DOCUMENT 00 11 16

NOTICE TO BIDDERS

1. Notice is hereby given that the governing board ("Board") of the Alum Rock Union School District ("District") will receive sealed bids for the following project, Bid No. **2425-Bonds04 / Project No. 10.01 & 10.02** ("Project" or "Contract"):

   Ben Painter Elementary School Fencing Project
   Sheppard Middle School Fencing Project

2. The Project consists of:

   Installation of 6'-0" High Chain Link Fence and Gates. Site improvements & parking.

3. To bid on this Project, the Bidder is required to possess one or more of the following State of California contractors' license(s)**:**

   A, B, and/or C-13

   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.

5. Contract Documents will be available on or after **September 12, 2024**, for review by downloading them from the District's website, https://www.arusd.org/district/departments/business-services/purchasing/bids, using the link. In addition, Contract Documents are available for bidders' review at the following builders' exchanges:

   A. Builder's Exchange of Santa Clara County (408) 727-4000
   B. Bay Area Builders Exchange (510) 483-8880

6. Sealed bids will be received until **1:00 p.m. on October 1, 2024**, at the District Purchashing Office, 2930 Gay Avenue, San Jose, California 95127 at or after which time the bids will be opened and publicly read aloud. Any bid that is submitted after this time shall be nonresponsive 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 20111.5, 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 by mail to the bidder.

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 a cashier's check or a certified check, drawn to the order of the Alum Rock Union 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 **September 16, 2024, at 10:00a.m. at Ben Painter ES - 500 Rough And Ready Rd, San Jose, CA. 95133; Sheppard MS to follow**. All participants are required to sign in front of the **Administration. Building/Front Office**. The site visit is expected to take approximately **1 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 successful bidder will be required to certify that it either meets the Disabled Veteran Business Enterprise ("DVBE") goal of three percent (3%) participation or made a good faith effort to solicit DVBE participation in this Contract if it is awarded the Contract for the Work.

14. The Contractor and all Subcontractors under the Contractor shall pay all workers on all Work performed pursuant to this Contract not less than the general prevailing rate of per diem wages and the general prevailing rate for holiday and overtime work as determined by the Director of the Department of Industrial Relations, State of California, for the type of work performed and the locality in which the work is to be performed within the boundaries of the District, pursuant to section 1770 et seq. of the California Labor Code. Prevailing wage rates are also available from the District or on the Internet at: <http://www.dir.ca.gov>.

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 subject to the requirements of Title 8 of the California Code of Regulations. The successful Bidder shall comply with all requirements of Division 2, Part 7, Chapter 1, Articles 1-5 of the Labor Code.

16. The District shall award the Contract, if it awards it at all, to the lowest responsive responsible bidder based on

    A. The base bid amount only.

17. The District has entered into a Project Labor Agreement that is applicable to this Project. A copy of the Project Labor Agreement is available for review at the District Bond Office and may be downloaded from the District's website, https://www.arusd.org/district/departments/business-services/purchasing/bids. The successful bidder and all subcontractors will be required to agree to be bound by the Project Labor Agreement.

18. 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

DOCUMENT 00 11 16.1

RFP SCHEDULE

1. The District intends to follow the schedule set forth below for the review and selection process. The District reserves the right to modify this schedule at any time during the RFQ/P schedule.

EVENT	TIME, DATE
Deadline for written questions regarding RFQ/P	2:00p.m. September 19, 2024
Deadline for District's response to written questions timely submitted. **Responses posted on District website via Addenda**	4:00p.m. September 23, 2024
Proposals Due	1:00p.m. October 1, 2024
Selection of Firm	TDB, October 10, 2024

Note: The above dates and times are subject to change at the discretion of the District

2. **Questions.** Questions regarding this RFP must be in writing and directed to **Maria Martinez, District Bonds Manager** at **maria.j.martinez@arusd.org**; and copy **Marc Freitas, District Bonds Director at marc.freitas@arusd.org and Ian Brakey, Construction Manager at ian.brakey@6dpmcm.com** Questions that are not submitted in writing or as directed herein will not be answered. Firms with questions or comments about this RFP or the Project should not contact any other District representative, Board Member, consultant, or employee unless directed to do so by the District.

3. **RFQ/P Addenda.** The District reserves the right to revise any part of this RFP, or to provide clarification or additional information. If the District issue any addenda to the RFQ/P, Firms are responsible for and must acknowledge receipt of addenda in the Firm's Proposal. Failure to acknowledge and response to any addenda issued by the District may, in the District's discretion, render the Firm's Proposal to be deemed non-responsive and may be rejected. All Addenda(s) will be posted on the District website at: https://www.arusd.org/district/departments/business-services/purchasing/bids

Thank you for your interest in working with the Alum Rock Union School District.

END OF DOCUMENT

DOCUMENT 00 21 13

INSTRUCTIONS TO BIDDERS

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

Alum Rock Union 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"):

   Ben Painter Elementary School Fencing Project
   Sheppard Middle School Fencing Project

2. A Bidder and its subcontractors must possess the appropriate State of California contractors' license and must maintain the license throughout the duration of the project. Bidders must also be registered as a public works contractor with the Department of Industrial Relations pursuant to the Labor Code. Bids submitted by a contractor who is not properly licensed or registered shall be deemed nonresponsive and will not be considered.

3. The District has prequalified bidders pursuant to Public Contract Code section 20111.5. 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.

4. District will receive sealed bids from bidders as stipulated in the Notice to Bidders.

   a. All bids must be sealed in an envelope, marked with the name and address of the Bidder, name of the Project, the Project Number and/or bid number, and time of bid opening.

   b. Bids must be submitted to the District Office (2930 Gay Ave, San Jose, CA 95127) by date and time shown in the Notice to Bidders.

   c. Bids must contain all documents as required herein.

5. Bidders are advised that on the date that bids are opened, telephones will not be available at the District Offices for use by bidders or their representatives.

6. Bids will be opened at or after the time indicated for receipt of bids.

7. Bidders must submit bids on the documents titled Bid Form and Proposal, and must submit all other required District forms. Bids not submitted on the District's required forms shall be deemed nonresponsive and shall not be considered. Additional sheets required to fully respond to requested information are permissible.

8. 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.

9. Bids shall be clearly written and without erasure or deletions. The District reserves the right to reject any bid containing erasures, deletions, or illegible contents.

10. Bidders must supply all information required by each Bid Document. Bids must be full and complete. The District reserves the right in its sole discretion to reject any bid as nonresponsive 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. Site Visit Certification, if a site visit was required.

    d. Non-Collusion Declaration.

    e. Addendum Acknowledgement

    f. Project Labor Agreement Participation Acknowledgement

11. Bidders must submit with their bids, 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 nonresponsive and will not be considered.

12. If Bidder to whom the Contract is awarded fails or neglects to enter into the 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.

13. 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. Failure to submit this list when required by law shall result in bid being deemed nonresponsive and the bid will not be considered.

14. 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.

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.

15. If a mandatory pre-bid conference and site visit ("Site Visit") is required as referenced in the Notice to Bidders, then Bidders must submit the Site Visit Certification with their Bid. 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.

16. Bidders shall submit the Non-Collusion Declaration with their bids. Bids submitted without the Non-Collusion Declaration shall be deemed nonresponsive and will not be considered.

17. The Contractor and all Subcontractors under the Contractor shall pay all workers on all work performed pursuant to the 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 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.

18. The District has entered into a Project Labor Agreement that is applicable to this Project. A copy of the Project Labor Agreement is available for review at the District Bonds Office. The successful bidder and all subcontractors will be required to agree to be bound by the Project Labor Agreement.

19. Section 17076.11 of the Education Code requires school districts using funds allocated pursuant to the State of California School Facility Program for the construction and/or modernization of school building(s) 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 on projects that receive state funding or demonstrate its good faith effort to solicit DVBE participation in this Contract. In order to meet this requirement by demonstrating a good faith effort, Bidder must advertise for DVBE-certified subcontractors and suppliers before submitting its Bid. For any project that is at least partially state-funded, the lowest responsive responsible Bidder awarded the Contract must submit certification of compliance with the procedures for implementation of DVBE contracting goals with its signed Agreement. DVBE Certification form is attached. Do not submit this form with your Bid

20. 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(s) thereof by the District is/are 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 Bidder 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 Bidder is required to make such verification as a condition to bidding. In submitting its Bid, Bidder shall rely on the results of its own independent investigation. In submitting its Bid, Bidder 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, Bidder 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 Bidder 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, Bidder may not in any manner rely on the information in these reports and drawings. Subject to the foregoing, Bidder must make its own independent investigation of all conditions affecting the Work and must not rely on information provided by District.

21. 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 the 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.

22. 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.

23. All questions about the meaning or intent of the Contract Documents are to be directed via email to the District to **6D PMCM at Ian.Brakey@6dpmcm.com** and copy **Maria Martinez**, **District Bonds Manager at maria.j.martinez@arusd.org** and **Marc Freitas, District Bonds Director at marc.freitas@arusd.org**. Interpretations or clarifications considered necessary by the District in response to such questions will be issued in writing by Addenda and posted on the District's website at https://www.arusd.org/district/departments/business-services/purchasing/bids by **September 23, 2024**. Questions should be received no later than **September 19, 2024 by 2pm** and all questions received after aforementioned date and time 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.

24. Addenda may also be issued to modify other parts of the Contract Documents as deemed advisable by the District.

25. 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.

26. 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.

27. 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.

28. Discrepancies between written words and figures, or words and numerals, will be resolved in favor of figures or numerals.

29. Bidders in contention for contract awards shall be required to attend a Post-Bid interview, which will be set within three (3) calendar days following bid opening. A duly authorized representative of the apparent low bidder is required to attend the Post Bid Interview, in person. The apparent low bidder's authorized representative(s) must have (1) knowledge of how the bid submitted was prepared, (2) the person responsible for supervising performance of the Work, and (3) the authority to bind the apparent low bidder. Failure to attend the Post Bid Interview as scheduled will be considered just cause for the District to reject the Bid as nonresponsive.

30. Any bid protest by any Bidder regarding any other bid must be submitted in writing to the District, before 5:00 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's 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 any other basis 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.

31. The Bidder to whom Contract is awarded shall execute and submit the following documents by 5:00 p.m. of the **SEVENTH (7th)** 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 nonresponsive.

a. Agreement: To be executed by successful Bidder. Submit four (4) copies, each bearing an original signature.

b. Escrow of Bid Documentation: This must include all required documentation. See the document titled Escrow 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 and Material Bond) (100%): 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. Disabled Veteran Business Enterprise Participation Certification

i. Drug-Free Workplace Certification

j. Tobacco-Free Environment Certification.

k. Criminal Background Investigation/Fingerprinting Certification.

l. Registered Subcontractors List: Must include Department of Industrial Relations (DIR) registration number of each subcontractor for all tiers

32. 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.

33. District reserves the right to reject any or all bids, including without limitation the right to reject any or all nonconforming, nonresponsive, 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 any inconsequential deviations or

irregularities in any bid. 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.

34. It is the policy of the District that no qualified person shall be excluded from participating in, be denied the benefits of, or otherwise be subjected to discrimination in any consideration leading to the award of contract, based on race, color, gender, sexual orientation, political affiliation, age, ancestry, religion, marital status, national origin, medical condition or disability. The Successful Bidder and its subcontractors shall comply with applicable federal and state laws, including, but not limited to the California Fair Employment and Housing Act, beginning with Government Code section 12900, and Labor Code section 1735.

35. 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

DOCUMENT 00 41 13

BID FORM AND PROPOSAL

To: Governing Board of the Alum Rock Union School District ("District" or "Owner")

From: _____
(Proper Name of Bidder)

The undersigned declares that Bidder has read and understands the Contract Documents, including, without limitation, the Notice to Bidders and the Instructions to Bidders, 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. 2425-Bonds04 / Project No. 10.01 & 10.02 for the following project known as:

_____

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

_____ dollars $ _____

BASE BID

Bidder acknowledges and agrees that the Base Bid accounts for any and all Allowance(s), Total Cost for Unit Prices

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

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Additional Detail Regarding Calculation of Base Bid

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

Item No.	Description	Unit of Measure	Estimated Quantity	Unit Price	Total Cost = Unit Price x Estimated Quantity (Included in Base Bid)
1.	Not Used			$ _____	$ _____

   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/Contingency** The Bidder's Base Bid shall include at ten percent (10%) contingency for unforeseen items/conditions.

   The above contingency shall only be allocated for unforeseen items/conditions or public health emergency/epidemic/pandemic compliance relating to the work; if necessary. Contractor shall not bill for or be due any portion of this contingency amount 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 contingency not allocated. Any unused portion of the contingency will revert back to the District documented by a deductive change order.

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
- Site Visit Certification
- Non-Collusion Declaration
- Project Labor Agreement Participation Acknowledgement
- Addendum Acknowledgement

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 A, B or C-13 license.

11. Bidder hereby certifies that Bidder is able to furnish labor that can work in harmony with all other elements of labor employed or to be employed on the Work.

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. Bidder hereby certifies that its bid includes sufficient funds to permit Bidder to comply with all local, state or federal labor laws or regulations during the Project, including payment of prevailing wage, and that Bidder will comply with the provisions of Labor Code section 2810(d) if awarded the Contract

14. Bidder agrees to comply with all requirements of the Project Labor Agreement.

15. 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.

16. 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.

17. 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, 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.

18. 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: _____

Signature: _____

Print Name: _____

Title: _____

Address of Bidder: _____

Taxpayer 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.: _____

END OF DOCUMENT

DOCUMENT 00 43 13

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 Principal ("Principal"),

and _____, as Surety ("Surety"), a corporation organized and existing under and by virtue of the laws of the State of California and authorized to do business as a surety in the State of California, are held and firmly bound unto the Alum Rock Union School District ("District") of Santa Clara County, State of California, as Obligee, in an amount equal to ten percent (10%) of the Base Bid plus alternates, 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 for the following project: Ben Painter ES & Sheppard MS Fencing Project ("Project" or "Contract").

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 duty executed by the Principal and Surety above named, on the _____ day of _____, 20___.

_____
Principal

_____
By

_____
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

DOCUMENT 00 43 36

DESIGNATED SUBCONTRACTORS LIST
(Public Contact Code Sections 4100-4114)

PROJECT: Ben Painter Elementary School & Sheppard Middle School Fencing Projects

Bidder acknowledges and agrees that 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 Base 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, 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 bid(s) is/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 Base Bid plus alternate(s).

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: _____

CA Cont. Lic. #: _____ Location: _____

DIR Registration #: _____

Portion of Work: _____

Subcontractor Name: _____

CA Cont. Lic. #: _____ Location: _____

DIR Registration #: _____

Portion of Work: _____

Subcontractor Name: _____

CA Cont. Lic. #: _____ Location: _____

DIR Registration #: _____

Portion of Work: _____

Subcontractor Name: _____

CA Cont. Lic. #: _____ Location: _____

DIR Registration #: _____

Portion of Work: _____

Subcontractor Name: _____

CA Cont. Lic. #: _____ Location: _____

DIR Registration #: _____

Portion of Work: _____

Subcontractor Name: _____

CA Cont. Lic. #: _____ Location: _____

DIR Registration #: _____

Portion of Work: _____

Subcontractor Name: _____

CA Cont. Lic. #: _____ Location: _____

DIR Registration #: _____

Portion of Work: _____

Subcontractor Name: _____

CA Cont. Lic. #: _____ Location: _____

DIR Registration #: _____

Portion of Work: _____

Date: _____

Proper Name of Bidder: _____

Signature: _____

Print Name: _____

Title: _____

END OF DOCUMENT

DOCUMENT 00 45 01

SITE VISIT CERTIFICATION

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

PROJECT: Ben Painter Elementary School & Sheppard Middle School Fencing 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 Alum Rock Union 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

DOCUMENT 00 45 19

NON-COLLUSION DECLARATION
(Public Contract Code Section 7106)

The undersigned declares:

I am the _____ of _____, the party making the foregoing bid.
[Title] [Name of Firm]

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

ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT

2930 Gay Avenue, San José, CA 95127 · Phone: 408-928-6800 · Fax: 408-928-6416 · www.arusd.org

DSK ARCHITECTS ADDENDUM

PROJECT NO. 10.01 & 10.02
BEN PAINTER ELEMENTARY SCHOOL & SHEPPARD MIDDLE SCHOOL FENCING PROJECT

Please submit a signed copy of this addendum acknowledgement with your RFQ/P response.

Company Name: _____

Signature: _____

Emmanuel Barbara, Interim Superintendent

Board of Trustees: Corina Herrera-Loera, President, Andrés Quintero, Vice-President
Andrea Flores Shelton, Clerk ·Minh Pham, Member· Linda Chavez, Member

ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT

2930 Gay Avenue, San José, CA 95127 · Phone: 408-928-6800 · Fax: 408-928-6416 · www.arusd.org

ALUM ROCK UNION SCHOOL DISTRICT PLA AGREEMENT

PROJECT NO. 10.01 & 10.02
BEN PAINTER ELEMENTARY SCHOOL & SHEPPARD MIDDLE SCHOOL FENCING PROJECT

See attached PLA Agreement.

Please submit a signed copy of this PLA agreement acknowledgement with your RFQ/P response.

Company Name: _____

Signature: _____

Emmanuel Barbara, Interim Superintendent

Board of Trustees: Corina Herrera-Loera, President, Andrés Quintero, Vice-President
Andrea Flores Shelton, Clerk ·Minh Pham, Member· Linda Chavez, Member

DOCUMENT 01 11 00

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.

1.02 SUMMARY OF WORK COVERED BY CONTRACT DOCUMENTS

A. The Work of this Contract consists of the following:

Installation of a 6'-0" high chain link fence and gate, along with site improvements and parking.

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: Not Applicable

B. Work on the Project that will be performed by others concurrent with the Work of this Contract: Not Applicable

1.05 CODES, REGULATIONS, AND STANDARDS

A. The codes, regulations, and standards adopted by the 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 and 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.

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

DOCUMENT 01 21 00

ALLOWANCE

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Non-specified work.

1.2 RELATED SECTIONS

A. Document 01 10 00 (Summary of Work)

B. Document 01 29 00 (Payments and Completion)

C. Document 01 32 19 (Submittal Procedures)

1.3 ALLOWANCES

A. Included in the Contract, a stipulated sum/price of ten percent **[10%] of base bid** as an allowance for Unforeseen Conditions within the limits set forth in the Contract Documents. This Allowance shall not be utilized without written approval by the District.

B. Contractor's costs, without overhead and profit, for products, delivery, installation, labor, insurance, payroll, taxes, bonding and equipment rental will be included in Allowance Expenditure Directive authorizing expenditure of funds from this Allowance. No overhead and profit shall be added to the Allowance Expenditure Directive.

C. Funds will be drawn from Allowance only with District approval evidenced by an Allowance Expenditure Directive.

D. At Contract closeout, funds remaining in Allowance will be credited to District by Change Order.

E. Whenever costs are more than the Allowance, the amount covered by the Allowance will be approved at cost. The Contract Price shall be adjusted by Change Order for amounts in excess of the Allowance.

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

Not used.

END OF DOCUMENT

DOCUMENT 01 22 00

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, including a ten percent (10%) contingency for unforeseen items, and in accordance with the Contract Documents.

1.05 ALTERNATES

A. Not Applicable

The above Alternate descriptions are general in nature and for reference purposes only. The Contract Documents, including, without limitation, the Drawings and Specifications, must be referred to for the complete scope of Work.

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).

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. The District’s Board has found and determined that certain item(s) shall be used on this Project based on the purpose(s) indicated pursuant to Public Contract Code section 3400(c). These findings, as well as the products and brand or trade names, have been identified in the Notice to Bidders.

D. The Contractor will not be allowed to substitute specified items unless the request for substitution is submitted as follows:

(1) District must receive any notice of request for substitution of a specified item a minimum of ten (10) calendar days prior to bid opening.

(2) Within 35 days after the date of the Notice of Award, the Contractor shall submit data substantiating the 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 technical Specifications. Insufficient information shall be grounds for rejection of substitution.

E. 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.

F. 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.

G. 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. The Contractor shall be responsible for any re-design costs occasioned by District's acceptance and/or approval of any substitute.

H. 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. 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.

I. 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.

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): $_____

(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: _____

DOCUMENT 01 31 19

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.

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 and/or the Architect'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 five (5) working days following District's distribution of the meeting notes.

1.03 PRE-INSTALLATION/PERFORMANCE MEETING:

A. Contractor shall schedule a meeting prior to the start of the Work for coordination purposes. 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.

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

DOCUMENT 01 32 13

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 ten (10) days of issuance of the Notice to Proceed 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	**10/14/2024**
FINAL PROJECT COMPLETION	**01/10/2025**

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 (¾) 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: 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) Twenty (20) 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 sixty (60) 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 IMPACT 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 man-hours 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

DOCUMENT 01 33 00

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 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. Also certify that Contractor-furnished equipment can be installed in allocated space. In event of any variance, Contractor shall specifically state in transmittal and on Shop Drawings, portions vary and require approval of a substitute. Submittals shall not be used as a means of requesting a substitution.

(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 the 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 "revise 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.

(4) Contractor may be assessed $100 a day for each day it is late in submitting a shop drawing or sample. No extensions of time will be granted to Trade Contractor or any Subcontractor because of its failure to have shop drawings and samples submitted in accordance with the 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. The District’s and/or Architect’s review of Shop Drawings 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. Contract 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

DOCUMENT 01 35 13.23

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

DOCUMENT 01 41 00

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, Licenses and Registrations and Work to Comply with All Applicable Laws and 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 over 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").

(1) California Building Standards Administrative Code, Part 1, Title 24, CCR.

(2) California Building Code (CBC), Part 2, Title 24, CCR; (International Building Code volumes 1-2 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; (International Fire Code and California Amendments).

(7) California Green Building Standards Code (CALGreen), Part 11, Title 24, CCR.

(8) California Referenced Standards Code, Part 12, Title 24, CCR.

(9) State Fire Marshal Regulations, Public Safety, Title 19, CCR.

(10) Partial List of Applicable National Fire Protection Association (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.

(11) California Division of the State Architect interpretation of Regulations ("DSA IR"), including, without limitation:

(a) DSA IR A-6 — Construction Change Document Submittal and Approval Processes.

(b) DSA IR A-7 — Project Inspector Certification and Approval.

(c) DSA IR A-8 — Project Inspector and Assistant Inspector Duties and Performance.

(d) DSA IR A-12 — Assistant Inspector Approval.

(12) DSA Procedures ("DSA PR")

(a) DSA PR 13-01 – Construction Oversight Process

(b) DSA PR 13-02 – Project Certification Process

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) Deferred Approvals per section 4-317(g).

(4) Verified reports per Sections 4-336 & 4-343(c).

(5) Duties of the Architect & Engineers shall be per Sections 4-333(a) and 4-341.

(6) Duties of the Contractor shall be per Section 4-343.

(7) Duties of Project Inspector shall be per Section 4-334.

(8) Addenda and Construction Change Documents per Section 4-338.

Contractor shall keep and make available all applicable parts of the most current version of Title 24 referred to in the plans and specifications 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) Contractor shall submit the following to Architect for review and endorsement:

(a) Product information on proposed material/system supplier.

(b) Drawings, specifications, and calculations prepared, signed, and stamped by an architect or engineer licensed in the State of California for that portion of the Work.

(c) All other requirements as may be required by DSA.

(2) Cost of preparing and submitting documentation per DSA Deferred Approval requirements including required modifications to Drawings and Specifications, whether or not indicated in the Contract Documents, shall be borne by Contractor.

(3) Contractor shall not begin fabrication and installation of deferred approval items without first obtaining DSA approval of Drawings and Specifications.

(4) Schedule of Work Subject to DSA Deferred Approval: Window wall systems exceeding 10 feet in span.

PART 2 – PRODUCTS Not Used.

PART 3 – EXECUTION Not Used.

END OF DOCUMENT

DOCUMENT 01 42 13

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	The Aluminum Association
2.	AASHTO	American Association of State Highway and Transportation Officials
3.	ABPA	Acoustical and Board Products Association
4.	ACI	American Concrete Institute
5.	AGA	American Gas Association
6.	AGC	Associated General Contractors of America
7.	AHC	Architectural Hardware Consultant
8.	AHRI	Air Conditioning, Heating, Refrigeration Institute
9.	AI	Asphalt Institute
10.	AIA	American Institute of Architects
11.	AISC	American Institute of Steel Construction
12.	AISI	American Iron and Steel Institute
13.	AMCA	Air Movement and Control Association
14.	ANSI	American National Standards Institute
15.	APA	APA – The Engineered Wood Association
16.	ASCE	American Society of Civil Engineers
17.	ASHRAE	American Society of Heating, Refrigeration and Air Conditioning Engineers
18.	ASME	American Society of Mechanical Engineers
19.	ASTM	American Society of Testing and Materials International
20.	AWPA	American Wood Protection Association
21.	AWPI	American Wood Preservers Institute
22.	AWS	American Welding Society
23.	AWSC	American Welding Society Code
24.	AWI	Architectural Woodwork Institute
25.	AWWA	American Water Works Association
26.	BIA	The Brick Industry Association

27.	CCR	California Code of Regulations
28.	CLFMI	Chain Link Fence Manufacturers Institute
29.	CRA	California Redwood Association
30.	CRSI	Concrete Reinforcing Steel Institute
31.	CS	Commercial Standards
32.	CSI	Construction Specifications Institute
33.	CTI	Cooling Technology Institute
34.	FGIA	Fenestration and Glazing Industry Alliance
35.	FGMA	Flat Glass Manufacturers' Association
36.	FIA	Factory Insurance Association
37.	FM	Factory Mutual Global
38.	FS/FED SPEC	Federal Specification
39.	FTI	Facing Title Institute
40.	GA	Gypsum Association
41.	IAPMO	International Association of Plumbing and Mechanical Officials
42.	ICC	International Code Council
43.	IEEE	Institute of Electrical and Electronics Engineers
44.	IES	Illuminating Engineering Society
45.	MCAC	Mason Contractors Association of California
46.	MIMA	Mineral Wool Insulation Manufacturers Association
47.	MLMA	Metal Lath Manufacturers Association
48.	MS/MIL SPEC	Military Specifications
49.	NAAMM	National Association of Architectural Metal Manufacturers
50.	NBHA	National Builders Hardware Association
51.	NCMA	National Concrete Masonry Association
52.	NCSEA	National Council of Structural Engineers Associations
53.	NEC	National Electrical Code
54.	NEMA	National Electrical Manufacturers Association
55.	NIST	National Institute of Standards and Technology
56.	NSI	Natural Stone Institute
57.	NTMA	National Terrazzo and Mosaic Association, Inc.
58.	ORS	Office of Regulatory Services (California)
59.	OSHA	Occupational Safety and Health Act
60.	PCI	Precast/Prestressed Concrete Institute
61.	PCA	Portland Cement Association
62.	PCA	Painting Contractors Association
63.	PDI	Plumbing Drainage Institute
64.	PEI	Porcelain Enamel Institute, Inc.
65.	PG&E	Pacific Gas & Electric Company
66.	PS	Product Standards
67.	SDI	Steel Door Institute; Steel Deck Institute
68.	SJI	Steel Joist Institute
69.	SSPC	Society for Protective Coatings
70.	TCNA	Tile Council of North America, Inc.
71.	TPI	Truss Plate Institute
72.	UBC	Uniform Building Code
73.	UL	Underwriters Laboratories Code

74.	UMC	Uniform Mechanical Code
75.	USDA	United States Department of Agriculture
76.	VI	Vermiculite Institute
77.	WCLIB	West Coast Lumber Inspection Bureau
78.	WDMA	Window and Door Manufacturers Association
79.	WEUSER	Western Electric Utilities Service Engineering Requirements
80.	WIC	Woodwork Institute of California

PART 2 - PRODUCTS Not Used.

PART 3 - EXECUTION Not Used.

END OF DOCUMENT

DOCUMENT 01 42 16

DEFINITIONS

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 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

DOCUMENT 01 42 19

REFERENCES

PART 1 - GENERAL

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	The Aluminum Association 1400 Crystal Drive, Suite 430 Arlington, VA 22202 www.aluminum.org	703/358-2960
AABC	Associated Air Balance Council 2401 Pennsylvania Avenue NW, Suite 330 Washington, DC 20037 www.aabc.com	202/737-0202
AASHTO	American Association of State Highway and Transportation Officials 555 12th St. NW - Suite 1000 Washington, DC 20004 www.transportation.org	202/624-5800
AATCC	American Association of Textile Chemists and Colorists P.O. Box 12215Research Triangle Park, NC 27709-2215 www.aatcc.org	919/549-8141
ACA	American Coatings Association 901 New York Ave., NW, Suite 300 West Washington, DC 20001 www.paint.org	202/462-6272
ACI	American Concrete Institute 38800 Country Club Dr. Farmington Hills, MI 48331-3439 www.concrete.org	248/848-3800
ACPA	American Concrete Pipe Association 5605 N. MacArthur Blvd., Suite 340 Irving, TX 75038 www.concrete-pipe.org	972/506-7216

ADC	Air Duct Council 1901 N. Roselle Road, Suite 800 Schaumburg, IL 60195 www.flexibleduct.org	847/706-6750
AF&PA	American Forest and Paper Association 1101 K Street, NW, Suite 700 Washington, DC 20005 www.afandpa.org	202/463-2700
AGA	American Gas Association 400 North Capitol Street, NW, Suite 450 Washington, DC 20001 www.aga.org	202/824-7000
AGC	Associate General Contractors of America 2300 Wilson Blvd., Suite 300 Arlington, VA 22201 www.agc.org	703/548-3118
AHA	American Hardboard Association 1210 West Northwest Highway Palatine, IL 60067 http://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 130 East Randolph Street, Suite 2000 Chicago, IL 60601 www.aisc.org	312.670.2400
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 1010 South 336th Street, #210 Federal Way, WA 98003-7394 https://www.plib.org/aitc/	253/835-3344

ALI	Associated Laboratories, Inc. P.O. Box 152837 Dallas, TX 75315 www.assoc-labs.com	214/565-0593
ALSC	American Lumber Standards Committee, Inc. 7470 New Technology Way, Suite F Frederick, MD 21703 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
AMPP (formerly SSPC)	Association for Materials Protection and Performance (merger of Society for Protective Coatings and National Association of Corrosion Engineers International) (formerly Steel Structures Painting Council) 800 Trumbull Drive Pittsburgh, PA 15205 www.sspc.org	412/281-2331 877/281-7772
ANLA	AmericanHort (merger of American Nursery & Landscape Association and OFA – The Association of Horticultural Professionals) 2130 Stella Court Columbus, OH 43215 www.americanhort.org	614/487-1117
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 325 John Knox Rd, Suite L-103 Tallahassee, FL 32303 www.archprecast.org	850/205-5637
APCIA	American Property Casualty Insurance Association (merger of American Insurance Association (formerly the National Board of Fire Underwriters) with the Property Casualty Insurers Association of America) 555 12th St, NW, Suite 550 Washington DC 20004 www.apci.org	202/828-7100
AHRI	Air Conditioning and Refrigeration Institute (now Air-Conditioning, Heating, & Refrigeration Institute) 2311 Wilson Blvd, Suite 400 Arlington, VA 22201 www.ahrinet.org	703/524-8800
ARMA	Asphalt Roofing Manufacturers Association 2331 Rock Spring Road Forest Hill, MD 21050 www.asphaltroofing.org	443/640-1075
ASA	The Acoustical Society of America Suite 300 1305 Walt Whitman Road Melville, NY 11747-4300 https://acousticalsociety.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 180 Technology Parkway Peachtree Corners, GA 30092 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 Two Park Avenue New York, NY 10016-5990 www.asme.org	800/834-2763

ASPE	American Society of Plumbing Engineers 6400 Shafer Court, Suite 350 Rosemont, 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 18927 Hickory Creek Dr., Suite 220 Mokena, IL 60448 www.asse-plumbing.org	708/995-3019
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 (formerly American Wood Preservers Institute) P.O. Box 361784 Birmingham, AL 35236-1784 www.awpa.com	205/733-4077
AWS	American Welding Society 8669 NW 36 Street, Suite 130 Miami, FL 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 12007 Sunrise Valley Drive, Suite 430 Reston, VA 20191 www.gobrick.com	703/620-0010
CGA	Compressed Gas Association 8484 Westpark Drive, Suite 220 McLean, VA 22102 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 2401 Fieldcrest Dr. Mundelein, IL 60060 www.cispi.org	224/864-2910
CLFMI	Chain Link Fence Manufacturers Institute 10015 Old Columbia Road, Suite B-215 Columbia, MD 21046 chainlinkinfo.org	301/596-2583
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	800/638-2772
CRA	California Redwood Association 818 Grayson Road, Suite 201 Pleasant Hill, CA 94523 www.calredwood.org	925/935-1499

CRI	Carpet and Rug Institute 100 S. Hamilton Street Dalton, GA 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 123 North Pitt St, Suite 450 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
DHA	Decorative Hardwoods Association (formerly Hardwood Plywood & Veneer Association) 42777 Trade West Dr. Sterling, VA 20166 https://www.decorativehardwoods.org/	703/435-2900
DHI	Door and Hardware Institute (formerly National Builders Hardware Association) 2001 K Street NW, 3rd Floor North Washington, DC 20006 www.dhi.org	202/367-1134
DIPRA	Ductile Iron Pipe Research Association P.O. Box 190306 Birmingham, AL 35219 www.dipra.org	205/402-8700
DOC	U.S. Department of Commerce 1401 Constitution Ave., NW Washington, DC 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 800 Roosevelt Rd., Bldg. C, Suite 312 Glen Ellyn, IL 60137 www.fcica.com	630/672-3702
FGIA	Fenestration and Glazing Industry Alliance 1900 E Golf Rd, Suite 1250 Schaumburg, IL 60173 https://fgiaonline.org/	847/303-5664
FM Global	Factory Mutual Insurance Company Amy Daley Global Practice Leader – Education, Public Entities, Health Care FM Global 270 Central Avenue Johnston, RI 02919-4949 www.fmglobal.com	401/275-3000 401/275-3029
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 962 Wayne Ave., Suite 620 Silver Spring, MD 20910 www.gypsum.org	301/277-8686
HMA	Hardwood Manufacturers Association One Williamsburg Place, Suite 108 Warrendale, PA 15086 http://hmamembers.org	412/244-0440

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
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, Inc. 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 P.O. Box 1906 Alexandria, VA 22313 https://insulationinstitute.org/	703/684-0084
NALP	National Association of Landscape Professionals (formerly Professional Landcare Network) 12500 Fair Lakes Circle, Suite 200 Fairfax, VA 22033 https://www.landscapeprofessionals.org/	703/736-9666
NAPA	National Asphalt Pavement Association 6406 Ivy Lane, Suite 350 Greenbelt, MD 20770-1441 www.asphaltpavement.org	888/468-6499 301/731-4748
NCSPA	National Corrugated Steel Pipe Association 14070 Proton Road, Suite 100 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 1201 Pennsylvania Ave. NW Washington, D.C., 20004 www.necanet.org	202/991-6300
NEMA	National Electrical Manufacturers Association 1300 North 17th Street N, Suite 900 Rosslyn, VA 22209 www.nema.org	703/841-3200
NEII	National Elevator Industry, Inc. 5537 SW Urish Road Topeka, KS 66610 https://nationalelevatorindustry.org/	703/589-9985
NFPA	National Fire Protection Association 1 Batterymarch Park Quincy, MA02169-7471 www.nfpa.org	800/344-3555 855/274-8525

NGA (formerly GANA)	National Glass Association (merged with Glass Association of North America) 1945 Old Gallows Road Suite 750 Vienna, VA 22182 www.glass.org	866/342-5642 Ext 127
NHLA	National Hardwood Lumber Association PO Box 34518 Memphis, TN 38184 www.nhla.com	901/377-1818
NIA	National Insulation Association 516 Herndon Pkwy., Ste. D Herndon, VA 20170 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 789 N. Dixboro Road Ann Arbor, MI 48113-0140 www.nsf.org	800/673-6275 734/769-8010
NSI	Natural Stone Institute (formerly Marble Institute of America) 380 E. Lorain St. Oberlin, OH 44074 https://www.naturalstoneinstitute.org/	440/250-9222
NTMA	National Terrazzo and Mosaic Association 209 N. Crockett Street, Suite 2 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, DC 20210 www.osha.gov	800/321-OSHA (6742)

PCA	Portland Cement Association 5420 Old Orchard Road Skokie, IL 60077 or 200 Massachusetts Ave NW, Suite 200 Washington, DC 20001 www.cement.org	847/966-6200 202/408-9494
PCA	Painting Contractors Association (formerly Painting and Decorating Contractors of America) 2316 Millpark Drive Maryland Heights, MO 63043 https://www.pcapainted.org/	800/322-7322
PCI	Precast/Prestressed Concrete Institute 8770 W. Bryn Mawr Ave., Suite 1150 Chicago, IL 60631 www.pci.org	312/786-0300
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 P.O. Box 997300 Sacramento, CA 95899-7300 www.pge.com	800/743-5000
PLIB	Pacific Lumber Inspection Bureau (formerly West Coast Lumber Inspection Bureau) 1010 South 336th Street, Suite 210 Federal Way, WA 98003-7394 https://www.plib.org/	253/835-3344
RFCI	Resilient Floor Covering Institute 115 Broad Street, Suite 201 La Grange, GA 30240 www.rfci.com	706/882-3833
SDI	Steel Deck Institute P.O. Box 426 Glenshaw, PA 15116 www.sdi.org	412/487-3325

SDI	Steel Door Institute 30200 Detroit Road Westlake, OH 44145 www.steeldoor.org	440/899-0010
SJI	Steel Joist Institute 140 West Evans Street, Suite 203 Florence, SC 29501 http://steeljoist.org	843/407-4091
SMA	Stucco Manufacturers Association 5753 E Santa Ana Cyn Rd, #G-156 Anaheim, CA 92807 www.stuccomfgassoc.com	714/473-9579
SMACNA	Sheet Metal and Air Conditioning Contractors' National Association 4201 Lafayette Center Drive Chantilly, VA 20151-1219 www.smacna.org	703/803-2980
SPI	SPI: The Plastics Industry Trade Association, Inc. 1425 K St. NW, Suite 500 Washington, DC 20005 www.plasticsindustry.org	202/974-5200
TCA	The Tile Council of North America 100 Clemson Research Blvd. Anderson, SC 29625 www.tcnatile.com	864/646-8453
TPI	Truss Plate Institute 2670 Crain Highway, Suite 203 Waldorf, MD 20601 www.tpinst.org	240/587-5582
TPI	Turfgrass Producers International 444 E. Roosevelt Road #346 Lombard, IL 60148 www.turfgrasssod.org	800/405-8873 847/649-5555
TCIA	Tree Care Industry Association (formerly the National Arborist Association) 670 N Commercial Street, Suite 201 Manchester, NH 03101 www.tcia.org	603/314-5380 800/733-2622

TVI	The Vermiculite Institute c/o The Schundler Company 10 Central Street Nahant, MA 01908 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 201 E. John Carpenter Freeway, Suite 750 Irving, TX 75062 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 35 E Wacker Dr., Suite 850 Chicago, IL 60601 www.wallcoverings.org	312/224-2574
WCMA	Window Covering Manufacturers Association 355 Lexington Avenue 15th Floor New York, NY 10017 www.wcmanet.org	212/297-2122
WDMA	Window & Door Manufacturers Association 2001 K Street NW, 3rd Floor North Washington, D.C. 20006 www.wdma.com	202/367-1157
WI	Woodwork Institute 1455 Response Road, Suite 110 Sacramento, CA 95815 www.wicnet.org	916/372-9943
WRI	Wire Reinforcement Institute 942 Main Street, Suite 300 Hartford, CT 06103 www.wirereinforcementinstitute.org	860/240-9545
WWCA	Western Wall & Ceiling Contractors Association 1910 N. Lime St. Orange, CA 92865 www.wwcca.org	714/221-5520

WWPA	Western Wood Products Association (formerly Redwood Inspection Service) 1500 SW First Ave., Suite 870 Portland, OR 97201 www.wwpa.org	503/224-3930

PART 2 - PRODUCTS Not Used.

PART 3 - EXECUTION Not Used.

END OF DOCUMENT

DOCUMENT 01 43 00

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 Design Professional 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

DOCUMENT 01 45 00

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) Tests and observations 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 TESTS AND INSPECTIONS

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 twenty-eight 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 – Not Applicable

E. Structural Steel Per Title 24 and as noted: - Not Applicable

(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

DOCUMENT 01 50 00

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 shall pay for water used during the course of the Work. Contractor shall coordinate and pay for installation or use of water meter in compliance with local water agency requirements. 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), on the Site, or other location approved by the local water agency, 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 on a daily basis. 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 specific campus location for office area determined/approved by the District, and in writing by the 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) Portable Toilets/Wash Station

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 workers. 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:

(1) 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 Design Professional; 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 Design Professional.

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) without the written permission of the District.

PART 2 – PRODUCTS Not used.

PART 3 – EXECUTION Not used.

END OF DOCUMENT

DOCUMENT 01 50 13

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.

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 sixty-five percent (65%) 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. Qualification Data: For Waste Management Coordinator.

I. 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.

J. 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 measurement 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 DOCUMENT

DOCUMENT 01 52 13

FIELD OFFICES

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, Enactments, 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, 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

(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) Voicemail Messaging System or 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.

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 printer, 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

DOCUMENT 01 64 00

OWNER-FURNISHED PRODUCTS

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: 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. Installing 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 Installing Contractor(s) Responsibilities:

(1) Owner-Furnished/Contractor Installed ("OFCI"): Furnished by the Owner; installed by the Installing Contractor.

(a) General: Owner and Installing 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 Installing Contractor.

(d) The Installing 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. Installing 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 Installing Contractor shall assume responsibility for such defects and omissions.

3) Store materials and equipment until ready for installation and protect from loss and damage. Installing 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 Owner's satisfaction.

3.02 CLEANING AND PROTECTION

A. Repair or replace items not acceptable to the Architect or Owner.

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 Owner.

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.

PART 2 – PRODUCTS Not Used.

PART 3 - EXECUTION Not Used.

END OF DOCUMENT

DOCUMENT 01 71 23

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

DOCUMENT 01 73 29

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) Effects 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

DOCUMENT 01 76 00

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

DOCUMENT 01 77 00

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) 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

DOCUMENT 01 78 23

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: 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 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

DOCUMENT 01 78 36

WARRANTIES

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" 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 blank 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.

PART 2 - PRODUCTS Not Used.

PART 3 – EXECUTION Not Used.

END OF DOCUMENT

DOCUMENT 01 78 39

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 - 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-Builts") showing all changes incorporated into the Work since the preceding monthly submittal. The As-Builts shall be available at the Project Site. The Contractor shall submit reproducible vellums at the conclusion of the Project following review of the blueline 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."

D. After review and approval of the marked-up specifications by the Project Inspector, Contractor shall provide electronic copies of the drawings (in PDF format) with one file with all of the sheets and one set of individual sheet files at the conclusion of the Project.

PART 3 - RECORD SPECIFICATIONS

3.01 GENERAL:

A. Contractor shall mark each section legibly to record manufacturer, trade name, catalog number, and supplier of each Product and item of equipment actually installed.

B. After review and approval of the marked-up specifications by the Project Inspector, Contractor shall provide one electronic copy of the specifications (in PDF format) at the conclusion of the Project.

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

ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT
COMMUNITY WORKFORCE AGREEMENT

This Agreement is entered into this 8th day of December, 2016 by and between the Alum Rock Union Elementary School District (hereinafter the "District"), together with contractors and subcontractors of all tiers, who shall become signatory to this Agreement by signing the **Agreement To Be Bound** ("**Addendum A**") (referred to collectively herein as "Contractor(s)/Employer(s)"), and the Santa Clara and San Benito Counties Building & Construction Trades Council (hereinafter the "Council") and its affiliated local Unions that have executed this Agreement (referred to collectively herein as "Union" or "Unions").

The purpose of this Agreement is to promote the efficiency of construction operations for the District through the use of skilled labor resulting in quality construction outcomes, and to provide for the peaceful settlement of labor disputes and grievances without strikes or lockouts, thereby promoting the public interest in assuring the timely and economical completion of Projects funded by proceeds from Measure I and/or Measure J bonds.

WHEREAS, the timely and successful completion of the Project is of the utmost importance to meet the needs of the District and avoid increased costs resulting from delays in construction; and

WHEREAS, large numbers of workers of various skills will be required in the performance of the construction work, and will be represented by the Unions signatory to this Agreement and employed by contractors and subcontractors who are also signatory to this Agreement; and

WHEREAS, the use of skilled labor on construction work increases the safety of construction projects as well as the quality of completed work; and

WHEREAS, it is recognized that on projects of this magnitude with multiple contractors and bargaining units on the job site at the same time over an extended period of time, the potential for work disruption is substantial without an overriding commitment to maintain continuity of work; and

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

WHEREAS, the Contractor(s)/Employer(s) and the Unions desire to mutually establish and stabilize wages, hours and working conditions for the workers employed on the Project and to encourage close cooperation among the Contractor(s)/Employer(s) and the Unions so that a satisfactory, continuous and harmonious relationship will exist among the parties to this Agreement; and

WHEREAS, the parties agree that one of the primary purposes of this Agreement is to avoid the tensions that might arise on the Project if Union and non-union workers of different employers were to work side by side on the Project, potentially leading to labor disputes that could delay completion of the Project; and

WHEREAS, this Agreement is not intended to replace, interfere with, abrogate, diminish or modify existing local or national collective bargaining agreements in effect during the duration of the Project, insofar as a legally binding agreement exists between the

Contractor(s)/Employer(s) and the affected Union(s), except to the extent that the provisions of this Agreement are inconsistent with said collective bargaining agreements, in which event, the provisions of this Agreement shall prevail; and

WHEREAS, the contract(s) for construction work on the Project will be awarded in accordance with the applicable provisions of the California Public Contracts Code and all state, local and federal laws; and

WHEREAS, the District has the absolute right to select the lowest responsive and responsible bidder for the award of the construction contract(s) on the Project; and

WHEREAS, the District places high priority upon the development of comprehensive programs for the recruitment, training and employment of District graduates, underrepresented workers and targeted workers, and recognizes the ability of local pre-apprenticeship and apprenticeship programs to provide meaningful and sustainable careers in the building and construction industry; and

WHEREAS, the parties to this Agreement pledge their full good faith and trust to work toward the mutually satisfactory completion of the Project; and

WHEREAS, the District has previously entered into a Construction Careers Agreement for prior projects and has experienced positive benefits with its relationship with the Unions; and the District Board of Directors has approved the use of this Agreement.

NOW, THEREFORE, IT IS AGREED BETWEEN AND AMONG THE PARTIES HERETO, AS FOLLOWS:

ARTICLE I
DEFINITIONS

1.1 "Agreement" means this Community Workforce Agreement.

1.2 "Agreement to be Bound" means the agreement (attached hereto and incorporated herein as Addendum A) that shall be executed by each and every Contractor/Employer as a condition of performing Project work.

1.3 "Completion" means that point at which there is Final Acceptance by the District of a Construction Contract and the District has filed a Notice of Completion. For the purposes of this definition, "Final Acceptance" means that point in time at which the engineer for the District has determined upon final inspection that the work has been completed in all respects and all required contract documents, contract drawings, warranties, certificates, manuals and data have been submitted and training completed in accordance with the contract documents, and the District has executed a written acceptance of the work.

1.4 "Construction Contract(s)" means all public works or improvement contract(s) (including design-bid, design-build, lease-leaseback or other contracts under which construction of the Project is done) awarded by the District that are necessary to complete the Project.

1.5 "Contractor(s)/Employer(s)" or "Contractor(s)" or "Employer(s)" means any individual, firm, partnership or corporation (including the prime contractor, general contractor, construction manager, project manager, design-build entity, lease-leaseback entity or equivalent

entity), or combination thereof, including joint ventures, and their successors and assigns, that is an independent business enterprise and that enters into a contract with the District with respect to the construction of any part of the Project, under contract terms and conditions approved by the District and which incorporate this Agreement, and all contractors or subcontractors of any tier.

1.6 "Council" means the Santa Clara and San Benito Counties Building & Construction Trades Council.

1.7 "District" means the Alum Rock Union Elementary School District, its Board of Directors, officers, agents, employees and administrative staff, including managerial personnel.

1.8 "Master Agreement" or "Schedule A" means the Master Collective Bargaining Agreement of each craft Union signatory hereto.

1.9 "Project" means all District construction projects paid for in whole or in part out of Measure I and/or Measure J funds. The District and the Council may mutually agree in writing to add additional components to the Project's scope of work covered by this Agreement. Although "Project" is used throughout this Agreement in the singular, it applies to all projects as defined in this Section.

1.10 "Project Manager" means the person(s) or entity(ies) designated by the District to oversee all phases of construction on the Project and the implementation of this Agreement, and who works under the guidance of the District's authorized representative.

1.11 "Union" or "Unions" means the Santa Clara and San Benito Counties Building & Construction Trades Council, AFL-CIO, and its affiliated Unions signatory to this Agreement, acting on their own behalf and on behalf of their respective affiliates and member organizations, whose names are subscribed hereto and who have through their officers executed this Agreement.

ARTICLE II
SCOPE OF AGREEMENT

2.1 Parties: This Agreement applies to and is limited to all Contractor(s)/Employer(s) performing Construction Contracts on the Project (including subcontractors at any tier), and their successors and assigns, the District, the Council and its affiliated Unions signatory to this Agreement.

2.2 Applicability: This Agreement governs all Construction Contracts awarded on the Project. For the purposes of this Agreement, Construction Contracts shall be considered completed as set forth in Section 1.3, except when the District directs a Contractor to engage in repairs, warranty work, modifications or punch list work as required under a Construction Contract with the District, or when a Contractor performs work under a change order for a Construction Contract.

2.3 Covered Work: This Agreement covers, without limitation, all on-site site preparation, surveying, construction, alteration, demolition, installation, improvement, remediation, retrofit, painting or repair of buildings, structures and other works, and related

activities for the Project that is within the craft jurisdiction of one of the Unions and which is directly or indirectly part of the Project, including, without limitation to the following examples, geotechnical and exploratory drilling, temporary HVAC, landscaping and temporary fencing, pipelines (including those in linear corridors built to serve the Project), pumps, pump stations, start-up, and modular furniture installation. On-site work includes work done for the Project in temporary yards, dedicated sites, or areas adjacent to the Project, and at any on-site or off-site batch plant constructed solely to supply materials to the Project. This scope of work includes all soils and materials testing and inspection where such testing and inspection is a classification in which a prevailing wage determination has been published.

2.3.1 This Agreement applies to any start-up, calibration, commissioning, performance testing, repair, maintenance, and operational revisions to systems and/or subsystems for the Project performed after Completion unless it is performed by District employees.

2.3.2 This Agreement covers all on-site fabrication work over which the District, Contractor(s)/Employer(s) or subcontractor(s) possess the right of control (including work done for the Project in any temporary yard or area established for the Project). Additionally, this Agreement covers any off-site work, including fabrication necessary for the Project defined herein, that is covered by a current Schedule A Agreement or local addenda to a National Agreement of the applicable Union(s). This Agreement also covers work done off-site that is specifically dedicated to processing of materials that would otherwise be done on site if space was available (e.g. concrete batch plant, form or panel construction).

2.3.3 The furnishing of supplies, equipment or materials which are stockpiled for later use shall not be covered by this Agreement. However, construction trucking work, such as the delivery of ready-mix, asphalt, aggregate, sand, or other fill or similar material which is incorporated into the construction process as well as the off-hauling of debris and excess fill, material and/or mud, shall be covered by the terms and conditions of this Agreement. Contractor(s)/Employer(s), including brokers, of persons providing construction trucking work shall provide certified payroll records to the District within ten (10) days of a written request or as required by bid specifications.

2.3.4 In limited circumstances requiring specialized knowledge of particular item(s), this Agreement shall not apply to construction persons designated by a manufacturer as necessary to protect the manufacturer's warranty, provided that the contractor using the manufacturer's construction persons can demonstrate by an enumeration of specific tasks that the work cannot be performed by workers employed under this Agreement. All such work must be identified and discussed by the contractor at the Pre-Construction Conference, and the contractor shall be responsible for requesting a Pre-Construction Conference if necessary to satisfy the requirements of this Section. Any dispute shall be subject to the grievance and arbitration procedures set forth in this Agreement.

2.3.5 Work covered by this Agreement within the following craft jurisdictions shall be performed under the terms of their National Agreements as follows: the National Agreement of Elevator Constructors, the National Transient Lodge (NTL) Articles of Agreement, the National Stack/Chimney Agreement, the National Cooling Tower Agreement, and all instrument calibration work and loop checking shall be performed under the terms of the

UA/IBEW Joint National Agreement for Instrument and Control Systems Technicians, with the exception that Articles IV, XIII, XIV of this Agreement shall apply to such work.

2.4 Exclusions: The following shall be excluded from the scope of this Agreement.

2.4.1 The Agreement shall not apply to a Contractor/Employer's non-construction craft employees, including but not limited to executives, managerial employees, engineering employees, other professional engineers, supervisors above the level of General Foreman (except those covered by existing Master Agreements), and administrative and management personnel.

2.4.2 This Agreement shall not apply to any non-Project work performed on or near or leading to the site of work covered by this Agreement that is undertaken by state, county, city or other governmental bodies or their contractors, or by public or private utilities.

2.4.3 This Agreement shall not apply to off-site maintenance of leased equipment and on-site supervision of such work.

2.4.4 The District shall not be required to comply with this Agreement for any work performed with its own forces as permitted by the Public Contract Code.

2.5 Award of Contracts: It is understood and agreed that the District has the right to select any qualified bidder for the award of Construction Contracts under this Agreement. The bidder need only be willing, ready and able to execute and comply with this Agreement. It is further agreed that this Agreement shall be included in all invitations to bid or solicitations for proposals from contractors or subcontractors for work on the Project that are issued on or after the effective date of this Agreement. A copy of all invitations to bid shall be provided at time of issuance to the Council.

ARTICLE III
EFFECT OF AGREEMENT

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

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

3.3 At the time that any Contractor/Employer enters into a subcontract with any subcontractor providing for the performance of work under a Construction Contract, the Contractor/Employer shall provide a copy of this Agreement to said subcontractor and shall require the subcontractor as a condition of accepting the award of a construction subcontract, to agree in writing, by executing the **Agreement to be Bound**, to be bound by each and every provision of this Agreement prior to the commencement of work. The obligations of a Contractor/Employer may not be evaded by subcontracting. If the subcontractor refuses to

execute the **Agreement to be Bound**, then such subcontractor shall not be awarded a construction subcontract to perform work on the Project.

3.4 This Agreement shall only be binding on the signatory parties hereto and their successors and assigns and shall not apply to the parents, affiliates, subsidiaries, or other ventures of any such party. Each Contractor/Employer shall alone be liable and responsible for its own individual acts and conduct and for any breach or alleged breach of this Agreement. Any dispute between the Union(s) and the Contractor(s)/Employer(s) respecting compliance with the terms of the Agreement shall not affect the rights, liabilities, obligations and duties between the Union(s) and other Contractor(s)/Employer(s) party to this Agreement.

3.5 It is mutually agreed by the parties that any liability by a Union to this Agreement shall be several and not joint. Any alleged breach of this Agreement by a Union shall not affect the rights, liabilities, obligations and duties between the Contractor(s)/Employer(s) and the other Union(s) party to this Agreement.

3.6 The provisions of this Agreement, including the Schedule As incorporated herein by reference, shall apply to the work covered by this Agreement, notwithstanding the provisions of any other local, area and/or national agreements which may conflict with or differ from the terms of this Agreement. To the extent a provision of this Agreement is inconsistent with a Schedule A, the provisions of this Agreement shall prevail. Where a provision of a Schedule A is not inconsistent with this Agreement, the provisions of the Schedule A shall apply.

ARTICLE IV
WORK STOPPAGES, STRIKES, SYMPATHY STRIKES AND LOCKOUTS

4.1 The Unions, District and Contractor(s)/Employer(s) covered by this Agreement agree that for the duration of the Project:

4.1.1 There shall be no strikes, sympathy strikes, work stoppages, picketing, hand billing or otherwise advising the public that a labor dispute exists, or slowdowns of any kind, for any reason, by the Unions or employees employed on the Project, at the job site of the Project or any other facility of the District because of a dispute on the Project. Disputes arising between the Unions and Contractor(s)/Employer(s) on other District projects are not governed by the terms of the Agreement or this Article.

4.1.2 There shall be no lockout of any kind by a Contractor/Employer of workers employed on the Project.

4.1.3 If a Master Agreement expires before the Contractor/Employer completes the performance of work under a Construction Contract and the Union or Contractor/Employer gives notice of demands for a new or modified Master Agreement, the Union agrees that it will not strike on work covered by this Agreement and the Union and the Contractor/Employer agree that the expired Master Agreement will continue in full force and effect for work covered under this Agreement until a new or modified Master Agreement is reached. If the new or modified Master Agreement provides that any terms of the Master Agreement shall be retroactive, the Contractor/ Employer agrees to comply with any retroactive terms of the new or modified Master Agreement that are applicable to any employee(s) on the Project during the interim, with

retroactive payment due within seven (7) calendar days of the effective date of the modified Master Agreement.

4.1.4 In the case of nonpayment of wages or trust fund contributions on the Project, the Union shall give the District and the Contractor/Employer three (3) business days' notice when nonpayment of trust fund contributions has occurred and one (1) business day's notice when nonpayment of wages has occurred or when paychecks being tendered to a financial institution normally recognized to honor such paychecks will not honor such paycheck as a result of insufficient funds, of the intent to withhold labor from the Contractor/Employer's or their subcontractor's workforce, during which time the Contractor/Employer may correct the default. In this instance, a Union's withholding of labor (but not picketing) from an Contractor/Employer who has failed to pay its fringe benefit contributions or failed to meet its weekly payroll shall not be considered a violation of this Article.

4.1.5 Notification: If the District contends that any Union has violated this Article, it will so notify, in writing, the Senior Executive of the Council and the Senior Executive of the Union, setting forth the facts alleged to violate the Article, prior to instituting the expedited arbitration procedure set forth below. The Council will immediately use its best efforts to cause the cessation of any violation of this Article. The leadership of the Union will immediately inform the workers of their obligations under this Article.

4.2 Expedited Arbitration: Any party to this Agreement shall institute the following procedure, prior to initiating any other action at law or equity, when a breach of this Article is alleged to have occurred.

4.2.1 A party invoking this procedure shall notify Robert Hirsch, as the permanent arbitrator, or Barry Winograd, as the alternate arbitrator under this procedure. In the event the permanent arbitrator is unavailable at any time, the alternate will be contacted. If neither is available, then the parties shall select the arbitrator from the list in Section 13.4. Notice to the arbitrator shall be by the most expeditious means available, with notices by facsimile, email or telephone to the District and the party alleged to be in violation, and to the Council and involved local Union if a Union is alleged to be in violation.

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

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

4.2.4 The sole issue at the hearing shall be whether or not a violation of Section 4.1 of the Agreement has occurred. The arbitrator shall have no authority to consider any matter of justification, explanation or mitigation of such violation or to award damages, which issue is reserved for court proceedings, if any. The award shall be issued in writing within three (3) hours

after the close of the hearing, and may be issued without a written opinion. If any party desires a written opinion, one shall be issued within fifteen (15) days, but the parties shall not delay compliance with or enforcement of the award due to the issuance of a written opinion. The arbitrator may order cessation of the violation of this Article and other appropriate relief and such award shall be served on all parties by hand or registered mail upon issuance. Should a party found in violation of this Article fail to comply with an Arbitrator's award to cease the violation, the party in violation shall pay to the affected party as liquidated damages the sum of ten thousand dollars ($10,000.00) per shift for which it failed to comply, or portion thereof, until such violation is ceased. The Arbitrator shall retain jurisdiction to resolve any disputes regarding the liquidated damages claimed under this Section.

4.2.5 Such award may be enforced by any court of competent jurisdiction upon the filing of this Agreement and all other relevant documents referred to above in the following manner. The party filing such enforcement proceedings shall give written notice to the other party. In the proceeding to obtain a temporary order enforcing the arbitrator's award as issued under this Article, all parties waive the right to a hearing and agree that such proceedings may be *ex parte*. Such agreement does not waive any party's right to participate in a hearing for a final order of enforcement. The Court's order or orders enforcing the arbitrator's award shall be served on all parties by hand or delivered by certified mail.

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

4.2.7 The fees and expenses of the arbitrator shall be divided equally between the party instituting the arbitration proceedings provided in this Article and the party alleged to be in breach of its obligation under this Article.

4.2.8 Should either the permanent or alternate arbitrator identified above no longer work as a labor arbitrator, the District and the Council shall mutually agree to a replacement.

ARTICLE V
PRE-CONSTRUCTION CONFERENCE

5.1 Timing: Upon request of the District or the Council, the Prime Employer and/or Project Manager shall convene and conduct a pre-construction conference at a time and location mutually agreeable to the Council, with the Unions and with representatives of all involved Contractors/Employers, who shall be prepared to announce craft assignments and to discuss in detail the scope of work and the other issues set forth below, at least fourteen (14) calendar days prior to:

(a) The commencement of any Project work, and
(b) The commencement of Project work on each subsequently awarded Construction Contract.

5.2 The pre-construction conference shall be attended by a representative of each participating Contractor and each affected Union, and the Council and the District may attend at their discretion.

5.3 Pre-Construction Conference: The pre-construction conference shall include but not be limited to the following subjects:

(a) A listing of each Contractor's scope of work;
(b) The craft assignments;
(c) The estimated number of craft workers required to perform the work;
(d) Transportation arrangements;
(e) The estimated start and completion dates of the work; and
(f) Discussion of pre-fabricated materials.

5.4 Joint Administrative Committee: This Agreement is intended to provide close cooperation between management and labor. To that end, the District and Council shall each designate two representatives to serve on a Joint Administrative Committee ("JAC"), each of whom may designate an alternate. JAC members may invite participation by a Contractor or Union as needed. The JAC shall meet periodically, at the request of any member, to review progress on the Project and to discuss matters of general concern, such as safety and security. The JAC shall serve as a forum to foster communication between management and labor, and to assist the Unions and the Contactors to complete the Project in an economic and efficient manner without interruption, delays or work stoppages. The JAC shall have no authority to review grievances or disputes involving this Agreement, which are subject to the applicable grievance procedure.

ARTICLE VI
NO DISCRIMINATION

6.1 The Contractor(s)/Employer(s) and Unions agree to comply with all anti-discrimination provisions of federal, state and local law, to protect employees and applicants for employment on the Project.

ARTICLE VII
UNION SECURITY

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

7.2 All employees who are employed by Contractor(s)/Employer(s) to work on the Project will be required to become members and maintain membership in the appropriate Union on or before eight (8) days of consecutive or cumulative employment on the Project. Membership under this Section shall be satisfied by the tendering of periodic dues and fees uniformly required to the extent allowed by the law.

7.3 Authorized representatives of the Union(s) shall have access to the Project whenever work covered by this Agreement is being, has been, or will be performed on the Project.

ARTICLE VIII
REFERRAL

8.1 The Contractor(s)/Employer(s) performing construction work on the Project described in the Agreement shall, in filling craft job requirements, utilize and be bound by the registration facilities and referral systems established or authorized by the Unions signatory hereto. The Contractor/Employer(s) shall have the right to reject any applicant referred by the Union(s), in accordance with the applicable Master Agreement.

8.2 The Contractor(s)/Employer(s) shall have the unqualified right to select and hire directly all supervisors above the level of general foreman it considers necessary and desirable, without such persons being referred by the Union(s) (unless such craft construction employees are covered by existing Master Agreements).

8.3 In the event that referral facilities maintained by the Union(s) are unable to fill the requisition of a Contractor/Employer for employees within a forty-eight (48) hour period (Saturdays, Sundays and Holidays excluded) after such requisition is made by the Contractor/Employer, the Contractor/Employer shall be free to obtain workers from any source. A Contractor/Employer who hires any worker(s) to perform Covered Work on the Project pursuant to this section shall immediately provide the appropriate Union with the name and address of such employee(s) and shall immediately refer such employee(s) to the appropriate Union to satisfy the requirements of Article VII of this Agreement.

8.4 Targeted Hiring: In order to increase construction job opportunities for District graduates, underrepresented workers and targeted workers, the parties shall comply with the Targeted Hiring Agreement attached hereto as **Addendum B**.

ARTICLE IX
WAGES AND BENEFITS

9.1 The Contractor(s)/Employer(s) agree to pay contributions to the vacation, pension and other form of deferred compensation plan, apprenticeship, worker protection and assistance, and health benefit funds established by the applicable Master Agreement(s) for each hour worked on the Project, in the amounts designated in the Master Agreement(s) of the appropriate Union(s).

9.2 By signing this Agreement, the Contractor(s)/Employer(s) adopt and agree to be bound by the written terms of the legally established Trust Agreements, as described in Section 9.1, which may from time to time be amended, specifying the detailed basis on which payments are to be made into, and benefits paid out of, such Trust Funds. The Contractor(s)/Employer(s) authorize the parties to such local trust agreements to appoint trustees and successor trustees to administer the Trust Funds and hereby ratify and accept the trustees so appointed as if made by the Contractor(s)Employer(s). The Contractor(s)/Employer(s) agrees to execute a Subscription Agreement(s) when such Trust Fund(s) requires such document(s).

9.3 Wages, Hours, Terms and Conditions of Employment: The wages, hours and other terms and conditions of employment on the Project shall be governed by the Master Agreement of the respective crafts, to the extent such Master Agreement is not inconsistent with this Agreement. Where a subject is covered by the Master Agreement and not covered by this Agreement, the Master Agreement will prevail. When a subject is covered by both the Master Agreement and this Agreement, to the extent there is any inconsistency, this Agreement will prevail.

9.4 Holidays: Holidays shall be in compliance with the applicable Schedule A.

ARTICLE X
APPRENTICES

10.1 Recognizing the need to develop adequate numbers of competent workers in the construction industry, the Contractor(s)/Employer(s) shall employ apprentices from a California state-approved Joint Apprenticeship Training Program in the respective crafts to perform such work as is within their capabilities and which is customarily performed by the craft in which they are indentured.

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

10.3 Consistent with the Master Agreements, there shall be no restrictions on the utilization of apprentices in performing the work of their craft, provided they are properly supervised. The Unions agree to cooperate with the Contractor(s)/Employer(s) in furnishing apprentices as requested up to the maximum percentage, in compliance with the applicable Master Agreement and the state-approved apprenticeship standards for that craft.

ARTICLE XI
HELMETS TO HARDHATS

11.1 The Contractor(s)/Employer(s) and the Unions recognize a desire to facilitate the entry into the building and construction trades of veterans who are interested in careers in the building and construction industry. The Contractor(s)/Employer(s) and Unions agree to utilize the services of the Center for Military Recruitment, Assessment and Veterans Employment (the "Center") and the Center's "Helmets to Hardhats" program to serve as a resource for preliminary orientation, assessment of construction aptitude, referral to apprenticeship programs or hiring halls, counseling and mentoring, support network, employment opportunities and other needs as identified by the parties.

11.2 The Unions and Contractor(s)/Employer(s) agree to coordinate with the Center to participate in an integrated database of veterans interested in working on the Project and of apprenticeship and employment opportunities for this Project. To the extent permitted by law, the Unions will give credit to such veterans for bona fide, provable past experience.

ARTICLE XII
COMPLIANCE

12.1 It shall be the responsibility of the Contractor(s)/Employer(s) and Unions to investigate and monitor compliance with the provisions of the Agreement contained in Article IX. Nothing in this Agreement shall be construed to interfere with or supersede the usual and customary legal remedies available to the Unions and/or employee benefit Trust Funds to collect delinquent Trust Fund contributions from Contractor(s)/ Employer(s) on the Project. The District shall monitor and enforce compliance with the prevailing wage requirements of the state, and the Contractor(s)/Employer(s)' compliance with this Agreement.

ARTICLE XIII
GRIEVANCE ARBITRATION PROCEDURE

13.1 Project Labor Disputes: All disputes involving the application or interpretation of the Master Agreement to which a Contractor/Employer and a Union are parties shall be resolved pursuant to the resolution procedures of the Master Agreement. All disputes relating to the interpretation or application of this Agreement, other than disputes under Article IV (Work Stoppages, Strikes, Sympathy Strikes and Lockouts) and Article XIV (Work Assignments and Jurisdictional Disputes), shall be subject to resolution by the grievance arbitration procedures set forth herein.

13.2 Employee Discipline: All disputes involving the discipline and/or discharge of an employee working on the Project shall be resolved through the grievance and arbitration provisions contained in the Master Agreement for the craft of the affected employee. No employee working on the Project shall be disciplined or discharged without just cause.

13.3 No grievance shall be recognized unless the grieving party (Local Union or District Council, on its own behalf, or on behalf of an employee whom it represents, or a Contractor/Employer on its own behalf) provides notice in writing to the party with whom it has a dispute within five (5) business days after becoming aware of the dispute but in no event more than thirty (30) calendar days after it reasonably should have become aware of the event giving rise to the dispute. Time limits may be extended by mutual agreement of the parties.

13.4 Grievances shall be settled according to the following procedures:

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

Step 2: If the grievance is not settled in Step 1, within five (5) business days of the Step 1 meeting, the alleged grievance may be referred in writing by either involved party to the Business Manager(s) of the affected Union(s) involved, and the Labor Relations Manager of the Contractor/Employer, or the Contractor/Employer's designated representative, for discussion and resolution. Regardless of which party has initiated the grievance, the Union shall notify its International Union representative prior to the Step 2 meeting, and the International Union

representative shall advise if it intends to participate in the Step 2 meeting. The Project Manager and the Council shall have the right to participate in any efforts to resolve the dispute at Step 2.

Step 3: If the grievance is not settled in Step 2, within five (5) business days of the Step 2 meeting, either party may request the dispute be submitted to arbitration or the time may be extended by mutual agreement of the parties. Within five (5) business days after referral of the dispute to Step 3, the representatives shall notify the permanent arbitrator, or if he/she is not available, the alternate arbitrator, for final and binding arbitration. The parties agree that if the permanent arbitrator or the alternate is not available, an arbitrator shall be selected by the alternate striking method from the list of three (3) below. The order of striking names from the list of arbitrators shall be determined by a coin toss, the winner of which shall decide whether they wish to strike first or second.

1. William Riker

2. Morris Davis

3. William Engler

13.5 The decision of the Arbitrator shall be final and binding on all parties. The Arbitrator shall have no authority to change, amend, add to or detract from any of the provisions of the Agreement. The expense of the Arbitrator shall be borne equally by both parties. The Arbitrator shall arrange for a hearing on the earliest available date from the date of his/her selection. A decision shall be given to the parties within five (5) calendar days after completion of the hearing unless such time is extended by mutual agreement. A written opinion may be requested by a party from the presiding Arbitrator.

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

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

13.8 Retention: At the time a grievance is submitted under this Agreement or any Master Agreement, the Union may request that the District withhold and retain an amount from what is due and owing to the Contractor against whom the grievance is filed, sufficient to cover the damages alleged in the grievance, should the Unions prevail. The amount shall be retained by the District until such time as the underlying grievance giving rise to the retention is withdrawn, settled, or otherwise resolved, and the retained amount shall be paid to whomever the parties to the grievance shall decide, or to whomever an Arbitrator shall so order.

13.9 Should any of the arbitrators listed in this Article or Article IV no longer work as a labor arbitrator, the District and the Council shall mutually agree to a replacement.

ARTICLE XIV
WORK ASSIGNMENTS AND JURISDICTIONAL DISPUTES

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

14.2 All jurisdictional disputes on this Project between or among the building and construction trades Unions and the Employers parties to this Agreement, shall be settled and adjusted according to the present Plan established by the Building and Construction Trades Department or any other plan or method of procedure that may be adopted in the future by the Building and Construction Trades Department. Decisions rendered shall be final, binding and conclusive on the Employers and Unions parties to this Agreement.

14.3 If a dispute arising under this Article involves the Northern California Carpenters Regional Council or any of its subordinate bodies, an Arbitrator shall be chosen by the procedures specified in Article V, Section 5, of the Plan from a list composed of John Kagel, Thomas Angelo, Robert Hirsch, and Thomas Pagan, and the Arbitrator's hearing on the dispute shall be held at the offices of the California State Building and Construction Trades Council in Sacramento, California, within fourteen (14) days of the selection of the Arbitrator. All other procedures shall be as specified in the Plan.

14.4 All jurisdictional disputes shall be resolved without the occurrence of any strike, work stoppage, or slow-down of any nature, and the Employer's assignment shall be adhered to until the dispute is resolved. Individual employees violating this Section shall be subject to immediate discharge. Each Employer will conduct a pre-job conference with the Council prior to commencing work. The Project Manager and the District will be advised in advance of all such conferences and may participate if they wish. Pre-job conferences for different Employers may be held together.

ARTICLE XV
MANAGEMENT RIGHTS

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

15.2 Consistent with the Schedule A agreements, it is the responsibility of the Contractor(s)/Employer(s) to ensure safe working conditions on the Project and to notify employees of and ensure compliance with the applicable safety laws and regulations on the Project.

ARTICLE XVI
DRUG AND ALCOHOL TESTING

16.1 The use, sale, transfer, purchase and/or possession of a controlled substance, alcohol and/or firearms at any time during the work day is prohibited.

16.2 Drug and alcohol testing shall be conducted in accordance with the Substance Abuse Prevention Policies contained in the applicable Schedule A.

ARTICLE XVII
SAVINGS CLAUSE

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

17.2 The parties agree that in the event that a decision of a court of competent jurisdiction materially alters the terms of the Agreement such that the intent of the parties is defeated, then the entire Agreement shall be null and void.

17.3 If a court of competent jurisdiction determines that all or part of the Agreement is invalid and/or enjoins the District from complying with all or part of its provisions and the District accordingly determines that the Agreement will not be required as part of an award to a Contractor/Employer, the Unions will no longer be bound by the provisions of Article IV.

ARTICLE XVIII
TERM

18.1 This Agreement shall be included in the bid documents, requests for proposals, or other equivalent Project solicitations, which shall indicate that entering into this Agreement is a condition of the award of Construction Contracts for the Project.

18.2 This Agreement shall become effective on the day it is executed by the District and by the Council.

18.3 This Agreement may be executed in counterparts, such that original signatures may appear on separate pages and when bound together all necessary signatures shall constitute an original. Faxed or emailed PDF signature pages transmitted to other parties to this Agreement shall be deemed the equivalent of original signatures.

ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT

By: _____ Date: 4/24/17

SANTA CLARA AND SAN BENITO COUNTIES BUILDING & CONSTRUCTION TRADES COUNCIL

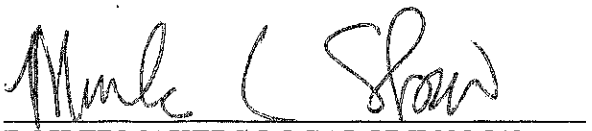
By: _____ Date: 4/5/17

Josué García, CEO

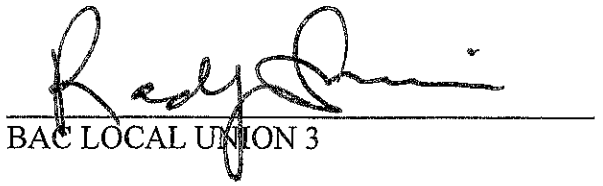
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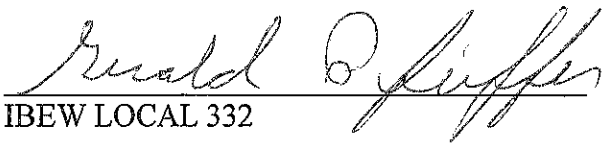
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BAC LOCAL UNION 3



IBEW LOCAL 332

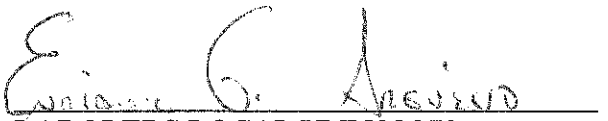


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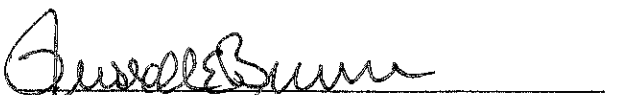
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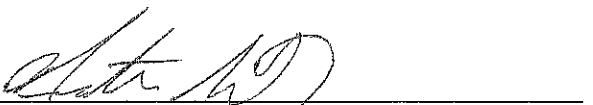
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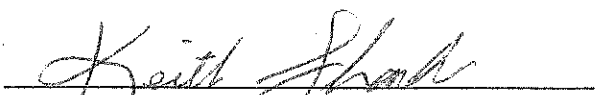
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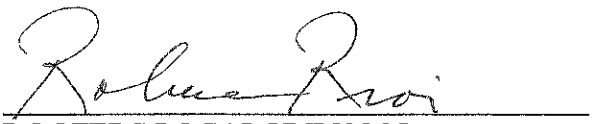
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OPERATIVE PLASTERERS AND CEMENT MASONS LOCAL UNION 400



PLASTERERS LOCAL UNION 300



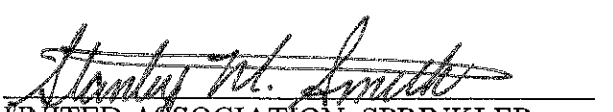
ROOFERS LOCAL UNION 95



UNITED ASOCIATION, PLUMBERS & PIPEFITTERS LOCAL UNION 355



UNITED ASSOCIATION, PLUMBERS & PIPEFITTERS LOCAL UNION 393



UNITED ASSOCIATION, SPRINKLER FITTERS LOCAL UNION 483



SHEET METAL WORKERS INTERNATIONAL UNION LOCAL 104

SIGNATURE BLOCKS FOR UNIONS

ASBESTOS WORKERS LOCAL 16

BOILERMAKERS LOCAL UNION 549

BAC LOCAL UNION 3

IBEW LOCAL 332

ELEVATOR CONSTRUCTORS LOCAL UNION 8

I.U.P.A.T. DISTRICT COUNCIL 16

IRON WORKERS LOCAL 377

LABORERS LOCAL UNION 270

OPERATING ENGINEERS LOCAL 3

OPERATIVE PLASTERERS AND CEMENT MASONS LOCAL UNION 400

PLASTERERS LOCAL UNION 300

ROOFERS LOCAL UNION 95

UNITED ASOCIATION, PLUMBERS & PIPEFITTERS LOCAL UNION 355

UNITED ASSOCIATION, PLUMBERS & PIPEFITTERS LOCAL UNION 393

UNITED ASSOCIATION, SPRINKLER FITTERS LOCAL UNION 483

SHEET METAL WORKERS INTERNATIONAL UNION LOCAL 104

SIGN, DISPLAY AND ALLIED CRAFTS LOCAL UNION 510

NORTHERN CALIFORNIA CARPENTERS REGIONAL COUNCIL, FOR ITSELF AND ITS AFFILIATES

LABORERS LOCAL UNION 67

TEAMSTERS LOCAL UNION 287

Addendum A
Agreement to be Bound

[Addressee]
[Address]
[City and State]

Re: Alum Rock Union Elementary School District Community Workforce Agreement

Dear Mr./Ms. _____:

The undersigned party confirms that it agrees to be a party to and bound by the Alum Rock Union Elementary School District Community Workforce Agreement as such Agreement may, from time to time, be amended by the parties or interpreted pursuant to its terms.

By executing this **Agreement to be Bound**, the undersigned subscribes to, adopts and agrees to be bound by the written terms of the legally established trust agreements as set forth in Section 9.1, as they may from time to time be amended, specifying the detailed basis upon which contributions are to be made into, and benefits made out of, such trust funds and ratifies and accepts the trustees appointed by the parties to such trust funds. The undersigned agrees to execute a separate Subscription Agreement when such trust funds require such documents.

The obligation to be a party to and bound by this Agreement shall extend to all work covered by the Alum Rock Union Elementary School District Community Workforce Agreement undertaken by the undersigned. The undersigned shall require all of its subcontractors, of whatever tier, to become similarly bound for all their work within the scope of this Agreement by signing an identical Agreement to be Bound.

This letter shall constitute a subscription agreement, to the extent of the terms of the letter.

CONTRACTOR/SUBCONTRACTOR:_____

Contractor State License Number or Motor Carrier (CA) Permit Number:_____

Name of Authorized Person (print):_____

Signature of Authorized Person:_____

Title of Authorized Person:_____

Telephone Number of Authorized Person:_____

Address of Authorized Person:_____

State Public Works Registration Number: _____

Addendum B
ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT
TARGETED HIRING AGREEMENT

I. Purpose

As parties to the Alum Rock Union Elementary School District Community Workforce Agreement ("Agreement"), the Alum Rock Union Elementary School District ("District") and the Santa Clara & San Benito Counties Building Trades Council ("Council") recognize the mutual needs and the public interest in: (1) increasing training and career opportunities for District graduates, Targeted Workers and Underrepresented Workers in the construction trades through apprenticeship and pre-apprenticeship programs; and (2) developing a pipeline to ensure the continued availability of a skilled, qualified and readily available construction workforce for this and future construction Projects.

In furtherance of these goals, the District and the Council hereby agree to enter into this Targeted Hiring Agreement ("THA").

II. Definitions

All capitalized terms not defined in this THA are as defined in the Agreement.

Approved Pre-Apprenticeship Program. An Approved Pre-Apprenticeship Program means the Santa Clara County Trades Orientation Program or an equivalent structured, MC-3 certified pre-apprenticeship program; or a Union-sponsored program that serves Underrepresented Workers and is sponsored by Council-approved community based organizations ("CBOs"), the Council itself, affiliate(s) of the Council, the State Building & Construction Trades Council of California, or the North America Building & Construction Trades Council.

Community Workforce Coordinator. The Community Workforce Coordinator means the work2future Workforce Investment Board, or another entity as determined by mutual written agreement of the District and the Council. The Community Workforce Coordinator is responsible for maintaining an up-to-date list of Targeted Workers who are available for work with their current contact information, and will provide this list to any of the Parties upon request.

Covered Contractor. A Covered Contractor means a contractor performing $250,000 or more of Covered Work on a Project. A Covered Contractor is subject to the Workforce Goal. If a contractor performs less than $250,000 of Covered Work on a Project, that contractor is not subject to the Workforce Goal, but may nonetheless participate voluntarily in the Workforce Goal.

Targeted Worker. A Targeted Worker is an individual who has completed an Approved Pre-Apprenticeship Program. Prior to working on the Project, a Targeted Worker must be indentured in the applicable Joint Apprenticeship Training Program.

Underrepresented Worker. An Underrepresented Worker is an individual who, prior to commencing work, has at least one of the following barriers to employment: (1) is currently homeless; (2) is currently receiving public assistance; (3) is currently participating in a reentry program or was formerly incarcerated; (4) has been continuously unemployed for the previous one year; (5) has been emancipated from the foster care system; (6) is a veteran of the U.S. military; (7) is an at-risk youth; or (8) is a survivor of labor trafficking.

III. Hiring/Employment Obligations

Consistent with the Master Agreements of the Unions signatory to the Agreement, the Unions' hiring hall procedures, and the applicable Joint Apprenticeship Training Committee ("JATC") rules, standards and procedures, Covered Contractors shall make a good faith effort to meet the following Workforce Goal related to hiring and employment of workers on the Project.

Workforce Goal.

a) Consistent with the requirements of California Labor Code §§ 1776, 1777.5 and 1777.6, each Covered Contractor shall make a good faith effort to reach the goal of employing one (1) or more Targeted Worker(s) as First Year Apprentice(s) for at least 25% of the Covered Contractor's apprentice hours on the Project, unless the Contractor demonstrates to the Community Workforce Coordinator that the Targeted Worker(s) worked the maximum feasible hours, or shows other good cause. A Targeted Worker may be assigned to work on the Project or on another jobsite at the employer's discretion, provided that the worker is assigned to the same job classification that would apply to a Targeted Worker on the Project.

b) Nothing in this THA requires a Covered Contractor to hire a particular individual or to retain a particular individual in employment. In the event that a Targeted Worker is hired by a Covered Contractor but does not complete the requisite hours of employment in Section III(a), the Covered Contractor shall make a good faith effort to meet the "Alternate Method to Satisfy Workforce Goal" set forth in Part IV of this THA.

c) The Community Workforce Coordinator will, upon request, refer names of qualified, available and willing Targeted Workers to the Union and/or Covered Contractor(s).

d) The Unions agree to cooperate with Covered Contractor(s) in providing available apprentices as requested. All apprentices shall be properly supervised and paid in accordance with provisions contained within the Master Agreements.

e) In the event that the Community Workforce Coordinator is unable to refer sufficient qualified, available and willing Targeted Workers, this section shall not apply until such time as qualified, available and willing Targeted Workers are available for hire.

f) The Unions agree to cooperate with the District and CBOs designated by mutual agreement of the District and the Council in conducting outreach activities to recruit and refer Underrepresented Worker applicants to Approved Pre-Apprenticeship Programs for which they are qualified or qualifiable.

g) Covered Contractors shall maintain electronic records documenting the employment of and hours worked by Targeted Worker(s), and provide such records to the General Contractor, the District or the Community Workforce Coordinator upon request.

IV. Alternate Method to Satisfy Workforce Goal

Covered Contractors who fail to make good faith efforts to meet the Workforce Goal in Part III of this THA may also satisfy the Workforce Goal by demonstrating they have accomplished ***all*** of the following, subject to the applicable Master Agreement(s), hiring hall procedures, JATC procedures and standards approved by the Division of Apprenticeship Standards of the California Department of Industrial Relations.

Alternate Method.

a) Make good faith efforts to employ least one (1) first-year apprentice on the Project (or for equivalent work on another jobsite, provided that the apprentice is assigned to the same job classification that the apprentice would have performed on the Project).

b) Submit a Craft Request Form to the Community Workforce Coordinator offering the opportunity to provide qualified, available and willing individuals with employment consideration for first-year apprentice positions.

c) Submit a Craft Request Form to the applicable Union(s) requesting the dispatch of qualified, willing and available individuals referred by the Community Workforce Coordinator by name.

d) Contact the Community Workforce Coordinator and provide the following information for all first-year apprentice job openings on the Project:

i. a description of the job, including the trade and any job requirements, such as specific qualifications or skills;
ii. the person's name and telephone number at the Covered Contractor's business who will be responsible for answering questions regarding the job opening; and
iii. a description of how applicants should apply for the job.

V. Consequences of Non-Compliance

The District and the Council shall oversee compliance monitoring through a Memorandum of Understanding with Working Partnerships. The Joint Administrative

Committee formed by Section 5.4 of the Agreement shall consider allegations of non-compliance by a Covered Contractor. If there is a determination by the JAC that a Covered Contractor has failed to make good faith efforts to meet the Workforce Goal ***and*** failed to satisfy the Alternate Method, this issue will be referred to the grievance procedure set forth in Article XIII of the Agreement. At any time during the process of compliance review, the JAC shall have the authority to reach a resolution with the Covered Contractor.

VI. Implementation

The JAC shall assist with implementation of and monitoring compliance with the terms of this THA.

