

**MERCED COMMUNITY COLLEGE DISTRICT
 BID #2024-10 Career Center Interiors Upgrades
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NOTICE CALLING FOR BIDS

DISTRICT	MERCED COMMUNITY COLLEGE DISTRICT
PROJECT DESCRIPTION	BID #2024-10 Career Center Interiors Upgrades
PROJECT BUDGET	\$110,000.00
LATEST TIME/DATE FOR SUBMISSION OF BID PROPOSALS	2:00 P.M. Wednesday, March 27, 2024
LOCATION FOR SUBMISSION OF BID PROPOSALS	Merced College, Purchasing Office (Corner University Drive and West Community College Drive) 3600 M Street, Merced, California 95348
LOCATION FOR OBTAINING BID AND CONTRACT DOCUMENTS	https://www.mccd.edu/about-merced-college/divisions/admin-services/purchasing/bids/

NOTICE IS HEREBY GIVEN that the Merced Community College District (District), acting by and through its Board of Trustees, will receive up to, but not later than the above-stated date and time, sealed Bid Proposals for the Contract for the Work generally described as **BID #2024-10 Career Center Interiors Upgrades**

1. Submittal of Bid Proposals. All Bid Proposals must be submitted on forms furnished by the District prior to the last time for submission of Bid Proposals and the District's public opening and reading of Bid Proposals.
2. Bid and Contract Documents. (Available Electronically), The Bid and Contract Documents are available at the location stated above for a Choose an item. payment of \$_____ per set by check payable to _____. If the payment for Bid and Contract Documents is refundable, refunds will be processed only if the Bid and Contract Documents are returned as directed to the District intact and in good order on or before Click here to enter a date..
3. Documents Accompanying Bid Proposal. Each Bid Proposal shall be accompanied by: (i) the required Bid Security; (ii) Subcontractors List; (iii) Statement of Qualifications; (iv) Non-Collusion Affidavit; and (v) DIR Registration Verification.
4. Project Budget. The Project Budget for the Work is set forth above. If bidding for the Work includes Alternate Bid Items, the selection of Alternate Bid Items for determination of the lowest priced Bid Proposal will be by priority of Alternate Bid Items, up to but not exceeding the Project Budget. If bidding for the Work does not include Alternate Bid Items, the Project Budget set forth above is for information purposes only.
5. Pre-Bid Inquiries. Bidders may submit pre-bid inquiries or clarification requests. Bidders are solely and exclusively responsible for submitting pre-bid inquiries or clarification requests no later than **2:00 PM FIVE (5) days** before the latest date for submittal of Bid Proposals. Pre-bid inquiries or clarification requests shall be submitted to. PurchasingBids@mccd.edu
6. Prevailing Wage Rates. The Contractor and all Subcontractors shall pay not less than the applicable prevailing wage rate for the classification of labor provided by their respective workers to execute the Work. Copies of the prevailing wage rates in the locality where the Work is to be performed, entitled PREVAILING WAGE SCALE are available to any interested party on the INTERNET at <http://>

www.dir.ca.gov/dlsr/statistics_research.html. In addition to compliance with prevailing wage requirements, the successful Bidder shall comply with all other applicable provisions of the Labor Code, the California Code of Regulations and rulings or determinations of the California Department of Industrial Relations. During the Work and pursuant to Labor Code §1771.4(a)(4), the Department of Industrial Relations shall monitor compliance with prevailing wage rate requirements and enforce the Contractor's prevailing wage rate obligations.

7. Contractors' License Classification. Bidders must possess the following classification(s) of California Contractors License at the time that the Bid Proposal is submitted and at time the Contract for the Work is awarded: **B - General Building**. The Bid Proposal of a Bidder who does not possess a valid and in good standing Contractors' License in the classification(s) set forth above will be rejected for non-responsiveness. Any Bidder not duly and properly licensed is subject to all penalties imposed by law. No payment shall be made for the Work unless and until the Registrar of Contractors verifies to the District that the Bidder awarded the Contract is properly and duly licensed for the Work.
8. Contract Time. Completion of the Work shall be achieved within the time set forth in Contract Documents after the date for commencement of the Work established in the Notice to Proceed issued by the District. Failure to achieve Completion within the Contract Time will result in the assessment of Liquidated Damages as set forth in the Contract.
9. Bid Security. Each Bid Proposal shall be accompanied by Bid Security in an amount equal to TEN PERCENT (10%) of the maximum amount of the Bid Proposal, inclusive of the value of any additive Alternate Bid Item(s). A Bid Proposal not accompanied by Bid Security in the form and in the amount required is non-responsive and will be rejected by the District.
10. Payment Bond; Performance Bond. Prior to commencement of the Work, the Bidder awarded the Contract shall deliver to the District a Payment Bond and a Performance Bond issued by a California Admitted Surety in the form and content included in the Contract Documents in a penal sum equal to One Hundred Percent (100%) of the Contract Price. The Payment Bond and the Performance Bond shall be issued by a California Admitted Surety in the form and content included in the Contract Documents.
11. No Withdrawal of Bid Proposals. Bid Proposals shall not be withdrawn by any Bidder for a period of thirty (30) **days** after the opening of Bid Proposals. During this time, all Bidders shall guarantee prices quoted in their respected Bid Proposals.
12. Return of Executed Agreement. The Bidder awarded the Contract shall execute the Agreement and return the executed Agreement to the District within three (3) **calendar days** from the date of receiving notification that it is the Bidder to whom the Contract has been awarded. If the successful Bidder fails to return the executed Agreement pursuant to the foregoing, the District may declare the Bidder's Bid Security forfeited as damages caused by the failure of the Bidder to enter into the Contract and may thereupon award the Contract for the Work to the responsible Bidder submitting the next lowest Bid Proposal or may call for new bids, in its sole and exclusive discretion.
13. Job-Walk. The District will conduct a **Mandatory Job Walk on Monday, March 11, 2024, beginning at 10:30 AM**. Bidders are to meet at the Purchasing Office for conduct of the Job Walk. If the Job Walk is mandatory, the Bid Proposal submitted by a Bidder whose representative(s) did not attend the entirety of the Mandatory Job Walk will be rejected by the District as being non-responsive. Access to the Job Walk will be available to Bidders for ten (10) minutes after the scheduled start time of the Job Walk; no access to the Job Walk will be permitted thereafter. A Bidder whose representative(s) arrive at the Job Walk location more than ten (10) minutes after the scheduled start of the Job Walk will be denied access and will not be deemed to have attended the Job Walk.

<https://www.mccd.edu/wp-content/uploads/2024/01/Merced-Campus-Map-Print-202401-v1.pdf>

14. Waiver of Irregularities. The District reserves the right to reject any or all Bid Proposals or to waive any irregularities or informalities in any Bid Proposal or in the bidding.
15. Award of Contract. The Contract for the Work, if awarded, will be by action of the District's Board of Trustees to the responsible Bidder submitting the lowest priced responsive Bid Proposal. If the Bid Proposal requires Bidders to propose prices for Alternate Bid Items, the District's selection of Alternate Bid Items, if any, for determination of the lowest priced Bid Proposal and for inclusion in the scope of the Contract to be awarded shall be in accordance with the Instructions for Bidders.

Merced Community College District

Advertisement Publications: March 1, 2024 through March 11, 2024

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INSTRUCTIONS FOR BIDDERS

1. Preparation and Submittal of Bid Proposal.
 - 1.1. Bid Proposal Preparation. All information required by the bid forms must be completely and accurately provided. Numbers shall be stated in both words and figures where required in the bid forms; conflicts between a number stated in words and in figures are governed by the words. Partially completed Bid Proposals or Bid Proposals submitted on other than the bid forms included herein are non-responsive and will be rejected. Bid Proposals not conforming to these Instructions for Bidders and the Notice to Contractors Calling for Bids ("Call for Bids") may be deemed non-responsive and rejected.
 - 1.2. Bid Proposal Submittal. Bid Proposals shall be submitted at the place designated in the Call for Bids in sealed envelopes bearing on the outside the Bidder's name and address along with an identification of the Work for which the Bid Proposal is submitted. Bidders are solely responsible for timely submission of Bid Proposals to the District at the place designated in the Call for Bids.
 - 1.3. Date and Time of Bid Proposal Submittal. A Bid Proposal is submitted only if the outer envelope containing the Bid Proposal is marked with the Project title and is received by a District Purchasing Department representative for logging-in at (or before) the latest date and time for submittal of Bid Proposals. The official U.S. time-clock website: <https://www.time.gov/> is controlling and determinative as to the time of the Bidder's submittal of the Bid Proposal. The foregoing notwithstanding, whether or not Bid Proposals are opened exactly at the time fixed in the Call for Bids, no Bid Proposals shall be received or considered by the District after it has commenced the public opening and reading of Bid Proposals; Bid Proposals submitted after such time are non-responsive and will be returned to the Bidder unopened.
2. Bid Security. Each Bid Proposal shall be accompanied by Bid Security in the form of: (i) cash, (ii) a certified or cashier's check made payable to the District or (iii) a Bid Bond, in the form and included with the Contract Documents (the "Bid Security") in at least the amount set forth in the Call for Bids. A Bid Proposal submitted without the required Bid Security is non-responsive and will be rejected. If the Bid Security is in the form of a Bid Bond, the Bidder's Bid Proposal is deemed responsive only if the Bid Bond is in the form and content included herein and the Surety is an Admitted Surety Insurer under Code of Civil Procedure §995.120.
3. Documents Accompanying Bid Proposal; Signatures. The Bid Proposal and all other documents required to be submitted with the Bid Proposal shall be executed by an individual duly authorized to execute the same on behalf of the Bidder; failure of a Bid Proposal to conform to the foregoing will render the Bid Proposal non-responsive and rejected.
4. Bidder and Subcontractors' DIR Registered Contractor Status. Each Bidder must be a DIR Registered Contractor when submitting a Bid Proposal. The Bid Proposal of a Bidder who is not a DIR Registered Contractor when the Bid Proposal is submitted will be rejected for non-responsiveness. All Subcontractors identified in a Bidder's Subcontractors' List must be DIR Registered contractors at the time the Bid Proposal is submitted. The foregoing notwithstanding, a Bid Proposal is not subject to rejection for non-responsiveness for listing Subcontractor the Subcontractors List who is/are not DIR Registered contractor(s) if such Subcontractor(s) complete DIR Registration pursuant to Labor Code §1771.1(c)(1) or (2). Further, a Bid Proposal is not subject to rejection if the Bidder submitting the Bid Proposal lists any Subcontractor(s) who is/are not DIR Registered contractors and such Subcontractor(s) do not become DIR Registered pursuant to Labor Code §1771.1(c)(1) or (2) prior to award of the Contract, the Bidder, if awarded the Contract, must request consent of the District to substitute a DIR Registered Subcontractor for any non-DIR Registered Subcontractor(s) pursuant to Labor Code §1771.1(c)(3) without adjustment of the Contract Price or the Contract Time.
5. Modifications or Withdrawal of Bid Proposal. Changes to the bid forms which are not specifically called for or permitted may result in the District's rejection of the Bid Proposal as being non-responsive. No oral or telephonic modification of any submitted Bid Proposal will be considered.

After submittal of a Bid Proposal, a Bidder may modify or withdraw its Bid Proposal only by written request actually received by the District prior to the scheduled closing time for the receipt of Bid Proposals and the District's public opening and reading of Bid Proposals; written requests to withdraw or modify a submitted Bid Proposal received by the District after the scheduled closing time for receipt of Bid Proposals shall not be considered by the District, nor effective to withdraw such Bid Proposal.

6. Erasures; Inconsistent or Illegible Bid Proposals. Erasures, interlineations or other corrections to any document submitted with a Bid Proposal shall be suitably authenticated by affixing in the margin immediately opposite such erasure, interlineations or correction the surname(s) of the person(s) signing the Bid Proposal. Any Bid Proposal not conforming to the foregoing may be deemed by the District to be non-responsive. If any Bid Proposal or portions thereof, is determined by the District to be illegible, ambiguous or inconsistent, the District may reject such a Bid Proposal as being non-responsive.
7. Examination of Site and Contract Documents. Each Bidder shall, at its sole cost and expense, inspect the Site and to become fully acquainted with the Contract Documents and conditions affecting the Work. Failure of a Bidder to receive or examine any of the Contract Documents or to inspect the Site shall not relieve such Bidder from any obligation with respect to the Bid Proposal, or the Work required under the Contract Documents. The District assumes no responsibility or liability to any Bidder for, nor shall the District be bound by, any understandings, representations or agreements of the District's agents, employees or officers concerning the Contract Documents or the Work made prior to execution of the Contract which are not in the form of Bid Addenda duly issued by the District. The submission of a Bid Proposal shall be deemed prima facie evidence of the Bidder's full compliance with the requirements of this section.
8. Agreement and Bonds. The Agreement which the successful Bidder, as Contractor, will be required to execute along with the forms Payment Bond, Performance Bond and other documents and instruments which are required to be furnished are included in the Contract Documents and shall be carefully examined by the Bidder.
9. Interpretation of Drawings, Specifications or Contract Documents. The District will respond to any pre-bid inquiry submitted in accordance with requirements established in the Call for Bids. If in the sole discretion of the District, a response to a pre-bid inquiry affects or potentially affects other Bidders, the Work, the Contract Documents or other requirements, the District will issue addenda. A copy of any such addendum will be delivered by fax, email or mail to each Bidder receiving a set of the Contract Documents. No person is authorized to render an oral interpretation or correction of any portion of the Contract Documents to any Bidder, and no Bidder is authorized to rely on any such oral interpretation or correction. Failure to request interpretation or clarification of any portion of the Contract Documents pursuant to the foregoing is a waiver of any discrepancy, defect or conflict therein.
10. District's Right to Modify Contract Documents. Before the public opening and reading of Bid Proposals, the District may modify the Work, the Contract Documents, or any portion(s) thereof by the issuance of written addenda disseminated to all Bidders who have obtained a copy of the Specifications, Drawings and Contract Documents pursuant to the Call for Bids. If the District issues any addenda during the bidding, the failure of any Bidder to acknowledge such addenda in its Bid Proposal will render the Bid Proposal non-responsive and rejected.
11. Bidders Interested in More Than One Bid Proposal; Non-Collusion Affidavit. No person, firm, corporation or other entity shall submit or be interested in more than one Bid Proposal for the same Work; provided, however, that a person, firm or corporation that has submitted a sub-proposal to a Bidder or who has quoted prices for materials to a Bidder is not disqualified from submitting a sub-proposal, quoting prices to other Bidders or submitting a Bid Proposal for the proposed Work to the District. The form of Non-Collusion Affidavit included in the Contract Documents must be completed

and duly executed on behalf of the Bidder; failure of a Bidder to submit a completed and executed Non-Collusion Affidavit with its Bid Proposal will render the Bid Proposal non-responsive.

12. Award of Contract.

- 12.1. Waiver of Irregularities or Informalities. The District reserves the right to reject any and all Bid Proposals or to waive any irregularities or informalities in any Bid Proposal or in the bidding.
- 12.2. Award to Lowest Responsive Responsible Bidder. The award of the Contract, if made by the District through action of its Board of Trustees, will be to the responsible Bidder submitting the lowest responsive Bid Proposal on the basis of the Base Bid Proposal and Alternate Bid Items selected in accordance with these Instructions.
- 12.3. Selection of Alternate Bid Items. Additive Alternate Bid Items ("ALT"), if any, will be accepted by the District in the order of priority established by the District, with the highest prioritized ALT being ALT 1. The Contract for the Work will be awarded to the Bidder submitting the lowest priced responsive Bid Proposal for the Base Bid scope and the maximum number of ALTs up to but not exceeding the Project Budget set forth in the Call for Bids. In the following example, Bidder B proposes \$19,000 for the Base Bid plus ALTs 1-3, Bidder A proposes \$20,000 and Bidder C proposes for the Base Bid plus ALTs 1-3. Pricing for the Base Bid and ALT 4 to any Bidder exceeds the Project Budget. Hence: Bidder B submitted the lowest priced proposal for the Base Bid and the maximum number of ALTs within the Project Budget.

Project Budget: \$19,000 (EXAMPLE)							
BID PRICING					BASE BID + ALTS		
	BIDDER A	BIDDER B	BIDDER C		BIDDER A	BIDDER B	BIDDER C
Base Bid	\$5,000	\$5,500	\$4,800		\$5,000	\$5,500	\$4,800
ALT 1	\$8,000	\$7,500	\$7,800		\$13,000	\$13,000	\$12,600
ALT 2	\$1,000	\$1,000	\$1,200		\$14,000	\$14,000	\$13,800
ALT 3	\$6,000	\$5,000	\$7,000		\$20,000	\$19,000	\$20,800
ALT 4	\$150	\$120	\$200		\$20,150	\$19,150	\$21,000

- 12.4. Alternate Bid Items Not Included in Award of Contract. Bidders are referred to the provisions of the Contract Documents permitting the District, during performance of the Work, to add or delete from the scope of the Work any or all of the Alternate Bid Items with the cost or credit of the same being the amount(s) set forth by in the Alternate Bid Items Bid on the Proposal.
- 12.5. Responsive Bid Proposal. A responsive Bid Proposal shall mean a Bid Proposal which conforms, in all material respects, to requirements of the Bid and Contract Documents.
- 12.6. Responsible Bidder. Determination of the responsibility of Bidders is based on the following evaluation criteria.
- 12.6.1. Bidder Capacity. Factors affecting the Bidder's capacity to perform and complete the Work will be assessed, including: (i) Bidder's access to labor, materials and other resources necessary to complete the Work; (ii) Bidder's ability to complete the Work within the time established for completion of the Work, or portions thereof; and (iii) Bidder's ability to complete warranty obligations.
- 12.6.2. Bidder Character, Integrity. Factors reflecting the character and integrity of the Bidder, including: (i) other public agency finding/determination, within the past five (5) years, that the Bidder is not responsible; (ii) currently debarred from bidding public works projects or

debarment from bidding within past five (5) years; and (iii) false claims liability within the past five (5) years under local, state or federal laws.

12.6.3. Bidder Financial Capability. Factors considered include: (i) sufficiency of the Bidder's financial resources; (ii) whether the Bidder is current in payment of debts and performance of other financial obligations; and (iii) bankruptcy or insolvency proceedings have been instituted within the past five (5) years.

12.6.4. Bidder Prior Performance. The Bidder's prior performance on prior public works contracts, including without limitation: (i) cost overruns; (ii) compliance with general conditions and other contractual requirements, including schedule development, schedule updates and coordination of labor, material/equipment procurements and subcontractors; (iii) completion within allocated time; (iv) submittal of unsubstantiated, unsupported or excessive cost proposals, claims or contract adjustment requests; (iv) completion of a project by a surety; (vi) owner's exercise of default remedies; and (vii) finding or determination by any public agency that the Bidder is not a responsible bidder.

12.6.5. Safety. Factors include: (i) findings of serious or willful safety violations of safety laws, regulations or requirements by any local, state or federal agency within the past five (5) years; (ii) adequacy and implementation of safety plans, programs for on-site and off-site construction and construction related activities; and (iii) Workers Compensation Insurance EMR rating exceeding 1.25.

13. Subcontractors.

13.1. Designation of Subcontractors; Subcontractors List. Each Bidder shall submit a list of its proposed Subcontractors for the proposed Work as required by the Subletting and Subcontracting Fair Practices Act (California Public Contract Code §§ 4100 et seq.) on the form furnished. The failure of any Bid Proposal to include all information required by the Subcontractors List will result in rejection of the Bid Proposal for non-responsiveness.