AMENDMENT NO. 1
to the
ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT
COMMUNITY WORKFORCE AGREEMENT

Preamble

This Amendment is made and entered into on this 11 day of August, 2023 by and between the Alum Rock Union Elementary School District ("District") and the Santa Clara & San Benito Counties Building and Construction Trades Council, AFL-CIO ("Council"), on behalf of itself and its affiliated local Unions that have authorized the Council to enter into this Amendment ("Unions").

Recitals

Whereas, a Community Workforce Agreement ("Agreement") was entered into on April 5, 2017 by and between the District, the Council, the signatory Unions, and the contractors and/or subcontractors that have become or shall become signatory to the Agreement by signing the "Agreement to be Bound" thereto; and

Whereas, the Agreement applies to projects funded by the District's Measure I and J bonds; and

Whereas, the District has continued to experience positive benefits from the Agreement and from an ongoing relationship with the Council and its affiliated local Unions; and

Whereas, the residents of the District area voted in favor of a new bond called Measure S, which reauthorizes the remaining $71.5 million in Measure J bonds previously authorized by District voters to fund the modernization, renovation, repair, and updating of District facilities; and

Whereas, the parties to the Agreement now mutually desire to amend the Agreement to apply the Agreement to projects funded in whole or in part by Measure S; and

NOW, THEREFORE, IT IS HEREBY AGREED BETWEEN AND AMONG THE PARTIES TO AMEND THE AGREEMENT AS FOLLOWS:

1) The second paragraph of the Agreement is hereby amended and fully restated as follows:

   The purpose of this Agreement is to promote the efficiency of construction operations for the District through the use of skilled labor resulting in quality construction outcomes, and to provide for the peaceful settlement of labor disputes and grievances without strikes or lockouts, thereby promoting the public interest in assuring the timely and economical completion of Projects funded by proceeds from Measure I, Measure J, and/or Measure S bonds.

2) Section 1.9 of the Agreement is hereby amended and fully restated as follows:

"Project" means all District construction projects paid for in whole or in part out of Measure I, Measure J, and/or Measure S funds. The District and the Council may mutually agree in writing to add additional components to the Project's scope of work covered by this Agreement. Although "Project" is used throughout this Agreement in the singular, it applies to all projects as defined in this Section.

3) Other than as explicitly set forth herein, this Amendment No. 1 shall make no other changes, amendments, modifications, additions or deletions to the Agreement.

4) This Amendment No. 1 shall become effective when the District's governing board ratifies this Amendment No. 1 and it is executed by the District and the Council.

5) This Amendment No. 1 shall be attached to and included with the Agreement for all intents and purposes, including all bid solicitations or similar documents issued by the District, and shall continue in full force and effect until completion of the Project(s) as defined therein.

Dated: August 26th 2023

SANTA CLARA & SAN BENITO COUNTIES BUILDING & CONSTRUCTION TRADES COUNCIL

David Bini

David Bini
Executive Director

Dated: August 25, 2023

ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT

Name: Koluiva Chheng
Title: Asst. Supt., Bus. Svcs.

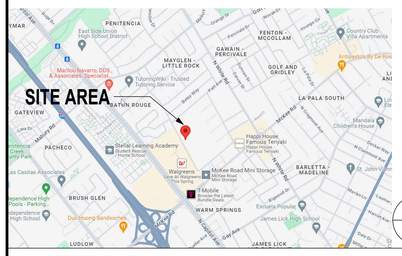
ALUM ROCK UNION SCHOOL DISTRICT
BEN PAINTER ELEMENTARY SCHOOL

BEN PAINTER ES FENCING PROJECT
BEN PAINTER ELEMENTARY SCHOOL
500 ROUGH & READY RD., SAN JOSE, CA. 95133

DSA SUBMITTAL
August 7, 2024

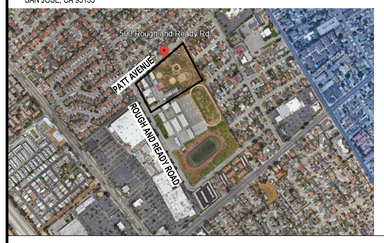
DSA APPLICATION NO: 01-121932 **DSA FILE NO: 43-4**

VICINITY MAP



CONTEXT MAP

PAINTER ELEMENTARY SCHOOL
ADDRESS: 500 ROUGH AND READY RD.,
SAN JOSE, CA 95133



STATEMENT OF GENERAL CONFORMANCE

FOR ARCHITECTS/ENGINEERS WHO UTILIZE PLANS, INCLUDING BUT NOT LIMITED TO, SHOP DRAWINGS PREPARED BY OTHER LICENSED DESIGN PROFESSIONAL AND/OR CONSULTANTS.

APPLICATION NUMBER: 01-121932 **FILE NUMBER:** 43-4

X THE DRAWINGS OR SHEETS LISTED ON THE COVER OR SHEET INDEX -
X THESE SPECIFICATIONS SECTIONS - DIVISION
N/A THESE CALCULATIONS

HAVE/HAS BEEN PREPARED BY OTHER DESIGN PROFESSIONALS OR CONSULTANTS WHO ARE LICENSED AND/OR AUTHORIZED TO PREPARE SUCH DRAWINGS IN THIS STATE. IT HAS BEEN EXAMINED BY ME FOR:
1) DESIGN INTENT, AND APPEARS TO MEET THE APPROPRIATE REQUIREMENTS OF TITLE 24, CALIFORNIA CODE OF REGULATIONS, AND THE PROJECT SPECIFICATIONS PREPARED BY ME, AND
2) COORDINATION WITH MY PLANS AND SPECIFICATIONS, AND IS ACCEPTABLE FOR INCORPORATION INTO CONSTRUCTION OF THIS PROJECT.

THE STATEMENT OF GENERAL CONFORMANCE "SHALL NOT BE CONSTRUED AS RELIEVING ME OF MY RIGHTS, DUTIES, AND RESPONSIBILITIES UNDER SECTION 17302 AND 81138 OF THE EDUCATION CODE, AND SECTIONS 4-336, 4-341 AND 4-344" OF TITLE 24, PART 1 (TITLE 24, PART 1, SECTION 4-317 (B)).

I FIND THAT:

X ALL DRAWINGS OR SHEETS LISTED ON THE COVER OR INDEX SHEET
X THESE SPECIFICATIONS SECTIONS
N/A THESE CALCULATIONS -

X ARE IN GENERAL CONFORMANCE WITH THE PROJECT DESIGN, AND
X HAVE BEEN COORDINATED WITH THE PROJECT PLAN AND SPECIFICATIONS.

AIA, LEED AP, dsk architects — 2024/07/08
ARCHITECT/ENGINEER DESIGNATED TO BE IN GENERAL RESPONSIBLE CHARGE **DATE**

AMIR KAKAVAND
PRINT NAME

C-30095 — 2021/08/31
LICENSE NUMBER **EXPIRATION DATE**

DRAWINGS, SPECS AND CALCULATIONS BY OTHERS

N/A

PROJECT DIRECTORY

CLIENT:

Alum Rock Union School District
2930 Gay Avenue
San Jose, CA 95127
Marc Freitas
Director of Bonds, Facilities and Leases
marc.freitas@arusd.org
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ARCHITECT:

dsk Architects:

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Oakland, CA 94612
Amir Kakavand, AIA, LEED AP
Principal
amir@dskarch.com
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SCOPE OF WORK

1. INSTALLATION OF 6'-0" HIGH CHAIN LINK FENCE AND GATES.

PROJECT DATA

DEFERRED SUBMITTALS

N/A

APPLICABLE CODES & REGULATIONS (2022 CBC)

1. STATUTORY AND JUDICIAL REGULATIONS (EFFECTIVE JANUARY 1, 2023)
   a. 2022 CALIFORNIA ADMINISTRATIVE CODE (CAC), PART 1, TITLE 24 C.C.R.
   b. 2022 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24 C.C.R. (2021 INTERNATIONAL BUILDING CODE AND 2022 CALIFORNIA AMENDMENTS)
   c. 2022 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 C.C.R. (2020 NATIONAL ELECTRICAL CODE AND 2022 CALIFORNIA AMENDMENTS)
   d. 2022 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24 C.C.R. (2021 IAPMO UNIFORM MECHANICAL CODE AND 2022 CALIFORNIA AMENDMENTS)
   e. 2022 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 C.C.R. (2021 IAPMO UNIFORM PLUMBING CODE AND 2022 CALIFORNIA AMENDMENTS)
   f. 2022 CALIFORNIA ENERGY CODE, PART 6, TITLE 24 C.C.R.
   g. 2022 CALIFORNIA FIRE CODE (CFC), PART 9, TITLE 24 C.C.R. (2021 INTERNATIONAL FIRE CODE AND 2022 CALIFORNIA AMENDMENTS)
   h. 2022 CALIFORNIA EXISTING BUILDING CODE (CEBC), PART 10, TITLE 24 C.C.R. (2021 INTERNATIONAL EXISTING BUILDING CODE AND 2022 CALIFORNIA AMENDMENTS)
   i. 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN), PART 11, TITLE 24 C.C.R.
   j. 2022 CALIFORNIA REFERENCED STANDARDS CODE, PART 12, TITLE 24 C.C.R.
   k. TITLE 19 C.C.R., PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS
   l. THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS IS THAT THE WORK OF THE ALTERATION, REHABILITATION OR RECONSTRUCTION IS TO BE IN ACCORDANCE WITH TITLE 24, CALIFORNIA CODE OF REGULATIONS PER SECTION 4-317, PART 1, TITLE 24, C.C.R.: SHOULD ANY EXISTING CONDITIONS SUCH AS DETERIORATION OR NON-COMPLYING CONSTRUCTION BE DISCOVERED WHICH IS NOT COVERED BY THE DSA APPROVED DOCUMENTS WHEREIN THE FINISHED WORK WILL NOT COMPLY WITH TITLE 24, CALIFORNIA CODE OF REGULATIONS, A CONSTRUCTION CHANGE DOCUMENT, OR A SEPARATE SET OF PLANS AND SPECIFICATIONS, DETAILING AND SPECIFYING THE REQUIRED REPAIR WORK SHALL BE SUBMITTED TO AND APPROVED BY DSA BEFORE PROCEEDING WITH THE REPAIR WORK.
   m. CHAPTER 4, PART 1, TITLE 24 C.C.R., ADMINISTRATIVE REGULATIONS (PARTIAL LISTING ONLY):
      1. A COPY OF ALL PARTS 1, 2, 3, 4 & 5 TITLE 24 C.C.R. SHALL BE KEPT ON THE JOB SITE AT ALL TIMES.
      2. ALL ADDENDA AND CONSTRUCTION CHANGES TO BE SIGNED BY THE ARCHITECT, CONTRACTOR AND OWNER AND APPROVED BY DSA. CONSTRUCTION CHANGE DOCUMENTS NOT VALID UNTIL APPROVED BY DSA PER SECTION 4-338, PART 1, TITLE 24. SUBSTITUTIONS SHALL BE CONSIDERED AS CHANGE ORDERS.
      3. ALL TESTS TO CONFORM TO THE REQUIREMENTS OF SECTION 4-335, PART 1, TITLE 24, AND APPROVED TESTING AND INSPECTION SHEET.
      4. TESTS OF MATERIALS AND TESTING LAB SHALL BE IN ACCORDANCE WITH SECTION 4-335 OF PART 1, TITLE 24, AND THE DISTRICT SHALL EMPLOY AND PAY THE LABORATORY. COST OF RE-TEST MAY BE BACK-CHARGED TO THE CONTRACTOR.
      5. DSA SHALL BE NOTIFIED AT THE START OF CONSTRUCTION AND PRIOR TO THE REPLACEMENT OF CONCRETE, PER SECTION 4-331, PART 1, TITLE 24.
      6. INSPECTOR TO BE APPROVED BY THE ARCHITECT AND DSA AND TO BE EMPLOYED BY THE DISTRICT. INSPECTION TO BE IN ACCORDANCE WITH SECTION 4-333(B). THE DUTY OF THE INSPECTOR SHALL BE IN ACCORDANCE WITH SECTION 4-342, PART 1, TITLE 24.
      7. SUPERVISION OF CONSTRUCTION BY DSA IN ACCORDANCE WITH SECTION 4-334, PART 1, TITLE 24.
      8. CONTRACTOR, INSPECTOR, ARCHITECT, AND ENGINEERS SHALL SUBMIT VERIFIED REPORTS (DSA-6) IN ACCORDANCE WITH SECTIONS 4-336 AND 4-343, PART 1, TITLE 24.
      9. THE ARCHITECT, STRUCTURAL ENGINEER, AND PROFESSIONAL ENGINEER SHALL PERFORM THEIR DUTIES IN ACCORDANCE WITH SECTIONS 4-333(a) AND 4-341, PART 1, TITLE 24.
      10. THE CONTRACTOR SHALL PERFORM HIS DUTIES IN ACCORDANCE WITH SECTION 4-343, PART 1, TITLE 24.
      11. DSA IS NOT SUBJECT TO ARBITRATION.

2. NATIONAL REFERENCE STANDARDS
   a. AISC 360-16 MANUAL OF STEEL CONSTRUCTION
   b. AISC 341-16 SEISMIC PROVISIONS FOR STRUCTURAL STEEL BUILDINGS
   c. 2019 ASME A17.1 / CSA B44 SAFETY CODE FOR ELEVATORS & ESCALATORS (PER 2022 CBC PART 2 CHAPTER 35)
      • NOTE: CAL / OSHA ELEVATOR UNIT ENFORCES CCR TITLE 8 AND USES 2004 ASME A17.1 BY ADOPTION
   d. ICC 300-17 STANDARDS ON BLEACHERS, FOLDING AND TELESCOPIC SEATING AND GRANDSTANDS
   e. 2018 NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION
   f. ACI-318-19 CODE AND COMMENTARY
   g. 2022 NFPA 13, AUTOMATIC SPRINKLER SYSTEMS (CA AMENDED)
   h. 2019 NFPA 14, STANDPIPE & HOSE SYSTEMS (CA AMENDED)
   i. 2021 NFPA 17, DRY CHEMICAL EXTINGUISHING SYSTEMS
   j. 2021 NFPA 17A, WET CHEMICAL EXTINGUISHING SYSTEMS
   k. 2019 NFPA 20, STATIONARY PUMPS FOR FIRE PROTECTION
   l. 2013 NFPA 22, WATER TANKS FOR PRIVATE FIRE PROTECTION
   m. 2019 NFPA 24, PRIVATE FIRE SERVICE MAINS AND THEIR APPURTENANCES (CA AMENDED)
   n. 2013 NFPA 25 INSPECTION, TESTING, MAINTENANCE OF WATER-BASED FIRE PROTECTION SYSTEMS (CALIFORNIA EDITION)
   o. 2016 NFPA 72, NATIONAL FIRE ALARM AND SIGNALING CODE (CA AMENDED)
   p. 2016 NFPA 80, FIRE DOORS AND OTHER OPENING PROTECTIVES
   q. 2015 NFPA 92, STANDARD FOR SMOKE CONTROL SYSTEMS
   r. 2016 NFPA 110, EMERGENCY AND STANDBY POWER SYSTEMS
   s. 2015 NFPA 253, CRITICAL RADIANT FLUX OF FLOOR COVERING SYSTEMS
   t. 2015 NFPA 2001, CLEAN AGENT FIRE EXTINGUISHING SYSTEMS (CA AMENDED)
   u. 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN: ADA ACCESSIBILITY GUIDELINES FOR BUILDINGS & FACILITIES (ADAAG)
   v. 2005 & R2010 UL 300, STANDARD FOR FIRE TESTING OF FIRE EXTINGUISHING SYSTEMS FOR PROTECTION OF COMMERCIAL COOKING EQUIPMENT
   w. 2003 UL 464, AUDIBLE SIGNALING DEVICES FOR FIRE ALARM AND SIGNALING SYSTEMS, INCLUDING ACCESSORIES
   x. 1999 UL 521, STANDARD FOR HEAT DETECTORS FOR FIRE PROTECTIVE SIGNALING SYSTEMS
   y. 2002 & R2010 UL 1971, STANDARD FOR SIGNALING DEVICES FOR THE HEARING IMPAIRED
   z. NOTES:
      • FOR A COMPLETE LIST OF APPLICABLE STANDARDS, REFER TO 2022 CBC (SFM) CHAPTER 35 AND CALIFORNIA FIRE CODE CHAPTER 80.
      • SEE CALIFORNIA BUILDING CODE CHAPTER 35 FOR STATE OF CALIFORNIA AMENDMENTS TO THE NFPA STANDARDS.

3. NOTES
   a. ALL BARRIER FREE ITEMS SHALL COMPLY WITH TITLE 21 AND 24 OF THE CALIFORNIA CODE OF REGULATIONS, 2022.
   b. ALL WORK AND MATERIALS SHALL BE IN FULL ACCORDANCE WITH THE REQUIREMENTS OF THESE CODES AND ALL APPLICABLE LOCAL ORDINANCES. WHERE CODES CONFLICT, THE MORE STRINGENT SHALL APPLY.
   c. NO CHANGES OR REVISIONS SHALL BE MADE FOLLOWING WRITTEN APPROVAL WHICH AFFECTS ACCESS COMPLIANCE ITEMS UNLESS SUCH CHANGES OR REVISIONS ARE SUBMITTED TO DSA FOR APPROVAL.
   d. SUBSTITUTIONS AFFECTING DSA REGULATED ITEMS SHALL BE SUBMITTED AS A CONSTRUCTION CHANGE DOCUMENT OR ADDENDA, AND SHALL BE APPROVED BY DSA PRIOR TO FABRICATION AND INSTALLATION.
   e. MATERIALS AND THEIR INSTALLATION SHALL COMPLY WITH APPLICABLE CODES, STANDARDS AND MANUFACTURER RECOMMENDATIONS.
   f. PER CBC 11B-104.1.1 "ALL DIMENSIONS ARE SUBJECT TO CONVENTIONAL INDUSTRY TOLERANCES EXCEPT WHERE THE REQUIREMENT IS STATED AS A RANGE WITH A SPECIFIC MINIMUM AND MAXIMUM END POINTS."

4. CONSTRUCTION SAFETY
   a. STATUTORY AND JURISDICTIONAL REQUIREMENTS AS APPLICABLE TO TEMPORARY WORK, INCLUDING CALIFORNIA CONSTRUCTION SAFETY ORDERS.
   b. ASSOCIATED GENERAL CONTRACTORS OF AMERICA, INC., MANUAL OF ACCIDENT PREVENTION.
   c. PROTECTION DURING WELDING: PROTECT OCCUPANTS AND THE PUBLIC WITH PORTABLE SOLID VISION BARRICADES AROUND LOCATION WHERE WELDING IS BEING PERFORMED. PROVIDE SIGNS WARNING AGAINST LOOKING AT WELDING WITHOUT PROPER EYE PROTECTION OR EQUIVALENT. CONFORM TO CHAPTER 9, C.F.C. FOR REQUIREMENTS FOR ON SITE WELDING.
   d. DURING THE ENTIRE CONSTRUCTION PERIOD, IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN CONDITIONS AT THE PROJECT SITE TO MEET THE REQUIREMENTS OF THE CITY BUILDING DEPARTMENT AND THE CALIFORNIA OCCUPATIONAL REGULATIONS. THIS PROVISION SHALL COVER THE CONTRACTOR'S EMPLOYEES AND ALL OTHER PERSONS WORKING UPON OR VISITING THE SITE. THE CONTRACTOR SHALL BECOME FULLY INFORMED OF ALL APPLICABLE STANDARDS AND REGULATIONS AND INFORM ALL PERSONS AND REPRESENTATIVES RESPONSIBLE FOR WORK UNDER THIS CONTRACT.
   e. WORK SHALL COMPLY WITH THE PROVISIONS OF CHAPTER 33 OF THE CBC AND CFC - "FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION".

GENERAL NOTES

1. DRAWING AND SPECIFICATIONS REPRESENT FINISHED CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR MEANS AND METHODS OF CONSTRUCTION INCLUDING BUT NOT LIMITED TO SHORING AND TEMPORARY BRACING.
2. OMISSION OR CONFLICTS BETWEEN VARIOUS ELEMENTS OF DRAWINGS, NOTES AND DETAILS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND RESOLVED BEFORE PROCEEDING WITH THE WORK.
3. THE ARCHITECTURAL DRAWINGS SHOW PRINCIPAL AREAS WHERE WORK MUST BE ACCOMPLISHED UNDER THIS CONTRACT. INCIDENTAL WORK MAY ALSO BE NECESSARY IN AREAS NOT SHOWN ON THE ARCHITECTURAL DRAWINGS DUE TO CHANGES AFFECTING EXISTING MECHANICAL, ELECTRICAL, PLUMBING AND OR OTHER SYSTEMS. SUCH INCIDENTAL WORK IS ALSO PART OF THIS CONTRACT. INSPECT THOSE AREAS AND ASCERTAIN WORK NEEDED, AND DO THAT WORK IN ACCORDANCE WITH THE CONTRACT REQUIREMENTS AT NO ADDITIONAL COST.
4. NO DEVIATION FROM THE APPROVED DRAWINGS AND SPECIFICATIONS IS PERMITTED WITHOUT THE PRIOR WRITTEN CONSENT OF THE ARCHITECT. THE ARCHITECT'S INTERPRETATION OF THESE DOCUMENTS SHALL BE FINAL.
5. BEFORE BEGINNING WORK AT THE SITE, INSPECT AND VERIFY THE CONDITION OF EVERY ITEM AFFECTED BY THE WORK UNDER THIS CONTRACT AND REPORT DISCREPANCIES WITH THE PROJECT DOCUMENTS TO THE ARCHITECT BEFORE WORK TO THAT AREA.
6. BEFORE BEGINNING WORK AT THE SITE, INSPECT THE EXISTING BUILDING AND DETERMINE THE EXTENT OF EXISTING FINISHES, SPECIALTIES, CASEWORK, EQUIPMENT AND OTHER ITEMS WHICH MUST BE REMOVED AND REINSTALLED IN ORDER TO PERFORM THE WORK UNDER THIS CONTRACT.
7. SEE MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS FOR VENT, DUCT, CONDUIT SLEEVE PENETRATIONS, ETC. NOT SHOWN ON THE ARCHITECTURAL DRAWINGS.
8. DO NOT DRILL OR CUT EXISTING FLOOR OR ROOF JOISTS, BEAMS, COLUMNS OR OTHER STRUCTURAL ELEMENTS UNLESS SPECIFICALLY INDICATED. MAKE OPENINGS OF PROPER SIZE FOR CONDUITS, DUCTS, PIPES AND OTHER ITEMS PASSING THROUGH OPENINGS.
9. PROTECT EXISTING WORK FROM DAMAGE.
10. PATCH AND FINISH OR REFINISH TO MATCH ADJACENT EXISTING FINISHES, THOSE DAMAGED, WHERE CUTTING, GRINDING, DRILLING, DEMOLITION AND NEW CONSTRUCTION AFFECT EXISTING SURFACES TO REMAIN.
11. WHERE CONDUIT, DUCTS, PIPES AND SIMILAR ITEMS ARE SHOWN TO BE INSTALLED IN EXISTING WALLS OR PARTITIONS, NEATLY CHASE THE WALLS OR PARTITIONS, INSTALL THE ITEMS, AND PATCH THE WALLS OR PARTITIONS. MAKE THE INSTALLATION INDISCERNIBLE IN THE FINISH WORK.
12. SEAL TIGHT AND PROTECT WITH FIRE SAFING NEW SLEEVES AND OPENINGS THROUGH FIRE RATED PARTITIONS.
13. WHERE "MATCH EXISTING" IS INDICATED, NEW CONSTRUCTION OR FINISHES AS APPROPRIATE TO THE NOTE, SHALL MATCH THE EXISTING.
14. TRUCK ROUTES USED FOR THE CONSTRUCTION OF THIS PROJECT TO BE SUBMITTED TO AND APPROVED BY CLIENT.
15. PAINT ALL EXPOSED CONDUITS, METALS, PIPES, DUCTS, ETC. (U.O.N.). COLORS TO BE SELECTED BY THE ARCHITECT.
16. IN THE DEMOLITION DRAWINGS, DASHED LINES INDICATE CONSTRUCTION FIXTURES OR ITEMS TO BE REMOVED OR SALVAGED. REMOVE MEANS DEMOLITION AND DISPOSAL OF ITEMS. SALVAGE MEANS CAREFUL EXTRACTION AND PROTECTION FOR REINSTALLATION OR STORAGE. ITEMS NOT SPECIFICALLY NOTED FOR SALVAGE ARE TO BE REMOVED.
17. USE OF ANY ASBESTOS OR LEAD CONTAINING MATERIAL IS PROHIBITED. ALL NEW MATERIALS EXCLUDING BARE FIBERGLASS, WOOD, METAL, GLASS, RUBBER, OR CONCRETE SHALL HAVE MATERIAL SAFETY DATA SHEETS SUBMITTED FOR REVIEW AND APPROVAL BY THE DISTRICT. NO MATERIAL SHALL BE USED OR INSTALLED PRIOR TO REVIEW AND APPROVAL OF THE MATERIAL SAFETY DATA SHEET FOR THAT PRODUCT.
18. HAZARDOUS MATERIALS MAY BE PRESENT ON SITE. REFER TO THE OWNER'S HAZMAT DOCUMENTS FOR ADDITIONAL INFORMATION. SHOULD CONTRACTOR DISCOVER WHAT IS BELIEVED TO BE HAZARDOUS MATERIALS IN ADDITION TO WHAT IS SHOWN ON THE HAZMAT DOCUMENTS, THE CONTRACTOR SHALL NOTIFY THE OWNER IMMEDIATELY AND WAIT FOR DIRECTION.
   A. ANY WORK REQUIRING IMPACT, REMOVAL, OR ALTERATION OF ASBESTOS CONTAINING MATERIALS MUST BE PERFORMED IN COMPLIANCE WITH THE PROJECT MANUAL.
   B. ANY WORK REQUIRING IMPACT, REMOVAL, OR ALTERATION OF LEAD CONTAINING STAINS, PAINTS, AND COATINGS ON BUILDING COMPONENTS, MUST BE PERFORMED IN COMPLIANCE WITH THE PROJECT MANUAL AS APPROPRIATE.
19. CONTRACTOR IS RESPONSIBLE FOR PROVIDING PROPER WEATHER PROTECTION DURING CONSTRUCTION.
20. ALL ITEMS NOTED ON DRAWINGS NOT CALLED OUT AS EXISTING SHALL BE CONSIDERED NEW.
21. ALL DIMENSIONS SHOWN SHALL BE VERIFIED ON SITE.
22. CONTRACTOR SHOULD NOT SCALE THE DRAWINGS FOR MEASUREMENTS.
23. WRITTEN INFORMATION SUPERSEDES DRAWN INFORMATION.

DRAWING INDEX

GENERAL
G0.01 PROJECT DIRECTORY, SCOPE OF WORK & DRAWING INDEX
G0.02 SYMBOLS & ABBREVIATIONS
GENERAL: 2

ARCHITECTURAL
A0.01 OVERALL SITE PLAN
A0.02 ACCESSIBILITY SITE PLAN
A0.03 SITE PLAN
A0.04 ENLARGED SITE PLANS
A1.01 SITE DETAILS
A2.21 SIGNAGE DETAILS & GATE SCHEDULE
ARCHITECTURAL: 6
Grand total: 8

AGENCY STAMP

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-121932 INC:
REVIEWED FOR
SS ☐ FLS ☑ ACS ☑
DATE: 8/14/2024

DSA APPLICATION NO: 01-121932

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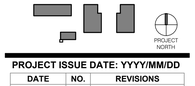
LICENSED ARCHITECT — AMIR M. KAKAVAND — No. C-30095 — Exp. 08-31-25 — STATE OF CALIFORNIA

CONSULTANT

PROJECT NAME
BEN PAINTER ES FENCING PROJECT

FACILITY INFO
BEN PAINTER ELEMENTARY SCHOOL
500 ROUGH & READY RD., SAN JOSE, CA. 95133

KEY PLAN



PROJECT ISSUE DATE: YYYY/MM/DD

DATE	NO.	REVISIONS

DRAFTER: XX — REVIEWER: XX
PM: XX — DSK JOB NO: 24000

SHEET TITLE
PROJECT DIRECTORY, SCOPE OF WORK & DRAWING INDEX

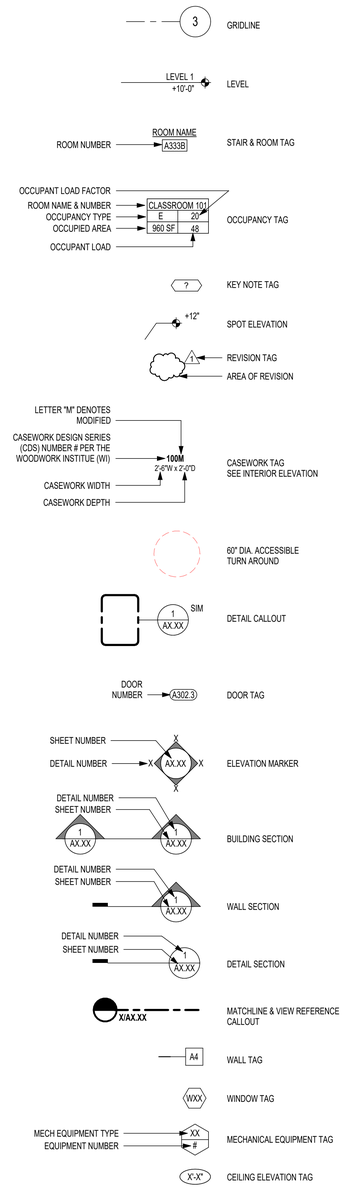
SHEET NUMBER
G0.01

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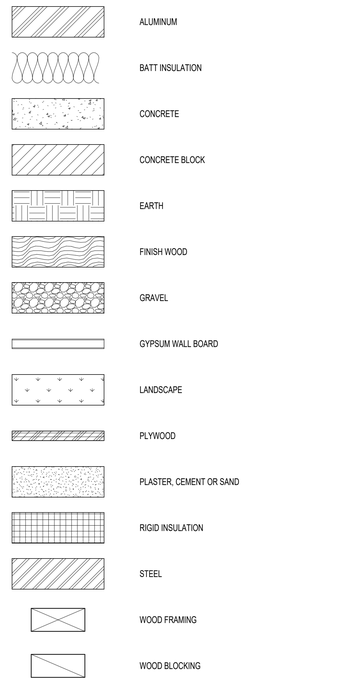
ABBREVIATIONS

A.F.F.	ABOVE FINISH FLOOR	FLR.	FLOOR	RELOC.	RELOCATABLE
A.P.	ACCESS PANEL	F.D.	FLOOR DRAIN	(R)	REMOVE
ACCES.	ACCESSIBLE	FLUOR.	FLUORESCENT	REQ'D	REQUIRED
ACT	ACOUSTIC CEILING TILE	FT.	FOOT OR FEET	RET.	RETAINING
ACOUS.	ACOUSTICAL	FTG.	FOOTING	REV.	REVISION
ADD'L	ADDITIONAL	FDN.	FOUNDATION	R.	RISER
ADHES.	ADHESIVE	FURR.	FURRING	R.D.	ROOF DRAIN
ADJAC.	ADJACENT	GALV.	GALVANIZED	RM.	ROOM
ADJ.	ADJUSTABLE	G.I.	GALVANIZED IRON	R.O.	ROUGH OPENING
ADMIN.	ADMINISTRATION	GA.	GAUGE	RUB.	RUBBER
AGGR.	AGGREGATE	GEN.	GENERAL	S.N.D.	SANITARY NAPKIN DISPENSER
A/C	AIR CONDITIONING	GL.	GLASS	S.N.R.	SANITARY NAPKIN RECEPTACLE
A.H.D.	AIR HAND DRYER	G.F.R.C.	GLASS FIBER REINFORCED CONCRETE	SCHD.	SCHEDULE
ALT.	ALTERNATIVE OR ALTERNATE	G.B.	GRAB BAR	SEAL.	SEALANT
AL.	ALUMINUM	GND.	GROUND	SECT.	SECTION
A.D.A.	AMERICAN DISABILITIES ACT	GYP.	GYPSUM	S.C.D.	SEE CIVIL DRAWINGS
A.B.	ANCHOR BOLT	H.R.	HANDRAIL	S.E.D.	SEE ELECTRICAL DRAWINGS
ANOD.	ANODIZED	HDWE	HARDWARE	S.F.A.D.	SEE FIRE ALARM DRAWINGS
APPROX.	APPROXIMATE	HDWD.	HARDWOOD	S.F.P.D.	SEE FIRE PROTECTION DWGS.
ARCH.	ARCHITECTURAL	HDR.	HEADER	S.L.D.	SEE LANDSCAPE DRAWINGS
A.C.	ASPHALT CONCRETE	HVAC	HEATING, VENTILATING, AND AIR CONDITIONING	S.M.D.	SEE MECHANICAL DRAWINGS
BSMT.	BASEMENT	HGT. or HT.	HEIGHT	S.P.D.	SEE PLUMBING DRAWINGS
B.O.D.	BASIS OF DESIGN	H.C.	HOLLOW CORE	S.S.D.	SEE STRUCTURAL DRAWINGS
BM.	BEAM	H.M.	HOLLOW METAL	SERV.	SERVICE
BTWN.	BETWEEN	HORIZ.	HORIZONTAL	SHT.	SHEET
BITUM.	BITUMINOUS	H.B.	HOSE BIBB	SIM.	SIMILAR
BLK.	BLOCK	HR.	HOUR	S.DT.	SMOKE DETECTOR
BD.	BOARD	IN.	INCH	S.D.	SOAP DISPENSER
BOL.	BOLLARD	INCL.	INCLUDING	S.C.	SOLID CORE
BOT.	BOTTOM	INFO.	INFORMATION	STC	SOUND TRANSMISSION CLASS
BLDG.	BUILDING	INSUL.	INSULATION	SPEC.	SPECIFICATIONS
B.U.R.	BUILT-UP ROOFING	INT.	INTERIOR	SPKR.	SPRINKLER
CAB.	CABINET	JAN.	JANITOR	SQ.	SQUARE
C.B.	CATCH BASIN	JT.	JOINT	SF	SQUARE FEET
CLG.	CEILING	KIT.	KITCHEN	S.S.	STAINLESS STEEL
CEM.	CEMENT	LAB.	LABORATORY	STD.	STANDARD
C.B.B.	CEMENTITIOUS BACKER BOARD	L.B.	LAG BOLT	STL.	STEEL
CTR.	CENTER	LAM.	LAMINATE	STOR.	STORAGE
CER.	CERAMIC	LAV.	LAVATORY	STRUCT.	STRUCTURAL
C.T.	CERAMIC TILE	L.	LONG	SUSP.	SUSPENDED
CLF.	CHAIN LINK FENCE	M.B.	MACHINE BOLT	S.A.T.	SUSPENDED ACOUSTICAL TILE
CLR.	CLEAR	MAINT.	MAINTENANCE	SYM.	SYMMETRICAL
C.A.	CLEAR ANODIZED	M.H.	MANHOLE	TEL.	TELEPHONE
CLO.	CLOSET	MFR.	MANUFACTURER	TEMP.	TEMPERED
COL.	COLUMN	MAT.	MATERIAL	TER.	TERRAZZO
CONC.	CONCRETE	MAX.	MAXIMUM	THK.	THICK
C.M.U.	CONCRETE MASONRY UNIT	MECH.	MECHANICAL	THRESH.	THRESHOLD
CONF.	CONFERENCE	MEMB.	MEMBRANE	T.S.C.D.	TOILET SEAT COVER DISPENSER
CONN.	CONNECTION	MTL.	METAL	T.T.D.	TOILET TISSUE DISPENSER
CONSTR.	CONSTRUCTION	MEZZ.	MEZZANINE	T & G	TONGUE AND GROOVE
CONT.	CONTINUOUS	MIN.	MINIMUM	T & B	TOP AND BOTTOM
C.J.	CONTROL JOINT	MISC.	MISCELLANEOUS	T.O.	TOP OF
C.G.	CORNER GUARD	MTD.	MOUNTED	T.O.C.	TOP OF CONCRETE
CORR.	CORRIDOR	(N)	NEW	T.O.P.	TOP OF PARAPET
CTSK.	COUNTERSUNK	NOM.	NOMINAL	T.O.S.	TOP OF STEEL
DEMO.	DEMOLITION	N.P.S.	NOMINAL PIPE SIZE	T.W.	TOP OF WALL
DET(S).	DETAIL(S)	N.I.C.	NOT IN CONTRACT	T.	TREAD
DIA.	DIAMETER	NO.	NUMBER	T.S.	TUBE STEEL
DIM.	DIMENSION	OFF.	OFFICE	TYP.	TYPICAL
DISP.	DISPENSER	O.C.	ON CENTER	UNF.	UNFINISHED
DR.	DOOR	O.D.	OUTSIDE DIAMETER	U.O.N.	UNLESS OTHERWISE NOTED
D.O.	DOOR OPENING	O/	OVER	UR.	URINAL
DBL.	DOUBLE	O.F.D.	OVERFLOW DRAIN	V.I.F.	VERIFY IN FIELD
DN.	DOWN	O.F.S.	OVERFLOW SCUPPER	VERT.	VERTICAL
D.S.	DOWN SPOUT	O.H.	OVERHEAD	V.C.T.	VINYL COMPOSITION TILE
DWG(S).	DRAWING(S)	OFOI	OWNER FURNISHED OWNER INSTALLED	WSCT.	WAINSCOT
D.F.	DRINKING FOUNTAIN	O.S.C.I.	OWNER SUPPLIED, CONTRACTOR INSTALLED	W.C.	WATER CLOSET
EA.	EACH	PTD.	PAINTED	W.H.	WATER HEATER
E.S.	EACH SIDE	PR.	PAIR	WP.	WATERPROOF
E.W.	EACH WAY	PNL.	PANEL	WT.	WEIGHT
ELEC.	ELECTRICAL	P.H.	PANIC HARDWARE	W.W.F.	WELDED WIRE FABRIC
EL.	ELEVATION	P.T.D.	PAPER TOWEL DISPENSER	W.O.	WHERE OCCURS
ELEV.	ELEVATOR	P.T.D./R.	PAPER TOWEL DISPENSER & RECEPTACLE	WDW.	WINDOW
EMER.	EMERGENCY	PTN.	PARTITION	W.G.	WIRE GLASS
ENCL.	ENCLOSURE	P.H.S.	PHILLIPS HEAD SCREW	W/	WITH
EQ.	EQUAL	P.A.	PLANTING AREA	W/O	WITHOUT
EQUIP.	EQUIPMENT	PLAS.	PLASTER	WD.	WOOD
EXH.	EXHAUST	P.LAM.	PLASTIC LAMINATE	W.I.C.	WOOD INSTITUTE OF CALIFORNIA
(E)	EXISTING	PL.	PLATE	YD.	YARD
E.D.	EXIT DEVICE	PLYWD.	PLYWOOD		
EXP.	EXPANSION	PVC	POLYVINYL CHLORIDE		
E.B.	EXPANSION BOLT	PRCST	PRECAST		
E.J.	EXPANSION JOINT	PREFAB.	PREFABRICATED		
EXPO.S.	EXPOSED STRUCTURE	PREP.	PREPARATION		
EXT.	EXTERIOR	P.T.	PRESSURE TREATED		
F.O.	FACE OF	PA.	PUBLIC ADDRESS		
FIN.	FINISH	QTY.	QUANTITY		
F.F.	FINISHED FLOOR	Q.T.	QUARRY TILE		
F.A.	FIRE ALARM	RAD.	RADIUS		
F.E.	FIRE EXTINGUISHER	R.W.L.	RAIN WATER LEADER		
F.E.C.	FIRE EXTINGUISHER CABINET	RWD	REDWOOD		
F.H.C.	FIRE HOSE CABINET	REF.	REFERENCE		
F.H.	FIRE HYDRANT	RCP	REFLECTED CEILING PLAN		
F.R.	FIRE RATED	REINF.	REINFORCED		
FIXT.	FIXTURE	REBAR.	REINFORCING BAR		
F.H.M.S.	FLAT HEAD MACHINE (OR METAL) SCREW				

SYMBOLS



MATERIALS LEGEND



KEYNOTE REFERENCE CATEGORIES

EXISTING & DEMO

A_SITE
B_FLOOR
C_WALL
D_CEILINGS
E_ROOF
F_DOOR
G_WINDOW
H_CASEWORK
J_INTERIOR SPECIALTIES
K_EXTERIOR SPECIALTIES
L_LANDSCAPING
M_MECHANICAL AND PLUMBING
N_ELECTRICAL
P_GENERAL

NEW

01 GENERAL
02 EXISTING CONDITIONS
03 CONCRETE
04 MASONRY
05 METALS
06 WOOD, PLASTICS, AND COMPOSITES
07 THERMAL AND MOISTURE PROTECTION
08 OPENINGS
09 FINISHES
10 SPECIALTIES
11 EQUIPMENT
12 FURNISHINGS
13 SPECIAL CONSTRUCTION
14 CONVEYING EQUIPMENT
21 FIRE SUPPRESSION
22 PLUMBING
23 HVAC
26 ELECTRICAL
27 COMMUNICATIONS
28 ELECTRONIC SAFETY AND SECURITY
31 EARTHWORK
32 EXTERIOR IMPROVEMENTS
33 UTILITIES

CODE ANALYSIS

00 ACCESS COMPLIANCE AND FIRE LIFE SAFETY

AGENCY STAMP

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-121932 INC:
REVIEWED FOR
SS ☐ FLS ☑ ACS ☑
DATE: 8/14/2024

DSA APPLICATION NO: 01-121932

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LICENSED ARCHITECT
AMIR M. KAKAVAND
No. C-30095
Exp. 08-31-25
STATE OF CALIFORNIA

CONSULTANT

PROJECT NAME
BEN PAINTER ES FENCING PROJECT

FACILITY INFO
BEN PAINTER ELEMENTARY SCHOOL
500 ROUGH & READY RD., SAN JOSE, CA. 95133

KEY PLAN



PROJECT ISSUE DATE: YYYY/MM/DD

DATE	NO.	REVISIONS

DRAFTER: Author
PM: XX
REVIEWER: XX
DSK JOB NO: 24000

SHEET TITLE
SYMBOLS & ABBREVIATIONS

SHEET NUMBER
G0.02

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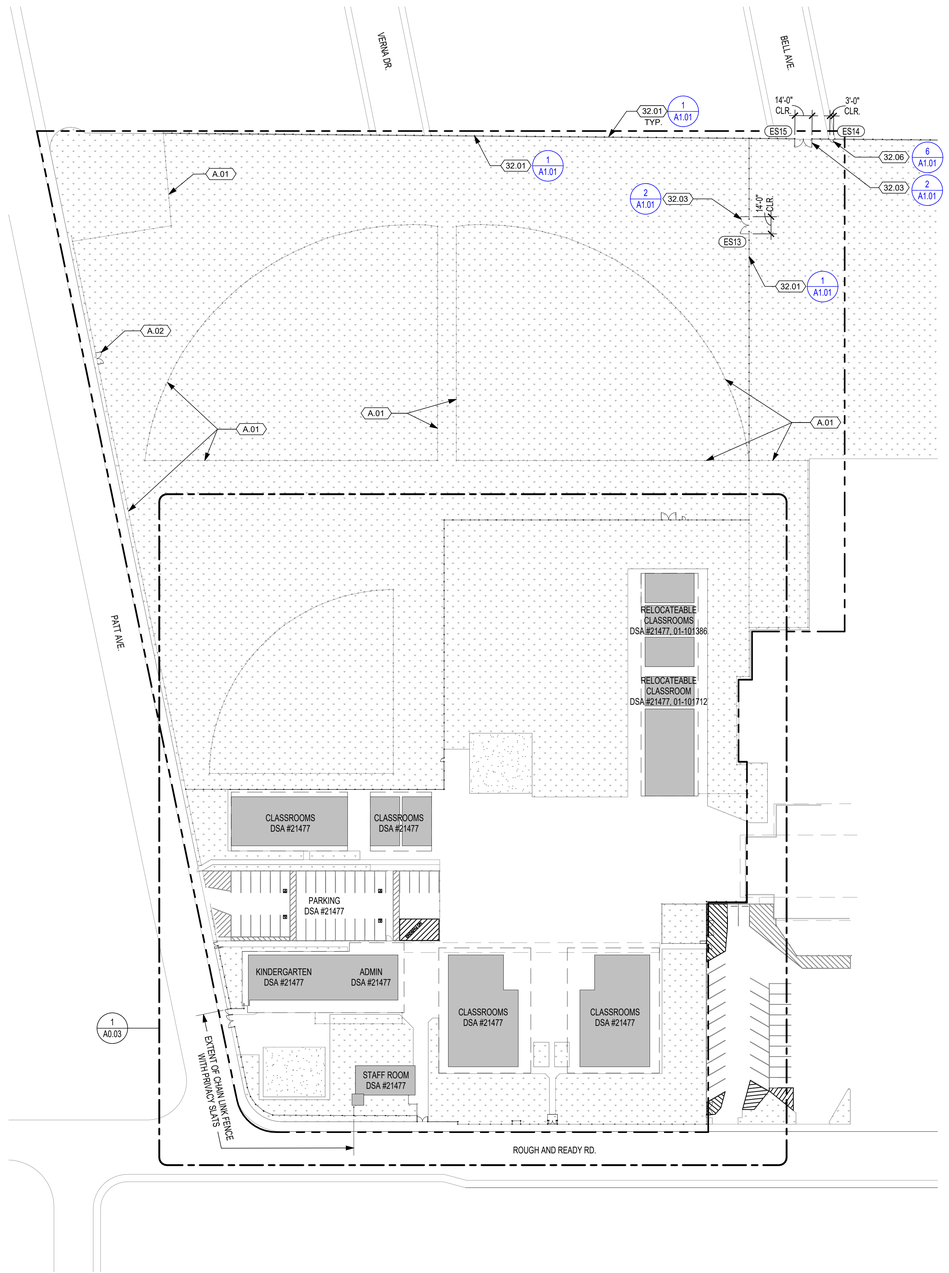
SITE LEGEND

- PROPERTY LINE
- BUILDING FOOTPRINT
- EXISTING BUILDING (NOT IN SCOPE)
- EXISTING LANDSCAPE / PLANTING AREA
- EXISTING CONCRETE PAVING
- NEW CONCRETE PAVING SEE DETAILS 10/A1.01 ,11/A1.01 ,12/A1.01 13/A1.01 , 14/A1.01

KEYNOTE LEGEND

32.01	6'-0" HIGH CHAIN LINK FENCE
32.03	6'-0" HIGH CHAIN LINK DOUBLE VEHICULAR GATES
32.06	3'-0" WIDE X 6'-0" HIGH CHAIN LINK MAINTENANCE PERSONNEL GATE
A.01	EXISTING CHAIN LINK FENCE
A.02	EXISTING 6' HIGH CHAIN LINK DOUBLE VEHICULAR GATES

NOTES:
1. FOR GATE SCHEDULE SEE SHEET A2.21



1 OVERALL SITE PLAN
1" = 50'-0"

TRUE N

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CONSULTANT

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FACILITY INFO
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KEY PLAN

PROJECT NORTH

PROJECT ISSUE DATE: YYYY/MM/DD

DATE	NO.	REVISIONS

DRAFTER: Author REVIEWER: XX
PM: XX DSK JOB NO: 24000

SHEET TITLE
OVERALL SITE PLAN

SHEET NUMBER
A0.01

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ACCESSIBILTY NOTES

1. PATH OF TRAVEL (P.O.T.) AS INDICATED IS A BARRIER FREE ACCESS WITHOUT ANY ABRUPT VERTICAL CHANGES EXCEEDING 1/2" BEVELED AT 1:2 MAXIMUM SLOPE. EXCEPT THAT LEVEL CHANGES DO NOT EXCEED 1/4" VERTICAL AND IS AT LEAST 48" WIDE. SURFACE IS SLIP RESISTANT, STABLE, FIRM, AND SMOOTH. CROSS-SLOPE DOES NOT EXCEED 2% AND SLOPE IN THE DIRECTION OF TRAVEL IS LESS THAN 5% UNLESS OTHERWISE INDICATED.

   (P.O.T.) SHALL MAINTAIN FREE OF OVERHANGING OBSTRUCTIONS TO 80" MINIMUM (11B-307.4) AND PROTRUDING OBJECTS WITH LEADING EDGES MORE THAN 27 INCHES AND NOT MORE THAN 80 INCHES ABOVE THE FINISH FLOOR OR GROUND SHALL PROTRUDE 4 INCHES MAXIMUM HORIZONTALLY INTO THE CIRCULATION PATH. (11B-307.2.).

   ARCHITECT TO VERIFY THAT ALL BARRIERS IN THE PATH OF TRAVEL HAVE BEEN REMOVED OR WILL BE REMOVED UNDER THIS PROJECT, AND PATH OF TRAVEL COMPLIES WITH CBC 11B-206.

2. PROVIDE SITE DIRECTIONAL ACCESSIBLE ROUTE SIGNAGE (SDS-1) AT ALL MAJOR JUNCTIONS PER CBC SEC. 11-216.6 WHERE ACCESSIBLE ROUTE DIVERGES FROM CENERAL ROUTE.

ACCESSIBILTY STATEMENT BY DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE

THE PATH OF TRAVEL (P.O.T.) INDICATED IN THESE CONSTRUCTION DOCUMENTS IS COMPLIANT WITH CURRENT APPLICABLE CALIFORNIA BUILDING CODE ACCESSIBILITY PROVISIONS FOR PATH OF TRAVEL REQUIREMENTS FOR ALTERATIONS, ADDITIONS AND STRUCTURAL REPAIRS.

AS PART OF THE DESIGN OF THIS PROJECT, THE P.O.T. WAS EXAMINED, AND ANY ELEMENTS, COMPONENTS OR PORTIONS OF THE P.O.T. THAT WERE DETERMINED TO BE NONCOMPLIANT (1) HAVE BEEN IDENTIFIED, AND (2) THE CORRECTIVE WORK NECESSARY TO BRING THEM INTO COMPLIANCE HAS BEEN INCLUDED WITHIN THE SCOPE OF THIS PROJECT'S WORK THROUGH DRAWINGS, DETAILS AND SPECIFICATIONS INCORPORATED INTO THESE CONSTRUCTION DOCUMENTS.

ANY NONCOMPLIANT ELEMENT, COMPONENT OR PORTION OF THE P.O.T. THAT WILL NOT BE CORRECTED BY THIS PROJECT, BASED ON A VALUATION THRESHOLD LIMITATION OR A FINDING OR UNREASONABLE HARDSHIP, IS SO INDICATED IN THESE CONSTUCTION DOCUMENTS.

DURING CONSTRUCTION, IF ANY P.O.T. ITEM WITHIN THE SCOPE OF THE PROJECT REPRESENTED AS CODE COMPLIANT IS FOUND TO BE NONCONFORMING BEYOND REASONABLE CONSTRUCTION TOLERANCES, IT SHALL BE BROUGHT INTO COMPLIANCE WITH THE CBC AS A PART OF THIS PROJECT BY MEANS OF A CONSTRUCTION CHANGE DOCUMENT.

PARKING COUNT / RATIO

PARKING LOT:

30 TOTAL PARKING SPACES
PER 11B-208.2, 2 ACCESSIBLE SPACES ARE REQUIRED.
IT IS CONFIRMED THAT 2 ACCESSIBLE SPACES ARE CURRENTLY PROVIDED.

STAFF & VISITOR PARKING LOT:

39 TOTAL PARKING SPACES
PER 11B-208.2, 1 ACCESSIBLE SPACES ARE REQUIRED.
IT IS CONFIRMED THAT 2 ACCESSIBLE SPACES, INCLUDING 1 VAN ACCESSIBLE SPACE IS CURRENTLY PROVIDED.

VISITOR PARKING LOT:

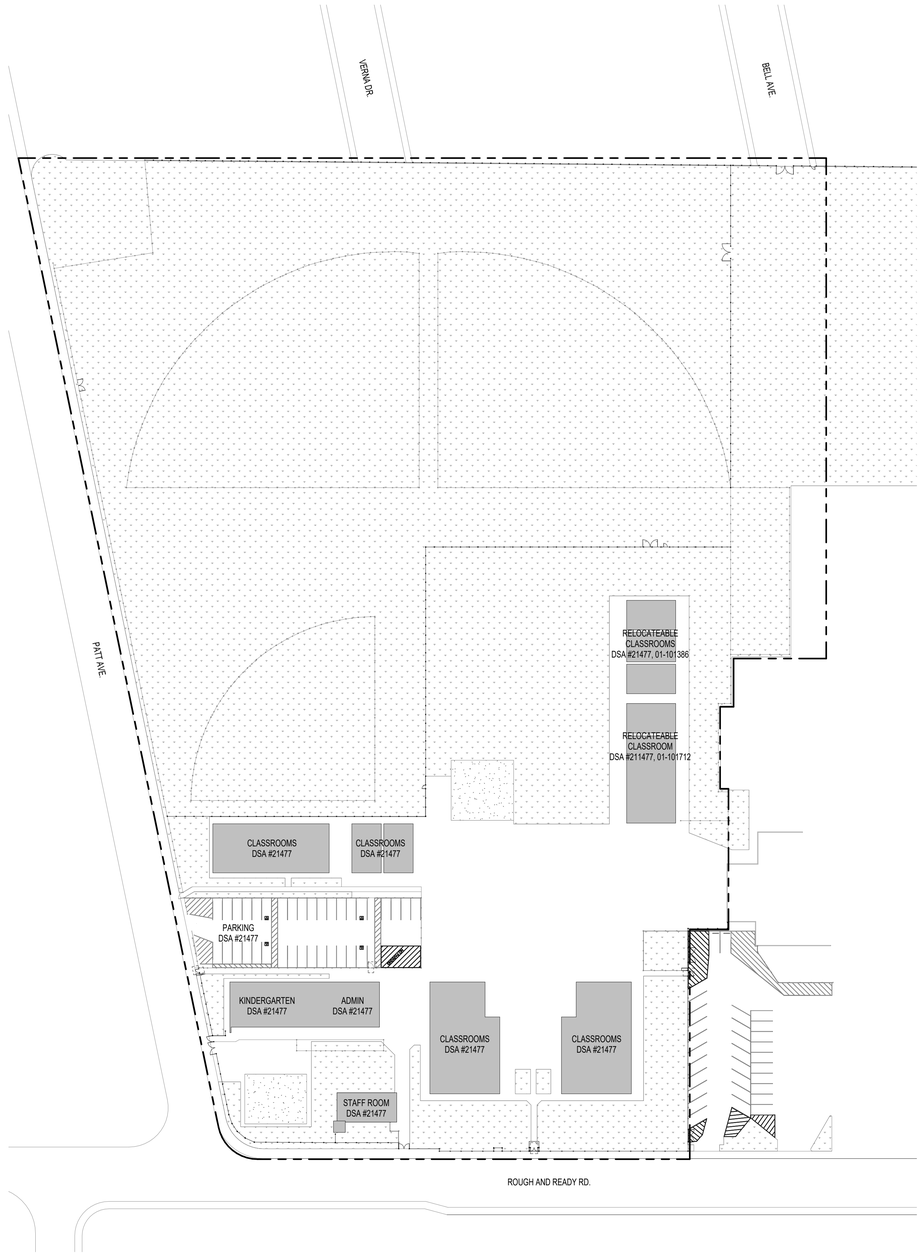
37 TOTAL PARKING SPACES
PER 11B-208.2, 2 ACCESSIBLE SPACES ARE REQUIRED.
IT IS CONFIRMED THAT 2 ACCESSIBLE SPACES ARE CURRENTLY PROVIDED.

SITE LEGEND

- PROPERTY LINE
- BUILDING FOOTPRINT
- EXISTING BUILDING (NOT IN SCOPE)
- EXISTING LANDSCAPE / PLANTING AREA
- EXISTING CONCRETE PAVING
- NEW CONCRETE PAVING SEE DETAILS 10/A1.01 ,11/A1.01 ,12/A1.01 13/A1.01 , 14/A1.01

ACCESSIBILITY LEGEND

- PROPERTY LINE
- EXISTING LANDSCAPE / PLANTING AREA
- EXISTING CONCRETE PAVING
- NEW CONCRETE PAVING
- NEW AC PAVING
- EXISTING BUILDING (NOT IN SCOPE)



1 ACCESSIBILITY SITE PLAN
1" = 50'-0"

TRUE N

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Exp. 08-31-25
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CONSULTANT

PROJECT NAME
BEN PAINTER ES FENCING PROJECT

FACILITY INFO
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KEY PLAN

PROJECT NORTH

PROJECT ISSUE DATE: YYYY/MM/DD

DATE	NO.	REVISIONS

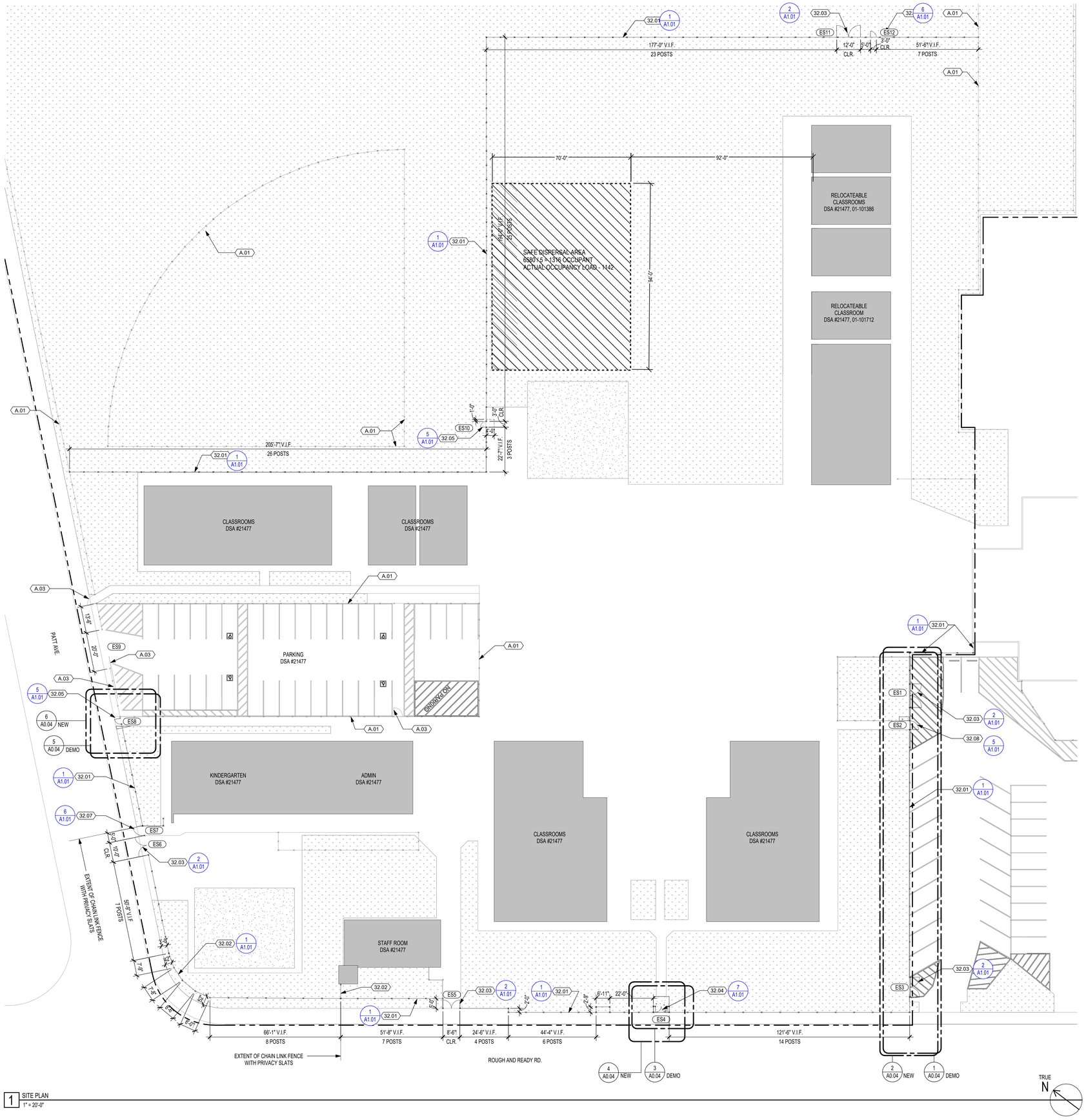
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PM: XX DSK JOB NO: 24000

SHEET TITLE
ACCESSIBILITY SITE PLAN

SHEET NUMBER
A0.02

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1 SITE PLAN
1" = 20'-0"

KEYNOTE LEGEND

32.01	6'-0" HIGH CHAIN LINK FENCE
32.02	6'-0" HIGH CHAIN LINK FENCE WITH PRIVACY SLATS
32.03	6'-0" HIGH CHAIN LINK DOUBLE VEHICULAR GATES
32.04	6'-0" WIDE X 6'-0" HIGH CHAIN LINK DOUBLE ACCESSIBLE GATE
32.05	3'-0" WIDE X 6'-0" HIGH CHAIN LINK ACCESSIBLE GATE
32.06	3'-0" WIDE X 6'-0" HIGH CHAIN LINK MAINTENANCE PERSONNEL GATE
32.07	5'-0" WIDE X 6'-0" HIGH CHAIN LINK MAINTENANCE PERSONNEL GATE
32.08	4'-6" WIDE X 6'-0" HIGH CHAIN LINK ACCESSIBLE GATE
A.01	EXISTING CHAIN LINK FENCE
A.03	EXISTING CHAIN LINK FENCE AND GATE

NOTES:
1. FOR GATE SCHEDULE SEE SHEET A2.21

SITE LEGEND

- PROPERTY LINE
- BUILDING FOOTPRINT
- EXISTING BUILDING (NOT IN SCOPE)
- EXISTING LANDSCAPE / PLANTING AREA
- EXISTING CONCRETE PAVING
- NEW CONCRETE PAVING SEE DETAILS 10/A1.01 ,11/A1.01 ,12/A1.01 13/A1.01 , 14/A1.01

OCCUPANCY LOAD

TOTAL = 1,142

MINIMUM NUMBER OF EXITS OR ACCESS TO EXITS PER STORY (TABLE 1006.3.3)

4 EXITS REQUIRED

4 EXITS PROVIDED

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PROJECT ISSUE DATE: YYYY/MM/DD

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REVIEWER: XX
PM: XX
DSK JOB NO: 24000

SHEET TITLE
SITE PLAN

SHEET NUMBER
A0.03

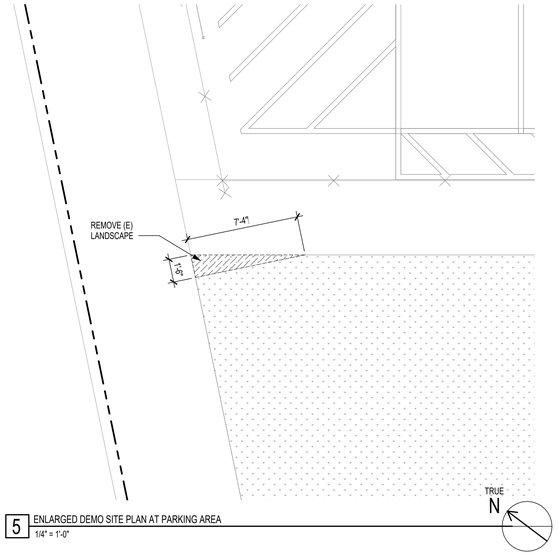
SITE LEGEND

- PROPERTY LINE
- BUILDING FOOTPRINT
- EXISTING BUILDING (NOT IN SCOPE)
- EXISTING LANDSCAPE / PLANTING AREA
- EXISTING CONCRETE PAVING
- NEW CONCRETE PAVING SEE DETAILS 10/A1.01 ,11/A1.01 ,12/A1.01 13/A1.01 , 14/A1.01

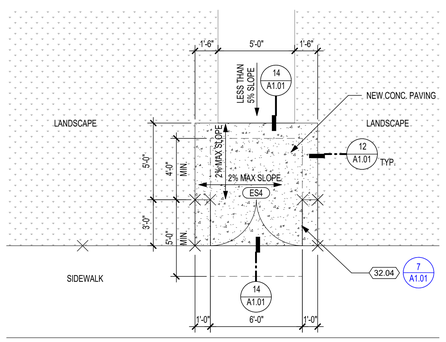
KEYNOTE LEGEND

32.01	6'-0" HIGH CHAIN LINK FENCE
32.03	6'-0" HIGH CHAIN LINK DOUBLE VEHICULAR GATES
32.04	6'-0" WIDE X 6'-0" HIGH CHAIN LINK DOUBLE ACCESSIBLE GATE
32.05	3'-0" WIDE X 6'-0" HIGH CHAIN LINK ACCESSIBLE GATE
32.08	4'-6" WIDE X 6'-0" HIGH CHAIN LINK ACCESSIBLE GATE
A.01	EXISTING CHAIN LINK FENCE

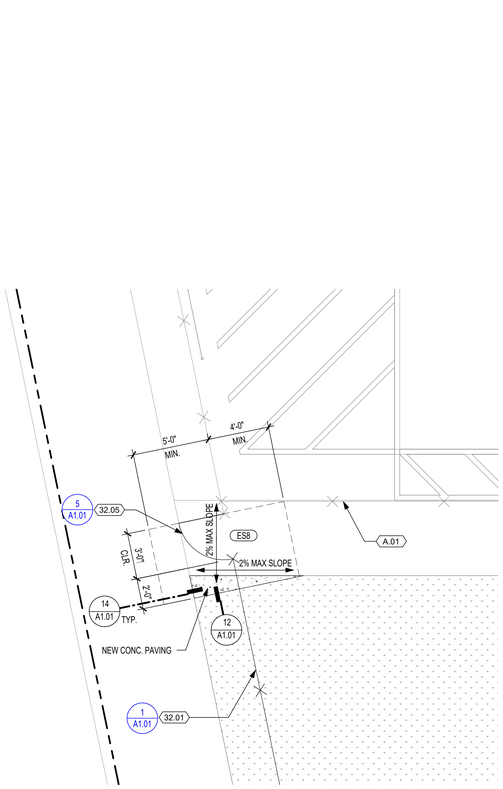
NOTES:
1. FOR GATE SCHEDULE SEE SHEET A2.21
2. ALL DIMENSIONS OF DEMO CONCRETE PAVING TO BE VERIFIED IN FIELD.
3. PROTECT (E) CURB AND (E) FOOTING DURING DEMOLITION OF CONCRETE SLAB.



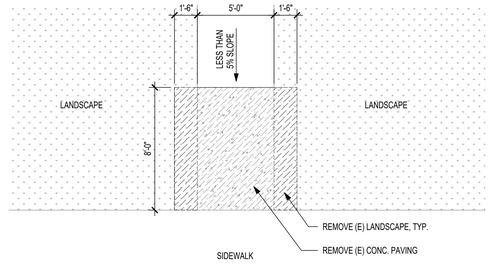
5 ENLARGED DEMO SITE PLAN AT PARKING AREA
1/4" = 1'-0"



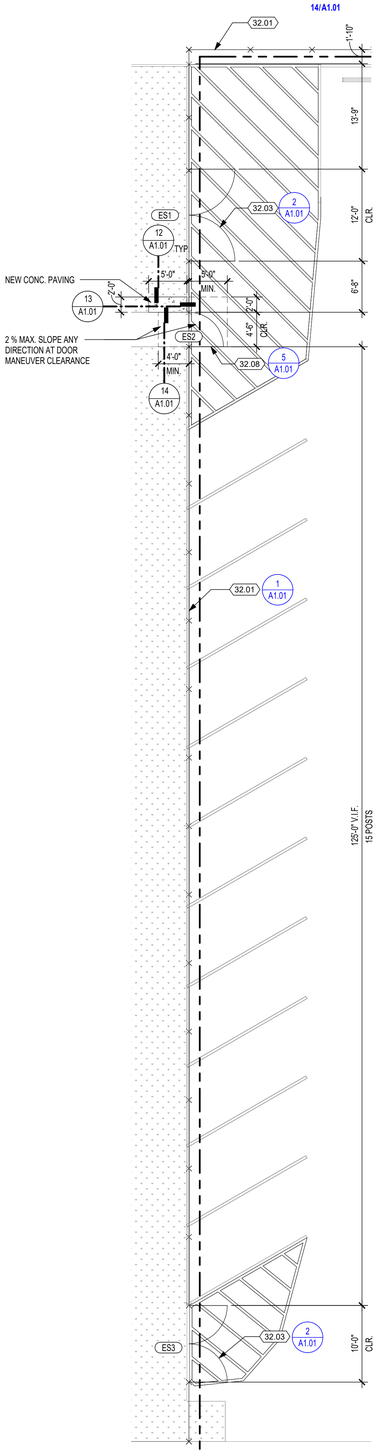
4 ENLARGED SITE PLAN AT ENTRY AREA
1/4" = 1'-0"



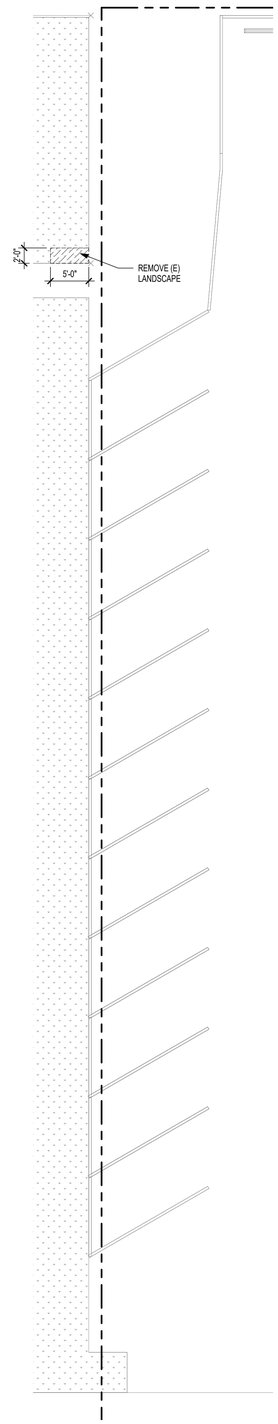
6 ENLARGED SITE PLAN AT PARKING AREA
1/4" = 1'-0"



3 ENLARGED DEMO SITE PLAN AT ENTRY AREA
1/4" = 1'-0"



2 ENLARGED SITE PLAN AT EAST PERIMETER
1/8" = 1'-0"



1 ENLARGED DEMO SITE PLAN AT EAST PERIMETER
1/8" = 1'-0"

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LICENSED ARCHITECT
AMIR M. KAKAVAND
No. C-30095
Exp. 08-31-25
STATE OF CALIFORNIA

CONSULTANT

PROJECT NAME
BEN PAINTER ES FENCING PROJECT

FACILITY INFO
BEN PAINTER ELEMENTARY SCHOOL
500 ROUGH & READY RD., SAN JOSE, CA. 95133

KEY PLAN



PROJECT ISSUE DATE: YYYY/MM/DD

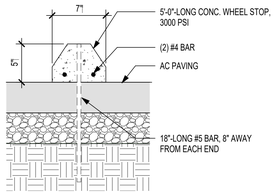
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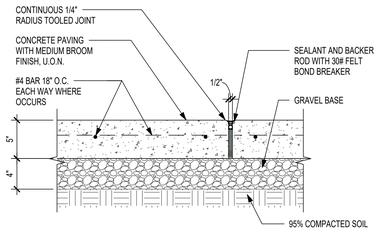
SHEET TITLE
ENLARGED SITE PLANS

SHEET NUMBER
A0.04

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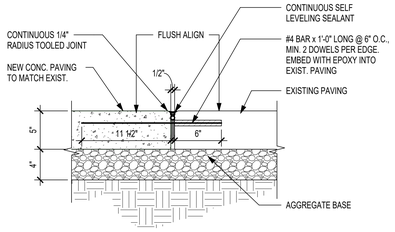


15 WHEEL STOP DETAIL
1 1/2" = 1'-0"

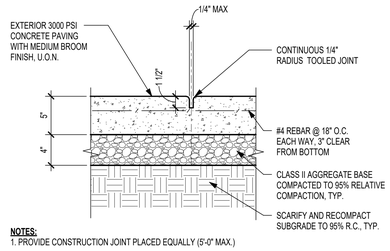


NOTE:
1. PROVIDE EXPANSION JOINT @ 20'-0" MAX U.O.N

11 CONCRETE PAVING EXPANSION JOINT DETAIL
1 1/2" = 1'-0"



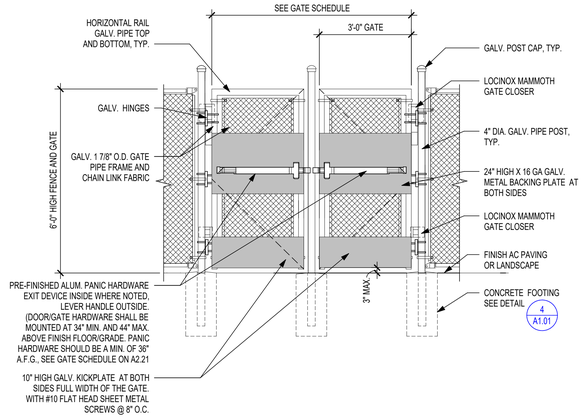
14 CONCRETE PAVING TO (E) CONCRETE PAVING DETAIL
1 1/2" = 1'-0"



NOTES:
1. PROVIDE CONSTRUCTION JOINT PLACED EQUALLY (5'-0" MAX.)

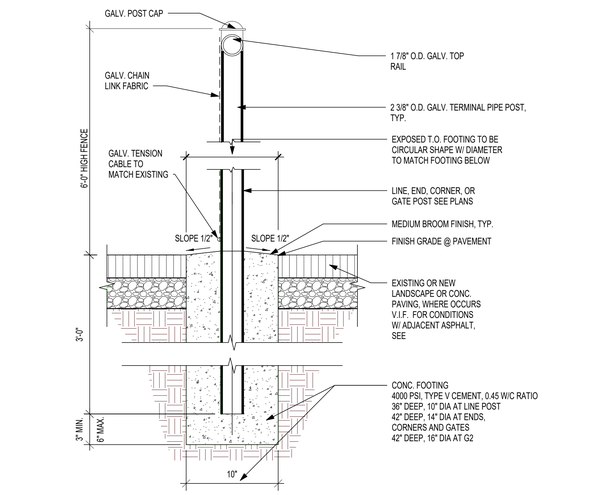
10 CONCRETE PAVING AND CONTROL JOINT DETAIL
1 1/2" = 1'-0"

PANIC HARDWARE NOTES:
- THE CROSS BAR SHALL EXTEND ACROSS NOT LESS THAN ONE-HALF THE WIDTH OF THE DOOR / GATE.
- THE ENDS OF THE CROSS BAR SHALL BE CURVED, GUARDED OR OTHERWISE DESIGNED TO PREVENT CATCHING ON THE CLOTHING OF PERSONS DURING EGRESS

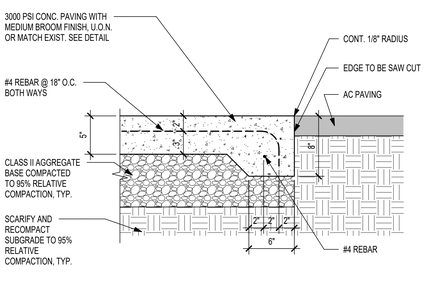


NOTE:
GATE SHALL OPERATE WITH 5 POUNDS MAX. OPENING FORCE.

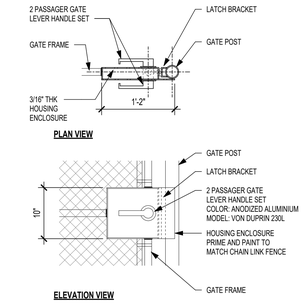
7 CHAIN LINK ACCESSIBLE DOUBLE GATE - ES4
1/2" = 1'-0"



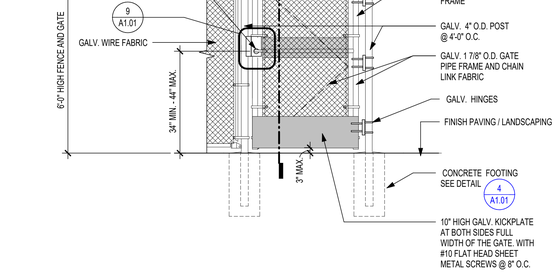
4 TYPICAL FENCE & GATE POST FOOTING DETAIL @ CONCRETE OR LANDSCAPING
1 1/2" = 1'-0"



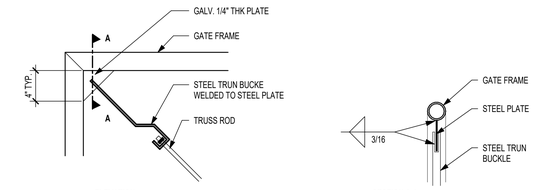
13 CONCRETE PAVING / (E) AC PAVING TRANSITION DETAIL
1 1/2" = 1'-0"



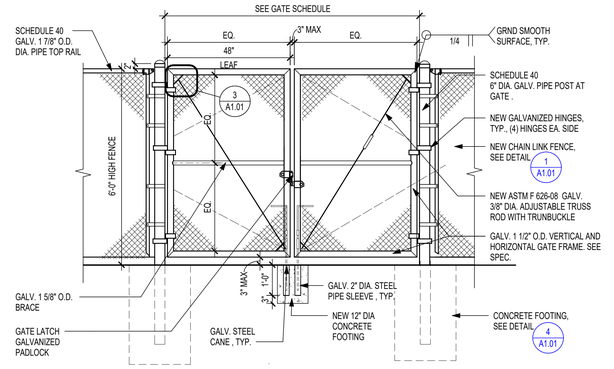
9 LEVER HANDLE DETAIL @ CHAIN LINK GATE
1" = 1'-0"



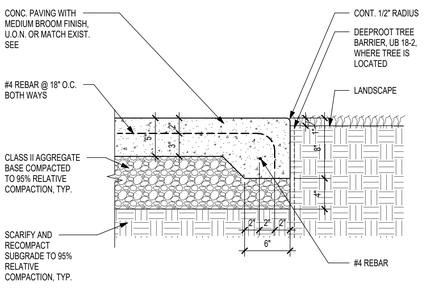
6 CHAIN LINK PEDESTRIAN SINGLE GATE - ES7, ES12, ES14
1/2" = 1'-0"



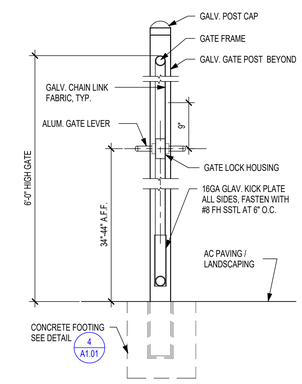
3 CORNER PLATES/TRUSS ROD CONNECTION
1 1/2" = 1'-0"



2 CHAIN LINK DOUBLE GATE - ES1, ES3, ES5, ES6, ES11, ES13, ES15
1/2" = 1'-0"

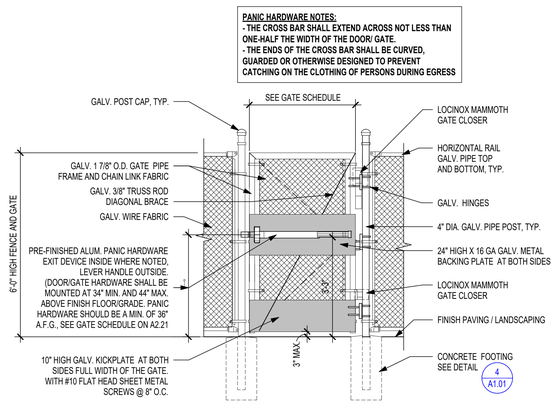


12 CONCRETE PAVING / LANDSCAPE TRANSITION DETAIL
1 1/2" = 1'-0"



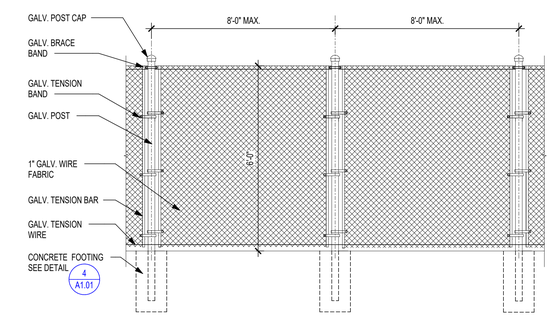
8 GATE HEAD/SILL FRAME DETAIL
1" = 1'-0"

PANIC HARDWARE NOTES:
- THE CROSS BAR SHALL EXTEND ACROSS NOT LESS THAN ONE-HALF THE WIDTH OF THE DOOR/ GATE.
- THE ENDS OF THE CROSS BAR SHALL BE CURVED, GUARDED OR OTHERWISE DESIGNED TO PREVENT CATCHING ON THE CLOTHING OF PERSONS DURING EGRESS



NOTE:
GATE SHALL OPERATE WITH 5 POUNDS MAX. OPENING FORCE.

5 CHAIN LINK ACCESSIBLE SINGLE GATE - ES2, ES4, ES8, ES10
1/2" = 1'-0"



1 CHAIN LINK FENCE ELEVATION (TYPICAL)
1/2" = 1'-0"

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IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-121932 INC:
REVIEWED FOR
SS ☐ FLS ☑ ACS ☑
DATE: 8/14/2024

DSA APPLICATION NO: 01-121932

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LICENSED ARCHITECT AMIR M. KAKAVAND No. C- 30095 Exp. 08-31-25 STATE OF CALIFORNIA

CONSULTANT

PROJECT NAME
BEN PAINTER ES FENCING PROJECT

FACILITY INFO
BEN PAINTER ELEMENTARY SCHOOL
500 ROUGH & READY RD., SAN JOSE, CA. 95133

KEY PLAN

PROJECT NORTH

PROJECT ISSUE DATE: YYYY/MM/DD

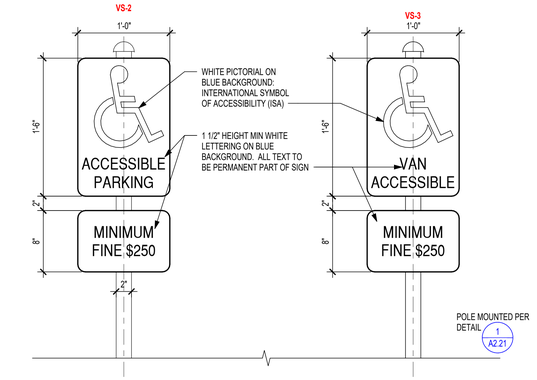
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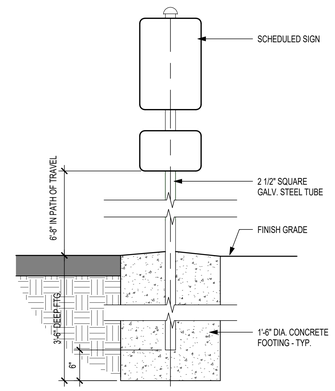
SHEET TITLE
SITE DETAILS

SHEET NUMBER
A1.01

GATE SCHEDULE					
NO.	NAME	WIDTH	HEIGHT	PANIC HARDWARE	HARDWARE GROUP #
ES1	VEHICLE ACCESS GATE (DOUBLE GATE)	12'-0"	6'-0"	NO	04
ES2	ACCESSIBLE GATE (SINGLE GATE)	4'-6"	6'-0"	YES	01
ES3	VEHICLE ACCESS GATE (DOUBLE GATE)	10'-0"	6'-0"	NO	04
ES4	ACCESSIBLE GATE (DOUBLE GATE)	6'-0"	6'-0"	YES	03
ES5	PEDESTRIAN GATE (DOUBLE GATE)	8'-6"	6'-0"	NO	04
ES6	PEDESTRIAN GATE (DOUBLE GATE)	10'-0"	6'-0"	NO	04
ES7	PEDESTRIAN GATE (SINGLE GATE)	5'-0"	6'-0"	NO	02
ES8	ACCESSIBLE GATE (SINGLE GATE)	3'-0"	6'-0"	YES	01
ES9	VEHICLE ACCESS GATE (SLIDING GATE)	20'-0"	6'-0"	NO	EXISTING TO REMAIN
ES10	ACCESSIBLE GATE (SINGLE GATE)	3'-0"	6'-0"	YES	01
ES11	VEHICLE ACCESS GATE (DOUBLE GATE)	12'-0"	6'-0"	NO	04
ES12	PEDESTRIAN GATE (SINGLE GATE)	3'-0"	6'-0"	NO	02
ES13	VEHICLE ACCESS GATE (DOUBLE GATE)	14'-0"	6'-0"	NO	04
ES14	PEDESTRIAN GATE (SINGLE GATE)	3'-0"	6'-0"	NO	02
ES15	VEHICLE ACCESS GATE (DOUBLE GATE)	14'-0"	6'-0"	NO	04



2 VEHICULAR SIGN TYPE AND SIZE
1 1/2" = 1'-0"



1 SIGNAGE MOUNTING POLE
1" = 1'-0"

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FACILITY INFO

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500 ROUGH & READY RD., SAN JOSE, CA. 95133

KEY PLAN

PROJECT NORTH

PROJECT ISSUE DATE: YYYY/MM/DD

DATE	NO.	REVISIONS

DRAFTER: Author REVIEWER: XX
PM: XX DSK JOB NO: 24000

SHEET TITLE
SIGNAGE DETAILS & GATE SCHEDULE

SHEET NUMBER
A2.21

DIVISION 0
GENERAL

SECTION 00001

PROJECT TITLE & SIGNATURES

PROJECT MANUAL
ALUM ROCK UNION SCHOOL DISTRICT
BEN PAINTER ES FENCING PROJECT
500 ROUGH AND READY RD.,
SAN JOSE, CA 95133

DATE: August 7, 2024

OWNER: Alum Rock Union School District
2930 Gay Avenue
San Jose, CA 95127

DSA FILE #: 43-4
DSA PTN #:
DSA APP #: 01-121932

ARCHITECT
dsk Architects
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(510) 686-6595

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DATE: 8/14/2024



By: Amir Kakavand C-30095

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00 00 10	TABLE OF CONTENTS
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DIVISION 02 - EXISTING CONDITIONS	
02 41 13	SELECTIVE SITE DEMOLITION
DIVISION 08 - OPENINGS	
08 71 00	DOOR HARDWARE
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31 11 00	CLEARING AND GRUBBING
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DIVISION 1
GENERAL REQUIREMENT

SECTION 01 05 20

CONSTRUCTION FACILITIES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes requirements for temporary facilities and controls, including temporary utilities, support facilities, and security and protection facilities.

B. Temporary utilities include, but are not limited to, the following:

1. Sewers and drainage.
2. Water service and distribution.
3. Sanitary facilities, including toilets, wash facilities, and drinking-water facilities.
4. Heating and cooling facilities.
5. Ventilation.
6. Electric power service.
7. Lighting.
8. Telephone service.
9. DSL service.

C. Support facilities include, but are not limited to, the following:

1. Temporary roads and paving.
2. Dewatering facilities and drains.
3. Project identification and temporary signs.
4. Waste disposal facilities.
5. Storage and fabrication sheds.
6. Lifts and hoists.
7. Temporary elevator usage.
8. Temporary stairs.
9. Construction aids and miscellaneous services and facilities.

D. Security and protection facilities include, but are not limited to, the following:

1. Environmental protection.
2. Stormwater control.
3. Tree and plant protection.
4. Pest control.

5. Site enclosure fence.
6. Security enclosure and lockup.
7. Barricades, warning signs, and lights.
8. Covered walkways.
9. Temporary enclosures.
10. Temporary partitions.
11. Fire protection.

1.3 DEFINITIONS

A. Permanent Enclosure: As determined by District, permanent or temporary roofing is complete, insulated, and weathertight; exterior walls are insulated and weathertight; and all openings are closed with permanent construction or substantial temporary closures.

1.4 USE CHARGES

A. General: Where cost or use charges for temporary facilities are not chargeable to District or Architect they shall be included in the Contract Sum. Allow other entities to use temporary services and facilities without cost, including, but not limited to, the following:

1. District's construction forces.
2. Architect.
3. Testing agencies.
4. Personnel of authorities having jurisdiction.

B. Sewer Service: Use Owner’s existing sewer service use without metering and without payment of use charges.

C. Water Service: Use water from District's existing water system without metering and without payment of use charges.

D. Electric Power Service: In existing structures use electric power from District's existing system without metering and without payment of use charges unless otherwise noted. All new structures under construction and temporary facilities (including but not limited to all field offices and temporary construction facilities) the contractor shall engage the appropriate local utility company to install temporary service. Pay electrical service use charges for all new structures under construction and temporary facilities.

E. Telephone and DSL Service: Pay telephone and DSL service use and maintenance charges for telephones and DSL used by all entities engaged in construction activities at Project site.

1.5 QUALITY ASSURANCE

A. Standards: Comply with ANSI A10.6, NECA's "Temporary Electrical Facilities," and NFPA 241.

1. Electric Service: Comply with NECA, NEMA, and UL standards and regulations for temporary electric service. Install service to comply with NFPA 70.

B. Tests and Inspections: Arrange for authorities having jurisdiction to test and inspect each temporary utility before use. Contractor to obtain required certifications and permits.

1.6 Material Safety Data Sheets (MSDS)

A. 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 substances 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.

1.7 PROJECT CONDITIONS

A. Temporary Utilities: At earliest feasible time, when acceptable to District, change over from use of temporary service to use of permanent service.

1. Temporary Use of Permanent Facilities: Installer of each permanent service shall assume responsibility for operation, maintenance, and protection of each permanent service during its use as a construction facility before District's acceptance, regardless of previously assigned responsibilities.

B. Conditions of Use: The following conditions apply to use of temporary services and facilities by all parties engaged in the Work:

1. Keep temporary services and facilities clean and neat.

2. Relocate temporary services and facilities as required by progress of the Work.

3. If power greater than that available at nearby convenience outlets is required, make arrangements for such service and pay all costs of wiring and current. Repair existing facilities to originally found conditions.

PART 2 - PRODUCTS

2.1 MATERIALS

A. General: Provide new materials. Undamaged, previously used materials in serviceable condition may be used if approved by District. Provide materials suitable for use intended.

B. Pavement: Comply with Division 2.

C. Portable and Temporary Chain-Link Fencing around the perimeter of the construction site: Minimum 2-inch 9-gage, galvanized steel, chain-link fabric fencing; minimum 6 feet high with galvanized steel pipe posts; minimum 2-3/8-inch OD line posts and 2-7/8-inch OD corner and pull posts, with 1-5/8-inch OD top and bottom rails.
   1. For portable chain-link fencing, provide galvanized steel support bases for supporting posts. Use bolt clamp connections. No wire ties to secure between fence panels.
   2. Provide gates and steel chain locks in sizes and at locations necessary to accommodate delivery vehicles and other construction operations.

   3. Maintain security by limiting number of keys and restricting distribution to authorized personnel. Provide District with three sets of keys.

D. Lumber and Plywood: Comply with requirements in Division 6 Section Rough Carpentry."

E. Paint: Comply with requirements in Division 9 Section "Painting."

F. Tarpaulins: Fire-resistive labeled with flame-spread rating of 15 or less.

G. Water: Potable.

2.2 EQUIPMENT

A. General: Provide equipment suitable for use intended.

B. General Contractor to provide the following equipment to the on-site superintendent
   1. Furnish superintendent with an electronic paging device or a portable two-way radio for use when away from field office.
   2. Provide a portable cellular telephone for superintendent's use in making and receiving telephone calls when away from field office.
   3. 3’ smart level and door pressure gauge for District use.

C. Fire Extinguishers: Hand carried, portable, UL rated. Provide class and extinguishing agent as indicated or a combination of extinguishers of NFPA-recommended classes for exposures.

   1. Comply with NFPA 10 and NFPA 241 for classification, extinguishing agent, and size required by location and class of fire exposure.

D. Self-Contained Toilet Units: Single-occupant units of chemical, aerated recirculation, or combustion type; vented; fully enclosed with a glass-fiber-reinforced polyester shell or similar nonabsorbent material.

E. Drinking-Water Fixtures: Containerized, tap-dispenser, bottled-water drinking-water units, including paper cup supply.

F. Heating Equipment: Unless District authorizes use of permanent heating system, provide vented, self-contained, liquid-propane-gas or fuel-oil heaters with individual space thermostatic control.

1. Heating Units: Listed and labeled, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use for type of fuel being consumed.

G. Electrical Outlets: Properly configured, NEMA-polarized outlets to prevent insertion of 110- to 120-V plugs into higher-voltage outlets; equipped with ground-fault circuit interrupters, reset button, and pilot light.

H. Power Distribution System Circuits: Where permitted and overhead and exposed for surveillance, wiring circuits, not exceeding 125-V ac, 20-A rating, and lighting circuits may be nonmetallic sheathed cable.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

A. Locate facilities where they will serve Project adequately and result in minimum interference with performance of the Work. Relocate and modify facilities as required by the District. See Article 3.3.A.1

B. Provide each facility ready for use when needed to avoid delay. Maintain and modify as required. Do not remove until facilities are no longer needed or are replaced by authorized use of completed permanent facilities and approved by District.

3.2 TEMPORARY UTILITY INSTALLATION

A. General: Engage appropriate local utility company to install temporary service or connect to existing service. Where utility company provides only part of the service, provide the remainder with matching, compatible materials and equipment. Comply with utility company recommendations.

1. Arrange with utility company, District, and existing users for time when service can be interrupted, if necessary, to make connections for temporary services.

2. Provide adequate capacity at each stage of construction. Before temporary utility is available, provide trucked-in services.

3. Obtain easements to bring temporary utilities to Project site where District's easements cannot be used for that purpose.

B. Sewers and Drainage: If sewers are available, provide temporary connections to remove effluent that can be discharged lawfully. If sewers are not available or cannot be used, provide drainage ditches, dry wells, stabilization ponds, and similar facilities. If neither sewers nor drainage facilities can be lawfully used for discharge of effluent, provide containers to remove and dispose of effluent off-site in a lawful manner.

1. Filter out excessive soil, construction debris, chemicals, oils, and similar contaminants that might clog sewers or pollute waterways before discharge.

2. Connect temporary sewers to municipal system as directed by sewer department officials.

3. Maintain temporary sewers and drainage facilities in a clean, sanitary condition. After heavy use, restore normal conditions promptly.

C. Water Service: Use of District's existing water service facilities will be permitted, as long as facilities are cleaned and maintained in a condition acceptable to District. At Substantial Completion, restore these facilities to condition existing before initial use.

1. The Contractor shall be responsible for undue wasting of water used on the Work.

2. Contractor to furnish hoses and temporary piping placed where water connections are available.

3. Provide adequate fire protection for the duration of work in accordance with local codes, ordinances and the State Fire Marshal.

   a. The Contractor shall take necessary precaution to guard against and eliminate possible fire hazards and to prevent damage to construction work, building materials, equipment, and public property. The Contractor shall be responsible for providing, maintaining and enforcing fire protection methods

4. Where installations below an outlet might be damaged by spillage or leakage, provide a drip pan of suitable size to minimize water damage. Drain accumulated water promptly from pans.

D. Sanitary Facilities: Provide temporary toilets, wash facilities, and drinking-water fixtures. Comply with regulations and health codes for type, number, location, operation, and maintenance of fixtures and facilities.

1. Disposable Supplies: Provide toilet tissue, paper towels, paper cups, and similar disposable materials for each facility. Maintain adequate supply. Provide covered waste containers for disposal of used material.

2. Toilets: Install self-contained toilet units. Shield toilets to ensure privacy.

3. Wash Facilities: Install wash facilities supplied with potable water at convenient locations for personnel who handle materials that require wash up. Dispose of drainage properly. Supply cleaning compounds appropriate for each type of material handled.

4. Drinking-Water Facilities: Provide bottled-water, drinking-water units and paper cup supply.

E. Heating and Cooling: Provide temporary heating and cooling required by construction activities for curing or drying of completed installations or for protecting installed construction from adverse effects of low temperatures or high humidity. Select equipment from that specified that will not have a harmful effect on completed installations or elements being installed.

F. Ventilation and Humidity Control: Provide temporary ventilation required by construction activities for curing or drying of completed installations or for protecting installed construction from adverse effects of high humidity. Select equipment from that specified that will not have a harmful effect on completed installations or elements being installed. Coordinate ventilation requirements to produce ambient condition required and minimize energy consumption.

1. Unless the District Project Manager authorizes an alternate procedure in writing, in advance of the start of construction; continuously ventilate all construction work areas and spaces with 100% outdoor (fresh) air for at least 30 days prior to substantial completion of work. In areas, which make use of natural ventilation such as windows, install temporary fans sufficient to provide no less than three air changes per hour. In all cases make sure that air is exhausted from construction work areas directly to the outdoors; do not re-circulate air or ventilate to other enclosed areas either within the occupied school or the construction area itself. Continuously operate ventilation systems and/or temporary fans 24 hours per day, 7 days per week, providing all measures necessary to allow the operation of ventilation systems and fans while maintaining the security of the site.

    a. When volatile organic compound, and/or odor generating activities are performed during the 30-day ventilation period provide temporary exhaust ventilation to capture emissions and exhaust them directly to the outdoors. Extend the building flush out for a minimum of four days after the completion of any such activities.

    b. During ventilation, make necessary provisions to temper supply air or heat spaces sufficiently to prevent condensation, water damage, and/or mold growth. Do not attempt to speed the off gassing of materials and/or curing of finishes by increasing room temperatures above normal levels (“baking” the building and/or components)

c. Additional Conditioning at Move-In: Continue to operate ventilation systems at 100% fresh air during occupant move-in and unpacking. Do not perform final balancing of the ventilation system until two weeks after the move-in.

G. Electric Power Service: Provide weatherproof, grounded electric power service and distribution system of sufficient size, capacity, and power characteristics during construction period. Include meters, transformers, overload-protected disconnecting means, automatic ground-fault interrupters, and main distribution switchgear.

1. Install power distribution wiring overhead and rise vertically where least exposed to damage.

H. Electric Power Service: Where approved by the District, use of District's existing electric power service will be permitted, as long as equipment is maintained in a condition acceptable to District.

I. Electric Distribution: Provide receptacle outlets adequate for connection of power tools and equipment.

1. Provide waterproof connectors to connect separate lengths of electrical power cords if single lengths will not reach areas where construction activities are in progress. Do not exceed safe length-voltage ratio.

J. Lighting: Provide temporary lighting, as required, with local switching that provides adequate illumination for construction operations and traffic conditions.
1. Contractor prohibited from using existing theatrical lighting in auditorium and/or multipurpose room. See Section 00800, 1.17.

K. Temporary Roads and Paved Areas: Construct and maintain temporary roads and paved areas adequate to support loads and to withstand exposure to traffic during construction period. Locate temporary roads and paved areas, if required, as indicated on Drawings.

1. Provide a reasonably level, graded, well-drained subgrade of satisfactory soil material, compacted to not less than 95 percent of maximum dry density in the top 6 inches.

2. Provide gravel paving course of subbase material not less than 6 inches thick; roller compacted to a level, smooth, dense surface.

3. Provide dust-control treatment that is nonpolluting and non-tracking. Reapply treatment as required to minimize dust.

4. Extend temporary roads and paved areas, within construction limits indicated, as necessary for construction operations.

5. Coordinate elevations of temporary roads and paved areas with permanent roads and paved areas.

6. Prepare subgrade and install subbase and base for temporary roads and paved areas according to Division 2 Section "Earthwork."

7. Recondition base after temporary use, including removing contaminated material, regrading, proof rolling, compacting, and testing.

8. Delay installation of final course of permanent hot-mix asphalt pavement until immediately before Substantial Completion. Repair hot-mix asphalt base-course pavement before installation of final course according to Division 2 Section "Hot-Mix Asphalt Paving."

L. Traffic Controls: Provide temporary traffic controls at junction of temporary roads with public roads. Include warning signs for public traffic and "STOP" signs for entrance onto public roads. Comply with requirements of authorities having jurisdiction.

M. Dewatering Facilities and Drains: Comply with requirements in applicable Division 2 Sections for temporary drainage and dewatering facilities and operations not directly associated with construction activities included in individual Sections. Where feasible, use same facilities. Maintain Project site, excavations, and construction free of water.

1. Dispose of rainwater in a lawful manner that will not result in flooding Project or adjoining property nor endanger permanent Work or temporary facilities.
2. Before connection and operation of permanent drainage piping system, provide temporary drainage where roofing or similar waterproof deck construction is completed.

N. Project Identification and Temporary Signs: Prepare a minimum of two (2) Project identification signs not less than 32 square feet in area. Install signs in locations approved by the District to inform public and persons seeking entrance to Project. Do not permit installation of unauthorized signs. Provide safety/restricted access signs at fencing perimeter every 20 feet.

1. Engage an experienced sign painter to apply graphics for Project identification signs. Comply with details indicated. District to provide project information to be included on signage.

2. Prepare temporary signs to provide directional information to construction personnel and visitors.

3. Construct signs of exterior-type Grade B-B high-density concrete form overlay plywood. Support on posts or framing of preservative-treated wood or steel. Do not install signage on any fencing – temporary or permanent.

4. Paint sign panel and applied graphics with exterior-grade alkyd gloss enamel over exterior primer.

O. Waste Disposal Facilities: Provide waste-collection containers in sizes adequate to handle waste from construction operations. Containerize and clearly label hazardous, dangerous, or unsanitary waste materials separately from other waste. Comply with Division 1 Section "Execution Requirements" for progress cleaning requirements.

1. If required by authorities having jurisdiction, provide separate containers, clearly labeled, for each type of waste material to be deposited.

2. Develop a waste management plan for Work performed on Project. Indicate types of waste materials Project will produce and estimate quantities of each type. Provide detailed information for on-site waste storage and separation of recyclable materials. Provide information on destination of each type of waste material and means to be used to dispose of all waste materials.

P. Professional Cleaning Services: Provide professional cleaning services on a weekly basis for temporary offices, first-aid stations, toilets, and similar areas.

Q. Storage and Fabrication Sheds: Provide sheds sized, furnished, and equipped to accommodate materials and equipment involved, including temporary utility services. Sheds may be open shelters or fully enclosed spaces within building or elsewhere on-site.

R. Existing Elevator Usage: Use of District's existing elevators may be permitted with prior District approval. Elevator operation and condition shall be documented by contractor and reviewed by District prior to first use. Elevators shall be cleaned and maintained in a condition acceptable to District. At Substantial Completion, restore elevators to condition existing before initial use, including replacing worn cables, guide shoes, and similar items of limited life. Contractor usage of elevator shall not interfere with normal operation of school operations and/or activities.

1. Provide protective coverings, barriers, devices, signs, or other procedures to protect elevator car and entrance doors and frame. If, despite such protection, elevators become damaged, engage elevator Installer to restore damaged work so no evidence remains of correction work. Return items that cannot be refinished in field to the shop, make required repairs and refinish entire unit, or provide new units as required.

2. Any damage to elevator is required to be repaired within 24 hours.

S. Existing Stair Usage: Use of District's existing stairs will be permitted, as long as stairs are cleaned and maintained in a condition acceptable to District. At Substantial Completion, restore stairs to condition existing before initial use.

1. Provide protective coverings, barriers, devices, signs, or other procedures to protect stairs and to maintain means of egress. If, despite such protection, stairs become damaged, restore damaged areas so no evidence remains of correction work.

3.3 SECURITY AND PROTECTION FACILITIES INSTALLATION

A. District Occupied Areas. The Contractor, at the Contractor's expense, shall separate the construction area from District occupied areas using physical barrier and/or temporal isolation methods that protect the occupied areas from dust, odors, noise, visual distractions or any other source of disruption of educational operations in adjacent or nearby areas. Prior to any demolition work starting, the Contractor is to submit a plan for meeting these requirements to the District for approval. Plan shall include the locations of all physical barriers and the differential air pressure units as required in Paragraph I. "Temporary Partitions".

1. The contractor shall submit a detailed plan for meeting these requirements to the District for approval. The Contractor shall identify the person responsible for implementing, monitoring and enforcing the requirements set forth in the Contractor's plan and the Contract Documents. The plan shall include the following:
   a. A set of drawings showing the locations of temporary partitions to be used to separate construction areas from occupied areas, the path of travel to and from construction areas, emergency exits, locations of fire extinguishers, etc for each phase of work.
   b. Procedures for controlling dust, fumes, and odors in construction areas.
   c. Procedures for preventing dust, fumes, and odors from migrating into occupied areas of the building.
   d. Procedures for responding to a spill outside the construction area.
   e. Method of communicating plan requirements to all subcontractors.

2. If lead-based paint (LBP) will be disturbed as part of the renovation as defined by 40 CFR Part 745 the Contractor's containment plan and notifications shall meet the minimum requirements of this regulation and be prepared by an EPA "Certified Renovator".

B. Environmental Protection: Provide protection, operate temporary facilities, and conduct construction in ways and by methods that comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects. Avoid using tools and equipment that produce harmful noise. Restrict use of noisemaking tools and equipment to hours that will minimize complaints from persons or firms near Project site. Contractor shall perform all work in compliance with all applicable rules, regulations, laws, and local ordinances including, without limitation, all noise and light limitations.

C. Storm Water Control: Provide earthen embankments and similar barriers in and around excavations and subgrade construction, sufficient to prevent flooding by runoff of storm water from heavy rains.

D. Tree and Plant Protection: Install temporary fencing located as indicated or outside the drip line of trees to protect vegetation from construction damage. Protect tree root systems from damage, flooding, and erosion.

E. Pest Control: Before deep foundation work has been completed, retain a local exterminator or pest-control company to recommend practices to minimize attraction and harboring of rodents, roaches, and other pests. Engage this pest-control service to perform extermination and control procedures at regular intervals so Project will be free of pests and their residues at Substantial Completion. Obtain two-year extended warranty for District. Perform control operations lawfully, using environmentally safe materials approved by the District.

F. Security Enclosure and Lockup: Install substantial temporary enclosure around partially completed areas of construction. Provide lockable entrances to prevent unauthorized entrance, vandalism, theft, and similar violations of security. The Contractor is required to secure all areas of work and set security alarms when leaving the site.

G. Barricades, Warning Signs, and Lights: Comply as required by local authorities and State safety ordinances, standards and code requirements for erecting structurally adequate barricades. Paint with appropriate colors, graphics, and warning signs to inform personnel and public of possible hazard. Where appropriate and needed, provide lighting, including flashing red or amber lights.

H. Temporary Enclosures: Provide temporary enclosures for protection of construction, in progress and completed, from exposure, foul weather, other construction operations, and similar activities. Provide temporary weathertight enclosure for building exterior.

1. Where heating or cooling is needed and permanent enclosure is not complete, provide insulated temporary enclosures. Coordinate enclosure with ventilating and material drying or curing requirements to avoid dangerous conditions and effects.

2. Vertical Openings: Close openings of 25 sq. ft. or less with plywood or similar materials.

3. Horizontal Openings: Close openings in floor or roof decks and horizontal surfaces with load-bearing, wood-framed construction.

4. Install tarpaulins securely using fire-retardant-treated wood framing and other materials.

I. Temporary Partitions: Erect and maintain effective dustproof partitions and temporary enclosures to prevent dust and dirt migration into occupied areas and to separate areas from fumes, odors and noise. Construction of temporary barriers shall take into consideration existing hazardous materials present in building finishes.

1. Construct dustproof partitions of not less than nominal 4-inch (100-mm) studs, 5/8-inch (16-mm) gypsum wallboard with joints taped on occupied side, and 1/2-inch (13-mm) fire-retardant plywood on construction side.

2. Insulate partitions to provide noise protection to occupied areas.

3. Seal joints and perimeter. Equip partitions with dustproof doors and security locks.

4. Protect air-handling equipment.

5. Weatherstrip openings.

6. Where the heating, ventilating, and/or air conditioning (HVAC) system and ducting is shared between the construction and occupied areas of a building, either isolate the areas by duct capping or conduct construction operations with ventilation shut down and sealed after hours or weekends.

7. The Contractor shall install differential air pressure units equipped with high efficiency particulate absolute (HEPA) air filtration systems within the Construction area(s). These units shall operate continuously during construction operations. A sufficient number of units shall be installed to create a lower air pressure in the Construction area(s) as compared to adjacent non-construction areas and achieve a minimum of 4 air changes per hour. All differential pressure units shall be DOP tested and certified on-site by an independent party prior to use. Differential units shall be exhausted to the outside of the building when ever possible. The Contractor shall be responsible for maintenance of the units including monitoring and changing filters as required. All differential air pressure units used in this manner shall be labeled “FOR CONSTRUCTION USE ONLY”.

8. The Contractor shall install additional differential air pressure units within the Construction Area for the sole purpose of “scrubbing” the air within the construction area as another method of dust control. These units shall be located at the primary source of dust generating construction work activities. The Contractor shall be responsible for maintenance of the units including monitoring and changing filters as required. All differential air pressure units used in this manner shall be labeled “FOR CONSTRUCTION USE ONLY”.

9. Where temporary barriers and physical isolation of the construction area is not feasible or practical, conduct the operations during off hours, weekends, or holidays employing such protective methods as are feasible and practical according to an approved plan. Employ a professional cleaning service to ensure all traces of dust and debris are cleaned up prior to next District business day.

J. Temporary Fire Protection: Until fire-protection needs are supplied by permanent facilities, install and maintain temporary fire-protection facilities of types needed to protect against reasonably predictable and controllable fire losses. Comply with NFPA 241.

1. Store combustible materials in containers in fire-safe locations.

2. Maintain unobstructed access to fire extinguishers, fire hydrants, temporary fire-protection facilities, stairways, and other access routes for firefighting. Prohibit smoking in hazardous fire-exposure areas.

3. Supervise welding operations, combustion-type temporary heating units, and similar sources of fire ignition.

4. Permanent Fire Protection: At earliest feasible date in each area of Project, complete installation of permanent fire-protection facility, including connected services, and place into operation and use. Instruct key personnel on use of facilities.

5. Develop and supervise an overall fire-prevention and first-aid fire-protection program for personnel at Project site. Review needs with local fire department and establish procedures to be followed. Instruct personnel in methods and procedures. Post warnings and information.

6. Provide hoses for fire protection of sufficient length to reach construction areas. Hang hoses with a warning sign stating that hoses are for fire-protection purposes only and are not to be removed. Match hose size with outlet size and equip with suitable nozzles.

K. District Occupied Areas. The Contractor shall protect furniture, equipment, supplies etc from dust within spaces where contractor is operating. See Section 01770, Article 3.2. The Contractor, at the Contractor's expense, shall separate the construction area from District occupied areas using physical barrier and/or temporary isolation methods that protect the occupied areas from dust, odors, noise, visual distractions or any other source of disruption of educational operations in adjacent or near by areas. The Contractor is to submit plan for meeting these requirements to the District for approval. Employ a professional cleaning service to ensure all traces of debris and dust are removed prior to occupancy.

3.4 OPERATION, TERMINATION, AND REMOVAL

A. Supervision: Enforce strict discipline in use of temporary facilities. To minimize waste and abuse, limit availability of temporary facilities to essential and intended uses.

B. Maintenance: Maintain facilities in good operating condition until removal. Protect from damage caused by freezing temperatures and similar elements.

1. Maintain operation of temporary enclosures, heating, cooling, humidity control, ventilation, and similar facilities on a 24-hour basis where required to achieve indicated results and to avoid possibility of damage.
2. Prevent water-filled piping from freezing. Maintain markers for underground lines. Protect from damage during excavation operations.

C. Temporary Facility Changeover: Except for using permanent fire protection as soon as available, do not change over from using temporary security and protection facilities to permanent facilities without District approval

D. Termination and Removal: Remove each temporary facility when authorized by the District. Complete or, if necessary, restore permanent construction that may have been delayed because of interference with temporary facility. Repair damaged Work, clean exposed surfaces, and replace construction that cannot be satisfactorily repaired.

1. Materials and facilities that constitute temporary facilities are the property of Contractor. District reserves right to take possession of Project identification signs.

2. Remove temporary paving not intended for or acceptable for integration into permanent paving. Where area is intended for landscape development, remove soil and aggregate fill that do not comply with requirements for fill or subsoil. Remove materials contaminated with road oil, asphalt and other petrochemical compounds, and other substances that might impair growth of plant materials or lawns. Repair or replace street paving, curbs, and sidewalks at temporary entrances, as required by authorities having jurisdiction.

3. At Substantial Completion, clean and renovate permanent facilities used during construction period.

END OF SECTION 01520

DIVISION 2
EXISTING CONDITIONS

SECTION 02 41 13

SELECTIVE SITE DEMOLITION

PART 1 - GENERAL

1.1 SUMMARY

This Section includes the work necessary to successfully complete demolition to prepare site for the phasing and new construction, including the following:

1. Clean line saw cutting of existing asphalt pavement, concrete sidewalks, concrete curb/gutter, etc., as specified herein.
2. Protection from injury or defacement existing building elements to be preserved.
3. Removal of debris and deleterious materials such as rubbish.
4. Removal and stockpile of materials for landscaping use at approved location.
5. Disposal of unwanted or objectionable materials off site.
6. Disconnecting, capping or sealing, and abandoning site utilities in place.
7. Disconnecting, capping or sealing, and removing site utilities.
8. Removing above-grade site improvements within limits indicated.

1.2 REGULATORY REQUIREMENTS:

No burning shall be allowed.

Do not use explosives.

Comply with the following 2022 California Code of Regulations:

1. Title 8: CAL-OSHA, Chapter, Subchapter 4 – Construction Safety Orders.
2. Title 24: Part 2, California Building Code, Chapter 33, Protection of Pedestrian during Construction or Demolition.
3. Bay Area Air Quality Management District.

1.3 DEFINITIONS

ANSI: American National Standards Institute.

CAL-OSHA: California Occupational Safety and Health Administration.

ANSI: American National Standards Institute.

CFR: Code of Federal Standards.

EPA: Environmental Protection Agency.

NFPA: National Fire Protection Association.

Remove: Detach items from existing construction and legally dispose of them off-site unless they indicated to be removed and salvaged or recycled.

Remove and Salvage: Detach items from existing construction, prior to demolition, and deliver them to the District.

Existing to Remain: Existing items of construction that are not to be removed and that are not otherwise indicated to be removed and salvaged, or recycled.

1.4 SUBMITTALS

Follow Submittal procedure outlined in Division 1– General Requirements.

1.5 PROJECT CONDITIONS

Ensure that demolition work does not adversely affect adjacent water courses groundwater and wildlife, or contribute to excess air and noise pollution.

Do not dispose, of waste or volatile materials such as mineral spirits, oil, petroleum based lubricants, or toxic cleaning solutions into watercourses, storm or sanitary sewers. Ensure proper disposal procedures are maintained throughout project.

Do not pump water containing suspended materials into watercourses, storm or sanitary sewers, or onto adjacent properties.

Control disposal or runoff of water containing suspended materials or other harmful substances in accordance with local authorities.

Protect trees, plants and foliage on site and adjacent properties where indicated.

Except for materials indicated to be stockpiled or to remain, cleared materials are the Contractor's property. Remove cleared materials from site and dispose of in lawful manner.

PART 2 - PRODUCTS

2.1 SOIL MATERIALS

Backfill excavations resulting from demolition operations with on-site or import materials conforming to structural backfill defined in Section 31 23 33 “Utility Trenching and Backfill”.

PART 3 - EXECUTION

3.1 PREPARATION

Protect and maintain benchmarks and survey control points during construction.

Protect existing site improvements to remain during construction.

Provide the following temporary facilities to facilitate the demolition operations, as necessary:

1. Temp Traffic Controls
2. Protection of Persons and Property
3. Protection of Utilities
4. Protection of Trees
5. Noise and Dust Abatement
6. Clear and restore area to their original condition
7. Protect existing site improvements and adjacent structures from removal and damage.
8. Protect and maintain benchmarks and survey control points during construction.

3.2 RESTORATION

Restore areas and existing works outside areas of demolition to match conditions to their original condition, as acceptable to the District.

Restore damaged improvements to their original condition, as acceptable to the District.

3.3 UTILITIES

Locate, identify, disconnect, and seal or cap off utilities indicated to be removed or abandoned.

Arrange to shut off indicated utilities with utility companies or verify that utilities have been shut off.

Existing Utilities: Do not interrupt utilities serving facilities occupied by District or others unless authorized in writing by the District and then only after arranging to provide temporary utility services according to requirements indicated.

Coordinate utility interruptions with utility company affected.

Do not proceed with utility interruptions without the permission of the District and utility company affected. Notify the District and the utility company affected 14 working days prior to utility interruptions.

Excavate and remove underground utilities that are indicated to be removed.

Securely close ends of abandoned piping with tight fitting plug or wall of concrete minimum 6-inches thick.

Adjustment of manhole frames and other castings Caltrans Standard Specifications Section 15-2.05A.

3.4 SITE IMPROVEMENTS

Remove existing above- and below-grade improvements as indicated and as necessary to facilitate new construction.

Remove slabs, paving, curbs, and gutters, as indicated. Where concrete slabs, curb, gutter and asphalt pavements are designated to be removed, remove bases and subbase to surface of underlying, undisturbed soil.

Unless the existing full-depth joints coincide with line of pavement demolition, neatly saw-cut to full depth the length of existing pavement to remain before removing existing pavement. Saw-cut faces vertically.

Remove driveways, curbs, gutters and sidewalks by saw cutting to full depth. If saw cut falls within 30-inches of a construction joint, expansions joint, score mark or edge, remove material to joint, mark or edge.

3.5 SALVAGED IMPROVEMENTS

Salvaged Improvements: Carefully remove items indicated to be salvaged and store where indicated on plans or where designated by the District. Avoid damaging materials designated for salvage.

3.6 DISPOSAL

Remove surplus obstructions, demolished materials, and waste materials, including trash and debris, and legally dispose of them off the District's property.

Remove: Unless items are otherwise to remain or be reinstalled, remove and dispose of items. Do not store removed items that are of value to the contractor on site.

Remove and Reinstall: Remove items; clean, service and otherwise prepare for service; reinstall in the same location (or in the location shown on drawings).

Unidentified Materials: If unidentified materials are discovered, including hazardous materials that will require additional removal other than is required by the Contract Documents, immediately report the discovery to the District. If necessary, the District will arrange for testing or analysis of the discovered materials and will provide instructions regarding the removal and disposal of the unidentified materials.

3.7 CONSTRUCTION WASTE MANAGEMENT

Separate reusable and recyclable products from contaminated waste and debris in accordance with the General Contractor's Waste Management Plan. Place recyclable and reusable products in designated containers and protect from moisture and contamination.

END OF SECTION

DIVISION 8
OPENINGS

SECTION 08 71 00

DOOR HARDWARE

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of Contract, including General and Supplementary Conditions of Division 1 Specification Sections, apply to this Section.

1.02 SUMMARY

A. This Section includes items known commercially as finish or door hardware that are required for swing, sliding, and folding doors, except special types of unique hardware specified in the same sections as the doors and door frames on which they are installed.

B. This Section includes the following, but is not necessarily limited to:

1. Door Hardware, including electric hardware.
2. Gate Hardware.

C. Related Sections: The following sections are noted as containing requirements that relate to this Section, but may not be limited to this listing.

1. Division 5

1.03 REFERENCES (USE DATE OF STANDARD IN EFFECT AS OF BID DATE.)

A. 2022 California Building Code, CCR, Title 24.

B. BHMA – Builders' Hardware Manufacturers Association

C. CCR – California Code of Regulations, Title 24, Part 2, California State Accessibility Standards.

D. DHI – Door and Hardware Institute

E. NFPA - National Fire Protection Association.

1. NFPA 80 - Fire Doors and Other Opening Protectives
2. NFPA 105 - Smoke and Draft Control Door Assemblies

F. UL - Underwriters Laboratories.

1. UL 10C - Fire Tests of Door Assemblies
2. UL 305 - Panic Hardware

G. WHI - Warnock Hersey Incorporated

H. SDI - Steel Door Institute

1.04 SUBMITTALS & SUBSTITUTIONS

A. General: Submit in accordance with Conditions of the Contract and Division 1 Specification sections.

B. Submit product data (catalog cuts) including manufacturers' technical product information for each item of door hardware, installation instructions, maintenance of operating parts and finish, and other information necessary to show compliance with requirements.

C. Submit six (6) copies of schedule organized vertically into “Hardware Sets” with index of doors and headings, indicating complete designations of every item required for each door or opening. Include following information:

1. Include a Cover Sheet with;
   a. Job Name, location, telephone number.
   b. Architects name, location and telephone number.
   c. Contractors name, location, telephone number and job number.
   d. Suppliers name, location, telephone number and job number.
   e. Hardware consultant's name, location and telephone number.

2. Job Index information included;
   a. Numerical door number index including; door number, hardware heading number and page number.
   b. Complete keying information (referred to DHI hand-book "Keying Systems and Nomenclature"). Provision should be made in the schedule to provide keying information when available; if it is not available at the time the preliminary schedule is submitted.
   c. Manufacturers' names and abbreviations for all materials.
   d. Explanation of abbreviations, symbols, and codes used in the schedule.
   e. Mounting locations for hardware.
   f. Clarification statements or questions.
   g. Catalog cuts and manufacturer’s technical data and instructions.

3. Vertical schedule format sample:

Heading Number 1 (Hardware group or set number – HW -1)					
			(a) 1 Single Door #1 - Exterior from Corridor 101	(b) 90°	(c) RH
			(d) 3' 0"x7' 0" x 1-3/4" x (e) 20 Minute (f) WD x HM		
(g) 1	(h)	(i) ea	(j) Hinges - (k) 5BB1HW 4.5 x 4.5 NRP (l) ½ TMS	(m) 626	(n) IVE
2	6AA	1 ea	Lockset - ND50PD x RHO x RH x 10-025 x JTMS	626	SCH

(a) - Single or pair with opening number and location. (b) - Degree of opening (c) - Hand of door(s) (d) - Door and frame dimensions and door thickness. (e) - Label requirements if any. (f) - Door by frame material. (g) - (Optional) Hardware item line #. (h) - Keyset Symbol. (i) - Quantity. (j) - Product description. (k) - Product Number. (l) - Fastenings

and other pertinent information. (m) - Hardware finish codes per ANSI A156.18. (n) - Manufacture abbreviation.

D. Make substitution requests in accordance with Division 1. Substitution requests must be made prior to bid date. Include product data and indicate benefit to the project. Furnish samples of any proposed substitution.

E. Keying Schedule: Submit separate detailed schedule indicating clearly how the Owner's final instructions on keying of locks has been fulfilled.

F. Templates for doors, frames, and other work specified to be factory prepared for the installation of door hardware. Check shop drawings of other work to confirm that adequate provisions are made for locating and installing door hardware to comply with indicated requirements.

G. Furnish as-built/as-installed schedule with close-out documents, including keying schedule and transcript, wiring/riser diagrams, manufacturers' installation and adjustment and maintenance information.

H. Fire Door Assembly Testing: Submit a written record of each fire door assembly to the Owner to be made available to the Authority Having Jurisdiction (AHJ) for future building

1.05 QUALITY ASSURANCE

A. Obtain each type of hardware (latch and lock sets, hinges, closers, exit devices, etc.) from a single manufacturer.

B. Supplier Qualifications: A recognized architectural door hardware supplier, with warehousing facilities in the project's vicinity, that has a record of successful in-service performance for supplying door hardware similar in quantity, type, and quality to that indicated for this project and that employs an experienced architectural hardware consultant (AHC) who is available to Owner, Architect, and Contractor, at reasonable times during the course of the Work, for consultation.

1. Responsible for detailing, scheduling and ordering of finish hardware.
2. Meet with Owner to finalize keying requirements and to obtain final instructions in writing.
3. Stock parts for products supplied and are capable of repairing and replacing hardware items found defective within warranty periods.

C. Hardware Installer: Company specializing in the installation of commercial door hardware with five years documented experience.

D. Fire-Rated Openings: Provide door hardware for fire-rated openings that complies with NFPA Standard No. 80 and requirements of authorities having jurisdiction. Provide only items of door hardware that are listed and tested by UL or Warnock Hersey for given type/size opening and degree of label. Provide proper latching hardware, door closers, approved-bearing hinges and seals whether listed in the Hardware Schedule or not.

1. Where emergency exit devices are required on fire-rated doors, (with supplementary marking on doors' UL labels indicating "Fire Door to be Equipped with Fire Exit Hardware") provide UL label on exit devices indicating "Fire Exit Hardware".

E. Exit Doors: Operable from inside with single motion without the use of a key or special knowledge or effort.

1.06 DELIVERY, STORAGE AND HANDLING

A. Coordinate delivery of packaged hardware items to the appropriate locations (shop or field) for installation.

B. Hardware items shall be individually packaged in manufacturers' original containers, complete with proper fasteners. Clearly mark packages on outside to indicate contents and locations in hardware schedule and in work.

C. Provide locked storage area for hardware, protect from moisture, sunlight, paint, chemicals, etc.

D. Contractor to inventory door hardware jointly with representatives of hardware supplier and hardware installer until each all are satisfied that count is correct.

1.07 WARRANTY

A. Provide warranties of respective manufacturers' regular terms of sale from day of final acceptance as follows:

1. Mechanical Locksets: Ten (10) years.
2. Closers: Three (3) years
3. Mechanical exit devices: Ten (10) years
4. All other hardware: Three (3) years.

1.08 MAINTENANCE

A. Maintenance Tools and Instructions: Furnish a complete set of specialized tools and maintenance instructions as needed for Owner's continued adjustment, maintenance, and removal and replacement of door hardware.

1.09 PRE-INSTALLATION CONFERENCE

A. Convene a pre-installation conference at least one week prior to beginning work of this section.

B. Attendance: Architect, Construction Manager, Contractor, Security Contractor, Hardware Supplier, Installer, Key District Personnel, and Project Inspector.

C. Agenda: Review hardware schedule, products, installation procedures and coordination required with related work. Review District's keying standards.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

Item	Manufacturer	Acceptable Substitutes

Locks, Latches & Cylinders	Schlage	None – Owner Standard
Exit Devices	Von Duprin	None – Owner Standard

A. Heavy Duty Cylindrical Locks and Latches: Schlage "ND" Series as scheduled with "Rhodes" design, fastened with through-bolts and threaded chassis hubs.

1. Provide cylindrical locksets exceeding the ANSI/BHMA A156.2 Grade 1 performance standards for strength, security, and durability in the categories below:
   a. Abusive Locked Lever Torque Test – minimum 3,100 inch-pounds without gaining access
   b. Offset lever pull – minimum 1,600 foot pounds without gaining access
   c. Vertical lever impact – minimum 100 impacts without gaining access

2. Cycle life - tested to minimum 16 million cycles per ANSI/BHMA A156.2 Cycle Test with no visible lever sag or use of performance aids such as set screws or spacers
3. UL 10C for 4'-0" x 10'-0" 3-hour fire door.
4. Cylinders: Refer to "KEYING" article, herein.
5. Provide solid steel anti-rotation through bolts and posts to control excessive rotation of lever.
6. Provide lockset that allows lock function to be changed to over twenty other common functions by swapping easily accessible parts.
7. Provide locks with standard 2-3/4 inches (70 mm) backset, unless noted otherwise, with 1/2 inch latch throw capable of UL listing of 3 hours on a 4' x 10' opening. Provide proper latch throw for UL listing at pairs.
8. Provide locksets with separate anti-rotation thru-bolts, and no exposed screws.
9. Provide independently operating levers with two external return spring cassettes mounted under roses to prevent lever sag.
10. Provide standard ASA strikes unless extended lip strikes are necessary to protect trim.
11. Provide wired electrified options as scheduled in the hardware sets.
    a. 12 through 24 volt DC operating capability, auto-detecting
    b. Selectable EL (fail safe)/EU (fail secure) operating mode via switch on chassis
    c. 0.230A (230mA) maximum current draw
    d. 0.010A (10mA) holding current
    e. Modular / "plug in" request to exit switch

12. Lever Trim: Solid cast levers without plastic inserts, and wrought roses on both sides.

B. Exit devices: Von Duprin as scheduled.

1. Provide certificate by independent testing laboratory that device has completed over 1,000,000 cycles and can still meet ANSI/BHMA A156.3 - 2001 standards.
2. All internal parts shall be of cold-rolled steel with zinc dichromate coating.
3. Mechanism case shall have an average thickness of .140".
4. Compression spring engineering.
5. Non-handed basic device design with center case interchangeable with all functions.
6. All devices shall have quiet return fluid dampeners.
7. All latchbolts shall be deadlocking with ¾" throw and have a self-lubricating coating to reduce friction and wear.
8. Device shall bear UL label for fire and or panic as may be required.
9. All surface strikes shall be roller type and utilize a plate underneath to prevent movement.

10. Lever Trim: “Breakaway” design, forged brass or bronze escutcheon with a minimum of .130” thickness, match lockset lever design.
11. Removable Mullions: Removable with single turn of building key. Securely reinstalled without need for key.
12. Furnish glass bead kits for vision lites where required.
13. All Exit Devices to be sex-bolted to the doors.
14. Panic Hardware shall comply with CBC Section 11B.404.2.7 and shall be mounted between 34" and 44" above the finished floor surface.
    a. Provide exit devices UL certified to meet maximum 5 pound requirements according to the California Building Code section 11B-309.4, and UL listed for Panic Exterior Fire Exit Hardware.

2.02 KEYING

A. Furnish a Proprietary Schlage masterkey system as directed by the owner or architect. Key system to be designated and combinated by the Schlage Master Key Department even if pinned by the Authorized Key Center, Authorized Security Center or a local authorized commercial dealer.

B. A detailed keying schedule is to be prepared by the owner and/or architect in consultation with a representative of Allegion or an Authorized Key Center or Authorized Security Center. Each keyed cylinder on every keyed lock is to be listed separately showing the door #, key group (in BHMA terminology), cylinder type, finish and location on the door.

C. Extend the original Schlage masterkey system established for the project under Schlage Structure # 42247

D. Furnish construction keying for doors requiring locking during construction.

1. For FSIC systems provide 23-030-ICX Full Size Construction Cores
2. For FSIC systems provide three 48-101-ICX Construction Keys per doorway
3. For FSIC systems provide two 48-056-ICX Control Keys (const.)
4. For FSIC systems provide two control keys for installing the permanent cores (48-052-XP for “Classic Primus”)

E. Furnish all keys with visual key control.

1. Stamp key “Do Not Duplicate”.
2. Stamp unique owner identifier from the key bow.
3. Delete key section identifier from the key bow.
4. Delete key “bitting” from the key bow.

F. Furnish all cylinders with visual key control

1. Stamp (BHMA) key symbol on side of cylinder (CKC).

G. Furnish mechanical keys as follows:

1. Furnish 2 cut change keys for each different change key code.
2. Furnish 1 uncut key blank for each change key code.
3. Furnish 6 cut masterkeys for each different masterkey set.

H. Furnish Schlage Padlocks and the cylinders to tie them into the masterkey system for gates, storage boxes, utility valve security, roof hatches and roll-up doors keyed as directed in the keying schedule.

1. Furnish KS43G3200 padlock for use with FSIC Schlage cylinders. Furnish 23-030 (Classic / Everest) or 20-740 (PrimusXP) with above.

2.03 FINISHES

A. Generally to be satin chrome US26D (626 on bronze and 652 on steel) unless otherwise noted.

B. Furnish push plates, pull plates and kick or armor plates in satin stainless steel US32D (630) unless otherwise noted.

C. Door closers shall be powder-coated to match other hardware, unless otherwise noted.

D. Aluminum items to be finished anodized aluminum except thresholds which can be furnished as standard mill finish.

2.04 FASTENERS

A. Screws for strikes, face plates and similar items shall be flat head, countersunk type, provide machine screws for metal and standard wood screws for wood.

B. Screws for butt hinges shall be flathead, countersunk, full-thread type.

C. Fastening of closer bases or closer shoes to doors shall be by means of sex bolts and spray painted to match closer finish.

D. Provide expansion anchors for attaching hardware items to concrete or masonry.

E. All exposed fasteners shall have a phillips head.

F. Finish of exposed screws to match surface finish of hardware or other adjacent work.

G. All Exit Devices and Lock Protectors shall be fastened to the door by the means of sex bolts or through bolts.

PART 3 - EXECUTION

3.01 INSPECTION

A. Verify that doors and frames are square and plumb and ready to receive work and dimensions are as instructed by the manufacturer.

B. Beginning of installation means acceptance of existing conditions.

3.02 INSTALLATION

A. Install hardware in accordance with manufacturer's instructions and requirements of DHI.

B. Use the templates provided by hardware item manufacturer.

C. Mounting heights for hardware shall be as recommended by the Door and Hardware Institute. Operating hardware will to be located between 34" and 44" AFF.

D. Set units level, plumb and true to line and location. Adjust and reinforce the attachment substrate as necessary for proper installation and operation.

E. Drill and countersink units that are not factory-prepared for anchorage fasteners. Space fasteners and anchors in accordance with industry standards.

F. Set thresholds for exterior doors in full bed of butyl-rubber sealant.

G. If hand of door is changed during construction, make necessary changes in hardware at no additional cost.

3.03 ADJUST AND CLEAN

A. Adjust and check each operating item of hardware and each door, to ensure proper operation or function of every unit. Replace units which cannot be adjusted to operate freely and smoothly as intended for the application made.

B. Clean adjacent surface soiled by hardware installation.

C. Final Adjustment: Wherever hardware installation is made more than one month prior to acceptance or occupancy, return to that work area and make final check and adjustment of all hardware items in such space or area. Clean operating items as necessary to restore proper function and finish of hardware and doors. Adjust door control devices to compensate for final operation of heating and ventilating equipment.

D. Instruct Owner's Personnel in proper adjustment and maintenance of hardware finishes, during the final adjustment of hardware.

E. Continued Maintenance Service: Approximately six months after the completion of the project, the Contractor accompanied by the Architectural Hardware Consultant, shall return to the project and re-adjust every item of hardware to restore proper functions of doors and hardware. Consult with and instruct Owner's personnel in recommended additions to the maintenance procedures. Replace hardware items which have deteriorated or failed due to faulty design, materials or installation of hardware units. Prepare a written report of current and predictable problems (of substantial nature) in the performance of the hardware.

3.04 HARDWARE LOCATIONS

A. Conform to CCR, Title 24, Part 2; and ADAAG; and the drawings for access-compliant positioning requirements for the disabled.

3.05 FIELD QUALITY CONTROL

A. Contractor is responsible for providing the services of an Architectural Hardware Consultant (AHC) or a proprietary product technician to inspect installation and certify that hardware and its installation have been furnished and installed in accordance with manufacturers' instructions and as specified herein.

3.06 SCHEDULE

A. The items listed in the following schedule shall conform to the requirements of the foregoing specifications.

B. While the hardware schedule is intended to cover all doors, and other movable parts of the building, and establish type and standard of quality, the contractor is responsible for examining the Plans and Specifications and furnishing proper hardware for all openings whether listed or not. If there are any omissions in hardware groups in regard to regular doors they shall be called to the attention of the Architect prior to bid opening for instruction; otherwise, list will be considered Complete. No extras will be allowed for omissions.

C. The Door Schedule on the Drawings indicates which hardware set is used with each door.

Abbreviation	Name
CRO	Crown Industrial
LOX	Locinox
RIC	Richards-Wilcox, Inc.
SCH	Schlage Lock Company
VON	Von Duprin

115919 OPT0381627 VERSION 1

GROUP NO. 01

1	SET	SELF CLOSING HINGE	MAMMOTH 180		LOX
1	EA	PANIC HARDWARE	CDSI-PA-AX-98-L-KC-06-WH	628	VON
1	EA	RIM CYLINDER	20-057 ICX	626	SCH
1	EA	MORTISE CYLINDER	26-091 ICX XQ11-948	626	SCH
2	EA	PRIMUS CORE	20-740	626	SCH
1	EA	LEVER	230L	626	VON

GROUP NO. 02

1	SET	SELF CLOSING HINGE	MAMMOTH 180		LOX
1	EA	VANDL CLASSROOM SEC	ND95TD RHO XN12-035	626	SCH
2	EA	PRIMUS CORE	20-740	626	SCH

GROUP NO. 03

2	SET	SELF CLOSING HINGE	MAMMOTH 180		LOX
2	EA	PANIC HARDWARE	CDSI-PA-AX-98-L-KC-06-WH	628	VON
2	EA	RIM CYLINDER	20-057 ICX	626	SCH
2	EA	MORTISE CYLINDER	26-091 ICX XQ11-948	626	SCH
4	EA	PRIMUS CORE	20-740	626	SCH

GROUP NO. 04

6		HINGE	BY GATE FABRICATOR		
2	EA	CANE BOLT	0524.00021	Z	RIC
1	EA	PADLOCK L/CYL-FSIC	KS43D3200	606	SCH
1	EA	PRIMUS CORE	20-740	626	SCH
1	EA	HASP	7" FLAT		CRO

GROUP NO. 05

HARDWARE BY GATE MANUFACTURER

END OF SECTION

Legend:
↯Electrified Opening

DOOR #	HW SET#
ES1	04
ES2	01
ES3	04
ES4	03
ES5	04
ES6	04
ES7	02
ES8	01
ES9	EXISTING TO REMAIN
ES10	01
ES11	04
ES12	02
ES13	04
ES14	02
ES15	04

Catalog Cuts

For

Ben Painter ES Fencing Project

Sorted By Manufacturer

Prepared By

Michelle Bond

Created On 7/15/2024

Generated By



Table of Contents

Mfr	Catalog Number	Description
LOX	MAMMOTH 180	SELF CLOSING HINGE
RIC	0524.00021	CANE BOLT
SCH	20-057 ICX	RIM CYLINDER
SCH	ND95TD RHO XN12-035	VANDL CLASSROOM SEC
SCH	26-091 ICX XQ11-948	MORTISE CYLINDER
SCH	20-740	PRIMUS CORE
VON	CDSI-PA-AX-98-L-KC-06-WH	PANIC HARDWARE

MAMMOTH-180

LOCINOX®

WWW.LOCINOX.COM





USER GUIDE

- ENGLISH
- NEDERLANDS
- FRANÇAIS
- DEUTSCH
- ENGLISH USA

- As manufacturer of this product, we guarantee that we have taken all the necessary steps in order for this product to comply with the current safety requirements.



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Technical Support

If you require any additional information or assistance during the installation, please contact your dealer, who will be able to provide the latest information. Alternatively, you can visit the Locinox website for more technical information or e-mail us on sales@locinox.com

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MAMMOTH-180



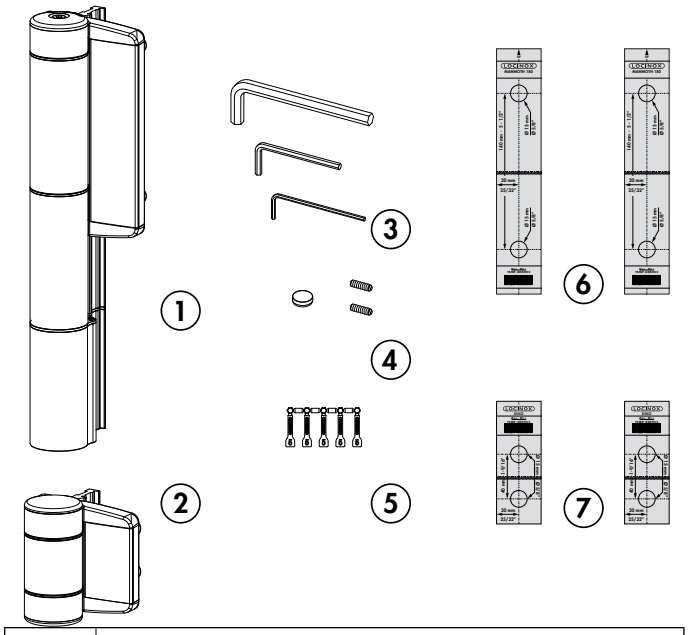
Manual - English USA

1. Introduction

Thank you for choosing a Locinox gatecloser! Please read the following instructions carefully before mounting the Mammoth-180 & Dino to your swing gate. Enclosed you will find all relevant user information concerning the Mammoth.

2. Package Contents

Please check if your package contains the following items:



①	Mammoth-180
②	Dino
③	Allen keys 10 - 5 - 3 mm
④	Cover cap (1x) & Setscrew (2x)
⑤	Hexplugs
⑥	Drilling templates for Mammoth-180
⑦	Drilling templates for Dino

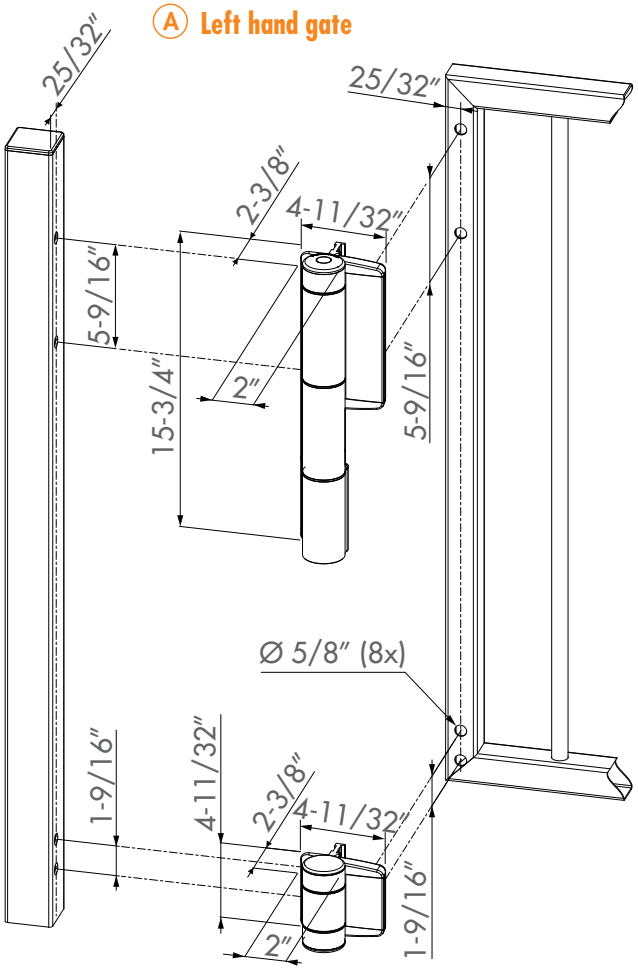
Please contact your supplier should any of the above items be damaged or missing.

3. Specifications

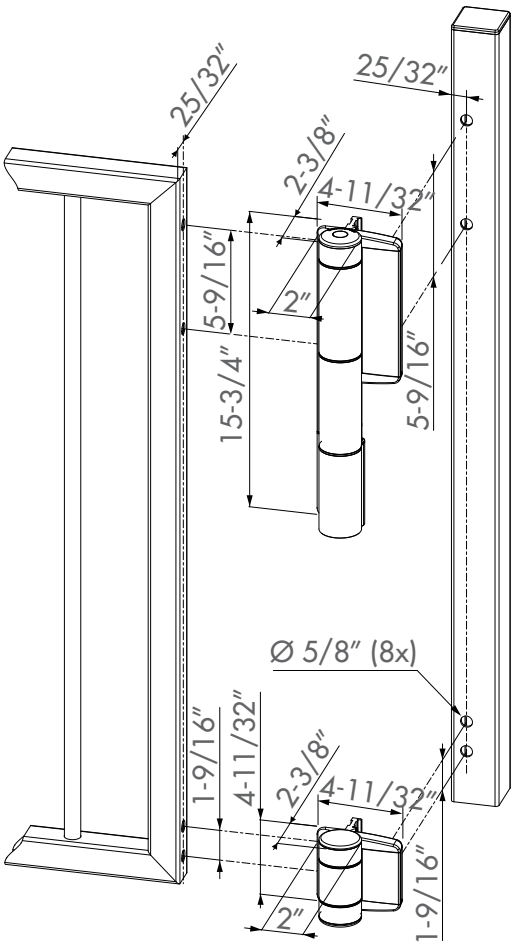
- Max Weight: 330 lbs.
- Max Width: 60 inches (for heavy gate)
- Max opening angle: 180°
- Hinge Gap: 9/16″ to 1- 3/8″ adjustable
- Temperature range: Stable: -4° F to +140° F (-20° C to +70°C)
- Vertical Adjustment: 3/4″
- Horizontal Adjustment: 3/4″
- Smooth or Snap closing action
- Mounting Mammoth: 4 QFs, Dino: 4 QFs
- Drilling Templates Included (2 for Mammoth, 2 for Dino)
- Shipping weight: 10 lbs.

4. Dimensions

Ⓐ Left hand gate



Ⓑ Right hand gate



5. Choose the turning-direction of your gate

⚠ Before preparing your profiles, decide if you have a left- or right hand gate. The fixing of Mammoth-180 and Dino is different for each situation!

Ⓐ Left hand gate

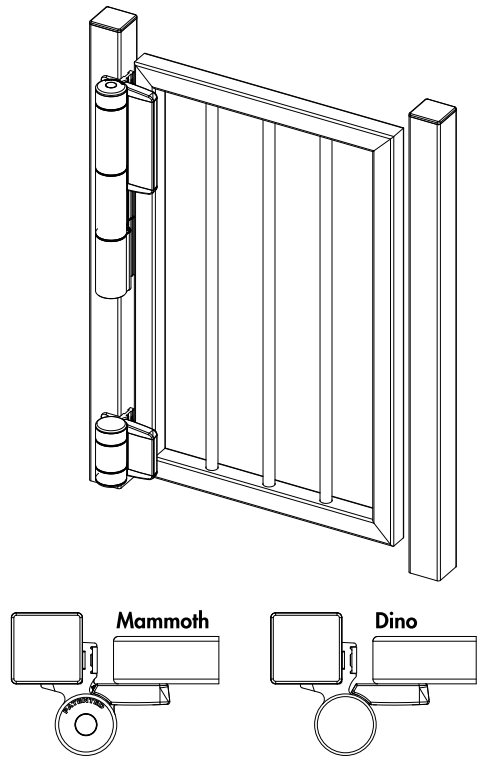


Fig. 5A.1

Ⓑ Right hand gate

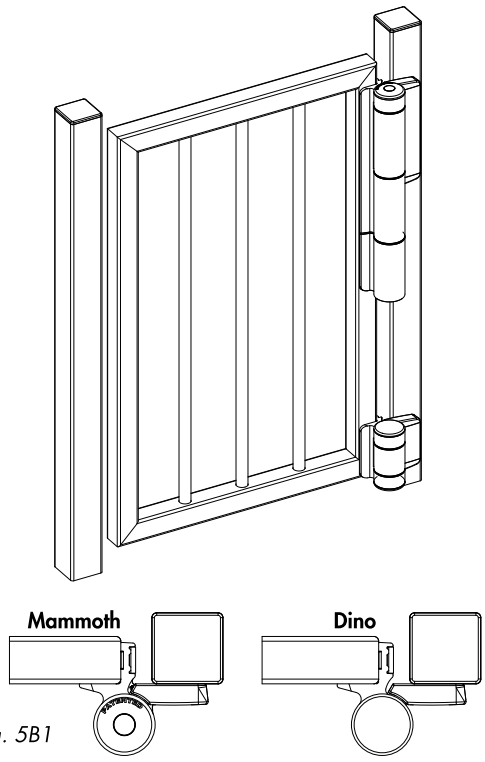


Fig. 5B1

6. Profile preparation

There are four templates included, two for the Mammoth-180 and two for the Dino. Use blocks to hold the gate in place, set the gate into its installed position. Align both sets of templates with the alignment marks ////////////////.

(A) Left hand gate

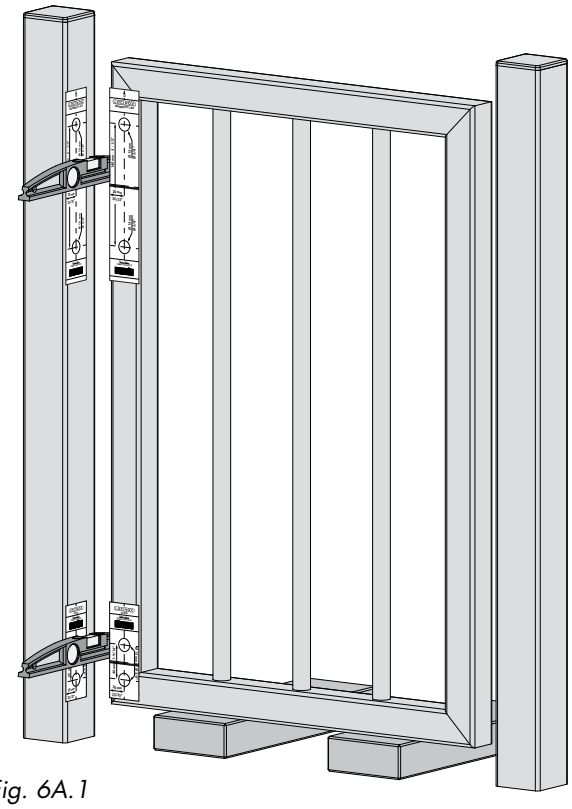


Fig. 6A.1

(B) Right hand gate

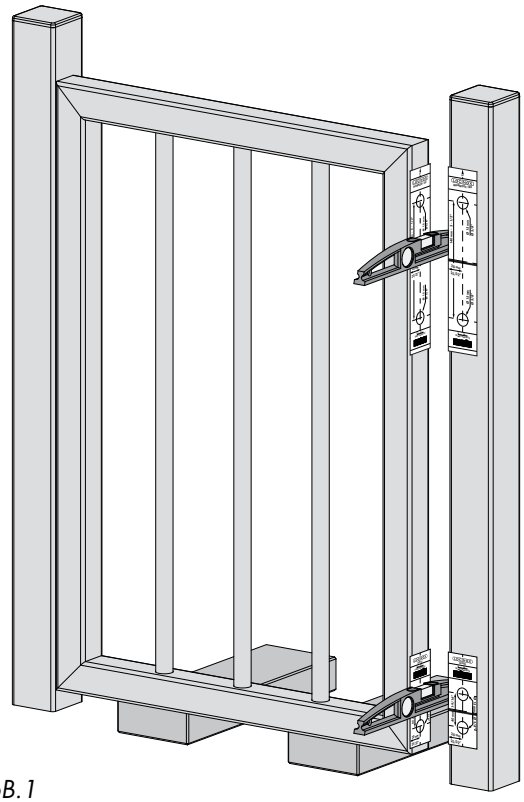


Fig. 6B.1

After aligning stick the templates to gate and post.

(A) Left hand gate

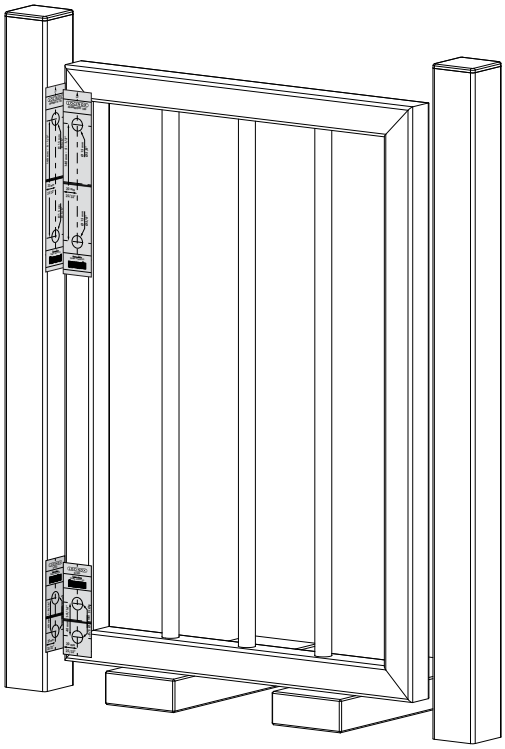


Fig. 6A.2

(B) Right hand gate

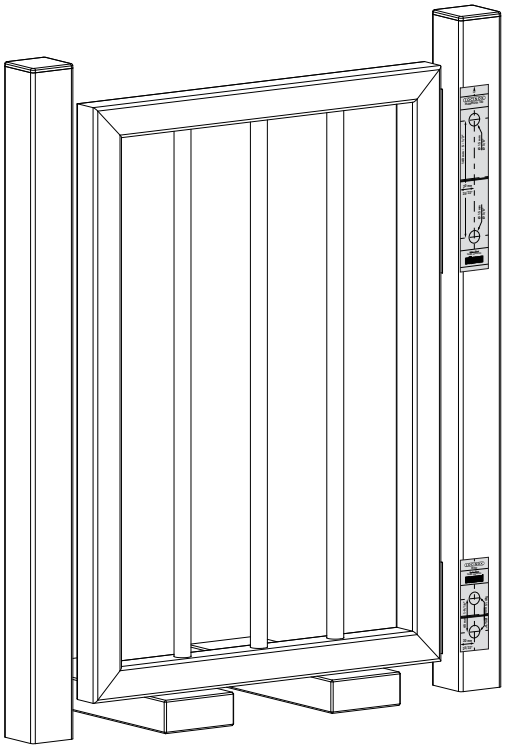


Fig. 6B.2

Center punch the gate and post for the holes, REMOVE THE TEMPLATES, and then drill the holes as marked.

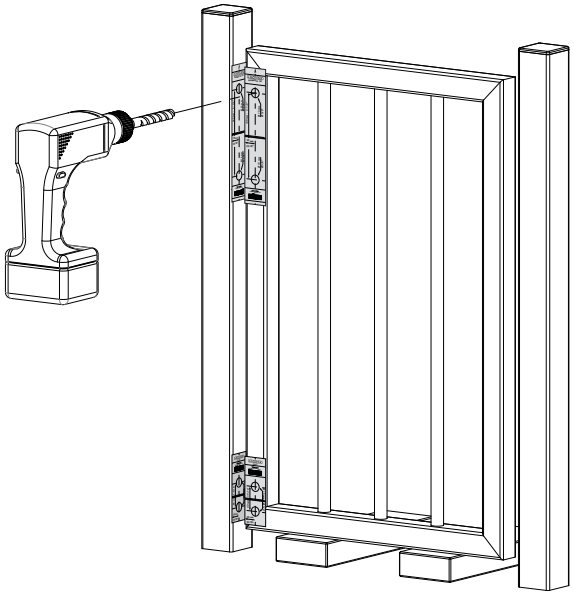


Fig. 6A.3

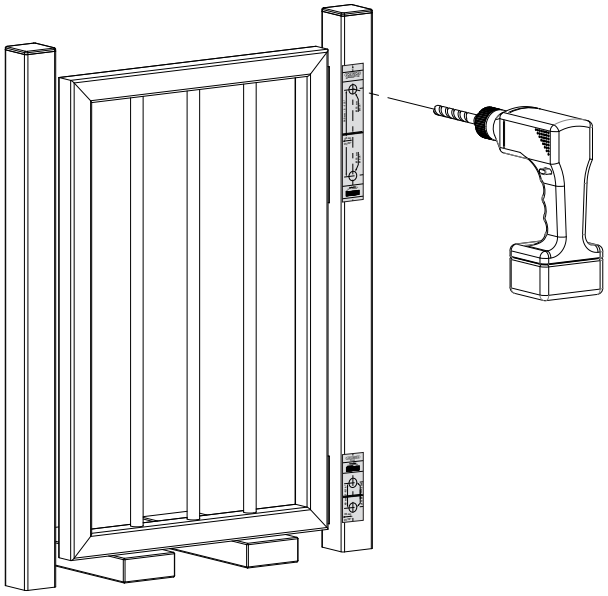


Fig. 6B.3

7. Mammoth-180 and Dino preparation

Remove the covercap and slide out the Quick-Fix cover.

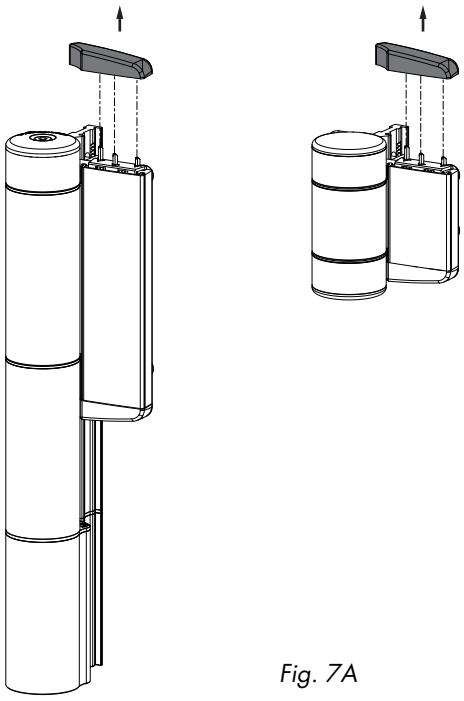


Fig. 7A

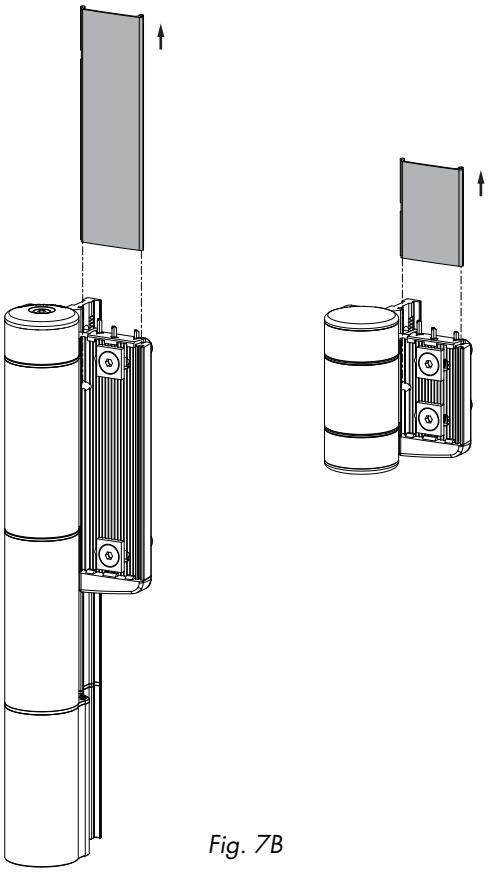


Fig. 7B

8. Mounting the gatecloser

Place the Mammoth-180 on the gate or post and tighten the Quick-Fix bolts. ⚠ Always start by mounting the left side hardware (L-wing side). Repeat this process for the Dino.

Ⓐ **Left hand gate**

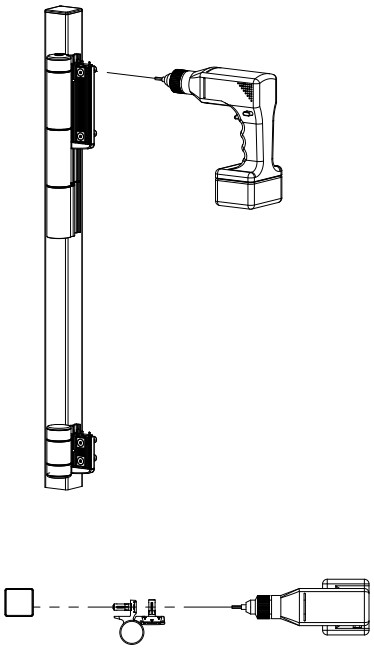


Fig. 8A.1

Ⓑ **Right hand gate**

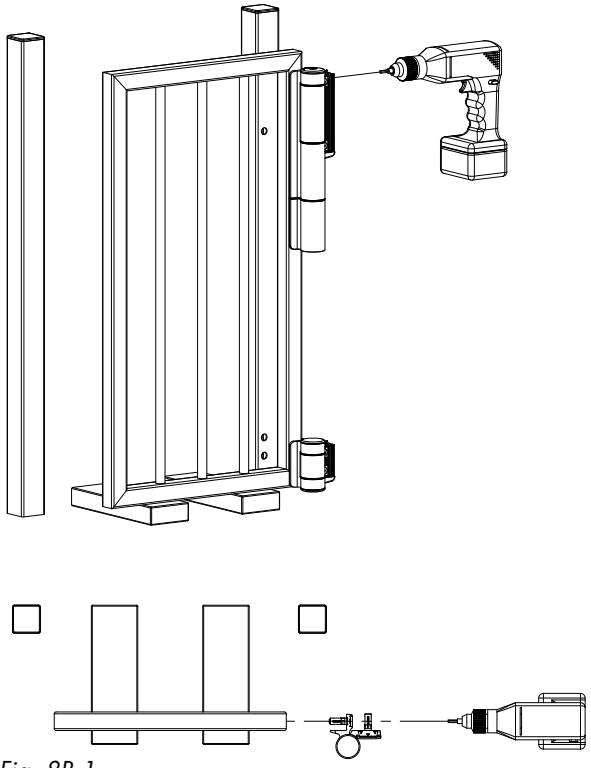


Fig. 8B.1

After mounting the left side, install and tighten the right side hardware.

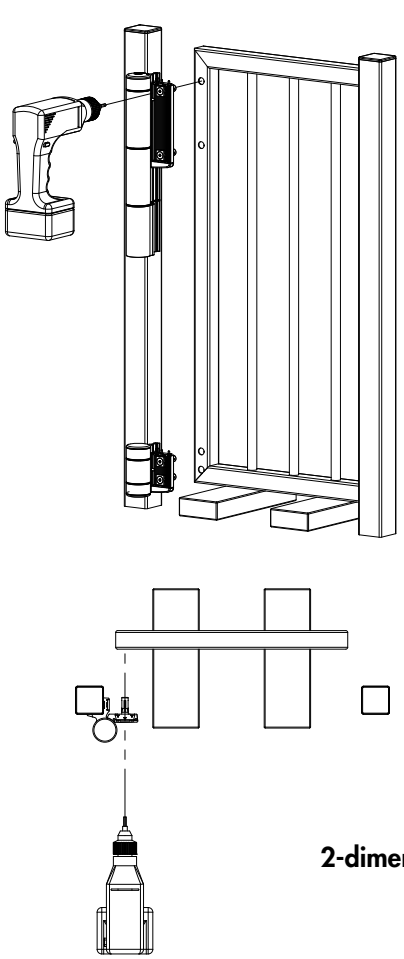


Fig. 8A.2

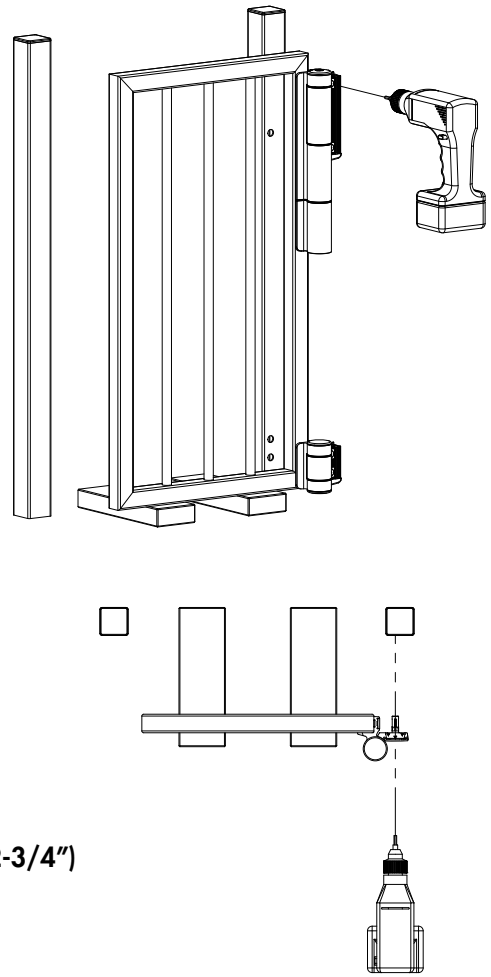
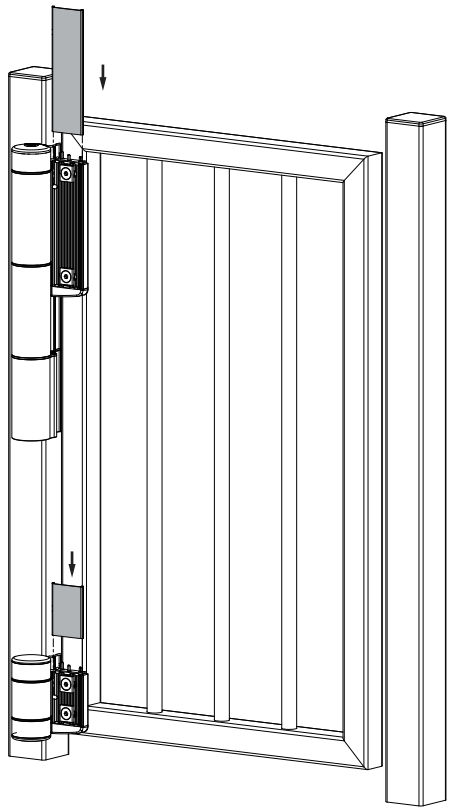


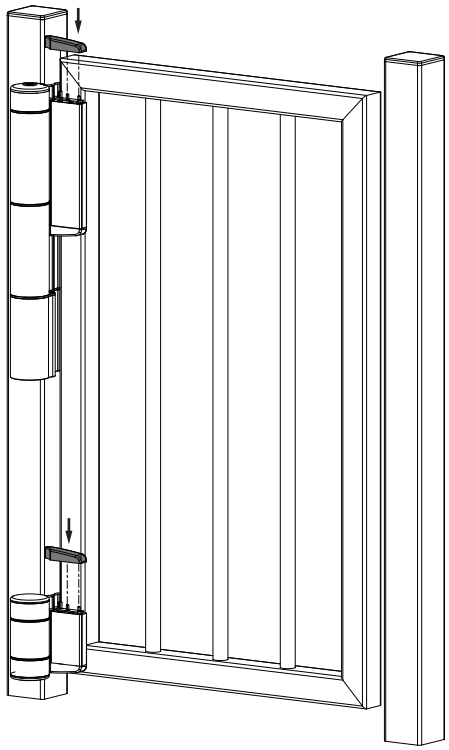
Fig. 8B.2

2-dimensionally adjustable (2 x 2-3/4")

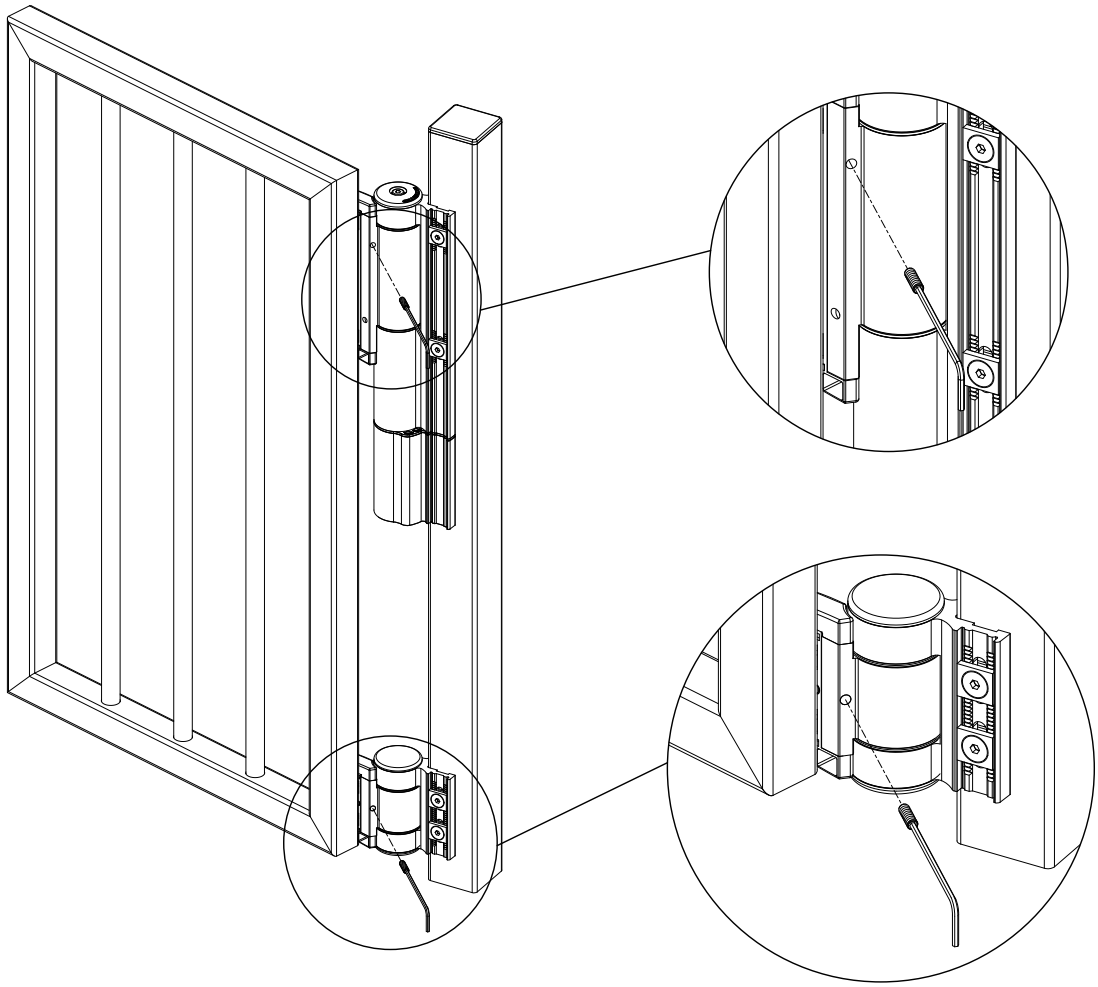
9. Finishing Mammoth-180 and Dino

Slide the cart back in place and replace the covercap.



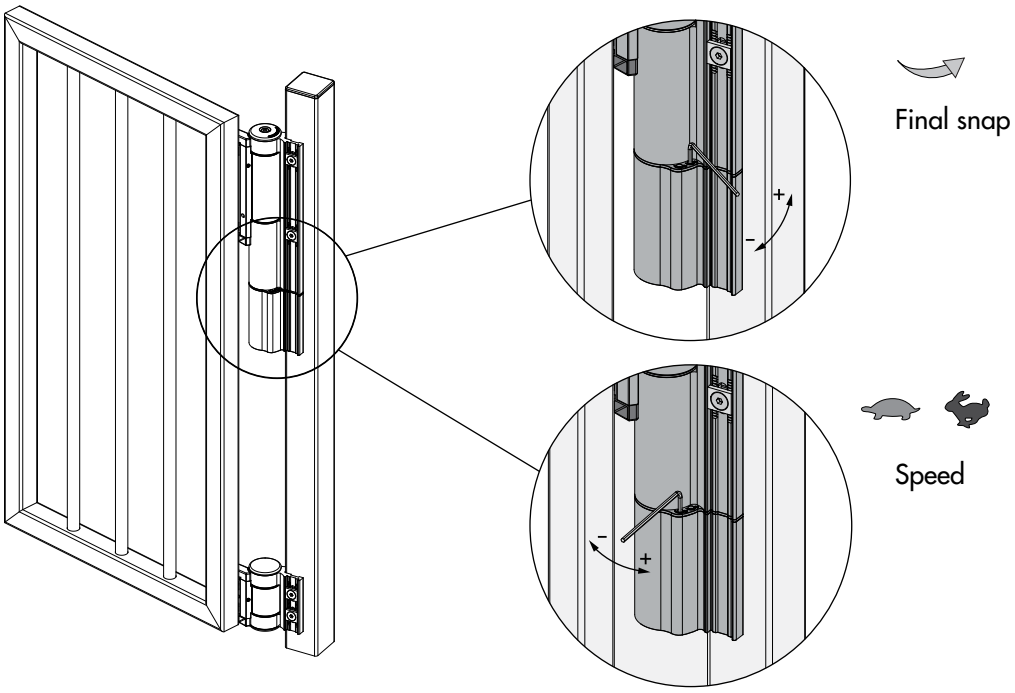


Open the gate and lock the Quick-Fix cover with the included setscrews.



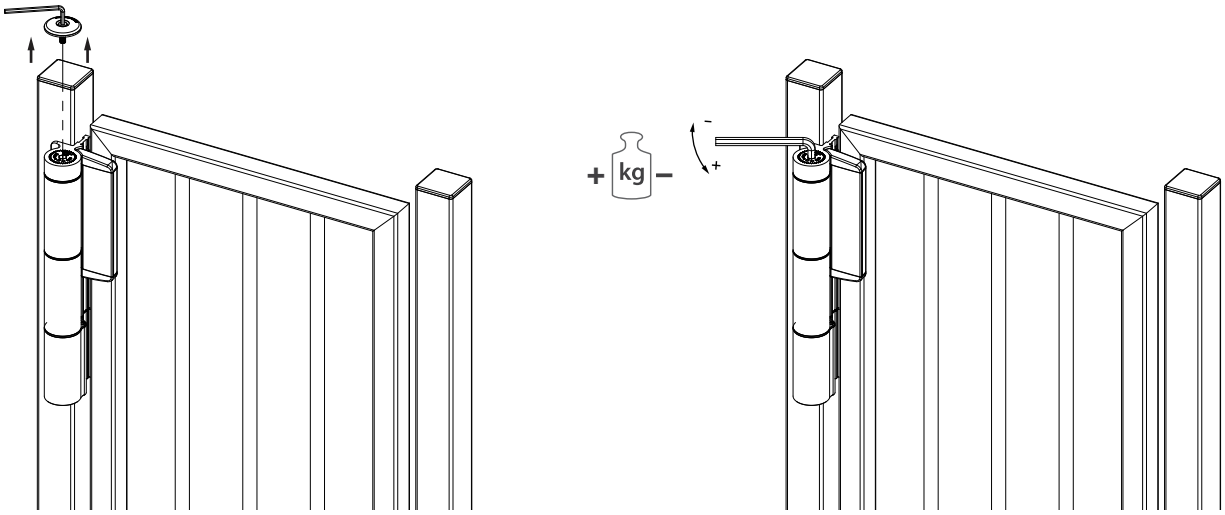
10. Speed and final snap adjustment

Final snap and speed can be adjusted by means of the included 3 mm Allen key.



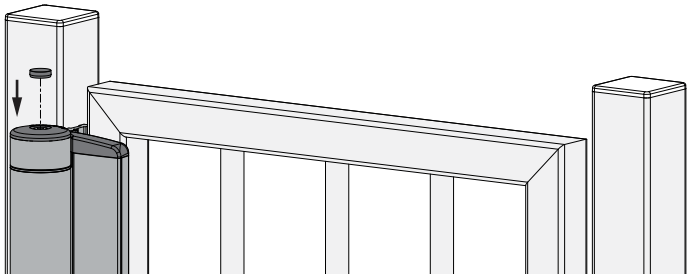
11. Force adjustment

Out of the box, the Mammoth 180° is set to its maximum closing-force: 15 Nm. We advise not to adjust the closing-force unless you have a specific application that requires a lower opening force.
Start by removing the cover cap. Insert the Allen key and push down firmly to disengage the spring. Turn the screw clockwise to decrease the spring force. Max 180° of closing force adjustment. DO NOT use excessive force on the Allen key while adjusting the force.