13.2. Work of Subcontractors. All Bidders are referred to the Contract Documents and the notation therein that all Contract Documents are intended to be complimentary and that the organization or arrangements of the Specifications and Drawings shall not limit the extent of the Work of the Contract Documents. Accordingly, all Bidders are encouraged to disseminate all of the Specifications, Drawings and other Contract Documents to all persons or entities submitting sub-bids to the Bidder. The omission of any portion or item of Work from the Bid Proposal or from the sub-bidders' sub-bids which is/are necessary to produce the intended results and/or which are reasonably inerrable from the Contract Documents is not a basis for adjustment of the Contract Price or the Contract Time.

13.3 Subcontractor Bonds. In accordance with California Public Contract Code §4108, if a Bidder requires a bond or bonds of its Subcontractor(s), whether the expense of procuring such bond or bonds are to be borne by the Bidder or the Subcontractor(s), such requirements shall be specified in the Bidder's written or published request for sub-bids. Failure of the Bidder to comply with these requirements shall preclude the Bidder from imposing bonding requirements upon its Subcontractor(s) or rejection of a Subcontractor's bid under California Public Contract Code §4108(b).

14. Workers' Compensation Insurance. Pursuant to California Labor Code § 3700, the successful Bidder shall secure Workers' Compensation Insurance for its employees engaged in the Work of the Contract. The successful Bidder shall execute and deliver to the District the form of Workers Compensation Certification included in the Contract Documents concurrently with such Bidder's delivery of the executed Agreement to the District.

15. Bid Security Return. The Bid Security of the Bidders submitting the three lowest priced Bid Proposals, the number being solely at the discretion of the District, will be held by the District for

ten (10) days after the period for which Bid Proposals must be held open (which is set forth in the Call for Bids) or until posting by the successful Bidder(s) of the bonds, certificates of insurance required and return of executed copies of the Agreement, whichever first occurs, at which time the Bid Security of such other Bidders will be returned to them.

16. Contractor's License. No Bid Proposal will be considered from a Bidder who, at the time Bid Proposals are opened, is not licensed to perform the Work of the Contract Documents, in accordance with the Contractors' License Law, California Business & Professions Code §§7000 et seq. This requirement is not a mere formality and will not be waived by the District or its Board of Trustees. The required California Contractors' License classification(s) for the Work is set forth in the Call for Bids.
17. Non-Discriminatory Practices. It is the policy of the District that there be no discrimination against any prospective or active employee engaged in the Work because of race, color, ancestry, national origin, religious creed, sex, age, marital status or other legally protected classification. All Bidders agree to comply with the District's non-discrimination policy and all applicable Federal and California anti-discrimination laws including but not limited to the California Fair Employment & Housing Act beginning with California Government Code §§ 12940 et seq. and California Labor Code § 1735. In addition, all Bidders agree to require like compliance by any Subcontractor employed by them on the Work of the Contract.
18. Bidder's Qualifications. Each Bidder shall submit with its Bid Proposal the form of Statement of Bidder's Qualifications, which is included within the Contract Documents. All information required by Statement of Bidder's Qualifications shall be completely and fully provided. Any Bid Proposal not accompanied by the Statement of Bidder's Qualifications completed with all information required and bearing the signature of the Bidder's duly authorized representative under penalty of perjury will render the Bid Proposal non-responsive and rejected. If the District determines that any information provided by a Bidder in the Statement of Bidder's Qualifications is false or misleading, or is incomplete so as to be false or misleading, the District may reject the Bid Proposal submitted by such Bidder as being non-responsive.
19. Job-Walk. The District will conduct a Job-Walk at the time(s) and place(s) designated in the Call for Bids. The District may, in its sole and exclusive discretion, elect to conduct one or more Job-Walk(s) in addition to that set forth in the Call for Bids, in which event the District shall notify all Bidders who have theretofore obtained the Contract Documents pursuant to the Call for Bids of any such additional Job-Walk. If the District elects to conduct any Job-Walk in addition to that set forth in the Call for Bids, the District shall, in its notice of any such additional Job-Walk(s), indicate whether Bidders' attendance at such additional Job-Walk(s) is/are mandatory. If attendance at the Job Walk is indicated in the Call for Bids as being mandatory, the failure of any Bidder to have its authorized representative present at the entirety of the Job-Walk will render the Bid Proposal of such Bidder to be non-responsive. Where the Job-Walk is mandatory, a Bidder may have more than one authorized representative and/or representatives of its Subcontractors present at the Job-Walk; provided, however that attendance by representatives of the Bidder's Subcontractors without attendance by a representative of the Bidder shall not be sufficient to meet the Bidder's obligations hereunder and will render the Bid Proposal of such Bidder to be non-responsive. The District will reject the Bid Proposal of a Bidder who obtains the Bid and Contract Documents after the date of the Mandatory Job-Walks set forth in the Call for Bids unless a Job-Walk is requested by such Bidder and a Job-Walk is conducted by the District in accordance with the following provisions. The District may, in its sole and exclusive discretion, conduct such requested Job-Walk taking into consideration factors such as the time remaining prior to the scheduled opening of Bid Proposals. Any such requested Job Walk will be conducted only upon the requesting Bidder's agreement to reimburse the District for the actual and/or reasonable costs for the District's staff and its agents and representatives in arranging for and conducting such additional Job-Walk.

20. Public Records. Bid Proposals and other documents responding to the Call for Bids become the exclusive property of the District upon submittal to the District. At such time as the District issues the Notice of Intent to award the Contract pursuant to these Instructions for Bidders, all Bid Proposals and other documents submitted in response to the Call for Bids become a matter of public record and shall be thereupon be considered public records, except for information contained in such Bid Proposals deemed to be Trade Secrets (as defined in California Civil Code § 3426.1) and information provided in response to the Statement of Qualifications. A Bidder that indiscriminately marks all or most of its Bid Proposal as exempt from disclosure as a public record, whether by the notations of "Trade Secret," "Confidential," "Proprietary," or other similar notations, may result in, or render, the Bid Proposal non-responsive and rejected. The District is not liable or responsible for the disclosure of such records, including those exempt from disclosure if disclosure is deemed required by law, by an order of Court, or which occurs through inadvertence, mistake or negligence on the part of the District or its officers, employees or agents. At such time as Bid Proposals are deemed a matter of public record, pursuant to the above, any Bidder or other party shall be afforded access for inspection and/or copying of such Bid Proposals, by request made to the District in conformity with the California Access to Public Records Act, California Government Code §§6250, et. seq. If the District is required to defend or otherwise respond to any action or proceeding wherein request is made for the disclosure of the contents of any portion of a Bid Proposal deemed exempt from disclosure hereunder, the Bidder submitting the materials sought by such action or proceeding agrees to defend, indemnify and hold harmless the District in any action or proceeding from and against any liability, including without limitation attorneys' fees arising therefrom. The party submitting materials sought by any other party shall be solely responsible for the cost and defense in any action or proceeding seeking to compel disclosure of such materials; the District's sole involvement in any such action shall be that of a stakeholder, retaining the requested materials until otherwise ordered by a court of competent jurisdiction.
21. Drug Free Workplace Certificate. In accordance with California Government Code §§ 8350 et seq., the Drug Free Workplace Act of 1990, the successful Bidder will be required to execute a Drug Free Workplace Certificate concurrently with execution of the Agreement. The successful Bidder will be required to implement and take the affirmative measures outlined in the Drug Free Workplace Certificate and in California Government Code §§8350 et seq. Failure of the successful Bidder to comply with the measures outlined in the Drug Free Workplace Certificate and in California Government Code §§ 8350 et seq. may result in penalties, including without limitation, the termination of the Agreement, the suspension of any payment of the Contract Price otherwise due under the Contract Documents and/or debarment of the successful Bidder.
22. Notice of Intent to Award Contract. Following the public opening and reading of Bid Proposals, the District will issue a Notice of Intent to Award the Contract, identifying the Bidder to whom the District intends to award the Contract and the date/time/place of the District's Board of Trustees meeting at which award of the Contract will be considered.
23. Bid Protest.
 - 23.1 Submittal of Bid Protest. Any Bidder submitting a Bid Proposal to the District may file a protest of the District's intent to award the Contract provided that all of the following are complied with: (i) the bid protest is in writing; (ii) the bid protest is filed and received by the District's Vice-President, Administrative Services not more than five (5) calendar days following the date of issuance of the District's Notice of Intent to Award the Contract; and (iii) the written bid protest sets forth, in detail, all grounds for the bid protest, including without limitation all facts, supporting documentation, legal authorities and argument in support of the grounds for the bid protest; any matters not set forth in the written bid protest shall be deemed waived. All factual contentions must be supported by competent, admissible and creditable evidence. Any bid protest not conforming to the foregoing shall be rejected by the District as invalid.

- 23.2 District Review and Disposition of Bid Protest. Provided that a bid protest is filed in strict conformity with the foregoing, the District's Vice-President, Administrative Services or such individual(s) as may be designated by him/her (Designee), shall review and evaluate the basis of the bid protest. The District's Vice-President, Administrative Services or Designee shall provide the Bidder submitting the bid protest with a written statement concurring with or denying the bid protest (Bid Protest Response). The Bid Protest Response is deemed the final action of the District and not subject to appeal or reconsideration by any other employee or officer of the District or the Board of Trustees of the District. The issuance of the Bid Protest Response by the District's Vice-President, Administrative Services or the Designee is an express condition precedent to the institution of any legal or equitable proceedings relative to the bidding process, the District's intent to award the Contract, the District's disposition of any bid protest or the District's decision to reject all Bid Proposals. If any such legal or equitable proceedings are instituted and the District is named as a party thereto, the prevailing party(ies) shall recover from the other party(ies), as costs, all attorneys' fees and costs incurred in connection with any such proceeding, including any appeal arising therefrom.

[END OF SECTION]

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BID PROPOSAL**Project: BID #2024-10 Career Center Interiors Upgrades**

Bidder Name		
Bidder Representative(s)	Name and Title _____ Name and Title _____	
Bidder Representative(s) Contact Information	Email Address(es) _____ _____	Phone/Fax (____) _____ Telephone (____) _____ Fax
Bidder Mailing Address	Address _____ City/State/Zip Code _____	
California Contractors' License	Number _____ Classification(s) and Expiration Date _____	

1. **Bid Proposal.**
 - 1.1 **Bid Proposal Amount.** The undersigned Bidder proposes and agrees to perform the Contract including, without limitation, providing and furnishing any and all of the labor, materials, tools, equipment and services necessary to perform all obligations under the Contract Documents and to complete the Work required for the sum of _____ Dollars (\$_____).
 - 1.2 **Acknowledgment of Bid Addenda.** The Bidder confirms that this Bid Proposal incorporates and is inclusive of, all items or other matters contained in Bid Addenda issued by or on behalf of the District.
 _____ **Addenda Nos.** _____ received, acknowledged
 (initial) and incorporated into this Bid Proposal.
 - 1.3 **Alternate Bid Items.** The Bidder's proposed pricing for each Alternate Bid Item, if any, are set forth in the accompanying form of Alternate Bid Items Proposal. Failure of a Bidder to propose pricing for each Alternate Bid Item set forth in the accompanying Alternate Bid Items Proposal will result in the Bid Proposal being deemed non-responsive and rejected.
2. **Documents Accompanying Bid Proposal.** The Bidder has submitted with this Bid Proposal the following: (i) Bid Security; (ii) Subcontractors List; (iii) Statement of Qualifications; (iv) Non-Collusion Affidavit; and (v) DIR Registration Verification. The Bidder acknowledges that if this Bid Proposal and the foregoing documents are not fully in compliance with applicable requirements set forth in the Call for Bids, the Instructions for Bidders and in each of the foregoing documents, the Bid Proposal may be rejected as non-responsive.
3. **Award of Contract.** Concurrently with delivery of the executed Agreement to the District, the Bidder awarded the Contract shall deliver to the District: (i) Certificates of Insurance evidencing

all insurance coverages required under the Contract Documents; (ii) Performance Bond; (iii) Labor and Material Payment Bond; (ii) Certificate of Workers' Compensation Insurance; and (iv) Drug-Free Workplace Certificate. Failure of the Bidder awarded the Contract to strictly comply with the preceding may result in the District's rescinding award of the Contract and/or forfeiture of the Bidder's Bid Security.

4. Bidder Certifications. The Bidder certifies the following to the District:

4.1 Contractor License. The Bidder certifies that: (i) it possesses a valid and in good standing Contractors' License, in the necessary class(es), for performing the Work as set for in the Call for Bids; (ii) that such license shall be in full force and effect throughout the duration of the performance of the Work; and (ii) that all Subcontractors providing or performing any portion of the Work are properly licensed to perform their respective portions of the Work at the time of submitting this Bid Proposal and at all times during their performance of the Work.

4.2 DIR Registration. The Bidder certifies to the District that the Bidder is a DIR Registered contractor and that during the Work, the Bidder will verify that all subcontractors, of any tier performing any portion of the Work are DIR Registered contractors. All Work will be performed and completed by DIR Registered contractors.

5. Agreement to Bidding Requirements and Attorneys' Fees. The undersigned Bidder acknowledges and confirms its receipt, review and agreement with, the contractual requirements set forth in this Bid Proposal and the Contract Documents. By executing this Bid Proposal hereinbelow, the Bidder expressly acknowledges and agrees that if the Bidder institutes any legal or equitable proceedings in connection with this Bid Proposal and the District is named as a party thereto, the prevailing party(ies) shall recover from the other party(ies), as costs, all attorneys' fees and costs incurred in connection with any such proceeding, including any appeal arising therefrom. This provision shall constitute a binding attorneys' fee agreement in accordance with and pursuant to California Civil Code §1717 which shall be enforceable against the Bidder and the District. This attorneys fee provision shall be solely limited to legal or equitable proceedings arising out of a bid protest or the bidding process and shall not extend to or have any force and effect on the Contract for the Work or to modify the terms of the Contract Documents for the Work.

6. Acknowledgment and Confirmation. The undersigned Bidder acknowledges its receipt, review and understanding of the Drawings, the Specifications and other Contract Documents pertaining to the proposed Work. The undersigned Bidder certifies that the Contract Documents are, in its opinion, adequate, feasible and complete for providing, performing and constructing the Work in a sound and suitable manner for the use specified and intended by the Contract Documents. The undersigned Bidder certifies that it has, or has available, all necessary equipment, personnel, materials, facilities and technical and financial ability to complete the Work for the amount bid herein within the Contract Time and in accordance with the Contract Documents.

By: _____
(Signature of Bidder's Authorized Officer
or Representative)

(Typed or Printed Name)

Title: _____

ALTERNATE BID ITEMS PROPOSAL**Bidder Name:** _____**Project****BID#2024-10 Career Center Interiors Upgrades**

Bidders must provide a proposal price for each Alternate Bid Item set forth herein; failure to do so will result in rejection of the Bid Proposal for non-responsiveness. The amount proposed for each Alternate Bid Item by the above-identified Bidder is set forth hereinbelow:

Alternate Item No. 1. [DESCRIPTION]

☐ Add _____ Dollars (\$_____) to
Base Bid Proposal Amount.

Alternate Item No. 2. [DESCRIPTION]

Check one of the following and indicate the additive or deductive proposed price for the foregoing Alternate Bid Item.

☐ Add _____ Dollars (\$_____) to
Base Bid Proposal Amount.

Dated _____

By: _____

(Signature of Bidder's Authorized Officer or Representative)

(Typed or Printed Name)

Title: _____

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SUBCONTRACTORS LIST

Project ("the Work")	BID#2024-10 Career Center Interiors Upgrades
Bidder Name	_____
Bidder's Representative Signature	_____ (Signature) _____ (Typed or Printed Name)

Licensed Name of Subcontractor	Trade or Portion of Work	Address of Office, Mill or Shop	Subcontractor CSLB License No.	DIR Registration No.

DUPLICATE THIS PAGE AS NECESSARY FOR LISTING ADDITIONAL SUBCONTRACTORS

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**VERIFICATION OF CONTRACTOR AND
SUBCONTRACTORS' DIR REGISTRATION**

I am the _____ of _____ ("Bidder")
(Title/Position) (Bidder Name)
submitting the accompanying Bid Proposal for the Work described as:

BID#2024-10 Career Center Interiors Upgrades

1. The Bidder is currently registered as a contractor with the Department of Industrial Relations ("DIR").
2. The Bidder's DIR Registration Number is: _____. The expiration date of the Bidder's DIR Registration is June 30, 20____.
3. If the expiration date of the Bidder's DIR Registration will occur prior to expiration of the Contract Time for the Work and the Bidder is awarded the Contract for the Work, prior to the Bidder's DIR Registration expiration, the Bidder will take all measures necessary to renew the Bidder's DIR Registration so that there is no lapse in the Bidder's DIR Registration.
4. The Bidder, if awarded the Contract for the Work will remain a DIR registered contractor for the entire duration of the Work.
5. The Bidder has independently verified that each Subcontractor identified in the Subcontractors List is currently a DIR registered contractor.
6. The Bidder's solicitation of subcontractor bids included notice to prospective subcontractors that: (i) all sub-tier subcontractors must be DIR registered contractors at all times during performance of the Work; and (ii) prospective subcontractors may only solicit sub-bids from and contract with lower-tier subcontractors who are DIR registered contractors.
7. If any of the statements herein are false or omit material facts rendering a statement to be false or misleading, the Bidder's Bid Proposal is subject to rejection for non-responsiveness.
8. I have personal first hand-knowledge of all of the foregoing.

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

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

(Signature)

(Name, typed or printed)

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STATEMENT OF QUALIFICATIONS

1. Bidder Information.

1.1. Contact Information

Mailing Address	_____ Street Address _____ City, State, Zip Code
Physical Location (if different from mailing address)	_____ Street Address _____ City, State, Zip Code
Telephone/Fax	(____) _____ Telephone (____) _____ Fax

1.2. Bidder Contacts.

Name	_____
Contact Information	Telephone: (____) _____ Fax (____) _____ Email _____

1.3. California Contractors' License.

License Number(s)	_____
License Classification(s)	_____
Responsible Managing Employee; Responsible Managing Officer	_____
Expiration Date(s)	_____

1.4. Bidder Form of Entity.

- | | |
|--|--|
| <input type="checkbox"/> Corporation | <input type="checkbox"/> Limited Liability Partnership |
| <input type="checkbox"/> General Partnership | <input type="checkbox"/> Joint Venture |
| <input type="checkbox"/> Limited Partnership | <input type="checkbox"/> Sole Proprietorship |
| <input type="checkbox"/> Limited Liability Company | |

[CONTINUED NEXT PAGE]

2. **Revenue.** Complete the following for the Applicant's construction operations; if any portion of the revenue disclosed is generated by non-construction operations or activities, the Applicant must identify the portion of revenue attributed to construction operations and generally describe business activities of the Applicant that generates non-construction operations related revenue.

Calendar Year/ Fiscal Year	Annual Gross Revenue	Average Dollar Value of all Contracts	Dollar Value of Largest Contract
Choose an item.			
Choose an item.			
Choose an item.			

3. **References.**

DSA Project Inspectors			
Firm Name	Address	Telephone No.	Contact Name
Owners (K-12 school districts or community colleges preferred)			
Owner Name	Address	Telephone No.	Contact Name
Architects (K-12 or Community College Projects)			
Architect Firm Name & Architect Firm Contact Name	Address	Telephone No.	Contact Name

[CONTINUED NEXT PAGE]

4. Insurance.

Commercial General Liability Insurance	Insurer: _____ Policy No. _____ Broker _____
Commercial General Liability Insurance Broker	(Contact Name) _____ (Street Address) _____ (City, State & Zip Code) _____ (_____) _____ (_____) _____ Telephone Fax (Email address) _____
Bid, Performance and Labor & Materials Payment Bond Surety	Surety: _____ Surety Broker _____ (Surety Broker Contact Name) _____ (Street Address) _____ (City, State & Zip Code) _____ (_____) _____ (_____) _____ Telephone Fax (Email address) _____
Workers Compensation Insurance	Insurer: _____ Policy No. _____ Broker _____
Workers Compensation Insurance Broker	(Contact Name) _____ (Street Address) _____ (City, State & Zip Code) _____ (_____) _____ (_____) _____ Telephone Fax (Email address) _____

[CONTINUED NEXT PAGE]

5. Essential Requirements. A Bidder will not be deemed qualified if the answer to any of the following questions results in a "not qualified" response and the Bid Proposal submitted by such a Bidder will be rejected for non-responsiveness.
- 5.1. Bidder possesses a valid and currently in good standing California Contractors' license for the Classification(s) of Contractors' License required by the Call for Bids.
☐ Yes ☐ No (Not Qualified)
- 5.2. Bidder is currently a DIR Registered contractor.
☐ Yes ☐ No (Not Qualified)
- 5.3. Bidder has a current commercial general liability insurance policy with coverage limits which are equal to or greater than minimum coverage limits set forth in the Special Conditions.
☐ Yes ☐ No (Not Qualified)
- 5.4. Bidder has a current workers' compensation insurance policy as required by the Labor Code or is legally self-insured pursuant to Labor Code §3700.
☐ Yes ☐ No (Not Qualified)
☐ Bidder is exempt from this requirement, because it has no employees
- 5.5. The Bidder ineligible or debarred from submitting Bid Proposals for public works projects or public works contracts pursuant Labor Code §1777.1 or Labor Code §1777.7.
☐ Yes (Not Qualified) ☐ No
- 5.6. A public agency, within the past five (5) years conducted proceedings that resulted in a finding that the Bidder, or any predecessor to the Bidder, is not a "responsible" bidder for a public works project or a public works contract.
☐ Yes (Not Qualified) ☐ No
- 5.7. During the last five (5) years, the Bidder or any predecessor to the Bidder, or any of the equity owners of the Bidder has been convicted of a federal or state crime involving fraud, theft, or any other act of dishonesty?
☐ Yes (Not Qualified) ☐ No
- 5.8. During the past five (5) years a Surety has completed any project or the Bidder's obligations under a construction contract.
☐ Yes (Not Qualified) ☐ No
- 5.9. During the past five (5) years the Bidder has been declared in default under any construction contract to which the Bidder was a party.
☐ Yes (Not Qualified) ☐ No
- 5.10. The Bidder's Worker's Compensation Insurance average Experience Modification Rating ("EMR") rating over the past five (5) years is more than 1.25.
☐ Yes (Not Qualified) ☐ No
- 5.11. The Bidder's Workers Compensation Insurance EMR for the current policy term is more than 1.25.
☐ Yes (Not Qualified) ☐ No
6. Accuracy and Authority. The undersigned is duly authorized to execute this Statement of Qualifications under penalty of perjury on behalf of the above-identified Bidder. The undersigned warrants and represents that he/she has personal knowledge of each of the responses to this Statement of Qualifications and/or that he/she has conducted all necessary and appropriate inquiries to determine the truth, completeness and accuracy of responses to this Statement of Qualifications. The undersigned declares and certifies that the responses to this Statement of Qualifications are complete and accurate; there are no omissions of material fact or information that render any response to be false or misleading and there are no misstatements of fact in any of the responses. The above-identified Bidder acknowledges and agrees that if the District determines that any response herein is false or

misleading or contains misstatements of fact so as to be false or misleading, the Bidder's Bid Proposal may be rejected by the District for non-responsiveness.

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

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

By: _____
(Signature of Bidder's Authorized Officer or Representative)

Title: _____
(Typed or Printed Name)

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NON-COLLUSION AFFIDAVIT

STATE OF CALIFORNIA
COUNTY OF _____

I, _____, being first duly sworn, deposes and says that I am
(Typed or Printed Name)

the _____ of _____, the party submitting
(Title) (Bidder Name)

the foregoing Bid Proposal ("the Bidder"). In connection with the foregoing Bid Proposal, the undersigned declares, states and certifies that:

1. The Bid Proposal is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization or corporation.

2. The Bid Proposal is genuine and not collusive or sham.

3. The Bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any other bidder or anyone else to put in sham bid, or to refrain from bidding.

4. The Bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price, or that of any other bidder, or to fix any overhead, profit or cost element of the bid price or that of any other bidder, or to secure any advantage against the public body awarding the contract or of anyone interested in the proposed contract.

5. All statements contained in the Bid Proposal and related documents are true.

6. The bidder has not, directly or indirectly, submitted the bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any person, corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid.

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

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

Signature

Name Printed or Typed

(_____) _____
(Area Code and Telephone Number)

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CERTIFICATE OF WORKERS' COMPENSATION INSURANCE

I, _____ the _____ of
 (Name) (Title)

_____, declare, state and certify that:
 (Contractor Name)

1. I am aware that California Labor Code § 3700(a) and (b) provides:

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

(a) By being insured against liability to pay compensation in one or more insurers duly authorized to write compensation insurance in this state.

(b) By securing from the Director of Industrial Relations a certificate of consent to self-insure either as an individual employer, or one employer in a group of employers, which may be given upon furnishing proof satisfactory to the Director of Industrial Relations of ability to self-insure and to pay any compensation that may become due to his or her employees."

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

 (Contractor Name)

By: _____
 (Signature)

 (Typed or printed name)

DRUG-FREE WORKPLACE CERTIFICATION

I, _____, am the _____ of
(Print Name) (Title)

(Contractor Name)

I declare, state and certify to all of the following:

1. I am aware of the provisions and requirements of California Government Code §§8350 et seq., the Drug Free Workplace Act of 1990.
2. I am authorized to certify, and do certify, on behalf of Contractor that a drug free workplace will be provided by Contractor by doing all of the following:
 - A. Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensation, possession or use of a controlled substance is prohibited in Contractor's workplace and specifying actions which will be taken against employees for violation of the prohibition;
 - B. Establishing a drug-free awareness program to inform employees about all of the following:
 - i. The dangers of drug abuse in the workplace;
 - ii. Contractor's policy of maintaining a drug-free workplace;
 - iii. The availability of drug counseling, rehabilitation and employee-assistance programs; and
 - iv. The penalties that may be imposed upon employees for drug abuse violations;
 - C. Requiring that each employee engaged in the performance of the Contract be given a copy of the statement required by subdivision (A), above, and that as a condition of employment by Contractor in connection with the Work of the Contract, the employee agrees to abide by the terms of the statement.
 - D. Contractor agrees to fulfill and discharge all of Contractor's obligations under the terms and requirements of California Government Code §8355 by, inter alia, publishing a statement notifying employees concerning: (i) the prohibition of any controlled substance in the workplace, (ii) establishing a drug-free awareness program, and (iii) requiring that each employee engaged in the performance of the Work of the Contract be given a copy of the statement required by California Government Code §8355(a) and requiring that the employee agree to abide by the terms of that statement.

3. Contractor and I understand that if the District determines that Contractor has either: (i) made a false certification herein, or (ii) violated this certification by failing to carry out and to implement the requirements of California Government Code §§8355, the Contract awarded herein is subject to termination, suspension of payments, or both. Contractor and I further understand that, should Contractor violate the terms of the Drug-Free Workplace Act of 1990, Contractor may be subject to debarment in accordance with the provisions of California Government Code §§8350, et seq.
4. Contractor and I acknowledge that Contractor and I are aware of the provisions of California Government Code §§8350, et seq. and hereby certify that Contractor and I will adhere to, fulfill, satisfy and discharge all provisions of and obligations under the Drug-Free Workplace Act of 1990.

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

Executed at _____ this _____ day of

1. (City and State)

_____, 20____.

(Signature)

(Printed or Typed Name)

AGREEMENT

THIS AGREEMENT is entered into [Click here to enter a date.](#) in the City of Merced, County of Merced, State of California, by and between **MERCED COMMUNITY COLLEGE DISTRICT**, a California Community College District hereinafter "District" and _____ ("Contractor").

WITNESSETH, that the District and the Contractor in consideration of the mutual covenants contained herein agree as follows:

The Work. Within the Contract Time and for the Contract Price, subject to adjustments thereto pursuant to the Contract Documents, the Contractor shall perform and provide all necessary labor, materials, tools, equipment, utilities, services and transportation to complete in a workmanlike manner all of the Work required in connection with the work of improvement commonly referred to as

BID#2024-10 Career Center Interiors Upgrades

- Contractor shall complete all Work covered by the Contract Documents, including without limitation, the Drawings and Specifications prepared by the Architect, _____ and other Contract Documents enumerated in Article 5 below, along with all modifications and addenda thereto issued in accordance with the Contract Documents.
- Contract Time. The Work shall be commenced on the date stated in the District's Notice to Proceed; the Contractor shall achieve Completion of the Work within the Contract Time set forth in the Contract Documents.
- Contract Price. The District shall pay the Contractor as full consideration for the Contractor's full, complete and faithful performance of the Contractor's obligations under the Contract Documents, subject to adjustments of the Contract Price in accordance with the Contract Documents, the Contract Price of _____ **Dollars (\$_____)**. The District's payment of the Contract Price shall be in accordance with the Contract Documents. The Contract Price is based upon the Contractor's Base Bid Proposal and the following Alternate Bid Items, if any: _____.
- Liquidated Damages. If the Contractor fails to achieve Completion of the Work within the Contract Time, including adjustments thereto authorized by the Contract Documents, the Contractor shall be subject to assessment of Liquidated Damages in accordance with the Contract Documents. Failure of the Contractor to complete Punchlist items noted upon Completion within the time established to complete the Punchlist items will result in the District's assessment of Liquidated Damages in accordance with the Contract Documents.
- The Contract Documents. The documents forming a part of the Contract Documents consist of the following, all of which are component parts of the Contract Documents.

Section	Description	Section	Description
00 01 10	Table of Contents	00 61 10	Bid Bond
00 11 13	Notice Calling for Bids	00 61 13	Performance Bond
00 21 13	Instructions for Bidders	00 61 14	Labor & Materials Payment Bond
00 41 22	Bid Proposal	00 62 90	Verification of Certified Payroll Records Submittal to Labor Commissioner
00 43 13	Bid Proposal; Alternate Bid Items Proposal	00 65 01	Conditional Waiver & Release on Progress Payment
00 43 36	Subcontractors List	00 65 02	Unconditional Waiver & Release on Progress Payment
00 45 10	DIR Registration Verification	00 65 03	Conditional Waiver & Release on Final Payment
00 45 13	Statement of Qualifications	00 65 04	Unconditional Waiver & Release on Final Payment
00 45 19	Non-Collusion Affidavit	00 65 36	Contractor Guarantee Form
00 45 23	Certificate of Workers Compensation Insurance	00 65 37	Contractor Certification of Subcontractor Claim
00 45 27	Drug-Free Workplace	00 72 13	General Conditions

Section	Description	Section	Description
	Certification		
00 52 00	Agreement	00 73 13	Special Conditions

6. Authority to Execute. The individual(s) executing this Agreement on behalf of the Contractor is/are duly and fully authorized to execute this Agreement on behalf of Contractor and to bind the Contractor to each and every term, condition and covenant of the Contract Documents.

CONTRACTORS ARE REQUIRED BY LAW TO BE LICENSED AND REGULATED BY THE CONTRACTORS' STATE LICENSE BOARD. ANY QUESTIONS CONCERNING A CONTRACTOR MAY BE REFERRED TO THE REGISTRAR, CONTRACTORS' STATE LICENSE BOARD, P.O. BOX 2600, SACRAMENTO, CALIFORNIA 95826

IN WITNESS WHEREOF, this Agreement has been duly executed by the District and the Contractor as of the date set forth above.

District
Merced Community College District

By: _____

Title: _____

Contractor
[Contractor Name]

By: _____

Title: _____

BID BOND

KNOW ALL MEN BY THESE PRESENTS that we, _____, as Surety and _____, as Principal, are jointly and severally, along with their respective heirs, executors, administrators, successors and assigns, held and firmly bound unto **MERCED COMMUNITY COLLEGE DISTRICT** ("the Obligee") for payment of the penal sum hereof in lawful money of the United States, as more particularly set forth herein.

THE CONDITION OF THIS OBLIGATION IS SUCH THAT:

WHEREAS, the Principal has submitted the accompanying Bid Proposal to the Obligee for the Work commonly described as **BID#2024-10 Career Center Interiors Upgrades**

WHEREAS, subject to the terms of this Bond, the Surety and the Principal are jointly and severally firmly bound unto the Obligee in the penal sum equal to Ten Percent (10%) of the maximum amount of the Bid Proposal submitted by the Principal to the Obligee, inclusive of amounts proposed for Alternate Bid Items, if any.

NOW THEREFORE, if the Principal shall not withdraw said Bid Proposal within the period specified therein after the opening of the same, or, if no period be specified, for sixty (60) days after opening of said Bid Proposal; and if the Principal is awarded the Contract, and shall within the period specified therefore, or if no period be specified, within five (5) days after the prescribed forms are presented to him for signature, enter into a written contract with the Obligee, in accordance with the Bid Proposal as accepted and give such bond(s) with good and sufficient surety or sureties, as may be required, for the faithful performance and proper fulfillment of such Contract and for the payment for labor and materials used for the performance of the Contract, or in the event of the withdrawal of said Bid Proposal within the period specified for the holding open of the Bid Proposal or the failure of the Principal to enter into such Contract and give such bonds within the time specified, if the Principal shall pay the Obligee the difference between the amount specified in said Bid Proposal and the amount for which the Obligee may procure the required Work and/or supplies, if the latter amount be in excess of the former, together with all costs incurred by the Obligee in again calling for Bids, then the above obligation shall be void and of no effect, otherwise to remain in full force and effect.

Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract or the Call for Bids, the Work to be performed there under, the Drawings or the Specifications accompanying the same, or any other portion of the Contract Documents shall in no way affect its obligations under this Bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of said Contract, the Call for Bids, the Work, the Drawings or the Specifications, or any other portion of the Contract Documents.

If suit or other proceeding is brought upon this Bond by the Obligee, the Surety and Principal shall be jointly and severally liable for payment to the Obligee all costs, expenses and fees

[CONTINUED NEXT PAGE]

incurred by the Obligee in connection therewith, including without limitation, attorneys' fees.

IN WITNESS WHEREOF, the Principal and Surety have executed this instrument this _____ day of _____, 20____ by their duly authorized agents or representatives.

(Bidder/Principal Name)	
By:	_____
	(Signature)

	(Typed or Printed Name)
Title:	_____
(Attach Notary Public Acknowledgement of Principal's Signature)	

(Surety Name)	
By:	_____
	(Signature of Attorney-In-Fact for Surety)

	(Typed or Printed Name of Attorney-In-Fact)
(Attach: (i) Attorney-In-Fact Certification; (ii) Notary Public Acknowledgment of Authorizing Signature on Attorney-Fact Certification; and (iii) Notary Public Acknowledgement of Attorney-In-Fact's Signature.)	

Contact name, address, telephone number and email address for notices to the Surety	

(Contact Name)	

(Street Address)	

(City, State & Zip Code)	
(_____) _____	(_____) _____
Telephone	Fax

(Email address)	

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS that we, _____, as Surety and _____, as Principal, are jointly and severally, along with their respective heirs, executors, administrators, successors and assigns, held and firmly bound unto **MERCED COMMUNITY COLLEGE DISTRICT** ("the Oblige") for payment of the penal sum the penal sum of _____ Dollars (\$_____) in lawful money of the United States, well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally.

THE CONDITION OF THIS OBLIGATION IS SUCH THAT:

WHEREAS, the Oblige, by resolution of its Board of Trustees has awarded to the Principal a Contract for the Work described as **BID#2024-10 Career Center Interiors Upgrades**

WHEREAS, the Principal, has entered into an agreement with the Oblige for performance of the Work; the Agreement and all other Contract Documents set forth therein are incorporated herein and made a part hereof by this reference.

WHEREAS, by the terms of the Contract Documents, the Principal is required to furnish a bond ensuring the Principal's prompt, full and faithful performance of the Work of the Contract Documents.

NOW THEREFORE, if the Principal promptly, fully and faithfully performs each and all of the obligations and things to be done and performed by the Principal in strict accordance with the terms of the Contract Documents as they may be modified or amended from time to time; and if the Principal shall indemnify, defend and hold harmless the Oblige and all of its officers, agents and employees from any and all losses, liability and damages, claims, judgments, liens, costs, and fees of every description, which may be incurred by the Oblige by reason of the failure or default on the part of the Principal in the performance of any or all of the terms or the obligations of the Contract Documents, including all modifications, and amendments, thereto, and any warranties or guarantees required thereunder; then this obligation shall be void; otherwise, it shall be, and remain, in full force and effect.

The Surety, for value received, stipulates and agrees that no change, adjustment of the Contract Time, adjustment of the Contract Price, alterations, deletions, additions, or any other modifications to the terms of the Contract Documents, the Work, or to the Specifications or the Drawings shall limit, restrict or otherwise impair Surety's obligations or Oblige's rights hereunder; Surety waives notice from the Oblige of any such changes, adjustments of Contract Time, adjustments of Contract Price, alterations, deletions, additions or other modifications to the Contract Documents, the Work, or the Drawings or the Specifications.

In the event of the Oblige's termination of the Contract due to the Principal's breach or default of the Principal's obligations thereunder, within twenty (20) days after written notice from the Oblige to the Surety of the Principal's breach or default of the Contract Documents and Oblige's termination of the Contract, the Surety shall notify Oblige in writing of Surety's assumption of obligations hereunder by its election to either remedy the default or breach of the Principal or to take charge of the Work of the Contract Documents and complete the Work at its own expense ("the Notice of Election"); provided, however, that the procedure by which the Surety undertakes to discharge its obligations under this

[CONTINUED NEXT PAGE]

Bond shall be subject to the advance written approval of the Obligee, which approval shall not be unreasonably withheld, limited or restricted. The insolvency of the Principal or the Principal's denial of a failure of performance or default under the Contract Documents shall not by itself, without the Surety's prompt, diligent inquiry and investigation of such denial, be justification for Surety's failure to give the Notice of Election or for its failure to promptly remedy the failure of performance or default of the Principal or to complete the Work.

If the Surety fails to issue its Notice of Election to Obligee within the time provided for hereinabove, the Obligee may thereafter cause the cure or remedy of the Principal's failure of performance or default or to complete the Work. The Principal and the Surety are jointly and severally liable to the Obligee for all damages and costs sustained by the Obligee as a result of the Principal's failure of performance under the Contract Documents or default in its performance of obligations thereunder, including without limitation the costs of cure or completion of the Work exceeding the then remaining balance of the Contract Price; provided that the Surety's liability hereunder for the costs of performance, damages and other costs sustained by the Obligee upon the Principal's failure of performance or default under the Contract Documents is limited to the penal sum hereof, which includes the costs or value of any Changes to the Work which increases the Contract Price.

If suit or other proceeding is brought upon this Bond by the Obligee, the Surety and Principal are jointly and severally liable for payment to the Obligee of all costs, expenses and fees incurred by the Obligee therewith, including without limitation, attorneys' fees.

IN WITNESS WHEREOF, the Principal and Surety have executed this instrument this ____ day of _____, 20____ by their duly authorized agent or representative.

_____ (Contractor-Principal Name)
By: _____ (Signature)
_____ (Typed or Printed Name)
Title: _____
(Attach Notary Public Acknowledgement of Principal's Signature)

_____ (Surety Name)
By: _____ (Signature of Attorney-In-Fact for Surety)
_____ (Typed or Printed Name of Attorney-In-Fact)
(Attach: (i) Attorney-In-Fact Certification; (ii) Notary Public Acknowledgment of Authorizing Signature on Attorney-Fact Certification; and (iii) Notary Public Acknowledgement of Attorney-In-Fact's Signature.)