12. Finalising the installation

⚠ After installing the Mammoth-180 you can proceed with the installation of your Locinox lock and keep. After the speed, closing force, and final snap action have been tested to your satisfaction, install the cap on the force adjustment screw.



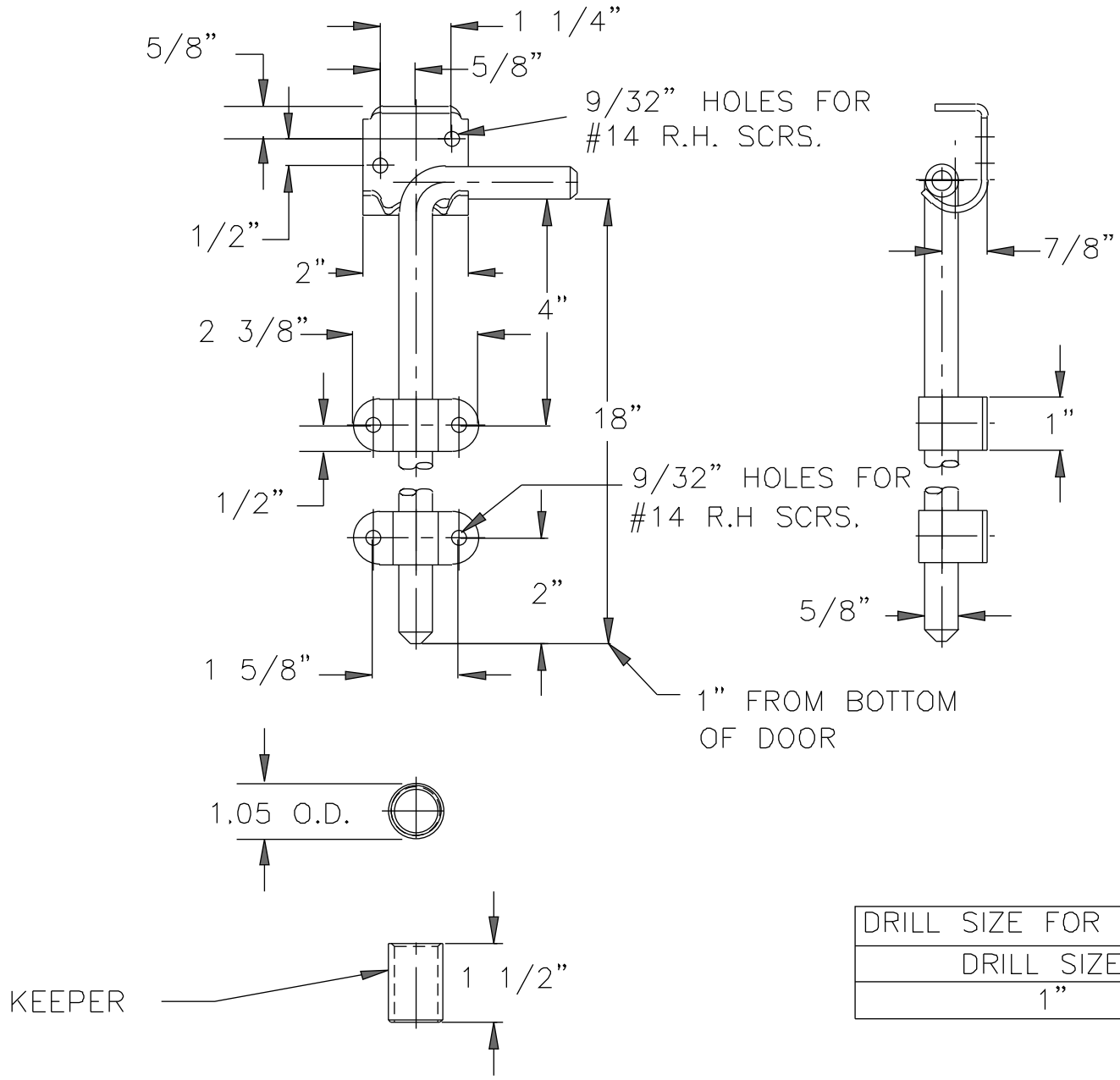
Memo



2014-10-22 - rev 2

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E-mail: locinox@locinox.com - Web: www.locinox.com



DRILL SIZE FOR KEEPER
DRILL SIZE
1"

ND Series

Grade 1 Cylindrical Locks





OVERVIEW

Beyond Grade 1 performance is the hallmark of the mechanical and electrified ND Series locks. These locks are put through extreme levels of testing and are proven to withstand 3,100 in-lb. of abusive lever torque-more than 2-1/2 times the Grade 1 standard requirement. Offset lever pull testing up to 1,600 lbs. assures you of the lock's superb resistance against pry bar attacks. More than strong, ND Series is built to last and shows nearly zero droop or wobble after 16 million cycles.

All ND Series locks including electronic functions, ligature-resistant trims, and ground-breaking, high-visibility status indication trims use the common cylindrical ANSI 161 door preparation making them easily interchangeable. They are ideal for all new construction and retrofit applications where Grade 1 strength and security are desired.

FINISHES



605
Bright Brass



606
Satin Brass



612
Satin Bronze



613
Oil Rubbed Bronze



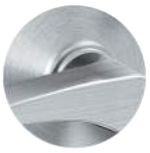
619
Satin Nickel



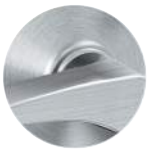
622
Matte Black



625
Bright Chrome



626
Satin Chrome



626AM
Satin Chrome Antimicrobial



643e[1]
Aged Bronze

1. e = an equivalent finish to the BHMA standard

LEVER STYLES



ATH (Athens)
8AT - Milled tactile warning



BRK (Boardwalk)
8BK - Knurled tactile warning



BRW (Broadway)
8BY - Knurled tactile warning



LAT (Latitude)
8LT - Milled tactile warning



LON (Longitude)
8LN - Milled tactile warning



OME (Omega)



RHO (Rhodes)[1]
8RO - Milled tactile warning[1]



SPA (Sparta)
8SP - Milled tactile warning

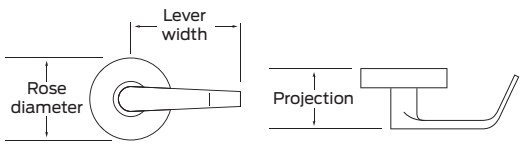


TLR (Tubular)
8TR - Knurled tactile warning

Dimensions		
Lever	**Width**	**Projection**
ATH (Athens)	4.56"	3.31"
BRK (Boardwalk)	4.94"	3.06"
BRW (Broadway)	4.50"	3.06"
LAT (Latitude)	4.50"	3.13"
LON (Longitude)	4.94"	3.13"
OME (Omega)	5.06"	3.31"
RHO (Rhodes)	4.56"	2.94"
SPA (Sparta)	4.94"	3.50"
TLR (Tubular)	4.94"	3.00"

Rose	Diameter
Standard	3.44"

Return to door meets 1/2" requirement for Boardwalk (BRK), Longitude (LON), Omega (OME), Rhodes (RHO), Sparta (SPA) and Tubular (TLR) levers



1. Optional break-away feature available on Rhodes levers for most locking functions. This allows the handheld part of the lever to break away from the shank when extreme torque is applied protecting the spring cage and locking mechanism from exterior access to help prevent unauthorized break-in.

INDICATORS

Inside Trim



Outside Trim



Available Messages

	Standard indicator messages		ND78/ND98 indicator message
	UNLOCKED	UNOCCUPIED	UNLOCKED To lock, turn key 1: then
	LOCKED	OCCUPIED	LOCKED 2: then, 3: Remove key
Inside trim	IS-LOC	IS-OCC	IS-CRS
Outside trim	OS-LOC	OS-OCC	–

Note: French and Spanish language options available.

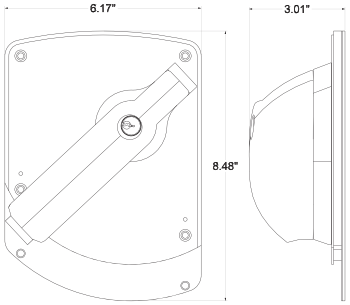
Indicator Dimensions

Trim	Width	Projection
Escutcheon	3.66"	0.95"
Window (surface area)	1.92 square inches	0.22 square inches

LIGATURE-RESISTANT SOLUTIONS



HSLR
Handed



Dimensions

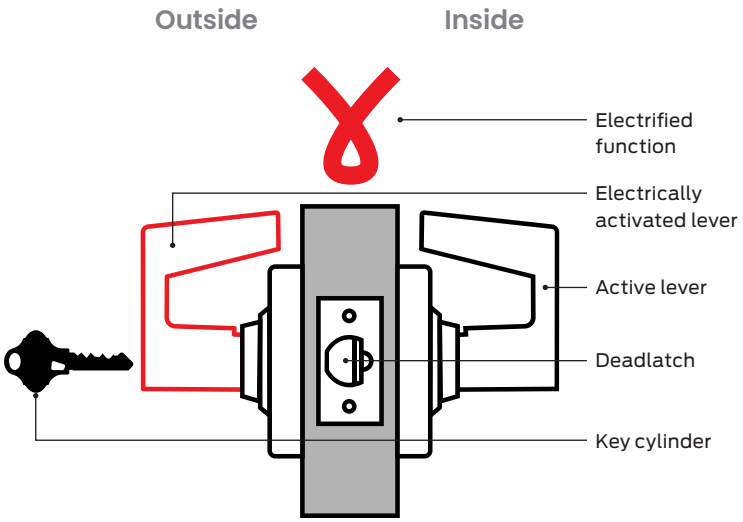
	Width	Height	Projection
HSLR	6.17"	8.48"	3.01"

Specifications and certifications

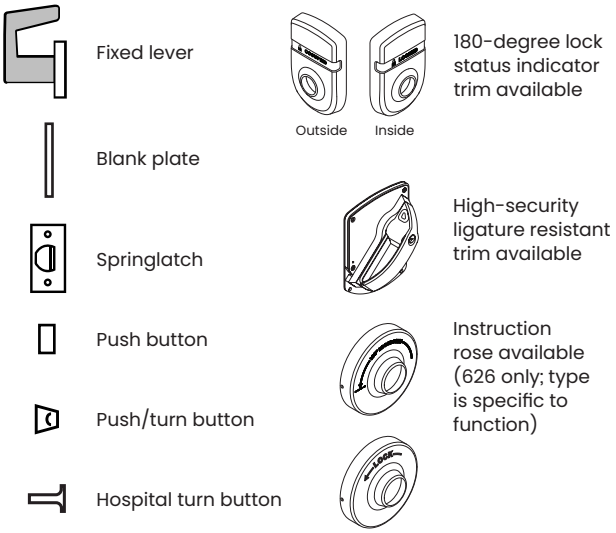
	HSLR
Accepted by NYS-OHM	●
ADA compliant	●
Suitable for:	
High risk areas	●
Medium risk areas	●
Low risk areas	●

MECHANICAL LOCK FUNCTIONS

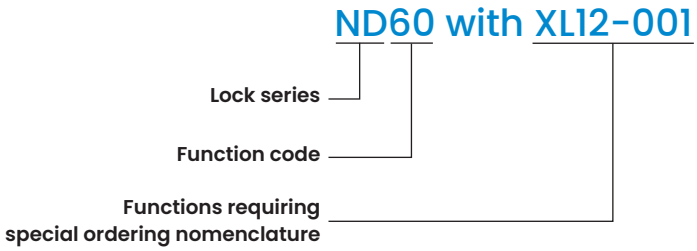
Legend

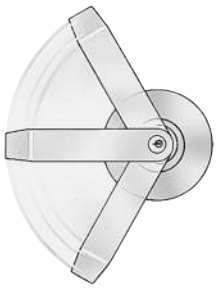


Key



Product Identification Guide

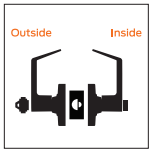




Vandlgard® functions.

Some functions feature Vandlgard locked lever protection. It allows the outside lever to rotate freely up and down when locked to limit the ability of vandals to apply excessive force to the chassis helping to prevent damage to internal components.

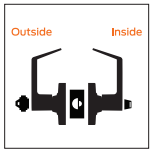
Mechanical keyed functions



Schlage ND91
ANSI F82

Entrance/office lock with Vandlgard

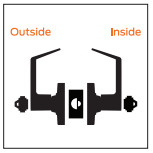
- Push-button locking.
- Push-button disengages outside lever until unlocked with key or by turning inside lever.
- Inside lever always free for immediate egress.



Schlage ND92
ANSI F109

Entrance lock with Vandlgard

- Turn/push-button locking: Pushing and turning button disengages outside lever, requiring using of key until button is manually unlocked.
- Push-button locking: Pushing button disengages outside lever until unlocked by key or by turning inside lever.
- Inside lever always free for immediate egress.



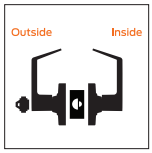
Schlage ND93
ANSI F88

Vestibule lock with Vandlgard

- Latch retracted by key from outside when outside lever is disengaged by key in inside lever.
- Inside lever always free for immediate egress.

Available with an optional instruction rose (XN12-035) that clearly identifies key rotation direction for rapid lockdown. 626 finish only.

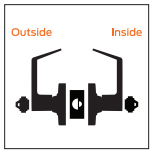




Schlage ND94
ANSI F84

Classroom lock with Vandlgard

- Outside lever disengaged and unlocked by key.
- Inside lever always free for immediate egress.



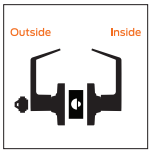
Schlage ND95
ANSI F110

Classroom security lock with Vandlgard (360-degree lockdown)

- Key in either lever locks outside lever by rotating the key 360-degrees counter-clockwise.
- Unlocking requires the key to be rotated 360-degrees clockwise.
- Vandlgard allows outside spindle to disengage from latch when locked.
- Inside lever always free for immediate egress.

Locks ordered in 626 finish come standard with an instruction rose (XN12-035) that clearly identifies key rotation direction for rapid lockdown. Other finishes receive a standard rose.





Schlage ND96
ANSI F86

Storeroom lock with Vandlgard

- Outside lever always disengaged.
- Entrance by key only.
- Inside lever always free for immediate egress.

Note: Available with Request to Exit (RX) function.

Key
Pushbutton
Turn/push button
Springlatch
Deadlatch

ALLEGION

CYLINDERS

Conventional cylinder	
P	6-pin Conventional (keyed 5)
P6	6-pin Conventional (standard)
Z	SL 7-pin Conventional (A2 pinning)
L	Less Conventional
C	Less 6-pin Conventional double cylinder

Full size interchangeable core (FSIC)	
R	6-pin FSIC
M	SL 7-pin FSIC (A2 pinning)
J	Less FSIC
T	Refundable FSIC construction core

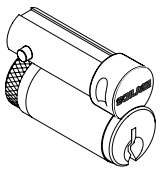
Small format interchangeable core (SFIC)	
G	7-pin SFIC (A2 pinning)
B	Less SFIC
BDC	Disposable SFIC construction core
H	Refundable SFIC construction core

SPECIFICATIONS

Chassis	
Material	Modular design of zinc and steel components plated for corrosion protection
Door thickness	**Standard:** 1-5/8" (41 mm) to 2-1/8" (54 mm) **Optional:** 1-3/8" (35 mm) - 6" (152 mm) EE, EO, EI, ED configurations
Handing	Non-handed
Trim	
Levers	**Standard:** Pressure cast zinc, plated to match product finish specification in nine designs - Athens (ATH), Boardwalk (BRK), Broadway (BRW), Latitude (LAT), Longitude (LON), Omega (OME), Rhodes (RHO), Sparta (SPA), and Tubular (TLR) **Optional:** Tactile feature available on all designs, specify 8AT, 8RO, 8SP, 8TR, 8LT, 8LN, 8OM, 8BY, or 8BK
Rose/escutcheon	Wrought brass or zinc, plated to match product finish specification
Finishes	**Nine available:** 605, 606, 612, 613, 619, 622, 625, 626, 643e; optional antimicrobial coating is available on 626–order as 626AM
Latch	
Backset	**Standard:** 2-3/4" (70 mm) **Optional:** 2-3/8", 3-3/4", 5" (60, 92, 127 mm)
Latch bolt	**Standard:** 1/2" (12 mm) throw spring latch or deadlatch (Stainless Steel) **Optional:** 3/4" (19 mm) throw anti-friction deadlatch available for pairs of doors
Strike	**Standard:** ANSI curved lip: 1-1/4" x 4-7/8" x 1-3/16" (32 mm x 124 mm x 30 mm) **Optional:** T Strike, ANSI strikes with alternative lip lengths, dust box options
Keying	
Formats	**Standard:** 6-pin Conventional cylinder with two patented keys **Optional:** FSIC, SFIC, and 7-pin SL cylinder formats plus less cylinder options made to fit non-Schlage cylinders from Best, Corbin Russwin, Medeco, Sargent and Yale
Access security	**Standard:** 6-pin, patented Everest 29 S123 keyway **Optional:** Open, restricted, Primus®, master keying, and construction keying
Wired electrified	
Input voltage	Autodetecting 12-24V DC, +/- 10%
Operating mode	Fail safe or fail secure via switch on chassis
Current draw	0.23 amps maximum; 0.01 amps holding
Request to Exit	Modular - 3A @ 125VAC / 2A @ 30VDC
Warranty	
	10 years mechanical, 1 year wired electrified
Certifications	
ANSI/BHMA	All ND Series comply with A156.2-2011, Series 4000 Grade 1 cylindrical locks; Wired electrified complies with A156.25 (indoor)
ICC	Complies with ICC A117.1 Accessible and Usable Buildings and Facilities
UL/cUL	UL 10C and CAN/ULC-S104; All locks 3-hour A label single fire door 4'0" x 10'0"; pair doors 3-hour fire door 8'0" x 8'0" with 3/4" latch option; pair doors 90-minute fire 8'0" x 10'0" with 3/4" latch option
CA Fire Code	All levers with a return to door of 1/2" (13 mm) or less comply (Rhodes, Sparta, Tubular, Omega, Longitude and Boardwalk)
FL Building Code	Complies with Florida Building Code (ASTM E330, E1886, E1996) and Miami Dade (TAS 201, 202, 203) requirements for hurricanes
Federal	Meets FF-H-106C Series 161 BAA compliant, all functions

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013158, Rev. 02/24

Full Size Interchangeable Core Cylinders for Schlage Locksets



Full Size Core Only

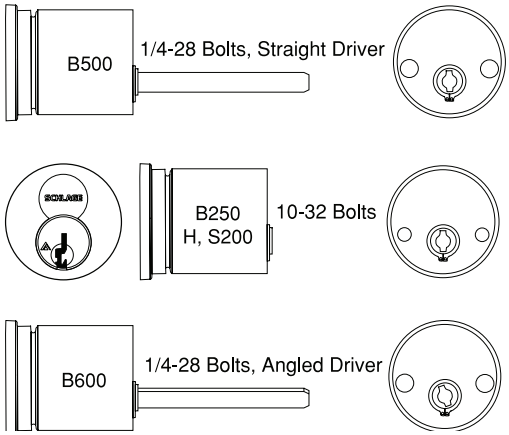
Number	Mechanism
23-030	Conventional core
30-120	Conventional core for hotel function (specify hand)
20-740-XP	Primus XP core (not available in hotel function)

Available 606 and 626 finish only. Order control keys separately.

Full Size IC Housings for Bored Deadlocks, Less Core

Lockset Series	Description	Number	Specify Finish
B500-Series	Outside	B610-203, B610-205	605, 609, 612, 613, 619, 625, 626, and 716
	Inside	B610-028**	605, 609, 612, 613, 619, 625, 626, and 716
B250, H, S200-Series	Outside	22-061	605, 606, 609, 610, 611, 612, 613, 616, 625, 626
	Inside of B252	22-062	
B600 / 700-Series	Outside	B610-027	605, 606, 609, 612, 613, 625, 626
	Inside	B610-028	See Note Below

Specify finish of B610-031 inside snap-on faceplate ordered separately for BC162 and B662/762.
**Inside housing does not include snap-on faceplate

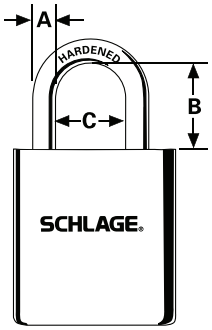




KS43F KS72F KS92M

Full Size Interchangeable Core Padlocks

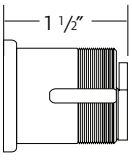
Part #	Shackle Dimensions		
	A	B	C
LESS CYLINDER - FULL SIZE INTERCHANGEABLE CORE			
BRASS BODY			
KS43A3200	3/8″	3/4″	3/4″
KS43D3200	3/8″	1 1/2″	3/4″
KS43F3200	3/8″	2″	3/4″
KS43G3200	3/8″	4″	3/4″
STEEL BODY			
KS72M3200	7/16″	1″	7/8″
KS72F3200	7/16″	2″	7/8″
KS92M3200	3/8″	1″	3/4″



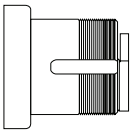
Note: To order Primus XP add the suffix - XP to the Primus part number. (Example: 12-345-XP)

Full Size Interchangeable Core Mortise Cylinders

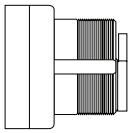




Cylinder Only



Compr. Ring & Spring



With Blocking Ring



Cylinders for Schlage L-Series Mortise Locks

	Design	Function	Core Mechanism		
			Conventional	Primus, Primus XP	Housing Less Core
	**L & N Escutcheons** (cylinders with compression ring)	All Except Below	30-008	20-798, 20-798-XP	30-007
		L9060P Outside	30-030	20-782, 20-782-XP	30-032 + 36-083
		L9485P, L9486P Hotel Funtions	30-010*	N/A	30-007
	**Sectional Trim** (cylinder with compression ring, spring and 3/8" blocking ring). 9060 requires 1/2" blocking ring.	All Except Below	30-138	20-776, 20-776-XP	30-137
		L9060P Outside	30-030 + 36-083 + 35-082-030	20-783, 20-783-XP	30-032 + 36-083 + 36-082-050
		L9485P, L9486P Hotel Funtions	30-040*	N/A	30-137

* Hotel function cores are handed. Specify hand of door.



L583-489
Cam for All Functions Except L9060 Outside



K510-680
Cam for L9060 Outside

Mortise Cylinders with Straight Cam for Exit Devices

Number	Core Mechanism	Collar
26-091	Conventional core	Compression ring & spring
20-061		3/8" blocking rings + compression ring & spring
20-763, 20-763-XP	Primus/Primus XP core	Compression ring & spring
20-771, 20-771-XP		3/8" blocking rings + compression ring & spring
20-059	Housing less core	None
26-064		Compression ring & spring

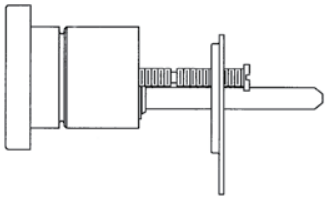


K510-730
Straight Cam, Other Applications

Notes 1. Available 605, 606, 609, 610, 612, 613, 625, and 626 finish. Cores furnished 606 and 626 only.
2. To differentiate between Classic and Everest, specify keyway. Example: C or CP (Classic), C123 (Everest). Everest C123 keyway standard.
3. All cylinders are 1 1/2" long.
4. Specify LKB if 0-bitted Primus XP cylinders are required less key blanks.

Full Size Interchangeable Core Cylinders for Exit Devices, Aluminum Doors, etc.





Interchangeable Core Rim Cylinders for Exit Devices

Number	Core Mechanism
20-057	Conventional core
20-757	Primus core
20-757-XP	Primus XP core
20-079	Housing only, less core

Available 605, 606, 609, 610, 612, 613, 625 and 626 finish.



Cylinders for Adams Rite MS and 4700 Series Lori 4500 Series and Corbin Russwin DL3000 Series

Number	Core Mechanism	Collar
26-098	Conventional core	Compression ring & spring
20-062	Conventional core	3/16″ + 3/8″ blocking rings
20-766	Primus core	3/16″ + 3/8″ blocking rings
20-766-XP	Primus XP core	3/16″ + 3/8″ blocking rings
20-060	Housing less core	None

These cylinders include set screw pack B220-050 for Adams Rite locks.



K510-711
Adams Rite
MS Cam

Cylinders for Adams Rite 4070 Series Deadlocks

Number	Core Mechanism	Collar
20-091	Conventional core	3/16″ + 3/8″ blocking rings
20-722	Primus core	3/16″ + 3/8″ blocking rings
20-722-XP	Primus XP core	3/16″ + 3/8″ blocking rings
20-090	Housing less core	None



B520-378
Adams Rite
4070 Cam

Notes
1. Mortise cylinders available 605, 606, 609, 610, 612, 613, 625, and 626 finish. Cores furnished 606 and 626 only.
2. To differentiate between Classic and Everest, specify keyway. Example: C or CP (Classic), C123 (Everest).
3. All cylinders are 1 1/2″ long.
4. Specify LKB if 0-bitted Primus XP cylinders are required less key blanks.

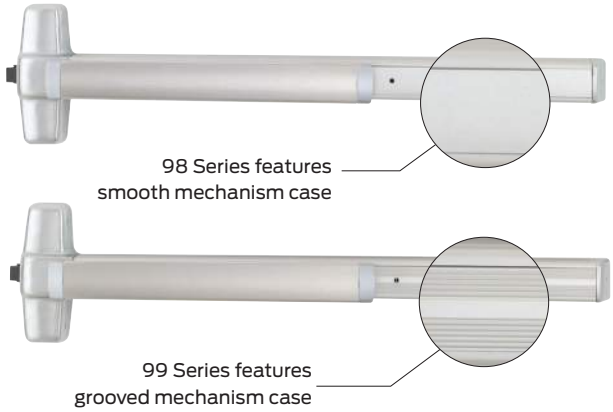
VON DUPRIN®

Exit device

98/99 Series

Overview

The 98/99 Series devices are heavy-duty push pads. The 98 Series has a smooth mechanism case, while the 99 Series has a grooved mechanism case. The 98/99 Series has been certified to the highest industry standards and are used in schools, hospitals and government buildings.



Device types



Rim device



75 Mortise lock device



27 Surface mounted vertical rod device [1]



47 Concealed vertical rod device, 5/16" throw [1]

48 Concealed vertical rod device, 5/8" top, 1 1/2" bottom throw



47WDC Concealed vertical rod wood door device [1]



49 Concealed vertical cable device [2]



50WDC Concealed vertical cable wood door device



57 Three-point latch device

[1] Also available less bottom rod (LBR)
[2] Also available less bottom latch (LBL)

ALLEGION™

VON DUPRIN®

Exit device
98/99 Series

Finishes



605
Bright Brass



606
Satin Brass



612
Satin Bronze



619
Satin Nickel



622
Matte Black

625
Bright Chrome



626
Satin Chrome



626AM
Satin Chrome, Antimicrobial



628
Aluminum, Clear Anodized



630
Satin Stainless



630AM
Satin Stainless, Antimicrobial



643e
Aged Bronze



693
Black

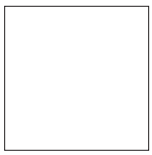


710
Dark Brown, Anodized

Due to the many variations in monitors and printers, color samples may appear different than the physical product. Contact your local sales representative for a physical color sample.

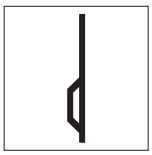
ALLEGION™

Trim functions



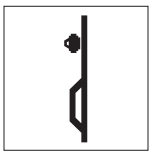
EO No outside trim

- Exit only



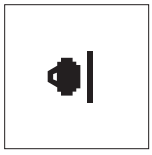
DT Dummy trim

- Pull when dogged (not recommended for fire device)



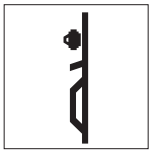
NL Night latch

- Key retracts latchbolt
- Rim and 1 ¼" mortise cylinder



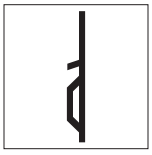
NLOP Night latch

- Key retracts latchbolt, pull required



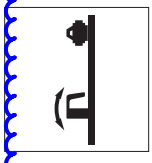
TP Thumbpiece

- Key locks and unlocks
- Rim and 1 ¼" mortise cylinder



TPBE Thumbpiece, blank escutcheon

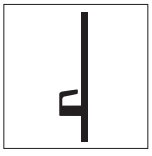
- Blank escutcheon always operable (no cylinder, use with DT trim)



L Lever

K Knob

- Key locks and unlocks
- Rim and 1 ¼" mortise cylinder
- Handed, reversible lever
- Electrified lever operation available



LDT Lever, dummy trim

KDT Knob, dummy trim

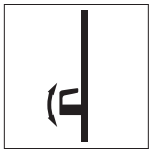
- Pull when dogged



LNL Lever, night latch

KNL Knob, night latch

- Key retracts latchbolt
- Rim and 1 ¼" mortise cylinder
- Handed, reversible lever



LBE[1] Lever, blank escutcheon

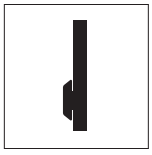
KBE Knob, blank escutcheon

- Always operable (no cylinder)



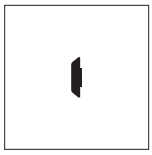
TL Turn lever

- Key locks and unlocks (use with DT trim)
- 1 ¼" mortise cylinder



TLBE Turn lever, blank escutcheon

- Blank escutcheon always operable (no cylinder, use with DT trim)



TLOP Turn lever, optional pull



HL Hospital latch

- Key locks and unlocks
- 1 ¼" mortise cylinder

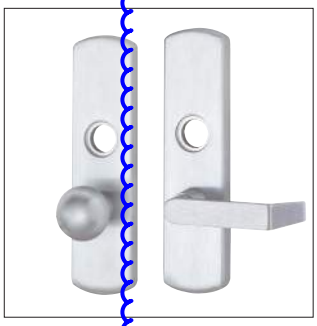
VON DUPRIN®

Exit device
98/99 Series

Trim styles



990



996



696



697
3/4" (19mm) diameter pull



392-7



HL



374



VR910



VR914

Dimensions

Trim style	Width	Height	Thickness	Projection
990	3"	14 3/16"	3/32"	2"
996 Knob	2 3/4"	10 3/4"	27/32"	3 1/4"
996 Lever	2 3/4"	10 3/4"	27/32"	2 7/8"
696	1 5/8"	13 1/2"	3/16"	2 1/6"
697	1 5/8"	13 1/2"	3/16"	3"
392-7	3/4" inch round stainless steel with 7" center to center that matches the 98/99 center case. 3 1/2" offset with 1 1/2" clearance.			
HL	2 9/16"	7 7/8"	-	2 5/8"
374	2 3/4"	10 3/4"	27/32"	
VR910/914 with RIM/verticals	5 1/2"	11"	-	
VR910/914 with mortise	7 1/4"	11"	-	

ALLEGION™

Electromechanical device options

Matrix shows available options per device type but does not represent compatibly across multiple options.

	Switches									Latch retraction					Delayed egress		Misc			
	LX	LX-LC	RX	RXLC	RX2	WP-RX	LX-RX	LX-RX-LC	SS	EL	SD-EL	QEL	HD-QEL	SD-QEL	CX	CX-RCM	ALK	CON	E996	Mortise
98 99	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
98F 99F	■	■	■	■	■	■	■	■	■	■		■			■	■	■	■	■	
XP98 XP99		■	■	■	■	■	■	■		■	■	■	■	■	■	■	■	■	■	
XP98-F XP99-F		■	■	■	■	■	■	■		■		■			■	■	■	■	■	
9875 9975			■	■	■	■			■	■	■	■	■	■	■	■	■	■	■	■
9875-F 9975-F			■	■	■	■			■	■		■			■	■	■	■	■	■
9827 9927	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
9827-F 9927-F	■	■	■	■	■	■	■	■	■	■		■			■	■	■	■	■	
9857 9957	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
9857-F 9957-F	■	■	■	■	■	■	■	■	■	■		■			■	■	■	■	■	
9847 9947	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
9847-F 9947-F	■	■	■	■	■	■	■	■	■	■		■			■	■	■	■	■	
9848 9948	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
9848-F 9948-F	■	■	■	■	■	■	■	■	■	■		■			■	■	■	■	■	
9849 9949	■[1]	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
9849-F 9949-F	■[1]	■	■	■	■	■	■	■	■	■		■			■	■	■	■	■	
9847WDC 9947WDC	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
9847WDC-F 9947WDC-F	■	■	■	■	■	■	■	■	■	■		■			■	■	■	■	■	
9850WDC 9950WDC	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
9850WDC-F 9950WDC-F	■	■	■	■	■	■	■	■	■	■		■			■	■	■	■	■	

[1] For 98/9949 devices, LX switch monitors trim input or electric dogging of EL/QEL devices. LX switch does not monitor latchbolt condition.

Mechanical device options

Dogging

CD — **Cylinder dogging, panic only**

CD-CX — **Center case cylinder dogging for Chexit devices**

CI — **Cylinder dogging indicator**
- Battery-operated dogging indicator in cylinder format with red light visible from over 75 feet away

DI — **Dogging indicator**
- Battery-operated dogging indicator in hex format with red light visible from over 75 feet away

LD — **Less dogging**

SD — **Special center case dogging**
- Center case cylinder dogging

Classroom security

-2 — **Double cylinder**
- Inside key cylinder locks/unlocks outside trim

-2SI — **Double cylinder with security indicator**
- Inside key cylinder locks/unlocks outside trim with visible indicators that provide status of door

CDSI — **Cylinder dogging with indicator**
- Provides visible lock/unlock indicators showing whether device is dogged or undogged

HDSI — **Hex dogging with indicator**
- Provides visible lock/unlock indicators showing whether device is dogged or undogged

Environmental

PN — **Pneumatic latch retraction**
- For areas where electrical devices banned
- Special linkage for mechanical or pneumatic dogging

QM — **Quiet mechanical option**
- Provides damper-controlled relatching of device

INS — **Insulclad kits**
- Kits with longer fasteners or parts for Insulclad doors

AM — **Anti-microbial finish**

Weatherized

WH — **Weep holes**
- Drainage (weep) holes in mechanism case

WS — **Windstorm**
- Severe weather certified/tested
- FEMA and ICC compliant
- Tornado and hurricane tested

California code

AX — **Accessible device**
- UL certified to meet new 5 lb. maximum operating force requirement
- Exceeds ANSI/BHMA requirements

Latches

PL — **Pullman latch**
- Latches are always extended
- Most commonly used in conjunction with electric strikes and LBR-less bottom rod application

Mechanical device options

Touch bar trim

RSS — **Red silk screen**
- Red silk-screened lettered touchbar trim

PUSH — **PUSH**
- Touchbar trim embossed PUSH

SG — **Safety glow**
- Self-illuminating touchpad
- Glows brightly during low or no light conditions

KN — **Knurled touchbar**
- Tactile warning applied to device

BRAILLE — **Braille**
- Vision impaired touchpad
- Raised letter and Braille

Mechanical device options

Matrix shows available options per device type but does not represent compatibly across multiple options.

	Dogging						Classroom security				Environmental				Weatherized		CA code
	CD	CD-CX	CI	DI	LD	SD	-2	-2SI	CDSI	HDSI	PN	QM	INS	AM	WH	WS	AX
98 99	■	■	■	■	■	■	■	■	■	■	■	■		■	■		■
98F 99F							■	■			■	■		■	■		■
XP98 XP99	■	■	■	■	■	■	■	■	■	■				■	■		■
XP98-F XP99-F							■	■						■	■		■
9875 9975	■	■	■	■	■	■	■		■	■	■			■	■		
9875-F 9975-F							■				■			■	■		
9827 9927	■	■	■	■	■	■			■	■	■	■		■	■	■	■ LBR
9827-F 9927-F											■	■		■	■	■	■ LBR
9857 9957	■	■	■	■	■	■			■	■	■			■	■	■	
9857-F 9957-F											■			■	■	■	
9847 9947	■	■	■	■	■	■			■	■	■		■	■	■		■ LBR
9847-F 9947-F											■			■	■		■ LBR
9848 9948	■	■	■	■	■	■			■	■	■			■	■		
9848-F 9948-F											■			■	■		
9849 9949	■	■	■	■	■	■			■	■	■		■	■	■		■ LBL
9849-F 9949-F											■			■	■		■ LBL
9847WDC 9947WDC	■	■	■	■	■	■			■	■	■			■	■		
9847WDC-F 9947WDC-F											■			■	■		
9850WDC 9950WDC	■	■	■	■	■	■			■	■	■			■	■		■ LBL
9850WDC-F 9950WDC-F											■			■	■		■ LBL

Mechanical device options

Matrix shows available options per device type but does not represent compatibly across multiple options.

	Latches	Touch bar trim				
	PL	RSS	PUSH	SG	KN	BRAILLE
98 99		■	■	■	■	■
98F 99F		■	■	■	■	■
XP98 XP99		■	■	■	■	■
XP98-F XP99-F		■	■	■	■	■
9875 9975		■	■	■	■	■
9875-F 9975-F		■	■	■	■	■
9827 9927	■	■	■	■	■	■
9827-F 9927-F		■	■	■	■	■
9857 9957		■	■	■	■	■
9857-F 9957-F		■	■	■	■	■
9847 9947	■	■	■	■	■	■
9847-F 9947-F		■	■	■	■	■
9848 9948		■	■	■	■	■
9848-F 9948-F		■	■	■	■	■
9849 9949		■	■	■	■	■
9849-F 9949-F		■	■	■	■	■
9847WDC 9947WDC		■	■	■	■	■
9847WDC-F 9947WDC-F		■	■	■	■	■
9850WDC 9950WDC		■	■	■	■	■
9850WDC-F 9950WDC-F		■	■	■	■	■

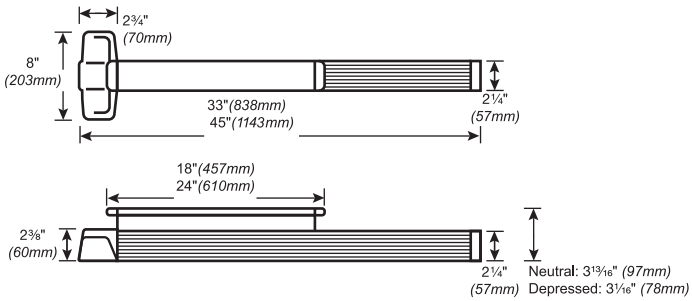
VON DUPRIN®

Exit device
98/99 Series

Specifications

Accessibility	▪ Force to depress push pad – AX device: 5 lbs – Standard device: 15 lbs ▪ Push pad projection – Neutral: 3 13/16" (97 mm) – Depressed: 3 1/16" (78 mm)
Certifications/ approvals	All Von Duprin 98/99 exit devices are ANSI/BHMA Certified. Please refer to the BHMA Certified Products Directory for specific listings.
Mounting height	39 13/16" (1011 mm) 39 11/16" (1008 mm) with mullion
Warranty	36 months from the date of placing the product in operation

Dimensions



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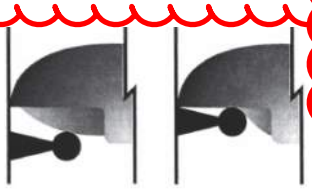
Mechanical options

AX Accessible device

The AX device is a UL certified exit device designed to meet the progressive requirements of the California Building Code for accessible openings. This device meets the 5 lbs of operating force requirement called for in chapter 11B-309.4. The AX device also exceeds ANSI/BHMA requirements. Available devices include: AX98/99, AX98/99-F, AX98/9949LBL, AX98/9949-F LBL, AX98/9949-F LBLAFL. Additionally, all AX devices will be shipped with a new UL label clearly stating “Meets California building Code (2013) Sec. 11B-309.4” and an “AX” identifier label on device center case. See images below for reference.



XP Extra performance



For increased security the XP98/99 Rim exit device has a static load force resistance of more than 2,000 pounds, twice that of standard rim exit devices. The two-piece latch bolt forms a 90° latch-to-strike contact. The “smart” latch changes shape when subjected to external forces. This design enables the exit door to withstand an external attack and remain secure. Additionally, the patented latch bolt design provides a greater, longer-lasting latch bolt to strike contact which is not easily affected by the twisting motion of a weakened frame, resulting in an opening that will remain strong.

With a door loaded to 250 pounds, XP98/99 requires less than 40 pounds of pressure to open, 25% less than the safety code requires.

XP98/99 is available for panic or fire exit hardware applications. Dimensions, finishes and trim options are equal to the standard 98/99 series rim exit device.

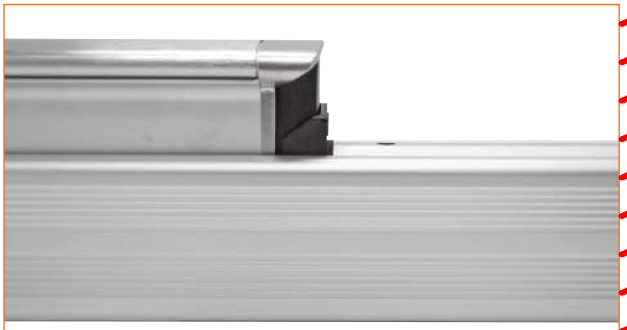
Note: The 909 strike is to be used for all applications.
The exception occurs with the use of fire rated double door applications, in this instance the 954 strike is required.

PA Pushpad armor

Built to absorb impact, the pushpad armor stands up to the wear and tear of demanding high-traffic areas. This composite accessory provides added support, while protecting the pushpad on the hinge side of the device. Available for 33A/35A and 98/99 series exit devices. See images below for reference.







ALLEGION

VON DUPRIN®

996L-KC

Lever key capture trim



Overview

996L-KC lever key capture trim allows for single-handed entry while incorporating the patented vandal-resistant trim design.

The trim is unlocked using a 180 degree key turn, upon which the key becomes captured in cylinder. This operation allows the lever to become active and used to open the door. When the key is then rotated to a maximum 180° in the reverse direction, the key can be removed, and the lever returns to a rigid/locked state.

The vandal-resistant breakaway feature engages when more than 35 lbs. of torque pressure is applied to the locked lever. In breakaway mode, the lever dangles, internal components are protected from breakage, and the trim remains locked. Lever position is restored simply by pulling up on the lever.

The 996L-KC trim is compatible with most 98/99 device configurations with the exception of 75 mortise locks.

The 996L-KC trim can be ordered with a device, or a conversion kit can be purchased as a standalone product to be retrofitted to an existing 996L trim.

Features and benefits

- Vandal-resistant breakaway lever
- Allows for single-handed operation
- Compatible with most device configurations, except for 75 mortise locks
- Field retrofit kits work for 996L
- Field-reversible handing

To order, specify:

- 996L-KC
- Lever style: 06 lever is furnished standard if not specified
- Handing: RHR or LHR (RHR is furnished standard if not specified; field reversible)
- Finish: 605, 606, 612, 613, 619, 622, 625, 626, 643e, 693, 695
- When ordering with device, specify device type + 996L-KC, example: 98LX 996L-KC
- When ordering conversion kit, specify part number 47683326

Note: For more ordering details, please reference Von Duprin catalog and price book.

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Allegion (NYSE: ALLE) is a global pioneer in seamless access. We keep people and their assets safe, wherever they are, bringing together simple solutions, convenient access and advanced technology.

For more, visit **www.allegion.com**

KRYPTONITE ■ LCN ■ SCHLAGE ■ STEELCRAFT ■ VON DUPRIN

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DIVISION 10
IDENTIFYING DEVICES

SECTION 10 14 26

IDENTIFYING DEVICES

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes metal and plastic signs and exterior dimensional letters.
B. Related requirements:

1. 03 20 00 for post-mounted sign footings.

1.2 SUBMITTALS

A. Data: Manufacturer Product Data and installation instructions for each type of sign required.
B. Samples: Each sign form and material showing finishes, colors and surface texture.

1. Full-size sample units, when requested by Architect.
2. Acceptable units may be installed as part of the work.
3. Approved samples will serve as Architect’s control samples.

C. Shop drawings: Of all signs. Include elevations, sections, and large-scale details of lettering layout and color scheme. Show anchorages and accessory items.

1. Furnish location template drawings for signs supported or anchored to other construction.

D. Sign schedule: Include locations and sign graphics (images, text, and messages).
E. Template: Provide template for free-standing individual lettering for building signage.

1.3 QUALITY ASSURANCE

A. Regulatory requirements: Comply with applicable requirements of the laws, codes, ordinances and regulations of Federal, State and Municipal authorities having jurisdiction. Obtain necessary approvals and permits from authorities as required.

1. Signage shall conform to CBC Section 11b-703. Grade 2 Braille shall be used whenever Braille symbols are specifically required. Refer to CBC Section 11B-703.3.
2. Products shall comply with current disabled accessibility requirements.
3. Signage must be field inspected in accordance with 2013 CBC 11B-703. 1.1.

B. Uniformity: For each sign form and graphic image process indicated furnish products of a single manufacturer.
C. Coordination: Before starting Shop Drawings, notify the Architect and arrange a meeting with the Owner's designated personnel to review in detail the work of this Section. Review and coordinate layouts and colors for each sign, and obtain Architect's approval prior to generating shop drawings.

1.4 HANDLING

A. Pack, wrap, crate, bundle, box, bag, or otherwise package, handle, transport, and store fabricated work as necessary to provide protection from damage.

1.5 WARRANTY

B. Warrant this work against defective materials, workmanship, and design for 3 years from Substantial Completion.
C. Fading, cracking, warping, peeling, delaminating, rusting, corroding, and structural failure, including distortion by whatever cause, shall be construed to mean failure because of faulty materials and workmanship.
D. Failures during the warranty period shall be repaired or replaced at no cost to the Owner.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Plastic and metal signage:

1. ASI.
2. Architectural Graphics, Inc.
3. Architectural Signs and Directories.
4. Best Manufacturing Sign Systems.
5. Vomar Products, Inc.

B. Dimensional Building Signage:

1. Basis of Design: Impactsigns.com
2. Signlettersupplier, www.signlettersupplier.com/
3. ASI Signage Inovations, asisignage.com/our-products/dimensional-letters.
4. CASigns, casigns.com.

2.2 DESIGN CRITERIA

A. General: Contractor is responsible for the structural design of the post-mounted signs and to incorporate reasonable safety factors necessary to protect the Owner against public liability. Designs which survive rational engineering analyses will be acceptable.
B. District standards:

1. All signage criteria: Comply with UCB table 11B 703.5.5.

a. Except for reflective parking and traffic signs, all identification, informational and directional signs must have non-glare backgrounds and characters. “Matte,” “satin” or brushed metals are rarely appropriate. These and other shiny or reflective materials are only appropriate for frames or other strictly decorative elements, which shall not intrude into the area of the sign.
b. On visual signs, size characters and symbols according to viewing distance. Sign mounted 80 inches or more AFF must have 3-inch high (minimum) characters.

c. Pictograms (pictorial symbols) and ISA's (International Symbol of Accessibility) bon interior signs at eye level should be 3 inches (minimum) high or twice as high as height of largest text on sign, whichever is greater. On signs where the bottom is 72 inches or more AFF, (minimum) pictograms or ISA's should be 6 inches high or twice as height as height of largest text on sign, whichever is greater.

1) NOTE: Pictograms and other symbols, such as ISA's, which are included on signs with raised characters and Braille, are not required to be raised. The ISA, when included on a tactile sign, does not require any accompanying text, either visual or tactile. Contrast between characters and background must be 70 percent (minimum).

d. On tactile signs, raised characters must be 5/8 inch minimum and 2 inches maximum in height.
e. Characters shall be selected from fonts where the width of uppercase "O" 60% minimum and 110% maximum of the height of the uppercase letter "T
f. Stroke width must be 15 percent (maximum) of character height, measured by stroke, width, and height of uppercase "I".
g. Pictograms that identify rooms and spaces, such as gender pictograms for restrooms must be in a 6-inch (minimum) height field directly above accompanying raised text and California Braille. No characters or Braille in field.
h. Ease all edges and corners of signs. On signs installed on poles, provide radius corners and eased edges.
i. Concealed mounting systems:
   1) Signs mounted on glazing are to have the same size blank backer sign on the opposite to cover the adhesive spots on the glazing. Verify blank backer color with architect.
   2) Epoxy adhesive.
   3) For exterior signs where epoxy-mounted signage is not practical, provide tamper-resistant screw mounting.

2. Restroom door symbols: ADAAG-compliant, colored plastic sign, 0.25 inch thick, unless noted otherwise. Unisex restroom signs shall comply with CBC 2013 Section 11B-703.7.2.6.3. The male triangle symbol shall be of a color that is different from and contrasts with the background female circular symbol.
3. Room identification signage: Colored plastic, 0.125 inch thick, unless noted otherwise.
4. Exterior non-metal signage: Tough laminated polycarbonate face adhered to 1/8 inch acrylic back plate.
5. Tactile signage:

a. Raised characters must use Sans Serif font, in all uppercase characters. NO Serif fonts of any kind are allowed. Use 1/8 inch (minimum) between the two closest points of adjacent tactile characters, measured at top surface of characters. Use beveled or rounded characters.
b. Braille should be directly below the text, separated by 3/8 inch (minimum) from the bottom of text to top of Braille, either flush left with text or centered below it, depending on layout. Keep tactile messages very brief.
c. California Grade 2 Braille must accompany raised text characters.
d. Use rounded or domed California Braille dots, each distinct and separate.

e. California Braille dots within cells must be 1/10 inch apart o.c. Cells must be 2/10 inch apart. Measure cell distance from the center of top dot location of column two of the first cell to the center of top dot location of column one of the next cell on right, within the same word. Dots must be 1/40 inch high at dot apex.

6. Informational and directional signage: Do not use vinyl adhesive-applied signage for exterior applications.
7. Parking lot signage:

   a. Engineer-grade reflective recycled aluminum 0.63 thick; porcelain enamel with beaded text and symbols. Mount signs where applicable on galvanized steel post embedded into concrete footings, diameter and depth as indicated.
   b. Tow-Away sign phone number: 415-553-1200. Confirm with local police department and SF Municipal Transportation Agency (SFMTA). Mount Tow-Away sign per CBC and ADA requirements at entry gate or driveway approach to school parking lot.
   c. Include “NO SKATEBOARDING – NO ROLLER SKATING – NO BIKE RIDING” signage at parking lots and other locations where applicable.

2.3 MATERIALS

A. Polycarbonate Sheet: Of thickness indicated, manufactured by extrusion process, coated on both surfaces with abrasion-resistant coating:

   1. Impact Resistance: 16 ft-lbf/in., ASTM D 256, Method A.
   2. Tensile Strength: 9000 lbf/sq. in., ASTM D 638.
   3. Flexural Modulus of Elasticity: 340,000 lbf/sq. in., ASTM D 790.
   4. Heat Deflection: 265 deg F at 264 lbf/sq. in., ASTM D 648.
   5. Abrasion Resistance: 1.5 percent maximum haze increase for 100 revolutions of a Taber abraser with a load of 500 g, ASTM D 1044.

B. UV-absorbing acrylic sheet: ASTM D 4802, Category A-1 (cell-cast sheet), Type UVA.
C. Cast acrylic sheet for interior application only: Cast (not extruded or continuous cast) methacrylate plastic sheet with a minimum flexural strength of 16,000 psi, ASTM D 790.

   1. Transparent sheet: Colorless sheet with light transmittance of 92 percent, ASTM D 1003, in matte finish, unless otherwise indicated.
   2. White translucent sheet: White translucent sheet of density required to produce uniform brightness and minimum halation effects.
   3. Opaque sheet: Colored opaque acrylic sheet in colors and finishes to match Architect’s control samples.

D. Aluminum sheet: ASTM B 209, 0.08-inch alloy 3000 Series. Provide with mill finish for work to be painted.
E. Sheet steel: Minimum 18-gage.
F. Steel shapes: ASTM A 36 hot-rolled, or cold-rolled shapes, plates and tubes in sizes indicated on Drawings, hot-dip galvanized.
G. Stainless steel plate, sheet and strip: ASTM A 167, AISI Type 302.
H. Fasteners: Use concealed fasteners unless otherwise indicated. Fabricate from metals which are non-corrosive to sign materials and mounting surface.
I. Anchors and inserts:

1. Non-ferrous metal or hot-dipped galvanized steel anchors and inserts for exterior installations.
2. Toothed steel or lead expansion bolt devices for drilled-in-place anchors. Furnish inserts, as required, to be set into concrete or masonry work.

J. Colored coatings: Non-fading coatings, including inks and paints for copy and background colors, recommended by acrylic manufacturers for optimum adherence to acrylic surface.

2.4 FABRICATION OF SIGNS

A. General:

1. Produce smooth, even, level sign panel surfaces, constructed to remain flat when installed within a tolerance of plus 1/16-inch measured diagonally from corner to corner.
2. Letter style: As indicated on the Drawings.

B. Surface and subsurface silkscreening:

1. Silkscreen copy shall be photo-produced using fine mesh screens, 280 mesh or finer, and screening inks.
2. Surface of printed material shall be uniform in color and finish and free of pinholes or other blemishes.
3. Signs shall be consistent in color, value and coverage, and shall maintain proper opacity, or translucency as applicable, and shall be free of blistering, fading and other imperfections.
4. Sign color registration shall be crisp, sharp and free of imperfections.

C. Laminated sign panels: Permanently laminate face panels to backing sheets, of material and thickness indicated, using manufacturer's standard process.

D. Bracket-mounted signs: Fabricate brackets and fittings for bracket-mounted signs from extruded aluminum. Factory paint brackets in color matching background color of sign panel, unless otherwise indicated.

E. Posts, brackets and fittings: Factory-paint brackets in color matching background color of sign panel, unless otherwise indicated.

F. Dimensional Letters:

1. Size 6 inches high by 1 inch deep.
2. Materials: Stainless steel letters, brackets and fasteners.
3. Font: Verify with Architect.
4. Fasteners: Tamper-resistant.

2.5 FINISHES

A. Apply finishes uniformly, over compatible primer for finishes, without runs, pinholes, ripples, holidays and other defects. Flat screen letters, numbers and symbols.

B. Match approved samples.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Verify conditions and measurements affecting the work of this Section at site.

B. Correct conditions detrimental to the proper and timely completion of this work before proceeding with installation.

3.2 INSTALLATION

A. Coordinate post installation with the work of Section 03300.
B. Locate signs where indicated.
C. Install level, plumb and at heights indicated, with sign surfaces free from distortion and other defects.
D. Wall mounted signs: Use adhesive or ship plate mounting, except where tape mounting is indicated.
E. Dimensional Signage:

1. Provide backing at exterior locations.
2. Exposed fasteners are not allowed.

3.3 FIELD QUALITY CONTROL

A. Touchup minor damage, or replace damaged parts.
B. Replace signs damaged beyond satisfactory field repair.

3.4 SIGN SCHEDULE

A. DF-1:

1. Type: Door Frame District Signage.
2. Location: Interior: Cast Acrylic.
3. Location: Exterior: Polycarbonate/Acrylic.

B. DS-1:

1. Type: Directional Sign-Assistive Listening:
2. Location: Interior.
3. Material: Cast Acrylic.

C. DS-2

1. Type: Directional Sign; Accessible Route.
2. Location: Interior: Cast Acrylic.
3. Location: Exterior: Polycarbonate/Acrylic.

D. DS-3

1. Type: Directional Sign-Elevator
2. Location: Interior.
3. Material: Cast Acrylic.

E. DS-4:

1. Type: Directional Sign-Exit.
2. Location: Interior.
3. Material: Cast Acrylic.

F. DS-5:

1. Type: Directional Sign - Exit
2. Location: Interior.
3. Material: Cast Acrylic.

G. DS-6:

1. Type: Main Entry Directional Sign
2. Location: Exterior
3. Material: Polycarbonate/Acrylic

H. RS-1:

1. Type: Room Identification Sign, Typ.
2. Location: Interior. Material: Cast Acrylic.
3. Location: Exterior: Polycarbonate/Acrylic.

I. RS-2:

1. Type: Room Identification Sign-Toilets.
2. Location: Interior.
3. Material: Cast Acrylic.

J. RS-3:

1. Type: Toilet Door Signage.
2. Location: Interior.
3. Material: Cast Acrylic.

K. RS-4:

1. Type: Stair Identification Sign
2. Location: Interior. Material: Cast Acrylic.
3. Location: Exterior: Polycarbonate/Acrylic.

L. RS-5:

1. Type: Floor Identification Sign
2. Location: Interior.
3. Exterior: Polycarbonate/Acrylic.
4. Interior: Cast Acrylic.

M. SS-1:

1. Type: Safety Sign/Maximum Occupancy.
2. Location: Interior.
3. Material: Cast Acrylic.

N. VS-1:

1. Type: Aluminum Sheet with galvanized steel post.
2. Location: Exterior

O. VS-2:

1. Type: Aluminum Sheet with galvanized steel post.
2. Location: Exterior

P. VS-3:

1. Type: Aluminum Sheet with galvanized steel post.
2. Location: Exterior

END OF SECTION

DIVISION 31
EARTHWORK

SECTION 31 11 00

CLEARING & GRUBBING

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes all work necessary to successfully complete demolition, clearing & grubbing to prepare site for the phasing and new construction, including the following:

1. Protecting existing trees and vegetation to remain.
2. Trimming tree limbs and roots.
3. Removing trees as designated.
4. Clearing vegetation, debris, trash and other materials within limits indicated.
5. Grubbing of vegetation within limits indicated.
6. Stripping of topsoil within limits indicated.
7. Removing above-grade site improvements within limits indicated.
8. Disconnecting, capping or sealing, and abandoning site utilities in place.
9. Disconnecting, capping or sealing, and removing site utilities.
10. Disposing of objectionable material off site.
11. Clean line saw cutting of existing asphalt pavement, concrete sidewalks, concrete curb/gutter, etc., as specified herein.
12. Clearing and site preparation. Including removal of site vegetation and other root system.
13. Protection from injury or defacement of trees and other vegetation and objects to be preserved.
    a. Removal of surface debris and deleterious materials such as rubbish.
    b. Removal and stockpile of materials for landscaping use at approved location.
    c. Disposal of unwanted materials off site.

1.2 RELATED DOCUMENTS

A. Caltrans 2022 Standard Specifications, Section 17, Clearing and Grubbing.

1.3 REGULATORY REQUIREMENTS

A. No burning shall be allowed.

B. Comply with the following 2022 California Code of Regulations:

1. Title 8: CAL/OSHA, Chapter, Subchapter 4 – Construction Safety Orders

2. Title 24: Part 2, California Building Code, Chapter 33, Protection of Pedestrian during Construction or Demolition.
3. Bay Area Air Quality Management District
4. Alameda County Water District, Standard Specification and Details.
5. County of Alameda County Public Works Department, Design Guidelines.

1.4 DEFINITIONS

A. ANSI: American National Standards Institute.

B. CAL-OSHA: California Occupational Safety and Health Administration.

C. Topsoil: Natural or cultivated surface-soil layer containing organic matter and sand, silt, and clay particles; friable, pervious, and black or a darker shade of brown, gray, or red than underlying subsoil; reasonably free of subsoil, clay lumps, gravel, and other objects more than 2-inches in diameter; and free of weeds, roots, and other deleterious materials.

D. Tree Protection Zone: Area surrounding individual trees or groups of trees to be protected during construction, and defined by the drip line of individual trees or the perimeter drip line of groups of trees, unless otherwise indicated.

1.5 MATERIAL DISTRICTSHIP

A. Except for stripped topsoil or other materials indicated to remain District’s property, cleared materials shall become Contractor's property and shall be removed from Project site.

1.6 SUBMITTALS

A. Submittal procedure shall be as outlined in Division 1 – General Requirements.

1.7 QUALITY ASSURANCE

A. Do not remove or prune trees without first securing a permit from the appropriate agency.

B. Prune to the standards of the International Society of Arborists and to ANSI 300.

1.8 PROJECT CONDITIONS

A. Except for materials indicated to be stockpiled or to remain the District’s property, cleared materials are the Contractor's property. Remove cleared materials from site and dispose of in lawful manner.

B. Salvable Improvements: Carefully remove items indicated to be salvaged and store where indicated on plans or where designated by the District. Avoid damaging materials designated for salvage.

C. Unidentified Materials;

1. If unidentified materials are discovered, including hazardous materials that will require additional removal other than is required by the Contract Documents, immediately report the discovery to the District.
2. If necessary, the District will arrange for any testing or analysis of the discovered materials and will provide instructions regarding the removal and disposal of the unidentified materials.

PART 2 - PRODUCTS

2.1 SOIL MATERIALS

A. Backfill excavations resulting from demolition operations with on-site or import materials conforming to structural backfill defined in Section 31 23 33 Utility Trenching and Backfill.

1. Obtain approved borrow soil materials off-site when satisfactory soil materials are not available on-site.

PART 3 - EXECUTION

3.1 PREPARATION

A. Protect and maintain benchmarks and survey control points during construction.

B. Locate and clearly flag trees and vegetation to remain or to be relocated.

C. Protect existing site improvements to remain during construction.

1. Restore damaged improvements to their original condition, as acceptable to the Engineer and/or District. Prior to restoration the contractor shall notify Engineer and /or District of the damaged improvements.

3.2 TREE PROTECTION

A. Erect and maintain temporary fence around drip line of individual trees or around perimeter drip line of groups of trees to remain. Remove fence when construction is complete.

B. Do not store construction materials, debris, or excavated material within drip line of remaining trees.

C. Do not permit vehicles or equipment within drip line of remaining trees.

D. Do not excavate within drip line of remaining trees, unless otherwise indicated.

E. Where excavation for new construction is required within drip line of trees, hand clear and excavate to minimize damage to root systems. Use narrow-tine spading forks, comb soil to expose roots, and cleanly cut roots as close to excavation edge as possible.

1. Cover exposed roots with burlap and water regularly.
2. Temporarily support and protect roots from damage until they are permanently

relocated and covered with soil.

3. Coat cut faces of roots more than 1-1/2-inches in diameter with an emulsified asphalt or other approved coating formulated for use on damaged plant tissues.

4. Cover exposed roots with wet burlap to prevent roots from drying out. Backfill with soil as soon as possible.

3.3 TREE PRUNING

A. Prune trees to balance the crown, and eliminate hazards. Perform main work to reduce sail effect through thinning, reducing end weights, shortening long heavy limbs, removing deadwood, weak limbs and sucker growth. Prune limbs back to an appropriate lateral branch.

B. Make final cuts at the outer edge of the branch collar in accordance with the arborist's recommendations.

C. Perform pruning work in a safe and proper manner, adhering to CAL-OSHA and ANSI Standards.

3.4 ROOT PRUNING

A. Do not cut tree roots greater than 3-inch in diameter and less than 12-inches below ground level without approval of the District.

B. Cut tree roots cleanly, as far from the trunk as possible, and not underneath any area where walkways are to be constructed. Root pruning shall be to a depth of 18-inches.

C. Tree root prune using a Vermeer root-cutting machine. Obtain the District's approval before using alternate equipment or techniques.

D. Complete tree root pruning prior to any excavation adjacent to the tree.

E. Do not expose tree roots to drying out. Cover root ends with soil or burlap and keep moist until the final backfill is completed.

3.5 TREE REMOVAL

A. Remove trees designated for removal prior to the construction of new improvements.

B. Perform tree removal work in a safe and proper manner, adhering to CAL-OSHA and ANSI Standards.

C. Remove or grind stumps to a minimum of 18-inches below finish subgrade. Remove surface roots to this depth within 24-inches of the tree trunk. Trees, plants and roots that are below proposed building footprint or slabs on grade shall be removed in its entirety.

3.6 RESTORATION

A. Restore damaged improvements to their original condition, as acceptable to the District.

B. Repair or replace trees and vegetation indicated to remain that are damaged by construction operations, as directed by the District.

1. Employ a qualified arborist, licensed in jurisdiction where the Project is located, to submit details of proposed repairs and to repair damage to trees and shrubs.

2. Replace trees that cannot be repaired and restored to full-growth status, as determined by the District. Clear and grub existing areas only to extent required by new construction and as indicated. Use methods required to complete the Work within limitations of governing regulations.

3.7 UTILITIES

A. Locate, identify, disconnect, and seal or cap off utilities indicated to be removed or abandoned.

B. Arrange to shut off indicated utilities with utility companies or verify that utilities have been shut off.

C. Existing Utilities: Do not interrupt utilities serving facilities occupied by District or others unless authorized in writing by the District, and then only after arranging to provide temporary utility services according to requirements indicated.

D. Coordinate utility interruptions with utility company affected.

E. Do not proceed with utility interruptions without the permission of the District and utility company affected. Notify District and utility company affected 14 working days prior to utility interruptions.

F. Excavate and remove underground utilities that are indicated to be removed.

G. Securely close ends of abandoned piping with tight fitting plug or wall of concrete minimum 6-inches thick. All abandoned piping shall be filled with a cementious material, such as controlled low strength material.

3.8 CLEARING AND GRUBBING

A. Remove obstructions, trees, shrubs, grass, and other vegetation to permit installation of new construction. Removal includes digging out stumps and obstructions and grubbing roots.

B. Remove trash, debris, logs, concrete, masonry and other waste materials.

C. Do not remove trees, shrubs, and other vegetation indicated to remain or to be relocated.

D. Completely remove stumps, roots, obstructions, and debris extending to a depth of 18-inches below subgrade. Trees, plants and roots that are below proposed building footprint or slabs on grade shall be removed in its entirety.

E. Use only hand methods for grubbing within drip line of remaining trees.

3.9 TOPSOIL STRIPPING

A. Remove sod and grass before stripping topsoil.

B. Strip topsoil to whatever depths are encountered in a manner to prevent intermingling with underlying subsoil or other waste materials.

C. Remove trash, debris, weeds, roots, and other waste materials.

D. Stockpile topsoil materials designated to remain on site at a location approved by the District at a location away from edge of excavations without intermixing with subsoil. Grade and shape stockpiles to drain surface water. Cover to prevent windblown dust. Refer to the SWPPP as required.

E. Do not stockpile topsoil within drip line of remaining trees.

3.10 SITE IMPROVEMENTS

A. Remove existing above- and below-grade improvements as indicated and as necessary to facilitate new construction.

B. Remove slabs, paving, curbs, and gutters, as indicated. Where concrete slabs, curb, gutter and asphalt pavements are designated to be removed, remove bases and subbase to surface of underlying, undisturbed soil.

C. Unless the existing full-depth joints coincide with line of pavement demolition, neatly saw-cut to full depth the length of existing pavement to remain before removing existing pavement. Saw-cut faces vertically.

D. Remove driveways, curbs, gutters and sidewalks by saw cutting to full depth. If saw cut falls within 30-inches of a construction joint, expansions joint, score mark or edge, remove material to joint, mark or edge

3.11 BACKFILL

A. Place and compact material in excavations and depressions remaining after site clearing in conformance with Section 31 23 33.

3.12 DISPOSAL

A. Remove surplus soil material, unsuitable topsoil, obstructions, demolished materials, and waste materials, including trash and debris, and legally dispose of them off the District's property.

3.13 TEMPORARY FACILITIES

A. Provide the following temporary facilities to facilitate the demolition operations, as necessary.

1. Temp Traffic Controls
2. Protection of Persons and Property
3. Protection of Utilities
4. Noise and Dust Abatement.
5. Clear and restore area to their original condition.
6. Protect survey markers and monuments, existing improvements, and adjacent structures from removal and damage.

3.14 CONSTRUCTION WASTE MANAGEMENT

A. To the greatest extent possible, separate reusable and recyclable products from contaminated waste and debris in accordance with the General Contractor's Waste Management Plan. Place recyclable and reusable products in designated containers and protect from moisture and contamination.

END OF SECTION

SECTION 31 23 00

EXCAVATION AND FILL

PART 1 - GENERAL

1.1 SUMMARY

A. This Section describes the requirements for earthwork operation, as shown on the Drawings and specified:

1. Excavation and/or embankment from existing ground to subgrade, including soil sterilant, for parking areas, walks, paths, and any other site improvements called for on the Plans.

a. Aggregate base.

b. Lime stabilization.

c. Dispose off-site waste, excess or unsatisfactory material.

1.2 RELATED DOCUMENTS

A. Caltrans 2022 Standard Specifications:

1. Section 19, Earthwork.

2. Section 24, Lime Stabilization.

3. Section 26, Aggregate Bases.

1.3 RELATED SECTIONS

A. Section 31 11 00 – Clearing and Grubbing

1.4 REGULATORY REQUIREMENTS

A. State of California, Department of Transportation, Standard Specifications 2010 - Section 19

B. San Francisco Standard Specification and Details.

C. ASTM

1. D 1557, Test Method for Laboratory Compaction Characteristics of Soil Using Modified Effort.

2. D1557-70 for testing in compaction.

3. D 1586, Method for Penetration Tests and Split-Barrel Sampling of Soils.

4. D 2487, Classification of Soils for Engineering Purposes.

5. D 3740, Practice for Evaluation of Agencies Engaged in Testing and/or Inspection of

Soil and Rock as Used in Engineering Design and Construction.

6. D 4318. Test Method for Liquid Limit, Plastic Limit and Plasticity Index of Soils.
7. E 329, Specification for Minimum Requirements for Agencies Engaged in the Testing and/or Inspection of Materials Used in Construction.
8. E 548, Guide for General Criteria Used for Evaluating Laboratory Competence.

D. California Building Code, Title 24, Part 2 – California Code of Regulations, Chapter 18 and 18A, Soils and Foundations.

E. CAL/OSHA, Title 8.

1.5 DEFINITIONS

A. Borrow: Approved soil material imported from off-site for use as Structural Fill or Backfill.

B. Excavation: Removal of material encountered above subgrade elevations.

1. Authorized Over-Excavation: Excavation below subgrade elevations or beyond indicated horizontal dimensions as shown on plans or authorized by the District's Representative.
2. Unauthorized Over-Excavation: Excavation below subgrade elevations or beyond indicated horizontal dimensions without authorization by the District's Representative. Unauthorized excavation shall be without additional compensation.

C. Structural Backfill: Soil materials approved by the District's Representative and used to fill excavations resulting from removal of existing below grade facilities, including trees.

D. Structural Fill: Soil materials approved by the District's Representative and used to raise existing grades.

E. Rock: Rock material in beds, ledges, unstratified masses, and conglomerate deposits and boulders of rock material ¾-cubic yards or more in volume that when tested by an independent geotechnical testing agency, according to ASTM D 1586, exceeds a standard penetration resistance of 100 blows/2-inches.

F. Structures: Buildings, footings, foundations, retaining walls, slabs, tanks, curbs, mechanical and electrical appurtenances, or other man made stationary features constructed above or below grade.

G. Subgrade: Surface or elevation remaining after completing excavation, or top surface of a fill or backfill immediately below base or topsoil materials.

H. Unsuitable Material: Any soil material that is not suitable for a specific use on the Project. The District's Representative will determine if a soil material is unsuitable.

I. Utilities: onsite underground pipes, conduits, ducts and cables.

1.6 SUBMITTALS

A. Submittal procedure shall be as outlined in Division 1 – General Requirements.

B. Submit material certificates signed by the material producer and the Contractor, certifying that that each material item complies with, or exceeds the specified requirements.

1.7 QUALITY ASSURANCE

A. Conform all work and materials to the recommendations or requirements of the District's Representative.

B. Conform all work to the appropriate portion(s) of Caltrans Standard Specifications, Section 17 and 19, and the appropriate sections of the California Building Code.

C. Percentage of compaction specified shall be the minimum acceptable. The percentage represents the ratio of the dry density of the compacted material to the maximum dry density of the material as determined by the procedure set forth in ASTM D 1557.

D. Excavate and backfill existing areas only to extent required by new construction and as indicated. Use methods required to complete the Work within limitations of governing regulations. Backfill as necessary to achieve rough grade elevations as indicated per plan.

E. Perform excavation, filling, compaction and related earthwork under the observation of the District's Representative. Materials placed without approval of the District's Representative will be presumed to be defective and, at the discretion of the District's Representative, shall be removed and replaced at no cost to the District. Notify the District's Representative at least 24-hours prior to commencement of earthwork and at least 48 hours prior to testing.

F. The District's Representative will perform observations and tests required to enable him to form an opinion of the acceptability of the Project earthwork. Correct earthwork that, in the opinion of the District's Representative, does not meet the requirements of these Technical Specifications.

G. Upon completion of the construction work, certify that all compacted fills and foundations are in place at the correct locations, and have been constructed in accordance with sound construction practice. In addition, certify that the materials used are of the types, quality and quantity required by these Technical Specifications. The Contractor shall be responsible for the stability of all fills and backfills constructed by his forces and shall replace portions that in the opinion of the District's Representative have been displaced or are otherwise unsatisfactory due to the Contractor's operations.

H. Do not mix or place cement treated base when the temperature is below is below 36 degrees F or when the ground is frozen.

I. Finish surface of material to be stabilized prior to lime treatment shall be as specified in Section 24-1.04 of Caltrans Standard Specifications and as required by these Technical Specifications.

J. Finish surface of the stabilized material after lime treatment shall be as specified in Section 24-1.08 of Caltrans Standard Specifications and as required by these Technical Specifications.

K. Identify and protect existing utilities.

L. Finish soil grade tolerance at completion of grading:

1. Paved areas: +0.05
2. Other areas: ±0.10 feet.

1.8 PROJECT CONDITIONS

A. Promptly notify the District and the District's Representative of surface or subsurface conditions differing from those disclosed in conformance with Division 1 General Requirements.

B. Protect open excavations, trenches, and the like with fences, covers and railings to maintain safe pedestrian and vehicular traffic passage.

C. Prevent erosion of freshly graded areas during construction and until such time as permanent drainage and erosion control measures have been installed.

D. Temporarily stockpile fill material in an orderly and safe manner and in a location approved by the District.

E. Provide dust and noise control in conformance with Division 1 General Requirements.

F. Environmental Requirements: When unfavorable weather conditions necessitate interrupting earthwork operation, areas shall be prepared by compaction of surface and grading to avoid collection of water. Provide adequate temporary drainage to prevent erosion. After interruption, compaction specified in last layer shall be re-established before resuming work.

PART 2 - PRODUCTS

2.1 SOIL MATERIALS

A. General: Provide borrow soil materials when sufficient satisfactory soil materials are not available from on-site excavations.

B. Obtain approval of on-site soil materials and borrow materials to be used for structural fill or structural backfill from the District's Representative.

C. On-Site Structural Fill and Structural Backfill: Soil or soil-rock mixture from on site excavations, free from organic matter or other deleterious substances. On-site structural fill and backfill shall not contain rocks or rock fragments over 3 inches in greatest dimension.

D. Imported Structural Fill and Structural Backfill Type A: Conform to the requirements of on-site structural fill. Material shall also be a non-expansive and predominantly granular soil or soil-rock mixture with plasticity index of 8 or less, has a liquid limit less than 25, and an R-Value of 25 or greater and shall not contain ground up asphaltic concrete or AC fragments.

E. Imported Structural Fill and Structural Backfill Type B: Conform to the requirements of on-site structural fill. Material shall also be a non-expansive and predominantly granular soil or soil-rock mixture with plasticity index of 12 or less, has a liquid limit less than 25, and an R-Value of 25 or greater.

2.2 SOIL STERILANT

A. Commercial chemical for weed control, registered by EPA. Provide granular, liquid or wettable powder form.

2.3 AGGREGATE BASE

A. Material: Caltrans Standard Specification Section 26.

1. Class 2, 1-1/2-inch Maximum: Section 26-1.02A.
2. Class 2, 3/4-inch Maximum: Section 26-1.02A.
3. Class 3: Section 26-1.02B.

2.4 LIME STABILIZATION

A. Lime Treatment Material: Conform to Section 24-1.02 and 24-1.03 of Caltrans Standard Specifications and the Project Geotechnical Report.

PART 3 - EXECUTION

3.1 GENERAL

A. Conform to Section 19, Earthwork, Caltrans Standard Specifications as modified by the Contract Documents.

B. Placement and compaction of material by flooding, ponding, or jetting will not be permitted.

C. The use of explosives will not be permitted.

3.2 CONTROL OF WATER AND DEWATERING

A. Prevent surface water and ground water from entering excavations, from ponding on prepared subgrades, and from flooding the site and surrounding area. Provide dewatering equipment necessary to drain and keep excavations and site free from water.

B. Dewater during backfilling operation so that groundwater is maintained a least two feet below level of compaction effort.

C. Obtain the District's Representative's approval for proposed control of water and dewatering methods.

D. Protect subgrades from softening, undermining, washout and damage by rain or water accumulation.

E. Reroute surface water runoff away from excavated areas. Do not allow water to accumulate in excavations.

F. Maintain dewatering system in place until dewatering is no longer required.

3.3 WET WEATHER CONDITIONS

A. Do not prepare subgrade, place or compact soil materials if above optimum moisture content.

B. If the District's Representative allows work to continue during wet weather conditions, conform to supplemental recommendations provided by the District's Representative.

3.4 EXCAVATION

A. Excavate earth and rock to lines and grades shown on drawings as prepared by a licensed professional engineer and to the neat dimensions indicated on the Plans, required herein or as required to satisfactorily compact backfill.

B. Remove and dispose of large rocks, pieces of concrete and other obstructions encountered during excavation.

C. Where forming is required, excavate only as much material as necessary to permit placing and removing forms.

D. Provide supports, shoring and sheet piles required to support the sides of excavations or for protection of adjacent existing improvements.

3.5 REMOVAL OF EXISTING FILLS AND UNSUITABLE MATERIAL

A. Over-excavate areas of existing fills and other unsuitable material encountered during mass grading as directed by the District's Representative.

B. Conform with Division 1 General Requirements.

3.6 GRADING

A. Uniformly grade the Project to meet existing conditions.

B. Finish ditches, gutters and swales to the sections, lines and grades indicated and to permit proper surface drainage.

C. Round tops and bottoms of slopes as indicated or to blend with existing contours.

3.7 SUBGRADE PREPARATION

A. Prepare subgrades under paved areas, curbs, gutters, walks, structures, other surface facilities and areas to receive structural fill. At least 6 inches of select material shall be placed beneath exterior flatwork and extend at least two feet beyond the slab edges.

B. Prepare subgrades for paved areas, curbs and gutters by plowing or scarifying surface at least 9 inches in one lift below final subgrade elevations and 1-foot beyond edge of pavement unless specified otherwise by the District's Representative. Uniformly moisture condition to obtain optimum moisture contents. Break clods and condition surface by

harrowing or dry rolling. Remove boulders, hard ribs and solid rock. Prepare earth uniform for full depth and width of subgrade.

1. Surface soil that has a moisture content of less than 22 percent (average, approximate plastic limit of the soil) should be excavated, moisture-conditioned to at least three percent above optimum moisture content, and compacted to between 88 and 93 percent relative compaction to reduce its expansion potential; maximum depth of required excavation for moisture conditioning is about two feet.

C. Protect utilities from damage during compaction of subgrades and until placement of final pavements or other surface facilities.

D. Obtain the District's Representative's approval of subgrades prior to placing pavement.

E. Subgrade preparation will not be required in areas where lime treatment is used.

3.8 PLACEMENT OF STRUCTURAL FILL

A. Obtain the District's Representative's approval of surface to receive structural fill prior to placement of structural fill material.

B. Place structural fill on prepared subgrade.

C. Spread structural fill material in uniform lifts not more than 8-inches in un-compacted thickness and compact.

D. Place structural fill material to suitable elevations above grade to provide for anticipated settlement and shrinkage.

E. Overbuild fill slopes, as required by the District's Representative, to obtain required compaction. Remove excess material to lines and grades indicated.

F. Do not drop fill on structures. Do not backfill around, against or upon concrete or masonry structures until structure has attained sufficient strength to withstand loads imposed and the horizontal structural system had been installed.

3.9 TEMPORARY AND PERMANENT SLOPES

A. Temporary slopes less than 10 feet high should be inclined no steeper than 1.5:1 (horizontal to vertical).

B. Shallow, permanent, cut and fill slopes shall be constructed no steeper than 2:1 (horizontal to vertical).

3.10 AGGREGATE BASE

A. Watering, Spreading and Compacting: Section 26-1.035, 26-1.04 and 26-1.05 of Caltrans Standard Specifications.

3.11 LIME STABILIZATION

A. Performing the stabilization shall conform to Section 24-1.05, through 24-1.09 of Caltrans Standard Specifications and the following:

1. Add lime in the amount specified by the District's Representative.
2. Lime treat subgrade soils from back of curb to back of curb to a depth specified by the District's Representative.
3. Mix in two mixing periods, both with the tines lowered to the same depth. Both mixing periods shall be monitored and verified by the District's Representative. The second mixing shall occur at about 24 hours after the initial mixing.
4. Compact and grade the lime mixed subgrade immediately after the second mixing.
5. Compact the lime treated subgrade to 93 percent as determined by ASTM D1557.
6. After application of the curing seal, do not allow traffic on the lime treated material for a period of 7 days in lieu of the 3 days specified in Section 24-1.03 of Caltrans Standard Specifications.
7. Proof-roll the stabilized subgrade after compacting to confirm that a non-yielding surface has been achieved. Yielding areas, if any, shall be mitigated. Mitigation could consist of over-excavation, utilization of stabilization fabric, or chemical treatment. Each case shall be addressed individually in the field by the District's Representative.

3.12 COMPACTION AND TESTING

A. Do not compact by ponding, flooding or jetting.

B. Compact soils at optimum water content. Aerate material if it is too wet. Add water to material if it is too dry. Thoroughly mix lifts before compaction to ensure uniform moisture distribution.

C. Perform compaction using rollers, pneumatic or vibratory compactors or other equipment and mechanical methods approved by the District's Representative.

D. Compaction requirements:

1. Compact structural fills less than 5-feet thick to 90 percent compaction.
2. Compact structural fill 5-feet thick or greater to 95 percent compaction.
3. Compact the upper 6 inches of subgrade soils beneath pavements, curbs and gutters to 95 percent compaction. Extend compaction 2-feet beyond pavement edges unless specified otherwise by the District's Representative.
4. Compact the upper 6-inches of subgrade soils under walks, structures and areas to receive structural fill to 90 percent compaction.

3.13 SOIL STERILIZATION

A. Apply soil sterilant to areas indicated, such as beneath asphalt concrete pavement, brick pavement, concreter pavement and at grade concrete slabs, including sidewalks, curbs and gutters. Also where indicated apply soil sterilant below expansion and control joints and at

areas where pipes, ducts or other features penetrate slabs.

B. Apply soil sterilant uniformly and at the rates recommended by the manufacturer.

C. Apply soil sterilant to prepared subgrade, or after installation of aggregate base as recommended by the manufacturer.

3.14 DISPOSAL

A. Lawfully dispose of all unsuitable and excess or surplus material off-site at no cost to the District.

END OF SECTION

SECTION 31 23 33

UTILITY TRENCHING AND BACKFILLING

PART 1 - GENERAL

1.0 SECTION INCLUDES

A. Excavation, bedding, and backfill of underground storm drain, sanitary sewer and water piping and associated structures.

B. The CONTRACTOR shall provide all materials, equipment, and labor necessary to perform and complete all utility earthwork as shown on the Drawings and as specified herein.

C. The work of this Section includes all utility earthwork required for construction of the project. Such earthwork shall include, but may not necessarily be limited to, the loosening, removing, loading, transporting, depositing, and compacting in its final location of all materials wet and dry, as required for the purposes of completing the work, which shall include, but not necessarily be limited to, the furnishing, placing, and removing of sheeting, shoring and bracing necessary to safely support the sides of all excavations; all pumping, ditching, draining and other required measures for the removal or exclusion of water from the excavation; the supporting of structures above and below the ground; all backfilling around structures and all backfilling of trenches and pits; the disposal of excess excavated materials; borrow of materials to make up deficiencies for fills; and all other incidental earthwork.

D. Hazardous materials shall be handled in accordance with all regulatory agency requirements. Asbestos cement pipe (ACP) exists within the project area and replacement of existing ACP is anticipated but shall be abandoned in place unless otherwise noted in the plans. The contractor shall make every attempt to protect all asbestos containing items during the execution of this contract. However, there will be instances where ACP or asbestos containing material will need to be removed, handled, cut, disturbed, or disposed of and the contractor shall comply with all local, state and federal regulations regarding construction activities near asbestos containing materials.

1.1 SECTION EXCLUDES

A. Drainage fill material and placement around subdrains.
B. Power, telecommunications, and low voltage scope of work.

1.2 RELATED DOCUMENTS

A. ASTM:
1. C 33, Specification for Concrete Aggregates.
2. C 150, Specification for Portland Cement.
3. C 260, Specification for Air-Entraining Admixtures for Concrete.

4. C 618, Specification for Fly Ash and Raw or Calcined Natural Pozzolan for Use as a Mineral Admixture in Portland Cement Concrete.
5. D 1557, Test Method for Laboratory Compaction Characteristics of Soil Using Modified Effort.
6. D 2321, Practice for Underground Installation of Flexible Thermoplastic Sewer Pipe.
7. D 2487, Classification of Soils for Engineering Purposes.
8. D 3740, Practice for Evaluation of Agencies Engaged in Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction.
9. E 329, Specification for Minimum Requirements for Agencies Engaged in the Testing and/or Inspection of Materials Used in Construction.
10. E 548, Guide for General Criteria Used for Evaluating Laboratory Competence.

C. 2022 California Building Code, California Code of Regulations, Title 24, Part 2 - Chapter 18, Foundations, and Retaining Walls, and Chapter 33, Site Work, Demolition and Construction.

D. Caltrans 2022 Standard Specifications:
1. Section 19, Earthwork.
2. Section 26, Aggregate Bases.

E. CAL/OSHA, Title 8.

F. San Francisco Procedures, Specifications and Drawings.

1.3 RELATED SECTIONS

A. Section 31 11 00, Clearing and Grubbing.

B. Section 33 31 00, Sanitary Sewer System.

C. Section 33 41 00, Storm Drain System.

D. Section 33 46 00 Subdrainage.

1.4 DEFINITIONS

A. AC: Asphalt Concrete.

B. ASTM: American Society for Testing and Materials.

C. Bedding: Material from bottom of trench to bottom of pipe.

D. CDF: Controlled Density Fill.

E. DIP: Ductile Iron Pipe.

F. Initial Backfill: Material from bottom of pipe to 12-inches above top of pipe.

G. PCC: Portland Cement Concrete.

H. RCP: Reinforced Concrete Pipe.

I. Springline of Pipe: Imaginary line on surface of pipe at a vertical distance of ½ the outside diameter measured from the top or bottom of the pipe.

J. Subsequent Backfill: Material from 12-inches above top of pipe to subgrade of surface material or subgrade of surface facility or to finish grade.

K. Trench Excavation: Removal of material encountered above subgrade elevations and within horizontal trench dimensions.
   1. Authorized Trench Over-Excavation: Excavation below trench subgrade elevations or beyond indicated horizontal trench dimensions as shown on plans or authorized by the Geotechnical Consultant.
   2. Unauthorized Trench Over-Excavation: Excavation below trench subgrade elevations or beyond indicated horizontal trench dimensions without authorization by the Geotechnical Consultant. Unauthorized excavation shall be without additional compensation.