Contact name, address, telephone number and email address for notices to the Surety
_____ (Contact Name)
_____ (Street Address)
_____ (City, State & Zip Code)
(_____) _____ (_____) _____ Telephone Fax
_____ (Email address)

LABOR AND MATERIAL PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS that we, _____, as Surety and _____, as Principal, are jointly and severally, along with their respective heirs, executors, administrators, successors and assigns, held and firmly bound unto **MERCED COMMUNITY COLLEGE DISTRICT** ("the Obligee") for payment of the penal sum the penal sum of _____ Dollars (\$_____) in lawful money of the United States, well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally.

THE CONDITION OF THIS OBLIGATION IS SUCH THAT:

WHEREAS, the Obligee, by resolution of its Board of Trustees has awarded to the Principal a Contract for the Work described as **BID#2024-10 Career Center Interiors Upgrades**

WHEREAS, the Principal, has entered into an Agreement with the Obligee for performance of the Work, the Agreement and all other Contract Documents set forth therein are incorporated herein by this reference and made a part hereof.

WHEREAS, by the terms of the Contract Documents, the Principal is required to furnish a bond for the prompt, full and faithful payment to any Claimant, as hereinafter defined, for all labor materials or services used, or reasonably required for use, in the performance of the Work.

NOW THEREFORE, if the Principal shall promptly, fully and faithfully make payment: (i) to any Claimant for all labor, materials or services used or reasonably required for use in the performance of the Work; (ii) of amounts due under the Unemployment Insurance Code for work or labor performed under the Contract; and (iii) of amounts required to be deducted, withheld and paid to the Employment Development Department from wages of the employees of the Principal and its Subcontractors under Section 13020 of the Unemployment Insurance Code with respect to work and labor under the Contract then this obligation shall be void; otherwise, it shall be, and remain, in full force and effect.

The term "Claimant" shall refer to any person, corporation, partnership, proprietorship or other entity including without limitation, all persons and entities described in California Civil Code §9100, providing or furnishing labor, materials or services used or reasonably required for use in the performance of the Work under the Contract Documents, without regard for whether such labor, materials or services were sold, leased or rented. This Bond shall inure to the benefit of all Claimants so as to give them, or their assigns and successors, a right of action upon this Bond.

If suit is brought on this Bond by any Claimant for amounts due such Claimant for labor, materials or services provided or furnished by such Claimant, the Surety shall pay for the same and reasonable attorneys' fees pursuant to California Civil Code §9554.

The Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration, deletion, addition, or any other modification to the terms of the Contract Documents, the Work to be performed thereunder, the Specifications or the Drawings, or any other portion of the Contract Documents, shall in any way limit, restrict or otherwise affect its obligations under this Bond; the Surety hereby waives notice from the Obligee of any such change, extension of time, alteration

[CONTINUED NEXT PAGE]

deletion, addition or other modification to the Contract Documents, the Work to be performed under the Contract Documents, the Drawings or the Specifications of any other portion of the Contract Documents.

IN WITNESS WHEREOF, the Principal and Surety have executed this instrument this _____ day of _____, 20__ by their duly authorized agent or representative.

<p>_____</p> <p align="center">(Contractor-Principal Name)</p> <p>By: _____</p> <p align="center">(Signature)</p> <p>_____</p> <p align="center">(Typed or Printed Name)</p> <p>Title: _____</p> <p>(Attach Notary Public Acknowledgement of Principal's Signature)</p>

<p>_____</p> <p align="center">(Surety Name)</p> <p>By: _____</p> <p align="center">(Signature of Attorney-In-Fact for Surety)</p> <p>_____</p> <p align="center">(Typed or Printed Name of Attorney-In-Fact)</p> <p>(Attach: (i) Attorney-In-Fact Certification; (ii) Notary Public Acknowledgment of Authorizing Signature on Attorney-Fact Certification; and (iii) Notary Public Acknowledgement of Attorney-In-Fact's Signature)</p>

<p align="center">Contact name, address, telephone number and email address for notices to the Surety</p> <p>_____</p> <p align="center">(Contact Name)</p> <p>_____</p> <p align="center">(Street Address)</p> <p>_____</p> <p align="center">(City, State & Zip Code)</p> <p>(_____) _____ (_____) _____</p> <p>Telephone Fax</p> <p>_____</p> <p align="center">(Email address)</p>

**VERIFICATION OF CERTIFIED PAYROLL RECORDS SUBMITTAL
TO LABOR COMMISSIONER**

I am the _____ for _____ in
(Superintendent/Project Manager) (Contractor)
connection with **BID#2024-10 Career Center Interiors Upgrades**

1. This Verification is submitted to Merced Community College District concurrently with the Contractor's submittal of an Application for Progress Payment to the District, identified as Application For Progress Payment No. _____ ("the Pay Application").
2. The Pay Application requests the District's disbursement of a Progress Payment for the value of Work performed between _____, 20__ and _____, 20__.
3. The Contractor has submitted Certified Payroll Records ("CPR") to the Labor Commissioner for all employees of the Contractor engaged in performance of Work subject to prevailing wage rate requirements for the period of time covered by the Pay Application.
4. All Subcontractors who are entitled to any portion of payment to be disbursed pursuant to the Pay Application have submitted their CPRs to the Labor Commissioner for all of their employees performing Work subject to prevailing wage rate requirements for the period of time covered by the Pay Application.
5. I have reviewed the Contractor's CPRs submitted to the Labor Commissioner. The CPRs submitted to the Labor Commissioner by the Contractor are complete and accurate for the period of time covered by the Pay Application.
6. I have reviewed the Subcontractors' CPRs submitted to the Labor Commissioner. The CPRs submitted to the Labor Commissioner by the Subcontractors are complete and accurate for the period of time covered by the Pay Application.

I declare under penalty of perjury under California law that the foregoing is true and correct. I executed this Certification on the ____ day of _____, 20__ at _____

(City) and State)

By: _____

(Typed or Printed Name)

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**CONDITIONAL WAIVER AND RELEASE
ON PROGRESS PAYMENT
(Civil Code §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.

Identifying Information

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 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 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.

Signature

Claimant's Signature: _____

Claimant's Title: _____

Date of Signature: _____

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**UNCONDITIONAL WAIVER AND RELEASE
ON PROGRESS PAYMENT
(Civil Code §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.

Identifying Information

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.

Signature

Claimant's Signature: _____

Claimant's Title: _____

Date of Signature: _____

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**CONDITIONAL WAIVER AND RELEASE
ON FINAL PAYMENT
(Civil Code §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.

Identifying Information

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. 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 checks are 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: \$_____

Signature

Claimant's Signature: _____

Claimant's Title: _____

Date of Signature: _____

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**UNCONDITIONAL WAIVER AND RELEASE
ON FINAL PAYMENT
(Civil Code §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.

Identifying Information

Name of Claimant	
Name of Customer	
Job Location	

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 the following:

Disputed claims for extras in the amount of: \$_____

Signature

Claimant's Signature: _____

Claimant's Title: _____

Date of Signature: _____

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Contractor Guarantee**District:** Merced Community College District**Project Name:** BID#2024-10 Career Center Interiors Upgrades**Contractor Name:** _____

The Contractor hereby warrants and guarantees to the District that all work, materials, equipment and workmanship provided, furnished or installed by or on behalf of Contractor in connection with the above-referenced Project (the "Work") have been provided, furnished and installed in strict conformity with the Contract Documents for the Work, including without limitation, the Drawings and the Specifications. Contractor further warrants and guarantees that all work, materials, equipment and workmanship as provided, furnished and/or installed are fit for use as specified and fulfill all applicable requirements of the Contract Documents including without limitation, the Drawings and the Specifications. Contractor shall, at its sole cost and expense, repair, correct and/or replace any or all of the work, materials, equipment and/or workmanship of the Work, together with any other items which may be affected by any such repairs, corrections or replacement, that may be unfit for use as specified or defective within a period of one (1) year from the date of the District's Final Acceptance of the Work, ordinary wear and tear and unusual abuse or neglect excepted.

In the event of the Contractor's failure and/or refusal to comply with the provisions of this Guarantee, within the period of time set forth in the Contract Documents after the District's issuance of the Notice to the Contractor of any defect(s) in the Work, materials, equipment or workmanship, Contractor authorizes the District, without further notice to Contractor, to repair, correct and/or replace any such defective item at the expense of the Contractor. The Contractor shall reimburse the District for all costs, expenses or fees incurred by the District in providing or performing such repairs, corrections or replacements within ten (10) days of the District's presentation of a demand to the Contractor for the same.

The provisions of this Guarantee and the provisions of the Contract Documents for the Work relating to the Contractor's Guarantee(s) and warranties relating to the Work shall be binding upon the Contractor's Performance Bond Surety and all successors or assigns of Contractor and/or Contractor's Performance Bond Surety.

The provisions of this Guarantee are in addition to, and not in lieu of, any provisions of the Contract Documents for the Work relating to the Contractor's guarantee(s) and warranties or any guarantee(s) or warranties provided by any material supplier or manufacturer of any equipment, materials or other items forming a part of, or incorporated into the Work, or any other guarantee or warranty obligation of the Contractor, prescribed, implied or imposed by law.

The undersigned individual executing this Guarantee on behalf of Contractor warrants and represents that he/she is duly authorized to execute this Guarantee on behalf of Contractor and to bind Contractor to each and every provision hereof.

Dated: _____

By: _____
(Signature)_____
(Typewritten or Handwritten Name)_____
(Title)

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CONTRACTOR CERTIFICATION OF SUBCONTRACTOR CLAIM

TO: MERCED COMMUNITY COLLEGE DISTRICT ("DISTRICT")

RE: **BID#2024-10 Career Center Interiors Upgrades (Project)**
YYYY (Contractor)
ZZZZ (Subcontractor)
Subcontractor Claim

This Contractor Certification of Subcontractor Claim is submitted by YYYY relating to **BID #2024-10 Career Center Interiors Upgrades** to the District on behalf of ZZZZ.

1. I am the _____ of the Contractor in connection with the above-described Project.
2. The Subcontractor has submitted the accompanying Subcontractor Claim to the Contractor for presentation to the District pursuant to Public Contract Code §9204.
3. I have personally reviewed the entirety of the Subcontractor Claim and all substantiating documentation in support of the Subcontractor Claim.
4. The Subcontractor Claim is made by the Subcontractor in good faith.
5. The Subcontractor Claim is supported by reasonable documentation establishing entitlement to the relief requested and District liability therefor.
6. The Subcontractor Claim does not incorporate any request constituting a False Claim under applicable law, including the California False Claim Act (Government Code §12650 et. seq.).
7. I am authorized: (i) to execute this Certification on behalf of the Contractor; and (ii) to submit this Certification and the accompanying Subcontractor Claim to the District.
8. I have personal first-hand knowledge of all of the foregoing.

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

Executed at _____, California, on _____, 20____.

(Signature)

(Print Name)

(Title)

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GENERAL CONDITIONS
BID#2024-10 Career Center Interiors Upgrades



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GENERAL CONDITIONS

ARTICLE 1: DEFINITIONS

- 1.1 District. The "District" refers to **Merced Community College District** and unless otherwise stated, includes the District's authorized representatives, including the Project Manager, if a Project Manager is designated, the District's Board of Trustees and the District's officers, employees, agents and representatives.
- 1.2 Contractor. The Contractor is the person or entity identified as such in the Agreement; references to "Contractor" include the Contractor's authorized representative.
- 1.3 Architect. The Architect is the person or entity identified as such in the Agreement; references to the "Architect" include, as required by context of usage, the Architect's employees and authorized representative(s) and the Architect's Consultants and their employees and authorized representative(s).
- 1.4 The Work. The Work is the construction and services required by the Contract Documents, whether completed or partially completed, and includes all other labor, materials, equipment or services provided or to be provided by the Contractor to fulfill the Contractor's obligations under the Contract Documents. The Work may constitute the whole or a part of the Project.
- 1.5 The Project. The Project is the total construction of which the Work performed by the Contractor under the Contract Documents may be the whole or a part of the Project and which may include construction by the District or by separate contractors.
- 1.6 Surety. The Surety is the person or entity that executes, as surety, the Contractor's Labor and Material Payment Bond and/or Performance Bond.
- 1.7 Subcontractors; Sub-Subcontractors. A Subcontractor is a person or entity who has a direct contract with the Contractor to perform a portion of the Work. "Subcontractor" does not include a separate contractor to the District or subcontractors of any separate contractor. A Sub-Subcontractor is a person or entity of any tier, who has a direct or indirect contract with a Subcontractor to perform a portion of the Work at the Site. References to "Subcontractor" herein include all subcontractors of any tier.
- 1.8 Material Supplier. A Material Supplier is any person or entity who only furnishes materials, equipment or supplies for the Work without fabricating, installing or consuming them in the Work.
- 1.9 Drawings and Specifications. The Drawings are the graphic and pictorial portions of the Contract Documents, wherever located and whenever issued, showing generally, the design, location and dimensions of the Work and may include without limitation, plans, elevations, sections, details, schedules or diagrams. The Specifications are that portion of the Contract Documents consisting of the written requirements for materials, equipment, construction systems, standards, criteria and workmanship for the Work and related services. The Drawings and Specifications are intended to delineate and describe the Work and its component parts so as to permit skilled and competent contractors to bid upon the Work and prosecute the same to completion.
- 1.10 Special Conditions; Supplemental Conditions. Special Conditions and/or Supplemental Conditions, if any are special or supplemental provisions, not otherwise provided for in the Agreement or the General Conditions.
- 1.11 Contract Documents. The Contract Documents consist of the Agreement between the District and the Contractor, Conditions of the Contract (whether General, Special, Supplemental or otherwise), Drawings, Specifications, including addenda thereto issued prior to execution of the Agreement and any other documents listed in the Agreement. The Contract Documents shall include modifications issued after execution of the Agreement. The Contract Documents form

the Contract for Construction.

1.12 Intent and Correlation of Contract Documents.

1.12.1 Work of the Contract Documents. The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the Work by the Contractor. The Contract Documents are complementary and what is required by one shall be as binding as if required by all; performance by the Contractor shall be required to the extent consistent with the Contract Documents and reasonably inferable therefrom as being necessary to produce the intended results. Organization of the Specifications into divisions, sections or articles, and the arrangement of Drawings shall not control the Contractor in dividing the Work among Subcontractors or in establishing the extent of Work to be performed by any trade. Where any portion of the Contract Documents is silent and information appears elsewhere in the Contract Documents, such other portions of the Contract Documents shall control.

1.12.2 Technical Terms. Unless otherwise stated in the Contract Documents, words or terms which have well-known technical or construction industry meanings are used in the Contract Documents in accordance with such recognized meanings.

1.12.3 Conflict in Contract Documents. Conflicts, inconsistencies or ambiguities in the Contract Documents shall be resolved by the Architect in accordance with Article 3.1.9 of the General Conditions; where conflicts or inconsistencies arise between the Drawings and the Specifications, in resolving such conflicts or inconsistencies, the Architect will be governed generally by the following standards: the Drawings are intended to describe matters relating to placement, type, quantity and the like; the Specifications are intended to describe matters relating to quality, materials, compositions, manufacturers and the like. If conflicts exist between portions of the Contract Documents regarding the quality of any item, product, equipment or materials, unless otherwise directed or authorized by the District, the Contractor shall provide the item, product, equipment or material of the highest or more stringent quality.

1.13 Shop Drawings; Samples; Product Data ("Submittals"). Shop Drawings are diagrams, schedules and other data specially prepared for the Work by the Contractor or a Subcontractor, Material Supplier, or others to illustrate some portion of the Work. Samples are physical examples of materials, equipment or workmanship forming a part of, or to be incorporated into the Work. Product Data are illustrations, standard schedules, performance charts, instructions, brochures, diagrams and other information furnished by the Contractor to illustrate materials or equipment for some portion of the Work. Shop Drawings, Samples and Product Data prepared or furnished by the Contractor, Subcontractors or Material Suppliers are collectively referred to as "Submittals".

1.14 Division of State Architect ("DSA"). DSA is the California Division of the State Architect including without limitation DSA's Office of Construction Services, Office of Design Services and the Office of Regulatory Services; references to the DSA in the Contract Documents shall mean the DSA, its offices and its authorized employees and agents. The authority of the DSA over the Work and the performance thereof shall be as set forth in the Contract Documents and Title 24 of the California Code of Regulations.

1.15 District's Inspector. The District's Inspector is the individual designated and employed by the District in accordance with the requirements of Title 24 of the California Code of Regulations. The District's Inspector shall be authorized to act on behalf of the District as provided for in the Contract Documents and in Title 24 of the California Code of Regulations, as the same may be amended from time to time.

1.16 Contract Document Terms. The term "provide" means "provide complete in place" or to "furnish and install" such item. Unless otherwise provided in the Contract Documents, the terms "approved," "directed," "satisfactory," "accepted," "acceptable," "proper," "required," "necessary"

and “equal” shall mean as approved, directed, satisfactory, accepted, acceptable, proper, required, necessary and equal, in the opinion of the Architect. The term “typical” as used in the Drawings shall require the installation or furnishing of such item(s) of the Work designated as “typical” in all other areas similarly marked as “typical”; Work in such other areas shall conform to that shown as “typical” or as reasonably inferable therefrom.

- 1.17 Contractor’s Superintendent. The Contractor’s Superintendent is the individual employed by the Contractor whose principal responsibility shall be the supervision and coordination of the Work; the Contractor’s Superintendent shall not perform routine construction labor.
- 1.18 Record Drawings. The Record Drawings are a set of the Drawings marked by the Contractor during the performance of the Work to indicate completely and accurately the actual as-built condition of the Work. The Record Drawings shall be sufficient for a capable and qualified draftsman to modify the Drawings to reflect and indicate the Work actually in place at Final Completion of the Work.
- 1.19 Project Manager. The Project Manager, if any, is the individual or entity designated as such in the Special Conditions. The Project Manager is an independent contractor retained by the District and shall be authorized and empowered to act on behalf of the District. In the event that a Project Manager is not designated in the Special Conditions, the District reserves the right to designate a Project Manager at any time during Contractor’s performance of the Work. The District reserves the right to remove or replace the Project Manager during Contractor’s performance of the Work. The designation of a Project Manager, if one has not been designated in the Special Conditions, or the removal or replacement of the designated Project Manager shall not result in adjustment of the Contract Price or the Contract Time or otherwise affect, limit or restrict Contractor’s obligations hereunder.
- 1.20 Construction Equipment. Construction Equipment is equipment utilized for the performance of any portion of the Work, but which is not incorporated into the Work.
- 1.21 Site. The Site is the physical area designated in the Contract Documents for Contractor’s performance, construction and installation of the Work.
- 1.22 Field Clarifications. A written or graphic document consisting of supplementary details, instructions or information issued on behalf of the District which clarifies or supplements the Contract Documents and which becomes a part of the Contract Documents upon issuance. Field Clarifications do not constitute an adjustment of the Contract Time or the Contract Price, unless a Change Order relating to a Field Clarification is authorized and issued under the Contract Documents.
- 1.23 Defective or Non-Conforming Work. Defective or Non-Conforming Work is any Work which is unsatisfactory, faulty or deficient by: (i) not conforming to the requirements of the Contract Documents; (ii) not conforming to the standards of workmanship of the applicable trade or industry; (iii) not being in compliance with the requirements of any inspection, reference, standard, test, or approval required by the Contract Documents; or (iv) damage occurring prior to Final Completion of all of the Work.
- 1.24 Delivery. Delivery used in conjunction with any equipment, materials or other items to be incorporated into the Work shall mean the unloading and storage in a protected condition at the Site pending incorporation into the Work.
- 1.25 Notice to Proceed. The Notice to Proceed is the written notice issued by or on behalf of the District to the Contractor authorizing the Contractor to proceed with commencement of the Work and which establishes the date for commencement of the Contract Time.
- 1.26 Progress Reports; Verified Reports. Progress Reports, if required, are written reports prepared by the Contractor and periodically submitted to the District in the form and content as required

by the Contract Documents. Verified Reports are periodic written reports prepared by the Contractor and submitted to the DSA; Verified Reports shall be in such form and content as required by the applicable provisions of Title 24 of the California Code of Regulations. A material obligation of the Contractor is the preparation of complete and accurate Progress Reports, if required, and Verified Reports as well as the timely submission of the same.