L. Utility Structures:
   1. Storm Drain Manholes, vaults, etc.
   2. Sanitary sewer manholes, vaults, etc.
   3. Water vaults, etc.

1.5 SUBMITTALS

A. Submittal procedure shall be as outlined in Division 1 – General Requirements

B. Product Data:
   1. Grading and quality characteristics showing compliance with requirements for the Work.
   2. Certify that material meets requirements of the Project.
   3. Aggregate for Structural Soil Mix.

C. Samples:
   1. If required by the Geotechnical Consultant, provide 40-pound samples of all imported trench bedding and backfill material sealed in airtight containers, tagged with source locations and suppliers of each proposed material. Do not import materials to Project without written approval of the Geotechnical Consultant.
   2. Provide materials from same source throughout work. Change of source requires approval of the Geotechnical Consultant and the District's Representative's.

D. Material Test Reports: Provide, from a qualified testing agency, the following test results showing compliance with the project requirements:
   1. Classification according to ASTM D 2487 of each imported trench bedding and backfill material.
   2. Laboratory compaction curve in conformance with ASTM D 1557 for each imported trench bedding and backfill material
   3. Structural Soil Mix Testing: Provide a two-gallon representative sample to laboratories for an analysis of the structural soil mix indicating the following:

a. Particle size analysis, including the following gradients of mineral content (USDA Designated Size in mm):
   (i) 3" (76mm)
   (ii) 2 ½" – 3" (63-76mm)
   (iii) 2" – 2 ½" (50-63mm)
   (iv) 1 ½" – 2" (37-50mm)
   (v) 1" (25-37mm)
   (vi) ¾" (19-25mm)
   (vii) Fine gravel – 1/8" – ¾" (2-19mm)
   (viii) Sand – 0.05 -2mm
   (ix) Silt – 0.002-0.05mm
   (x) Clay – minus 0.002mm

(b) Provide manufacturer's analysis of the following:
   (i) Loose and rodded unit weight.
   (ii) Bulk specific gravity and absorbance.
   (iii) Gravel dimension and surface texture description.
   (iv) Aggregate soundness and L.A. abrasion.

(c) Sample Collection Procedure:
   (i) Collect a minimum of eight samples to make up the composite sample.
   (ii) Take samples from random locations in the stockpile varying from the top to the bottom and around the stockpile.
   (iii) Take at least half the samples from the lower third of the stockpile into a clean bucket
   (iv) Thoroughly mix material after samples are taken.
   (v) Remove 2 gallon of material from bucket and fill a zip-lock plastic bag.
   (vi) Double bag the composite sample and label the bag with a permanent marker indicating the material name and date sample was taken.

1.6 QUALITY ASSURANCE

A. Provide an independent testing agency qualified according to ASTM E 329 to conduct soil materials and rock definition testing, as documented according to ASTM D 3740 and ASTM E 548.

B. Conform all work and materials to the recommendations or requirements of the Geotechnical Report and meet the approval of the Geotechnical Consultant.

C. Conform all work to the appropriate portion(s) of the Caltrans Standard Specifications, Section 19.

D. Percentage of compaction specified shall be the minimum acceptable. The percentage represents the ratio of the dry density of the compacted material to the maximum dry density of the material as determined by the procedure set forth in ASTM D 1557.

E. The Geotechnical Consultant will perform observations and tests required to enable him to form an opinion of the acceptability of the trench backfill. Correct the trench backfill that, in the opinion of the Geotechnical Consultant, does not meet the requirements of these Technical Specifications and the Geotechnical Report.

1.7 PROJECT CONDITIONS

A. Promptly notify the District's Representative of surface or subsurface conditions differing from those disclosed in the Geotechnical Report. First notify the District's Representative verbally to permit verification and extent of condition and then in writing. No claim for conditions differing from those anticipated in the Contract Documents and disclosed in the Geotechnical Report will be allowed unless Contractor has notified the District's Representative in writing of differing conditions prior to contractor starting work on affected items.

B. Protect open, trenches, and utility structure excavations with fences, covers and railings to maintain safe pedestrian and vehicular traffic passage.

C. Stockpile on-site and imported backfill material temporarily in an orderly and safe manner.

D. Provide dust and noise control in conformance with Section 01 00 00, General Requirements.

E. Areas to receive structural soil mix shall be inspected by the Owner's Representative before starting work.

PART 2 - PRODUCTS

2.1 PIPE BEDDING AND INITIAL BACKFILL

. ASTM D 2321, Class IA, IB or II.
1. Clean and free of clay, silt or organic matter.

A. Class 2 Aggregate Base: Conform to Section 26 of Caltrans Standard Specifications, ¾-inch maximum.

B. Sand: Conform to Section 19-3.025B of Caltrans Standard Specifications.

2.2 WARNING TAPE

. See Section 33 11 66, Water Distribution System.

2.3 SUBSEQUENT BACKFILL

. Conform to on-site or imported structural backfill in Section 31 23 00, Excavation and Fill.

2.4 CONTROLLED DENSITY FILL (CDF) (IN TRENCHES)

. Provide non-structural CDF, from bottom of trench to finish subgrade of subbase or base material, that can be excavated by hand and produce unconfined compressive 28-day strengths from 50-psi to a maximum of 150-psi. Provide aggregate no larger than 3/8-inch top size. The 3/8-inch aggregate shall not comprise more than 30% of the total aggregate content.

A. Cement: Conform to the standards as set forth in ASTM C-150, Type II Cement.

B. Fly Ash: Conform to the standards as set forth in ASTM C-618, for Class F pozzolan. Do not inhibit the entrainment of air with the fly ash.

C. Air Entraining Agent: Conform to the standards as set forth in ASTM C-260.

D. Aggregates need not meet the standards as set forth in ASTM C-33. Any aggregate, producing performances characteristics described herein will be accepted for consideration. The amount of material passing a #200 sieve shall not exceed 12% and no plastic fines shall be present.

E. Provide CDF that is a mixture of cement, Class F pozzolan, aggregate, air entraining agent and water. CDF shall be batched by a ready mixed concrete plant and delivered to the job site by means of transit mixing trucks.

F. The Contractor shall determine the actual mix proportions of the controlled density fill to meet job site conditions, minimum and maximum strengths, and unit weight. Entrained air content shall be a minimum of 4.0%. The actual entrained air content shall be established for each job with the materials and aggregates to be used to meet the placing and unit weight requirements. Entrained air content may be as high as 20% for fluidity requirements.

G. Mix design shall meet the Geotechnical Consultant's approval.

2.5 CONCRETE STRUCTURE BEDDING AND BACKFILL

. Precast Structures: Same materials to the same heights as specified for pipe bedding and backfill, or other material approved by the Geotechnical Consultant.

A. Poured-in-Place Structures:
   1. Bedding: Bedding shall meet the approval of the Geotechnical Consultant. In general, bedding is not required, pour bases against undisturbed native earth in cut areas and against engineered fill compacted to 90% relative compaction in embankment areas.
   2. Side Backfill: On-site or imported structural fill meeting the requirements given in Section 31 23 00.
   3. Structural Soil Mix: TMT Enterprices, 1996 Oakland Road, San Jose, CA 915131; (408)432-9010

2.6 AGGREGATE FOR STRUCTURAL SOIL MIX:

1. Aggregate shall be triangular.
2. Aggregate shall not be limestone or sandstone.
3. Aggregate shall pass a 3-inch screen and be retained on a 2-inch screen.
4. Aggregate dimensions shall not exceed 1.5:1.0 for any two dimensions chosen.

2.7 SOIL FOR STRUCTURAL SOIL MIX:

1. Soil shall be a “clay loam” or “clay” based on “USDA classification system” as determined by mechanical analysis and shall be of uniform composition, without admixture of subsoil.
2. Soil shall be free of stones greater than one-half inch, plants, roots, debris and other extraneous matter larger than one inch in diameter or an excess of smaller pieces of same type materials as determined by Owner’s Representative.
3. Soil shall not contain toxic substances harmful to plant growth.
4. Soil shall be obtained from naturally well drained areas which have never been stripped of topsoil before and have a history of satisfactory vegetative growth.
5. Soil shall contain not less than 3%or more than 7% organic matter as determined by organic carbon and total nitrogen on oven-dried samples.
6. Soil shall be the product of a commercial processing facility specializing in production of Structural Soil Mixes for a minimum of 5 years.
7. Mechanical analysis:
   A. Textural Class: Based on material passing a 2 mm screen.
   B. Gravel: Less than 5%.
   C. Sand: 20 – 50%.
   D. Silt: 20 – 30%.
   E. Clay: 25- 60%.
8. Chemical analysis:
   A. pH: Between 6.5 to 7.9.
   B. Percent organic matter: 3 – 7% by dry weight.
   C. Nutrient level:

      1. Fertility: The range of the essential elemental concentration in soil shall be as follows.

         Ammonium Bicarbonate/DTPA Extraction parts per million (mg/kolgram) dry weight basis.

Phosphorous	10-40
Potassium	100-200
Iron	5-35
Manganese	0.6-6
Zinc 1-8	
Copper	0.3-5
Boron	0.2-1
Magnesium	50-150
Sodium	0-100
Sulfur	25-500
Molybdenum	0.1-2

      2. Toxic elements and compounds and excessive nutrients below UC guidelines and soil testing laboratory guidelines. The maximum permissible elemental concentration in the soil.

Ammonium Bicarbonate/DTPA Extraction parts per million (mg/kolgram) dry weight basis.

Arsenic	1
Cadmium	1
Chromium	10
Cobalt	2
Lead	30
Mercury	1
Nickel	5
Selenium	3
Silver	0.5
Vanadium	3

D. Soluble salt: Less than 3.0 Millimho per cm in saturation extract.
E. Boron: Less than 1 part per million in saturation extract.
F. Sodium Absorption Ratio: Less than 4.
G. Carbon/Nitrogen Ratio: Less than 15:1.

2.8 STRUCTURAL SOIL MIX

1. Content:
   A. 4 parts structural soil aggregate.
   B. 1 part soil, treated with polymer.
2. Mixing:
   A. Mix polymer (PAM) with soil 48 hours ahead of blending with aggregate to allow for proper bonding.
   B. Cure polymer treated soil by allowing the soil to partially dry.
   C. Based upon accepted mix design, blend materials off-site in a clean area using an experienced blending operator.
   D. Uniformly blend materials so that they are even distributed throughout mixtures.
   E. Maintain adequate soil moisture content during mixing process.
   F. Soils and mix components shall easily shred and break down without clumping.
   G. Soil clods shall easily break down into a medium crumbly texture material.
   H. Do not blend materials that are saturated or contain excessive water.
   I. Measure and monitor amount of soils moisture at mixing site periodically during mixing process.
   J. Protect materials and mixtures from contamination prior to, during, and after mixing operations.
   K. Store mixes in stockpiles prior to shipment to site in clean areas protected from contamination from other materials.
   L. Reblend the mix if the components have separated.

2.9 FILTER FABRIC

. Filter Fabric:
1. Filter Fabric: Section 88-1.03 of Caltrans Standard Specifications.
2. Mirifi 140N (Mirifi Inc., Charlotte, NC) (Tel. 800-438-1855) or equal.

PART 3 - EXECUTION

3.1 TRENCHING AND EXCAVATION

. Existing PCC or AC Areas: Cut PCC or AC to full depth at a minimum distance of 12-inches beyond the edge of the trench.

A. Excavate by hand or machine. For gravity systems begin excavation at the outlet end and proceed upstream. Excavate sides of the trench parallel and equal distant from the centerline of the pipe. Hand trim excavation. Remove loose matter.

B. Excavation Depth for Bedding: Minimum of 4-inches below bottom of pipe or as otherwise allowed or required by the Geotechnical Consultant, except that bedding is not required for nominal pipe diameters of 2-inches or less.

C. Excavation Width at Springline of Pipe:
   1. Up to a nominal pipe diameter of 24-inches: Minimum of twice the outside pipe diameter, or as otherwise allowed or required by the Geotechnical Consultant.
   2. Nominal pipe diameter of 30-inches through 36-inches: Minimum of the outside pipe diameter plus 2-feet, or as otherwise allowed or required by the Geotechnical Consultant.
   3. Nominal pipe diameter of 42-inches through 60-inches: Minimum of the outside pipe diameter plus 3-feet, or as otherwise allowed or required by the Geotechnical Consultant.

D. Over-Excavations: Backfill trenches that have been excavated below bedding design subgrade, with approved bedding material.

E. Comply with the District's Representative's limitations on the amount of trench that is opened or partially opened at any one time. Do not leave trenches open overnight without the approval of the District's Representative.

F. Where forming is required, excavate only as much material as necessary to permit placing and removal of forms.

G. Bottoms of trenches will be subject to testing by Geotechnical Consultant. Correct deficiencies as directed by the Geotechnical Consultant.

H. Grade bottom of trench to provide uniform thickness of bedding material and to provide uniform bearing and support for pipe along entire length. Remove stones to avoid point bearing.

3.2 CONTROL OF WATER AND DEWATERING

. Be solely responsible for dewatering trenches and excavations and subsequent control of ground and surface water. Provide and maintain such pumps or other equipment as may be necessary to control ground water and seepage to the satisfaction of the Geotechnical Consultant and the District's Representative until backfilling is completed.

A. Dewater during backfilling operation so that groundwater is maintained a least one foot

below level of compaction effort.

B. Obtain the Geotechnical Consultant's approval for proposed control of water and dewatering methods.

C. Reroute surface water runoff away from open trenches and excavations. Do not allow water to accumulate in trenches and excavations.

D. Maintain dewatering system in place until dewatering is no longer required.

3.3 BRACING AND SHORING

. Conform to California and Federal OSHA requirements.

A. Place and maintain such bracing and shoring as may be required to support the sides of the excavations for the proper protection of workmen; to facilitate the work; to prevent damage to the pipes and appurtenances being constructed; and to prevent damage to adjacent structures or facilities. Remove all bracing and shoring upon completion of the work.

B. Be solely responsible for all bracing and shoring and, if requested by the District's Representative, submit details and calculations to the District's Representative. The District's Representative may forward the submittal to the Geotechnical Consultant, the Consulting Engineer and/or the California Division of Industrial Safety for their review. The Contractor's submittal shall include the basic design, assumed soils conditions and estimation of forces to be resisted, together with plans and specifications of the materials and methods to be used, and shall be prepared by a civil engineer or structural engineer registered in California. No excavations in trench section or around structures shall precede a response to the submittal by the District's Representative.

C. Be solely responsible for installing and extracting the sheathing in a manner which will not disturb the line, grade, or backfill compaction or operation of the utility being installed or adjacent utilities and facilities.

3.4 PIPE BEDDING

. Obtain approval of bedding material from the Geotechnical Consultant.

A. Accurately shape bedding material to the line and grade called for on the Plans. Carefully place and compact bedding material to the elevation of the bottom of the pipe in layers not exceeding 8-inches in loose thickness. Compact bedding material at optimum water content to 90% relative compaction for sand and 95% relative compaction for fine gravel unless specified otherwise on the Plans or by the Geotechnical Consultant. Compact by pneumatic tampers or other mechanical means approved by the Geotechnical Consultant. Jetting or ponding of bedding material will not be permitted.

B. Upon completion of bedding operations, and prior to the installation of pipe, notify the Geotechnical Consultant, who will inspect the bedding layer. Do not commence pipe laying until the Geotechnical Consultant has approved the bedding.

3.5 WARNING TAPE

. Install in accordance with Section 33 11 66.

3.6 BACKFILLING

. Obtain approval of backfill material from Geotechnical Consultant.

A. Bring initial backfill up simultaneously on both sides of the pipe, so as to prevent any displacement of the pipe from its true alignment. Carefully place and compact initial backfill material to an elevation of 12-inches above the top of the pipe in layers not exceeding 8-inches in loose thickness. Compact initial backfill material at optimum water content to 90% relative compaction for sand and 95% relative compaction for fine gravel unless specified otherwise on the Plans or by the Geotechnical Consultant. Compact by pneumatic tampers or other mechanical means approved by the Geotechnical Consultant. Jetting or ponding of initial backfill material will not be permitted.

B. Bring subsequent backfill to subgrade or finish grade as indicated. Carefully place and compact subsequent backfill material to the proper elevation in layers not exceeding 8-inches in loose thickness. Compact subsequent backfill material at optimum water content to 90% relative compaction, except in areas subject to vehicular traffic shall be compacted to at least 95% relative compaction, unless specified otherwise on the Plans or by the Geotechnical Consultant. Compact by pneumatic tampers or other mechanical means approved by the Geotechnical Consultant. Jetting or ponding of subsequent backfill material will not be permitted.

C. Do not use compaction equipment or methods that produce horizontal or vertical earth pressures which may cause excessive pipe displacement or damage the pipe.

D. Utility backfill shall be inspected and tested by the Geotechnical Consultant during placement. Cooperate with the Geotechnical Consultant and provide working space for such tests in operations. Backfill not compacted in accordance with these specifications shall be re-compacted or removed as necessary and replaced to meet the specified requirements, to the satisfaction of the Geotechnical Consultant and the District's Representative prior to proceeding with the Project.

3.7 STRUCTURAL SOIL MIX INSTALLATION

. Place mix carefully to avoid damage or displacement of other materials such as paving, drain rock, geotextile fabric and irrigation piping.
A. Do not mix subgrade soils on construction materials with mix.
B. Remove soil mix contaminated with subgrade soil, construction materials or debris.
C. Maintain mix in a moist, but not saturated, condition to prevent segregation of mix during placement.
D. Install mix in 6 inch lifts in locations indicated on the Drawings.
E. Compact lifts to 95 percent compaction in compliance with Geotechnical Investigation Report. Schedule the Geotechnical Engineer to perform nuclear density field tests after each lift of mix to confirm compaction.
F. Install final lift of mix to elevations indicated on the Drawings.

3.8 CLEANUP

. Upon completion of utility earthwork all lines, manholes catch basins, inlets, water meter boxes and other structures shall be thoroughly cleaned of dirt, rubbish, debris and obstructions of any kind to the satisfaction of the District's Representative.

END OF SECTION

SECTION 31 25 00

EROSION AND SEDIMENTATION CONTROL

PART 1 - GENERAL

1.1 SUMMARY

A. This Section describes the requirements for providing and installing temporary erosion and sedimentation control structures as specified.

1.2 SUBMITTALS

A. Follow Submittal procedure outlined in Section 1 General Provisions.

1.3 REGULATORY REQUIREMENTS:

A. California Stormwater Quality Association (CASQA) “Stormwater Best Management Practice Handbook for Construction”.

B. State Water Resources Control Board (SWRCB) standards.

C. California Stormwater Quality Association “Stormwater Best Management Practice Handbook” for Construction and Industrial and Commercial Development, latest edition.

PART 2 - PRODUCTS

2.1 Furnish and install products to eliminate potential erosion and sedimentation during construction works. Products which shall be installed, but are not limited to, the following:

A. Siltation fences

B. Outlet structure, basins, ditches

C. Hydroseeding

D. Wattle and/or Gravel bags

PART 3 - EXECUTION

3.1 GENERAL

A. The Contractor shall review the BMP’s selected for the Project.

B. Erosion and sedimentation control measures are to be installed in areas only to extent required by new construction and as indicated or as directed by governing regulations.

C. The Contractor shall provide inspection and repair BMP’s throughout the construction process.

END OF SECTION

DIVISION 32
EXTERIOR IMPROVEMENTS

SECTION 32 05 23

PORTLAND CEMENT CONCRETE

PART 1 - GENERAL

1.0 SECTION INCLUDES

A. Materials for Portland cement concrete.

B. Aggregate and aggregate grading for Portland cement concrete.

C. Water for Portland cement concrete.

D. Admixtures for Portland cement concrete.

E. Proportioning for Portland cement concrete.

F. Mixing and transporting Portland cement concrete.

G. Formwork for cast in place Portland cement concrete.

H. Embedded materials for Portland cement concrete.

I. Steel reinforcement for Portland cement concrete.

J. Placing and finishing Portland cement concrete.

K. Curing Portland cement concrete.

L. Protecting Portland cement concrete.

1.1 RELATED SECTIONS

A. Section 31 11 00, Clearing and Grubbing

1.2 RELATED DOCUMENTS

A. ASTM:
1. A 82, Cold Drawn Steel Wire for Concrete Reinforcement.
2. A 185, Steel Welded Wire Fabric, Plain for Concrete Reinforcement.
3. A 615, Deformed and Plain Billet Steel Bars, for Concrete Reinforcement.
4. C 94, Specification for Ready-mixed Concrete.
5. C 114, Method for Chemical Analysis of Hydraulic Cement.
6. C 150. Portland Cement.
7. C 618, Fly Ash and Raw or Calcined Natural Pozzolan for use as Natural Admixture in Portland Cement.
8. C 1751, Preformed Expansion Joint Fillers for Concrete. Paving and Structural Construction (Non-extruded and Resilient Bituminous Types).

B. Caltrans 2022 Standard Specifications:
   1. Section 51: Concrete Structures.
   2. Section 73: Concrete Curbs and Sidewalks.
   3. Section 90: Concrete.

1.3 DEFINITIONS

A. ASTM: American Society for Testing Materials

1.4 SUBMITTALS

A. Submittal procedure shall be as directed by the District's General Requirements.

B. Concrete Mix Design: Have all concrete mixes designed by a testing laboratory and approved by the Consulting Engineer. Conform all mixes to the applicable building code requirement, regardless of other minimum requirements listed herein or on the drawings. Submit mix designs for review before use. Show proportions and specific gravities of cement, fine and coarse aggregate, and water and gradation of combined aggregates.

1.5 QUALITY ASSURANCE

A. Concrete shall be subject to quality assurance in accordance with Section 90 of Caltrans Standard Specifications.
   1. Slump tests: Have available, at job site, equipment required to perform slump tests. Make one slump test for each cylinder sample, from same concrete batch. Allowable maximum slump shall be 4 inches for walls and 3 inches for slab on grade.

B. Certifications:
   1. Provide District's Representative at the time of delivery with certificates of compliance signed by both Contractor and Supplier containing the following statements:
      a. Materials contained comply with the requirements of the Contract Documents in all respects.
      b. Proportions and mixing comply with the design mix approved by the Consulting Engineer. Design mix shall have been field tested in accordance with the herein requirements of the Caltrans Standard Specifications and produces the required compressive strength under like conditions.
      c. Statement of type and amount of any admixtures.
   2. Provide District's Representative, at time of delivery, with certified delivery ticket stating volume of concrete delivered and time of mixing, or time of load-out in case of transit mixers.

C. Conform to the applicable provisions of Section 51, 73 and 90 of the Caltrans Standard Specification and these Technical Specifications.
   1. Conform construction of Portland cement concrete surface improvements (including curbs, gutters, medians, valley gutters, walks, pads) to the requirements of Section 73 of the Caltrans Standard Specifications unless otherwise required in these Technical Specifications or shown on the Plans.
   2. Conform other construction of Portland cement concrete items to the requirements of Section 51 of the Caltrans Standard Specifications unless otherwise required in these Technical Specifications or shown on the Plans.

1.6 DESIGNATION

A. General: Whenever the 28-day compressive strength is designated herein or on the Plans is a 3,600psi or greater, the concrete shall considered to be designated by compressive strength. The 28-day compressive strength shown herein or on the plans which are less than a 3,600psi are shown for design information only and are not considered a requirement for acceptance of the concrete. Whenever the concrete is designated by class or as minor concrete herein or on the Plans, the concrete shall contain the cement per cubic yard shown in Section 90-1.01 of the Caltrans Standard Specifications.

B. Unless noted otherwise herein or on the Plans, the minimum compressive strength for portland cement concrete at 28 days for this Project shall be 3,600 psi.

PART 2 - PRODUCTS

2.1 PORTLAND CEMENT

A. General: Type II (modified) cement conforming to section 90-2.01 of the Caltrans Standard Specifications.

B. Provide a coloring equivalent to ¼ pound of lampblack per cubic yard. Add to the concrete at the central mixing plant. Liquiblack concrete colorant, or approved equal, may be used in lieu of lampblack. One pint of Liquiblack shall be considered equal to one pound of lampblack.

2.2 AGGREGATE AND AGGREGATE GRADING

A. General: Conform to the requirements of Section 90-2.02, 2.02A and 2.02B of the Caltrans Standard Specifications.

B. Aggregate Size and Gradation: Conform to the requirements of Section 90-3 of the Caltrans Standard Specifications for 1-inch maximum combined aggregate.

2.3 WATER

A. General: Conform to the requirements of section 90-2.03 of the Caltrans Standard Specifications. For mixing and curing Portland cement concrete and for washing aggregates.

2.4 EXPANSION JOINT MATERIAL

A. Material for expansion joints in Portland cement concrete improvements shall be pre-molded expansion joint fillers conforming to the requirements of ASTM Designation D 1751. Expansion joint material shall be shaped to fit the cross section of the concrete prior to being placed. Suppliers certificates showing conformance with this specification shall be delivered with each shipment of materials delivered to the job site. Unless noted otherwise herein or on the Plans expansion joint thickness shall be as follows:

1. Curbs, Curb Ramps, Sidewalks, Driveways and Gutter Depressions: ¼-inch.
2. Gutter Lining, Ditch Lining and Channel Lining: ½-inch.
3. Structures: As indicated.

2.5 REINFORCEMENT AND DOWELS

A. Bar reinforcement for concrete improvements shall be deformed steel bars of the size or sizes called for on the plans conforming to the requirements of ASTM Designation A 615 for Grade 60 bars. Size and shape for bar reinforcement shall conform to the details shown or called for on the Plans. Substitution of wire mesh reinforcement for reinforcing bars will not be allowed.

B. Slip dowels, where noted or called for on the plans or detail drawings shall be smooth billet-steel bars as designated and conforming to the requirements of ASTM Designation A 615 for Grade 60 bars. Ends of bars inserted in new work shall be covered with a cardboard tube sealed with cork; no grease or oil shall be used.

C. Mesh for reinforcement for concrete improvements shall be cold drawn steel wire mesh of the size and spacing called for on the plans conforming to the requirements of ASTM Designation A 82 for the material and ASTM Designation A 185 for the mesh. Size and extent of mesh reinforcement shall conform to the details shown or called for on the plans.

D. Tie wire for reinforcement shall be eighteen (18) gauge or heavier, black, annealed conforming to the requirements of ASTM Designation A 82.

E. Suppliers certificates showing conformance with this specification shall be delivered with each shipment of materials delivered to the job site.

2.6 COLOR AND PATTERN FOR DECORATIVE SURFACES

A. Colors for decorative surfacing shall be CHROMIX admixtures as manufactured by the L. M. Scofield Company, Schedule A-312.05 or approved equal. The specific color shall be Winter Beige #6063.

B. Patterns for decorative surfacing shall be standard "Bomanite" patterns as copyrighted by the Bomanite Corporation of Palo Alto, California or approved equal. The specific pattern shall be as designated or called for on the Plans.

2.7 ACCESSORY MATERIALS

A. Conform water stops and other items required to be embedded in of portland cement concrete structures to the applicable requirements of Section 51 of the Caltrans Standard Specifications unless otherwise specifically noted or called for on the Plans or detail drawings.

B. Curing Compounds:
1. Regular Portland Cement Concrete: "Non-Pigmented Curing Compound - Chlorinated Rubber Base-Clear" conforming to the requirements contained in Section 90-7.01B, of the Caltrans Standard Specifications.
2. Color Conditioned Decorative Portland Cement Concrete: LITHOCHROME colorwax

as manufactured by the L. M. Scofield Company or approved equal.

2.8 FORMS

A. Conform to the requirements of Section 51-1.05 of the Caltrans Standard Specifications.

2.9 PRECAST CONCRETE STRUCTURES

A. Conform to the following Sections of Caltrans Standard Specifications:
   1. 51-1.02, Minor Structures.
   2. 70-1.02C, Flared End Sections.
   3. 70-1.02H, Precast Concrete Structures.

PART 3 - EXECUTION

3.1 STRUCTURAL EXCAVATION

A. Structural excavation may be either by hand, or by machine and shall be neat to the line and dimension shown or called for on the plans. Excavation shall be sufficient width to provide adequate space for working therein, and comply with CAL-OSHA requirements.

B. Where an excavation has been constructed below the design grade, refill the excavation to the bottom of the excavation grade with approved material and compact in place to 95% of the maximum dry density.

C. Remove surplus excavation material remaining upon completion of the work from the job site, or condition it to optimum moisture content and compact it as fill or backfill on the site, if the material is approved by the Geotechnical Consultant.

3.2 SOIL STERILANT

A. Furnish and apply to areas indicated in accordance with Section 31 23 00, Excavation and Fill.

3.3 BRACING AND SHORING

A. Conform to California and Federal OSHA requirements.

B. Place and maintain such bracing and shoring as may be required to support the sides of the excavations for the proper protection of workmen; to facilitate the work; to prevent damage to the facility being constructed; and to prevent damage to adjacent structures or facilities. Remove all bracing and shoring upon completion of the work.

C. Be solely responsible for all bracing and shoring and, if requested by the District's Representative, submit details and calculations to the District's Representative. The District's Representative may forward the submittal to the Geotechnical Consultant, the

Consulting Engineer and/or the California Division of Industrial Safety for their review. The Contractor's submittal shall include the basic design, assumed soils conditions and estimation of forces to be resisted, together with plans and specifications of the materials and methods to be used, and shall be prepared by a civil engineer or structural engineer registered in California. No excavations related to the proposed facility shall precede a response to the submittal by the District's Representative.

D. Be solely responsible for installing and extracting the sheathing in a manner which will not disturb the position or operation of the facility being constructed or adjacent utilities and facilities.

3.4 PLACING CONCRETE FORMS

A. Form concrete improvements with a smooth and true upper edge. Side of the form with a smooth finish shall be placed next to concrete. Construct forms rigid enough to withstand the pressure of the fresh concrete to be placed without any distortion.

B. Thoroughly clean all forms prior to placement and coat forms with approved form oil in sufficient quantity to prevent adherence of concrete prior to placing concrete.

C. Carefully set forms to the alignment and grade established and conform to the required dimensions. Rigidly hold forms in place by stakes set at satisfactory intervals. Provide sufficient clamps, spreaders and braces to insure the rigidity of the forms.

D. Provide forms for back and face of curbs, lip of gutters and edge of walks, valley gutters or other surface slabs that are equal to the full depth of the concrete as shown, noted or called for on the Plans. On curves and curb returns provide composite forms made from benders or thin planks of sufficient ply to ensure rigidity of the form.

3.5 PLACING STEEL REINFORCEMENT

A. Bars shall be free of mortar, oil, dirt, excessive mill scale and scabby rust and other coatings of any character that would destroy or reduce the bond. All bending shall be done cold, to the shapes shown on the plans. The length of lapped splices shall be as follows:
   1. Reinforcing bars No. 8, or smaller, shall be lapped at least 45 bar diameters of the smaller bar joined, and reinforced bars Nos. 9, 10, and 11 shall be lapped at least 60 bar diameters of the smaller bars joined, except when otherwise shown on the plans.
   2. Splice locations shall be made as indicated on the plans.

B. Accurately place reinforcement as shown on the plans and hold firmly and securely in position by wiring at intersections and splices, and by providing precast mortar blocks or ferrous metal chairs, spacers, metal hangers, supporting wires, and other approved devices of sufficient strength to resist crushing under applied loads. Provide supports and ties of such strength and density to permit walking on reinforcing without undue displacement.

C. Place reinforcing to provide the following minimum concrete cover:
   1. Surfaces exposed to water: 4-inches.
   2. Surfaces poured against earth: 3-inches.
   3. Formed surfaces exposed to earth or weather: 2-inches.
   4. Slabs, walls, not exposed to weather or earth: 1-inch.

D. Minimum spacing, center of parallel bars shall be two and one half (2-1/2) times the

diameter of the larger sized bar. Accurately tie reinforcing securely in place prior to pouring concrete. Placing of dowels or other reinforcing in the wet concrete is not permitted.

3.6 MIXING AND TRANSPORTING PORTLAND CEMENT CONCRETE

A. Transit mix concrete in accordance with the requirements of ASTM Designation C 94. Transit mix for not less than ten (10) minutes total, not less than three (3) minutes of which shall be on the site just prior to pouring. Mix continuous with no interruptions from the time the truck is filled until the time it is emptied. Place concrete within one hour of the time water is first added unless authorized otherwise by the District's Representative.

B. Do not hand mix concrete for use in concrete structures

3.7 PLACING PORTLAND CEMENT CONCRETE

A. Thoroughly wet subgrade when concrete is placed directly on soil. Remove all standing water prior to placing concrete.

B. Do not place concrete until the subgrade and the forms have been approved.

C. Convey concrete from mixer to final location as rapidly as possible by methods that prevent separation of the ingredients. Deposit concrete as nearly as possible in final position to avoid re-handling.

D. Place and solidify concrete in forms without segregation by means of mechanical vibration or by other means as approved by the District's Representative. Continue vibration until the material is sufficiently consolidated and absent of all voids without causing segregation of material. The use of vibrators for extensive shifting of fresh concrete will not be permitted.

E. Concrete in certain locations may be pumped into place upon prior approval by the District's Representative. When this procedure requires redesign of the mix, such redesign shall be submitted for approval in the same manner as herein specified for approval of design mixes.

3.8 PLACING ACCESSORY MATERIALS

A. Place water stops and other items required to be embedded in of Portland cement concrete structures at locations shown or required in accordance with Section 51 of the Caltrans Standard Specifications unless otherwise specifically noted or called for on the Plans.

B. Curing Compounds:
   1. Regular Portland Cement Concrete: Apply "Non-Pigmented Curing Compound - chlorinated Rubber Base-Clear" in accordance with Section 90-7.01B, 7.01D and 7.03 of the Caltrans Standard Specifications.
   2. Color Conditioned Decorative Portland Cement Concrete: Apply LITHOCHROME colorwax, or approved equal, in accordance with the manufacturer's instructions.

3.9 EXPANSION JOINTS

A. Construct expansion joints incorporating pre-molded joint fillers at twenty (20) foot intervals in all concrete curbs, gutters, sidewalks, median/island paving, valley gutters, driveway approaches and at the ends of all returns. At each expansion joint install one-half inch by twelve inch (1/2" x 12") smooth slip dowels in the positions shown or noted on the detail drawings.

B. Orient slip dowels at right angles to the expansion joint and hold firmly in place during the construction process by means of appropriate chairs.

3.10 WEAKENED PLANE JOINTS

A. Construct weakened plane joints in concrete curbs, gutters, sidewalks, median/island paving and valley gutters between expansion joints at ten (10) foot intervals throughout, or as otherwise indicated. Depth of joint score depth to be one-fourth (25%) the thickness of the concrete.

1. Grooved Joints: Form weakened plane joints after initial floating by grooving and finishing each edge of joint to a radius of 1/8-inch. Repeat grooving of weakened plane joints after applying surface finishes. Eliminate groover tool marks on concrete surfaces.
2. Sawed Joints: Form weakened plane joints with power saws equipped with shatterproof abrasive or diamond-rimed blades. Cut 1/8-inch wide joints into concrete when cutting action will not tear, abrade or otherwise damage surface and before concrete develops random contraction cracks.

3.11 FORM REMOVAL

A. Remove forms without damage to the concrete. Remove all shores and braces below the ground surface, before backfilling.

B. Do not backfill against concrete until the concrete has developed sufficient strength to prevent damage.

C. Leave forms for cast-in-place walls in place at least 72 hours after pouring.

D. Leave edge forms in place at least 24 hours after pouring.

3.12 CONSTRUCTION

A. Form, place and finish concrete curbs, walkways, island paving, valley gutters and driveway approaches in conformance with the applicable requirements of Section 73-1.04, 73-1.05, 72-1.05A and 73-1.06 of the Caltrans Standard Specifications as modified herein.

B. Provide a medium broom finish to all horizontal surfaces unless otherwise shown.

C. Construct new concrete curb, curb and gutter and valley gutters against existing asphalt concrete by removing a minimum of 12-inches of the asphalt concrete to allow placement of curb or gutter forms. Patch pavement with a 6-inch deep lift of asphalt concrete after gutter form is removed.

D. Where monolithic curb, gutter and sidewalk is specified, separate concrete pours will not be allowed.

3.13 CONNECTING TO EXISTING CONCRETE IMPROVEMENTS

A. New curb, gutter, or sidewalk is to connect to existing improvements to remain by saw cutting to existing sound concrete at the nearest score line, expansion joint or control joint. Drill and insert ½-inch diameter by 12-inch long dowels at 24-inches on center into existing improvements. Install pre-molded expansion joint filler at the matching joint.

B. A cold joint to the existing curb is not acceptable.

3.14 DECORATIVE AND NON-DECORATIVE SURFACING CONSTRUCTION

A. Decorative surfacing concrete walks or other installations shall be formed and placed as a concrete slab conforming to the details shown or noted on the Plans. Exposed aggregate concrete sidewalks shall be repaired in kind or better condition.

B. Add lampblack or equivalent to the non-decorative surface concrete at the mixing plant.

3.15 ACCESSIBLE PATH OF TRAVEL CONSTRUCTION FINISH

A. Provide equivalent of medium salted finish at slopes less than 6% and slip-resistant finish at slopes 6% and greater along any accessible path of travel.

3.16 FIELD QUALITY CONTROL

A. Finish subgrade for concrete improvements shall be subject to approval prior to placement of forms.

B. No concrete shall be placed prior to approval of forms.

C. Concrete improvements constructed shall not contain areas that pond water and shall be smooth and ridge free.

D. Conform the finish grade at top of curb, flow line of gutter, and the finish cross section of concrete improvements to the design grades and cross sections.

E. Variation of concrete improvements from design grade and cross section as shown or called for on the plans shall not exceed the tolerances established in Sections 73-1.05 and/or 73-1.06 of the Caltrans Standard Specifications.

3.17 RESTORATION OF EXISTING IMPROVEMENTS

A. Replace in kind all pavement or other improvements removed or damaged due to the installation of concrete improvements.

B. Remove, landscaping or plantings damaged or disturbed due to the installation of concrete improvements. Replace in kind.

END OF SECTION

SECTION 32 11 32

AGGREGATE BASE COURSE

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Aggregate base.

B. Lime stabilization.

1.2 RELATED SECTIONS

A. Section 32 12 16, Asphalt Paving

B. Section 32 05 23, Portland Cement Concrete

1.3 RELATED DOCUMENTS

A. Caltrans 2022 Standard Specifications:
   1. Section 24, Lime Stabilization.
   2. Section 26, Aggregate Bases.

B. ASTM:
   1. D 1557, Test Method for Laboratory Compaction Characteristics of Soil Using Modified Effort.

1.4 DEFINITIONS

A. ASTM: American Society for Testing Materials.

1.5 SUBMITTALS

A. Submittal procedure shall be as outlined in the District's General Requirements.

B. Submit material certificates signed by the material producer and the Contractor, certifying that that each material item complies with, or exceeds the specified requirements.

1.6 QUALITY ASSURANCE

A. Conform to these Specifications and Section 19 of Caltrans 2022 Standard Specifications.

B. Finish surface of the prepared subgrade to receive aggregate base, shall be as specified in Section 31 23 00.

C. Finish surface of material to be stabilized prior to lime treatment shall be as specified in

Section 24-1.04 of Caltrans Standard Specifications.

D. Finish surface of the stabilized material after lime treatment shall be as specified in Section 24-1.08 of Caltrans Standard Specifications.

E. Do not project the finish surface of aggregate base above the design subgrade.

F. Finish surface of aggregate base shall be 0 to - 0.05-feet.

G. Finish surface of cement treated base shall be as specified in Section 27 of Caltrans Standard Specifications.

H. Percentage of compaction specified shall be the minimum acceptable. The percentage represents the ratio of the dry density of the compacted material to the maximum dry density of the material as determined by the procedure set forth in ASTM Designation D1557.

PART 2 - PRODUCTS

2.1 FILL MATERIAL

A. If fill material is required to restore the previously constructed subgrade to its proper elevation, provide structural fill material specified in Section 31 23 00.

2.2 AGGREGATE BASE

A. Material: Caltrans Standard Specification Section 26.
1. Class 2, 3/4-inch Maximum: Section 26-1.02A.

2.3 LIME STABILIZATION

A. Lime Treatment Material per Geotechnical recommendation and field investigation if required.

PART 3 - EXECUTION

3.1 SOIL STERILANT

A. Furnish and apply to areas indicated in accordance with Section 31 23 00.

3.2 AGGREGATE BASE

A. Watering, Spreading & Compacting: Section 26-1.035, 26-1.04 and 26-1.05 of Caltrans Specs

3.3 LIME STABILIZATION

A. Performing the stabilization shall conform with Geotechnical recommendation

END OF SECTION

SECTION 32 31 13

CHAIN LINK FENCING

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes:

1. Repairing existing galvanized chain link fence.
2. New swing gates.

B. Related requirements:

1. Division 03 for concrete post footings.
2. Division 09 for field-painting fence components.

1.2 SUBMITTALS

A. Data: Manufacturer product data for fabric, posts, privacy slats and other accessories.
B. Shop drawings: Show fence layouts, footings size and reinforcement, gate details, and typical elevations, including position of hardware.

1. Include elevations showing pattern for privacy slats.

C. Samples:

1. 24-inch square samples of chain link fabric.
2. Full-size sample of each type of gate hardware.
3. 12-inch sample of privacy slats for Architect's color and texture selection.
4. Approved samples will serve as Architect's control samples.

1.3 QUALITY ASSURANCE

A. The applicable provisions of the Chain Link Fence Manufacturers Institute (CLFMI) Product Manual govern the work of this Section.
B. This requirement does not limit manufacture of the fencing components to CLFMI members.

1.4 HANDLING

A. Handle and store components to avoid damaging the finish.
B. Store off the ground in a protected location.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Framework:

1. Round steel pipe and rail: ASTM F1043 Group IA Heavy Industrial Fence Framework, schedule 40 galvanized pipe per ASTM F1083. Exterior zinc coating Type A, interior zinc coating Type A. A36 regular grade.

   a. Line Post: 2.875 inches diameter.
   b. End, corner, pull post: 3.500 inches diameter.
   c. Top, brace, bottom & intermediate rails: 1.660 inches, 2.27 lbs/ft.

B. Chain link fabric: Polymer Coated Steel Fabric: ASTM F668.

1. One piece width, 1-inch x 1 inch mesh, 9-gage.
2. Color: Black in compliance with ASTM F934.

C. Accessories, general: Galvanized, complying with ASTM A 153, except that the coating weight may comply with the requirements of CFLMI standards for coating thickness.

1. Tension wire: 7-gage marcelled wire complying with ASTM A824.

   a. Type II Zinc-Coated Class 5 - 2.0 oz/ft².

2. Stretcher bars: One piece length equal to full height of fabric with a minimum cross section of 3/16 inch by 3/4 inch. Provide one stretcher bar for each gate and end post, and 2 for each corner and pull post.
3. Stretcher bar bands: Heavy pressed steel to secure stretcher bars to intermediate, corner and gate posts.
4. Post tops: Steel or malleable iron designed as a weathertight closure cap. Design caps with opening to permit passage of the top rail, when rail is provided.

D. Wire ties: For tying fabric to line posts, galvanized minimum zinc coating 1.20 oz/ft² 9 gauge (0.148) steel wire in compliance with ASTM F626. For tying fabric to tension wire use 9-gage hog rings.

E. Privacy slats: Polypropylene tubular slats, , manufactured for chain-link fences containing UV inhibitor, sized to fit fencing fabric specified for direction indicated on the shop drawings.

1. Color and texture: Match Architect's control sample.

2.2 GATES

A. Fabricate gate frames of welded steel tubes in compliance with ASTM F 900. Provide additional horizontal and diagonal members to insure that gates stay square and operate properly, and for attachment of fabric, hardware and accessories.

B. Weld gate frames:

1. Use same fabric as for fencing, installed with stretcher bars at vertical edges.
2. Tie fabric to top and bottom edges. Attach stretcher bars to gate frame at not more than 15 inches o.c.

3. Attach hardware with rivets or by other means that will provide security against removal and breakage.

C. Hardware:

1. Padlock provided by Door Hardware supplier.
2. Latching devices: Self-closing and latching, galvanized heavy-duty hardware, positioned outside of children's reach.
3. Hinges: One pair of steel hinges, non-lift-off type offset to permit 180-degree gate opening.
4. Gate hardware to be accessible in accessible path of travel locations.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Verify conditions and measurements affecting the work of this Section at site.
B. Correct detrimental conditions before proceeding with installation.

3.2 INSTALLATION

A. General: Comply with ASTM F 567.
B. Posts: Provide corner, end, and intermediate posts. Erect posts plumb and level, in straight alignment, and set in concrete footings. Support and brace until concrete sets.
C. Post caps: Provide on each post unless equal protection is provided by combination post top cap and barbed wire supporting arm.
D. Tension wires: Install before stretching fabric and tie to each posts with ties or clips.
E. Top, bottom and intermediate rails: Install before installing fabric. Pass top rail through intermediate post caps. Provide expansion coupling spaced at no more than 20 feet o.c.
F. Tension wires: Pull wire taut and anchor securely to the posts.
G. Stretcher bars: Thread through fabric and secure to posts with steel bands.
H. Privacy slats: Securely install slats in locations indicated, patterns as indicated on the approved shop drawings.

3.3 BRACING

A. Brace gates, corner, end, and pull posts to the nearest post with a horizontal brace used as a compression member and a diagonal truss rod and truss tightener used as a tension member.

3.4 GATES

A. General: Install gates plumb, level, square, free of rack and secure for full opening without interference. Adjust hardware for smooth operation.

3.5 COATING SYSTEM FOR GALVANIZED STEEL

A. New and existing fencing components shall be field primed and painted.
B. Surface preparation:

1. SSPC-SP1 preparation to remove soluble contamination.

2. Thoroughly roughen the entire surface to be coated using compressed air nozzle brush-off blast cleaning with a fine abrasive to achieve a uniform anchor profile (1.5 to 2 mils) (38 to 50 microns).
3. Pressure wash with 140 to 150-degree F alkaline cleaner followed by tap water rinse is the preferred method to remove both water soluble and organic solvent soluble contaminants.

C. Touchup: Where the galvanized surface is damaged, repair shall consist of mechanical surface cleaning to bare metal, followed by touchup application of organic zinc-rich moisture cured urethane primer at 2.5 mils DFT minimum.
D. Spot primer: Surface tolerant epoxy primer/aliphatic acrylic polyurethane gloss finish.

FENCING PAINT TYPE: PFX-4, SEE SECTION 09910.

END OF SECTION

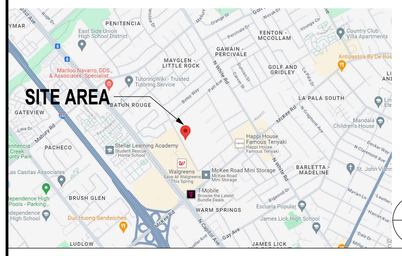
ALUM ROCK UNION SCHOOL DISTRICT
WILLIAM SHEPPARD MIDDLE SCHOOL

WILLIAM SHEPPARD MS FENCING PROJECT
WILLIAM SHEPPARD MIDDLE SCHOOL
480 ROUGH & READY RD., SAN JOSE, CA. 95133

DSA SUBMITTAL
AUGUST 7, 2024

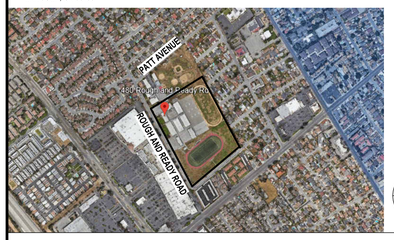
DSA APPLICATION NO: 01-121931 **DSA FILE NO: 43-4**

VICINITY MAP



CONTEXT MAP

SHEPPARD MIDDLE SCHOOL
ADDRESS: 480 ROUGH AND READY RD.,
SAN JOSE, CA 95133



STATEMENT OF GENERAL CONFORMANCE

FOR ARCHITECTS/ENGINEERS WHO UTILIZE PLANS, INCLUDING BUT NOT LIMITED TO, SHOP DRAWINGS PREPARED BY OTHER LICENSED DESIGN PROFESSIONAL AND/OR CONSULTANTS.

APPLICATION NUMBER: 01-121931 **FILE NUMBER:** 43-4

X THE DRAWINGS OR SHEETS LISTED ON THE COVER OR SHEET INDEX -
X THESE SPECIFICATIONS SECTIONS - DIVISION
N/A THESE CALCULATIONS

HAVE/HAS BEEN PREPARED BY OTHER DESIGN PROFESSIONALS OR CONSULTANTS WHO ARE LICENSED AND/OR AUTHORIZED TO PREPARE SUCH DRAWINGS IN THIS STATE. IT HAS BEEN EXAMINED BY ME FOR:
1) DESIGN INTENT, AND APPEARS TO MEET THE APPROPRIATE REQUIREMENTS OF TITLE 24, CALIFORNIA CODE OF REGULATIONS, AND THE PROJECT SPECIFICATIONS PREPARED BY ME, AND
2) COORDINATION WITH MY PLANS AND SPECIFICATIONS, AND IS ACCEPTABLE FOR INCORPORATION INTO CONSTRUCTION OF THIS PROJECT.

THE STATEMENT OF GENERAL CONFORMANCE "SHALL NOT BE CONSTRUED AS RELIEVING ME OF MY RIGHTS, DUTIES, AND RESPONSIBILITIES UNDER SECTION 17302 AND 81138 OF THE EDUCATION CODE, AND SECTIONS 4-336, 4-341 AND 4-344" OF TITLE 24, PART 1 (TITLE 24, PART 1, SECTION 4-317 (B)).

I FIND THAT:

X ALL DRAWINGS OR SHEETS LISTED ON THE COVER OR INDEX SHEET
X THESE SPECIFICATIONS SECTIONS
N/A THESE CALCULATIONS -

X ARE IN GENERAL CONFORMANCE WITH THE PROJECT DESIGN, AND
X HAVE BEEN COORDINATED WITH THE PROJECT PLAN AND SPECIFICATIONS.

AIA, LEED AP, dsk architects — 2024/07/08
ARCHITECT/ENGINEER DESIGNATED TO BE IN GENERAL RESPONSIBLE CHARGE **DATE**

AMIR KAKAVAND
PRINT NAME

C-30095 — 2021/08/31
LICENSE NUMBER **EXPIRATION DATE**

DRAWINGS, SPECS AND CALCULATIONS BY OTHERS

N/A

PROJECT DIRECTORY

CLIENT:

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dsk Architects:

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SCOPE OF WORK

1. INSTALLATION OF 6'-0" HIGH CHAIN LINK FENCE AND GATES.
2. SITE IMPROVEMENTS AND PARKING.

PROJECT DATA

DEFERRED SUBMITTALS

N/A

APPLICABLE CODES & REGULATIONS (2022 CBC)

1. STATUTORY AND JUDICIAL REGULATIONS (EFFECTIVE JANUARY 1, 2023)
   a. 2022 CALIFORNIA ADMINISTRATIVE CODE (CAC), PART 1, TITLE 24 C.C.R.
   b. 2022 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24 C.C.R. (2021 INTERNATIONAL BUILDING CODE AND 2022 CALIFORNIA AMENDMENTS)
   c. 2022 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 C.C.R. (2020 NATIONAL ELECTRICAL CODE AND 2022 CALIFORNIA AMENDMENTS)
   d. 2022 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24 C.C.R. (2021 IAPMO UNIFORM MECHANICAL CODE AND 2022 CALIFORNIA AMENDMENTS)
   e. 2022 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 C.C.R. (2021 IAPMO UNIFORM PLUMBING CODE AND 2022 CALIFORNIA AMENDMENTS)
   f. 2022 CALIFORNIA ENERGY CODE, PART 6, TITLE 24 C.C.R.
   g. 2022 CALIFORNIA FIRE CODE (CFC), PART 9, TITLE 24 C.C.R. (2021 INTERNATIONAL FIRE CODE AND 2022 CALIFORNIA AMENDMENTS)
   h. 2022 CALIFORNIA EXISTING BUILDING CODE (CEBC), PART 10, TITLE 24 C.C.R. (2021 INTERNATIONAL EXISTING BUILDING CODE AND 2022 CALIFORNIA AMENDMENTS)
   i. 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN), PART 11, TITLE 24 C.C.R.
   j. 2022 CALIFORNIA REFERENCED STANDARDS CODE, PART 12, TITLE 24 C.C.R.
   k. TITLE 19 C.C.R., PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS
   l. THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS IS THAT THE WORK OF THE ALTERATION, REHABILITATION OR RECONSTRUCTION IS TO BE IN ACCORDANCE WITH TITLE 24, CALIFORNIA CODE OF REGULATIONS PER SECTION 4-317, PART 1, TITLE 24, C.C.R.: SHOULD ANY EXISTING CONDITIONS SUCH AS DETERIORATION OR NON-COMPLYING CONSTRUCTION BE DISCOVERED WHICH IS NOT COVERED BY THE DSA APPROVED DOCUMENTS WHEREIN THE FINISHED WORK WILL NOT COMPLY WITH TITLE 24, CALIFORNIA CODE OF REGULATIONS, A CONSTRUCTION CHANGE DOCUMENT, OR A SEPARATE SET OF PLANS AND SPECIFICATIONS, DETAILING AND SPECIFYING THE REQUIRED REPAIR WORK SHALL BE SUBMITTED TO AND APPROVED BY DSA BEFORE PROCEEDING WITH THE REPAIR WORK.
   m. CHAPTER 4, PART 1, TITLE 24 C.C.R., ADMINISTRATIVE REGULATIONS (PARTIAL LISTING ONLY):
      1. A COPY OF ALL PARTS 1, 2, 3, 4 & 5 TITLE 24 C.C.R. SHALL BE KEPT ON THE JOB SITE AT ALL TIMES.
      2. ALL ADDENDA AND CONSTRUCTION CHANGES TO BE SIGNED BY THE ARCHITECT, CONTRACTOR AND OWNER AND APPROVED BY DSA. CONSTRUCTION CHANGE DOCUMENTS NOT VALID UNTIL APPROVED BY DSA PER SECTION 4-338, PART 1, TITLE 24. SUBSTITUTIONS SHALL BE CONSIDERED AS CHANGE ORDERS.
      3. ALL TESTS TO CONFORM TO THE REQUIREMENTS OF SECTION 4-335, PART 1, TITLE 24, AND APPROVED TESTING AND INSPECTION SHEET.
      4. TESTS OF MATERIALS AND TESTING LAB SHALL BE IN ACCORDANCE WITH SECTION 4-335 OF PART 1, TITLE 24, AND THE DISTRICT SHALL EMPLOY AND PAY THE LABORATORY. COST OF RE-TEST MAY BE BACK-CHARGED TO THE CONTRACTOR.
      5. DSA SHALL BE NOTIFIED AT THE START OF CONSTRUCTION AND PRIOR TO THE REPLACEMENT OF CONCRETE, PER SECTION 4-331, PART 1, TITLE 24.
      6. INSPECTOR TO BE APPROVED BY THE ARCHITECT AND DSA AND TO BE EMPLOYED BY THE DISTRICT. INSPECTION TO BE IN ACCORDANCE WITH SECTION 4-333(B). THE DUTY OF THE INSPECTOR SHALL BE IN ACCORDANCE WITH SECTION 4-342, PART 1, TITLE 24.
      7. SUPERVISION OF CONSTRUCTION BY DSA IN ACCORDANCE WITH SECTION 4-334, PART 1, TITLE 24.
      8. CONTRACTOR, INSPECTOR, ARCHITECT, AND ENGINEERS SHALL SUBMIT VERIFIED REPORTS (DSA-6) IN ACCORDANCE WITH SECTIONS 4-336 AND 4-343, PART 1, TITLE 24.
      9. THE ARCHITECT, STRUCTURAL ENGINEER, AND PROFESSIONAL ENGINEER SHALL PERFORM THEIR DUTIES IN ACCORDANCE WITH SECTIONS 4-333(a) AND 4-341, PART 1, TITLE 24.
      10. THE CONTRACTOR SHALL PERFORM HIS DUTIES IN ACCORDANCE WITH SECTION 4-343, PART 1, TITLE 24.
      11. DSA IS NOT SUBJECT TO ARBITRATION.

2. NATIONAL REFERENCE STANDARDS
   a. AISC 360-16 MANUAL OF STEEL CONSTRUCTION
   b. AISC 341-16 SEISMIC PROVISIONS FOR STRUCTURAL STEEL BUILDINGS
   c. 2019 ASME A17.1 / CSA B44 SAFETY CODE FOR ELEVATORS & ESCALATORS (PER 2022 CBC PART 2 CHAPTER 35)
      • NOTE: CAL / OSHA ELEVATOR UNIT ENFORCES CCR TITLE 8 AND USES 2004 ASME A17.1 BY ADOPTION
   d. ICC 300-17 STANDARDS ON BLEACHERS, FOLDING AND TELESCOPIC SEATING AND GRANDSTANDS
   e. 2018 NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION
   f. ACI-318-19 CODE AND COMMENTARY
   g. 2022 NFPA 13, AUTOMATIC SPRINKLER SYSTEMS (CA AMENDED)
   h. 2019 NFPA 14, STANDPIPE & HOSE SYSTEMS (CA AMENDED)
   i. 2021 NFPA 17, DRY CHEMICAL EXTINGUISHING SYSTEMS
   j. 2021 NFPA 17A, WET CHEMICAL EXTINGUISHING SYSTEMS
   k. 2019 NFPA 20, STATIONARY PUMPS FOR FIRE PROTECTION
   l. 2013 NFPA 22, WATER TANKS FOR PRIVATE FIRE PROTECTION
   m. 2019 NFPA 24, PRIVATE FIRE SERVICE MAINS AND THEIR APPURTENANCES (CA AMENDED)
   n. 2013 NFPA 25 INSPECTION, TESTING, MAINTENANCE OF WATER-BASED FIRE PROTECTION SYSTEMS (CALIFORNIA EDITION)
   o. 2016 NFPA 72, NATIONAL FIRE ALARM AND SIGNALING CODE (CA AMENDED)
   p. 2016 NFPA 80, FIRE DOORS AND OTHER OPENING PROTECTIVES
   q. 2015 NFPA 92, STANDARD FOR SMOKE CONTROL SYSTEMS
   r. 2016 NFPA 110, EMERGENCY AND STANDBY POWER SYSTEMS
   s. 2015 NFPA 253, CRITICAL RADIANT FLUX OF FLOOR COVERING SYSTEMS
   t. 2015 NFPA 2001, CLEAN AGENT FIRE EXTINGUISHING SYSTEMS (CA AMENDED)
   u. 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN: ADA ACCESSIBILITY GUIDELINES FOR BUILDINGS & FACILITIES (ADAAG)
   v. 2005 & R2010 UL 300, STANDARD FOR FIRE TESTING OF FIRE EXTINGUISHING SYSTEMS FOR PROTECTION OF COMMERCIAL COOKING EQUIPMENT
   w. 2003 UL 464, AUDIBLE SIGNALING DEVICES FOR FIRE ALARM AND SIGNALING SYSTEMS, INCLUDING ACCESSORIES
   x. 1999 UL 521, STANDARD FOR HEAT DETECTORS FOR FIRE PROTECTIVE SIGNALING SYSTEMS
   y. 2002 & R2010 UL 1971, STANDARD FOR SIGNALING DEVICES FOR THE HEARING IMPAIRED
   z. NOTES:
      • FOR A COMPLETE LIST OF APPLICABLE STANDARDS, REFER TO 2022 CBC (SFM) CHAPTER 35 AND CALIFORNIA FIRE CODE CHAPTER 80.
      • SEE CALIFORNIA BUILDING CODE CHAPTER 35 FOR STATE OF CALIFORNIA AMENDMENTS TO THE NFPA STANDARDS.

3. NOTES
   a. ALL BARRIER FREE ITEMS SHALL COMPLY WITH TITLE 21 AND 24 OF THE CALIFORNIA CODE OF REGULATIONS, 2022.
   b. ALL WORK AND MATERIALS SHALL BE IN FULL ACCORDANCE WITH THE REQUIREMENTS OF THESE CODES AND ALL APPLICABLE LOCAL ORDINANCES. WHERE CODES CONFLICT, THE MORE STRINGENT SHALL APPLY.
   c. NO CHANGES OR REVISIONS SHALL BE MADE FOLLOWING WRITTEN APPROVAL WHICH AFFECTS ACCESS COMPLIANCE ITEMS UNLESS SUCH CHANGES OR REVISIONS ARE SUBMITTED TO DSA FOR APPROVAL.
   d. SUBSTITUTIONS AFFECTING DSA REGULATED ITEMS SHALL BE SUBMITTED AS A CONSTRUCTION CHANGE DOCUMENT OR ADDENDA, AND SHALL BE APPROVED BY DSA PRIOR TO FABRICATION AND INSTALLATION.
   e. MATERIALS AND THEIR INSTALLATION SHALL COMPLY WITH APPLICABLE CODES, STANDARDS AND MANUFACTURER RECOMMENDATIONS.
   f. PER CBC 11B-104.1.1 "ALL DIMENSIONS ARE SUBJECT TO CONVENTIONAL INDUSTRY TOLERANCES EXCEPT WHERE THE REQUIREMENT IS STATED AS A RANGE WITH A SPECIFIC MINIMUM AND MAXIMUM END POINTS."

4. CONSTRUCTION SAFETY
   a. STATUTORY AND JURISDICTIONAL REQUIREMENTS AS APPLICABLE TO TEMPORARY WORK, INCLUDING CALIFORNIA CONSTRUCTION SAFETY ORDERS.
   b. ASSOCIATED GENERAL CONTRACTORS OF AMERICA, INC., MANUAL OF ACCIDENT PREVENTION.
   c. PROTECTION DURING WELDING: PROTECT OCCUPANTS AND THE PUBLIC WITH PORTABLE SOLID VISION BARRICADES AROUND LOCATION WHERE WELDING IS BEING PERFORMED. PROVIDE SIGNS WARNING AGAINST LOOKING AT WELDING WITHOUT PROPER EYE PROTECTION OR EQUIVALENT. CONFORM TO CHAPTER 9, C.F.C. FOR REQUIREMENTS FOR ON SITE WELDING.
   d. DURING THE ENTIRE CONSTRUCTION PERIOD, IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN CONDITIONS AT THE PROJECT SITE TO MEET THE REQUIREMENTS OF THE CITY BUILDING DEPARTMENT AND THE CALIFORNIA OCCUPATIONAL REGULATIONS. THIS PROVISION SHALL COVER THE CONTRACTOR'S EMPLOYEES AND ALL OTHER PERSONS WORKING UPON OR VISITING THE SITE. THE CONTRACTOR SHALL BECOME FULLY INFORMED OF ALL APPLICABLE STANDARDS AND REGULATIONS AND INFORM ALL PERSONS AND REPRESENTATIVES RESPONSIBLE FOR WORK UNDER THIS CONTRACT.
   e. WORK SHALL COMPLY WITH THE PROVISIONS OF CHAPTER 33 OF THE CBC AND CFC - "FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION".

GENERAL NOTES

1. DRAWING AND SPECIFICATIONS REPRESENT FINISHED CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR MEANS AND METHODS OF CONSTRUCTION INCLUDING BUT NOT LIMITED TO SHORING AND TEMPORARY BRACING.
2. OMISSION OR CONFLICTS BETWEEN VARIOUS ELEMENTS OF DRAWINGS, NOTES AND DETAILS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND RESOLVED BEFORE PROCEEDING WITH THE WORK.
3. THE ARCHITECTURAL DRAWINGS SHOW PRINCIPAL AREAS WHERE WORK MUST BE ACCOMPLISHED UNDER THIS CONTRACT. INCIDENTAL WORK MAY ALSO BE NECESSARY IN AREAS NOT SHOWN ON THE ARCHITECTURAL DRAWINGS DUE TO CHANGES AFFECTING EXISTING MECHANICAL, ELECTRICAL, PLUMBING AND OR OTHER SYSTEMS. SUCH INCIDENTAL WORK IS ALSO PART OF THIS CONTRACT. INSPECT THOSE AREAS AND ASCERTAIN WORK NEEDED, AND DO THAT WORK IN ACCORDANCE WITH THE CONTRACT REQUIREMENTS AT NO ADDITIONAL COST.
4. NO DEVIATION FROM THE APPROVED DRAWINGS AND SPECIFICATIONS IS PERMITTED WITHOUT THE PRIOR WRITTEN CONSENT OF THE ARCHITECT. THE ARCHITECT'S INTERPRETATION OF THESE DOCUMENTS SHALL BE FINAL.
5. BEFORE BEGINNING WORK AT THE SITE, INSPECT AND VERIFY THE CONDITION OF EVERY ITEM AFFECTED BY THE WORK UNDER THIS CONTRACT AND REPORT DISCREPANCIES WITH THE PROJECT DOCUMENTS TO THE ARCHITECT BEFORE WORK TO THAT AREA.
6. BEFORE BEGINNING WORK AT THE SITE, INSPECT THE EXISTING BUILDING AND DETERMINE THE EXTENT OF EXISTING FINISHES, SPECIALTIES, CASEWORK, EQUIPMENT AND OTHER ITEMS WHICH MUST BE REMOVED AND REINSTALLED IN ORDER TO PERFORM THE WORK UNDER THIS CONTRACT.
7. SEE MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS FOR VENT, DUCT, CONDUIT SLEEVE PENETRATIONS, ETC. NOT SHOWN ON THE ARCHITECTURAL DRAWINGS.
8. DO NOT DRILL OR CUT EXISTING FLOOR OR ROOF JOISTS, BEAMS, COLUMNS OR OTHER STRUCTURAL ELEMENTS UNLESS SPECIFICALLY INDICATED. MAKE OPENINGS OF PROPER SIZE FOR CONDUITS, DUCTS, PIPES AND OTHER ITEMS PASSING THROUGH OPENINGS.
9. PROTECT EXISTING WORK FROM DAMAGE.
10. PATCH AND FINISH OR REFINISH TO MATCH ADJACENT EXISTING FINISHES, THOSE DAMAGED, WHERE CUTTING, GRINDING, DRILLING, DEMOLITION AND NEW CONSTRUCTION AFFECT EXISTING SURFACES TO REMAIN.
11. WHERE CONDUIT, DUCTS, PIPES AND SIMILAR ITEMS ARE SHOWN TO BE INSTALLED IN EXISTING WALLS OR PARTITIONS, NEATLY CHASE THE WALLS OR PARTITIONS, INSTALL THE ITEMS, AND PATCH THE WALLS OR PARTITIONS. MAKE THE INSTALLATION INDISCERNIBLE IN THE FINISH WORK.
12. SEAL TIGHT AND PROTECT WITH FIRE SAFING NEW SLEEVES AND OPENINGS THROUGH FIRE RATED PARTITIONS.
13. WHERE "MATCH EXISTING" IS INDICATED, NEW CONSTRUCTION OR FINISHES AS APPROPRIATE TO THE NOTE, SHALL MATCH THE EXISTING.
14. TRUCK ROUTES USED FOR THE CONSTRUCTION OF THIS PROJECT TO BE SUBMITTED TO AND APPROVED BY CLIENT.
15. PAINT ALL EXPOSED CONDUITS, METALS, PIPES, DUCTS, ETC. (U.O.N.). COLORS TO BE SELECTED BY THE ARCHITECT.
16. IN THE DEMOLITION DRAWINGS, DASHED LINES INDICATE CONSTRUCTION FIXTURES OR ITEMS TO BE REMOVED OR SALVAGED. REMOVE MEANS DEMOLITION AND DISPOSAL OF ITEMS. SALVAGE MEANS CAREFUL EXTRACTION AND PROTECTION FOR REINSTALLATION OR STORAGE. ITEMS NOT SPECIFICALLY NOTED FOR SALVAGE ARE TO BE REMOVED.
17. USE OF ANY ASBESTOS OR LEAD CONTAINING MATERIAL IS PROHIBITED. ALL NEW MATERIALS EXCLUDING BARE FIBERGLASS, WOOD, METAL, GLASS, RUBBER, OR CONCRETE SHALL HAVE MATERIAL SAFETY DATA SHEETS SUBMITTED FOR REVIEW AND APPROVAL BY THE DISTRICT. NO MATERIAL SHALL BE USED OR INSTALLED PRIOR TO REVIEW AND APPROVAL OF THE MATERIAL SAFETY DATA SHEET FOR THAT PRODUCT.
18. HAZARDOUS MATERIALS MAY BE PRESENT ON SITE. REFER TO THE OWNER'S HAZMAT DOCUMENTS FOR ADDITIONAL INFORMATION. SHOULD CONTRACTOR DISCOVER WHAT IS BELIEVED TO BE HAZARDOUS MATERIALS IN ADDITION TO WHAT IS SHOWN ON THE HAZMAT DOCUMENTS, THE CONTRACTOR SHALL NOTIFY THE OWNER IMMEDIATELY AND WAIT FOR DIRECTION.
   A. ANY WORK REQUIRING IMPACT, REMOVAL, OR ALTERATION OF ASBESTOS CONTAINING MATERIALS MUST BE PERFORMED IN COMPLIANCE WITH THE PROJECT MANUAL.
   B. ANY WORK REQUIRING IMPACT, REMOVAL, OR ALTERATION OF LEAD CONTAINING STAINS, PAINTS, AND COATINGS ON BUILDING COMPONENTS, MUST BE PERFORMED IN COMPLIANCE WITH THE PROJECT MANUAL AS APPROPRIATE.
19. CONTRACTOR IS RESPONSIBLE FOR PROVIDING PROPER WEATHER PROTECTION DURING CONSTRUCTION.
20. ALL ITEMS NOTED ON DRAWINGS NOT CALLED OUT AS EXISTING SHALL BE CONSIDERED NEW.
21. ALL DIMENSIONS SHOWN SHALL BE VERIFIED ON SITE.
22. CONTRACTOR SHOULD NOT SCALE THE DRAWINGS FOR MEASUREMENTS.
23. WRITTEN INFORMATION SUPERSEDES DRAWN INFORMATION.

DRAWING INDEX

GENERAL
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ARCHITECTURAL
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A0.02 ACCESSIBILITY SITE PLAN
A0.03 SITE PLAN
A0.04 ENLARGED SITE PLANS
A1.01 SITE DETAILS
A2.21 SIGNAGE DETAILS, SITE DETAIL & GATE SCHEDULE
ARCHITECTURAL: 6
Grand total: 8

AGENCY STAMP

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-121931 INC:
REVIEWED FOR
SS ☐ FLS ☑ ACS ☑
DATE: 8/14/2024

DSA APPLICATION NO: 01-121931

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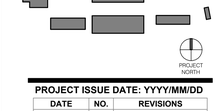
LICENSED ARCHITECT — AMIR M. KAKAVAND — No. C-30095 — Exp. 08-31-25 — STATE OF CALIFORNIA

CONSULTANT

PROJECT NAME
WILLIAM SHEPPARD MS FENCING PROJECT

FACILITY INFO
WILLIAM SHEPPARD MIDDLE SCHOOL
480 ROUGH & READY RD., SAN JOSE, CA. 95133

KEY PLAN



PROJECT ISSUE DATE: YYYY/MM/DD

DATE	NO.	REVISIONS

DRAFTER: XX — REVIEWER: XX
PM: XX — DSK JOB NO: 24000

SHEET TITLE
PROJECT DIRECTORY, SCOPE OF WORK & DRAWING INDEX

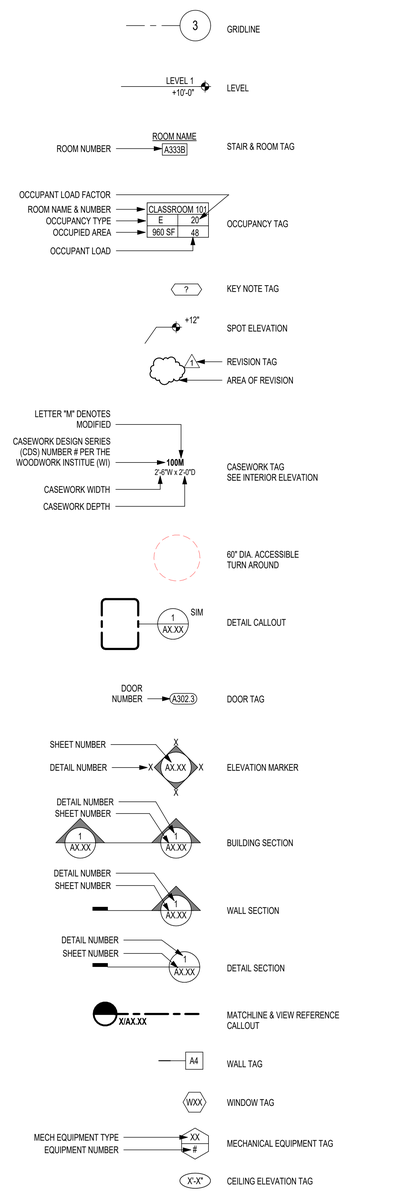
SHEET NUMBER
G0.01

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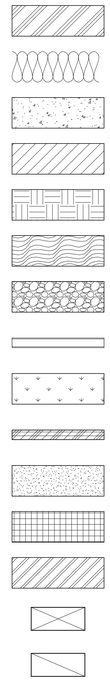
ABBREVIATIONS

A.F.F.	ABOVE FINISH FLOOR	FLR.	FLOOR	RELOC.	RELOCATABLE
A.P.	ACCESS PANEL	F.D.	FLOOR DRAIN	(R)	REMOVE
ACCES.	ACCESSIBLE	FLUOR.	FLUORESCENT	REQ'D	REQUIRED
ACT	ACOUSTIC CEILING TILE	FT.	FOOT OR FEET	RET.	RETAINING
ACOUS.	ACOUSTICAL	FTG.	FOOTING	REV.	REVISION
ADD'L	ADDITIONAL	FDN.	FOUNDATION	R.	RISER
ADHES.	ADHESIVE	FURR.	FURRING	R.D.	ROOF DRAIN
ADJAC.	ADJACENT	GALV.	GALVANIZED	RM.	ROOM
ADJ.	ADJUSTABLE	G.I.	GALVANIZED IRON	R.O.	ROUGH OPENING
ADMIN.	ADMINISTRATION	GA.	GAUGE	RUB.	RUBBER
AGGR.	AGGREGATE	GEN.	GENERAL	S.N.D.	SANITARY NAPKIN DISPENSER
A/C	AIR CONDITIONING	GL.	GLASS	S.N.R.	SANITARY NAPKIN RECEPTACLE
A.H.D.	AIR HAND DRYER	G.F.R.C.	GLASS FIBER REINFORCED CONCRETE	SCHD.	SCHEDULE
ALT.	ALTERNATIVE OR ALTERNATE	G.B.	GRAB BAR	SEAL.	SEALANT
AL.	ALUMINUM	GND.	GROUND	SECT.	SECTION
A.D.A.	AMERICAN DISABILITIES ACT	GYP.	GYPSUM	S.C.D.	SEE CIVIL DRAWINGS
A.B.	ANCHOR BOLT	H.R.	HANDRAIL	S.E.D.	SEE ELECTRICAL DRAWINGS
ANOD.	ANODIZED	HDWE	HARDWARE	S.F.A.D.	SEE FIRE ALARM DRAWINGS
APPROX.	APPROXIMATE	HDWD.	HARDWOOD	S.F.P.D.	SEE FIRE PROTECTION DWGS.
ARCH.	ARCHITECTURAL	HDR.	HEADER	S.L.D.	SEE LANDSCAPE DRAWINGS
A.C.	ASPHALT CONCRETE	HVAC	HEATING, VENTILATING, AND AIR CONDITIONING	S.M.D.	SEE MECHANICAL DRAWINGS
BSMT.	BASEMENT	HGT. or HT.	HEIGHT	S.P.D.	SEE PLUMBING DRAWINGS
B.O.D.	BASIS OF DESIGN	H.C.	HOLLOW CORE	S.S.D.	SEE STRUCTURAL DRAWINGS
BM.	BEAM	H.M.	HOLLOW METAL	SERV.	SERVICE
BTWN.	BETWEEN	HORIZ.	HORIZONTAL	SHT.	SHEET
BITUM.	BITUMINOUS	H.B.	HOSE BIBB	SIM.	SIMILAR
BLK.	BLOCK	HR.	HOUR	S.DT.	SMOKE DETECTOR
BD.	BOARD	IN.	INCH	S.D.	SOAP DISPENSER
BOL.	BOLLARD	INCL.	INCLUDING	S.C.	SOLID CORE
BOT.	BOTTOM	INFO.	INFORMATION	STC	SOUND TRANSMISSION CLASS
BLDG.	BUILDING	INSUL.	INSULATION	SPEC.	SPECIFICATIONS
B.U.R.	BUILT-UP ROOFING	INT.	INTERIOR	SPKR.	SPRINKLER
CAB.	CABINET	JAN.	JANITOR	SQ.	SQUARE
C.B.	CATCH BASIN	JT.	JOINT	SF	SQUARE FEET
CLG.	CEILING	KIT.	KITCHEN	S.S.	STAINLESS STEEL
CEM.	CEMENT	LAB.	LABORATORY	STD.	STANDARD
C.B.B.	CEMENTITIOUS BACKER BOARD	L.B.	LAG BOLT	STL.	STEEL
CTR.	CENTER	LAM.	LAMINATE	STOR.	STORAGE
CER.	CERAMIC	LAV.	LAVATORY	STRUCT.	STRUCTURAL
C.T.	CERAMIC TILE	L.	LONG	SUSP.	SUSPENDED
CLF.	CHAIN LINK FENCE	M.B.	MACHINE BOLT	S.A.T.	SUSPENDED ACOUSTICAL TILE
CLR.	CLEAR	MAINT.	MAINTENANCE	SYM.	SYMMETRICAL
C.A.	CLEAR ANODIZED	M.H.	MANHOLE	TEL.	TELEPHONE
CLO.	CLOSET	MFR.	MANUFACTURER	TEMP.	TEMPERED
COL.	COLUMN	MAT.	MATERIAL	TER.	TERRAZZO
CONC.	CONCRETE	MAX.	MAXIMUM	THK.	THICK
C.M.U.	CONCRETE MASONRY UNIT	MECH.	MECHANICAL	THRESH.	THRESHOLD
CONF.	CONFERENCE	MEMB.	MEMBRANE	T.S.C.D.	TOILET SEAT COVER DISPENSER
CONN.	CONNECTION	MTL.	METAL	T.T.D.	TOILET TISSUE DISPENSER
CONSTR.	CONSTRUCTION	MEZZ.	MEZZANINE	T & G	TONGUE AND GROOVE
CONT.	CONTINUOUS	MIN.	MINIMUM	T & B	TOP AND BOTTOM
C.J.	CONTROL JOINT	MISC.	MISCELLANEOUS	T.O.	TOP OF
C.G.	CORNER GUARD	MTD.	MOUNTED	T.O.C.	TOP OF CONCRETE
CORR.	CORRIDOR	(N)	NEW	T.O.P.	TOP OF PARAPET
CTSK.	COUNTERSUNK	NOM.	NOMINAL	T.O.S.	TOP OF STEEL
DEMO.	DEMOLITION	N.P.S.	NOMINAL PIPE SIZE	T.W.	TOP OF WALL
DET(S).	DETAIL(S)	N.I.C.	NOT IN CONTRACT	T.	TREAD
DIA.	DIAMETER	NO.	NUMBER	T.S.	TUBE STEEL
DIM.	DIMENSION	OFF.	OFFICE	TYP.	TYPICAL
DISP.	DISPENSER	O.C.	ON CENTER	UNF.	UNFINISHED
DR.	DOOR	O.D.	OUTSIDE DIAMETER	U.O.N.	UNLESS OTHERWISE NOTED
D.O.	DOOR OPENING	O/	OVER	UR.	URINAL
DBL.	DOUBLE	O.F.D.	OVERFLOW DRAIN	V.I.F.	VERIFY IN FIELD
DN.	DOWN	O.F.S.	OVERFLOW SCUPPER	VERT.	VERTICAL
D.S.	DOWN SPOUT	O.H.	OVERHEAD	V.C.T.	VINYL COMPOSITION TILE
DWG(S).	DRAWING(S)	OFOI	OWNER FURNISHED OWNER INSTALLED	WSCT.	WAINSCOT
D.F.	DRINKING FOUNTAIN	O.S.C.I.	OWNER SUPPLIED, CONTRACTOR INSTALLED	W.C.	WATER CLOSET
EA.	EACH	PTD.	PAINTED	W.H.	WATER HEATER
E.S.	EACH SIDE	PR.	PAIR	WP.	WATERPROOF
E.W.	EACH WAY	PNL.	PANEL	WT.	WEIGHT
ELEC.	ELECTRICAL	P.H.	PANIC HARDWARE	W.W.F.	WELDED WIRE FABRIC
EL.	ELEVATION	P.T.D.	PAPER TOWEL DISPENSER	W.O.	WHERE OCCURS
ELEV.	ELEVATOR	P.T.D./R.	PAPER TOWEL DISPENSER & RECEPTACLE	WDW.	WINDOW
EMER.	EMERGENCY	PTN.	PARTITION	W.G.	WIRE GLASS
ENCL.	ENCLOSURE	P.H.S.	PHILLIPS HEAD SCREW	W/	WITH
EQ.	EQUAL	P.A.	PLANTING AREA	W/O	WITHOUT
EQUIP.	EQUIPMENT	PLAS.	PLASTER	WD.	WOOD
EXH.	EXHAUST	P.LAM.	PLASTIC LAMINATE	W.I.C.	WOOD INSTITUTE OF CALIFORNIA
(E)	EXISTING	PL.	PLATE	YD.	YARD
E.D.	EXIT DEVICE	PLYWD.	PLYWOOD		
EXP.	EXPANSION	PVC	POLYVINYL CHLORIDE		
E.B.	EXPANSION BOLT	PRCST.	PRECAST		
E.J.	EXPANSION JOINT	PREFAB.	PREFABRICATED		
EXPO.S.	EXPOSED STRUCTURE	PREP.	PREPARATION		
EXT.	EXTERIOR	P.T.	PRESSURE TREATED		
F.O.	FACE OF	PA.	PUBLIC ADDRESS		
FIN.	FINISH	QTY.	QUANTITY		
F.F.	FINISHED FLOOR	Q.T.	QUARRY TILE		
F.A.	FIRE ALARM	RAD.	RADIUS		
F.E.	FIRE EXTINGUISHER	R.W.L.	RAIN WATER LEADER		
F.E.C.	FIRE EXTINGUISHER CABINET	RWD	REDWOOD		
F.H.C.	FIRE HOSE CABINET	REF.	REFERENCE		
F.H.	FIRE HYDRANT	RCP	REFLECTED CEILING PLAN		
F.R.	FIRE RATED	REINF.	REINFORCED		
FIXT.	FIXTURE	REBAR.	REINFORCING BAR		
F.H.M.S.	FLAT HEAD MACHINE (OR METAL) SCREW				

SYMBOLS



MATERIALS LEGEND



KEYNOTE REFERENCE CATEGORIES

EXISTING & DEMO

A_SITE
B_FLOOR
C_WALL
D_CEILINGS
E_ROOF
F_DOOR
G_WINDOW
H_CASEWORK
J_INTERIOR SPECIALTIES
K_EXTERIOR SPECIALTIES
L_LANDSCAPING
M_MECHANICAL AND PLUMBING
N_ELECTRICAL
P_GENERAL

NEW

01 GENERAL
02 EXISTING CONDITIONS
03 CONCRETE
04 MASONRY
05 METALS
06 WOOD, PLASTICS, AND COMPOSITES
07 THERMAL AND MOISTURE PROTECTION
08 OPENINGS
09 FINISHES
10 SPECIALTIES
11 EQUIPMENT
12 FURNISHINGS
13 SPECIAL CONSTRUCTION
14 CONVEYING EQUIPMENT
21 FIRE SUPPRESSION
22 PLUMBING
23 HVAC
26 ELECTRICAL
27 COMMUNICATIONS
28 ELECTRONIC SAFETY AND SECURITY
31 EARTHWORK
32 EXTERIOR IMPROVEMENTS
33 UTILITIES

CODE ANALYSIS

00 ACCESS COMPLIANCE AND FIRE LIFE SAFETY

AGENCY STAMP

IDENTIFICATION STAMP
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APP: 01-121931 INC:
REVIEWED FOR
SS ☐ FLS ☑ ACS ☑
DATE: 8/14/2024

DSA APPLICATION NO: 01-121931

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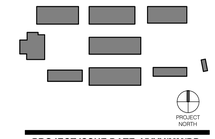
LICENSED ARCHITECT
AMIR M. KAKAVAND
No. C-30095
Exp. 08-31-25
STATE OF CALIFORNIA

CONSULTANT

PROJECT NAME
WILLIAM SHEPPARD MS FENCING PROJECT

FACILITY INFO
WILLIAM SHEPPARD MIDDLE SCHOOL
480 ROUGH & READY RD., SAN JOSE, CA. 95133

KEY PLAN



PROJECT ISSUE DATE: YYYY/MM/DD

DATE	NO.	REVISIONS

DRAFTER: Author
REVIEWER: XX
PM: XX
DSK JOB NO: 24000

SHEET TITLE
SYMBOLS & ABBREVIATIONS

SHEET NUMBER
G0.02

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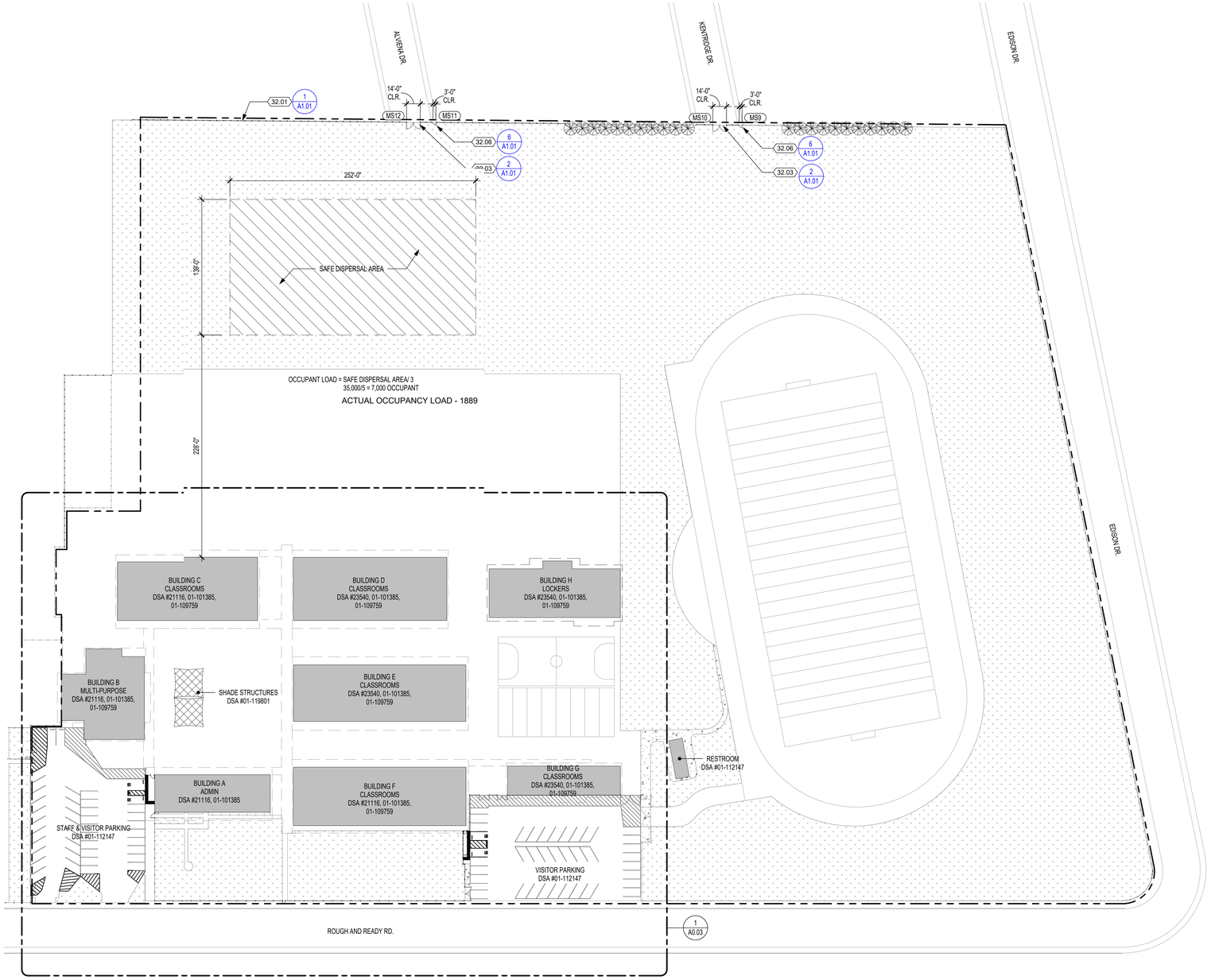
SITE LEGEND

- PROPERTY LINE
- BUILDING FOOTPRINT
- EXISTING BUILDING (NOT IN SCOPE)
- EXISTING LANDSCAPE / PLANTING AREA
- EXISTING CONCRETE PAVING
- NEW CONCRETE PAVING SEE DETAILS 10/A1.01 ,11/A1.01 ,12/A1.01 13/A1.01 , 14/A1.01

KEYNOTE LEGEND

32.01	6'-0" HIGH CHAIN LINK FENCE
32.03	6'-0" HIGH CHAIN LINK DOUBLE VEHICULAR GATES
32.06	3'-0" WIDE X 6'-0" HIGH CHAIN LINK MAINTENANCE PERSONNEL GATE

NOTES:
1. FOR GATE SCHEDULE SEE SHEET A2.21



1 OVERALL SITE PLAN
1" = 50'-0"

TRUE N

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CONSULTANT

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KEY PLAN

PROJECT NORTH

PROJECT ISSUE DATE: YYYY/MM/DD

DATE	NO.	REVISIONS

DRAFTER: Author REVIEWER: XX
PM: XX DSK JOB NO: 24000

SHEET TITLE
OVERALL SITE PLAN

SHEET NUMBER
A0.01

ACCESSIBILTY NOTES

1. PATH OF TRAVEL (P.O.T.) AS INDICATED IS A BARRIER FREE ACCESS WITHOUT ANY ABRUPT VERTICAL CHANGES EXCEEDING 1/2" BEVELED AT 1:2 MAXIMUM SLOPE, EXCEPT THAT LEVEL CHANGES DO NOT EXCEED 1/4" VERTICAL AND IS AT LEAST 48" WIDE. SURFACE IS SLIP RESISTANT, STABLE, FIRM, AND SMOOTH. CROSS-SLOPE DOES NOT EXCEED 2% AND SLOPE IN THE DIRECTION OF TRAVEL IS LESS THAN 5% UNLESS OTHERWISE INDICATED.

   (P.O.T.) SHALL MAINTAIN FREE OF OVERHANGING OBSTRUCTIONS TO 80" MINIMUM (11B-307.4) AND PROTRUDING OBJECTS WITH LEADING EDGES MORE THAN 27 INCHES AND NOT MORE THAN 80 INCHES ABOVE THE FINISH FLOOR OR GROUND SHALL PROTRUDE 4 INCHES MAXIMUM HORIZONTALLY INTO THE CIRCULATION PATH. (11B-307.2.).

   ARCHITECT TO VERIFY THAT ALL BARRIERS IN THE PATH OF TRAVEL HAVE BEEN REMOVED OR WILL BE REMOVED UNDER THIS PROJECT, AND PATH OF TRAVEL COMPLIES WITH CBC 11B-206.

2. PROVIDE SITE DIRECTIONAL ACCESSIBLE ROUTE SIGNAGE (SDS-1) AT ALL MAJOR JUNCTIONS PER CBC SEC. 11-216.6 WHERE ACCESSIBLE ROUTE DIVERGES FROM CENERAL ROUTE.

ACCESSIBILTY STATEMENT BY DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE

THE PATH OF TRAVEL (P.O.T.) INDICATED IN THESE CONSTRUCTION DOCUMENTS IS COMPLIANT WITH CURRENT APPLICABLE CALIFORNIA BUILDING CODE ACCESSIBILITY PROVISIONS FOR PATH OF TRAVEL REQUIREMENTS FOR ALTERATIONS, ADDITIONS AND STRUCTURAL REPAIRS.

AS PART OF THE DESIGN OF THIS PROJECT, THE P.O.T. WAS EXAMINED, AND ANY ELEMENTS, COMPONENTS OR PORTIONS OF THE P.O.T. THAT WERE DETERMINED TO BE NONCOMPLIANT (1) HAVE BEEN IDENTIFIED, AND (2) THE CORRECTIVE WORK NECESSARY TO BRING THEM INTO COMPLIANCE HAS BEEN INCLUDED WITHIN THE SCOPE OF THIS PROJECT'S WORK THROUGH DRAWINGS, DETAILS AND SPECIFICATIONS INCORPORATED INTO THESE CONSTRUCTION DOCUMENTS.

ANY NONCOMPLIANT ELEMENT, COMPONENT OR PORTION OF THE P.O.T. THAT WILL NOT BE CORRECTED BY THIS PROJECT, BASED ON A VALUATION THRESHOLD LIMITATION OR A FINDING OR UNREASONABLE HARDSHIP, IS SO INDICATED IN THESE CONSTUCTION DOCUMENTS.

DURING CONSTRUCTION, IF ANY P.O.T. ITEM WITHIN THE SCOPE OF THE PROJECT REPRESENTED AS CODE COMPLIANT IS FOUND TO BE NONCONFORMING BEYOND REASONABLE CONSTRUCTION TOLERANCES, IT SHALL BE BROUGHT INTO COMPLIANCE WITH THE CBC AS A PART OF THIS PROJECT BY MEANS OF A CONSTRUCTION CHANGE DOCUMENT.

PARKING COUNT / RATIO

PARKING LOT:

30 TOTAL PARKING SPACES
PER 11B-208.2, 2 ACCESSIBLE SPACES ARE REQUIRED.
IT IS CONFIRMED THAT 2 ACCESSIBLE SPACES ARE CURRENTLY PROVIDED.

STAFF & VISITOR PARKING LOT:

39 TOTAL PARKING SPACES
PER 11B-208.2, 1 ACCESSIBLE SPACES ARE REQUIRED.
IT IS CONFIRMED THAT 2 ACCESSIBLE SPACES, INCLUDING 1 VAN ACCESSIBLE SPACE IS CURRENTLY PROVIDED.

VISITOR PARKING LOT:

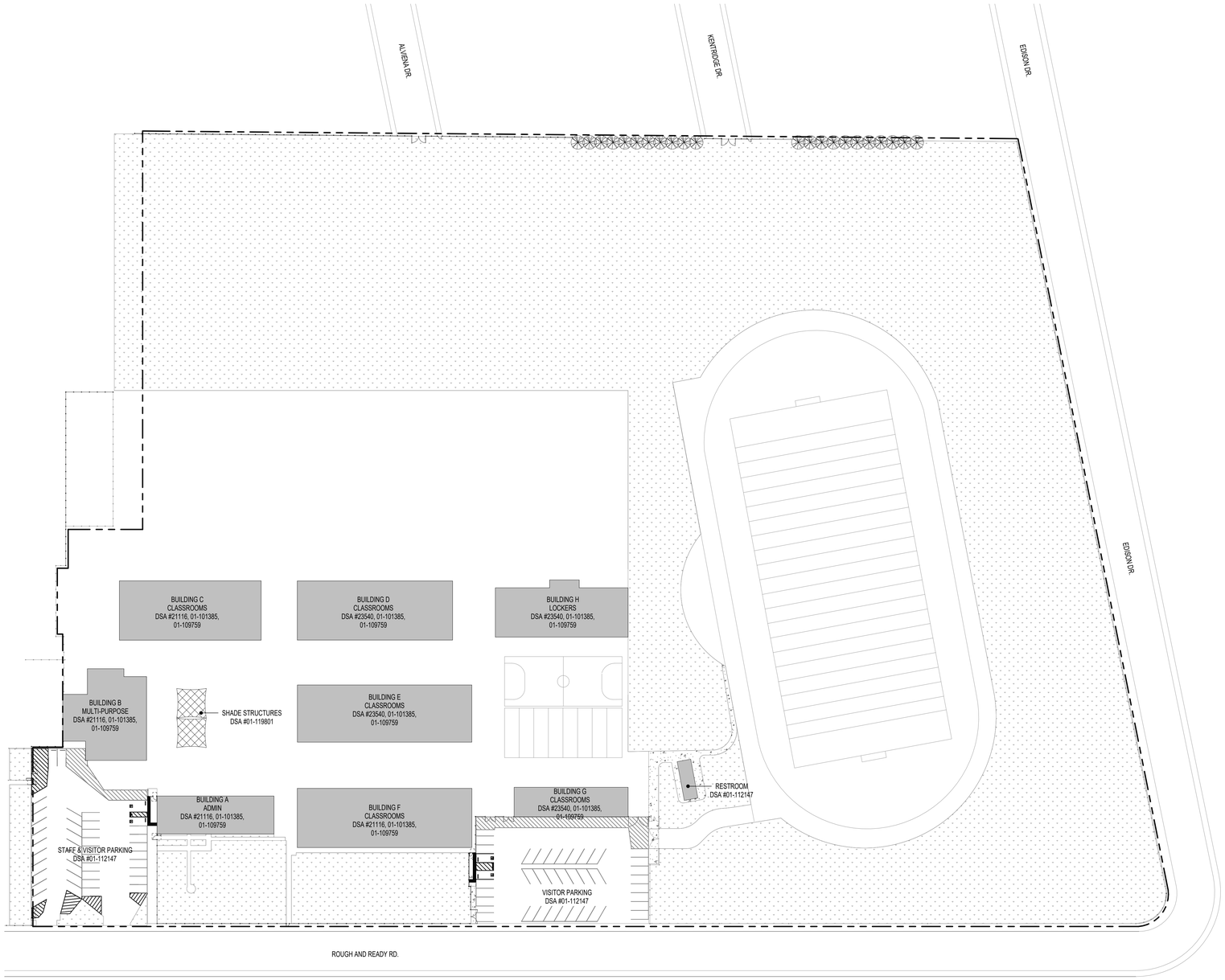
37 TOTAL PARKING SPACES
PER 11B-208.2, 2 ACCESSIBLE SPACES ARE REQUIRED.
IT IS CONFIRMED THAT 2 ACCESSIBLE SPACES ARE CURRENTLY PROVIDED.

SITE LEGEND

- PROPERTY LINE
- BUILDING FOOTPRINT
- EXISTING BUILDING (NOT IN SCOPE)
- EXISTING LANDSCAPE / PLANTING AREA
- EXISTING CONCRETE PAVING
- NEW CONCRETE PAVING SEE DETAILS 10/A1.01 ,11/A1.01 ,12/A1.01 13/A1.01 , 14/A1.01

ACCESSIBILITY LEGEND

- PROPERTY LINE
- EXISTING LANDSCAPE / PLANTING AREA
- EXISTING CONCRETE PAVING
- NEW CONCRETE PAVING
- NEW AC PAVING
- EXISTING BUILDING (NOT IN SCOPE)



1 ACCESSIBILITY SITE PLAN
1" = 50'-0"

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No. C-30095
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CONSULTANT

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FACILITY INFO
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480 ROUGH & READY RD., SAN JOSE, CA. 95133

KEY PLAN

PROJECT NORTH

PROJECT ISSUE DATE: YYYY/MM/DD

DATE	NO.	REVISIONS

DRAFTER: Author REVIEWER: XX
PM: XX DSK JOB NO: 24000

SHEET TITLE
ACCESSIBILITY SITE PLAN

SHEET NUMBER
A0.02

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OCCUPANCY LOAD

TOTAL = 1,889

MINIMUM NUMBER OF EXITS OR ACCESS TO EXITS PER STORY (TABLE 1006.3.3)

4 EXITS REQUIRED

4 EXITS PROVIDED

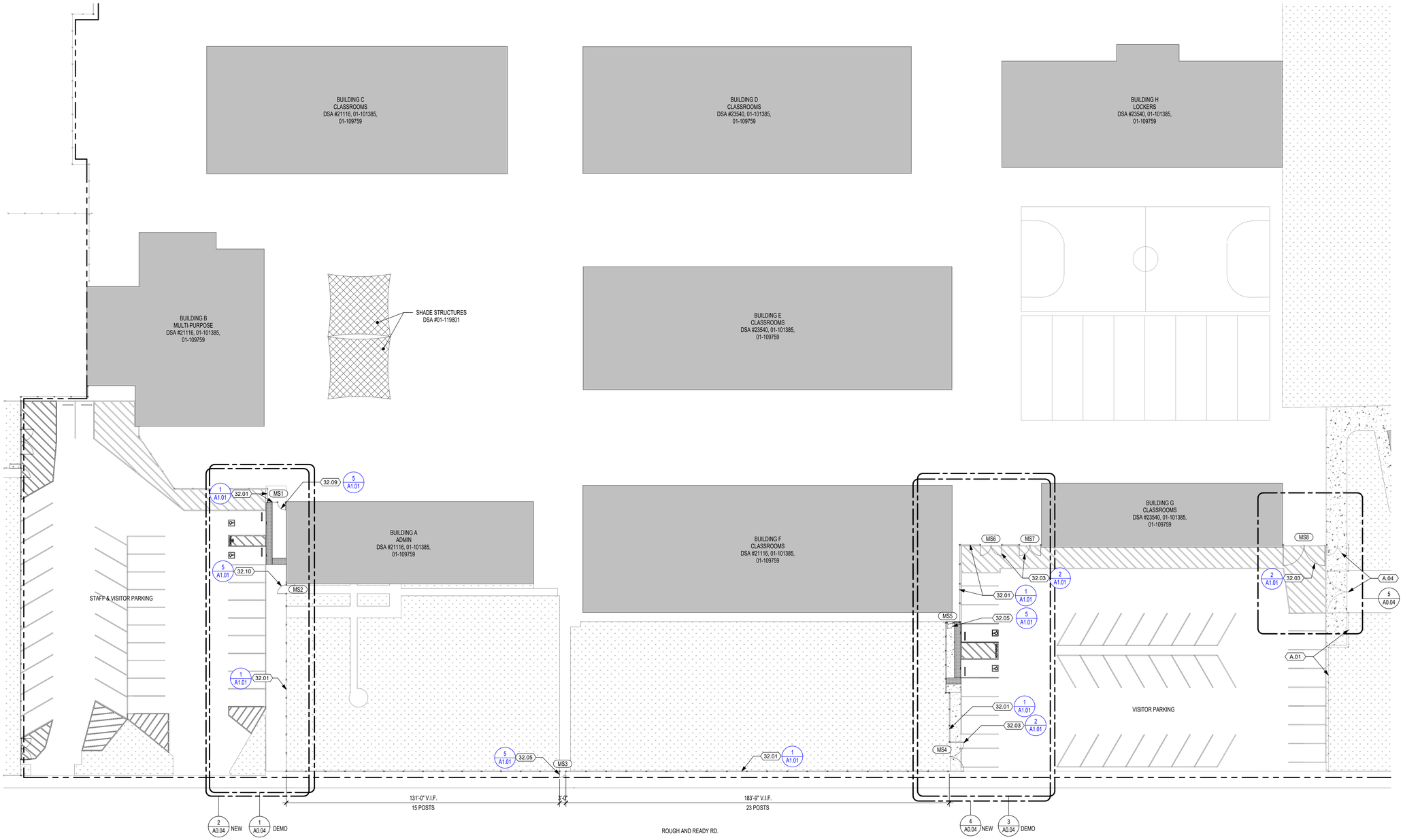
SITE LEGEND

- PROPERTY LINE
- BUILDING FOOTPRINT
- EXISTING BUILDING (NOT IN SCOPE)
- EXISTING LANDSCAPE / PLANTING AREA
- EXISTING CONCRETE PAVING
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KEYNOTE LEGEND

32.01	6'-0" HIGH CHAIN LINK FENCE
32.03	6'-0" HIGH CHAIN LINK DOUBLE VEHICULAR GATES
32.05	3'-0" WIDE X 6'-0" HIGH CHAIN LINK ACCESSIBLE GATE
32.09	3'-10" WIDE X 6'-0" HIGH CHAIN LINK ACCESSIBLE GATE
32.10	4'-3" WIDE X 6'-0" HIGH CHAIN LINK ACCESSIBLE GATE
A.01	EXISTING CHAIN LINK FENCE
A.04	EXISTING DOUBLE GATES

NOTES:
1. FOR GATE SCHEDULE SEE SHEET A2.21



1 SITE PLAN
1" = 20'-0"

TRUE N

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KEY PLAN

PROJECT NORTH

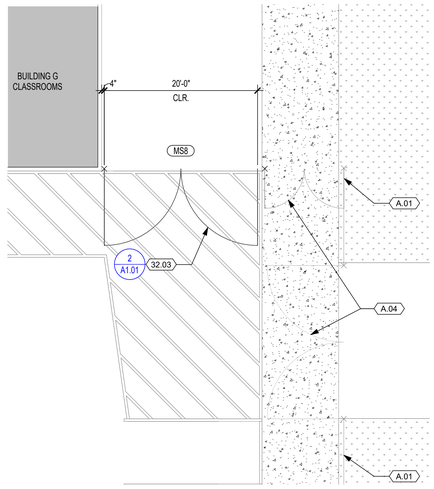
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PM: XX
DSK JOB NO: 24000

SHEET TITLE
SITE PLAN

SHEET NUMBER
A0.03



5 ENLARGED SITE PLAN AT VISITOR PARKING EAST
1/8" = 1'-0"

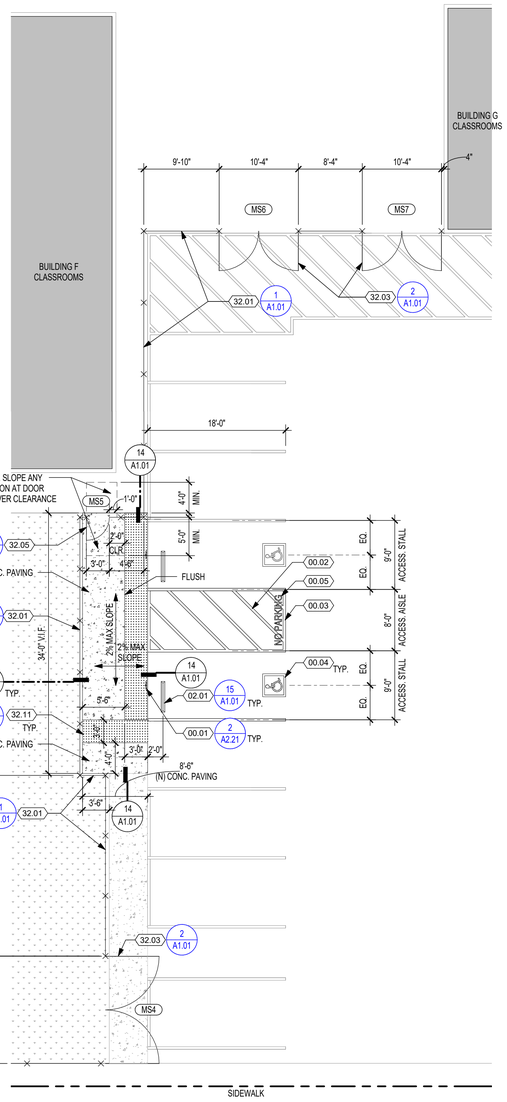
SITE LEGEND

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- BUILDING FOOTPRINT
- EXISTING BUILDING (NOT IN SCOPE)
- EXISTING LANDSCAPE / PLANTING AREA
- EXISTING CONCRETE PAVING
- NEW CONCRETE PAVING SEE DETAILS 10/A1.01 ,11/A1.01 ,12/A1.01 13/A1.01 , 14/A1.01

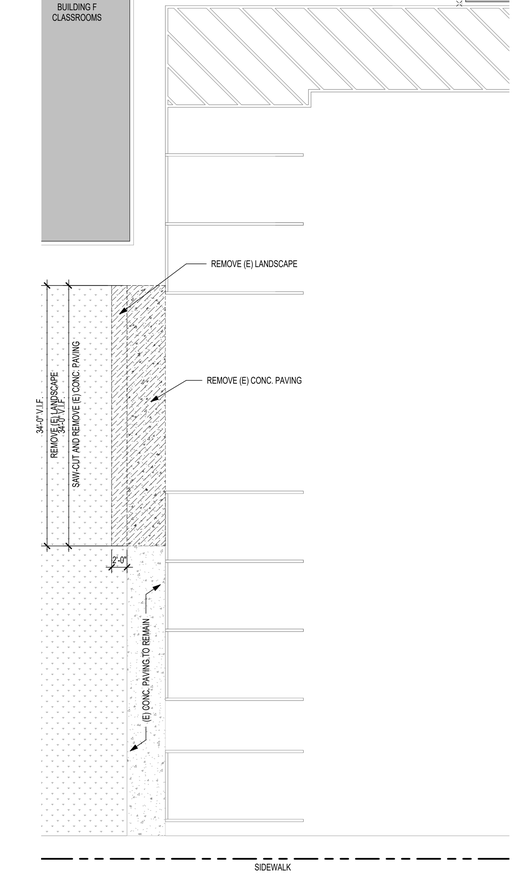
KEYNOTE LEGEND

00.01	PARKING IDENTIFICATION SIGNAGE - ACCESSIBLE PARKING SPACE
00.02	4" THICK WHITE PAINTED STRIPES AT 3'-0" O.C. - FEDERAL STD COLOR - 37925
00.03	4" THICK BLUE PAINTED BORDERS AROUND ACCESS AISLE - PAINT 15090 FEDERAL STD. 595B
00.04	36"x36" SYMBOL OF ACCESSIBILITY. BLUE - 15090 FEDERAL STD. 595B, WHITE - FEDERAL STD COLOR - 37925
00.05	WHITE LETTERING "NO PARKING" 12" MIN. HEIGHT
02.01	WHEELSTOP
32.01	6'-0" HIGH CHAIN LINK FENCE
32.03	6'-0" HIGH CHAIN LINK DOUBLE VEHICULAR GATES
32.05	3'-0" WIDE X 6'-0" HIGH CHAIN LINK ACCESSIBLE GATE
32.09	3'-10" WIDE X 6'-0" HIGH CHAIN LINK ACCESSIBLE GATE
32.10	4'-3" WIDE X 6'-0" HIGH CHAIN LINK ACCESSIBLE GATE
32.11	TACTILE DOMES
A.01	EXISTING CHAIN LINK FENCE
A.04	EXISTING DOUBLE GATES

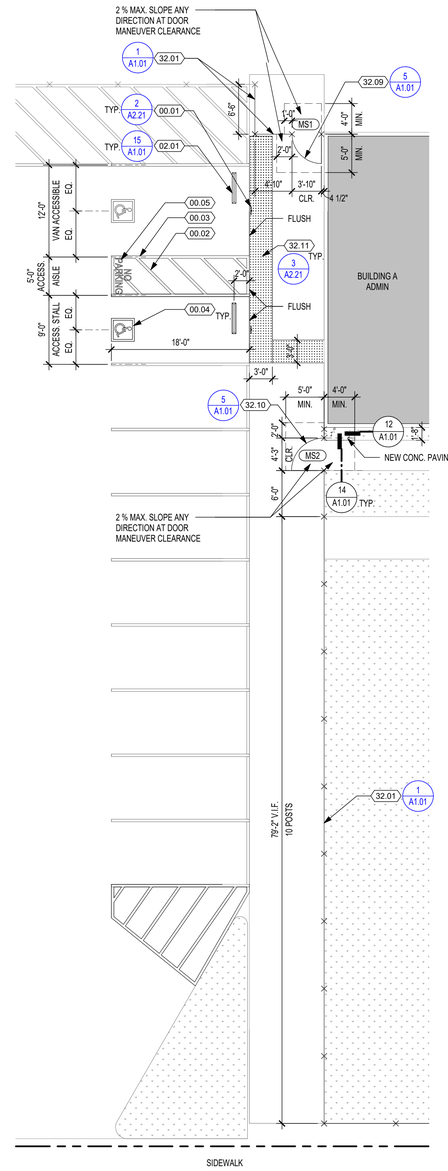
NOTES:
1. FOR GATE SCHEDULE SEE SHEET A2.21
2. ALL DIMENSIONS OF DEMO CONCRETE PAVING TO BE VERIFIED IN FIELD.
3. PROTECT (E) CURB AND (E) FOOTING DURING DEMOLITION OF CONCRETE SLAB.



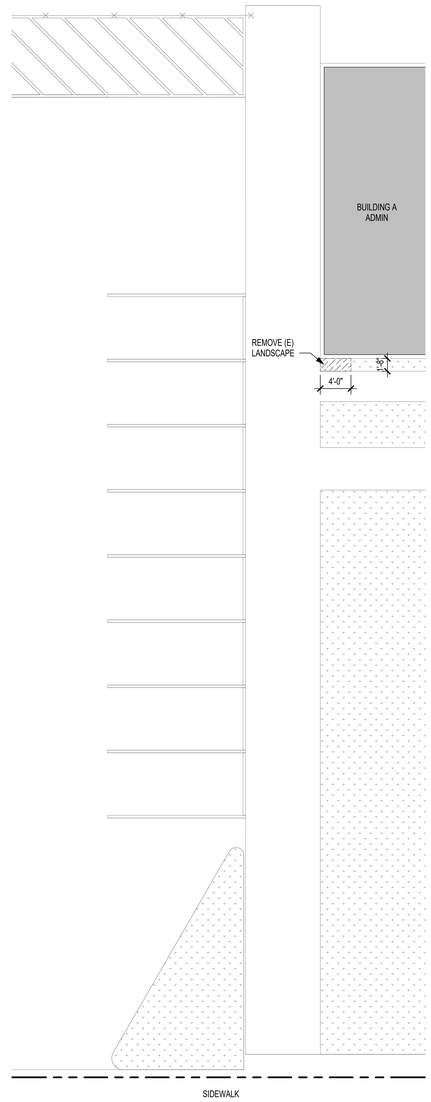
4 ENLARGED SITE PLAN AT VISITOR PARKING WEST
1/8" = 1'-0"



3 ENLARGED DEMO SITE PLAN AT VISITOR PARKING WEST
1/8" = 1'-0"



2 ENLARGED SITE PLAN AT STAFF & VISITOR PARKING
1/8" = 1'-0"



1 ENLARGED DEMO SITE PLAN AT STAFF & VISITOR PARKING
1/8" = 1'-0"

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APP: 01-121931 INC:
REVIEWED FOR
SS ☐ FLS ☑ ACS ☑
DATE: 8/14/2024

DSA APPLICATION NO: 01-121931

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LICENSED ARCHITECT
AMIR M. KAKAVAND
No. C-30095
Exp. 08-31-25
STATE OF CALIFORNIA

CONSULTANT

PROJECT NAME
WILLIAM SHEPPARD MS FENCING PROJECT

FACILITY INFO
WILLIAM SHEPPARD MIDDLE SCHOOL
480 ROUGH & READY RD., SAN JOSE, CA. 95133

KEY PLAN

PROJECT NORTH

PROJECT ISSUE DATE: YYYY/MM/DD

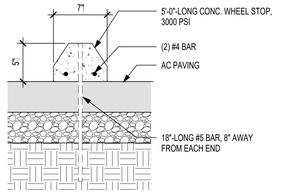
DATE	NO.	REVISIONS

DRAFTER: Author REVIEWER: XX
PM: XX DSK JOB NO: 24000

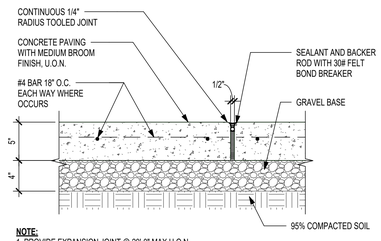
SHEET TITLE
ENLARGED SITE PLANS

SHEET NUMBER
A0.04

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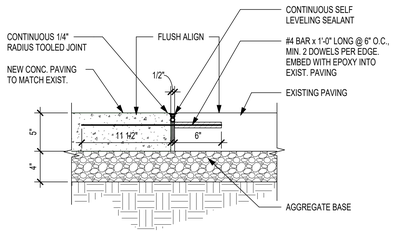


15 WHEEL STOP DETAIL
1 1/2" = 1'-0"

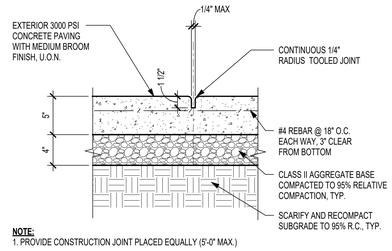


NOTE:
1. PROVIDE EXPANSION JOINT @ 20'-0" MAX U.O.N

11 CONCRETE PAVING EXPANSION JOINT DETAIL
1 1/2" = 1'-0"



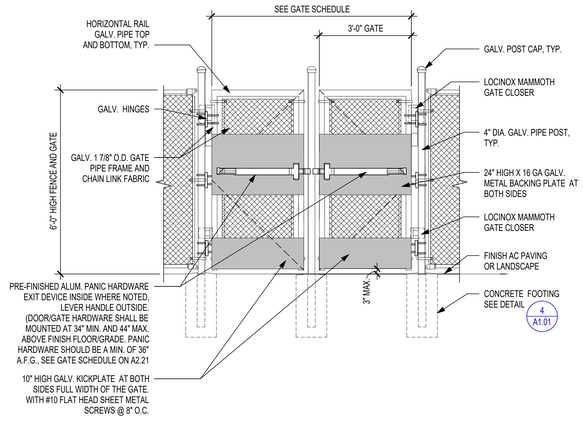
14 CONCRETE PAVING TO (E) CONCRETE PAVING DETAIL
1 1/2" = 1'-0"



NOTE:
1. PROVIDE CONSTRUCTION JOINT PLACED EQUALLY (5'-0" MAX.)

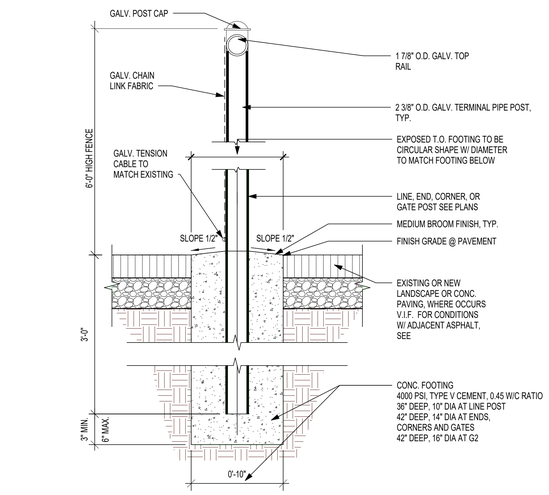
10 CONCRETE PAVING AND CONTROL JOINT DETAIL
1 1/2" = 1'-0"

PANIC HARDWARE NOTES:
- THE CROSS BAR SHALL EXTEND ACROSS NOT LESS THAN ONE-HALF THE WIDTH OF THE DOOR / GATE.
- THE ENDS OF THE CROSS BAR SHALL BE CURVED, GUARDED OR OTHERWISE DESIGNED TO PREVENT CATCHING ON THE CLOTHING OF PERSONS DURING EGRESS

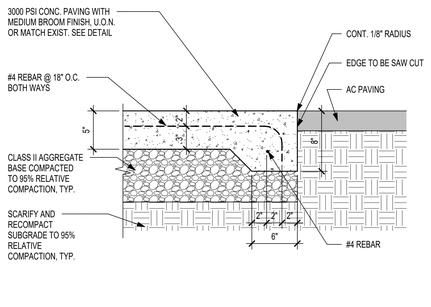


NOTE:
GATE SHALL OPERATE WITH 5 POUNDS MAX. OPENING FORCE.

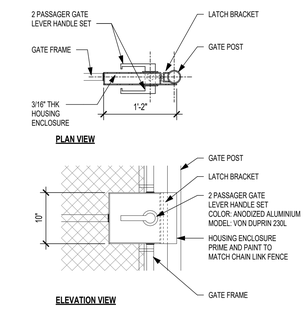
7 CHAIN LINK ACCESSIBLE DOUBLE GATE - G4
1/2" = 1'-0"



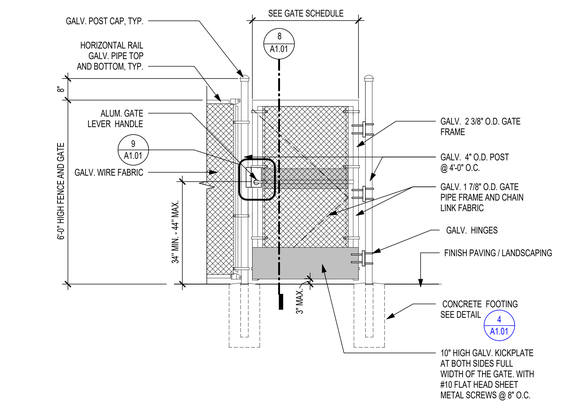
4 TYPICAL FENCE & GATE POST FOOTING DETAIL @ CONCRETE OR LANDSCAPING
1 1/2" = 1'-0"



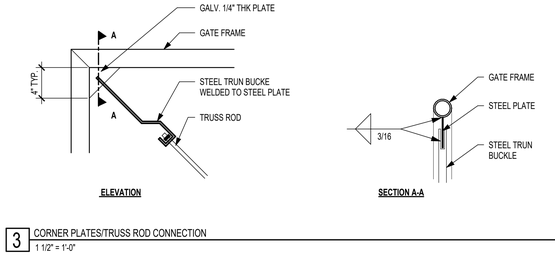
13 CONCRETE PAVING / (E) AC PAVING TRANSITION DETAIL
1 1/2" = 1'-0"



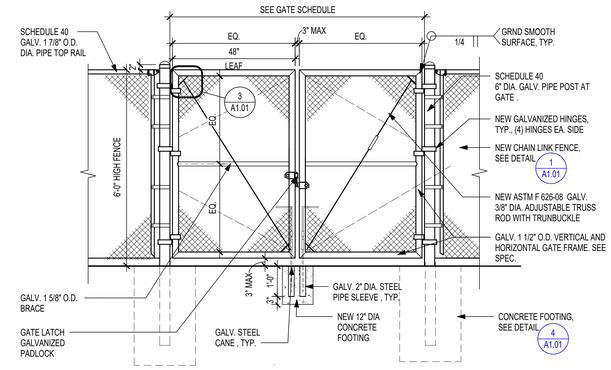
9 LEVER HANDLE DETAIL @ CHAIN LINK GATE
1" = 1'-0"



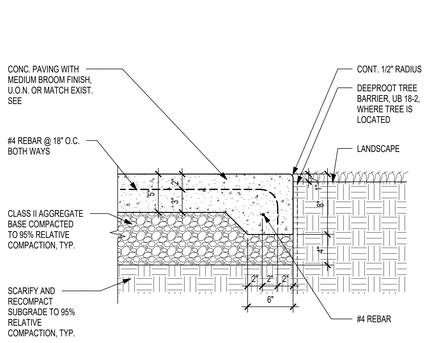
6 CHAIN LINK PEDESTRIAN SINGLE GATE - MS9, MS11
1/2" = 1'-0"



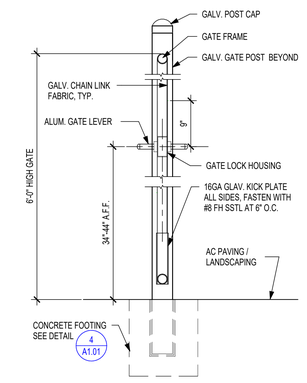
3 CORNER PLATES/TRUSS ROD CONNECTION
1 1/2" = 1'-0"



2 CHAIN LINK DOUBLE GATE - MS4, MS6, MS7, MS8, MS10, MS12
1/2" = 1'-0"

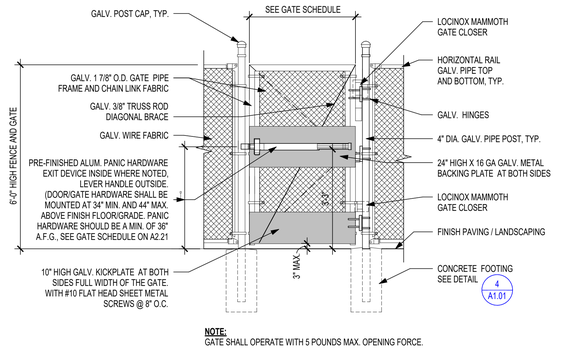


12 CONCRETE PAVING / LANDSCAPE TRANSITION DETAIL
1 1/2" = 1'-0"



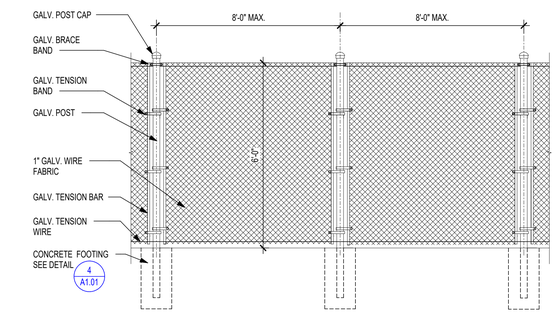
8 GATE HEAD/SILL FRAME DETAIL
1" = 1'-0"

PANIC HARDWARE NOTES:
- THE CROSS BAR SHALL EXTEND ACROSS NOT LESS THAN ONE-HALF THE WIDTH OF THE DOOR/ GATE.
- THE ENDS OF THE CROSS BAR SHALL BE CURVED, GUARDED OR OTHERWISE DESIGNED TO PREVENT CATCHING ON THE CLOTHING OF PERSONS DURING EGRESS



NOTE:
GATE SHALL OPERATE WITH 5 POUNDS MAX. OPENING FORCE.

5 CHAIN LINK ACCESSIBLE SINGLE GATE - MS1, MS2, MS3, MS5
1/2" = 1'-0"



1 CHAIN LINK FENCE ELEVATION (TYPICAL)
1/2" = 1'-0"

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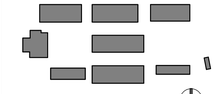
LICENSED ARCHITECT AMIR M. KAKAVAND No. C-30095 Exp. 08-31-25 STATE OF CALIFORNIA

CONSULTANT

PROJECT NAME
WILLIAM SHEPPARD MS FENCING PROJECT

FACILITY INFO
WILLIAM SHEPPARD MIDDLE SCHOOL
480 ROUGH & READY RD., SAN JOSE, CA. 95133

KEY PLAN



PROJECT NORTH

PROJECT ISSUE DATE: YYYY/MM/DD

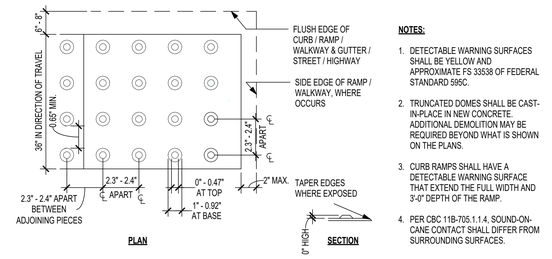
DATE	NO.	REVISIONS

DRAFTER: Author
REVIEWER: XX
PM: XX
DSK JOB NO: 24000

SHEET TITLE
SITE DETAILS

SHEET NUMBER
A1.01

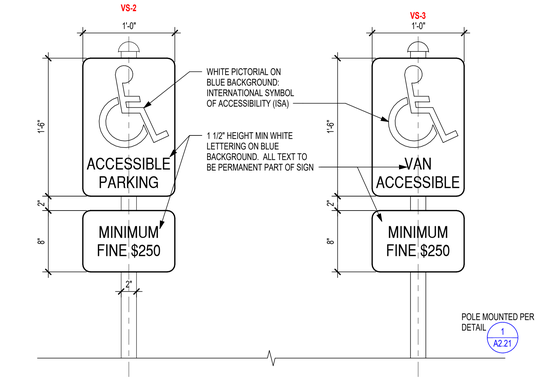
GATE SCHEDULE					
NO.	NAME	WIDTH	HEIGHT	PANIC HARDWARE	HARDWARE GROUP #
MS1	ACCESSIBLE GATE (SINGLE GATE)	3'-10"	6'-0"	YES	01
MS2	ACCESSIBLE GATE (SINGLE GATE)	4'-3"	6'-0"	YES	01
MS3	ACCESSIBLE GATE (SINGLE GATE)	3'-0"	6'-0"	YES	01
MS4	VEHICLE ACCESS GATE (DOUBLE GATE)	14'-0"	6'-0"	NO	04
MS5	ACCESSIBLE GATE (SINGLE GATE)	3'-0"	6'-0"	YES	01
MS6	VEHICLE ACCESS GATE (DOUBLE GATE)	10'-4"	6'-0"	NO	04
MS7	VEHICLE ACCESS GATE (DOUBLE GATE)	10'-4"	6'-0"	NO	04
MS8	VEHICLE ACCESS GATE (DOUBLE GATE)	20'-0"	6'-0"	NO	04
MS9	PEDESTRIAN GATE (SINGLE GATE)	3'-0"	6'-0"	NO	02
MS10	VEHICLE ACCESS GATE (DOUBLE GATE)	14'-0"	6'-0"	NO	04
MS11	PEDESTRIAN GATE (SINGLE GATE)	3'-0"	6'-0"	NO	02
MS12	VEHICLE ACCESS GATE (DOUBLE GATE)	14'-0"	6'-0"	NO	04



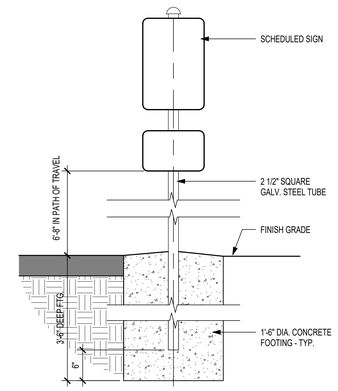
NOTES:

1. DETECTABLE WARNING SURFACES SHALL BE YELLOW AND APPROXIMATE FS 33538 OF FEDERAL STANDARD 595C.
2. TRUNCATED DOMES SHALL BE CAST-IN-PLACE IN NEW CONCRETE. ADDITIONAL DEMOLITION MAY BE REQUIRED BEYOND WHAT IS SHOWN ON THE PLANS.
3. CURB RAMPS SHALL HAVE A DETECTABLE WARNING SURFACE THAT EXTEND THE FULL WIDTH AND 3'-0" DEPTH OF THE RAMP.
4. PER CBC 11B-705.1.1.4, SOUND-ON-CANE CONTACT SHALL DIFFER FROM SURROUNDING SURFACES.

3 DETECTABLE WARNING SURFACE DETAIL
3" = 1'-0"



2 VEHICULAR SIGN TYPE AND SIZE
1 1/2" = 1'-0"



1 SIGNAGE MOUNTING POLE
1" = 1'-0"

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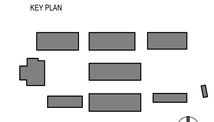
CONSULTANT

PROJECT NAME
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FACILITY INFO

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KEY PLAN



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REVIEWER: XX
PM: XX
DSK JOB NO: 24000

SHEET TITLE
SIGNAGE DETAILS, SITE DETAIL & GATE SCHEDULE

SHEET NUMBER
A2.21

DIVISION 0
GENERAL

SECTION 00001

PROJECT TITLE & SIGNATURES

PROJECT MANUAL
ALUM ROCK UNION SCHOOL DISTRICT
WILLIAM SHEPPARD MS FENCING PROJECT
480 ROUGH AND READY RD.,
SAN JOSE, CA 95133

DATE: August 7, 2024

OWNER: Alum Rock Union School District
2930 Gay Avenue
San Jose, CA 95127

DSA FILE #: 43-4
DSA PTN #:
DSA APP #: 01-121931

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REVIEWED FOR
SS ☐ FLS ☑ ACS ☑
DATE: 8/14/2024

ARCHITECT
dsk Architects
1901 Harrison St., Ste 1320
Oakland, CA 94612
(510) 686-6595



By: Amir Kakavand C-30095

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00 00 10	TABLE OF CONTENTS
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DIVISION 02 - EXISTING CONDITIONS	
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DIVISION 1
GENERAL REQUIREMENT

SECTION 01 05 20

CONSTRUCTION FACILITIES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes requirements for temporary facilities and controls, including temporary utilities, support facilities, and security and protection facilities.

B. Temporary utilities include, but are not limited to, the following:

1. Sewers and drainage.
2. Water service and distribution.
3. Sanitary facilities, including toilets, wash facilities, and drinking-water facilities.
4. Heating and cooling facilities.
5. Ventilation.
6. Electric power service.
7. Lighting.
8. Telephone service.
9. DSL service.

C. Support facilities include, but are not limited to, the following:

1. Temporary roads and paving.
2. Dewatering facilities and drains.
3. Project identification and temporary signs.
4. Waste disposal facilities.
5. Storage and fabrication sheds.
6. Lifts and hoists.
7. Temporary elevator usage.
8. Temporary stairs.
9. Construction aids and miscellaneous services and facilities.

D. Security and protection facilities include, but are not limited to, the following:

1. Environmental protection.
2. Stormwater control.
3. Tree and plant protection.
4. Pest control.

5. Site enclosure fence.
6. Security enclosure and lockup.
7. Barricades, warning signs, and lights.
8. Covered walkways.
9. Temporary enclosures.
10. Temporary partitions.
11. Fire protection.

1.3 DEFINITIONS

A. Permanent Enclosure: As determined by District, permanent or temporary roofing is complete, insulated, and weathertight; exterior walls are insulated and weathertight; and all openings are closed with permanent construction or substantial temporary closures.

1.4 USE CHARGES

A. General: Where cost or use charges for temporary facilities are not chargeable to District or Architect they shall be included in the Contract Sum. Allow other entities to use temporary services and facilities without cost, including, but not limited to, the following:

1. District's construction forces.
2. Architect.
3. Testing agencies.
4. Personnel of authorities having jurisdiction.

B. Sewer Service: Use Owner’s existing sewer service use without metering and without payment of use charges.

C. Water Service: Use water from District's existing water system without metering and without payment of use charges.

D. Electric Power Service: In existing structures use electric power from District's existing system without metering and without payment of use charges unless otherwise noted. All new structures under construction and temporary facilities (including but not limited to all field offices and temporary construction facilities) the contractor shall engage the appropriate local utility company to install temporary service. Pay electrical service use charges for all new structures under construction and temporary facilities.

E. Telephone and DSL Service: Pay telephone and DSL service use and maintenance charges for telephones and DSL used by all entities engaged in construction activities at Project site.

1.5 QUALITY ASSURANCE

A. Standards: Comply with ANSI A10.6, NECA's "Temporary Electrical Facilities," and NFPA 241.

3. Obtain easements to bring temporary utilities to Project site where District's easements cannot be used for that purpose.

B. Sewers and Drainage: If sewers are available, provide temporary connections to remove effluent that can be discharged lawfully. If sewers are not available or cannot be used, provide drainage ditches, dry wells, stabilization ponds, and similar facilities. If neither sewers nor drainage facilities can be lawfully used for discharge of effluent, provide containers to remove and dispose of effluent off-site in a lawful manner.

1. Filter out excessive soil, construction debris, chemicals, oils, and similar contaminants that might clog sewers or pollute waterways before discharge.

2. Connect temporary sewers to municipal system as directed by sewer department officials.

3. Maintain temporary sewers and drainage facilities in a clean, sanitary condition. After heavy use, restore normal conditions promptly.

C. Water Service: Use of District's existing water service facilities will be permitted, as long as facilities are cleaned and maintained in a condition acceptable to District. At Substantial Completion, restore these facilities to condition existing before initial use.

1. The Contractor shall be responsible for undue wasting of water used on the Work.

2. Contractor to furnish hoses and temporary piping placed where water connections are available.

3. Provide adequate fire protection for the duration of work in accordance with local codes, ordinances and the State Fire Marshal.

   a. The Contractor shall take necessary precaution to guard against and eliminate possible fire hazards and to prevent damage to construction work, building materials, equipment, and public property. The Contractor shall be responsible for providing, maintaining and enforcing fire protection methods

4. Where installations below an outlet might be damaged by spillage or leakage, provide a drip pan of suitable size to minimize water damage. Drain accumulated water promptly from pans.

D. Sanitary Facilities: Provide temporary toilets, wash facilities, and drinking-water fixtures. Comply with regulations and health codes for type, number, location, operation, and maintenance of fixtures and facilities.

1. Disposable Supplies: Provide toilet tissue, paper towels, paper cups, and similar disposable materials for each facility. Maintain adequate supply. Provide covered waste containers for disposal of used material.

2. Toilets: Install self-contained toilet units. Shield toilets to ensure privacy.

3. Wash Facilities: Install wash facilities supplied with potable water at convenient locations for personnel who handle materials that require wash up. Dispose of drainage properly. Supply cleaning compounds appropriate for each type of material handled.

4. Drinking-Water Facilities: Provide bottled-water, drinking-water units and paper cup supply.

E. Heating and Cooling: Provide temporary heating and cooling required by construction activities for curing or drying of completed installations or for protecting installed construction from adverse effects of low temperatures or high humidity. Select equipment from that specified that will not have a harmful effect on completed installations or elements being installed.

F. Ventilation and Humidity Control: Provide temporary ventilation required by construction activities for curing or drying of completed installations or for protecting installed construction from adverse effects of high humidity. Select equipment from that specified that will not have a harmful effect on completed installations or elements being installed. Coordinate ventilation requirements to produce ambient condition required and minimize energy consumption.

1. Unless the District Project Manager authorizes an alternate procedure in writing, in advance of the start of construction; continuously ventilate all construction work areas and spaces with 100% outdoor (fresh) air for at least 30 days prior to substantial completion of work. In areas, which make use of natural ventilation such as windows, install temporary fans sufficient to provide no less than three air changes per hour. In all cases make sure that air is exhausted from construction work areas directly to the outdoors; do not re-circulate air or ventilate to other enclosed areas either within the occupied school or the construction area itself. Continuously operate ventilation systems and/or temporary fans 24 hours per day, 7 days per week, providing all measures necessary to allow the operation of ventilation systems and fans while maintaining the security of the site.

    a. When volatile organic compound, and/or odor generating activities are performed during the 30-day ventilation period provide temporary exhaust ventilation to capture emissions and exhaust them directly to the outdoors. Extend the building flush out for a minimum of four days after the completion of any such activities.

    b. During ventilation, make necessary provisions to temper supply air or heat spaces sufficiently to prevent condensation, water damage, and/or mold growth. Do not attempt to speed the off gassing of materials and/or curing of finishes by increasing room temperatures above normal levels (“baking” the building and/or components)

c. Additional Conditioning at Move-In: Continue to operate ventilation systems at 100% fresh air during occupant move-in and unpacking. Do not perform final balancing of the ventilation system until two weeks after the move-in.

G. Electric Power Service: Provide weatherproof, grounded electric power service and distribution system of sufficient size, capacity, and power characteristics during construction period. Include meters, transformers, overload-protected disconnecting means, automatic ground-fault interrupters, and main distribution switchgear.

1. Install power distribution wiring overhead and rise vertically where least exposed to damage.

H. Electric Power Service: Where approved by the District, use of District's existing electric power service will be permitted, as long as equipment is maintained in a condition acceptable to District.

I. Electric Distribution: Provide receptacle outlets adequate for connection of power tools and equipment.

1. Provide waterproof connectors to connect separate lengths of electrical power cords if single lengths will not reach areas where construction activities are in progress. Do not exceed safe length-voltage ratio.

J. Lighting: Provide temporary lighting, as required, with local switching that provides adequate illumination for construction operations and traffic conditions.
1. Contractor prohibited from using existing theatrical lighting in auditorium and/or multipurpose room. See Section 00800, 1.17.

K. Temporary Roads and Paved Areas: Construct and maintain temporary roads and paved areas adequate to support loads and to withstand exposure to traffic during construction period. Locate temporary roads and paved areas, if required, as indicated on Drawings.

1. Provide a reasonably level, graded, well-drained subgrade of satisfactory soil material, compacted to not less than 95 percent of maximum dry density in the top 6 inches.

2. Provide gravel paving course of subbase material not less than 6 inches thick; roller compacted to a level, smooth, dense surface.

3. Provide dust-control treatment that is nonpolluting and non-tracking. Reapply treatment as required to minimize dust.

4. Extend temporary roads and paved areas, within construction limits indicated, as necessary for construction operations.

5. Coordinate elevations of temporary roads and paved areas with permanent roads and paved areas.

6. Prepare subgrade and install subbase and base for temporary roads and paved areas according to Division 2 Section "Earthwork."

7. Recondition base after temporary use, including removing contaminated material, regrading, proof rolling, compacting, and testing.

8. Delay installation of final course of permanent hot-mix asphalt pavement until immediately before Substantial Completion. Repair hot-mix asphalt base-course pavement before installation of final course according to Division 2 Section "Hot-Mix Asphalt Paving."

L. Traffic Controls: Provide temporary traffic controls at junction of temporary roads with public roads. Include warning signs for public traffic and "STOP" signs for entrance onto public roads. Comply with requirements of authorities having jurisdiction.

M. Dewatering Facilities and Drains: Comply with requirements in applicable Division 2 Sections for temporary drainage and dewatering facilities and operations not directly associated with construction activities included in individual Sections. Where feasible, use same facilities. Maintain Project site, excavations, and construction free of water.

1. Dispose of rainwater in a lawful manner that will not result in flooding Project or adjoining property nor endanger permanent Work or temporary facilities.
2. Before connection and operation of permanent drainage piping system, provide temporary drainage where roofing or similar waterproof deck construction is completed.

N. Project Identification and Temporary Signs: Prepare a minimum of two (2) Project identification signs not less than 32 square feet in area. Install signs in locations approved by the District to inform public and persons seeking entrance to Project. Do not permit installation of unauthorized signs. Provide safety/restricted access signs at fencing perimeter every 20 feet.

1. Engage an experienced sign painter to apply graphics for Project identification signs. Comply with details indicated. District to provide project information to be included on signage.

2. Prepare temporary signs to provide directional information to construction personnel and visitors.

3. Construct signs of exterior-type Grade B-B high-density concrete form overlay plywood. Support on posts or framing of preservative-treated wood or steel. Do not install signage on any fencing – temporary or permanent.

4. Paint sign panel and applied graphics with exterior-grade alkyd gloss enamel over exterior primer.

O. Waste Disposal Facilities: Provide waste-collection containers in sizes adequate to handle waste from construction operations. Containerize and clearly label hazardous, dangerous, or unsanitary waste materials separately from other waste. Comply with Division 1 Section "Execution Requirements" for progress cleaning requirements.

1. If required by authorities having jurisdiction, provide separate containers, clearly labeled, for each type of waste material to be deposited.

2. Develop a waste management plan for Work performed on Project. Indicate types of waste materials Project will produce and estimate quantities of each type. Provide detailed information for on-site waste storage and separation of recyclable materials. Provide information on destination of each type of waste material and means to be used to dispose of all waste materials.

P. Professional Cleaning Services: Provide professional cleaning services on a weekly basis for temporary offices, first-aid stations, toilets, and similar areas.

Q. Storage and Fabrication Sheds: Provide sheds sized, furnished, and equipped to accommodate materials and equipment involved, including temporary utility services. Sheds may be open shelters or fully enclosed spaces within building or elsewhere on-site.

R. Existing Elevator Usage: Use of District's existing elevators may be permitted with prior District approval. Elevator operation and condition shall be documented by contractor and reviewed by District prior to first use. Elevators shall be cleaned and maintained in a condition acceptable to District. At Substantial Completion, restore elevators to condition existing before initial use, including replacing worn cables, guide shoes, and similar items of limited life. Contractor usage of elevator shall not interfere with normal operation of school operations and/or activities.

1. Provide protective coverings, barriers, devices, signs, or other procedures to protect elevator car and entrance doors and frame. If, despite such protection, elevators become damaged, engage elevator Installer to restore damaged work so no evidence remains of correction work. Return items that cannot be refinished in field to the shop, make required repairs and refinish entire unit, or provide new units as required.

2. Any damage to elevator is required to be repaired within 24 hours.

S. Existing Stair Usage: Use of District's existing stairs will be permitted, as long as stairs are cleaned and maintained in a condition acceptable to District. At Substantial Completion, restore stairs to condition existing before initial use.

1. Provide protective coverings, barriers, devices, signs, or other procedures to protect stairs and to maintain means of egress. If, despite such protection, stairs become damaged, restore damaged areas so no evidence remains of correction work.

3.3 SECURITY AND PROTECTION FACILITIES INSTALLATION

A. District Occupied Areas. The Contractor, at the Contractor's expense, shall separate the construction area from District occupied areas using physical barrier and/or temporal isolation methods that protect the occupied areas from dust, odors, noise, visual distractions or any other source of disruption of educational operations in adjacent or nearby areas. Prior to any demolition work starting, the Contractor is to submit a plan for meeting these requirements to the District for approval. Plan shall include the locations of all physical barriers and the differential air pressure units as required in Paragraph I. "Temporary Partitions".

1. The contractor shall submit a detailed plan for meeting these requirements to the District for approval. The Contractor shall identify the person responsible for implementing, monitoring and enforcing the requirements set forth in the Contractor's plan and the Contract Documents. The plan shall include the following:
   a. A set of drawings showing the locations of temporary partitions to be used to separate construction areas from occupied areas, the path of travel to and from construction areas, emergency exits, locations of fire extinguishers, etc for each phase of work.
   b. Procedures for controlling dust, fumes, and odors in construction areas.
   c. Procedures for preventing dust, fumes, and odors from migrating into occupied areas of the building.
   d. Procedures for responding to a spill outside the construction area.
   e. Method of communicating plan requirements to all subcontractors.

2. If lead-based paint (LBP) will be disturbed as part of the renovation as defined by 40 CFR Part 745 the Contractor's containment plan and notifications shall meet the minimum requirements of this regulation and be prepared by an EPA "Certified Renovator".

B. Environmental Protection: Provide protection, operate temporary facilities, and conduct construction in ways and by methods that comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects. Avoid using tools and equipment that produce harmful noise. Restrict use of noisemaking tools and equipment to hours that will minimize complaints from persons or firms near Project site. Contractor shall perform all work in compliance with all applicable rules, regulations, laws, and local ordinances including, without limitation, all noise and light limitations.

C. Storm Water Control: Provide earthen embankments and similar barriers in and around excavations and subgrade construction, sufficient to prevent flooding by runoff of storm water from heavy rains.

D. Tree and Plant Protection: Install temporary fencing located as indicated or outside the drip line of trees to protect vegetation from construction damage. Protect tree root systems from damage, flooding, and erosion.

E. Pest Control: Before deep foundation work has been completed, retain a local exterminator or pest-control company to recommend practices to minimize attraction and harboring of rodents, roaches, and other pests. Engage this pest-control service to perform extermination and control procedures at regular intervals so Project will be free of pests and their residues at Substantial Completion. Obtain two-year extended warranty for District. Perform control operations lawfully, using environmentally safe materials approved by the District.

F. Security Enclosure and Lockup: Install substantial temporary enclosure around partially completed areas of construction. Provide lockable entrances to prevent unauthorized entrance, vandalism, theft, and similar violations of security. The Contractor is required to secure all areas of work and set security alarms when leaving the site.

G. Barricades, Warning Signs, and Lights: Comply as required by local authorities and State safety ordinances, standards and code requirements for erecting structurally adequate barricades. Paint with appropriate colors, graphics, and warning signs to inform personnel and public of possible hazard. Where appropriate and needed, provide lighting, including flashing red or amber lights.

H. Temporary Enclosures: Provide temporary enclosures for protection of construction, in progress and completed, from exposure, foul weather, other construction operations, and similar activities. Provide temporary weathertight enclosure for building exterior.

1. Where heating or cooling is needed and permanent enclosure is not complete, provide insulated temporary enclosures. Coordinate enclosure with ventilating and material drying or curing requirements to avoid dangerous conditions and effects.

2. Vertical Openings: Close openings of 25 sq. ft. or less with plywood or similar materials.

3. Horizontal Openings: Close openings in floor or roof decks and horizontal surfaces with load-bearing, wood-framed construction.

4. Install tarpaulins securely using fire-retardant-treated wood framing and other materials.

I. Temporary Partitions: Erect and maintain effective dustproof partitions and temporary enclosures to prevent dust and dirt migration into occupied areas and to separate areas from fumes, odors and noise. Construction of temporary barriers shall take into consideration existing hazardous materials present in building finishes.

1. Construct dustproof partitions of not less than nominal 4-inch (100-mm) studs, 5/8-inch (16-mm) gypsum wallboard with joints taped on occupied side, and 1/2-inch (13-mm) fire-retardant plywood on construction side.

2. Insulate partitions to provide noise protection to occupied areas.

3. Seal joints and perimeter. Equip partitions with dustproof doors and security locks.

4. Protect air-handling equipment.

5. Weatherstrip openings.

6. Where the heating, ventilating, and/or air conditioning (HVAC) system and ducting is shared between the construction and occupied areas of a building, either isolate the areas by duct capping or conduct construction operations with ventilation shut down and sealed after hours or weekends.

7. The Contractor shall install differential air pressure units equipped with high efficiency particulate absolute (HEPA) air filtration systems within the Construction area(s). These units shall operate continuously during construction operations. A sufficient number of units shall be installed to create a lower air pressure in the Construction area(s) as compared to adjacent non-construction areas and achieve a minimum of 4 air changes per hour. All differential pressure units shall be DOP tested and certified on-site by an independent party prior to use. Differential units shall be exhausted to the outside of the building when ever possible. The Contractor shall be responsible for maintenance of the units including monitoring and changing filters as required. All differential air pressure units used in this manner shall be labeled “FOR CONSTRUCTION USE ONLY”.

8. The Contractor shall install additional differential air pressure units within the Construction Area for the sole purpose of “scrubbing” the air within the construction area as another method of dust control. These units shall be located at the primary source of dust generating construction work activities. The Contractor shall be responsible for maintenance of the units including monitoring and changing filters as required. All differential air pressure units used in this manner shall be labeled “FOR CONSTRUCTION USE ONLY”.

9. Where temporary barriers and physical isolation of the construction area is not feasible or practical, conduct the operations during off hours, weekends, or holidays employing such protective methods as are feasible and practical according to an approved plan. Employ a professional cleaning service to ensure all traces of dust and debris are cleaned up prior to next District business day.

J. Temporary Fire Protection: Until fire-protection needs are supplied by permanent facilities, install and maintain temporary fire-protection facilities of types needed to protect against reasonably predictable and controllable fire losses. Comply with NFPA 241.

1. Store combustible materials in containers in fire-safe locations.

2. Maintain unobstructed access to fire extinguishers, fire hydrants, temporary fire-protection facilities, stairways, and other access routes for firefighting. Prohibit smoking in hazardous fire-exposure areas.

3. Supervise welding operations, combustion-type temporary heating units, and similar sources of fire ignition.

4. Permanent Fire Protection: At earliest feasible date in each area of Project, complete installation of permanent fire-protection facility, including connected services, and place into operation and use. Instruct key personnel on use of facilities.

5. Develop and supervise an overall fire-prevention and first-aid fire-protection program for personnel at Project site. Review needs with local fire department and establish procedures to be followed. Instruct personnel in methods and procedures. Post warnings and information.

6. Provide hoses for fire protection of sufficient length to reach construction areas. Hang hoses with a warning sign stating that hoses are for fire-protection purposes only and are not to be removed. Match hose size with outlet size and equip with suitable nozzles.

K. District Occupied Areas. The Contractor shall protect furniture, equipment, supplies etc from dust within spaces where contractor is operating. See Section 01770, Article 3.2. The Contractor, at the Contractor's expense, shall separate the construction area from District occupied areas using physical barrier and/or temporary isolation methods that protect the occupied areas from dust, odors, noise, visual distractions or any other source of disruption of educational operations in adjacent or near by areas. The Contractor is to submit plan for meeting these requirements to the District for approval. Employ a professional cleaning service to ensure all traces of debris and dust are removed prior to occupancy.

3.4 OPERATION, TERMINATION, AND REMOVAL

A. Supervision: Enforce strict discipline in use of temporary facilities. To minimize waste and abuse, limit availability of temporary facilities to essential and intended uses.

B. Maintenance: Maintain facilities in good operating condition until removal. Protect from damage caused by freezing temperatures and similar elements.

1. Maintain operation of temporary enclosures, heating, cooling, humidity control, ventilation, and similar facilities on a 24-hour basis where required to achieve indicated results and to avoid possibility of damage.
2. Prevent water-filled piping from freezing. Maintain markers for underground lines. Protect from damage during excavation operations.

C. Temporary Facility Changeover: Except for using permanent fire protection as soon as available, do not change over from using temporary security and protection facilities to permanent facilities without District approval

D. Termination and Removal: Remove each temporary facility when authorized by the District. Complete or, if necessary, restore permanent construction that may have been delayed because of interference with temporary facility. Repair damaged Work, clean exposed surfaces, and replace construction that cannot be satisfactorily repaired.

1. Materials and facilities that constitute temporary facilities are the property of Contractor. District reserves right to take possession of Project identification signs.

2. Remove temporary paving not intended for or acceptable for integration into permanent paving. Where area is intended for landscape development, remove soil and aggregate fill that do not comply with requirements for fill or subsoil. Remove materials contaminated with road oil, asphalt and other petrochemical compounds, and other substances that might impair growth of plant materials or lawns. Repair or replace street paving, curbs, and sidewalks at temporary entrances, as required by authorities having jurisdiction.

3. At Substantial Completion, clean and renovate permanent facilities used during construction period.

END OF SECTION 01520

DIVISION 2
EXISTING CONDITIONS

SECTION 02 41 13

SELECTIVE SITE DEMOLITION

PART 1 - GENERAL

1.1 SUMMARY

This Section includes the work necessary to successfully complete demolition to prepare site for the phasing and new construction, including the following:

1. Clean line saw cutting of existing asphalt pavement, concrete sidewalks, concrete curb/gutter, etc., as specified herein.
2. Protection from injury or defacement existing building elements to be preserved.
3. Removal of debris and deleterious materials such as rubbish.
4. Removal and stockpile of materials for landscaping use at approved location.
5. Disposal of unwanted or objectionable materials off site.
6. Disconnecting, capping or sealing, and abandoning site utilities in place.
7. Disconnecting, capping or sealing, and removing site utilities.
8. Removing above-grade site improvements within limits indicated.

1.2 REGULATORY REQUIREMENTS:

No burning shall be allowed.

Do not use explosives.

Comply with the following 2022 California Code of Regulations:

1. Title 8: CAL-OSHA, Chapter, Subchapter 4 – Construction Safety Orders.
2. Title 24: Part 2, California Building Code, Chapter 33, Protection of Pedestrian during Construction or Demolition.
3. Bay Area Air Quality Management District.

1.3 DEFINITIONS

ANSI: American National Standards Institute.

CAL-OSHA: California Occupational Safety and Health Administration.

ANSI: American National Standards Institute.

CFR: Code of Federal Standards.

EPA: Environmental Protection Agency.

NFPA: National Fire Protection Association.

Remove: Detach items from existing construction and legally dispose of them off-site unless they indicated to be removed and salvaged or recycled.

Remove and Salvage: Detach items from existing construction, prior to demolition, and deliver them to the District.

Existing to Remain: Existing items of construction that are not to be removed and that are not otherwise indicated to be removed and salvaged, or recycled.

1.4 SUBMITTALS

Follow Submittal procedure outlined in Division 1– General Requirements.

1.5 PROJECT CONDITIONS

Ensure that demolition work does not adversely affect adjacent water courses groundwater and wildlife, or contribute to excess air and noise pollution.

Do not dispose, of waste or volatile materials such as mineral spirits, oil, petroleum based lubricants, or toxic cleaning solutions into watercourses, storm or sanitary sewers. Ensure proper disposal procedures are maintained throughout project.

Do not pump water containing suspended materials into watercourses, storm or sanitary sewers, or onto adjacent properties.

Control disposal or runoff of water containing suspended materials or other harmful substances in accordance with local authorities.

Protect trees, plants and foliage on site and adjacent properties where indicated.

Except for materials indicated to be stockpiled or to remain, cleared materials are the Contractor's property. Remove cleared materials from site and dispose of in lawful manner.

PART 2 - PRODUCTS

2.1 SOIL MATERIALS

Backfill excavations resulting from demolition operations with on-site or import materials conforming to structural backfill defined in Section 31 23 33 “Utility Trenching and Backfill”.

PART 3 - EXECUTION

3.1 PREPARATION

Protect and maintain benchmarks and survey control points during construction.

Protect existing site improvements to remain during construction.

Provide the following temporary facilities to facilitate the demolition operations, as necessary:

1. Temp Traffic Controls
2. Protection of Persons and Property
3. Protection of Utilities
4. Protection of Trees
5. Noise and Dust Abatement
6. Clear and restore area to their original condition
7. Protect existing site improvements and adjacent structures from removal and damage.
8. Protect and maintain benchmarks and survey control points during construction.

3.2 RESTORATION

Restore areas and existing works outside areas of demolition to match conditions to their original condition, as acceptable to the District.

Restore damaged improvements to their original condition, as acceptable to the District.

3.3 UTILITIES

Locate, identify, disconnect, and seal or cap off utilities indicated to be removed or abandoned.

Arrange to shut off indicated utilities with utility companies or verify that utilities have been shut off.

Existing Utilities: Do not interrupt utilities serving facilities occupied by District or others unless authorized in writing by the District and then only after arranging to provide temporary utility services according to requirements indicated.

Coordinate utility interruptions with utility company affected.

Do not proceed with utility interruptions without the permission of the District and utility company affected. Notify the District and the utility company affected 14 working days prior to utility interruptions.

Excavate and remove underground utilities that are indicated to be removed.

Securely close ends of abandoned piping with tight fitting plug or wall of concrete minimum 6-inches thick.

Adjustment of manhole frames and other castings Caltrans Standard Specifications Section 15-2.05A.

3.4 SITE IMPROVEMENTS

Remove existing above- and below-grade improvements as indicated and as necessary to facilitate new construction.

Remove slabs, paving, curbs, and gutters, as indicated. Where concrete slabs, curb, gutter and asphalt pavements are designated to be removed, remove bases and subbase to surface of underlying, undisturbed soil.

Unless the existing full-depth joints coincide with line of pavement demolition, neatly saw-cut to full depth the length of existing pavement to remain before removing existing pavement. Saw-cut faces vertically.

Remove driveways, curbs, gutters and sidewalks by saw cutting to full depth. If saw cut falls within 30-inches of a construction joint, expansions joint, score mark or edge, remove material to joint, mark or edge.

3.5 SALVAGED IMPROVEMENTS

Salvaged Improvements: Carefully remove items indicated to be salvaged and store where indicated on plans or where designated by the District. Avoid damaging materials designated for salvage.

3.6 DISPOSAL

Remove surplus obstructions, demolished materials, and waste materials, including trash and debris, and legally dispose of them off the District's property.

Remove: Unless items are otherwise to remain or be reinstalled, remove and dispose of items. Do not store removed items that are of value to the contractor on site.

Remove and Reinstall: Remove items; clean, service and otherwise prepare for service; reinstall in the same location (or in the location shown on drawings).

Unidentified Materials: If unidentified materials are discovered, including hazardous materials that will require additional removal other than is required by the Contract Documents, immediately report the discovery to the District. If necessary, the District will arrange for testing or analysis of the discovered materials and will provide instructions regarding the removal and disposal of the unidentified materials.

3.7 CONSTRUCTION WASTE MANAGEMENT

Separate reusable and recyclable products from contaminated waste and debris in accordance with the General Contractor's Waste Management Plan. Place recyclable and reusable products in designated containers and protect from moisture and contamination.

END OF SECTION

DIVISION 8
OPENINGS

SECTION 08 71 00

DOOR HARDWARE

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of Contract, including General and Supplementary Conditions of Division 1 Specification Sections, apply to this Section.

1.02 SUMMARY

A. This Section includes items known commercially as finish or door hardware that are required for swing, sliding, and folding doors, except special types of unique hardware specified in the same sections as the doors and door frames on which they are installed.

B. This Section includes the following, but is not necessarily limited to:

1. Door Hardware, including electric hardware.
2. Gate Hardware.

C. Related Sections: The following sections are noted as containing requirements that relate to this Section, but may not be limited to this listing.

1. Division 5

1.03 REFERENCES (USE DATE OF STANDARD IN EFFECT AS OF BID DATE.)

A. 2022 California Building Code, CCR, Title 24.

B. BHMA – Builders' Hardware Manufacturers Association

C. CCR – California Code of Regulations, Title 24, Part 2, California State Accessibility Standards.

D. DHI – Door and Hardware Institute

E. NFPA - National Fire Protection Association.

1. NFPA 80 - Fire Doors and Other Opening Protectives
2. NFPA 105 - Smoke and Draft Control Door Assemblies

F. UL - Underwriters Laboratories.

1. UL 10C - Fire Tests of Door Assemblies
2. UL 305 - Panic Hardware

G. WHI - Warnock Hersey Incorporated

H. SDI - Steel Door Institute

1.04 SUBMITTALS & SUBSTITUTIONS

A. General: Submit in accordance with Conditions of the Contract and Division 1 Specification sections.

B. Submit product data (catalog cuts) including manufacturers' technical product information for each item of door hardware, installation instructions, maintenance of operating parts and finish, and other information necessary to show compliance with requirements.

C. Submit six (6) copies of schedule organized vertically into “Hardware Sets” with index of doors and headings, indicating complete designations of every item required for each door or opening. Include following information:

1. Include a Cover Sheet with;
   a. Job Name, location, telephone number.
   b. Architects name, location and telephone number.
   c. Contractors name, location, telephone number and job number.
   d. Suppliers name, location, telephone number and job number.
   e. Hardware consultant's name, location and telephone number.

2. Job Index information included;
   a. Numerical door number index including; door number, hardware heading number and page number.
   b. Complete keying information (referred to DHI hand-book "Keying Systems and Nomenclature"). Provision should be made in the schedule to provide keying information when available; if it is not available at the time the preliminary schedule is submitted.
   c. Manufacturers' names and abbreviations for all materials.
   d. Explanation of abbreviations, symbols, and codes used in the schedule.
   e. Mounting locations for hardware.
   f. Clarification statements or questions.
   g. Catalog cuts and manufacturer’s technical data and instructions.

3. Vertical schedule format sample:

Heading Number 1 (Hardware group or set number – HW -1)						
			(a) 1 Single Door #1 - Exterior from Corridor 101		(b) 90°	(c) RH
			(d) 3' 0"x7' 0" x 1-3/4" x (e) 20 Minute (f) WD x HM			
(g) 1	(h)	(i) ea	(j) Hinges - (k) 5BB1HW 4.5 x 4.5 NRP (l) ½ TMS		(m) 626	(n) IVE
2	6AA	1 ea	Lockset - ND50PD x RHO x RH x 10-025 x JTMS		626	SCH

(a) - Single or pair with opening number and location. (b) - Degree of opening (c) - Hand of door(s) (d) - Door and frame dimensions and door thickness. (e) - Label requirements if any. (f) - Door by frame material. (g) - (Optional) Hardware item line #. (h) - Keyset Symbol. (i) - Quantity. (j) - Product description. (k) - Product Number. (l) - Fastenings

and other pertinent information. (m) - Hardware finish codes per ANSI A156.18. (n) - Manufacture abbreviation.

D. Make substitution requests in accordance with Division 1. Substitution requests must be made prior to bid date. Include product data and indicate benefit to the project. Furnish samples of any proposed substitution.

E. Keying Schedule: Submit separate detailed schedule indicating clearly how the Owner's final instructions on keying of locks has been fulfilled.

F. Templates for doors, frames, and other work specified to be factory prepared for the installation of door hardware. Check shop drawings of other work to confirm that adequate provisions are made for locating and installing door hardware to comply with indicated requirements.

G. Furnish as-built/as-installed schedule with close-out documents, including keying schedule and transcript, wiring/riser diagrams, manufacturers' installation and adjustment and maintenance information.

H. Fire Door Assembly Testing: Submit a written record of each fire door assembly to the Owner to be made available to the Authority Having Jurisdiction (AHJ) for future building

1.05 QUALITY ASSURANCE

A. Obtain each type of hardware (latch and lock sets, hinges, closers, exit devices, etc.) from a single manufacturer.

B. Supplier Qualifications: A recognized architectural door hardware supplier, with warehousing facilities in the project's vicinity, that has a record of successful in-service performance for supplying door hardware similar in quantity, type, and quality to that indicated for this project and that employs an experienced architectural hardware consultant (AHC) who is available to Owner, Architect, and Contractor, at reasonable times during the course of the Work, for consultation.

1. Responsible for detailing, scheduling and ordering of finish hardware.
2. Meet with Owner to finalize keying requirements and to obtain final instructions in writing.
3. Stock parts for products supplied and are capable of repairing and replacing hardware items found defective within warranty periods.

C. Hardware Installer: Company specializing in the installation of commercial door hardware with five years documented experience.

D. Fire-Rated Openings: Provide door hardware for fire-rated openings that complies with NFPA Standard No. 80 and requirements of authorities having jurisdiction. Provide only items of door hardware that are listed and tested by UL or Warnock Hersey for given type/size opening and degree of label. Provide proper latching hardware, door closers, approved-bearing hinges and seals whether listed in the Hardware Schedule or not.

1. Where emergency exit devices are required on fire-rated doors, (with supplementary marking on doors' UL labels indicating "Fire Door to be Equipped with Fire Exit Hardware") provide UL label on exit devices indicating "Fire Exit Hardware".

E. Exit Doors: Operable from inside with single motion without the use of a key or special knowledge or effort.

1.06 DELIVERY, STORAGE AND HANDLING

A. Coordinate delivery of packaged hardware items to the appropriate locations (shop or field) for installation.

B. Hardware items shall be individually packaged in manufacturers' original containers, complete with proper fasteners. Clearly mark packages on outside to indicate contents and locations in hardware schedule and in work.

C. Provide locked storage area for hardware, protect from moisture, sunlight, paint, chemicals, etc.

D. Contractor to inventory door hardware jointly with representatives of hardware supplier and hardware installer until each all are satisfied that count is correct.

1.07 WARRANTY

A. Provide warranties of respective manufacturers' regular terms of sale from day of final acceptance as follows:

1. Mechanical Locksets: Ten (10) years.
2. Closers: Three (3) years
3. Mechanical exit devices: Ten (10) years
4. All other hardware: Three (3) years.

1.08 MAINTENANCE

A. Maintenance Tools and Instructions: Furnish a complete set of specialized tools and maintenance instructions as needed for Owner's continued adjustment, maintenance, and removal and replacement of door hardware.

1.09 PRE-INSTALLATION CONFERENCE

A. Convene a pre-installation conference at least one week prior to beginning work of this section.

B. Attendance: Architect, Construction Manager, Contractor, Security Contractor, Hardware Supplier, Installer, Key District Personnel, and Project Inspector.

C. Agenda: Review hardware schedule, products, installation procedures and coordination required with related work. Review District's keying standards.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

Item	Manufacturer	Acceptable Substitutes

Locks, Latches & Cylinders	Schlage	None – Owner Standard
Exit Devices	Von Duprin	None – Owner Standard

A. Heavy Duty Cylindrical Locks and Latches: Schlage "ND" Series as scheduled with "Rhodes" design, fastened with through-bolts and threaded chassis hubs.

1. Provide cylindrical locksets exceeding the ANSI/BHMA A156.2 Grade 1 performance standards for strength, security, and durability in the categories below:
   a. Abusive Locked Lever Torque Test – minimum 3,100 inch-pounds without gaining access
   b. Offset lever pull – minimum 1,600 foot pounds without gaining access
   c. Vertical lever impact – minimum 100 impacts without gaining access

2. Cycle life - tested to minimum 16 million cycles per ANSI/BHMA A156.2 Cycle Test with no visible lever sag or use of performance aids such as set screws or spacers
3. UL 10C for 4'-0" x 10'-0" 3-hour fire door.
4. Cylinders: Refer to "KEYING" article, herein.
5. Provide solid steel anti-rotation through bolts and posts to control excessive rotation of lever.
6. Provide lockset that allows lock function to be changed to over twenty other common functions by swapping easily accessible parts.
7. Provide locks with standard 2-3/4 inches (70 mm) backset, unless noted otherwise, with 1/2 inch latch throw capable of UL listing of 3 hours on a 4' x 10' opening. Provide proper latch throw for UL listing at pairs.
8. Provide locksets with separate anti-rotation thru-bolts, and no exposed screws.
9. Provide independently operating levers with two external return spring cassettes mounted under roses to prevent lever sag.
10. Provide standard ASA strikes unless extended lip strikes are necessary to protect trim.
11. Provide wired electrified options as scheduled in the hardware sets.
    a. 12 through 24 volt DC operating capability, auto-detecting
    b. Selectable EL (fail safe)/EU (fail secure) operating mode via switch on chassis
    c. 0.230A (230mA) maximum current draw
    d. 0.010A (10mA) holding current
    e. Modular / "plug in" request to exit switch

12. Lever Trim: Solid cast levers without plastic inserts, and wrought roses on both sides.

B. Exit devices: Von Duprin as scheduled.

1. Provide certificate by independent testing laboratory that device has completed over 1,000,000 cycles and can still meet ANSI/BHMA A156.3 - 2001 standards.
2. All internal parts shall be of cold-rolled steel with zinc dichromate coating.
3. Mechanism case shall have an average thickness of .140".
4. Compression spring engineering.
5. Non-handed basic device design with center case interchangeable with all functions.
6. All devices shall have quiet return fluid dampeners.
7. All latchbolts shall be deadlocking with ¾" throw and have a self-lubricating coating to reduce friction and wear.
8. Device shall bear UL label for fire and or panic as may be required.
9. All surface strikes shall be roller type and utilize a plate underneath to prevent movement.

10. Lever Trim: “Breakaway” design, forged brass or bronze escutcheon with a minimum of .130” thickness, match lockset lever design.
11. Removable Mullions: Removable with single turn of building key. Securely reinstalled without need for key.
12. Furnish glass bead kits for vision lites where required.
13. All Exit Devices to be sex-bolted to the doors.
14. Panic Hardware shall comply with CBC Section 11B.404.2.7 and shall be mounted between 34" and 44" above the finished floor surface.
    a. Provide exit devices UL certified to meet maximum 5 pound requirements according to the California Building Code section 11B-309.4, and UL listed for Panic Exterior Fire Exit Hardware.

2.02 KEYING

A. Furnish a Proprietary Schlage masterkey system as directed by the owner or architect. Key system to be designated and combinated by the Schlage Master Key Department even if pinned by the Authorized Key Center, Authorized Security Center or a local authorized commercial dealer.

B. A detailed keying schedule is to be prepared by the owner and/or architect in consultation with a representative of Allegion or an Authorized Key Center or Authorized Security Center. Each keyed cylinder on every keyed lock is to be listed separately showing the door #, key group (in BHMA terminology), cylinder type, finish and location on the door.

C. Extend the original Schlage masterkey system established for the project under Schlage Structure # 42247

D. Furnish construction keying for doors requiring locking during construction.

1. For FSIC systems provide 23-030-ICX Full Size Construction Cores
2. For FSIC systems provide three 48-101-ICX Construction Keys per doorway
3. For FSIC systems provide two 48-056-ICX Control Keys (const.)
4. For FSIC systems provide two control keys for installing the permanent cores (48-052-XP for “Classic Primus”)

E. Furnish all keys with visual key control.

1. Stamp key “Do Not Duplicate”.
2. Stamp unique owner identifier from the key bow.
3. Delete key section identifier from the key bow.
4. Delete key “bitting” from the key bow.

F. Furnish all cylinders with visual key control

1. Stamp (BHMA) key symbol on side of cylinder (CKC).

G. Furnish mechanical keys as follows:

1. Furnish 2 cut change keys for each different change key code.
2. Furnish 1 uncut key blank for each change key code.
3. Furnish 6 cut masterkeys for each different masterkey set.

H. Furnish Schlage Padlocks and the cylinders to tie them into the masterkey system for gates, storage boxes, utility valve security, roof hatches and roll-up doors keyed as directed in the keying schedule.

1. Furnish KS43G3200 padlock for use with FSIC Schlage cylinders. Furnish 23-030 (Classic / Everest) or 20-740 (PrimusXP) with above.

2.03 FINISHES

A. Generally to be satin chrome US26D (626 on bronze and 652 on steel) unless otherwise noted.

B. Furnish push plates, pull plates and kick or armor plates in satin stainless steel US32D (630) unless otherwise noted.

C. Door closers shall be powder-coated to match other hardware, unless otherwise noted.

D. Aluminum items to be finished anodized aluminum except thresholds which can be furnished as standard mill finish.

2.04 FASTENERS

A. Screws for strikes, face plates and similar items shall be flat head, countersunk type, provide machine screws for metal and standard wood screws for wood.

B. Screws for butt hinges shall be flathead, countersunk, full-thread type.

C. Fastening of closer bases or closer shoes to doors shall be by means of sex bolts and spray painted to match closer finish.

D. Provide expansion anchors for attaching hardware items to concrete or masonry.

E. All exposed fasteners shall have a phillips head.

F. Finish of exposed screws to match surface finish of hardware or other adjacent work.

G. All Exit Devices and Lock Protectors shall be fastened to the door by the means of sex bolts or through bolts.

PART 3 - EXECUTION

3.01 INSPECTION

A. Verify that doors and frames are square and plumb and ready to receive work and dimensions are as instructed by the manufacturer.

B. Beginning of installation means acceptance of existing conditions.

3.02 INSTALLATION

A. Install hardware in accordance with manufacturer's instructions and requirements of DHI.

B. Use the templates provided by hardware item manufacturer.

C. Mounting heights for hardware shall be as recommended by the Door and Hardware Institute. Operating hardware will to be located between 34" and 44" AFF.

D. Set units level, plumb and true to line and location. Adjust and reinforce the attachment substrate as necessary for proper installation and operation.

E. Drill and countersink units that are not factory-prepared for anchorage fasteners. Space fasteners and anchors in accordance with industry standards.

F. Set thresholds for exterior doors in full bed of butyl-rubber sealant.

G. If hand of door is changed during construction, make necessary changes in hardware at no additional cost.

3.03 ADJUST AND CLEAN

A. Adjust and check each operating item of hardware and each door, to ensure proper operation or function of every unit. Replace units which cannot be adjusted to operate freely and smoothly as intended for the application made.