- 1.27 Laws. Laws refer to all laws, ordinances, codes, rules and/or regulations promulgated by any governmental or quasi-governmental agency with jurisdiction over any portion of the Work and which apply to any portion of the Work, including those in effect as of the execution of the Agreement, amendments thereto and subsequently enacted Laws that take effect during the performance of the Work. No adjustment of the Contract Time or the Contract Price shall be allowed for the Contractor's compliance with the Laws.
- 1.28 Construction Change Directive. A Construction Change Directive is a written instrument issued by or on behalf of the District to the Contractor directing a Change to the Work prior to the Contractor and District reaching full agreement on an adjustment of the Contract Time and/or Contract Price on account of such Change. A material obligation of the Contractor is timely performance of Work noted in a Construction Change Directive.

ARTICLE 2: DISTRICT

2.1 Information Required of District

2.1.1 Surveys; Site Information. Information, if any, concerning physical characteristics of the Site, including without limitation, surveys, soils reports, and utility locations, to be provided by the District are set forth in the Contract Documents. Information not provided by the District or necessary information in addition to that provided by the District concerning physical characteristics of the Site which is required shall be obtained by Contractor without adjustment to the Contract Price or the Contract Time.

2.1.2 Permits, Licenses, Approvals. Except as otherwise provided in the Contract Documents, the District shall secure and pay for necessary approvals, easements, assessments and charges required for construction, use or occupancy of permanent structures or for permanent changes in existing facilities which relate to the Work of the Contractor under the Contract Documents. If permits, licenses, approvals or similar approvals relating to the Work, or the installation/construction thereof are designated as the responsibility of the Contractor under the Contract Documents, the Contractor shall obtain the same without adjustment of the Contract Price or the Contract Time.

2.1.3 Drawings and Specifications. Except as otherwise provided for in the Contract Documents, the District shall furnish the Contractor, free of charge, the number of copies of the Drawings and the Specifications as set forth in the Special Conditions. All of the Drawings and the Specifications provided by the District to the Contractor remain the property of the District; the Contractor shall not use the Drawings or the Specifications in connection with any other work of improvement other than the Work.

2.1.4 Furnishing of Information. Information or services to be provided by the District under the Contract Documents shall be furnished by the District with reasonable promptness to avoid delay in the orderly progress of the Work. Information about existing conditions furnished by the District under the Contract Documents is obtained from sources believed to be reliable, but the District neither guarantees nor warrants that such information is complete and accurate. The Contractor shall verify all information provided by the District. If the Contract Documents depict existing conditions on or about the Site, or the Work involves the renovation, removal or remodeling of existing improvements or the Work involves any tie-in or other connection with existing improvements, the conditions and/or existing improvements depicted in the Contract Documents are as they are believed to exist. The Contractor shall bear the risk of any variations

between conditions or existing improvements depicted in the Contract Documents and those conditions or existing improvements actually encountered in the performance of the Work. The existence of any variations between conditions or existing improvements depicted in the Contract Documents and those actually encountered in the performance of the Work shall not result in any District liability therefor, nor shall any such variations result in an adjustment of the Contract Time or the Contract Price.

- 2.2 District's Right to Stop the Work. In addition to the District's right to suspend the Work or terminate the Contract pursuant to the Contract Documents, the District, may, by written order, direct the Contractor to stop the Work, or any portion thereof, until the cause for such stop work order has been eliminated if the Contractor: (i) fails to correct Work which is not in conformity and in accordance with the requirements of the Contract Documents, or (ii) otherwise fails to carry out the Work in conformity and accordance with the Contract Documents. The right of the District to stop the Work hereunder shall not be deemed a duty on the part of the District to exercise such right for the benefit of the Contractor or any other person or entity, nor shall the District's exercise of such right: (i) waive or limit the exercise of any other right or remedy of the District under the Contract Documents or the Laws; or (ii) result in adjustment of the Contract Time or Contract Price.

2.3 Partial Occupancy or Use.

2.3.1 District's Right to Partial Occupancy. The District may occupy or use any completed or partially completed portion of the Work, provided that: (i) the District has obtained the consent of, or is otherwise authorized by, public authorities with jurisdiction thereof, to so occupy or use such portion of the Work and (ii) the District and the Contractor have accepted, in writing, the responsibilities assigned to each of them for security, maintenance, utilities, damage to the Work, insurance, the period for correction of the Work and commencement of warranties required by the Contract Documents for such portion of the Work partially used or occupied by the District. If the Contractor and the District are unable to agree upon the matters set forth in (ii) above, the District may nevertheless use or occupy any portion of the Work, with the responsibility for such matters subject to resolution in accordance with the Contract Documents. Immediately prior to such partial occupancy or use of the Work, or portions thereof, the District, the District's Inspector, the Contractor and the Architect shall jointly inspect the portions of the Work to be occupied or to be used to determine and record the condition of the Work. Repairs, replacements or other corrective action noted in such inspection shall be promptly performed and completed by the Contractor so that the portion of the Work to be occupied or used by the District is in conformity with the requirements of the Contract Documents and the District's occupancy or use thereof is not impaired. The District's use or occupancy of the Work or portions thereof pursuant to the preceding shall not be deemed "completion" of the Work as that term is used in Public Contract Code §7107.

2.3.2 No Acceptance of Defective or Nonconforming Work. The District's partial occupancy or use of the Work or any portion thereof, shall not constitute the District's acceptance of the Work which is defective or non-conforming.

2.4 District's Inspector.

2.4.1 Authority of District's Inspector. In addition to the authority and rights of the District's Inspector as provided for elsewhere in the Contract Documents and/or the Laws, all of the Work shall be performed under the observation of the District's Inspector. The foregoing notwithstanding, the Contractor shall not perform any Work deviating from the Contract Documents solely on the basis of direction by the District's Inspector; such deviations shall be deemed defective or non-conforming Work subject to correction or replacement at the sole cost of the Contractor and without adjustment of the Contract Time. The performance of the duties of the District's Inspector shall not relieve or limit the Contractor's performance of its obligations under the Contract Documents.

2.4.2 Limitations on District's Inspector. The does not have authority to interpret the Contract Documents or to modify the Work depicted in the Contract Documents. The District's Inspector has no authority relative to the content or scope of the Contractor's safety plan/program. The Contractor shall not perform any Work deviating from the Contract Documents solely on the basis of direction by the District's Inspector; such deviations shall be deemed Defective or Non-Conforming Work subject to correction or replacement at the sole cost of the Contractor and without adjustment of the Contract Time.

2.4.3 Contractor Access for District's Inspector. The Contractor shall provide the District's Inspector with access to all parts of the Work at any time, wherever located and whether partially or completely fabricated, manufactured, furnished or installed.

2.4.4 Contractor and District Responsibilities for Costs and Fees of District's Inspector. The District is responsible only for payment of the fees of the District's Inspector for standard eight (8) hour work day Mondays through Fridays, excepting holiday days ("District's Inspector Standard Workdays"). Unless the District directs the Contractor to perform Work exceeding the District's Inspector Standard Workdays, for any Work performed by the Contractor outside the District's Inspector Standard Workdays, the Contractor shall be responsible for payment of District's Inspector fees for District's Inspector services relating to such Work. All services provided by the District's Inspector exceeding an eight (8) hour workday Mondays through Fridays and/or the first eight (8) hours on Saturdays shall be at one and one-half (1½) times the District's Inspector's basic hourly rate. All hours of service provided by the District's Inspector in excess of eight (8) hours on Saturdays, and all hours of service provided by the District's Inspector on holiday days or on Sundays are at two (2) times the District's Inspector's basic hourly rate. Fees for services provided by the District's Inspector beyond the District's Inspector Standard Workdays set forth above are the sole responsibility of the Contractor; the District may deduct such fees from the Contract Price then or thereafter due the Contractor.

ARTICLE 3: ARCHITECT

3.1 Architect's Administration of the Contract.

3.1.1 Administration of Contract. The Architect will provide administration of the Contract as described in the Contract Documents, and will be one of the District's representatives during construction until the time that Final Payment. The Architect will advise and consult with the District, the Project Manager, if any, and the District's Inspector with respect to the administration of the Contract and the Work. The Architect is authorized to act on behalf of the District to the extent provided for in the Contract Documents; and shall have the responsibilities and authority established by the Laws.

3.1.2 Periodic Site Inspections. The Architect will visit the Site at intervals appropriate to the stage of construction to become generally familiar with the progress and quality of the completed Work and to determine, in general, if the Work is being performed in a manner indicating that the Work, when completed, will be in accordance with the Contract Documents. The Architect is not required to make exhaustive or continuous Site inspections to check quality or quantity of the Work. On the basis of Site observations as an architect, the Architect will keep the District informed of the progress of the Work, and will endeavor to guard the District against defects and deficiencies in the Work.

3.1.3 Contractor Responsibility for Construction Means, Methods and Sequences. The Architect will not have control over or charge of and will not be responsible for construction means, methods, techniques, sequences or procedures, or for safety precautions and programs in connection with the Work, these being solely the Contractor's responsibility. The Architect will not have control over or charge of and will not be responsible for acts or omissions of the Contractor, Subcontractors, or their agents or employees, or of any other persons performing portions of the Work.

3.1.4 Review of Applications for Payment. Pursuant to Article 8 hereof, the Architect will

review the Contractor's Payment Applications and for Final Payment, evaluate the extent of Work performed and verify to the District the amount properly due the Contractor on such Application for Payment.

3.1.5 Rejection of Work. The Architect is authorized to reject Work which is defective or does not conform to the requirements of the Contract Documents. Whenever the Architect considers it necessary or advisable, for implementation of the intent of the Contract Documents, the Architect is authorized to require additional inspections or testing of the Work, whether or not such Work is fabricated, installed or completed. Neither this authority of the Architect nor a decision made in good faith by the Architect to exercise or not to exercise such authority shall modify requirements of the Contract Documents or any obligation of the Contractor under the Contract Documents.

3.1.6 Submittals.

3.1.6.1 Architect's Review. The Architect will review and approve or take other appropriate action upon Submittals for the limited purpose of checking for general conformance with information given and the design concept expressed in the Contract Documents. Review of Submittals is not for the purpose of determining the accuracy and completeness of other details such as dimensions and quantities, or for substantiating instructions for installation or performance of equipment or systems, all of which remain the responsibility of the Contractor. The Architect's review of the Contractor's Submittals shall not: (i) modify or limit the Contractor's obligations under the Contract Documents; (ii) requirements of the Contract Documents relating to the Work; (iii) approval of safety measures, programs or precautions; or (iv) construction means, methods, techniques, sequences or procedures. The Architect's acceptance of a specific item in a Submittal shall not indicate approval of an assembly of which the item is a component with the Submittal(s) required and relating to such assembly have been reviewed by the Architect.

3.1.6.2 Time for Architect's Review. The Architect's review of Submittals will be conducted promptly so as not to delay or hinder the progress of the Work or the activities of the Contractor, the District or the District's separate contractors while allowing sufficient time, in the Architect's reasonable professional judgment, to permit adequate review of Submittals. The foregoing notwithstanding, the Architect's review and return of Submittals will conform with the time limits and other conditions, if any, set forth in the Specifications or the Submittal Schedule if the Submittal Schedule is required by other provisions of the Contract Documents.

3.1.7 Issuance of Construction Change Directive. The Architect is authorized to issue Construction Change Directives.

3.1.8 Changes to the Work; Change Orders. The Architect will prepare Change Orders, and may authorize minor Changes in the Work which do not result in adjustment of the Contract Time or the Contract Price.

3.1.9 Completion. In conjunction with the District, District's Inspector, Project Manager, if any, and the Contractor, the Architect will conduct observations of the Work to determine the date(s) of Completion and Final Completion. If the District does not designate a Project Manager for the Work, the Architect shall: (i) be authorized to enforce the Contractor's close-out obligations; and (ii) receive from the Contractor and the records, written warranties and related close-out materials assembled by the Contractor in accordance with the Contract Documents.

3.1.10 Interpretation of Contract Documents. The Architect will interpret and decide matters concerning the requirements of the Contract Documents on written request of either the District or the Contractor. The Architect's response to such requests will be made with reasonable promptness and within the time limits agreed upon, if any. If no agreement is reached establishing the time for the Architect's review and response to requests under this Article 3.1.10, the Architect shall be afforded a fifteen (15) day period after receipt of such request to review and respond thereto. Interpretations and decisions of the Architect will: (i) be consistent

with the intent of and reasonably inferable from the Contract Documents and will be in writing or in the form of drawings. When making such interpretations and decisions; (ii) endeavor to secure faithful performance by both the District and the Contractor; (iii) not show partiality to either the District or Contractor; and (iv) not result in liability for results of interpretations or decisions so rendered in good faith. The Architect's decisions on matters relating to aesthetic effect will be final if consistent with the intent expressed in the Contract Documents.

3.1.11 Request for Information. If the Contractor encounters any condition which the Contractor believes, in good faith and with reasonable basis, is the result of an ambiguity, conflict, error or omission in the Contract Documents (collectively "the Conditions"), Contractor shall timely notify the Architect, in writing, of the Conditions encountered and to request information from the Architect necessary to address and resolve any such Conditions before proceeding with any portion of the Work affected or which may be affected by such Conditions. If the Contractor fails to timely notify the Architect in writing of any Conditions encountered and the Contractor proceeds to perform any portion of the Work containing or affected by such Conditions the Contractor shall bear all costs associated with or required to correct, remove, or otherwise remedy any portion of the Work affected thereby without adjustment of the Contract Time or the Contract Price. In requesting information of the Architect to address and resolve any Conditions the Contractor shall act with promptness in submitting any such written request so as to allow the Architect a reasonable period of time to review, evaluate and respond to any such request, taking into account the then current status of the progress and completion of the Work and the actual or potential impact of any such Conditions upon the completion of the Work within the Contract Time. The Contract Time shall not be subject to adjustment in the event that the Contractor shall fail to timely request information from the Architect. The Architect's responses to any such Contractor request for information shall conform to the standards and time frame set forth in Article 3.1.10 of these General Conditions. The foregoing provisions notwithstanding, if the Architect reasonably determines that any of Contractor's request(s) for information: (i) does not reflect adequate or competent supervision or coordination by the Contractor or any Subcontractor; (ii) does not reflect the Contractor's adequate or competent knowledge of the requirements of the Work or the Contract Documents; or (iii) is not justified for any other reason, Contractor shall be liable to the District for all costs incurred by the District associated with the processing, reviewing, evaluating and responding to any such request for information, including without limitation, fees of the Architect. In responding to any of Contractor's request(s) for information, the Architect shall, in the response, indicate if the Architect has made the determination pursuant to the preceding sentence and, if so, the costs to be borne by the Contractor for the processing, review, evaluation and response to the request for information. Thereafter, the District is authorized to deduct such costs from any portion of the Contract Price then or thereafter due the Contractor.

3.2 Communications; Architect's Role. All communications regarding the Work, the performance thereof or the Contract Documents shall be in writing; verbal communications shall be reduced to writing. If the District does not designate a Project Manager for the Work, communications between the Contractor and the District shall be through the Architect. Communications between separate contractors, if any, shall be through the Architect.

3.3 Termination of Architect; Substitute Architect. In case of termination of employment of the Architect, the District shall appoint a substitute architect whose status under the Contract Documents shall be that of the Architect.

3.4 Project Manager. If a Project Manager is designated for the Work, the Project Manager shall be a representative of the District until Final Completion is achieved and Final Payment is due the Contractor. The Project Manager is authorized to act on behalf of the District and in connection with the Work as set forth in the Contract Documents, including without limitation: (i) review of the Contractor's Construction Schedule and updates thereto; (ii) review of the Contractor's Applications for

Payment and verification of the amount due the Contractor under an Application for Payment; (iii) conducting the Pre-Construction Meeting, Progress Meetings and/or Special Meetings and maintaining minutes thereof; and (iv) enforcement of the Contractor's obligations under the Contract Documents, including the Contractor's close-out obligations.

ARTICLE 4: THE CONTRACTOR

4.1 Contractor Review of Contract Documents.

4.1.1 Examination of Contract Documents. The Contractor shall carefully study and compare the Contract Documents with each other and with information furnished by the District pursuant to the Contract Documents and shall at once report to the Architect any errors, inconsistencies or omissions discovered. If the Contractor performs any Work knowing, or with reasonable diligence should have known that, it involves an error, inconsistency or omission in the Contract Documents without prior notice to the Architect of the same, the Contractor shall assume full responsibility for such performance and shall bear all costs for correction of the same without adjustment of the Contract Price.

4.1.2 Field Measurements. Prior to commencement of the Work, or portions thereof, the Contractor shall take field measurements and verify field conditions at the Site and shall carefully compare such field measurements and conditions with information provided in the Contract Documents. Errors, inconsistencies or omissions discovered shall be immediately reported to the Architect along with request for clarification or direction.

4.1.3 Dimensions; Layouts and Field Engineering. Unless otherwise expressly provided, dimensions indicated in the Drawings are intended for reference only. The Drawings are intended to be diagrammatic and schematic in nature; the Contractor is solely responsible for dimensioning and coordinating the Work of the Contract Documents. All field engineering required for laying out the Work and establishing grades for earthwork operations shall be by the Contractor at its expense. Any field engineering or other engineering to be provided or performed by the Contractor under the Contract Documents and required or necessary for the proper execution or installation of the Work shall be provided and performed by the an engineer duly registered under the laws of the State of California in the engineering discipline for such portion of the Work.

4.1.4 Work in Accordance With Contract Documents. The Contractor shall perform all of the Work in strict conformity with the Contract Documents, the Laws and Architect accepted Submittals.

4.2 Site Investigation; Subsurface Conditions.

4.2.1 Contractor Investigation. The Contractor is responsible for, and by executing the Agreement acknowledges, that it has carefully examined the Site and has taken all steps it deems reasonably necessary to ascertain all conditions which may affect the Work, or the cost thereof, including, without limitation, conditions bearing upon transportation, disposal, handling or storage of materials; availability of labor or utilities; access to the Site; and the physical conditions and the character of equipment, materials, labor and services necessary to perform the Work. Any failure of the Contractor to do so will not relieve it from the responsibility for fully and completely performing all Work without adjustment to the Contract Price or the Contract Time. The District assumes no responsibility to the Contractor for any understandings or representations concerning conditions or characteristics of the Site, or the Work, made by any of its officers, employees or agents prior to the execution of the Agreement, unless such understandings or representations are expressly set forth in the Contract Documents.

4.2.2 Subsurface Data. By executing the Agreement, the Contractor acknowledges that it has examined the boring data and other subsurface data available and satisfied itself as to the character, quality and quantity of surface and subsurface materials, including without limitation, obstacles which may be encountered in performance of the Work, insofar as this information is reasonably ascertainable from an inspection of the Site, review of available subsurface data and

analysis of information furnished by the District under the Contract Documents. Subsurface data or other soils investigation report provided by the District hereunder are not a part of the Contract Documents. Information contained in such data or report regarding subsurface conditions, elevations of existing grades or below grade elevations are approximate only and are neither guaranteed or warranted by the District to be complete and accurate. The Contractor shall examine all boring and other subsurface data to make its own independent interpretation of the subsurface conditions and acknowledges that its bid is based upon its own opinion of the conditions which may be encountered. The District assumes no responsibility for any conclusions or interpretations made by Contractor on the basis of available subsurface data or other information furnished by District under the Contract Documents.