B. Clean adjacent surface soiled by hardware installation.

C. Final Adjustment: Wherever hardware installation is made more than one month prior to acceptance or occupancy, return to that work area and make final check and adjustment of all hardware items in such space or area. Clean operating items as necessary to restore proper function and finish of hardware and doors. Adjust door control devices to compensate for final operation of heating and ventilating equipment.

D. Instruct Owner's Personnel in proper adjustment and maintenance of hardware finishes, during the final adjustment of hardware.

E. Continued Maintenance Service: Approximately six months after the completion of the project, the Contractor accompanied by the Architectural Hardware Consultant, shall return to the project and re-adjust every item of hardware to restore proper functions of doors and hardware. Consult with and instruct Owner's personnel in recommended additions to the maintenance procedures. Replace hardware items which have deteriorated or failed due to faulty design, materials or installation of hardware units. Prepare a written report of current and predictable problems (of substantial nature) in the performance of the hardware.

3.04 HARDWARE LOCATIONS

A. Conform to CCR, Title 24, Part 2; and ADAAG; and the drawings for access-compliant positioning requirements for the disabled.

3.05 FIELD QUALITY CONTROL

A. Contractor is responsible for providing the services of an Architectural Hardware Consultant (AHC) or a proprietary product technician to inspect installation and certify that hardware and its installation have been furnished and installed in accordance with manufacturers' instructions and as specified herein.

3.06 SCHEDULE

A. The items listed in the following schedule shall conform to the requirements of the foregoing specifications.

B. While the hardware schedule is intended to cover all doors, and other movable parts of the building, and establish type and standard of quality, the contractor is responsible for examining the Plans and Specifications and furnishing proper hardware for all openings whether listed or not. If there are any omissions in hardware groups in regard to regular doors they shall be called to the attention of the Architect prior to bid opening for instruction; otherwise, list will be considered Complete. No extras will be allowed for omissions.

C. The Door Schedule on the Drawings indicates which hardware set is used with each door.

Abbreviation	Name
CRO	Crown Industrial
LOX	Locinox
RIC	Richards-Wilcox, Inc.
SCH	Schlage Lock Company
VON	Von Duprin

115919 OPT0381627 VERSION 1

GROUP NO. 01

1	SET	SELF CLOSING HINGE	MAMMOTH 180		LOX
1	EA	PANIC HARDWARE	CDSI-PA-AX-98-L-KC-06-WH	628	VON
1	EA	RIM CYLINDER	20-057 ICX	626	SCH
1	EA	MORTISE CYLINDER	26-091 ICX XQ11-948	626	SCH
2	EA	PRIMUS CORE	20-740	626	SCH
1	EA	LEVER	230L	626	VON

GROUP NO. 02

1	SET	SELF CLOSING HINGE	MAMMOTH 180		LOX
1	EA	VANDL CLASSROOM SEC	ND95TD RHO XN12-035	626	SCH
2	EA	PRIMUS CORE	20-740	626	SCH

GROUP NO. 03

2	SET	SELF CLOSING HINGE	MAMMOTH 180		LOX
2	EA	PANIC HARDWARE	CDSI-PA-AX-98-L-KC-06-WH	628	VON
2	EA	RIM CYLINDER	20-057 ICX	626	SCH
2	EA	MORTISE CYLINDER	26-091 ICX XQ11-948	626	SCH
4	EA	PRIMUS CORE	20-740	626	SCH

GROUP NO. 04

6		HINGE	BY GATE FABRICATOR		
2	EA	CANE BOLT	0524.00021	Z	RIC
1	EA	PADLOCK L/CYL-FSIC	KS43D3200	606	SCH
1	EA	PRIMUS CORE	20-740	626	SCH
1	EA	HASP	7" FLAT		CRO

GROUP NO. 05

HARDWARE BY GATE
MANUFACTURER

END OF SECTION

Legend:
↯Electrified Opening

DOOR #	HW SET#
MS1	01
MS2	01
MS3	01
MS4	04
MS5	01
MS6	04
MS8	04
MS8	04
MS9	02
MS10	04
MS11	02
MS12	04

Catalog Cuts

For

William Sheppard MS Fencing Project

Sorted By Manufacturer

Prepared By

Michelle Bond

Created On 7/15/2024

Generated By



Table of Contents

Mfr	Catalog Number	Description
LOX	MAMMOTH 180	SELF CLOSING HINGE
RIC	0524.00021	CANE BOLT
SCH	20-057 ICX	RIM CYLINDER
SCH	ND95TD RHO XN12-035	VANDL CLASSROOM SEC
SCH	26-091 ICX XQ11-948	MORTISE CYLINDER
SCH	20-740	PRIMUS CORE
VON	CDSI-PA-AX-98-L-KC-06-WH	PANIC HARDWARE

MAMMOTH-180

LOCINOX®

WWW.LOCINOX.COM





USER GUIDE

- ENGLISH
- NEDERLANDS
- FRANÇAIS
- DEUTSCH
- ENGLISH USA

- As manufacturer of this product, we guarantee that we have taken all the necessary steps in order for this product to comply with the current safety requirements.



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Technical Support

If you require any additional information or assistance during the installation, please contact your dealer, who will be able to provide the latest information. Alternatively, you can visit the Locinox website for more technical information or e-mail us on sales@locinox.com

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MAMMOTH-180



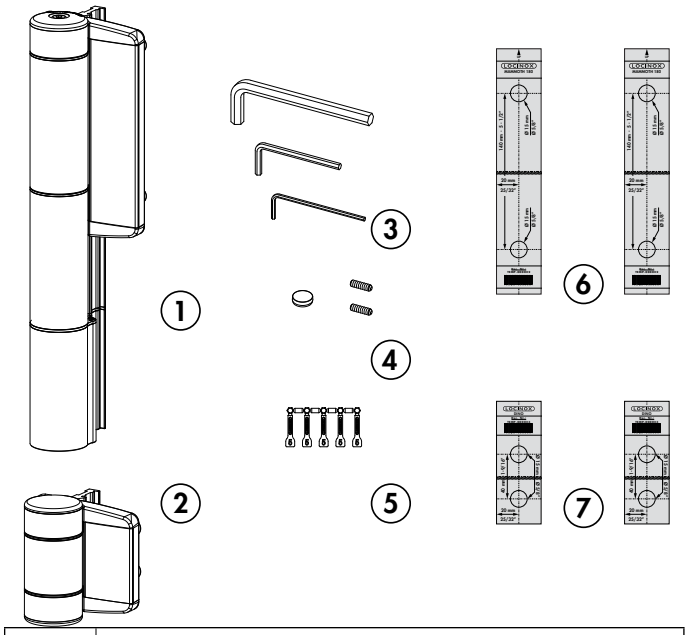
Manual - English USA

1. Introduction

Thank you for choosing a Locinox gatecloser! Please read the following instructions carefully before mounting the Mammoth-180 & Dino to your swing gate. Enclosed you will find all relevant user information concerning the Mammoth.

2. Package Contents

Please check if your package contains the following items:



①	Mammoth-180
②	Dino
③	Allen keys 10 - 5 - 3 mm
④	Cover cap (1x) & Setscrew (2x)
⑤	Hexplugs
⑥	Drilling templates for Mammoth-180
⑦	Drilling templates for Dino

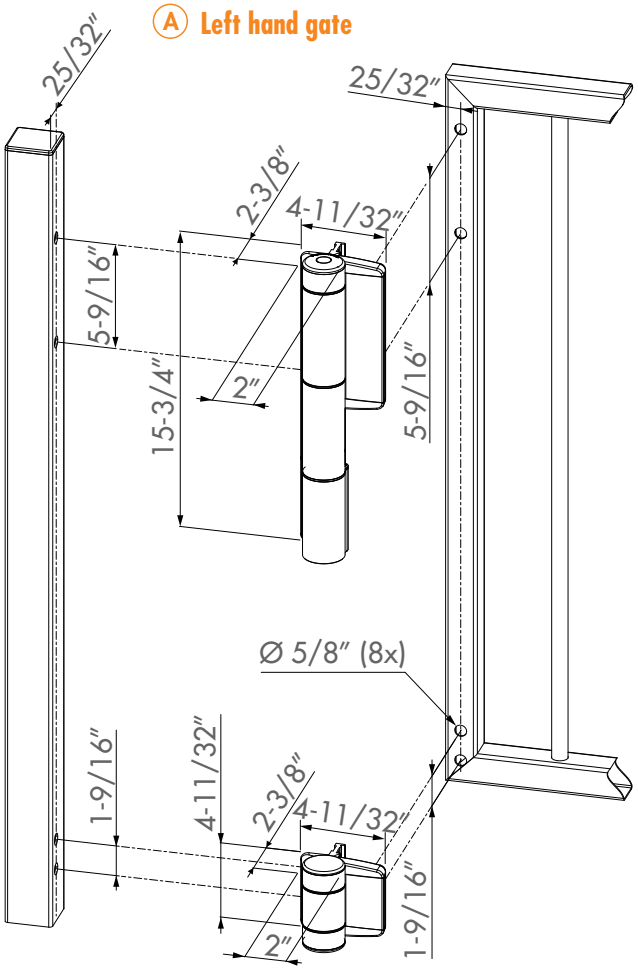
Please contact your supplier should any of the above items be damaged or missing.

3. Specifications

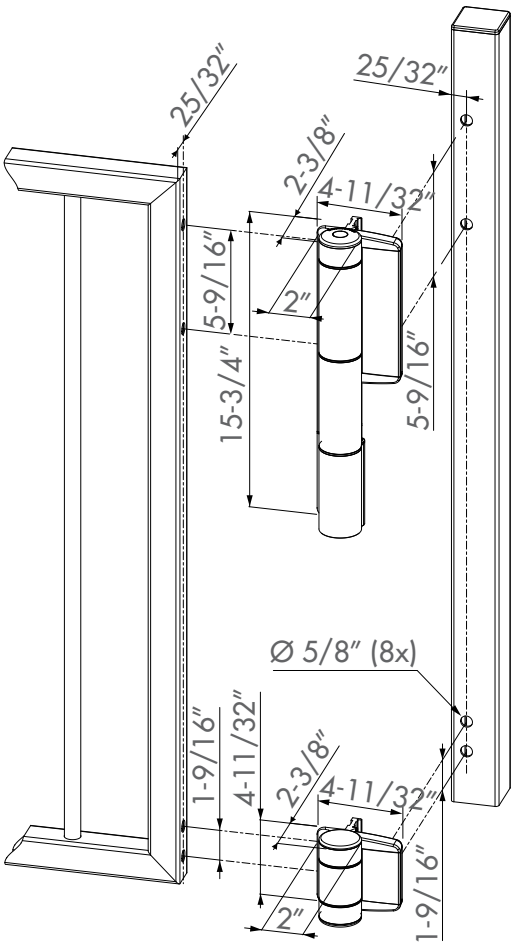
- Max Weight: 330 lbs.
- Max Width: 60 inches (for heavy gate)
- Max opening angle: 180°
- Hinge Gap: 9/16″ to 1- 3/8″ adjustable
- Temperature range: Stable: -4° F to +140° F (-20° C to +70°C)
- Vertical Adjustment: 3/4″
- Horizontal Adjustment: 3/4″
- Smooth or Snap closing action
- Mounting Mammoth: 4 QFs, Dino: 4 QFs
- Drilling Templates Included (2 for Mammoth, 2 for Dino)
- Shipping weight: 10 lbs.

4. Dimensions

Ⓐ Left hand gate



Ⓑ Right hand gate



5. Choose the turning-direction of your gate

⚠ Before preparing your profiles, decide if you have a left- or right hand gate. The fixing of Mammoth-180 and Dino is different for each situation!

Ⓐ Left hand gate

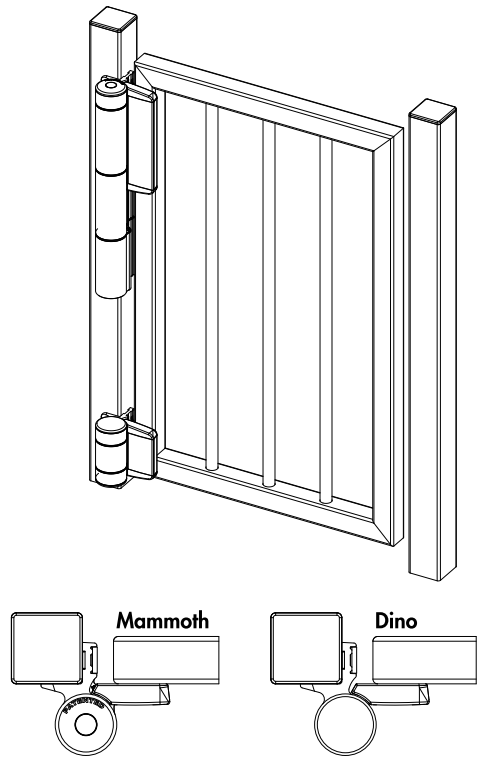


Fig. 5A.1

Ⓑ Right hand gate

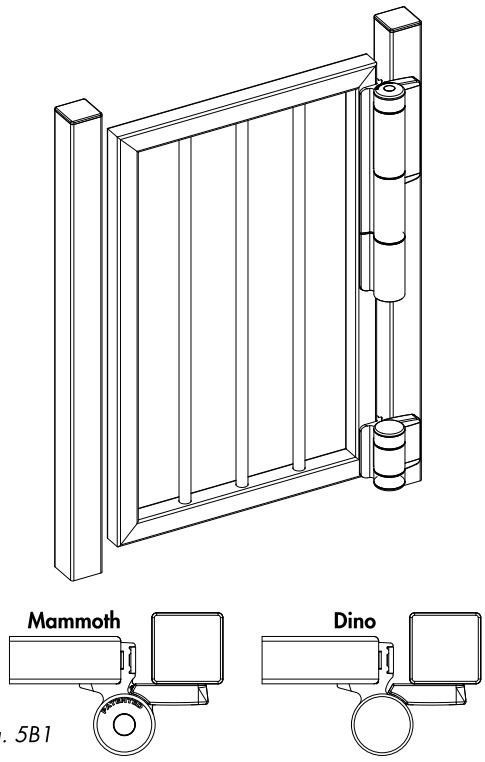


Fig. 5B1

6. Profile preparation

There are four templates included, two for the Mammoth-180 and two for the Dino. Use blocks to hold the gate in place, set the gate into its installed position. Align both sets of templates with the alignment marks ////////////////.

(A) Left hand gate

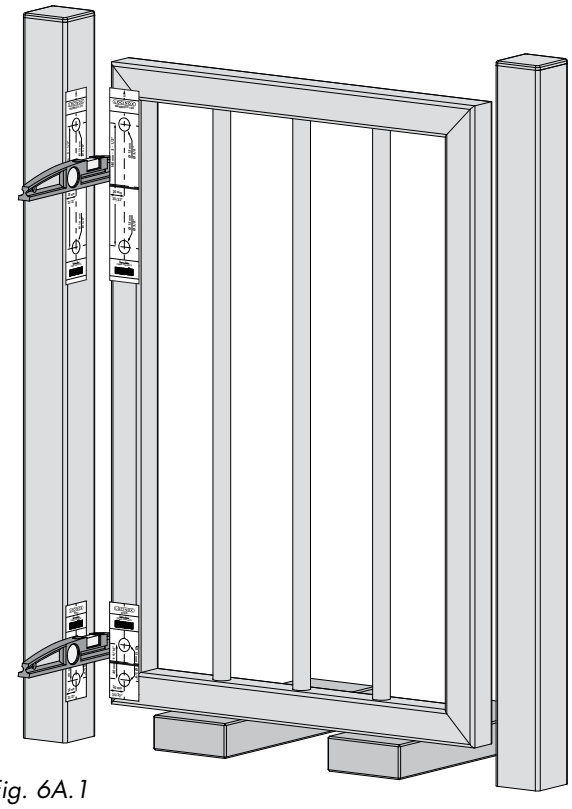


Fig. 6A.1

(B) Right hand gate

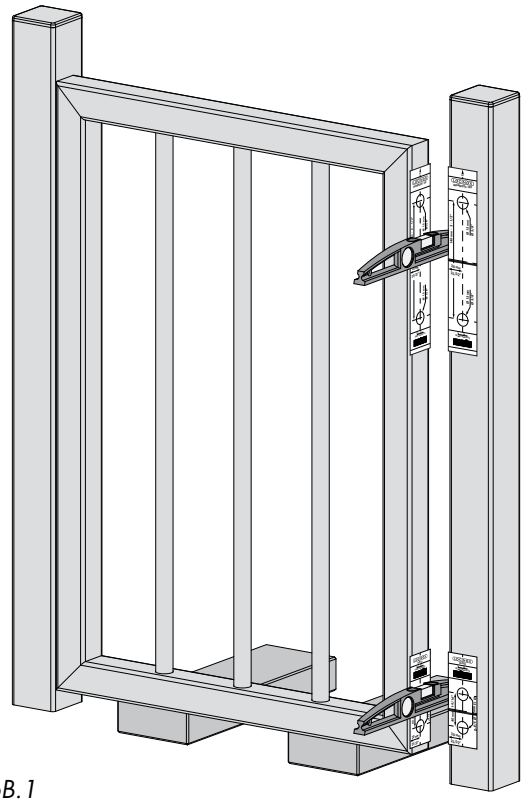


Fig. 6B.1

After aligning stick the templates to gate and post.

(A) Left hand gate

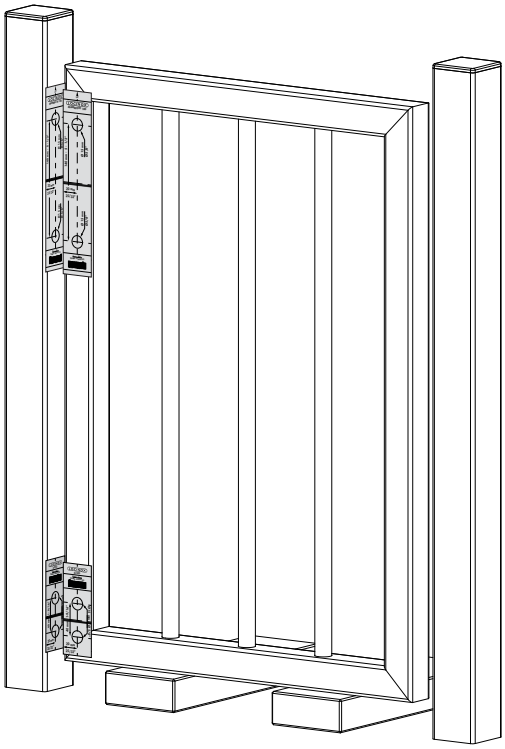


Fig. 6A.2

(B) Right hand gate

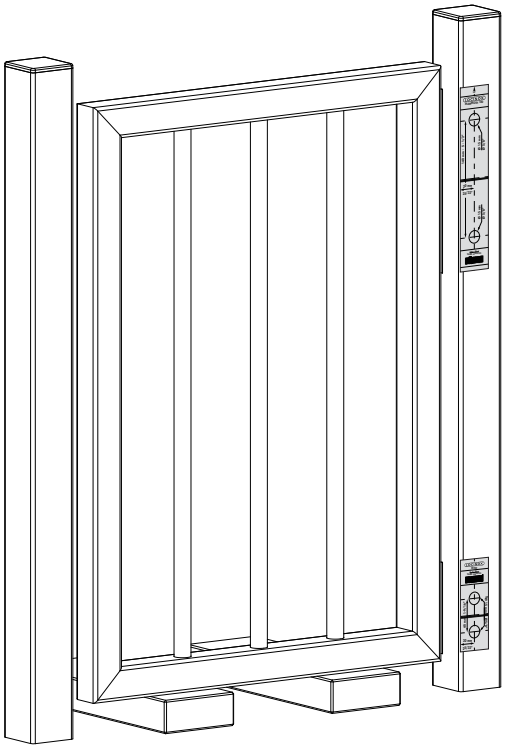


Fig. 6B.2

Center punch the gate and post for the holes, REMOVE THE TEMPLATES, and then drill the holes as marked.

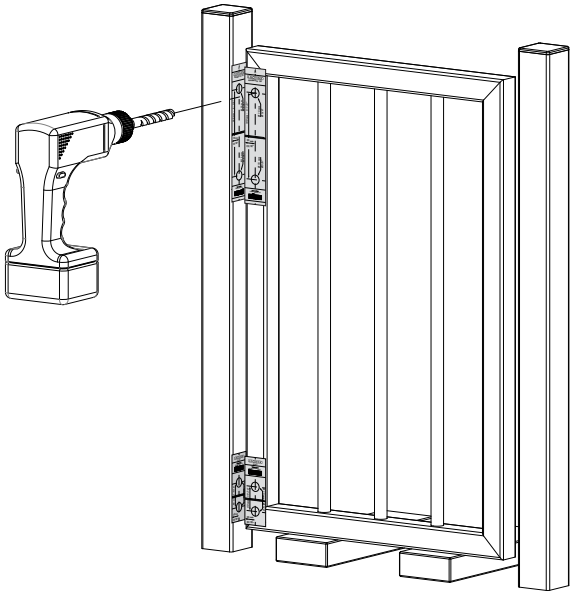


Fig. 6A.3

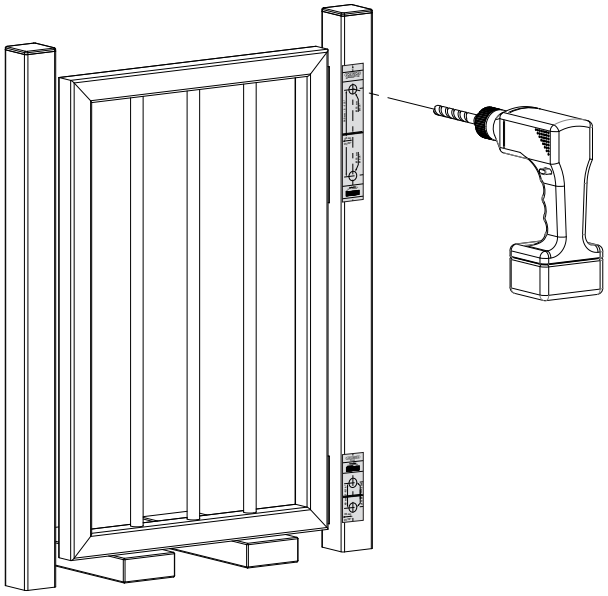


Fig. 6B.3

7. Mammoth-180 and Dino preparation

Remove the covercap and slide out the Quick-Fix cover.

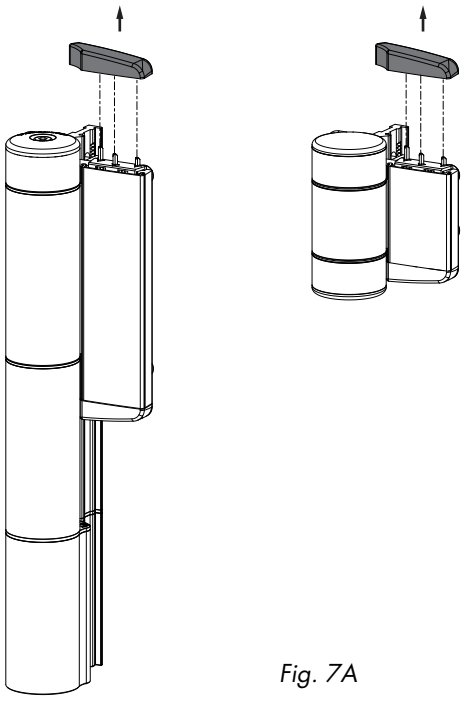


Fig. 7A

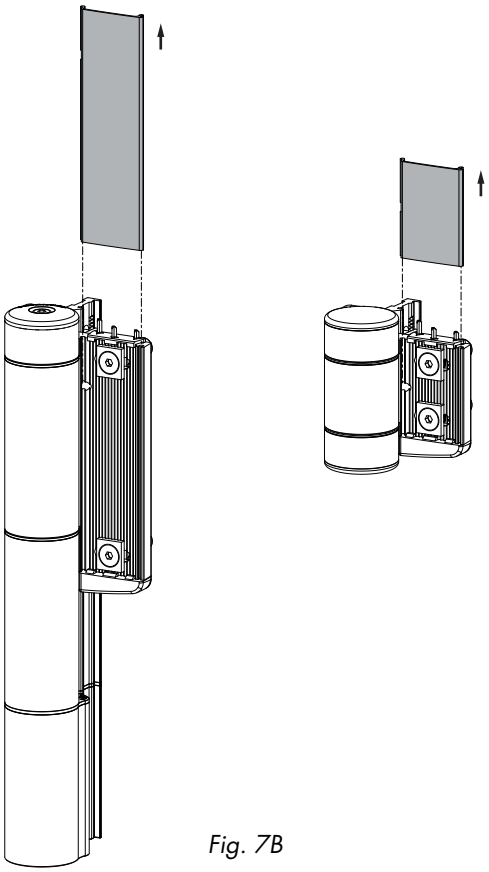


Fig. 7B

8. Mounting the gatecloser

Place the Mammoth-180 on the gate or post and tighten the Quick-Fix bolts. ⚠ Always start by mounting the left side hardware (L-wing side). Repeat this process for the Dino.

Ⓐ **Left hand gate**

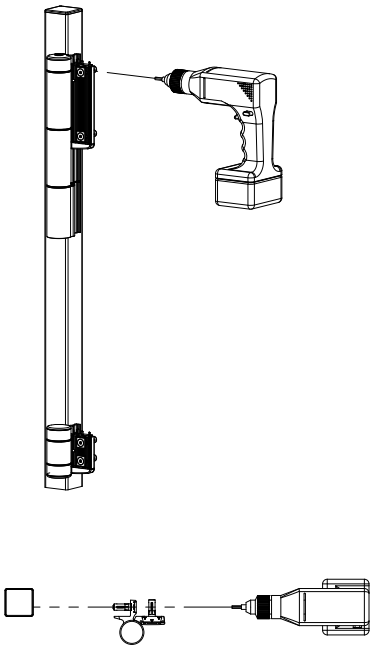


Fig. 8A.1

Ⓑ **Right hand gate**

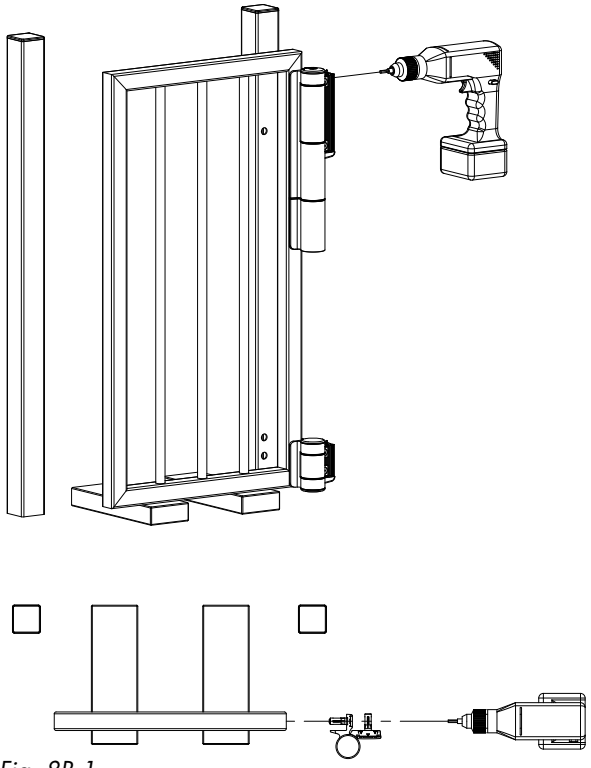


Fig. 8B.1

After mounting the left side, install and tighten the right side hardware.

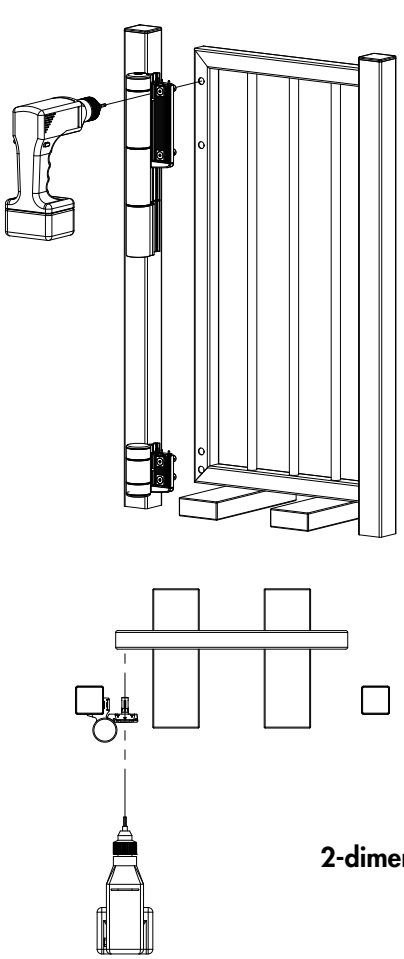


Fig. 8A.2

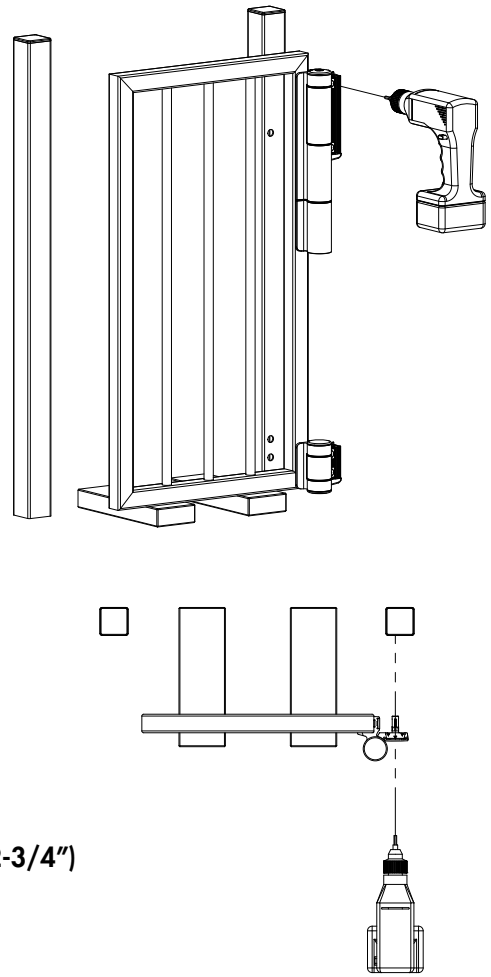
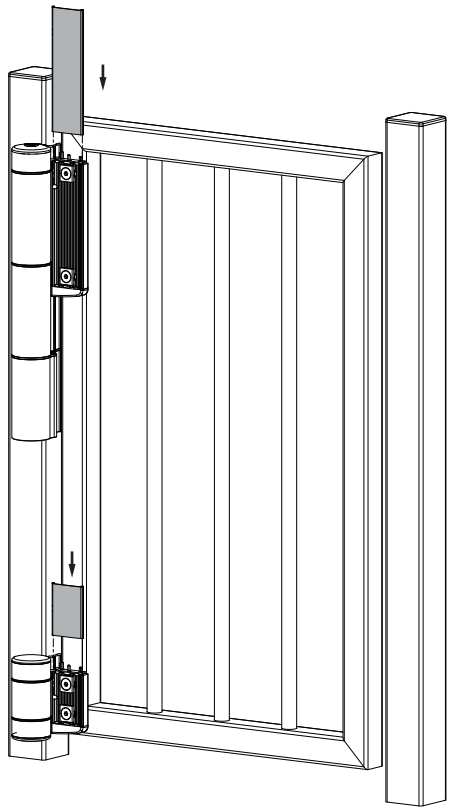


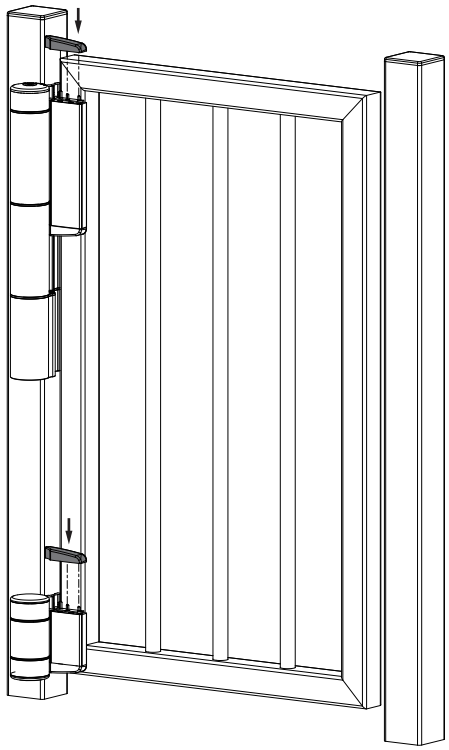
Fig. 8B.2

2-dimensionally adjustable (2 x 2-3/4")

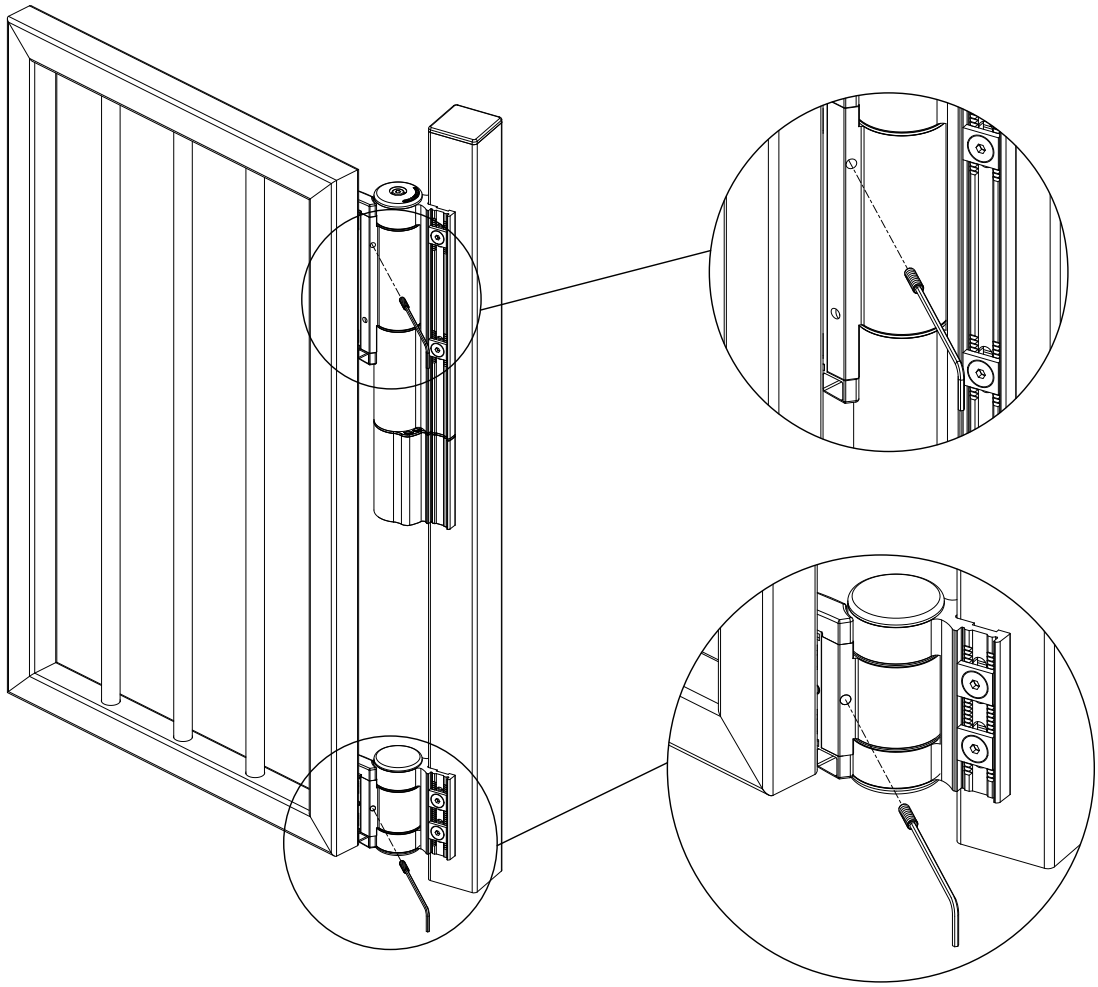
9. Finishing Mammoth-180 and Dino

Slide the cart back in place and replace the covercap.



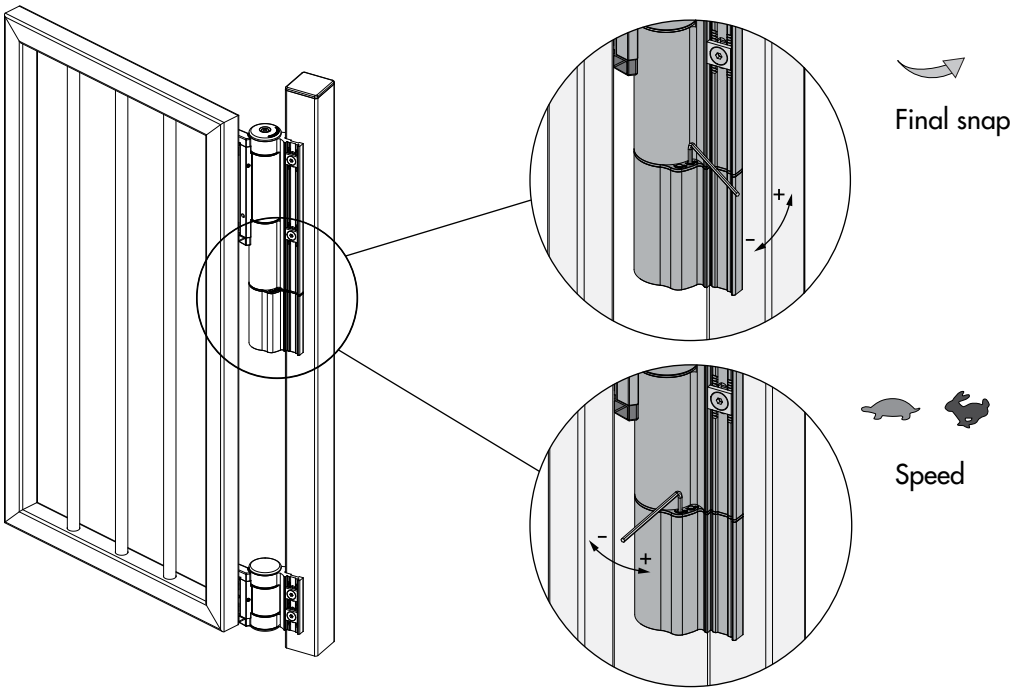


Open the gate and lock the Quick-Fix cover with the included setscrews.



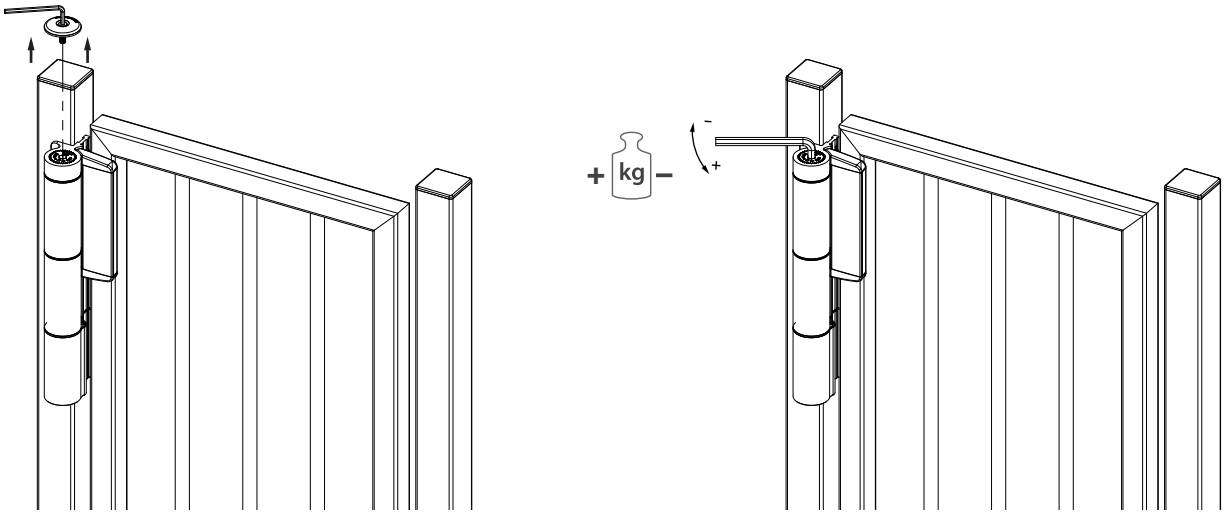
10. Speed and final snap adjustment

Final snap and speed can be adjusted by means of the included 3 mm Allen key.



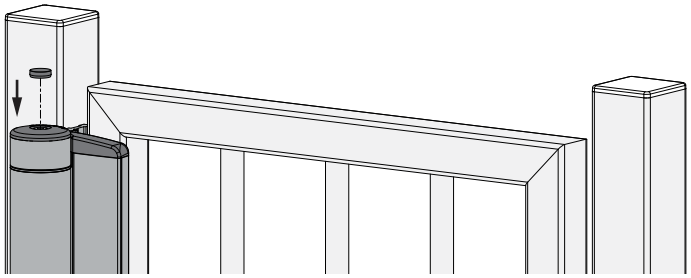
11. Force adjustment

Out of the box, the Mammoth 180° is set to its maximum closing-force: 15 Nm. We advise not to adjust the closing-force unless you have a specific application that requires a lower opening force.
Start by removing the cover cap. Insert the Allen key and push down firmly to disengage the spring. Turn the screw clockwise to decrease the spring force. Max 180° of closing force adjustment. DO NOT use excessive force on the Allen key while adjusting the force.



12. Finalising the installation

⚠ After installing the Mammoth-180 you can proceed with the installation of your Locinox lock and keep. After the speed, closing force, and final snap action have been tested to your satisfaction, install the cap on the force adjustment screw.



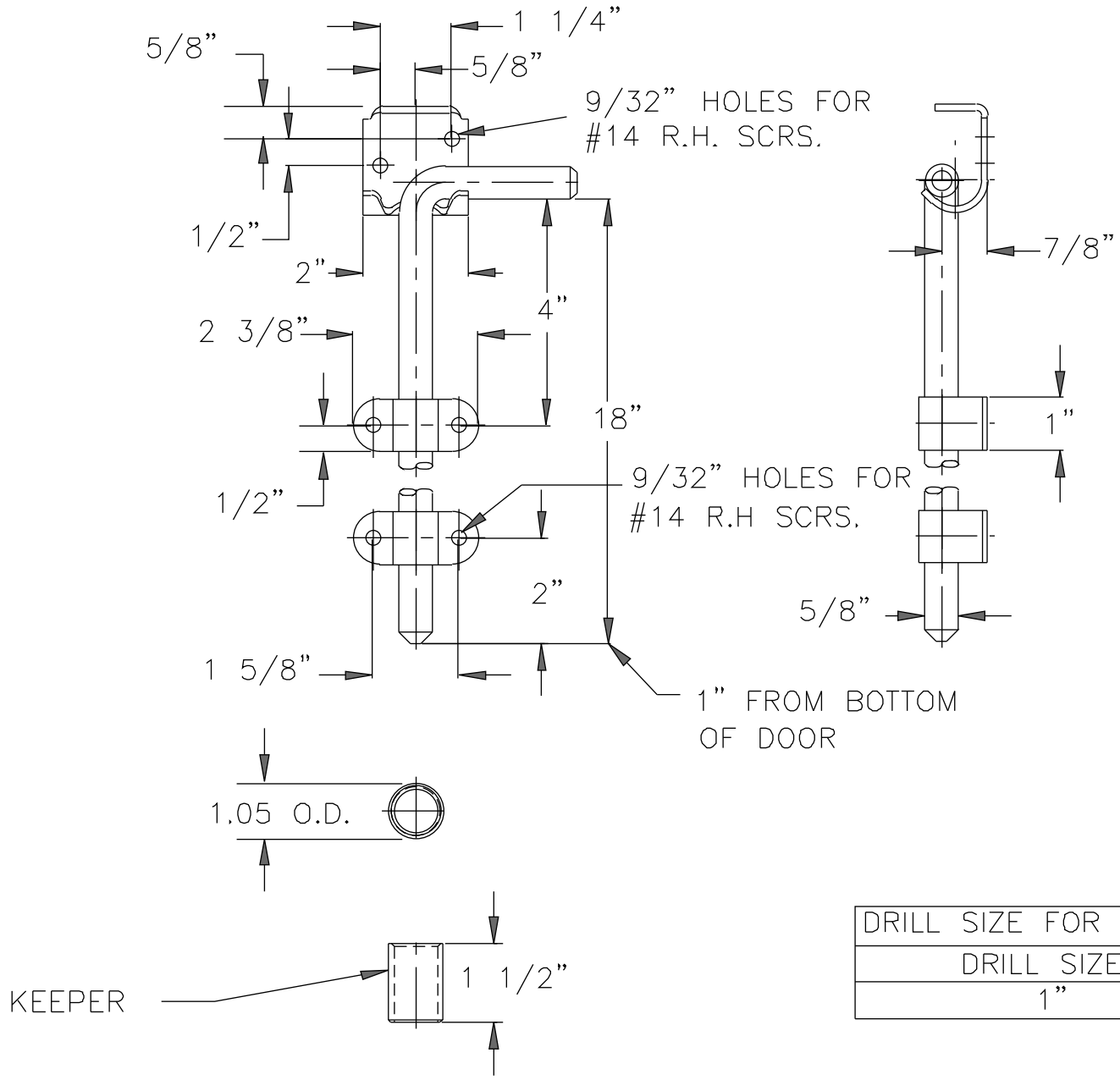
Memo



2014-10-22 - rev 2

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DRILL SIZE FOR KEEPER
DRILL SIZE
1"

ND Series

Grade 1 Cylindrical Locks





OVERVIEW

Beyond Grade 1 performance is the hallmark of the mechanical and electrified ND Series locks. These locks are put through extreme levels of testing and are proven to withstand 3,100 in-lb. of abusive lever torque-more than 2-1/2 times the Grade 1 standard requirement. Offset lever pull testing up to 1,600 lbs. assures you of the lock's superb resistance against pry bar attacks. More than strong, ND Series is built to last and shows nearly zero droop or wobble after 16 million cycles.

All ND Series locks including electronic functions, ligature-resistant trims, and ground-breaking, high-visibility status indication trims use the common cylindrical ANSI 161 door preparation making them easily interchangeable. They are ideal for all new construction and retrofit applications where Grade 1 strength and security are desired.

FINISHES



605
Bright Brass



606
Satin Brass



612
Satin Bronze



613
Oil Rubbed Bronze



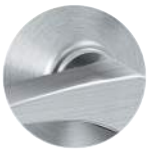
619
Satin Nickel



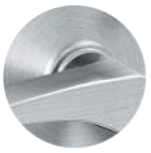
622
Matte Black



625
Bright Chrome



626
Satin Chrome



626AM
Satin Chrome Antimicrobial



643e[1]
Aged Bronze

1. e = an equivalent finish to the BHMA standard

LEVER STYLES



ATH (Athens)
8AT - Milled tactile warning



BRK (Boardwalk)
8BK - Knurled tactile warning



BRW (Broadway)
8BY - Knurled tactile warning



LAT (Latitude)
8LT - Milled tactile warning



LON (Longitude)
8LN - Milled tactile warning



OME (Omega)



RHO (Rhodes)[1]
8RO - Milled tactile warning[1]



SPA (Sparta)
8SP - Milled tactile warning

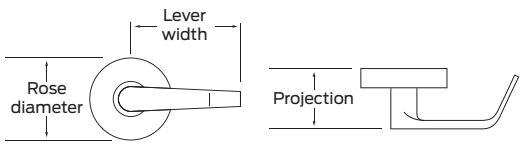


TLR (Tubular)
8TR - Knurled tactile warning

Dimensions		
Lever	**Width**	**Projection**
ATH (Athens)	4.56"	3.31"
BRK (Boardwalk)	4.94"	3.06"
BRW (Broadway)	4.50"	3.06"
LAT (Latitude)	4.50"	3.13"
LON (Longitude)	4.94"	3.13"
OME (Omega)	5.06"	3.31"
RHO (Rhodes)	4.56"	2.94"
SPA (Sparta)	4.94"	3.50"
TLR (Tubular)	4.94"	3.00"

Rose	Diameter
Standard	3.44"

Return to door meets 1/2" requirement for Boardwalk (BRK), Longitude (LON), Omega (OME), Rhodes (RHO), Sparta (SPA) and Tubular (TLR) levers



1. Optional break-away feature available on Rhodes levers for most locking functions. This allows the handheld part of the lever to break away from the shank when extreme torque is applied protecting the spring cage and locking mechanism from exterior access to help prevent unauthorized break-in.

INDICATORS

Inside Trim



Outside Trim



Available Messages

	Standard indicator messages		ND78/ND98 indicator message
	UNLOCKED	UNOCCUPIED	UNLOCKED To lock, turn key 1: then
	LOCKED	OCCUPIED	LOCKED 2: then, 3: Remove key
Inside trim	IS-LOC	IS-OCC	IS-CRS
Outside trim	OS-LOC	OS-OCC	–

Note: French and Spanish language options available.

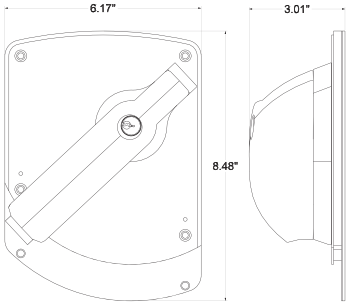
Indicator Dimensions

Trim	Width	Projection
Escutcheon	3.66"	0.95"
Window (surface area)	1.92 square inches	0.22 square inches

LIGATURE-RESISTANT SOLUTIONS



HSLR
Handed



Dimensions

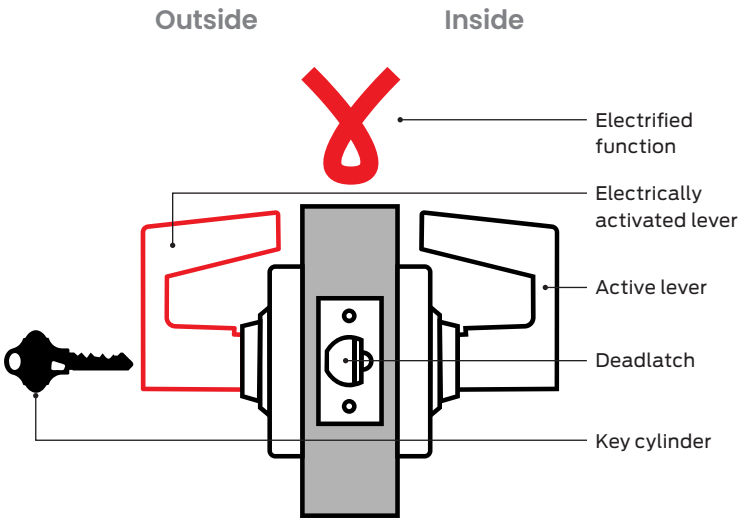
	Width	Height	Projection
HSLR	6.17"	8.48"	3.01"

Specifications and certifications

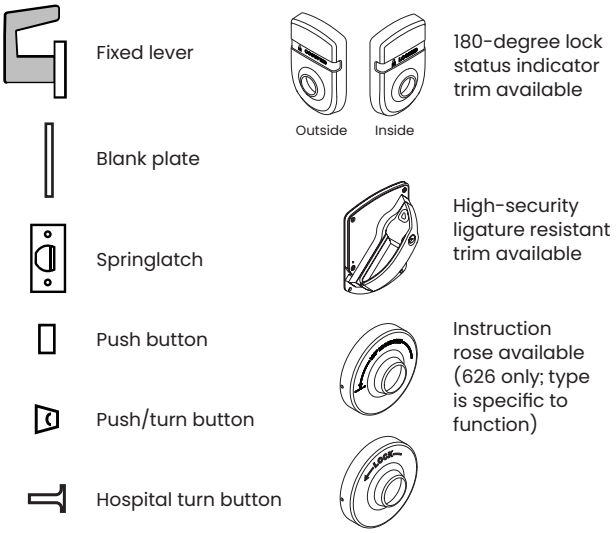
	HSLR
Accepted by NYS-OHM	●
ADA compliant	●
Suitable for:	
High risk areas	●
Medium risk areas	●
Low risk areas	●

MECHANICAL LOCK FUNCTIONS

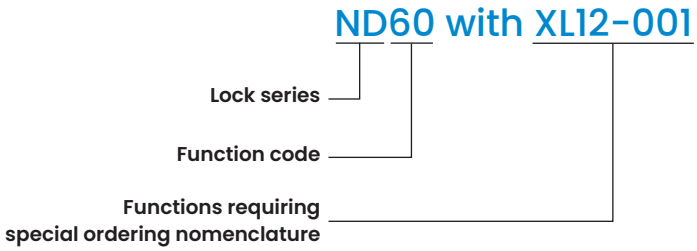
Legend

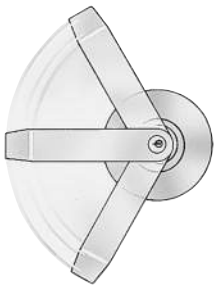


Key



Product Identification Guide

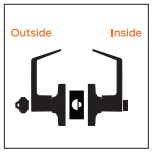




Vandlgard® functions.

Some functions feature Vandlgard locked lever protection. It allows the outside lever to rotate freely up and down when locked to limit the ability of vandals to apply excessive force to the chassis helping to prevent damage to internal components.

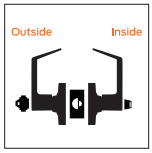
Mechanical keyed functions



Schlage ND91
ANSI F82

Entrance/office lock with Vandlgard

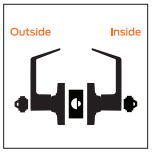
- Push-button locking.
- Push-button disengages outside lever until unlocked with key or by turning inside lever.
- Inside lever always free for immediate egress.



Schlage ND92
ANSI F109

Entrance lock with Vandlgard

- Turn/push-button locking: Pushing and turning button disengages outside lever, requiring using of key until button is manually unlocked.
- Push-button locking: Pushing button disengages outside lever until unlocked by key or by turning inside lever.
- Inside lever always free for immediate egress.



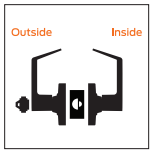
Schlage ND93
ANSI F88

Vestibule lock with Vandlgard

- Latch retracted by key from outside when outside lever is disengaged by key in inside lever.
- Inside lever always free for immediate egress.

Available with an optional instruction rose (XN12-035) that clearly identifies key rotation direction for rapid lockdown. 626 finish only.

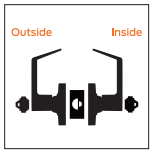




Schlage ND94
ANSI F84

Classroom lock with Vandlgard

- Outside lever disengaged and unlocked by key.
- Inside lever always free for immediate egress.



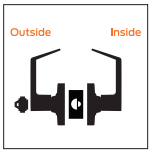
Schlage ND95
ANSI F110

Classroom security lock with Vandlgard (360-degree lockdown)

- Key in either lever locks outside lever by rotating the key 360-degrees counter-clockwise.
- Unlocking requires the key to be rotated 360-degrees clockwise.
- Vandlgard allows outside spindle to disengage from latch when locked.
- Inside lever always free for immediate egress.

Locks ordered in 626 finish come standard with an instruction rose (XN12-035) that clearly identifies key rotation direction for rapid lockdown. Other finishes receive a standard rose.





Schlage ND96
ANSI F86

Storeroom lock with Vandlgard

- Outside lever always disengaged.
- Entrance by key only.
- Inside lever always free for immediate egress.

Note: Available with Request to Exit (RX) function.

Key
Pushbutton
Turn/push button
Springlatch
Deadlatch

ALLEGION

CYLINDERS

Conventional cylinder	
P	6-pin Conventional (keyed 5)
P6	6-pin Conventional (standard)
Z	SL 7-pin Conventional (A2 pinning)
L	Less Conventional
C	Less 6-pin Conventional double cylinder

Full size interchangeable core (FSIC)	
R	6-pin FSIC
M	SL 7-pin FSIC (A2 pinning)
J	Less FSIC
T	Refundable FSIC construction core

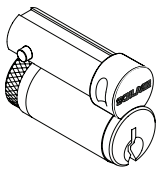
Small format interchangeable core (SFIC)	
G	7-pin SFIC (A2 pinning)
B	Less SFIC
BDC	Disposable SFIC construction core
H	Refundable SFIC construction core

SPECIFICATIONS

Chassis	
Material	Modular design of zinc and steel components plated for corrosion protection
Door thickness	**Standard:** 1-5/8" (41 mm) to 2-1/8" (54 mm) **Optional:** 1-3/8" (35 mm) - 6" (152 mm) EE, EO, EI, ED configurations
Handing	Non-handed
Trim	
Levers	**Standard:** Pressure cast zinc, plated to match product finish specification in nine designs - Athens (ATH), Boardwalk (BRK), Broadway (BRW), Latitude (LAT), Longitude (LON), Omega (OME), Rhodes (RHO), Sparta (SPA), and Tubular (TLR) **Optional:** Tactile feature available on all designs, specify 8AT, 8RO, 8SP, 8TR, 8LT, 8LN, 8OM, 8BY, or 8BK
Rose/escutcheon	Wrought brass or zinc, plated to match product finish specification
Finishes	**Nine available:** 605, 606, 612, 613, 619, 622, 625, 626, 643e; optional antimicrobial coating is available on 626–order as 626AM
Latch	
Backset	**Standard:** 2-3/4" (70 mm) **Optional:** 2-3/8", 3-3/4", 5" (60, 92, 127 mm)
Latch bolt	**Standard:** 1/2" (12 mm) throw spring latch or deadlatch (Stainless Steel) **Optional:** 3/4" (19 mm) throw anti-friction deadlatch available for pairs of doors
Strike	**Standard:** ANSI curved lip: 1-1/4" x 4-7/8" x 1-3/16" (32 mm x 124 mm x 30 mm) **Optional:** T Strike, ANSI strikes with alternative lip lengths, dust box options
Keying	
Formats	**Standard:** 6-pin Conventional cylinder with two patented keys **Optional:** FSIC, SFIC, and 7-pin SL cylinder formats plus less cylinder options made to fit non-Schlage cylinders from Best, Corbin Russwin, Medeco, Sargent and Yale
Access security	**Standard:** 6-pin, patented Everest 29 S123 keyway **Optional:** Open, restricted, Primus®, master keying, and construction keying
Wired electrified	
Input voltage	Autodetecting 12-24V DC, +/- 10%
Operating mode	Fail safe or fail secure via switch on chassis
Current draw	0.23 amps maximum; 0.01 amps holding
Request to Exit	Modular - 3A @ 125VAC / 2A @ 30VDC
Warranty	
	10 years mechanical, 1 year wired electrified
Certifications	
ANSI/BHMA	All ND Series comply with A156.2-2011, Series 4000 Grade 1 cylindrical locks; Wired electrified complies with A156.25 (indoor)
ICC	Complies with ICC A117.1 Accessible and Usable Buildings and Facilities
UL/cUL	UL 10C and CAN/ULC-S104; All locks 3-hour A label single fire door 4'0" x 10'0"; pair doors 3-hour fire door 8'0" x 8'0" with 3/4" latch option; pair doors 90-minute fire 8'0" x 10'0" with 3/4" latch option
CA Fire Code	All levers with a return to door of 1/2" (13 mm) or less comply (Rhodes, Sparta, Tubular, Omega, Longitude and Boardwalk)
FL Building Code	Complies with Florida Building Code (ASTM E330, E1886, E1996) and Miami Dade (TAS 201, 202, 203) requirements for hurricanes
Federal	Meets FF-H-106C Series 161 BAA compliant, all functions

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013158, Rev. 02/24

Full Size Interchangeable Core Cylinders for Schlage Locksets



Full Size Core Only

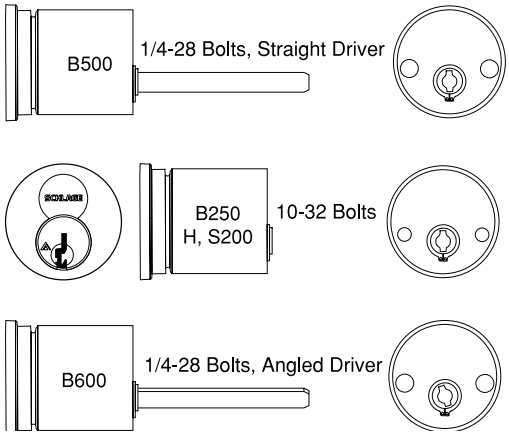
Number	Mechanism
23-030	Conventional core
30-120	Conventional core for hotel function (specify hand)
20-740-XP	Primus XP core (not available in hotel function)

Available 606 and 626 finish only. Order control keys separately.

Full Size IC Housings for Bored Deadlocks, Less Core

Lockset Series	Description	Number	Specify Finish
B500-Series	Outside	B610-203, B610-205	605, 609, 612, 613, 619, 625, 626, and 716
	Inside	B610-028**	605, 609, 612, 613, 619, 625, 626, and 716
B250, H, S200-Series	Outside	22-061	605, 606, 609, 610, 611, 612, 613, 616, 625, 626
	Inside of B252	22-062	
B600 / 700-Series	Outside	B610-027	605, 606, 609, 612, 613, 625, 626
	Inside	B610-028	See Note Below

Specify finish of B610-031 inside snap-on faceplate ordered separately for BC162 and B662/762.
**Inside housing does not include snap-on faceplate

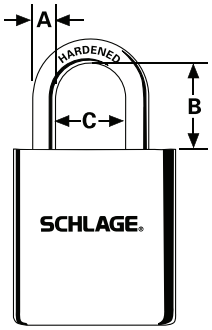




KS43F KS72F KS92M

Full Size Interchangeable Core Padlocks

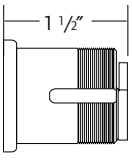
Part #	Shackle Dimensions		
	A	B	C
LESS CYLINDER - FULL SIZE INTERCHANGEABLE CORE			
BRASS BODY			
KS43A3200	3/8″	3/4″	3/4″
KS43D3200	3/8″	1 1/2″	3/4″
KS43F3200	3/8″	2″	3/4″
KS43G3200	3/8″	4″	3/4″
STEEL BODY			
KS72M3200	7/16″	1″	7/8″
KS72F3200	7/16″	2″	7/8″
KS92M3200	3/8″	1″	3/4″



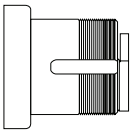
Note: To order Primus XP add the suffix - XP to the Primus part number. (Example: 12-345-XP)

Full Size Interchangeable Core Mortise Cylinders

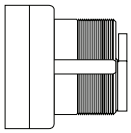




Cylinder Only



Compr. Ring & Spring



With Blocking Ring



Cylinders for Schlage L-Series Mortise Locks

	Design	Function	Core Mechanism		
			Conventional	Primus, Primus XP	Housing Less Core
	**L & N Escutcheons** (cylinders with compression ring)	All Except Below	30-008	20-798, 20-798-XP	30-007
		L9060P Outside	30-030	20-782, 20-782-XP	30-032 + 36-083
		L9485P, L9486P Hotel Funtions	30-010*	N/A	30-007
	**Sectional Trim** (cylinder with compression ring, spring and 3/8" blocking ring). 9060 requires 1/2" blocking ring.	All Except Below	30-138	20-776, 20-776-XP	30-137
		L9060P Outside	30-030 + 36-083 + 35-082-030	20-783, 20-783-XP	30-032 + 36-083 + 36-082-050
		L9485P, L9486P Hotel Funtions	30-040*	N/A	30-137

* Hotel function cores are handed. Specify hand of door.



L583-489
Cam for All Functions Except L9060 Outside



K510-680
Cam for L9060 Outside

Mortise Cylinders with Straight Cam for Exit Devices

Number	Core Mechanism	Collar
26-091	Conventional core	Compression ring & spring
20-061		3/8" blocking rings + compression ring & spring
20-763, 20-763-XP	Primus/Primus XP core	Compression ring & spring
20-771, 20-771-XP		3/8" blocking rings + compression ring & spring
20-059	Housing less core	None
26-064		Compression ring & spring

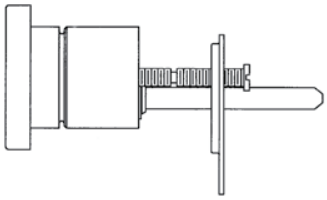


K510-730
Straight Cam, Other Applications

Notes 1. Available 605, 606, 609, 610, 612, 613, 625, and 626 finish. Cores furnished 606 and 626 only.
2. To differentiate between Classic and Everest, specify keyway. Example: C or CP (Classic), C123 (Everest). Everest C123 keyway standard.
3. All cylinders are 1 1/2" long.
4. Specify LKB if 0-bitted Primus XP cylinders are required less key blanks.

Full Size Interchangeable Core Cylinders for Exit Devices, Aluminum Doors, etc.





Interchangeable Core Rim Cylinders for Exit Devices

Number	Core Mechanism
20-057	Conventional core
20-757	Primus core
20-757-XP	Primus XP core
20-079	Housing only, less core

Available 605, 606, 609, 610, 612, 613, 625 and 626 finish.



Cylinders for Adams Rite MS and 4700 Series Lori 4500 Series and Corbin Russwin DL3000 Series

Number	Core Mechanism	Collar
26-098	Conventional core	Compression ring & spring
20-062	Conventional core	3/16″ + 3/8″ blocking rings
20-766	Primus core	3/16″ + 3/8″ blocking rings
20-766-XP	Primus XP core	3/16″ + 3/8″ blocking rings
20-060	Housing less core	None

These cylinders include set screw pack B220-050 for Adams Rite locks.



K510-711
Adams Rite
MS Cam

Cylinders for Adams Rite 4070 Series Deadlocks

Number	Core Mechanism	Collar
20-091	Conventional core	3/16″ + 3/8″ blocking rings
20-722	Primus core	3/16″ + 3/8″ blocking rings
20-722-XP	Primus XP core	3/16″ + 3/8″ blocking rings
20-090	Housing less core	None



B520-378
Adams Rite
4070 Cam

Notes
1. Mortise cylinders available 605, 606, 609, 610, 612, 613, 625, and 626 finish. Cores furnished 606 and 626 only.
2. To differentiate between Classic and Everest, specify keyway. Example: C or CP (Classic), C123 (Everest).
3. All cylinders are 1 1/2″ long.
4. Specify LKB if 0-bitted Primus XP cylinders are required less key blanks.

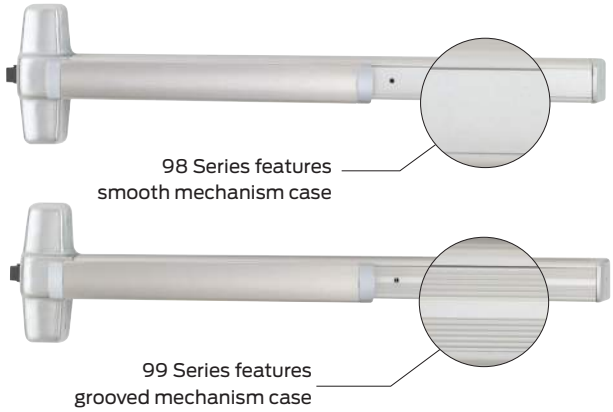
VON DUPRIN®

Exit device

98/99 Series

Overview

The 98/99 Series devices are heavy-duty push pads. The 98 Series has a smooth mechanism case, while the 99 Series has a grooved mechanism case. The 98/99 Series has been certified to the highest industry standards and are used in schools, hospitals and government buildings.



Device types



Rim device



75 Mortise lock device



27 Surface mounted vertical rod device [1]



47 Concealed vertical rod device, 5/16" throw [1]

48 Concealed vertical rod device, 5/8" top, 1 1/2" bottom throw



47WDC Concealed vertical rod wood door device [1]



49 Concealed vertical cable device [2]



50WDC Concealed vertical cable wood door device



57 Three-point latch device

[1] Also available less bottom rod (LBR)
[2] Also available less bottom latch (LBL)

ALLEGION™

VON DUPRIN®

Exit device
98/99 Series

Finishes



605
Bright Brass



606
Satin Brass



612
Satin Bronze



619
Satin Nickel



622
Matte Black

625
Bright Chrome



626
Satin Chrome



626AM
Satin Chrome, Antimicrobial



628
Aluminum, Clear Anodized



630
Satin Stainless



630AM
Satin Stainless, Antimicrobial



643e
Aged Bronze



693
Black

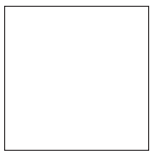


710
Dark Brown, Anodized

Due to the many variations in monitors and printers, color samples may appear different than the physical product. Contact your local sales representative for a physical color sample.

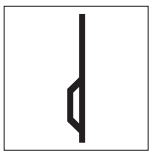
ALLEGION™

Trim functions



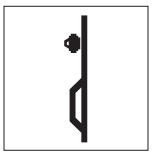
EO No outside trim

- Exit only



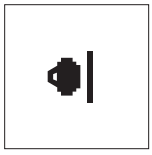
DT Dummy trim

- Pull when dogged (not recommended for fire device)



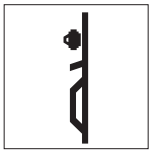
NL Night latch

- Key retracts latchbolt
- Rim and 1 ¼" mortise cylinder



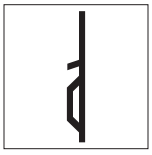
NLOP Night latch

- Key retracts latchbolt, pull required



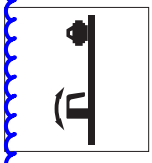
TP Thumbpiece

- Key locks and unlocks
- Rim and 1 ¼" mortise cylinder



TPBE Thumbpiece, blank escutcheon

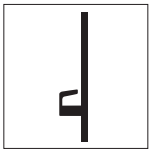
- Blank escutcheon always operable (no cylinder, use with DT trim)



L Lever

K Knob

- Key locks and unlocks
- Rim and 1 ¼" mortise cylinder
- Handed, reversible lever
- Electrified lever operation available



LDT Lever, dummy trim

KDT Knob, dummy trim

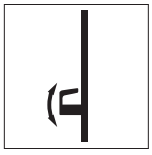
- Pull when dogged



LNL Lever, night latch

KNL Knob, night latch

- Key retracts latchbolt
- Rim and 1 ¼" mortise cylinder
- Handed, reversible lever



LBE[1] Lever, blank escutcheon

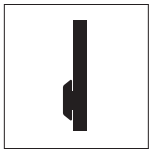
KBE Knob, blank escutcheon

- Always operable (no cylinder)



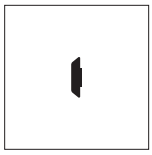
TL Turn lever

- Key locks and unlocks (use with DT trim)
- 1 ¼" mortise cylinder



TLBE Turn lever, blank escutcheon

- Blank escutcheon always operable (no cylinder, use with DT trim)



TLOP Turn lever, optional pull



HL Hospital latch

- Key locks and unlocks
- 1 ¼" mortise cylinder

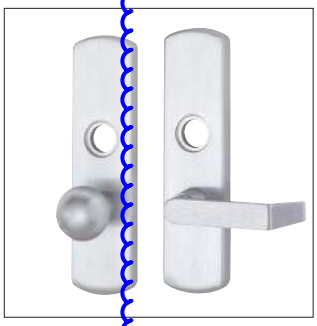
VON DUPRIN®

Exit device
98/99 Series

Trim styles



990



996



696



697
3/4" (19mm) diameter pull



392-7



HL



374



VR910



VR914

Dimensions

Trim style	Width	Height	Thickness	Projection
990	3"	14 3/16"	3/32"	2"
996 Knob	2 3/4"	10 3/4"	27/32"	3 1/4"
996 Lever	2 3/4"	10 3/4"	27/32"	2 7/8"
696	1 5/8"	13 1/2"	3/16"	2 1/6"
697	1 5/8"	13 1/2"	3/16"	3"
392-7	3/4" inch round stainless steel with 7" center to center that matches the 98/99 center case. 3 1/2" offset with 1 1/2" clearance.			
HL	2 9/16"	7 7/8"	-	2 5/8"
374	2 3/4"	10 3/4"	27/32"	
VR910/914 with RIM/verticals	5 1/2"	11"	-	
VR910/914 with mortise	7 1/4"	11"	-	

ALLEGION™

Electromechanical device options

Matrix shows available options per device type but does not represent compatibly across multiple options.

	Switches									Latch retraction					Delayed egress		Misc			
	LX	LX-LC	RX	RXLC	RX2	WP-RX	LX-RX	LX-RX-LC	SS	EL	SD-EL	QEL	HD-QEL	SD-QEL	CX	CX-RCM	ALK	CON	E996	Mortise
98 99	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
98F 99F	■	■	■	■	■	■	■	■	■	■		■			■	■	■	■	■	
XP98 XP99		■	■	■	■	■	■	■		■	■	■	■	■	■	■	■	■	■	
XP98-F XP99-F		■	■	■	■	■	■	■		■		■			■	■	■	■	■	
9875 9975			■	■	■	■			■	■	■	■	■	■	■	■	■	■	■	■
9875-F 9975-F			■	■	■	■			■	■		■			■	■	■	■	■	■
9827 9927	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
9827-F 9927-F	■	■	■	■	■	■	■	■	■	■		■			■	■	■	■	■	
9857 9957	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
9857-F 9957-F	■	■	■	■	■	■	■	■	■	■		■			■	■	■	■	■	
9847 9947	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
9847-F 9947-F	■	■	■	■	■	■	■	■	■	■		■			■	■	■	■	■	
9848 9948	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
9848-F 9948-F	■	■	■	■	■	■	■	■	■	■		■			■	■	■	■	■	
9849 9949	■[1]	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
9849-F 9949-F	■[1]	■	■	■	■	■	■	■	■	■		■			■	■	■	■	■	
9847WDC 9947WDC	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
9847WDC-F 9947WDC-F	■	■	■	■	■	■	■	■	■	■		■			■	■	■	■	■	
9850WDC 9950WDC	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
9850WDC-F 9950WDC-F	■	■	■	■	■	■	■	■	■	■		■			■	■	■	■	■	

[1] For 98/9949 devices, LX switch monitors trim input or electric dogging of EL/QEL devices. LX switch does not monitor latchbolt condition.

Mechanical device options

Dogging

CD — **Cylinder dogging, panic only**

CD-CX — **Center case cylinder dogging for Chexit devices**

CI — **Cylinder dogging indicator**
- Battery-operated dogging indicator in cylinder format with red light visible from over 75 feet away

DI — **Dogging indicator**
- Battery-operated dogging indicator in hex format with red light visible from over 75 feet away

LD — **Less dogging**

SD — **Special center case dogging**
- Center case cylinder dogging

Classroom security

-2 — **Double cylinder**
- Inside key cylinder locks/unlocks outside trim

-2SI — **Double cylinder with security indicator**
- Inside key cylinder locks/unlocks outside trim with visible indicators that provide status of door

CDSI — **Cylinder dogging with indicator**
- Provides visible lock/unlock indicators showing whether device is dogged or undogged

HDSI — **Hex dogging with indicator**
- Provides visible lock/unlock indicators showing whether device is dogged or undogged

Environmental

PN — **Pneumatic latch retraction**
- For areas where electrical devices banned
- Special linkage for mechanical or pneumatic dogging

QM — **Quiet mechanical option**
- Provides damper-controlled relatching of device

INS — **Insulclad kits**
- Kits with longer fasteners or parts for Insulclad doors

AM — **Anti-microbial finish**

Weatherized

WH — **Weep holes**
- Drainage (weep) holes in mechanism case

WS — **Windstorm**
- Severe weather certified/tested
- FEMA and ICC compliant
- Tornado and hurricane tested

California code

AX — **Accessible device**
- UL certified to meet new 5 lb. maximum operating force requirement
- Exceeds ANSI/BHMA requirements

Latches

PL — **Pullman latch**
- Latches are always extended
- Most commonly used in conjunction with electric strikes and LBR-less bottom rod application

Mechanical device options

Touch bar trim

RSS — **Red silk screen**
- Red silk-screened lettered touchbar trim

PUSH — **PUSH**
- Touchbar trim embossed PUSH

SG — **Safety glow**
- Self-illuminating touchpad
- Glows brightly during low or no light conditions

KN — **Knurled touchbar**
- Tactile warning applied to device

BRAILLE — **Braille**
- Vision impaired touchpad
- Raised letter and Braille

Mechanical device options

Matrix shows available options per device type but does not represent compatibly across multiple options.

	Dogging						Classroom security				Environmental				Weatherized		CA code
	CD	CD-CX	CI	DI	LD	SD	-2	-2SI	CDSI	HDSI	PN	QM	INS	AM	WH	WS	AX
98 99	■	■	■	■	■	■	■	■	■	■	■	■		■	■		■
98F 99F							■	■			■	■		■	■		■
XP98 XP99	■	■	■	■	■	■	■	■	■	■				■	■		■
XP98-F XP99-F							■	■						■	■		■
9875 9975	■	■	■	■	■	■	■		■	■	■			■	■		
9875-F 9975-F							■				■			■	■		
9827 9927	■	■	■	■	■	■			■	■	■	■		■	■	■	■ LBR
9827-F 9927-F											■	■		■	■	■	■ LBR
9857 9957	■	■	■	■	■	■			■	■	■			■	■	■	
9857-F 9957-F											■			■	■	■	
9847 9947	■	■	■	■	■	■			■	■	■		■	■	■		■ LBR
9847-F 9947-F											■			■	■		■ LBR
9848 9948	■	■	■	■	■	■			■	■	■			■	■		
9848-F 9948-F											■			■	■		
9849 9949	■	■	■	■	■	■			■	■	■		■	■	■		■ LBL
9849-F 9949-F											■			■	■		■ LBL
9847WDC 9947WDC	■	■	■	■	■	■			■	■	■			■	■		
9847WDC-F 9947WDC-F											■			■	■		
9850WDC 9950WDC	■	■	■	■	■	■			■	■	■			■	■		■ LBL
9850WDC-F 9950WDC-F											■			■	■		■ LBL

Mechanical device options

Matrix shows available options per device type but does not represent compatibly across multiple options.

	Latches	Touch bar trim				
	PL	RSS	PUSH	SG	KN	BRAILLE
98 99		■	■	■	■	■
98F 99F		■	■	■	■	■
XP98 XP99		■	■	■	■	■
XP98-F XP99-F		■	■	■	■	■
9875 9975		■	■	■	■	■
9875-F 9975-F		■	■	■	■	■
9827 9927	■	■	■	■	■	■
9827-F 9927-F		■	■	■	■	■
9857 9957		■	■	■	■	■
9857-F 9957-F		■	■	■	■	■
9847 9947	■	■	■	■	■	■
9847-F 9947-F		■	■	■	■	■
9848 9948		■	■	■	■	■
9848-F 9948-F		■	■	■	■	■
9849 9949		■	■	■	■	■
9849-F 9949-F		■	■	■	■	■
9847WDC 9947WDC		■	■	■	■	■
9847WDC-F 9947WDC-F		■	■	■	■	■
9850WDC 9950WDC		■	■	■	■	■
9850WDC-F 9950WDC-F		■	■	■	■	■

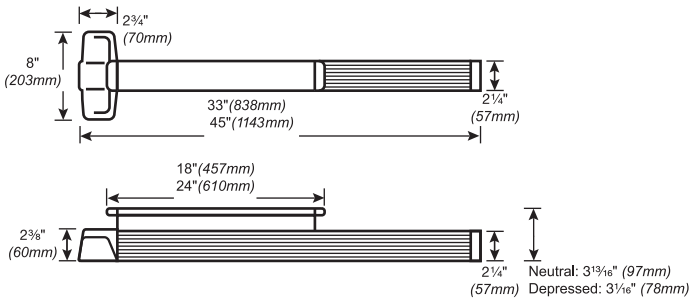
VON DUPRIN®

Exit device
98/99 Series

Specifications

Accessibility	▪ Force to depress push pad – AX device: 5 lbs – Standard device: 15 lbs ▪ Push pad projection – Neutral: 3 13/16" (97 mm) – Depressed: 3 1/16" (78 mm)
Certifications/ approvals	All Von Duprin 98/99 exit devices are ANSI/BHMA Certified. Please refer to the BHMA Certified Products Directory for specific listings.
Mounting height	39 13/16" (1011 mm) 39 11/16" (1008 mm) with mullion
Warranty	36 months from the date of placing the product in operation

Dimensions



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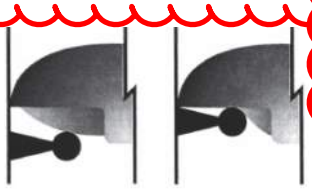
Mechanical options

AX Accessible device

The AX device is a UL certified exit device designed to meet the progressive requirements of the California Building Code for accessible openings. This device meets the 5 lbs of operating force requirement called for in chapter 11B-309.4. The AX device also exceeds ANSI/BHMA requirements. Available devices include: AX98/99, AX98/99-F, AX98/9949LBL, AX98/9949-F LBL, AX98/9949-F LBLAFL. Additionally, all AX devices will be shipped with a new UL label clearly stating “Meets California building Code (2013) Sec. 11B-309.4” and an “AX” identifier label on device center case. See images below for reference.



XP Extra performance



For increased security the XP98/99 Rim exit device has a static load force resistance of more than 2,000 pounds, twice that of standard rim exit devices. The two-piece latch bolt forms a 90° latch-to-strike contact. The “smart” latch changes shape when subjected to external forces. This design enables the exit door to withstand an external attack and remain secure. Additionally, the patented latch bolt design provides a greater, longer-lasting latch bolt to strike contact which is not easily affected by the twisting motion of a weakened frame, resulting in an opening that will remain strong.

With a door loaded to 250 pounds, XP98/99 requires less than 40 pounds of pressure to open, 25% less than the safety code requires.

XP98/99 is available for panic or fire exit hardware applications. Dimensions, finishes and trim options are equal to the standard 98/99 series rim exit device.

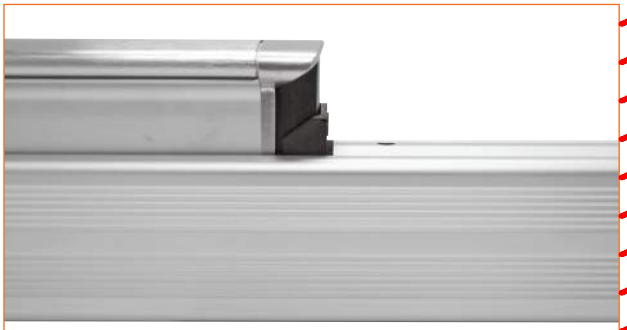
Note: The 909 strike is to be used for all applications.
The exception occurs with the use of fire rated double door applications, in this instance the 954 strike is required.

PA Pushpad armor

Built to absorb impact, the pushpad armor stands up to the wear and tear of demanding high-traffic areas. This composite accessory provides added support, while protecting the pushpad on the hinge side of the device. Available for 33A/35A and 98/99 series exit devices. See images below for reference.







ALLEGION

VON DUPRIN®

996L-KC

Lever key capture trim



Overview

996L-KC lever key capture trim allows for single-handed entry while incorporating the patented vandal-resistant trim design.

The trim is unlocked using a 180 degree key turn, upon which the key becomes captured in cylinder. This operation allows the lever to become active and used to open the door. When the key is then rotated to a maximum 180° in the reverse direction, the key can be removed, and the lever returns to a rigid/locked state.

The vandal-resistant breakaway feature engages when more than 35 lbs. of torque pressure is applied to the locked lever. In breakaway mode, the lever dangles, internal components are protected from breakage, and the trim remains locked. Lever position is restored simply by pulling up on the lever.

The 996L-KC trim is compatible with most 98/99 device configurations with the exception of 75 mortise locks.

The 996L-KC trim can be ordered with a device, or a conversion kit can be purchased as a standalone product to be retrofitted to an existing 996L trim.

Features and benefits

- Vandal-resistant breakaway lever
- Allows for single-handed operation
- Compatible with most device configurations, except for 75 mortise locks
- Field retrofit kits work for 996L
- Field-reversible handing

To order, specify:

- 996L-KC
- Lever style: 06 lever is furnished standard if not specified
- Handing: RHR or LHR (RHR is furnished standard if not specified; field reversible)
- Finish: 605, 606, 612, 613, 619, 622, 625, 626, 643e, 693, 695
- When ordering with device, specify device type + 996L-KC, example: 98LX 996L-KC
- When ordering conversion kit, specify part number 47683326

Note: For more ordering details, please reference Von Duprin catalog and price book.

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For more, visit **www.allegion.com**

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DIVISION 10
IDENTIFYING DEVICES

SECTION 10 14 26

IDENTIFYING DEVICES

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes metal and plastic signs and exterior dimensional letters.
B. Related requirements:

1. 03 20 00 for post-mounted sign footings.

1.2 SUBMITTALS

A. Data: Manufacturer Product Data and installation instructions for each type of sign required.
B. Samples: Each sign form and material showing finishes, colors and surface texture.

1. Full-size sample units, when requested by Architect.
2. Acceptable units may be installed as part of the work.
3. Approved samples will serve as Architect’s control samples.

C. Shop drawings: Of all signs. Include elevations, sections, and large-scale details of lettering layout and color scheme. Show anchorages and accessory items.

1. Furnish location template drawings for signs supported or anchored to other construction.

D. Sign schedule: Include locations and sign graphics (images, text, and messages).
E. Template: Provide template for free-standing individual lettering for building signage.

1.3 QUALITY ASSURANCE

A. Regulatory requirements: Comply with applicable requirements of the laws, codes, ordinances and regulations of Federal, State and Municipal authorities having jurisdiction. Obtain necessary approvals and permits from authorities as required.

1. Signage shall conform to CBC Section 11b-703. Grade 2 Braille shall be used whenever Braille symbols are specifically required. Refer to CBC Section 11B-703.3.
2. Products shall comply with current disabled accessibility requirements.
3. Signage must be field inspected in accordance with 2013 CBC 11B-703. 1.1.

B. Uniformity: For each sign form and graphic image process indicated furnish products of a single manufacturer.
C. Coordination: Before starting Shop Drawings, notify the Architect and arrange a meeting with the Owner's designated personnel to review in detail the work of this Section. Review and coordinate layouts and colors for each sign, and obtain Architect's approval prior to generating shop drawings.

1.4 HANDLING

A. Pack, wrap, crate, bundle, box, bag, or otherwise package, handle, transport, and store fabricated work as necessary to provide protection from damage.

1.5 WARRANTY

B. Warrant this work against defective materials, workmanship, and design for 3 years from Substantial Completion.
C. Fading, cracking, warping, peeling, delaminating, rusting, corroding, and structural failure, including distortion by whatever cause, shall be construed to mean failure because of faulty materials and workmanship.
D. Failures during the warranty period shall be repaired or replaced at no cost to the Owner.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Plastic and metal signage:

1. ASI.
2. Architectural Graphics, Inc.
3. Architectural Signs and Directories.
4. Best Manufacturing Sign Systems.
5. Vomar Products, Inc.

B. Dimensional Building Signage:

1. Basis of Design: Impactsigns.com
2. Signlettersupplier, www.signlettersupplier.com/
3. ASI Signage Inovations, asisignage.com/our-products/dimensional-letters.
4. CASigns, casigns.com.