4.2.3 Subsurface Conditions. If the Work involves digging trenches or other excavations that extend deeper than four feet below the surface, the Contractor shall promptly and before the following conditions are disturbed, notify the District's Inspector, in writing, of any: (i) material that the Contractor believes may be material that is hazardous waste, as defined in California Health and Safety Code §25117, that is required to be removed to a Class I or Class II or Class III disposal site in accordance with provisions of existing law; (ii) subsurface or latent physical conditions at the site differing from those indicated; or (iii) unknown physical conditions at the site of any unusual nature, different materially from those ordinarily encountered and generally recognized as inherent in the Work or the character provided for in the Contract Documents. If upon notice to the District of the conditions described above and upon the District's investigation thereof, the District determines that the conditions so materially differ or involve such hazardous materials which require an adjustment to the Contract Price or the Contract Time, the District shall issue a Change Order in accordance with Article 9 hereof. In accordance with California Public Contract Code §7104, any dispute arising between the Contractor and the District as to any of the conditions listed in (i), (ii) or (iii) above, shall not excuse the Contractor from the completion of the Work within the Contract Time and the Contractor shall proceed with all Work to be performed under the Contract Documents. The District reserves the right to terminate the Contract pursuant to Article 15.2 hereof should the District determine not to proceed because of any condition described in (i), (ii) or (iii) above.

4.3 Supervision and Construction Procedures.

4.3.1 Supervision of the Work. The Contractor shall supervise and direct performance of the Work, using the Contractor's best skill and attention. The Contractor shall be solely responsible for, and have control over, construction means, methods, techniques, sequences and procedures and for coordinating all portions of the Work under the Contract Documents, unless Contract Documents give other specific instructions concerning these matters. The Contractor shall be responsible for inspection of completed or partially completed portions of Work to determine that such portions are in proper condition to receive subsequent Work.

4.3.2 Responsibility for the Work. The Contractor is responsible to the District for acts and omissions of the Contractor's employees, Subcontractors and their agents and employees, and all other persons performing any portion of the Work under a contract with the Contractor. The Contractor is not relieved from its obligation to perform the Work in accordance with the Contract Documents either by activities or duties of the Project Manager, District's Inspector or the Architect, or by tests, inspections or approvals required or performed by persons other than the Contractor.

4.3.3 Surveys. The Contractor shall prepare or cause to be prepared all detailed surveys necessary for performance of the Work, including without limitation, slope stakes, points, lines and elevations. The Contractor is responsible for the establishment, location, maintenance and preservation of benchmarks, reference points and stakes for the Work without adjustment of the Contract Price. The Contractor is solely responsible for all loss or costs resulting from the loss, destruction, disturbance or damage of benchmarks, reference points or stakes.

4.3.4 Construction Utilities. The District will furnish and pay the costs of utility services for the

Work as set forth in the Special Conditions; all other utilities necessary to complete the Work and the Contractor's obligations hereunder shall be obtained by the Contractor without adjustment of the Contract Price or the Contract Time. The Contractor shall furnish and install necessary or appropriate temporary distributions of utilities, including utilities furnished by the District. Any such temporary distributions shall be removed by the Contractor upon completion of the Work. The costs of all such utility services, including the installation, relocations and removal of temporary distributions thereof, shall be borne by the Contractor and included in the Contract Price.

4.3.5 Existing Utilities; Removal, Relocation and Protection. In accordance with California Government Code §4215, the District assumes responsibility for the timely removal, relocation, or protection of existing main or trunkline utility facilities located on the Site which are not identified in the Drawings, Specifications or other Contract Documents. Contractor shall be compensated for the costs of locating, repairing damage not due to the Contractor's failure to exercise reasonable care, and removing or relocating such utility facilities not indicated in the Drawings, Specifications and other Contract Documents with reasonable accuracy and for equipment on the Site necessarily idled during such work. Contractor shall not be assessed Liquidated Damages for delay in completion of the Work when such delay is caused by the failure of the District or the owner of the utility to provide for removal or relocation of such utility facilities. The foregoing notwithstanding, the District is not required to indicate the presence of existing service laterals or appurtenances whenever the presence of such utilities can be inferred from the presence of other visible facilities, such as buildings, meters and junction boxes, on or adjacent to the Site. If the Contractor encounters utility facilities not identified by the District in the Drawings, Specifications, or other Contract Documents, the Contractor shall immediately notify, in writing, the District, the District's inspector, the Architect, the Project Manager and the utility owner. If utility facilities are owned by a public utility, the public utility shall have the sole discretion to perform repairs or relocation work or permit the Contractor to do such repairs or relocation work at a reasonable price.

4.3.6 Conferences and Meetings. A material obligation of the Contractor under the Contract Documents is the attendance by the Contractor's supervisory personnel for the Work and the Contractor's management personnel as required by the Contract Documents or as requested by the District. The Contractor's personnel participating in conferences and meetings relating to the Work shall be authorized to act on behalf of the Contractor and to bind the Contractor. The Contractor is solely responsible for arranging for the attendance by Subcontractors, Material Suppliers at meetings and conferences relating to the Work as necessary, appropriate or as requested by the District.

4.3.6.1 Pre-Construction Conference. The Contractor's representatives (and representatives of Subcontractors as requested by the District) shall attend a Pre-Construction Conference at such time and place as designated by the District. The Pre-Construction Conference will address items such as the Contractor's access to the Site, review of construction procedures and requirements and other matters pertaining generally to construction of the Work.

4.3.6.2 Progress Meetings. Progress meetings will be conducted on regular intervals (weekly unless otherwise expressly indicated elsewhere in the Contract Documents). The Contractor's representatives and representatives of Subcontractors (as requested by the District) shall attend Progress Meetings. Progress Meetings will be chaired by the Architect or the Project Manager and will generally include as agenda items: Site safety, field issues, coordination of Work, construction progress and impacts to timely completion, if any. The purposes of the Progress Meetings include: a formal and regular forum for discussion of the status and progress of the Work by all Project participants, a review of progress or resolution of previously raised issues and action items assigned to the Project participants, and reviews of the Construction Schedule and Submittals.

4.3.6.3 Special Meetings. As deemed necessary or appropriate by the District, Special Meetings will be conducted with the participation of the Contractor, Subcontractors and other Project participants as requested by the District.

4.3.6.4 Minutes of Meetings. Following conclusion of the Pre-Construction Conference, Progress Meetings and Special Meetings, the Architect or the Project Manager will prepare and distribute minutes reflecting the items addressed and actions taken at a meeting or conference. Unless the Contractor notifies the Architect or the Project Manager in writing of objections or corrections to minutes prepared hereunder within five (5) days of the date of distribution of the minutes, the minutes as distributed shall constitute the official record of the meeting or conference. No objections or corrections of any Subcontractor or Material Supplier shall be submitted directly to the Architect or the Project Manager; such objections or corrections shall be submitted to the Architect and the Project Manager through the Contractor. If the Contractor timely interposes objections or notes corrections, the resolution of such matters shall be addressed at the next scheduled Progress Meeting.

4.4 Labor and Materials.

4.4.1 Payment for Labor, Materials and Services. Unless otherwise provided in the Contract Documents, the Contractor shall provide and pay for labor, materials, equipment, tools, Construction Equipment and machinery, water, heat, utilities, transportation, and other facilities and services necessary for proper execution and completion of the Work, whether temporary or permanent and whether or not incorporated in the Work.

4.4.2 Employee Discipline. The Contractor shall enforce strict discipline and good order among the Contractor's employees, the employees of any Subcontractor or Sub-subcontractor, and all other persons performing any part of the Work at the Site. The Contractor shall not permit employment of unfit persons or persons not skilled in tasks assigned to them. The Contractor shall dismiss from its employ and direct any Subcontractor or Sub-subcontractor to dismiss from their employment any person deemed by the District to be unfit or incompetent to perform Work and thereafter, the Contractor shall not employ nor permit the employment of such person for performance of any part of the Work without the prior written consent of the District, which consent may be withheld in the reasonable discretion of the District.

4.4.3 Compliance with Immigration Reform and Control Act of 1986. The Contractor is solely and exclusively responsible for employment of individuals for the Work of the Contract in conformity with the Immigration Reform and Control Act of 1986, 8 USC §§1101 et seq. (the "IRCA"); the Contractor shall also require Subcontractors and any other person or entity employing labor in connection with any of the Work to so similarly comply with the IRCA. The foregoing includes without limitation, verification that individuals engaged in any Work are legally entitled to do so.

4.4.4 Contractor's Supervisory Personnel. Prior to start of Work at the Site, the Contractor shall submit to the District, Architect and Project Manager, a written statement of the qualifications of the Contractor's proposed Superintendent and Project Manager for the Work. Acceptance of the Contractor's proposed Superintendent and Project Manager is subject to establishing their: (i) skills, experience and other capabilities to supervise, coordinate and manage the Work; (ii) fluent verbal and written English language capabilities; (iii) competency in reading, comprehending and understanding drawings, specifications and other technical construction-related materials; and (iv) recent experience of in completing construction projects similar to the Work within the budget and time established for such other construction projects. Upon acceptance of the Contractor's Superintendent or Project Manager by the District, the Contractor shall not change such personnel without prior consent of the District, unless such personnel: (i) are unsatisfactory to the Contractor and ceases to be employed by the Contractor for the Work; or (ii) is determined by the District to be unfit, incompetent or incapable of performing functions and responsibilities assigned.

4.4.5 Prohibition on Harassment.

4.4.5.1 District's Policy Prohibiting Harassment. The District is committed to providing a campus and workplace free of sexual harassment and harassment based on factors such as race, color religion, national origin, ancestry, age, medical condition, marital status, disability, veteran status or other legally protected classification. Harassment includes without limitation, verbal, physical or visual conduct which creates an intimidating, offensive or hostile environment such as racial slurs; ethnic jokes; posting of offensive statements, posters or cartoons or similar conduct. Sexual harassment includes without limitation the solicitation of sexual favors, unwelcome sexual advances, or other verbal, visual or physical conduct of a sexual nature.

4.4.5.2 Contractor's Adoption of Anti-Harassment Policy. Contractor shall adopt and implement all appropriate and necessary policies prohibiting any form of discrimination in the workplace, including without limitation harassment on the basis of any classification protected under local, state or federal law, regulation or policy. Contractor shall take all reasonable steps to prevent harassment from occurring, including without limitation affirmatively raising the subject of harassment among its employees, expressing strong disapproval of any form of harassment, developing appropriate sanctions, informing employees of their right to raise and how to raise the issue of harassment and informing complainants of the outcome of an investigation into a harassment claim. Contractor shall require that any Subcontractor or Sub-subcontractor performing any portion of the Work to adopt and implement policies in conformity with this Article 4.4.4.

4.4.5.3 Prohibition on Harassment at the Site. Contractor shall not permit any person, whether employed by Contractor, a Subcontractor, or any other person or entity, performing any Work at or about the Site to engage in any prohibited form of harassment. Any such person engaging in a prohibited form of harassment directed to any individual performing or providing any portion of the Work at or about the Site shall be subject to appropriate sanctions in accordance with the anti-harassment policy adopted and implemented pursuant to Article 4.4.4.2 above. Any person, performing or providing Work on or about the Site engaging in a prohibited form of harassment directed to any student, faculty member or staff of the District or directed to any other person on or about the Site shall be subject to immediate removal and shall be prohibited thereafter from providing or performing any portion of the Work. Upon the District's receipt of any notice or complaint that any person employed directly or indirectly by Contractor in performing or providing the Work has engaged in a prohibited form of harassment, the District will promptly undertake an investigation of such notice or complaint. If the District, after such investigation, reasonably determines that a prohibited form of harassment has occurred, the District shall promptly notify the Contractor of the same and direct that the person engaging in such conduct be immediately removed from the Site. Unless the District's determination that a prohibited form of harassment has occurred is grossly negligent or without reasonable cause, District shall have no liability for directing the removal of any person determined to have engaged in a prohibited form of harassment nor shall the Contract Price or the Contract Time be adjusted on account thereof. Contractor and the Surety shall defend, indemnify and hold harmless the District and its employees, officers, board of trustees, agents, and representatives from any and all claims, liabilities, judgments, awards, actions or causes of actions, including without limitation, attorneys' fees, which arise out of, or pertain in any manner to: (i) the assertion by any person dismissed from performing or providing work at the direction of the District pursuant to this Article 4.4.4.3; or (ii) the assertion by any person that any person directly or indirectly under the employment or direction of the Contractor has engaged in a prohibited form of harassment directed to or affecting such person. The obligations of the Contractor and the Surety under the preceding sentence are in addition to, and not in lieu of, any other

obligation of defense, indemnity and hold harmless whether arising under the Contract Documents, at law or otherwise; these obligations survive completion of the Work or the termination of the Contract.

- 4.5 Taxes. The Contractor shall pay, without adjustment of the Contract Price, all sales, consumer, use and other taxes for the Work or portions thereof provided by the Contractor under the Contract Documents.

4.6 Permits, Fees and Notices; Compliance With Laws.

4.6.1 Payment of Permits, Fees. Unless otherwise provided in the Contract Documents, the Contractor shall secure and pay for the building permits, other permits, governmental fees, licenses and inspections necessary or required for the proper execution and completion of the Work.

4.6.2 Compliance With Laws. The Contractor shall comply with and give notices required by laws, ordinances, rules, regulations and other orders of public authorities bearing on performance of the Work.

4.6.3 Notice of Variation From Laws. If the Contractor knows, or has reason to believe, that any portion of the Contract Documents are at variance with applicable laws, statutes, ordinances, building codes, regulations or rules, the Contractor shall promptly notify the Architect and the District's Inspector, in writing, of the same. If the Contractor performs Work knowing, or with reasonable diligence should have known, it to be contrary to laws, statutes, ordinances, building codes, rules or regulations applicable to the Work without such notice to the Architect and the District's Inspector, the Contractor shall assume full responsibility for such Work and shall bear the attributable costs arising or associated therefrom, including without limitation, the removal, replacement or correction of the same.

4.7 Submittals.

4.7.1 Purpose of Submittals. Submittals are not Contract Documents. Submittals are for the purpose of demonstrating, for those portions of the Work for which Submittals are required, the manner in which the Contractor proposes to provide or incorporate such item of the Work in conformity with the information given and the design concept expressed in the Contract Documents.

4.7.2 Contractor's Submittals.

4.7.2.1 Prompt Submittals. The Contractor shall review, approve and submit to the Architect or such other person or entity designated by the District or the Contract Documents, the number of copies of Submittals required by the Contract Documents. All Submittals required by the Contract Documents shall be prepared, assembled and submitted by the Contractor within the time frames set forth in the Submittal Schedule incorporated and made a part of the Approved Construction Schedule. Contractor's submission of Submittals in conformity with the Submittal Schedule is a material obligation of the Contractor. If the Contractor fails or refuses to deliver Submittals in accordance with the Submittal Schedule, the Contractor shall be subject to per diem assessments in the amount set forth in the Special Conditions for each day of delayed submission for any Submittal beyond the date set forth in the Submittal Schedule for Contractor's submission of such Submittal. Contractor and the District acknowledge and agree that the per diem assessment for delayed submission of Submittals set forth in the Special Conditions represents a reasonable estimate of costs and expenses the District will incur as a result of delayed submission of Submittals and that the same is not a penalty. Notwithstanding Contractor's submission of all required Submittals in accordance with the Submittal Schedule, in the event that the District or the Architect reasonably determines that all or any portion of such Submittals fail to comply with the requirements of Articles 4.7.2.2, 4.7.2.3 and 4.7.2.4 of these General Conditions and/or such Submittals are not otherwise complete and accurate so as to require re-submission,

Contractor shall bear all costs associated with the review and approval of resubmitted Submittals, including without limitation Architect's fees incurred in connection therewith; provided that such costs are in addition to, and not in lieu of, Liquidated Damages imposed under this Article 4.7.2.1 for Contractor's delayed submission of Submittals. If Liquidated Damages are assessed for the Contractor's delayed submission of Submittals or if the Contractor is assessed Architect fees to review incomplete or inaccurate Submittals, the District may deduct the same from any portion the Contract Price then or thereafter due the Contractor. Submittals not required by the Contract Documents or which do not otherwise conform to the requirements of the Contract Documents may be returned without action. No adjustment to the Contract Time or the Contract Price shall be granted to the Contractor on account of its failure to timely submit of any Submittal.

4.7.2.2 Approval of Subcontractor Submittals. All Submittals prepared by Subcontractors, Material Suppliers, manufacturers or distributors shall bear the written approval of the Contractor thereto prior to submission to the Architect for review. Any Submittal not bearing the Contractor's written approval shall be subject to return to the Contractor for re-submittal in conformity herewith, with the same being deemed to not have been submitted. Any delay, impact or cost associated therewith shall be the sole and exclusive responsibility of the Contractor without adjustment to the Contract Time or the Contract Price.

4.7.2.3 Verification of Submittal Information. By approving and submission of Submittals, the Contractor represents to the District and Architect that the Contractor has determined and verified materials, field measurements, field construction criteria, catalog numbers and similar data related thereto and has checked and coordinated the information contained within such Submittals with the requirements of the Work and of the Contract Documents.

4.7.2.4 Information Included in Submittals. All Submittals shall be accompanied by a written transmittal or other writing by the Contractor providing an identification of the portion of the Drawings or the Specifications pertaining to the Submittal, with each Submittal numbered consecutively for ease of reference along with the following information: (i) date of submission; (ii) project name; (iii) name of submitting Subcontractor; and (iv) if applicable, the revision number. The foregoing information is in addition to, and not in lieu of, any other information required by the Contract Documents for the Architect's review, evaluation and acceptance of the Contractor's Submittals.

4.7.2.5 Contractor Responsibility for Deviations. The Contractor shall not be relieved of responsibility for correcting deviations from the requirements of the Contract Documents by the Architect's review of Submittals unless the Contractor has specifically informed the Architect in writing of such deviation at the time of submission of the Submittal and the Architect has given written approval to the specific deviation. The Contractor shall not be relieved of responsibility for errors or omissions in Submittals by the Architect's review thereof.

4.7.2.6 No Performance of Work Without Architect Review. The Contractor shall perform no portion of the Work requiring the Architect's review of Submittals until the Architect has completed its review and returned the Submittal to the Contractor indicating "No Exception Taken" to such Submittal. The Contractor shall not perform any portion of the Work forming a part of a Submittal or which is affected by a related Submittal until the entirety of the Submittal or other related Submittal has been fully processed. Such Work shall be in accordance with the final action taken by the Architect in review of Submittals and other applicable portions of the Contract Documents.

4.7.3 Architect Review of Submittals. The purpose of the Architect's review of Submittals and the time for the Architect's return of Submittals to the Contractor shall be as set forth elsewhere in the Contract Documents. If the Architect returns a Submittal as rejected or requiring

Notation	Action Required
No Exceptions Taken	No formal revision required
Make Corrections Noted	Make revision noted; re-submission of revised Submittal not required
Revise and Re-Submit	Revise Submittal in accordance with notations and re-submit for revision
Rejected Re-Submit	Prepare new alternative Submittal and re-submit for review

correction(s) with re-submission, the Contractor, so as not to delay the progress of the Work, shall promptly thereafter resubmit a Submittal conforming to the requirements of the Contract Documents; the resubmitted Submittal shall indicate the portions thereof modified in accordance with the Architect's direction. When professional certification of performance criteria of materials, systems or equipment is required by the Contract Documents, the Architect shall be entitled to rely upon the accuracy and completeness of such calculations and certifications accompanying Submittals. The Architect's review of the Submittals is for the limited purposes described in the Contract Documents. The following notations or notations of a similar nature noted on a reviewed Submittal will require the Contractor action noted below.

4.7.4 Deferred Approval Items. If any portion of the Work is designated in the Contract Documents as a "Deferred Approval" item, Contractor shall be solely and exclusively responsible for: (i) the design, engineering and specifying the materials/equipment forming any part of the Deferred Approval Item; (ii) integrating and/or coordinating the Deferred Approval Item with other portions of the Work; (iii) preparation of Submittals for such item(s) in a timely manner so as not to delay or hinder the completion of the Work within the Contract Time; and (iv) timely obtaining DSA approval thereof.

4.8 Materials and Equipment.

4.8.1 Specified Materials, Equipment. References in the Contract Documents to any specific article, device, equipment, product, material, fixture, patented process, form, method or type of construction, by name, make, trade name, or catalog number, with or without the words "or equal" shall be deemed to establish a minimum standard of quality or performance, and shall not be construed as limiting competition.

4.8.2 Approval of Substitutions or Alternatives. The Contractor may propose to furnish alternatives or substitutes for a particular item specified in the Contract Documents, provided that: (i) such proposed substitution or alternative complies with the requirements of the Specifications relating to substitutions of specified items; (ii) the Contractor certifies to the Architect and District that the quality, performance capability and functionality (including visual and/or aesthetic effect) of the proposed alternative or substitute meet or exceed the quality, performance capability and functionality of the item or process specified; and (iii) demonstrate to the reasonable satisfaction of the Architect and District that the use of the substitution or alternative is appropriate and will not delay completion of the Work or result in an increase to the Contract Price. The Contractor shall submit calculations engineering, construction, dimension, visual, aesthetic and performance data to the Architect to permit its proper evaluation of the proposed substitution or alternative. If requested by the Architect, Contractor shall promptly furnish any additional information or data regarding a proposed substitution or alternative which the Architect deems reasonably necessary for the evaluation of the proposed substitution or alternative. The Contractor shall not provide, furnish or install any substitution or alternative without the Architect's review and final action on the proposed substitution or alternative; any alternative or substitution installed or incorporated into the Work without first obtaining the Architect's review and final action of the same shall be subject to removal pursuant to Article 12 hereof. The Architect's decision evaluating the Contractor's proposed substitutions

or alternatives shall be final. Neither the Contract Time nor the Contract Price shall be increased on account of any substitution or alternative proposed by the Contractor and which is accepted by the Architect; provided, however, that in the event a substitution or alternative accepted by the Architect and purchase, fabrication and/or installation or such accepted substitution or alternative shall be less expensive than the originally specified item, the Contract Price shall be reduced by the actual cost savings realized by the Contractor's furnishing and/or installation of such approved substitution or alternative. The Contractor shall be solely responsible for all costs and fees incurred by the District to review a proposed substitution or alternative, including without limitation fees of the Architect, and/or governmental agencies to review and/or approve any proposed substitution or alternative. The Contractor shall be solely responsible for any increase in the cost of any accepted substitution or alternative or any Work affected by such alternative or substitution. The foregoing notwithstanding, all requests for the Architect's review and approval of any proposed substitution or alternative and all engineering, construction, dimension and performance data substantiating the equivalency of the proposed substitution or alternative shall be submitted by Contractor not later than thirty-five (35) days following the date of the District's award of the Contract to Contractor by action of the District's Board of Trustees; any request for approval of proposed alternatives or substitutions submitted thereafter may be rejected summarily. The foregoing process and time limits shall apply to any proposed substitution or alternative regardless of whether the substitute or alternate item is to be provided, furnished or installed by Contractor, any Subcontractor, any Sub-Subcontractor, Material Supplier or Manufacturer.

4.8.3 Placement of Material and Equipment Orders. Contractor shall, after award of the Contract, promptly and timely place all orders for materials and/or equipment necessary for completion of the Work so that delivery of the same shall be made without delay or interruption to the timely completion of the Work. Contractor shall require that any Subcontractor similarly place orders for all materials and/or equipment to be furnished by any such Subcontractor in a prompt and timely manner so that delivery of the same shall be made without delay or interruption to the timely completion of the Work. Upon request of the District, Project Manager or the Architect, the Contractor shall furnish reasonably satisfactory written evidence of the placement of orders for materials and/or equipment necessary for completion of the Work, including without limitation, orders for materials and/or equipment to be provided, furnished or installed by any Subcontractor.

4.8.4 District's Right to Place Orders for Materials and/or Equipment. Notwithstanding any other provision of the Contract Documents, if the Contractor shall, upon request of the District, Project Manager or the Architect, fails or refuses, for any reason, to provide reasonably satisfactory written evidence of the placement of orders for materials and/or equipment necessary for completion of the Work, or should the District determine, in its sole and reasonable discretion, that any orders for materials and/or equipment have not been placed in a manner so that such materials and/or equipment will be delivered to the Site so the Work can be completed without delay or interruption, the District shall have the right, but not the obligation, to place such orders on behalf of the Contractor. If the District exercises the right to place orders for materials and/or equipment pursuant to the foregoing, the District's conduct shall not be deemed to be an exercise, by the District, of any control over the means, methods, techniques, sequences or procedures for completion of the Work, all of which remain the responsibility and obligation of the Contractor. Notwithstanding the right of the District to place orders for materials and/or equipment pursuant to the foregoing, the election of the District to exercise, or not to exercise, such right shall not relieve the Contractor from any of Contractor's obligations under the Contract Documents, including without limitation, completion of the Work within the Contract Time and for the Contract Price. If the District exercises the right hereunder to place orders for materials and/or equipment on behalf of Contractor pursuant to the foregoing, Contractor shall reimburse the District for all costs and fees incurred by the District in placing such orders; such costs and fees may be deducted by the District from the Contract Price then or thereafter due the

Contractor.

4.8.5 Contractor and Subcontractor Communication. All written communications between the Contractor and any Subcontractor, Material Supplier or others directly or indirectly engaged by the Contractor to perform or provide any portion of the Work shall be available to the District, the Project Manager and the Architect for review, inspection and reproduction as may be requested from time to time. The foregoing is a material obligation of the Contractor hereunder.

4.9 Safety.

4.9.1 Safety Programs. The Contractor shall be solely responsible for initiating, maintaining and supervising all safety programs required by applicable law, ordinance, regulation or governmental orders in connection with the performance of the Contract, or otherwise required by the type or nature of the Work. The Contractor's safety program shall include all actions and programs necessary for compliance with California or federally statutorily mandated workplace safety programs, including without limitation, compliance with the California Drug Free Workplace Act of 1990 (California Government Code §§8350 et seq.). Without limiting or relieving the Contractor of its obligations hereunder, the Contractor shall require that its Subcontractors similarly initiate and maintain all appropriate or required safety programs.

4.9.2 Contractor Safety Plan. Prior to commencement of Work at the Site, the Contractor shall submit to the District and the Project Manager, if any, the Contractor's Safety Plan for the Work for review and acceptance by the District. Acceptance by the District is subject to the Safety Plan conforming to requirements of the Laws, conditions at or about the Site and the nature of the Work. The Contractor shall modify its Safety Plan as necessary to obtain the District's acceptance thereof. Notwithstanding the District's acceptance of the Contractor's Safety Plan, the Contractor shall remain solely responsible for implementing the Safety Plan and implementing measures as necessary to maintain safety of persons and property at and about the Site. The District's acceptance of the Contractor's Safety Plan shall not limit, restrict or otherwise modify the Contractor's obligations relating to safety at or about the Site in accordance with the Contract Documents and the Laws.

4.9.3 Safety Precautions. The Contractor shall be solely responsible for initiating and maintaining reasonable precautions for safety of, and shall provide reasonable protection to prevent damage, injury or loss to: (i) employees on the Work and other persons who may be affected thereby; (ii) the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site, under care, custody or control of the Contractor or Subcontractors; and (iii) other property or items at the Site, or adjacent thereto, such as trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement.

4.9.4 Safety Signs, Barricades. The Contractor shall erect and maintain, as required by existing conditions and conditions resulting from performance of the Contract, reasonable safeguards for safety and protection of property and persons, including, without limitation, posting danger signs and other warnings against hazards, barricades, promulgating safety regulations and notifying owners and users of adjacent sites and utilities.

4.9.5 Safety Notices. The Contractor shall give or post all safety notices required by the Laws and comply with the Laws bearing on safety of persons or property or their protection from damage, injury or loss.

4.9.6 Safety Coordinator. The Contractor shall designate a responsible member of the Contractor's organization at the Site whose duty shall be the prevention of accidents and the implementation and maintenance safety precautions and programs. This person shall be the Contractor's superintendent unless otherwise designated by the Contractor in writing to the Project Manager, District's Inspector and the Architect.

4.9.7 Emergencies. In an emergency affecting safety of persons or property, the Contractor shall act, to prevent threatened damage, injury or loss.

4.9.8 Hazardous Materials.

4.9.8.1 General. If the Contractor, any Subcontractor or anyone employed directly or indirectly by them shall use, at the Site, or incorporate into the Work, any material or substance deemed to be hazardous or toxic under any law, rule, ordinance, regulation or interpretation thereof (collectively "Hazardous Materials"), the Contractor shall comply with all Laws applicable thereto and shall exercise all necessary safety precautions relating to the use, storage or disposal thereof.

4.9.8.2 Prohibition on Use of Asbestos Construction Building Materials ("ACBMs"). Notwithstanding any provision of the Drawings or the Specifications to the contrary, it is the intent of the District that ACBMs not be used or incorporated into any portion of the Work. In the event that any portion of the Work depicted in the Drawings or the Specifications shall require materials or products which the Contractor knows, or should have known with reasonably diligent investigation, to contain ACBMs, Contractor shall promptly notify the Architect and the District's Inspector of the same so that an appropriate alternative can be made in a timely manner so as not to delay the progress of the Work. Contractor warrants to the District that there are no materials or products used or incorporated into the Work which contain ACBMs. Whether before or after completion of the Work, if it is discovered that any product or material forming a part of the Work or incorporated into the Work contains ACBMs, the Contractor shall at its sole cost and expense remove such product or material in accordance with any laws, rules, procedures and regulations applicable to the handling, removal and disposal of ACBMs and to replace such product or material with non-ACBM products or materials and to return the affected portion(s) of the Work to the finish condition depicted in the Drawings and Specifications relating to such portion(s) of the Work. Contractor's obligations under the preceding sentence shall survive the termination of the Contract, the warranty period provided under the Contract Documents, the Contractor's completion of the Work or the District's acceptance of the Work. If the Contractor fails or refuses, for any reason, to commence the removal and replacement of any material or product containing ACBMs forming a part of, or incorporated into the Work, within ten (10) days of the date of the District's written notice to the Contractor of the existence of ACBM materials or products in the Work, the District may thereafter proceed to cause the removal and replacement of such materials or products in any manner which the District determines to be reasonably necessary and appropriate; all costs, expenses and fees, including without limitation fees and costs of consultants and attorneys, incurred by the District in connection with such removal and replacement shall be the responsibility of the Contractor and the Surety.

4.9.8.3 Disposal of Hazardous Materials. Contractor shall be solely and exclusively responsible for the disposal of any Hazardous Materials on or about the Site. The Contractor's obligations hereunder shall include without limitation, the transportation and disposal of any Hazardous Materials in strict conformity with the Laws.

4.10 Maintenance of Documents.

4.10.1.1 Documents at Site. The Contractor shall maintain at the Site: (i) one record copy of the Drawings, Specifications and all addenda thereto; (ii) Change Orders approved by the District and all other modifications to the Contract Documents; (iii) Submittals reviewed by the Architect; (iv) Record Drawings; (v) Material Safety Data Sheets ("MSDS") accompanying any materials, equipment or products delivered or stored at the Site or incorporated into the Work; and (vi) all building and other codes or regulations applicable to the Work, including without limitation, Title 24, Part 2 of the California Code of Regulations. During performance of the Work, all documents maintained by Contractor at the Site shall be available to the District, the Project Manager, the Architect, the District's Inspector and DSA for review, inspection or reproduction. Upon completion of the Work, all documents maintained at the Site by the

Contractor pursuant to the foregoing shall be assembled and transmitted to the Architect for delivery to the District.

4.10.1.2 Maintenance of Record Drawings. During its performance of the Work, the Contractor shall maintain Record Drawings consisting of a set of the Drawings which are marked to indicate all field changes made to adapt the Work depicted in the Drawings to field conditions, changes resulting from Change Orders and all concealed or buried installations, including without limitation, piping, conduit and utility services. All buried or concealed items of Work shall be completely and accurately marked and located on the Record Drawings. The Record Drawings shall be clean and all changes, corrections and dimensions shall be marked in a neat and legible manner in a contrasting color. Record Drawings relating to the Structural, Mechanical, Electrical and Plumbing portions of the Work shall indicate without limitation, circuiting, wiring sizes, equipment/member sizing and shall depict the entirety of the as built conditions of such portions of the Work. The Record Drawings shall be continuously maintained by the Contractor during the performance of the Work. At any time during the Contractor's performance of the Work, upon the request of the District, the District's Inspector or the Architect, the Contractor shall make the Record Drawings maintained here under available for the District's review and inspection. The District's review and inspection of the Record Drawings during the Contractor's performance of the Work shall be only for the purpose of generally verifying that Contractor is continuously maintaining the Record Drawings in a complete and accurate manner; any such inspection or review shall not be deemed to be the District's approval or verification of the completeness or accuracy thereof. The failure or refusal of the Contractor to continuously maintain complete and accurate Record Drawings or to make available the Record Drawings for inspection and review by the District may be deemed by the District to be Contractor's default of a material obligation hereunder. Without waiving, restricting or limiting any other right or remedy of the District for the Contractor's failure or refusal to continuously maintain the Record Drawings, the District may, upon reasonably determining that the Contractor has not, or is not, continuously maintaining the Record Drawings in a complete and accurate manner, take appropriate action to cause the continuous maintenance of complete and accurate Record Drawings, in which event all fees and costs incurred or associated with such action shall be charged to the Contractor and the District may deduct the amount of such fees and costs from any portion of the Contract Price then or thereafter due the Contractor. In accordance with Article 8.4.2 of these General Conditions, prior to receipt of the Final Payment, Contractor shall deliver the Record Drawings to the Architect.

4.11 Use of Site. The Contractor shall confine operations at the Site to areas permitted by the Laws, subject to any restrictions or limitations set forth in the Contract Documents. The Contractor shall not unreasonably encumber the Site or adjoining areas with materials or equipment. The Contractor shall be solely responsible for providing security at the Site with all such costs included in the Contract Price. The District shall at all times have access to the Site.

4.12 Clean-Up. The Contractor shall at all times keep the Site and all adjoining areas free from the accumulation of any waste material or rubbish caused or generated by performance of the Work. Without limiting the generality of the foregoing, Contractor shall maintain the Site in a "rake-clean" standard on a daily basis. If the Work includes painting and/or the installation of floor covering, before any painting operations or the installation of any flooring covering, the area and adjoining areas of the Site where paint is to be applied or floor covering is to be installed shall be in a "broom-clean" condition. Prior to completion of the Work, Contractor shall remove from the Site all rubbish, waste materials, excess excavated materials, tools, Construction Equipment, machinery, surplus materials and any other items which are not the property of the District under the Contract Documents. Upon completion of the Work, the Site and all adjoining areas shall be left by the Contractor in a neat and broom clean condition satisfactory to District. The District's Inspector or

Project Manager shall be authorized to direct the Contractor's clean-up obligations hereunder. If the Contractor fails to clean up as provided for in the Contract Documents, the District may do so, and all costs incurred in connection therewith shall be charged to the Contractor; the District may deduct such costs from any portion of the Contract Price then or thereafter due the Contractor.

4.13 Access to the Work. The Contractor shall provide DSA, the District, the Project Manager, the District's Inspector and the Architect access to the Work, whether in place, preparation and progress and wherever located.

4.14 Facilities and Information for the District's Inspector.

4.14.1 Information to District's Inspector. The Contractor shall furnish the District's Inspector access to the Work for obtaining such information as may be necessary to keep the District's Inspector fully informed respecting the progress, quality and character of the Work and materials, equipment or other items incorporated therein.

4.14.2 Facilities for District's Inspector. Facilities, services or other items to be provided by the Contractor for use by the District's Inspector, if any, shall be as set forth in the Special Conditions. If any such facilities, services or other items are designated in the Special Conditions and the Contractor fails or refuses to provide the same, the District may furnish such facilities, services or other items, with the costs, fees or expenses incurred to furnish the same being deducted from the Contract Price.

4.15 Patents and Royalties. The Contractor and the Surety shall defend, indemnify and hold harmless the District and its agents, employees and officers from any claim, demand or legal proceeding arising out of or pertaining, in any manner, to any actual or claimed infringement of patent rights in connection with performance of the Work.

4.16 Cutting and Patching. The Contractor is responsible for cutting, fitting or patching required to complete the Work or to make the component parts thereof fit together properly. The Contractor shall not damage or endanger any portion of the Work, or the fully or partially completed construction of the District or separate contractors by cutting, patching, excavation or other alteration. The Contractor shall not cut, patch or otherwise alter the construction by the District or separate contractor without the prior written consent of the District or separate contractor thereto, which consent shall not be unreasonably withheld. The Contractor shall not unreasonably withhold consent to the request of the District or separate contractor to cut, patch or otherwise alter the Work.

4.17 Encountering of Hazardous Materials. If the Contractor encounters Hazardous Materials at the Site which have not been rendered harmless or for which there is no provision in the Contract Documents for containment, removal, abatement or handling of such Hazardous Materials, the Contractor shall immediately stop the Work in the affected area, but shall diligently proceed with the Work in all other unaffected areas. Upon encountering such Hazardous Materials, the Contractor shall immediately notify the District's Inspector and the Architect, in writing, of such condition. The Contractor shall proceed with the Work in such affected area only after such Hazardous Materials have been rendered harmless, contained, removed or abated. If such Hazardous Materials are encountered, the Contractor shall be entitled to an adjustment of the Contract Time to the extent that the Work is stopped and Completion of the Work is affected thereby. In no event shall there be an adjustment to the Contract Price solely on account of the Contractor encountering such Hazardous Materials.

4.18 Wage Rates; Employment of Labor.

4.18.1 Determination of Prevailing Rates. Pursuant to the provisions of Division 2, Part 7, Chapter 1, Article 2 of the California Labor Code at §§1770 et seq., the District has obtained from the Director of the Department of Industrial Relations the general prevailing rate of per diem wages and the prevailing rate for holiday and overtime work in the locality in which the Work is to be performed. Holidays shall be as defined in the collective bargaining agreement applicable to each particular craft, classification or type of worker employed under the Contract. Per diem wages include employer payments for health and welfare, pensions, vacation, travel time and

subsistence pay as provided in California Labor Code §1773.8, apprenticeship or other training programs authorized by California Labor Code §3093, and similar purposes when the term “per diem wages” is used herein. Holiday and overtime work, when permitted by law, shall be paid for at the rate of at least one and one-half (1½) times the above specified rate of per diem wages, unless otherwise specified. The Contractor shall post, at appropriate and conspicuous locations on the Site, a schedule showing all determined general prevailing wage rates.

4.18.2 Payment of Prevailing Rates. There shall be paid each worker of the engaged in the Work, not less than the general prevailing wage rate for the classification of Work performed, regardless of any contractual relationship which may be alleged to exist between the Contractor or any Subcontractor and such worker.