2.2 DESIGN CRITERIA

A. General: Contractor is responsible for the structural design of the post-mounted signs and to incorporate reasonable safety factors necessary to protect the Owner against public liability. Designs which survive rational engineering analyses will be acceptable.
B. District standards:

1. All signage criteria: Comply with UCB table 11B 703.5.5.

a. Except for reflective parking and traffic signs, all identification, informational and directional signs must have non-glare backgrounds and characters. “Matte,” “satin” or brushed metals are rarely appropriate. These and other shiny or reflective materials are only appropriate for frames or other strictly decorative elements, which shall not intrude into the area of the sign.
b. On visual signs, size characters and symbols according to viewing distance. Sign mounted 80 inches or more AFF must have 3-inch high (minimum) characters.

c. Pictograms (pictorial symbols) and ISA's (International Symbol of Accessibility) bon interior signs at eye level should be 3 inches (minimum) high or twice as high as height of largest text on sign, whichever is greater. On signs where the bottom is 72 inches or more AFF, (minimum) pictograms or ISA's should be 6 inches high or twice as height as height of largest text on sign, whichever is greater.

1) NOTE: Pictograms and other symbols, such as ISA's, which are included on signs with raised characters and Braille, are not required to be raised. The ISA, when included on a tactile sign, does not require any accompanying text, either visual or tactile. Contrast between characters and background must be 70 percent (minimum).

d. On tactile signs, raised characters must be 5/8 inch minimum and 2 inches maximum in height.
e. Characters shall be selected from fonts where the width of uppercase "O" 60% minimum and 110% maximum of the height of the uppercase letter "T
f. Stroke width must be 15 percent (maximum) of character height, measured by stroke, width, and height of uppercase "I".
g. Pictograms that identify rooms and spaces, such as gender pictograms for restrooms must be in a 6-inch (minimum) height field directly above accompanying raised text and California Braille. No characters or Braille in field.
h. Ease all edges and corners of signs. On signs installed on poles, provide radius corners and eased edges.
i. Concealed mounting systems:
   1) Signs mounted on glazing are to have the same size blank backer sign on the opposite to cover the adhesive spots on the glazing. Verify blank backer color with architect.
   2) Epoxy adhesive.
   3) For exterior signs where epoxy-mounted signage is not practical, provide tamper-resistant screw mounting.

2. Restroom door symbols: ADAAG-compliant, colored plastic sign, 0.25 inch thick, unless noted otherwise. Unisex restroom signs shall comply with CBC 2013 Section 11B-703.7.2.6.3. The male triangle symbol shall be of a color that is different from and contrasts with the background female circular symbol.
3. Room identification signage: Colored plastic, 0.125 inch thick, unless noted otherwise.
4. Exterior non-metal signage: Tough laminated polycarbonate face adhered to 1/8 inch acrylic back plate.
5. Tactile signage:

a. Raised characters must use Sans Serif font, in all uppercase characters. NO Serif fonts of any kind are allowed. Use 1/8 inch (minimum) between the two closest points of adjacent tactile characters, measured at top surface of characters. Use beveled or rounded characters.
b. Braille should be directly below the text, separated by 3/8 inch (minimum) from the bottom of text to top of Braille, either flush left with text or centered below it, depending on layout. Keep tactile messages very brief.
c. California Grade 2 Braille must accompany raised text characters.
d. Use rounded or domed California Braille dots, each distinct and separate.

e. California Braille dots within cells must be 1/10 inch apart o.c. Cells must be 2/10 inch apart. Measure cell distance from the center of top dot location of column two of the first cell to the center of top dot location of column one of the next cell on right, within the same word. Dots must be 1/40 inch high at dot apex.

6. Informational and directional signage: Do not use vinyl adhesive-applied signage for exterior applications.
7. Parking lot signage:

a. Engineer-grade reflective recycled aluminum 0.63 thick; porcelain enamel with beaded text and symbols. Mount signs where applicable on galvanized steel post embedded into concrete footings, diameter and depth as indicated.
b. Tow-Away sign phone number: 415-553-1200. Confirm with local police department and SF Municipal Transportation Agency (SFMTA). Mount Tow-Away sign per CBC and ADA requirements at entry gate or driveway approach to school parking lot.
c. Include “NO SKATEBOARDING – NO ROLLER SKATING – NO BIKE RIDING” signage at parking lots and other locations where applicable.

2.3 MATERIALS

A. Polycarbonate Sheet: Of thickness indicated, manufactured by extrusion process, coated on both surfaces with abrasion-resistant coating:

1. Impact Resistance: 16 ft-lbf/in., ASTM D 256, Method A.
2. Tensile Strength: 9000 lbf/sq. in., ASTM D 638.
3. Flexural Modulus of Elasticity: 340,000 lbf/sq. in., ASTM D 790.
4. Heat Deflection: 265 deg F at 264 lbf/sq. in., ASTM D 648.
5. Abrasion Resistance: 1.5 percent maximum haze increase for 100 revolutions of a Taber abraser with a load of 500 g, ASTM D 1044.

B. UV-absorbing acrylic sheet: ASTM D 4802, Category A-1 (cell-cast sheet), Type UVA.
C. Cast acrylic sheet for interior application only: Cast (not extruded or continuous cast) methacrylate plastic sheet with a minimum flexural strength of 16,000 psi, ASTM D 790.

1. Transparent sheet: Colorless sheet with light transmittance of 92 percent, ASTM D 1003, in matte finish, unless otherwise indicated.
2. White translucent sheet: White translucent sheet of density required to produce uniform brightness and minimum halation effects.
3. Opaque sheet: Colored opaque acrylic sheet in colors and finishes to match Architect’s control samples.

D. Aluminum sheet: ASTM B 209, 0.08-inch alloy 3000 Series. Provide with mill finish for work to be painted.
E. Sheet steel: Minimum 18-gage.
F. Steel shapes: ASTM A 36 hot-rolled, or cold-rolled shapes, plates and tubes in sizes indicated on Drawings, hot-dip galvanized.
G. Stainless steel plate, sheet and strip: ASTM A 167, AISI Type 302.
H. Fasteners: Use concealed fasteners unless otherwise indicated. Fabricate from metals which are non-corrosive to sign materials and mounting surface.
I. Anchors and inserts:

1. Non-ferrous metal or hot-dipped galvanized steel anchors and inserts for exterior installations.
2. Toothed steel or lead expansion bolt devices for drilled-in-place anchors. Furnish inserts, as required, to be set into concrete or masonry work.

J. Colored coatings: Non-fading coatings, including inks and paints for copy and background colors, recommended by acrylic manufacturers for optimum adherence to acrylic surface.

2.4 FABRICATION OF SIGNS

A. General:

1. Produce smooth, even, level sign panel surfaces, constructed to remain flat when installed within a tolerance of plus 1/16-inch measured diagonally from corner to corner.
2. Letter style: As indicated on the Drawings.

B. Surface and subsurface silkscreening:

1. Silkscreen copy shall be photo-produced using fine mesh screens, 280 mesh or finer, and screening inks.
2. Surface of printed material shall be uniform in color and finish and free of pinholes or other blemishes.
3. Signs shall be consistent in color, value and coverage, and shall maintain proper opacity, or translucency as applicable, and shall be free of blistering, fading and other imperfections.
4. Sign color registration shall be crisp, sharp and free of imperfections.

C. Laminated sign panels: Permanently laminate face panels to backing sheets, of material and thickness indicated, using manufacturer's standard process.

D. Bracket-mounted signs: Fabricate brackets and fittings for bracket-mounted signs from extruded aluminum. Factory paint brackets in color matching background color of sign panel, unless otherwise indicated.

E. Posts, brackets and fittings: Factory-paint brackets in color matching background color of sign panel, unless otherwise indicated.

F. Dimensional Letters:

1. Size 6 inches high by 1 inch deep.
2. Materials: Stainless steel letters, brackets and fasteners.
3. Font: Verify with Architect.
4. Fasteners: Tamper-resistant.

2.5 FINISHES

A. Apply finishes uniformly, over compatible primer for finishes, without runs, pinholes, ripples, holidays and other defects. Flat screen letters, numbers and symbols.

B. Match approved samples.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Verify conditions and measurements affecting the work of this Section at site.

B. Correct conditions detrimental to the proper and timely completion of this work before proceeding with installation.

3.2 INSTALLATION

A. Coordinate post installation with the work of Section 03300.
B. Locate signs where indicated.
C. Install level, plumb and at heights indicated, with sign surfaces free from distortion and other defects.
D. Wall mounted signs: Use adhesive or ship plate mounting, except where tape mounting is indicated.
E. Dimensional Signage:

1. Provide backing at exterior locations.
2. Exposed fasteners are not allowed.

3.3 FIELD QUALITY CONTROL

A. Touchup minor damage, or replace damaged parts.
B. Replace signs damaged beyond satisfactory field repair.

3.4 SIGN SCHEDULE

A. DF-1:

1. Type: Door Frame District Signage.
2. Location: Interior: Cast Acrylic.
3. Location: Exterior: Polycarbonate/Acrylic.

B. DS-1:

1. Type: Directional Sign-Assistive Listening:
2. Location: Interior.
3. Material: Cast Acrylic.

C. DS-2

1. Type: Directional Sign; Accessible Route.
2. Location: Interior: Cast Acrylic.
3. Location: Exterior: Polycarbonate/Acrylic.

D. DS-3

1. Type: Directional Sign-Elevator
2. Location: Interior.
3. Material: Cast Acrylic.

E. DS-4:

1. Type: Directional Sign-Exit.
2. Location: Interior.
3. Material: Cast Acrylic.

F. DS-5:

1. Type: Directional Sign - Exit
2. Location: Interior.
3. Material: Cast Acrylic.

G. DS-6:

1. Type: Main Entry Directional Sign
2. Location: Exterior
3. Material: Polycarbonate/Acrylic

H. RS-1:

1. Type: Room Identification Sign, Typ.
2. Location: Interior. Material: Cast Acrylic.
3. Location: Exterior: Polycarbonate/Acrylic.

I. RS-2:

1. Type: Room Identification Sign-Toilets.
2. Location: Interior.
3. Material: Cast Acrylic.

J. RS-3:

1. Type: Toilet Door Signage.
2. Location: Interior.
3. Material: Cast Acrylic.

K. RS-4:

1. Type: Stair Identification Sign
2. Location: Interior. Material: Cast Acrylic.
3. Location: Exterior: Polycarbonate/Acrylic.

L. RS-5:

1. Type: Floor Identification Sign
2. Location: Interior.
3. Exterior: Polycarbonate/Acrylic.
4. Interior: Cast Acrylic.

M. SS-1:

1. Type: Safety Sign/Maximum Occupancy.
2. Location: Interior.
3. Material: Cast Acrylic.

N. VS-1:

1. Type: Aluminum Sheet with galvanized steel post.
2. Location: Exterior

O. VS-2:

1. Type: Aluminum Sheet with galvanized steel post.
2. Location: Exterior

P. VS-3:

1. Type: Aluminum Sheet with galvanized steel post.
2. Location: Exterior

END OF SECTION

DIVISION 31
EARTHWORK

SECTION 31 11 00

CLEARING & GRUBBING

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes all work necessary to successfully complete demolition, clearing & grubbing to prepare site for the phasing and new construction, including the following:

1. Protecting existing trees and vegetation to remain.
2. Trimming tree limbs and roots.
3. Removing trees as designated.
4. Clearing vegetation, debris, trash and other materials within limits indicated.
5. Grubbing of vegetation within limits indicated.
6. Stripping of topsoil within limits indicated.
7. Removing above-grade site improvements within limits indicated.
8. Disconnecting, capping or sealing, and abandoning site utilities in place.
9. Disconnecting, capping or sealing, and removing site utilities.
10. Disposing of objectionable material off site.
11. Clean line saw cutting of existing asphalt pavement, concrete sidewalks, concrete curb/gutter, etc., as specified herein.
12. Clearing and site preparation. Including removal of site vegetation and other root system.
13. Protection from injury or defacement of trees and other vegetation and objects to be preserved.
    a. Removal of surface debris and deleterious materials such as rubbish.
    b. Removal and stockpile of materials for landscaping use at approved location.
    c. Disposal of unwanted materials off site.

1.2 RELATED DOCUMENTS

A. Caltrans 2022 Standard Specifications, Section 17, Clearing and Grubbing.

1.3 REGULATORY REQUIREMENTS

A. No burning shall be allowed.

B. Comply with the following 2022 California Code of Regulations:

1. Title 8: CAL/OSHA, Chapter, Subchapter 4 – Construction Safety Orders

2. Title 24: Part 2, California Building Code, Chapter 33, Protection of Pedestrian during Construction or Demolition.
3. Bay Area Air Quality Management District
4. Alameda County Water District, Standard Specification and Details.
5. County of Alameda County Public Works Department, Design Guidelines.

1.4 DEFINITIONS

A. ANSI: American National Standards Institute.

B. CAL-OSHA: California Occupational Safety and Health Administration.

C. Topsoil: Natural or cultivated surface-soil layer containing organic matter and sand, silt, and clay particles; friable, pervious, and black or a darker shade of brown, gray, or red than underlying subsoil; reasonably free of subsoil, clay lumps, gravel, and other objects more than 2-inches in diameter; and free of weeds, roots, and other deleterious materials.

D. Tree Protection Zone: Area surrounding individual trees or groups of trees to be protected during construction, and defined by the drip line of individual trees or the perimeter drip line of groups of trees, unless otherwise indicated.

1.5 MATERIAL DISTRICTSHIP

A. Except for stripped topsoil or other materials indicated to remain District's property, cleared materials shall become Contractor's property and shall be removed from Project site.

1.6 SUBMITTALS

A. Submittal procedure shall be as outlined in Division 1 – General Requirements.

1.7 QUALITY ASSURANCE

A. Do not remove or prune trees without first securing a permit from the appropriate agency.

B. Prune to the standards of the International Society of Arborists and to ANSI 300.

1.8 PROJECT CONDITIONS

A. Except for materials indicated to be stockpiled or to remain the District's property, cleared materials are the Contractor's property. Remove cleared materials from site and dispose of in lawful manner.

B. Salvable Improvements: Carefully remove items indicated to be salvaged and store where indicated on plans or where designated by the District. Avoid damaging materials designated for salvage.

C. Unidentified Materials;

1. If unidentified materials are discovered, including hazardous materials that will require additional removal other than is required by the Contract Documents, immediately report the discovery to the District.
2. If necessary, the District will arrange for any testing or analysis of the discovered materials and will provide instructions regarding the removal and disposal of the unidentified materials.

PART 2 - PRODUCTS

2.1 SOIL MATERIALS

A. Backfill excavations resulting from demolition operations with on-site or import materials conforming to structural backfill defined in Section 31 23 33 Utility Trenching and Backfill.

1. Obtain approved borrow soil materials off-site when satisfactory soil materials are not available on-site.

PART 3 - EXECUTION

3.1 PREPARATION

A. Protect and maintain benchmarks and survey control points during construction.

B. Locate and clearly flag trees and vegetation to remain or to be relocated.

C. Protect existing site improvements to remain during construction.

1. Restore damaged improvements to their original condition, as acceptable to the Engineer and/or District. Prior to restoration the contractor shall notify Engineer and /or District of the damaged improvements.

3.2 TREE PROTECTION

A. Erect and maintain temporary fence around drip line of individual trees or around perimeter drip line of groups of trees to remain. Remove fence when construction is complete.

B. Do not store construction materials, debris, or excavated material within drip line of remaining trees.

C. Do not permit vehicles or equipment within drip line of remaining trees.

D. Do not excavate within drip line of remaining trees, unless otherwise indicated.

E. Where excavation for new construction is required within drip line of trees, hand clear and excavate to minimize damage to root systems. Use narrow-tine spading forks, comb soil to expose roots, and cleanly cut roots as close to excavation edge as possible.

1. Cover exposed roots with burlap and water regularly.
2. Temporarily support and protect roots from damage until they are permanently

relocated and covered with soil.

3. Coat cut faces of roots more than 1-1/2-inches in diameter with an emulsified asphalt or other approved coating formulated for use on damaged plant tissues.

4. Cover exposed roots with wet burlap to prevent roots from drying out. Backfill with soil as soon as possible.

3.3 TREE PRUNING

A. Prune trees to balance the crown, and eliminate hazards. Perform main work to reduce sail effect through thinning, reducing end weights, shortening long heavy limbs, removing deadwood, weak limbs and sucker growth. Prune limbs back to an appropriate lateral branch.

B. Make final cuts at the outer edge of the branch collar in accordance with the arborist's recommendations.

C. Perform pruning work in a safe and proper manner, adhering to CAL-OSHA and ANSI Standards.

3.4 ROOT PRUNING

A. Do not cut tree roots greater than 3-inch in diameter and less than 12-inches below ground level without approval of the District.

B. Cut tree roots cleanly, as far from the trunk as possible, and not underneath any area where walkways are to be constructed. Root pruning shall be to a depth of 18-inches.

C. Tree root prune using a Vermeer root-cutting machine. Obtain the District's approval before using alternate equipment or techniques.

D. Complete tree root pruning prior to any excavation adjacent to the tree.

E. Do not expose tree roots to drying out. Cover root ends with soil or burlap and keep moist until the final backfill is completed.

3.5 TREE REMOVAL

A. Remove trees designated for removal prior to the construction of new improvements.

B. Perform tree removal work in a safe and proper manner, adhering to CAL-OSHA and ANSI Standards.

C. Remove or grind stumps to a minimum of 18-inches below finish subgrade. Remove surface roots to this depth within 24-inches of the tree trunk. Trees, plants and roots that are below proposed building footprint or slabs on grade shall be removed in its entirety.

3.6 RESTORATION

A. Restore damaged improvements to their original condition, as acceptable to the District.

B. Repair or replace trees and vegetation indicated to remain that are damaged by construction operations, as directed by the District.

1. Employ a qualified arborist, licensed in jurisdiction where the Project is located, to submit details of proposed repairs and to repair damage to trees and shrubs.

2. Replace trees that cannot be repaired and restored to full-growth status, as determined by the District. Clear and grub existing areas only to extent required by new construction and as indicated. Use methods required to complete the Work within limitations of governing regulations.

3.7 UTILITIES

A. Locate, identify, disconnect, and seal or cap off utilities indicated to be removed or abandoned.

B. Arrange to shut off indicated utilities with utility companies or verify that utilities have been shut off.

C. Existing Utilities: Do not interrupt utilities serving facilities occupied by District or others unless authorized in writing by the District, and then only after arranging to provide temporary utility services according to requirements indicated.

D. Coordinate utility interruptions with utility company affected.

E. Do not proceed with utility interruptions without the permission of the District and utility company affected. Notify District and utility company affected 14 working days prior to utility interruptions.

F. Excavate and remove underground utilities that are indicated to be removed.

G. Securely close ends of abandoned piping with tight fitting plug or wall of concrete minimum 6-inches thick. All abandoned piping shall be filled with a cementious material, such as controlled low strength material.

3.8 CLEARING AND GRUBBING

A. Remove obstructions, trees, shrubs, grass, and other vegetation to permit installation of new construction. Removal includes digging out stumps and obstructions and grubbing roots.

B. Remove trash, debris, logs, concrete, masonry and other waste materials.

C. Do not remove trees, shrubs, and other vegetation indicated to remain or to be relocated.

D. Completely remove stumps, roots, obstructions, and debris extending to a depth of 18-inches below subgrade. Trees, plants and roots that are below proposed building footprint or slabs on grade shall be removed in its entirety.

E. Use only hand methods for grubbing within drip line of remaining trees.

3.9 TOPSOIL STRIPPING

A. Remove sod and grass before stripping topsoil.

B. Strip topsoil to whatever depths are encountered in a manner to prevent intermingling with underlying subsoil or other waste materials.

C. Remove trash, debris, weeds, roots, and other waste materials.

D. Stockpile topsoil materials designated to remain on site at a location approved by the District at a location away from edge of excavations without intermixing with subsoil. Grade and shape stockpiles to drain surface water. Cover to prevent windblown dust. Refer to the SWPPP as required.

E. Do not stockpile topsoil within drip line of remaining trees.

3.10 SITE IMPROVEMENTS

A. Remove existing above- and below-grade improvements as indicated and as necessary to facilitate new construction.

B. Remove slabs, paving, curbs, and gutters, as indicated. Where concrete slabs, curb, gutter and asphalt pavements are designated to be removed, remove bases and subbase to surface of underlying, undisturbed soil.

C. Unless the existing full-depth joints coincide with line of pavement demolition, neatly saw-cut to full depth the length of existing pavement to remain before removing existing pavement. Saw-cut faces vertically.

D. Remove driveways, curbs, gutters and sidewalks by saw cutting to full depth. If saw cut falls within 30-inches of a construction joint, expansions joint, score mark or edge, remove material to joint, mark or edge

3.11 BACKFILL

A. Place and compact material in excavations and depressions remaining after site clearing in conformance with Section 31 23 33.

3.12 DISPOSAL

A. Remove surplus soil material, unsuitable topsoil, obstructions, demolished materials, and waste materials, including trash and debris, and legally dispose of them off the District's property.

3.13 TEMPORARY FACILITIES

A. Provide the following temporary facilities to facilitate the demolition operations, as necessary.

1. Temp Traffic Controls
2. Protection of Persons and Property
3. Protection of Utilities
4. Noise and Dust Abatement.
5. Clear and restore area to their original condition.
6. Protect survey markers and monuments, existing improvements, and adjacent structures from removal and damage.

3.14 CONSTRUCTION WASTE MANAGEMENT

A. To the greatest extent possible, separate reusable and recyclable products from contaminated waste and debris in accordance with the General Contractor's Waste Management Plan. Place recyclable and reusable products in designated containers and protect from moisture and contamination.

END OF SECTION

SECTION 31 23 00

EXCAVATION AND FILL

PART 1 - GENERAL

1.1 SUMMARY

A. This Section describes the requirements for earthwork operation, as shown on the Drawings and specified:

1. Excavation and/or embankment from existing ground to subgrade, including soil sterilant, for parking areas, walks, paths, and any other site improvements called for on the Plans.

a. Aggregate base.

b. Lime stabilization.

c. Dispose off-site waste, excess or unsatisfactory material.

1.2 RELATED DOCUMENTS

A. Caltrans 2022 Standard Specifications:

1. Section 19, Earthwork.

2. Section 24, Lime Stabilization.

3. Section 26, Aggregate Bases.

1.3 RELATED SECTIONS

A. Section 31 11 00 – Clearing and Grubbing

1.4 REGULATORY REQUIREMENTS

A. State of California, Department of Transportation, Standard Specifications 2010 - Section 19

B. San Francisco Standard Specification and Details.

C. ASTM

1. D 1557, Test Method for Laboratory Compaction Characteristics of Soil Using Modified Effort.

2. D1557-70 for testing in compaction.

3. D 1586, Method for Penetration Tests and Split-Barrel Sampling of Soils.

4. D 2487, Classification of Soils for Engineering Purposes.

5. D 3740, Practice for Evaluation of Agencies Engaged in Testing and/or Inspection of

Soil and Rock as Used in Engineering Design and Construction.

6. D 4318. Test Method for Liquid Limit, Plastic Limit and Plasticity Index of Soils.
7. E 329, Specification for Minimum Requirements for Agencies Engaged in the Testing and/or Inspection of Materials Used in Construction.
8. E 548, Guide for General Criteria Used for Evaluating Laboratory Competence.

D. California Building Code, Title 24, Part 2 – California Code of Regulations, Chapter 18 and 18A, Soils and Foundations.

E. CAL/OSHA, Title 8.

1.5 DEFINITIONS

A. Borrow: Approved soil material imported from off-site for use as Structural Fill or Backfill.

B. Excavation: Removal of material encountered above subgrade elevations.

1. Authorized Over-Excavation: Excavation below subgrade elevations or beyond indicated horizontal dimensions as shown on plans or authorized by the District's Representative.
2. Unauthorized Over-Excavation: Excavation below subgrade elevations or beyond indicated horizontal dimensions without authorization by the District's Representative. Unauthorized excavation shall be without additional compensation.

C. Structural Backfill: Soil materials approved by the District's Representative and used to fill excavations resulting from removal of existing below grade facilities, including trees.

D. Structural Fill: Soil materials approved by the District's Representative and used to raise existing grades.

E. Rock: Rock material in beds, ledges, unstratified masses, and conglomerate deposits and boulders of rock material ¾-cubic yards or more in volume that when tested by an independent geotechnical testing agency, according to ASTM D 1586, exceeds a standard penetration resistance of 100 blows/2-inches.

F. Structures: Buildings, footings, foundations, retaining walls, slabs, tanks, curbs, mechanical and electrical appurtenances, or other man made stationary features constructed above or below grade.

G. Subgrade: Surface or elevation remaining after completing excavation, or top surface of a fill or backfill immediately below base or topsoil materials.

H. Unsuitable Material: Any soil material that is not suitable for a specific use on the Project. The District's Representative will determine if a soil material is unsuitable.

I. Utilities: onsite underground pipes, conduits, ducts and cables.

1.6 SUBMITTALS

A. Submittal procedure shall be as outlined in Division 1 – General Requirements.

B. Submit material certificates signed by the material producer and the Contractor, certifying that that each material item complies with, or exceeds the specified requirements.

1.7 QUALITY ASSURANCE

A. Conform all work and materials to the recommendations or requirements of the District's Representative.

B. Conform all work to the appropriate portion(s) of Caltrans Standard Specifications, Section 17 and 19, and the appropriate sections of the California Building Code.

C. Percentage of compaction specified shall be the minimum acceptable. The percentage represents the ratio of the dry density of the compacted material to the maximum dry density of the material as determined by the procedure set forth in ASTM D 1557.

D. Excavate and backfill existing areas only to extent required by new construction and as indicated. Use methods required to complete the Work within limitations of governing regulations. Backfill as necessary to achieve rough grade elevations as indicated per plan.

E. Perform excavation, filling, compaction and related earthwork under the observation of the District's Representative. Materials placed without approval of the District's Representative will be presumed to be defective and, at the discretion of the District's Representative, shall be removed and replaced at no cost to the District. Notify the District's Representative at least 24-hours prior to commencement of earthwork and at least 48 hours prior to testing.

F. The District's Representative will perform observations and tests required to enable him to form an opinion of the acceptability of the Project earthwork. Correct earthwork that, in the opinion of the District's Representative, does not meet the requirements of these Technical Specifications.

G. Upon completion of the construction work, certify that all compacted fills and foundations are in place at the correct locations, and have been constructed in accordance with sound construction practice. In addition, certify that the materials used are of the types, quality and quantity required by these Technical Specifications. The Contractor shall be responsible for the stability of all fills and backfills constructed by his forces and shall replace portions that in the opinion of the District's Representative have been displaced or are otherwise unsatisfactory due to the Contractor's operations.

H. Do not mix or place cement treated base when the temperature is below is below 36 degrees F or when the ground is frozen.

I. Finish surface of material to be stabilized prior to lime treatment shall be as specified in Section 24-1.04 of Caltrans Standard Specifications and as required by these Technical Specifications.

J. Finish surface of the stabilized material after lime treatment shall be as specified in Section 24-1.08 of Caltrans Standard Specifications and as required by these Technical Specifications.

K. Identify and protect existing utilities.

L. Finish soil grade tolerance at completion of grading:

1. Paved areas: +0.05
2. Other areas: ±0.10 feet.

1.8 PROJECT CONDITIONS

A. Promptly notify the District and the District's Representative of surface or subsurface conditions differing from those disclosed in conformance with Division 1 General Requirements.

B. Protect open excavations, trenches, and the like with fences, covers and railings to maintain safe pedestrian and vehicular traffic passage.

C. Prevent erosion of freshly graded areas during construction and until such time as permanent drainage and erosion control measures have been installed.

D. Temporarily stockpile fill material in an orderly and safe manner and in a location approved by the District.

E. Provide dust and noise control in conformance with Division 1 General Requirements.

F. Environmental Requirements: When unfavorable weather conditions necessitate interrupting earthwork operation, areas shall be prepared by compaction of surface and grading to avoid collection of water. Provide adequate temporary drainage to prevent erosion. After interruption, compaction specified in last layer shall be re-established before resuming work.

PART 2 - PRODUCTS

2.1 SOIL MATERIALS

A. General: Provide borrow soil materials when sufficient satisfactory soil materials are not available from on-site excavations.

B. Obtain approval of on-site soil materials and borrow materials to be used for structural fill or structural backfill from the District's Representative.

C. On-Site Structural Fill and Structural Backfill: Soil or soil-rock mixture from on site excavations, free from organic matter or other deleterious substances. On-site structural fill and backfill shall not contain rocks or rock fragments over 3 inches in greatest dimension.

D. Imported Structural Fill and Structural Backfill Type A: Conform to the requirements of on-site structural fill. Material shall also be a non-expansive and predominantly granular soil or soil-rock mixture with plasticity index of 8 or less, has a liquid limit less than 25, and an R-Value of 25 or greater and shall not contain ground up asphaltic concrete or AC fragments.

E. Imported Structural Fill and Structural Backfill Type B: Conform to the requirements of on-site structural fill. Material shall also be a non-expansive and predominantly granular soil or soil-rock mixture with plasticity index of 12 or less, has a liquid limit less than 25, and an R-Value of 25 or greater.

2.2 SOIL STERILANT

A. Commercial chemical for weed control, registered by EPA. Provide granular, liquid or wettable powder form.

2.3 AGGREGATE BASE

A. Material: Caltrans Standard Specification Section 26.

1. Class 2, 1-1/2-inch Maximum: Section 26-1.02A.
2. Class 2, 3/4-inch Maximum: Section 26-1.02A.
3. Class 3: Section 26-1.02B.

2.4 LIME STABILIZATION

A. Lime Treatment Material: Conform to Section 24-1.02 and 24-1.03 of Caltrans Standard Specifications and the Project Geotechnical Report.

PART 3 - EXECUTION

3.1 GENERAL

A. Conform to Section 19, Earthwork, Caltrans Standard Specifications as modified by the Contract Documents.

B. Placement and compaction of material by flooding, ponding, or jetting will not be permitted.

C. The use of explosives will not be permitted.

3.2 CONTROL OF WATER AND DEWATERING

A. Prevent surface water and ground water from entering excavations, from ponding on prepared subgrades, and from flooding the site and surrounding area. Provide dewatering equipment necessary to drain and keep excavations and site free from water.

B. Dewater during backfilling operation so that groundwater is maintained a least two feet below level of compaction effort.

C. Obtain the District's Representative's approval for proposed control of water and dewatering methods.

D. Protect subgrades from softening, undermining, washout and damage by rain or water accumulation.

E. Reroute surface water runoff away from excavated areas. Do not allow water to accumulate in excavations.

F. Maintain dewatering system in place until dewatering is no longer required.

3.3 WET WEATHER CONDITIONS

A. Do not prepare subgrade, place or compact soil materials if above optimum moisture content.

B. If the District's Representative allows work to continue during wet weather conditions, conform to supplemental recommendations provided by the District's Representative.

3.4 EXCAVATION

A. Excavate earth and rock to lines and grades shown on drawings as prepared by a licensed professional engineer and to the neat dimensions indicated on the Plans, required herein or as required to satisfactorily compact backfill.

B. Remove and dispose of large rocks, pieces of concrete and other obstructions encountered during excavation.

C. Where forming is required, excavate only as much material as necessary to permit placing and removing forms.

D. Provide supports, shoring and sheet piles required to support the sides of excavations or for protection of adjacent existing improvements.

3.5 REMOVAL OF EXISTING FILLS AND UNSUITABLE MATERIAL

A. Over-excavate areas of existing fills and other unsuitable material encountered during mass grading as directed by the District's Representative.

B. Conform with Division 1 General Requirements.

3.6 GRADING

A. Uniformly grade the Project to meet existing conditions.

B. Finish ditches, gutters and swales to the sections, lines and grades indicated and to permit proper surface drainage.

C. Round tops and bottoms of slopes as indicated or to blend with existing contours.

3.7 SUBGRADE PREPARATION

A. Prepare subgrades under paved areas, curbs, gutters, walks, structures, other surface facilities and areas to receive structural fill. At least 6 inches of select material shall be placed beneath exterior flatwork and extend at least two feet beyond the slab edges.

B. Prepare subgrades for paved areas, curbs and gutters by plowing or scarifying surface at least 9 inches in one lift below final subgrade elevations and 1-foot beyond edge of pavement unless specified otherwise by the District's Representative. Uniformly moisture condition to obtain optimum moisture contents. Break clods and condition surface by

harrowing or dry rolling. Remove boulders, hard ribs and solid rock. Prepare earth uniform for full depth and width of subgrade.

1. Surface soil that has a moisture content of less than 22 percent (average, approximate plastic limit of the soil) should be excavated, moisture-conditioned to at least three percent above optimum moisture content, and compacted to between 88 and 93 percent relative compaction to reduce its expansion potential; maximum depth of required excavation for moisture conditioning is about two feet.

C. Protect utilities from damage during compaction of subgrades and until placement of final pavements or other surface facilities.

D. Obtain the District's Representative's approval of subgrades prior to placing pavement.

E. Subgrade preparation will not be required in areas where lime treatment is used.

3.8 PLACEMENT OF STRUCTURAL FILL

A. Obtain the District's Representative's approval of surface to receive structural fill prior to placement of structural fill material.

B. Place structural fill on prepared subgrade.

C. Spread structural fill material in uniform lifts not more than 8-inches in un-compacted thickness and compact.

D. Place structural fill material to suitable elevations above grade to provide for anticipated settlement and shrinkage.

E. Overbuild fill slopes, as required by the District's Representative, to obtain required compaction. Remove excess material to lines and grades indicated.

F. Do not drop fill on structures. Do not backfill around, against or upon concrete or masonry structures until structure has attained sufficient strength to withstand loads imposed and the horizontal structural system had been installed.

3.9 TEMPORARY AND PERMANENT SLOPES

A. Temporary slopes less than 10 feet high should be inclined no steeper than 1.5:1 (horizontal to vertical).

B. Shallow, permanent, cut and fill slopes shall be constructed no steeper than 2:1 (horizontal to vertical).

3.10 AGGREGATE BASE

A. Watering, Spreading and Compacting: Section 26-1.035, 26-1.04 and 26-1.05 of Caltrans Standard Specifications.

3.11 LIME STABILIZATION

A. Performing the stabilization shall conform to Section 24-1.05, through 24-1.09 of Caltrans Standard Specifications and the following:

1. Add lime in the amount specified by the District's Representative.
2. Lime treat subgrade soils from back of curb to back of curb to a depth specified by the District's Representative.
3. Mix in two mixing periods, both with the tines lowered to the same depth. Both mixing periods shall be monitored and verified by the District's Representative. The second mixing shall occur at about 24 hours after the initial mixing.
4. Compact and grade the lime mixed subgrade immediately after the second mixing.
5. Compact the lime treated subgrade to 93 percent as determined by ASTM D1557.
6. After application of the curing seal, do not allow traffic on the lime treated material for a period of 7 days in lieu of the 3 days specified in Section 24-1.03 of Caltrans Standard Specifications.
7. Proof-roll the stabilized subgrade after compacting to confirm that a non-yielding surface has been achieved. Yielding areas, if any, shall be mitigated. Mitigation could consist of over-excavation, utilization of stabilization fabric, or chemical treatment. Each case shall be addressed individually in the field by the District's Representative.

3.12 COMPACTION AND TESTING

A. Do not compact by ponding, flooding or jetting.

B. Compact soils at optimum water content. Aerate material if it is too wet. Add water to material if it is too dry. Thoroughly mix lifts before compaction to ensure uniform moisture distribution.

C. Perform compaction using rollers, pneumatic or vibratory compactors or other equipment and mechanical methods approved by the District's Representative.

D. Compaction requirements:

1. Compact structural fills less than 5-feet thick to 90 percent compaction.
2. Compact structural fill 5-feet thick or greater to 95 percent compaction.
3. Compact the upper 6 inches of subgrade soils beneath pavements, curbs and gutters to 95 percent compaction. Extend compaction 2-feet beyond pavement edges unless specified otherwise by the District's Representative.
4. Compact the upper 6-inches of subgrade soils under walks, structures and areas to receive structural fill to 90 percent compaction.

3.13 SOIL STERILIZATION

A. Apply soil sterilant to areas indicated, such as beneath asphalt concrete pavement, brick pavement, concreter pavement and at grade concrete slabs, including sidewalks, curbs and gutters. Also where indicated apply soil sterilant below expansion and control joints and at

areas where pipes, ducts or other features penetrate slabs.

B. Apply soil sterilant uniformly and at the rates recommended by the manufacturer.

C. Apply soil sterilant to prepared subgrade, or after installation of aggregate base as recommended by the manufacturer.

3.14 DISPOSAL

A. Lawfully dispose of all unsuitable and excess or surplus material off-site at no cost to the District.

END OF SECTION

SECTION 31 23 33

UTILITY TRENCHING AND BACKFILLING

PART 1 - GENERAL

1.0 SECTION INCLUDES

A. Excavation, bedding, and backfill of underground storm drain, sanitary sewer and water piping and associated structures.

B. The CONTRACTOR shall provide all materials, equipment, and labor necessary to perform and complete all utility earthwork as shown on the Drawings and as specified herein.

C. The work of this Section includes all utility earthwork required for construction of the project. Such earthwork shall include, but may not necessarily be limited to, the loosening, removing, loading, transporting, depositing, and compacting in its final location of all materials wet and dry, as required for the purposes of completing the work, which shall include, but not necessarily be limited to, the furnishing, placing, and removing of sheeting, shoring and bracing necessary to safely support the sides of all excavations; all pumping, ditching, draining and other required measures for the removal or exclusion of water from the excavation; the supporting of structures above and below the ground; all backfilling around structures and all backfilling of trenches and pits; the disposal of excess excavated materials; borrow of materials to make up deficiencies for fills; and all other incidental earthwork.

D. Hazardous materials shall be handled in accordance with all regulatory agency requirements. Asbestos cement pipe (ACP) exists within the project area and replacement of existing ACP is anticipated but shall be abandoned in place unless otherwise noted in the plans. The contractor shall make every attempt to protect all asbestos containing items during the execution of this contract. However, there will be instances where ACP or asbestos containing material will need to be removed, handled, cut, disturbed, or disposed of and the contractor shall comply with all local, state and federal regulations regarding construction activities near asbestos containing materials.

1.1 SECTION EXCLUDES

A. Drainage fill material and placement around subdrains.
B. Power, telecommunications, and low voltage scope of work.

1.2 RELATED DOCUMENTS

A. ASTM:
1. C 33, Specification for Concrete Aggregates.
2. C 150, Specification for Portland Cement.
3. C 260, Specification for Air-Entraining Admixtures for Concrete.

4. C 618, Specification for Fly Ash and Raw or Calcined Natural Pozzolan for Use as a Mineral Admixture in Portland Cement Concrete.
5. D 1557, Test Method for Laboratory Compaction Characteristics of Soil Using Modified Effort.
6. D 2321, Practice for Underground Installation of Flexible Thermoplastic Sewer Pipe.
7. D 2487, Classification of Soils for Engineering Purposes.
8. D 3740, Practice for Evaluation of Agencies Engaged in Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction.
9. E 329, Specification for Minimum Requirements for Agencies Engaged in the Testing and/or Inspection of Materials Used in Construction.
10. E 548, Guide for General Criteria Used for Evaluating Laboratory Competence.

C. 2022 California Building Code, California Code of Regulations, Title 24, Part 2 - Chapter 18, Foundations, and Retaining Walls, and Chapter 33, Site Work, Demolition and Construction.

D. Caltrans 2022 Standard Specifications:
   1. Section 19, Earthwork.
   2. Section 26, Aggregate Bases.

E. CAL/OSHA, Title 8.

F. San Francisco Procedures, Specifications and Drawings.

1.3 RELATED SECTIONS

A. Section 31 11 00, Clearing and Grubbing.

B. Section 33 31 00, Sanitary Sewer System.

C. Section 33 41 00, Storm Drain System.

D. Section 33 46 00 Subdrainage.

1.4 DEFINITIONS

A. AC: Asphalt Concrete.

B. ASTM: American Society for Testing and Materials.

C. Bedding: Material from bottom of trench to bottom of pipe.

D. CDF: Controlled Density Fill.

E. DIP: Ductile Iron Pipe.

F. Initial Backfill: Material from bottom of pipe to 12-inches above top of pipe.

G. PCC: Portland Cement Concrete.

H. RCP: Reinforced Concrete Pipe.

I. Springline of Pipe: Imaginary line on surface of pipe at a vertical distance of ½ the outside diameter measured from the top or bottom of the pipe.

J. Subsequent Backfill: Material from 12-inches above top of pipe to subgrade of surface material or subgrade of surface facility or to finish grade.

K. Trench Excavation: Removal of material encountered above subgrade elevations and within horizontal trench dimensions.
   1. Authorized Trench Over-Excavation: Excavation below trench subgrade elevations or beyond indicated horizontal trench dimensions as shown on plans or authorized by the Geotechnical Consultant.
   2. Unauthorized Trench Over-Excavation: Excavation below trench subgrade elevations or beyond indicated horizontal trench dimensions without authorization by the Geotechnical Consultant. Unauthorized excavation shall be without additional compensation.

L. Utility Structures:
   1. Storm Drain Manholes, vaults, etc.
   2. Sanitary sewer manholes, vaults, etc.
   3. Water vaults, etc.

1.5 SUBMITTALS

A. Submittal procedure shall be as outlined in Division 1 – General Requirements

B. Product Data:
   1. Grading and quality characteristics showing compliance with requirements for the Work.
   2. Certify that material meets requirements of the Project.
   3. Aggregate for Structural Soil Mix.

C. Samples:
   1. If required by the Geotechnical Consultant, provide 40-pound samples of all imported trench bedding and backfill material sealed in airtight containers, tagged with source locations and suppliers of each proposed material. Do not import materials to Project without written approval of the Geotechnical Consultant.
   2. Provide materials from same source throughout work. Change of source requires approval of the Geotechnical Consultant and the District's Representative's.

D. Material Test Reports: Provide, from a qualified testing agency, the following test results showing compliance with the project requirements:
   1. Classification according to ASTM D 2487 of each imported trench bedding and backfill material.
   2. Laboratory compaction curve in conformance with ASTM D 1557 for each imported trench bedding and backfill material
   3. Structural Soil Mix Testing: Provide a two-gallon representative sample to laboratories for an analysis of the structural soil mix indicating the following:

a. Particle size analysis, including the following gradients of mineral content (USDA Designated Size in mm):
   (i) 3" (76mm)
   (ii) 2 ½" – 3" (63-76mm)
   (iii) 2" – 2 ½" (50-63mm)
   (iv) 1 ½" – 2" (37-50mm)
   (v) 1" (25-37mm)
   (vi) ¾" (19-25mm)
   (vii) Fine gravel – 1/8" – ¾" (2-19mm)
   (viii) Sand – 0.05 -2mm
   (ix) Silt – 0.002-0.05mm
   (x) Clay – minus 0.002mm

(b) Provide manufacturer's analysis of the following:
   (i) Loose and rodded unit weight.
   (ii) Bulk specific gravity and absorbance.
   (iii) Gravel dimension and surface texture description.
   (iv) Aggregate soundness and L.A. abrasion.

(c) Sample Collection Procedure:
   (i) Collect a minimum of eight samples to make up the composite sample.
   (ii) Take samples from random locations in the stockpile varying from the top to the bottom and around the stockpile.
   (iii) Take at least half the samples from the lower third of the stockpile into a clean bucket
   (iv) Thoroughly mix material after samples are taken.
   (v) Remove 2 gallon of material from bucket and fill a zip-lock plastic bag.
   (vi) Double bag the composite sample and label the bag with a permanent marker indicating the material name and date sample was taken.

1.6 QUALITY ASSURANCE

A. Provide an independent testing agency qualified according to ASTM E 329 to conduct soil materials and rock definition testing, as documented according to ASTM D 3740 and ASTM E 548.

B. Conform all work and materials to the recommendations or requirements of the Geotechnical Report and meet the approval of the Geotechnical Consultant.

C. Conform all work to the appropriate portion(s) of the Caltrans Standard Specifications, Section 19.

D. Percentage of compaction specified shall be the minimum acceptable. The percentage represents the ratio of the dry density of the compacted material to the maximum dry density of the material as determined by the procedure set forth in ASTM D 1557.

E. The Geotechnical Consultant will perform observations and tests required to enable him to form an opinion of the acceptability of the trench backfill. Correct the trench backfill that, in the opinion of the Geotechnical Consultant, does not meet the requirements of these Technical Specifications and the Geotechnical Report.

1.7 PROJECT CONDITIONS

A. Promptly notify the District's Representative of surface or subsurface conditions differing from those disclosed in the Geotechnical Report. First notify the District's Representative verbally to permit verification and extent of condition and then in writing. No claim for conditions differing from those anticipated in the Contract Documents and disclosed in the Geotechnical Report will be allowed unless Contractor has notified the District's Representative in writing of differing conditions prior to contractor starting work on affected items.

B. Protect open, trenches, and utility structure excavations with fences, covers and railings to maintain safe pedestrian and vehicular traffic passage.

C. Stockpile on-site and imported backfill material temporarily in an orderly and safe manner.

D. Provide dust and noise control in conformance with Section 01 00 00, General Requirements.

E. Areas to receive structural soil mix shall be inspected by the Owner's Representative before starting work.

PART 2 - PRODUCTS

2.1 PIPE BEDDING AND INITIAL BACKFILL

. ASTM D 2321, Class IA, IB or II.
1. Clean and free of clay, silt or organic matter.

A. Class 2 Aggregate Base: Conform to Section 26 of Caltrans Standard Specifications, ¾-inch maximum.

B. Sand: Conform to Section 19-3.025B of Caltrans Standard Specifications.

2.2 WARNING TAPE

. See Section 33 11 66, Water Distribution System.

2.3 SUBSEQUENT BACKFILL

. Conform to on-site or imported structural backfill in Section 31 23 00, Excavation and Fill.

2.4 CONTROLLED DENSITY FILL (CDF) (IN TRENCHES)

. Provide non-structural CDF, from bottom of trench to finish subgrade of subbase or base material, that can be excavated by hand and produce unconfined compressive 28-day strengths from 50-psi to a maximum of 150-psi. Provide aggregate no larger than 3/8-inch top size. The 3/8-inch aggregate shall not comprise more than 30% of the total aggregate content.

A. Cement: Conform to the standards as set forth in ASTM C-150, Type II Cement.

B. Fly Ash: Conform to the standards as set forth in ASTM C-618, for Class F pozzolan. Do not inhibit the entrainment of air with the fly ash.

C. Air Entraining Agent: Conform to the standards as set forth in ASTM C-260.

D. Aggregates need not meet the standards as set forth in ASTM C-33. Any aggregate, producing performances characteristics described herein will be accepted for consideration. The amount of material passing a #200 sieve shall not exceed 12% and no plastic fines shall be present.

E. Provide CDF that is a mixture of cement, Class F pozzolan, aggregate, air entraining agent and water. CDF shall be batched by a ready mixed concrete plant and delivered to the job site by means of transit mixing trucks.

F. The Contractor shall determine the actual mix proportions of the controlled density fill to meet job site conditions, minimum and maximum strengths, and unit weight. Entrained air content shall be a minimum of 4.0%. The actual entrained air content shall be established for each job with the materials and aggregates to be used to meet the placing and unit weight requirements. Entrained air content may be as high as 20% for fluidity requirements.

G. Mix design shall meet the Geotechnical Consultant's approval.

2.5 CONCRETE STRUCTURE BEDDING AND BACKFILL

. Precast Structures: Same materials to the same heights as specified for pipe bedding and backfill, or other material approved by the Geotechnical Consultant.

A. Poured-in-Place Structures:
   1. Bedding: Bedding shall meet the approval of the Geotechnical Consultant. In general, bedding is not required, pour bases against undisturbed native earth in cut areas and against engineered fill compacted to 90% relative compaction in embankment areas.
   2. Side Backfill: On-site or imported structural fill meeting the requirements given in Section 31 23 00.
   3. Structural Soil Mix: TMT Enterprices, 1996 Oakland Road, San Jose, CA 915131; (408)432-9010

2.6 AGGREGATE FOR STRUCTURAL SOIL MIX:

1. Aggregate shall be triangular.
2. Aggregate shall not be limestone or sandstone.
3. Aggregate shall pass a 3-inch screen and be retained on a 2-inch screen.
4. Aggregate dimensions shall not exceed 1.5:1.0 for any two dimensions chosen.

2.7 SOIL FOR STRUCTURAL SOIL MIX:

1. Soil shall be a “clay loam” or “clay” based on “USDA classification system” as determined by mechanical analysis and shall be of uniform composition, without admixture of subsoil.
2. Soil shall be free of stones greater than one-half inch, plants, roots, debris and other extraneous matter larger than one inch in diameter or an excess of smaller pieces of same type materials as determined by Owner’s Representative.
3. Soil shall not contain toxic substances harmful to plant growth.
4. Soil shall be obtained from naturally well drained areas which have never been stripped of topsoil before and have a history of satisfactory vegetative growth.
5. Soil shall contain not less than 3%or more than 7% organic matter as determined by organic carbon and total nitrogen on oven-dried samples.
6. Soil shall be the product of a commercial processing facility specializing in production of Structural Soil Mixes for a minimum of 5 years.
7. Mechanical analysis:
   A. Textural Class: Based on material passing a 2 mm screen.
   B. Gravel: Less than 5%.
   C. Sand: 20 – 50%.
   D. Silt: 20 – 30%.
   E. Clay: 25- 60%.
8. Chemical analysis:
   A. pH: Between 6.5 to 7.9.
   B. Percent organic matter: 3 – 7% by dry weight.
   C. Nutrient level:

      1. Fertility: The range of the essential elemental concentration in soil shall be as follows.

         Ammonium Bicarbonate/DTPA Extraction parts per million (mg/kolgram) dry weight basis.

Phosphorous	10-40
Potassium	100-200
Iron	5-35
Manganese	0.6-6
Zinc 1-8	
Copper	0.3-5
Boron	0.2-1
Magnesium	50-150
Sodium	0-100
Sulfur	25-500
Molybdenum	0.1-2

      2. Toxic elements and compounds and excessive nutrients below UC guidelines and soil testing laboratory guidelines. The maximum permissible elemental concentration in the soil.

Ammonium Bicarbonate/DTPA Extraction parts per million (mg/kolgram) dry weight basis.

Arsenic	1
Cadmium	1
Chromium	10
Cobalt	2
Lead	30
Mercury	1
Nickel	5
Selenium	3
Silver	0.5
Vanadium	3

D. Soluble salt: Less than 3.0 Millimho per cm in saturation extract.
E. Boron: Less than 1 part per million in saturation extract.
F. Sodium Absorption Ratio: Less than 4.
G. Carbon/Nitrogen Ratio: Less than 15:1.

2.8 STRUCTURAL SOIL MIX

1. Content:
   A. 4 parts structural soil aggregate.
   B. 1 part soil, treated with polymer.
2. Mixing:
   A. Mix polymer (PAM) with soil 48 hours ahead of blending with aggregate to allow for proper bonding.
   B. Cure polymer treated soil by allowing the soil to partially dry.
   C. Based upon accepted mix design, blend materials off-site in a clean area using an experienced blending operator.
   D. Uniformly blend materials so that they are even distributed throughout mixtures.
   E. Maintain adequate soil moisture content during mixing process.
   F. Soils and mix components shall easily shred and break down without clumping.
   G. Soil clods shall easily break down into a medium crumbly texture material.
   H. Do not blend materials that are saturated or contain excessive water.
   I. Measure and monitor amount of soils moisture at mixing site periodically during mixing process.
   J. Protect materials and mixtures from contamination prior to, during, and after mixing operations.
   K. Store mixes in stockpiles prior to shipment to site in clean areas protected from contamination from other materials.
   L. Reblend the mix if the components have separated.

2.9 FILTER FABRIC

. Filter Fabric:
1. Filter Fabric: Section 88-1.03 of Caltrans Standard Specifications.
2. Mirifi 140N (Mirifi Inc., Charlotte, NC) (Tel. 800-438-1855) or equal.

PART 3 - EXECUTION

3.1 TRENCHING AND EXCAVATION

. Existing PCC or AC Areas: Cut PCC or AC to full depth at a minimum distance of 12-inches beyond the edge of the trench.

A. Excavate by hand or machine. For gravity systems begin excavation at the outlet end and proceed upstream. Excavate sides of the trench parallel and equal distant from the centerline of the pipe. Hand trim excavation. Remove loose matter.

B. Excavation Depth for Bedding: Minimum of 4-inches below bottom of pipe or as otherwise allowed or required by the Geotechnical Consultant, except that bedding is not required for nominal pipe diameters of 2-inches or less.

C. Excavation Width at Springline of Pipe:
   1. Up to a nominal pipe diameter of 24-inches: Minimum of twice the outside pipe diameter, or as otherwise allowed or required by the Geotechnical Consultant.
   2. Nominal pipe diameter of 30-inches through 36-inches: Minimum of the outside pipe diameter plus 2-feet, or as otherwise allowed or required by the Geotechnical Consultant.
   3. Nominal pipe diameter of 42-inches through 60-inches: Minimum of the outside pipe diameter plus 3-feet, or as otherwise allowed or required by the Geotechnical Consultant.

D. Over-Excavations: Backfill trenches that have been excavated below bedding design subgrade, with approved bedding material.

E. Comply with the District's Representative's limitations on the amount of trench that is opened or partially opened at any one time. Do not leave trenches open overnight without the approval of the District's Representative.

F. Where forming is required, excavate only as much material as necessary to permit placing and removal of forms.

G. Bottoms of trenches will be subject to testing by Geotechnical Consultant. Correct deficiencies as directed by the Geotechnical Consultant.

H. Grade bottom of trench to provide uniform thickness of bedding material and to provide uniform bearing and support for pipe along entire length. Remove stones to avoid point bearing.

3.2 CONTROL OF WATER AND DEWATERING

. Be solely responsible for dewatering trenches and excavations and subsequent control of ground and surface water. Provide and maintain such pumps or other equipment as may be necessary to control ground water and seepage to the satisfaction of the Geotechnical Consultant and the District's Representative until backfilling is completed.

A. Dewater during backfilling operation so that groundwater is maintained a least one foot

below level of compaction effort.

B. Obtain the Geotechnical Consultant's approval for proposed control of water and dewatering methods.

C. Reroute surface water runoff away from open trenches and excavations. Do not allow water to accumulate in trenches and excavations.

D. Maintain dewatering system in place until dewatering is no longer required.

3.3 BRACING AND SHORING

. Conform to California and Federal OSHA requirements.

A. Place and maintain such bracing and shoring as may be required to support the sides of the excavations for the proper protection of workmen; to facilitate the work; to prevent damage to the pipes and appurtenances being constructed; and to prevent damage to adjacent structures or facilities. Remove all bracing and shoring upon completion of the work.

B. Be solely responsible for all bracing and shoring and, if requested by the District's Representative, submit details and calculations to the District's Representative. The District's Representative may forward the submittal to the Geotechnical Consultant, the Consulting Engineer and/or the California Division of Industrial Safety for their review. The Contractor's submittal shall include the basic design, assumed soils conditions and estimation of forces to be resisted, together with plans and specifications of the materials and methods to be used, and shall be prepared by a civil engineer or structural engineer registered in California. No excavations in trench section or around structures shall precede a response to the submittal by the District's Representative.

C. Be solely responsible for installing and extracting the sheathing in a manner which will not disturb the line, grade, or backfill compaction or operation of the utility being installed or adjacent utilities and facilities.

3.4 PIPE BEDDING

. Obtain approval of bedding material from the Geotechnical Consultant.

A. Accurately shape bedding material to the line and grade called for on the Plans. Carefully place and compact bedding material to the elevation of the bottom of the pipe in layers not exceeding 8-inches in loose thickness. Compact bedding material at optimum water content to 90% relative compaction for sand and 95% relative compaction for fine gravel unless specified otherwise on the Plans or by the Geotechnical Consultant. Compact by pneumatic tampers or other mechanical means approved by the Geotechnical Consultant. Jetting or ponding of bedding material will not be permitted.

B. Upon completion of bedding operations, and prior to the installation of pipe, notify the Geotechnical Consultant, who will inspect the bedding layer. Do not commence pipe laying until the Geotechnical Consultant has approved the bedding.

3.5 WARNING TAPE

. Install in accordance with Section 33 11 66.

3.6 BACKFILLING

. Obtain approval of backfill material from Geotechnical Consultant.

A. Bring initial backfill up simultaneously on both sides of the pipe, so as to prevent any displacement of the pipe from its true alignment. Carefully place and compact initial backfill material to an elevation of 12-inches above the top of the pipe in layers not exceeding 8-inches in loose thickness. Compact initial backfill material at optimum water content to 90% relative compaction for sand and 95% relative compaction for fine gravel unless specified otherwise on the Plans or by the Geotechnical Consultant. Compact by pneumatic tampers or other mechanical means approved by the Geotechnical Consultant. Jetting or ponding of initial backfill material will not be permitted.

B. Bring subsequent backfill to subgrade or finish grade as indicated. Carefully place and compact subsequent backfill material to the proper elevation in layers not exceeding 8-inches in loose thickness. Compact subsequent backfill material at optimum water content to 90% relative compaction, except in areas subject to vehicular traffic shall be compacted to at least 95% relative compaction, unless specified otherwise on the Plans or by the Geotechnical Consultant. Compact by pneumatic tampers or other mechanical means approved by the Geotechnical Consultant. Jetting or ponding of subsequent backfill material will not be permitted.

C. Do not use compaction equipment or methods that produce horizontal or vertical earth pressures which may cause excessive pipe displacement or damage the pipe.

D. Utility backfill shall be inspected and tested by the Geotechnical Consultant during placement. Cooperate with the Geotechnical Consultant and provide working space for such tests in operations. Backfill not compacted in accordance with these specifications shall be re-compacted or removed as necessary and replaced to meet the specified requirements, to the satisfaction of the Geotechnical Consultant and the District's Representative prior to proceeding with the Project.

3.7 STRUCTURAL SOIL MIX INSTALLATION

. Place mix carefully to avoid damage or displacement of other materials such as paving, drain rock, geotextile fabric and irrigation piping.
A. Do not mix subgrade soils on construction materials with mix.
B. Remove soil mix contaminated with subgrade soil, construction materials or debris.
C. Maintain mix in a moist, but not saturated, condition to prevent segregation of mix during placement.
D. Install mix in 6 inch lifts in locations indicated on the Drawings.
E. Compact lifts to 95 percent compaction in compliance with Geotechnical Investigation Report. Schedule the Geotechnical Engineer to perform nuclear density field tests after each lift of mix to confirm compaction.
F. Install final lift of mix to elevations indicated on the Drawings.

3.8 CLEANUP

. Upon completion of utility earthwork all lines, manholes catch basins, inlets, water meter boxes and other structures shall be thoroughly cleaned of dirt, rubbish, debris and obstructions of any kind to the satisfaction of the District's Representative.

END OF SECTION

SECTION 31 25 00

EROSION AND SEDIMENTATION CONTROL

PART 1 - GENERAL

1.1 SUMMARY

A. This Section describes the requirements for providing and installing temporary erosion and sedimentation control structures as specified.

1.2 SUBMITTALS

A. Follow Submittal procedure outlined in Section 1 General Provisions.

1.3 REGULATORY REQUIREMENTS:

A. California Stormwater Quality Association (CASQA) “Stormwater Best Management Practice Handbook for Construction”.

B. State Water Resources Control Board (SWRCB) standards.

C. California Stormwater Quality Association “Stormwater Best Management Practice Handbook” for Construction and Industrial and Commercial Development, latest edition.

PART 2 - PRODUCTS

2.1 Furnish and install products to eliminate potential erosion and sedimentation during construction works. Products which shall be installed, but are not limited to, the following:

A. Siltation fences

B. Outlet structure, basins, ditches

C. Hydroseeding

D. Wattle and/or Gravel bags

PART 3 - EXECUTION

3.1 GENERAL

A. The Contractor shall review the BMP’s selected for the Project.

B. Erosion and sedimentation control measures are to be installed in areas only to extent required by new construction and as indicated or as directed by governing regulations.

C. The Contractor shall provide inspection and repair BMP’s throughout the construction process.

END OF SECTION

DIVISION 32
EXTERIOR IMPROVEMENTS

SECTION 32 05 23

PORTLAND CEMENT CONCRETE

PART 1 - GENERAL

1.0 SECTION INCLUDES

A. Materials for Portland cement concrete.

B. Aggregate and aggregate grading for Portland cement concrete.

C. Water for Portland cement concrete.

D. Admixtures for Portland cement concrete.

E. Proportioning for Portland cement concrete.

F. Mixing and transporting Portland cement concrete.

G. Formwork for cast in place Portland cement concrete.

H. Embedded materials for Portland cement concrete.

I. Steel reinforcement for Portland cement concrete.

J. Placing and finishing Portland cement concrete.

K. Curing Portland cement concrete.

L. Protecting Portland cement concrete.

1.1 RELATED SECTIONS

A. Section 31 11 00, Clearing and Grubbing

1.2 RELATED DOCUMENTS

A. ASTM:
1. A 82, Cold Drawn Steel Wire for Concrete Reinforcement.
2. A 185, Steel Welded Wire Fabric, Plain for Concrete Reinforcement.
3. A 615, Deformed and Plain Billet Steel Bars, for Concrete Reinforcement.
4. C 94, Specification for Ready-mixed Concrete.
5. C 114, Method for Chemical Analysis of Hydraulic Cement.
6. C 150. Portland Cement.
7. C 618, Fly Ash and Raw or Calcined Natural Pozzolan for use as Natural Admixture in Portland Cement.
8. C 1751, Preformed Expansion Joint Fillers for Concrete. Paving and Structural Construction (Non-extruded and Resilient Bituminous Types).

B. Caltrans 2022 Standard Specifications:
   1. Section 51: Concrete Structures.
   2. Section 73: Concrete Curbs and Sidewalks.
   3. Section 90: Concrete.

1.3 DEFINITIONS

A. ASTM: American Society for Testing Materials

1.4 SUBMITTALS

A. Submittal procedure shall be as directed by the District's General Requirements.

B. Concrete Mix Design: Have all concrete mixes designed by a testing laboratory and approved by the Consulting Engineer. Conform all mixes to the applicable building code requirement, regardless of other minimum requirements listed herein or on the drawings. Submit mix designs for review before use. Show proportions and specific gravities of cement, fine and coarse aggregate, and water and gradation of combined aggregates.

1.5 QUALITY ASSURANCE

A. Concrete shall be subject to quality assurance in accordance with Section 90 of Caltrans Standard Specifications.
   1. Slump tests: Have available, at job site, equipment required to perform slump tests. Make one slump test for each cylinder sample, from same concrete batch. Allowable maximum slump shall be 4 inches for walls and 3 inches for slab on grade.

B. Certifications:
   1. Provide District's Representative at the time of delivery with certificates of compliance signed by both Contractor and Supplier containing the following statements:
      a. Materials contained comply with the requirements of the Contract Documents in all respects.
      b. Proportions and mixing comply with the design mix approved by the Consulting Engineer. Design mix shall have been field tested in accordance with the herein requirements of the Caltrans Standard Specifications and produces the required compressive strength under like conditions.
      c. Statement of type and amount of any admixtures.
   2. Provide District's Representative, at time of delivery, with certified delivery ticket stating volume of concrete delivered and time of mixing, or time of load-out in case of transit mixers.

C. Conform to the applicable provisions of Section 51, 73 and 90 of the Caltrans Standard Specification and these Technical Specifications.
   1. Conform construction of Portland cement concrete surface improvements (including curbs, gutters, medians, valley gutters, walks, pads) to the requirements of Section 73 of the Caltrans Standard Specifications unless otherwise required in these Technical Specifications or shown on the Plans.
   2. Conform other construction of Portland cement concrete items to the requirements of Section 51 of the Caltrans Standard Specifications unless otherwise required in these Technical Specifications or shown on the Plans.

1.6 DESIGNATION

A. General: Whenever the 28-day compressive strength is designated herein or on the Plans is a 3,600psi or greater, the concrete shall considered to be designated by compressive strength. The 28-day compressive strength shown herein or on the plans which are less than a 3,600psi are shown for design information only and are not considered a requirement for acceptance of the concrete. Whenever the concrete is designated by class or as minor concrete herein or on the Plans, the concrete shall contain the cement per cubic yard shown in Section 90-1.01 of the Caltrans Standard Specifications.

B. Unless noted otherwise herein or on the Plans, the minimum compressive strength for portland cement concrete at 28 days for this Project shall be 3,600 psi.

PART 2 - PRODUCTS

2.1 PORTLAND CEMENT

A. General: Type II (modified) cement conforming to section 90-2.01 of the Caltrans Standard Specifications.

B. Provide a coloring equivalent to ¼ pound of lampblack per cubic yard. Add to the concrete at the central mixing plant. Liquiblack concrete colorant, or approved equal, may be used in lieu of lampblack. One pint of Liquiblack shall be considered equal to one pound of lampblack.

2.2 AGGREGATE AND AGGREGATE GRADING

A. General: Conform to the requirements of Section 90-2.02, 2.02A and 2.02B of the Caltrans Standard Specifications.

B. Aggregate Size and Gradation: Conform to the requirements of Section 90-3 of the Caltrans Standard Specifications for 1-inch maximum combined aggregate.

2.3 WATER

A. General: Conform to the requirements of section 90-2.03 of the Caltrans Standard Specifications. For mixing and curing Portland cement concrete and for washing aggregates.

2.4 EXPANSION JOINT MATERIAL

A. Material for expansion joints in Portland cement concrete improvements shall be pre-molded expansion joint fillers conforming to the requirements of ASTM Designation D 1751. Expansion joint material shall be shaped to fit the cross section of the concrete prior to being placed. Suppliers certificates showing conformance with this specification shall be delivered with each shipment of materials delivered to the job site. Unless noted otherwise herein or on the Plans expansion joint thickness shall be as follows:

1. Curbs, Curb Ramps, Sidewalks, Driveways and Gutter Depressions: ¼-inch.
2. Gutter Lining, Ditch Lining and Channel Lining: ½-inch.
3. Structures: As indicated.

2.5 REINFORCEMENT AND DOWELS

A. Bar reinforcement for concrete improvements shall be deformed steel bars of the size or sizes called for on the plans conforming to the requirements of ASTM Designation A 615 for Grade 60 bars. Size and shape for bar reinforcement shall conform to the details shown or called for on the Plans. Substitution of wire mesh reinforcement for reinforcing bars will not be allowed.

B. Slip dowels, where noted or called for on the plans or detail drawings shall be smooth billet-steel bars as designated and conforming to the requirements of ASTM Designation A 615 for Grade 60 bars. Ends of bars inserted in new work shall be covered with a cardboard tube sealed with cork; no grease or oil shall be used.

C. Mesh for reinforcement for concrete improvements shall be cold drawn steel wire mesh of the size and spacing called for on the plans conforming to the requirements of ASTM Designation A 82 for the material and ASTM Designation A 185 for the mesh. Size and extent of mesh reinforcement shall conform to the details shown or called for on the plans.

D. Tie wire for reinforcement shall be eighteen (18) gauge or heavier, black, annealed conforming to the requirements of ASTM Designation A 82.

E. Suppliers certificates showing conformance with this specification shall be delivered with each shipment of materials delivered to the job site.

2.6 COLOR AND PATTERN FOR DECORATIVE SURFACES

A. Colors for decorative surfacing shall be CHROMIX admixtures as manufactured by the L. M. Scofield Company, Schedule A-312.05 or approved equal. The specific color shall be Winter Beige #6063.

B. Patterns for decorative surfacing shall be standard "Bomanite" patterns as copyrighted by the Bomanite Corporation of Palo Alto, California or approved equal. The specific pattern shall be as designated or called for on the Plans.

2.7 ACCESSORY MATERIALS

A. Conform water stops and other items required to be embedded in of portland cement concrete structures to the applicable requirements of Section 51 of the Caltrans Standard Specifications unless otherwise specifically noted or called for on the Plans or detail drawings.

B. Curing Compounds:
1. Regular Portland Cement Concrete: "Non-Pigmented Curing Compound - Chlorinated Rubber Base-Clear" conforming to the requirements contained in Section 90-7.01B, of the Caltrans Standard Specifications.
2. Color Conditioned Decorative Portland Cement Concrete: LITHOCHROME colorwax

as manufactured by the L. M. Scofield Company or approved equal.

2.8 FORMS

A. Conform to the requirements of Section 51-1.05 of the Caltrans Standard Specifications.

2.9 PRECAST CONCRETE STRUCTURES

A. Conform to the following Sections of Caltrans Standard Specifications:
   1. 51-1.02, Minor Structures.
   2. 70-1.02C, Flared End Sections.
   3. 70-1.02H, Precast Concrete Structures.

PART 3 - EXECUTION

3.1 STRUCTURAL EXCAVATION

A. Structural excavation may be either by hand, or by machine and shall be neat to the line and dimension shown or called for on the plans. Excavation shall be sufficient width to provide adequate space for working therein, and comply with CAL-OSHA requirements.

B. Where an excavation has been constructed below the design grade, refill the excavation to the bottom of the excavation grade with approved material and compact in place to 95% of the maximum dry density.

C. Remove surplus excavation material remaining upon completion of the work from the job site, or condition it to optimum moisture content and compact it as fill or backfill on the site, if the material is approved by the Geotechnical Consultant.

3.2 SOIL STERILANT

A. Furnish and apply to areas indicated in accordance with Section 31 23 00, Excavation and Fill.

3.3 BRACING AND SHORING

A. Conform to California and Federal OSHA requirements.

B. Place and maintain such bracing and shoring as may be required to support the sides of the excavations for the proper protection of workmen; to facilitate the work; to prevent damage to the facility being constructed; and to prevent damage to adjacent structures or facilities. Remove all bracing and shoring upon completion of the work.

C. Be solely responsible for all bracing and shoring and, if requested by the District's Representative, submit details and calculations to the District's Representative. The District's Representative may forward the submittal to the Geotechnical Consultant, the

Consulting Engineer and/or the California Division of Industrial Safety for their review. The Contractor's submittal shall include the basic design, assumed soils conditions and estimation of forces to be resisted, together with plans and specifications of the materials and methods to be used, and shall be prepared by a civil engineer or structural engineer registered in California. No excavations related to the proposed facility shall precede a response to the submittal by the District's Representative.

D. Be solely responsible for installing and extracting the sheathing in a manner which will not disturb the position or operation of the facility being constructed or adjacent utilities and facilities.

3.4 PLACING CONCRETE FORMS

A. Form concrete improvements with a smooth and true upper edge. Side of the form with a smooth finish shall be placed next to concrete. Construct forms rigid enough to withstand the pressure of the fresh concrete to be placed without any distortion.

B. Thoroughly clean all forms prior to placement and coat forms with approved form oil in sufficient quantity to prevent adherence of concrete prior to placing concrete.

C. Carefully set forms to the alignment and grade established and conform to the required dimensions. Rigidly hold forms in place by stakes set at satisfactory intervals. Provide sufficient clamps, spreaders and braces to insure the rigidity of the forms.

D. Provide forms for back and face of curbs, lip of gutters and edge of walks, valley gutters or other surface slabs that are equal to the full depth of the concrete as shown, noted or called for on the Plans. On curves and curb returns provide composite forms made from benders or thin planks of sufficient ply to ensure rigidity of the form.

3.5 PLACING STEEL REINFORCEMENT

A. Bars shall be free of mortar, oil, dirt, excessive mill scale and scabby rust and other coatings of any character that would destroy or reduce the bond. All bending shall be done cold, to the shapes shown on the plans. The length of lapped splices shall be as follows:
   1. Reinforcing bars No. 8, or smaller, shall be lapped at least 45 bar diameters of the smaller bar joined, and reinforced bars Nos. 9, 10, and 11 shall be lapped at least 60 bar diameters of the smaller bars joined, except when otherwise shown on the plans.
   2. Splice locations shall be made as indicated on the plans.

B. Accurately place reinforcement as shown on the plans and hold firmly and securely in position by wiring at intersections and splices, and by providing precast mortar blocks or ferrous metal chairs, spacers, metal hangers, supporting wires, and other approved devices of sufficient strength to resist crushing under applied loads. Provide supports and ties of such strength and density to permit walking on reinforcing without undue displacement.

C. Place reinforcing to provide the following minimum concrete cover:
   1. Surfaces exposed to water: 4-inches.
   2. Surfaces poured against earth: 3-inches.
   3. Formed surfaces exposed to earth or weather: 2-inches.
   4. Slabs, walls, not exposed to weather or earth: 1-inch.

D. Minimum spacing, center of parallel bars shall be two and one half (2-1/2) times the

diameter of the larger sized bar. Accurately tie reinforcing securely in place prior to pouring concrete. Placing of dowels or other reinforcing in the wet concrete is not permitted.

3.6 MIXING AND TRANSPORTING PORTLAND CEMENT CONCRETE

A. Transit mix concrete in accordance with the requirements of ASTM Designation C 94. Transit mix for not less than ten (10) minutes total, not less than three (3) minutes of which shall be on the site just prior to pouring. Mix continuous with no interruptions from the time the truck is filled until the time it is emptied. Place concrete within one hour of the time water is first added unless authorized otherwise by the District's Representative.

B. Do not hand mix concrete for use in concrete structures

3.7 PLACING PORTLAND CEMENT CONCRETE

A. Thoroughly wet subgrade when concrete is placed directly on soil. Remove all standing water prior to placing concrete.

B. Do not place concrete until the subgrade and the forms have been approved.

C. Convey concrete from mixer to final location as rapidly as possible by methods that prevent separation of the ingredients. Deposit concrete as nearly as possible in final position to avoid re-handling.

D. Place and solidify concrete in forms without segregation by means of mechanical vibration or by other means as approved by the District's Representative. Continue vibration until the material is sufficiently consolidated and absent of all voids without causing segregation of material. The use of vibrators for extensive shifting of fresh concrete will not be permitted.

E. Concrete in certain locations may be pumped into place upon prior approval by the District's Representative. When this procedure requires redesign of the mix, such redesign shall be submitted for approval in the same manner as herein specified for approval of design mixes.

3.8 PLACING ACCESSORY MATERIALS

A. Place water stops and other items required to be embedded in of Portland cement concrete structures at locations shown or required in accordance with Section 51 of the Caltrans Standard Specifications unless otherwise specifically noted or called for on the Plans.

B. Curing Compounds:
   1. Regular Portland Cement Concrete: Apply "Non-Pigmented Curing Compound - chlorinated Rubber Base-Clear" in accordance with Section 90-7.01B, 7.01D and 7.03 of the Caltrans Standard Specifications.
   2. Color Conditioned Decorative Portland Cement Concrete: Apply LITHOCHROME colorwax, or approved equal, in accordance with the manufacturer's instructions.

3.9 EXPANSION JOINTS

A. Construct expansion joints incorporating pre-molded joint fillers at twenty (20) foot intervals in all concrete curbs, gutters, sidewalks, median/island paving, valley gutters, driveway approaches and at the ends of all returns. At each expansion joint install one-half inch by twelve inch (1/2" x 12") smooth slip dowels in the positions shown or noted on the detail drawings.

B. Orient slip dowels at right angles to the expansion joint and hold firmly in place during the construction process by means of appropriate chairs.

3.10 WEAKENED PLANE JOINTS

A. Construct weakened plane joints in concrete curbs, gutters, sidewalks, median/island paving and valley gutters between expansion joints at ten (10) foot intervals throughout, or as otherwise indicated. Depth of joint score depth to be one-fourth (25%) the thickness of the concrete.

1. Grooved Joints: Form weakened plane joints after initial floating by grooving and finishing each edge of joint to a radius of 1/8-inch. Repeat grooving of weakened plane joints after applying surface finishes. Eliminate groover tool marks on concrete surfaces.
2. Sawed Joints: Form weakened plane joints with power saws equipped with shatterproof abrasive or diamond-rimed blades. Cut 1/8-inch wide joints into concrete when cutting action will not tear, abrade or otherwise damage surface and before concrete develops random contraction cracks.

3.11 FORM REMOVAL

A. Remove forms without damage to the concrete. Remove all shores and braces below the ground surface, before backfilling.

B. Do not backfill against concrete until the concrete has developed sufficient strength to prevent damage.

C. Leave forms for cast-in-place walls in place at least 72 hours after pouring.

D. Leave edge forms in place at least 24 hours after pouring.

3.12 CONSTRUCTION

A. Form, place and finish concrete curbs, walkways, island paving, valley gutters and driveway approaches in conformance with the applicable requirements of Section 73-1.04, 73-1.05, 72-1.05A and 73-1.06 of the Caltrans Standard Specifications as modified herein.

B. Provide a medium broom finish to all horizontal surfaces unless otherwise shown.

C. Construct new concrete curb, curb and gutter and valley gutters against existing asphalt concrete by removing a minimum of 12-inches of the asphalt concrete to allow placement of curb or gutter forms. Patch pavement with a 6-inch deep lift of asphalt concrete after gutter form is removed.

D. Where monolithic curb, gutter and sidewalk is specified, separate concrete pours will not be allowed.

3.13 CONNECTING TO EXISTING CONCRETE IMPROVEMENTS

A. New curb, gutter, or sidewalk is to connect to existing improvements to remain by saw cutting to existing sound concrete at the nearest score line, expansion joint or control joint. Drill and insert ½-inch diameter by 12-inch long dowels at 24-inches on center into existing improvements. Install pre-molded expansion joint filler at the matching joint.

B. A cold joint to the existing curb is not acceptable.

3.14 DECORATIVE AND NON-DECORATIVE SURFACING CONSTRUCTION

A. Decorative surfacing concrete walks or other installations shall be formed and placed as a concrete slab conforming to the details shown or noted on the Plans. Exposed aggregate concrete sidewalks shall be repaired in kind or better condition.

B. Add lampblack or equivalent to the non-decorative surface concrete at the mixing plant.

3.15 ACCESSIBLE PATH OF TRAVEL CONSTRUCTION FINISH

A. Provide equivalent of medium salted finish at slopes less than 6% and slip-resistant finish at slopes 6% and greater along any accessible path of travel.

3.16 FIELD QUALITY CONTROL

A. Finish subgrade for concrete improvements shall be subject to approval prior to placement of forms.

B. No concrete shall be placed prior to approval of forms.

C. Concrete improvements constructed shall not contain areas that pond water and shall be smooth and ridge free.

D. Conform the finish grade at top of curb, flow line of gutter, and the finish cross section of concrete improvements to the design grades and cross sections.

E. Variation of concrete improvements from design grade and cross section as shown or called for on the plans shall not exceed the tolerances established in Sections 73-1.05 and/or 73-1.06 of the Caltrans Standard Specifications.

3.17 RESTORATION OF EXISTING IMPROVEMENTS

A. Replace in kind all pavement or other improvements removed or damaged due to the installation of concrete improvements.

B. Remove, landscaping or plantings damaged or disturbed due to the installation of concrete improvements. Replace in kind.

END OF SECTION

SECTION 32 11 32

AGGREGATE BASE COURSE

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Aggregate base.

B. Lime stabilization.

1.2 RELATED SECTIONS

A. Section 32 12 16, Asphalt Paving

B. Section 32 05 23, Portland Cement Concrete

1.3 RELATED DOCUMENTS

A. Caltrans 2022 Standard Specifications:
1. Section 24, Lime Stabilization.
2. Section 26, Aggregate Bases.

B. ASTM:
1. D 1557, Test Method for Laboratory Compaction Characteristics of Soil Using Modified Effort.

1.4 DEFINITIONS

A. ASTM: American Society for Testing Materials.

1.5 SUBMITTALS

A. Submittal procedure shall be as outlined in the District's General Requirements.

B. Submit material certificates signed by the material producer and the Contractor, certifying that that each material item complies with, or exceeds the specified requirements.

1.6 QUALITY ASSURANCE

A. Conform to these Specifications and Section 19 of Caltrans 2022 Standard Specifications.

B. Finish surface of the prepared subgrade to receive aggregate base, shall be as specified in Section 31 23 00.

C. Finish surface of material to be stabilized prior to lime treatment shall be as specified in

Section 24-1.04 of Caltrans Standard Specifications.

D. Finish surface of the stabilized material after lime treatment shall be as specified in Section 24-1.08 of Caltrans Standard Specifications.

E. Do not project the finish surface of aggregate base above the design subgrade.

F. Finish surface of aggregate base shall be 0 to - 0.05-feet.

G. Finish surface of cement treated base shall be as specified in Section 27 of Caltrans Standard Specifications.

H. Percentage of compaction specified shall be the minimum acceptable. The percentage represents the ratio of the dry density of the compacted material to the maximum dry density of the material as determined by the procedure set forth in ASTM Designation D1557.

PART 2 - PRODUCTS

2.1 FILL MATERIAL

A. If fill material is required to restore the previously constructed subgrade to its proper elevation, provide structural fill material specified in Section 31 23 00.

2.2 AGGREGATE BASE

A. Material: Caltrans Standard Specification Section 26.
1. Class 2, 3/4-inch Maximum: Section 26-1.02A.

2.3 LIME STABILIZATION

A. Lime Treatment Material per Geotechnical recommendation and field investigation if required.

PART 3 - EXECUTION

3.1 SOIL STERILANT

A. Furnish and apply to areas indicated in accordance with Section 31 23 00.

3.2 AGGREGATE BASE

A. Watering, Spreading & Compacting: Section 26-1.035, 26-1.04 and 26-1.05 of Caltrans Specs

3.3 LIME STABILIZATION

A. Performing the stabilization shall conform with Geotechnical recommendation

END OF SECTION

SECTION 32 31 13

CHAIN LINK FENCING

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes:

1. Repairing existing galvanized chain link fence.
2. New swing gates.

B. Related requirements:

1. Division 03 for concrete post footings.
2. Division 09 for field-painting fence components.

1.2 SUBMITTALS

A. Data: Manufacturer product data for fabric, posts, privacy slats and other accessories.
B. Shop drawings: Show fence layouts, footings size and reinforcement, gate details, and typical elevations, including position of hardware.

1. Include elevations showing pattern for privacy slats.

C. Samples:

1. 24-inch square samples of chain link fabric.
2. Full-size sample of each type of gate hardware.
3. 12-inch sample of privacy slats for Architect's color and texture selection.
4. Approved samples will serve as Architect's control samples.

1.3 QUALITY ASSURANCE

A. The applicable provisions of the Chain Link Fence Manufacturers Institute (CLFMI) Product Manual govern the work of this Section.
B. This requirement does not limit manufacture of the fencing components to CLFMI members.

1.4 HANDLING

A. Handle and store components to avoid damaging the finish.
B. Store off the ground in a protected location.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Framework:

1. Round steel pipe and rail: ASTM F1043 Group IA Heavy Industrial Fence Framework, schedule 40 galvanized pipe per ASTM F1083. Exterior zinc coating Type A, interior zinc coating Type A. A36 regular grade.

   a. Line Post: 2.875 inches diameter.
   b. End, corner, pull post: 3.500 inches diameter.
   c. Top, brace, bottom & intermediate rails: 1.660 inches, 2.27 lbs/ft.

B. Chain link fabric: Polymer Coated Steel Fabric: ASTM F668.

1. One piece width, 1-inch x 1 inch mesh, 9-gage.
2. Color: Black in compliance with ASTM F934.

C. Accessories, general: Galvanized, complying with ASTM A 153, except that the coating weight may comply with the requirements of CFLMI standards for coating thickness.

1. Tension wire: 7-gage marcelled wire complying with ASTM A824.

   a. Type II Zinc-Coated Class 5 - 2.0 oz/ft².

2. Stretcher bars: One piece length equal to full height of fabric with a minimum cross section of 3/16 inch by 3/4 inch. Provide one stretcher bar for each gate and end post, and 2 for each corner and pull post.
3. Stretcher bar bands: Heavy pressed steel to secure stretcher bars to intermediate, corner and gate posts.
4. Post tops: Steel or malleable iron designed as a weathertight closure cap. Design caps with opening to permit passage of the top rail, when rail is provided.

D. Wire ties: For tying fabric to line posts, galvanized minimum zinc coating 1.20 oz/ft² 9 gauge (0.148) steel wire in compliance with ASTM F626. For tying fabric to tension wire use 9-gage hog rings.

E. Privacy slats: Polypropylene tubular slats, , manufactured for chain-link fences containing UV inhibitor, sized to fit fencing fabric specified for direction indicated on the shop drawings.

1. Color and texture: Match Architect's control sample.

2.2 GATES

A. Fabricate gate frames of welded steel tubes in compliance with ASTM F 900. Provide additional horizontal and diagonal members to insure that gates stay square and operate properly, and for attachment of fabric, hardware and accessories.

B. Weld gate frames:

1. Use same fabric as for fencing, installed with stretcher bars at vertical edges.
2. Tie fabric to top and bottom edges. Attach stretcher bars to gate frame at not more than 15 inches o.c.

3. Attach hardware with rivets or by other means that will provide security against removal and breakage.

C. Hardware:

1. Padlock provided by Door Hardware supplier.
2. Latching devices: Self-closing and latching, galvanized heavy-duty hardware, positioned outside of children's reach.
3. Hinges: One pair of steel hinges, non-lift-off type offset to permit 180-degree gate opening.
4. Gate hardware to be accessible in accessible path of travel locations.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Verify conditions and measurements affecting the work of this Section at site.
B. Correct detrimental conditions before proceeding with installation.

3.2 INSTALLATION

A. General: Comply with ASTM F 567.
B. Posts: Provide corner, end, and intermediate posts. Erect posts plumb and level, in straight alignment, and set in concrete footings. Support and brace until concrete sets.
C. Post caps: Provide on each post unless equal protection is provided by combination post top cap and barbed wire supporting arm.
D. Tension wires: Install before stretching fabric and tie to each posts with ties or clips.
E. Top, bottom and intermediate rails: Install before installing fabric. Pass top rail through intermediate post caps. Provide expansion coupling spaced at no more than 20 feet o.c.
F. Tension wires: Pull wire taut and anchor securely to the posts.
G. Stretcher bars: Thread through fabric and secure to posts with steel bands.
H. Privacy slats: Securely install slats in locations indicated, patterns as indicated on the approved shop drawings.

3.3 BRACING

A. Brace gates, corner, end, and pull posts to the nearest post with a horizontal brace used as a compression member and a diagonal truss rod and truss tightener used as a tension member.

3.4 GATES

A. General: Install gates plumb, level, square, free of rack and secure for full opening without interference. Adjust hardware for smooth operation.

3.5 COATING SYSTEM FOR GALVANIZED STEEL

A. New and existing fencing components shall be field primed and painted.
B. Surface preparation:

1. SSPC-SP1 preparation to remove soluble contamination.

2. Thoroughly roughen the entire surface to be coated using compressed air nozzle brush-off blast cleaning with a fine abrasive to achieve a uniform anchor profile (1.5 to 2 mils) (38 to 50 microns).
3. Pressure wash with 140 to 150-degree F alkaline cleaner followed by tap water rinse is the preferred method to remove both water soluble and organic solvent soluble contaminants.

C. Touchup: Where the galvanized surface is damaged, repair shall consist of mechanical surface cleaning to bare metal, followed by touchup application of organic zinc-rich moisture cured urethane primer at 2.5 mils DFT minimum.
D. Spot primer: Surface tolerant epoxy primer/aliphatic acrylic polyurethane gloss finish.

FENCING PAINT TYPE: PFX-4, SEE SECTION 09910.

END OF SECTION