4.18.3 Prevailing Rate Penalty. The Contractor shall, as a penalty, forfeit not more than Two Hundred Dollars (\$200.00) to the District for each calendar day or portion thereof, for each worker paid less than the prevailing rates for such work or craft in which such worker is employed for the Work by the Contractor or by any Subcontractor, of any tier, in connection with the Work. The amount of the penalty for failure to pay applicable prevailing wage rates shall be determined and assessed in accordance with the standards established pursuant to Labor Code §1775(a)(2). The amount of the penalty shall be determined based on consideration of both of the following: (i) whether the failure of the Contractor or Subcontractor to pay the correct rate of per diem wages was a good faith mistake and, if so, the error was promptly and voluntarily corrected when brought to the attention of the Contractor or Subcontractor; and (ii) whether the Contractor or Subcontractor has a prior record of failing to meet its prevailing wage obligations. The penalty may not be less than forty dollars (\$40) for each calendar day, or portion thereof, for each worker paid less than the prevailing wage rate, unless the failure of the Contractor or Subcontractor to pay the correct rate of per diem wages was a good faith mistake and, if so, the error was promptly and voluntarily corrected when brought to the attention of the contractor or subcontractor. The penalty may not be less than eighty dollars (\$80) for each calendar day, or portion thereof, for each worker paid less than the prevailing wage rate, if the Contractor or Subcontractor has been assessed penalties within the previous three years for failing to meet its prevailing wage obligations on a separate contract, unless those penalties were subsequently withdrawn or overturned. The penalty may not be less than one hundred twenty dollars (\$120) for each calendar day, or portion thereof, for each worker paid less than the prevailing wage rate, if the Labor Commissioner determines that the violation was willful, as defined in subdivision (c) of Section 1777.1. When the penalty amount due hereunder is collected from the Contractor or Subcontractor, any outstanding wage claim under Chapter 1 (commencing with Section 1720) of Part 7 of Division 2 against that Contractor or Subcontractor shall be satisfied before applying that amount to the penalty imposed on that Contractor or Subcontractor hereunder. The difference between prevailing wage rates and the amount paid to each worker each calendar day, or portion thereof, for which each worker paid less than the prevailing wage rate, shall be paid to each worker by the Contractor.

4.18.4 Certified Payroll Records.

4.18.4.1 Maintenance of Certified Payroll Records. Pursuant to California Labor Code §1776, the Contractor and each Subcontractor, of any tier, shall keep an accurate payroll record, showing the name, address, social security number, work classification, straight time and overtime hours worked each day and week, and the actual per diem wages paid to each person employed for the Work.

4.18.4.2 Submittal of Certified Payroll Records to Labor Commissioner. The Contractor and each Subcontractor shall submit their respective Certified Payroll Records to the Labor Commissioner on forms, in the manner and within the times prescribed by the Labor Commissioner.

4.18.4.3 Inspection of Certified Payroll Records. The Certified Payroll Records of the Contractor and Subcontractors shall be available for inspection at all reasonable hours at the principal office of the Contractor on the following basis: (i) a certified copy

of an employee's payroll record shall be made available for inspection or furnished to such employee or his/her authorized representative on request; (ii) a certified copy of all payroll records shall be made available for inspection or furnished upon request to the District, the Division of Labor Standards Enforcement and the Division of Apprenticeship Standards of the Department of Industrial Relations; (iii) a certified copy of payroll records shall be made available upon request to the public for inspection or copies thereof made; provided, however, that a request by the public shall be made through either the District, the Division of Apprenticeship Standards, or the Division of Labor Standards Enforcement. If the requested Certified Payroll Records have not been provided, the requesting party shall, prior to being provided the records, reimburse the cost of preparation by the Contractor, Subcontractors and the entity through which the request was made; the public shall not be given access to such records at the principal office of the Contractor; (iv) the Contractor shall file a certified copy of the Certified Payroll Records with the entity that requested such records within ten (10) days after receipt of a written request; (v) any copy of records made available for inspection as copies and furnished upon request to the public or any public agency by the District, the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement shall be marked or obliterated in such a manner as to prevent disclosure of an individual's name, address and social security number. The name and address of the Contractor or any Subcontractor, of any tier, performing a part of the Work shall not be marked or obliterated. The Contractor shall inform the District of the location of Certified Payroll Records, including the street address, city and county and shall, within five (5) working days, provide a notice of a change or location and address. In the event of noncompliance with the requirements of this Article 4.18.4, the Contractor shall have ten (10) days in which to comply, subsequent to receipt of written notice specifying in what respects the Contractor must comply herewith. Should noncompliance still be evident after such 10-day period, the Contractor shall, as a penalty to the District, forfeit One Hundred Dollars (\$100.00) for each calendar day, or portion thereof, for each worker, until strict compliance is effectuated. Upon the request of the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement, such penalties shall be withheld from any portion of the Contract Price then or thereafter due the Contractor. The Contractor is solely responsible for compliance with the foregoing provisions.

4.18.5 Hours of Work.

4.18.5.1 Limits on Hours of Work. Pursuant to California Labor Code §1810, eight (8) hours of labor shall constitute a legal day's work. Pursuant to California Labor Code §1811, the time of service of any worker employed at any time by the Contractor or by a Subcontractor, of any tier, upon the Work or upon any part of the Work, is limited and restricted to eight (8) hours during any one calendar day and forty (40) hours during any one calendar week, except as hereafter provided. Notwithstanding the foregoing provisions, Work performed by employees of Contractor or any Subcontractor, of any tier, in excess of eight (8) hours per day and forty (40) hours during any one week, shall be permitted upon compensation for all hours worked in excess of eight (8) hours per day at not less than one and one-half (12) times the basic rate of pay.

4.18.5.2 Penalty for Excess Hours. The Contractor shall pay to the District a penalty of Twenty-five Dollars (\$25.00) for each worker employed on the Work by the Contractor or any Subcontractor, of any tier, for each calendar day during which such worker is required or permitted to work more than eight (8) hours in any calendar day and forty (40) hours in any one calendar week, in violation of the provisions of the California Labor Code, unless compensation to the worker so employed by the Contractor is not less than one and one-half (12) times the basic rate of pay for all hours worked in excess of eight (8) hours per day.

4.18.5.3 Contractor Responsibility. Any Work performed by workers necessary to

be performed after regular working hours or on Sundays or other holidays shall be performed without adjustment to the Contract Price or any other additional expense to the District.

4.18.6 Apprentices.

4.18.6.1 Employment of Apprentices. Any apprentices employed to perform any of the Work shall be paid the standard wage paid to apprentices under the regulations of the craft or trade for which such apprentice is employed, and such individual shall be employed only for the work of the craft or trade to which such individual is registered. Only apprentices, as defined in California Labor Code §3077 who are in training under apprenticeship standards and written apprenticeship agreements under California Labor Code §§3070 et seq. are eligible to be employed for the Work. The employment and training of each apprentice shall be in accordance with the provisions of the apprenticeship standards and apprentice agreements under which such apprentice is training.

4.18.6.2 Apprenticeship Certificate. When the Contractor or any Subcontractor, of any tier, in performing any of the Work employs workers in any Apprenticeable Craft or Trade, the Contractor and such Subcontractor shall apply to the Joint Apprenticeship Committee administering the apprenticeship standards of the craft or trade in the area of the site of the Work for a certificate approving the Contractor or such Subcontractor under the apprenticeship standards for the employment and training of apprentices in the area or industry affected, provided, however, that the approval as established by the Joint Apprenticeship Committee or Committees shall be subject to the approval of the Administrator of Apprenticeship. The Joint Apprenticeship Committee or Committees, subsequent to approving the Contractor or Subcontractor, shall arrange for the dispatch of apprentices to the Contractor or such Subcontractor in order to comply with California Labor Code §1777.5. The Contractor and Subcontractors shall submit contract award information to the applicable Joint Apprenticeship Committee which shall include an estimate of journeyman hours to be performed under the Contract, the number of apprentices to be employed, and the approximate dates the apprentices will be employed. There shall be an affirmative duty upon the Joint Apprenticeship Committee or Committees, administering the apprenticeship standards of the crafts or trades in the area of the site of the Work, to ensure equal employment and affirmative action and apprenticeship for women and minorities. Contractors or Subcontractors shall not be required to submit individual applications for approval to local Joint Apprenticeship Committees provided they are already covered by the local apprenticeship standards.

4.18.6.3 Ratio of Apprentices to Journeymen. The ratio of Work performed by apprentices to journeymen, who shall be employed in the Work, may be the ratio stipulated in the apprenticeship standards under which the Joint Apprenticeship Committee operates, but in no case shall the ratio be less than one hour of apprentice work for each five hours of labor performed by a journeyman, except as otherwise provided in California Labor Code §1777.5. The minimum ratio for the land surveyor classification shall not be less than one apprentice for each five journeymen. Any ratio shall apply during any day or portion of a day when any journeyman, or the higher standard stipulated by the Joint Apprenticeship Committee, is employed at the site of the Work and shall be computed on the basis of the hours worked during the day by journeymen so employed, except for the land surveyor classification. The Contractor shall employ apprentices for the number of hours computed as above before the completion of the Work. The Contractor shall, however, endeavor, to the greatest extent possible, to employ apprentices during the same time period that the journeymen in the same craft or trade are employed at the site of the Work. Where an hourly apprenticeship ratio is not feasible for a particular craft or trade, the Division of Apprenticeship Standards, upon application of a Joint Apprenticeship Committee, may order a minimum

ratio of not less than one apprentice for each five journeymen in a craft or trade classification. The Contractor or any Subcontractor covered by this Article and California Labor Code §1777.5, upon the issuance of the approval certificate, or if it has been previously approved in such craft or trade, shall employ the number of apprentices or the ratio of apprentices to journeymen stipulated in the apprenticeship standards. Upon proper showing by the Contractor that it employs apprentices in such craft or trade in the State of California on all of its contracts on an annual average of not less than one apprentice to each five journeymen, the Division of Apprenticeship Standards may grant a certificate exempting the Contractor from the 1-to-5 ratio as set forth in this Article and California Labor Code §1777.5. This Article shall not apply to contracts of general contractors, or to contracts of specialty contractors not bidding for work through a general or prime contractor, involving less than Thirty Thousand Dollars (\$30,000.00) or twenty (20) working days. The term "Apprenticeable Craft or Trade," as used herein shall mean a craft or trade determined as an Apprenticeable occupation in accordance with rules and regulations prescribed by the Apprenticeship Council.

4.18.6.4 Exemption From Ratios. The Joint Apprenticeship Committee shall have the discretion to grant a certificate, which shall be subject to the approval of the Administrator of Apprenticeship, exempting the Contractor from the 1-to-5 ratio set forth in this Article when it finds that any one of the following conditions are met: (i) unemployment for the previous three-month period in such area exceeds an average of fifteen percent (15%) or; (ii) the number of apprentices in training in such area exceeds a ratio of 1-to-5 in relation to journeymen, or; (iii) the Apprenticeable Craft or Trade is replacing at least one-thirtieth (1/30) of its journeymen annually through apprenticeship training, either on a statewide basis or on a local basis, or; (iv) if assignment of an apprentice to any Work performed under the Contract Documents would create a condition which would jeopardize such apprentice's life or the life, safety or property of fellow employees or the public at large, or if the specific task to which the apprentice is to be assigned is of such a nature that training cannot be provided by a journeyman. When such exemptions from the 1-to-5 ratio between apprentices and journeymen are granted to an organization which represents contractors in a specific trade on a local or statewide basis, the member contractors will not be required to submit individual applications for approval to local Joint Apprenticeship Committees, provided they are already covered by the local apprenticeship standards.

4.18.6.5 Contributions to Trust Funds. The Contractor or any Subcontractor, of any tier, who, performs any of the Work by employment of journeymen or apprentices in any Apprenticeable Craft or Trade and who is not contributing to a fund or funds to administer and conduct the apprenticeship program in any such craft or trade in the area of the site of the Work, to which fund or funds other contractors in the area of the site of the Work are contributing, shall contribute to the fund or funds in each craft or trade in which it employs journeymen or apprentices in the same amount or upon the same basis and in the same manner as the other contractors do, but where the trust fund administrators are unable to accept such funds, contractors not signatory to the trust agreement shall pay a like amount to the California Apprenticeship Council. The Division of Labor Standards Enforcement is authorized to enforce the payment of such contributions to such fund(s) as set forth in California Labor Code §227. Such contributions shall not result in an increase in the Contract Price.

4.18.6.6 Contractor's Compliance. The responsibility of compliance with this Article for all Apprenticeable Trades or Crafts is solely and exclusively that of the Contractor. All decisions of the Joint Apprenticeship Committee(s) under this Article are subject to the provisions of California Labor Code §3081. In the event the Contractor willfully fails to comply with the provisions of this Article and California Labor Code §1777.5, pursuant to California Labor Code §1777.7, the Contractor shall: (i) be denied

the right to bid on any public works contract for a period of one (1) year from the date the determination of non-compliance is made by the Administrator of Apprenticeship; and (ii) forfeit, as a civil penalty, Fifty Dollars (\$50.00) for each calendar day of noncompliance. Notwithstanding the provisions of California Labor Code §1727, upon receipt of such determination, the District shall withhold such amount from the Contract Price then due or to become due. Any such determination shall be issued after a full investigation, a fair and impartial hearing, and reasonable notice thereof in accordance with reasonable rules and procedures prescribed by the California Apprenticeship Council. Any funds withheld by the District pursuant to this Article shall be deposited in the General Fund or other similar fund of the District. The interpretation and enforcement of California Labor Code §§1777.5 and 1777.7 shall be in accordance with the rules and procedures of the California Apprenticeship Council.

4.18.7 Employment of Independent Contractors. Pursuant to California Labor Code §1021.5, Contractor shall not willingly and knowingly enter into any agreement with any person, as an independent contractor, to provide any services in connection with the Work where the services provided or to be provided requires that such person hold a valid contractors' license issued pursuant to California Business and Professions Code §§7000 et seq. and such person does not meet the burden of proof of his/her independent contractor status pursuant to California Labor Code §2750.5. In the event that Contractor shall employ any person in violation of the foregoing, Contractor shall be subject to the civil penalties under California Labor Code §1021.5 and any other penalty provided by law. In addition to the penalties provided under California Labor Code §1021.5, Contractor's violation of this Article 4.18.7 or the provisions of California Labor Code §1021.5 shall be deemed an event of Contractor's default under Article 15.1 of these General Conditions. The Contractor shall require Subcontractors performing or providing any portion of the Work to adhere to and comply with the foregoing provisions.

4.19 Assignment of Antitrust Claims. Pursuant to California Government Code §4551, the Contractor and its Subcontractor(s), of any tier, hereby offers and agrees to assign to the District all rights, title and interest in and to all causes of action they may have under Section 4 of the Clayton Act, (15 U.S.C. §15) or under the Cartwright Act (California Business and Professions Code §§16700 et seq.), arising from purchases of goods, services or materials hereunder or any Subcontract. This assignment shall be made and become effective at the time the District tenders Final Payment to the Contractor, without further acknowledgment by the parties. If the District receives, either through judgment or settlement, a monetary recovery in connection with a cause of action assigned under California Government Code §§4550 et seq., the assignor thereof shall be entitled to receive reimbursement for actual legal costs incurred and may, upon demand, recover from the District any portion of the recovery, including treble damages, attributable to overcharges that were paid by the assignor but were not paid by the District as part of the Contract Price, less the expenses incurred by the District in obtaining that portion of the recovery. Upon demand in writing by the assignor, the District shall, within one year from such demand, reassign the cause of action assigned pursuant to this Article if the assignor has been or may have been injured by the violation of law for which the cause of action arose: and (i) the District has not been injured thereby; or (ii) the District declines to file a court action for the cause of action.

4.20 Limitations Upon Site Activities. Except in the circumstances of an emergency, no construction activities shall be permitted at or about the Site except during the District's hours and days set forth in the Special Conditions. Work performed outside of the hours and days noted in the Special Conditions will not result in adjustment of the Contract Time or the Contract Price; unless Work outside of the hours and days noted in the Special Conditions is expressly authorized by the District.

4.21 Progress Reports: DSA Verified Reports.

4.21.1 DSA Verified Reports: Contractor Actions. A material obligation of the Contractor is the completion by the Contractor of all actions and activities which by the Contract Documents or by the Laws are the responsibility of the Contractor relating to DSA reporting requirements pursuant to Education Code §81141 (including amendments thereto) and issuance of DSA's Certificate of Compliance for the Project pursuant to Education Code §81147 (including amendments thereto) upon completion of the Work. The foregoing shall include without limitation, the timely preparation, completion and filing of Verified Reports during Project construction and the filing of the Final Verified Report with DSA within ten (10) days of the determination of Final Completion. Concurrently with submittal to DSA, the Contractor shall provide the District, District's Inspector, Architect and Construction Manager with copies of all Verified Reports completed by the Contractor and submitted to DSA.

4.21.2 District Withholdings From Final Payment. The completion and filing of the Final Verified Report with DSA by the Contractor is an express condition precedent to the District's disbursement of the Final Payment. If the Contractor fails to prepare and file the Final Verified Report with DSA within ten (10) days of the determination of Final Completion, the District may in the sole and exclusive discretion of the District retain and withhold an amount not to exceed ten percent (10%) of the Final Payment from disbursement to the Contractor as damages for the failure of the Contractor to have timely and completely discharged its obligations hereunder. The Contractor acknowledges and agrees that the foregoing withholdings by the District is a reasonable estimate of the damages and other losses the District will sustain due to the failure of the Contractor to have timely and fully discharged its obligations hereunder.

4.21.3 Progress Reports. Progress Reports shall be completed by the Contractor for each day of construction activities at the Site and submitted to the District or Project Manager not later than 9:00 A.M. of the ensuing business day.

ARTICLE 5: SUBCONTRACTORS

5.1 Subcontracts. Any Work performed for the Contractor by a Subcontractor shall be pursuant to a written agreement between the Contractor and such Subcontractor which specifically incorporates by reference the Contract Documents and which specifically binds the Subcontractor to the applicable terms and conditions of the Contract Documents, including without limitation, the policies of insurance required under Article 6 of these General Conditions and obligates the Subcontractor to assume toward the Contractor all the obligations and responsibilities of the Contractor which by the Contract Documents the Contractor assumes toward the District and the Architect. The foregoing notwithstanding, no contractual relationship shall exist, or be deemed to exist, between any Subcontractor and the District, unless the Contract is terminated and District, in writing, elects to assume the Subcontract. Each Subcontract for a portion of the Work shall provide that such Subcontract may be assigned to the District if the Contract is terminated by the District pursuant to Article 15 hereof, subject to the prior rights of the Surety if the District terminates the Contract for the Contractor's default. The Contractor shall provide to the District copies of all executed Subcontracts and Purchase Orders to which Contractor is a party within thirty (30) days after Contractor's execution of the Agreement. During performance of the Work, the Contractor shall, from time to time, as and when requested by the District, the Architect or the Project Manager provide the District with copies of any and all Subcontracts or Purchase Orders relating to the Work and all modifications thereto. The Contractor's failure or refusal, for any reason, to provide copies of such Subcontracts or Purchase Orders in accordance with the two preceding sentences is Contractor's default of a material term of the Contract Documents.

5.2 Subcontractor DIR Contractor Registration.

5.2.1 No Subcontractor Performance of Work Without DIR Registration. No portion of the Work is permitted to be performed by a Subcontractor unless the Subcontractor is a DIR

Registered contractor. The foregoing DIR contractor registration requirement is applicable for all Subcontractors, including without limitation, lower tier Subcontractors and Subcontractors who are not identified in the Contractor's Subcontractors List.

5.2.2 Contractor Obligation to Verify Subcontractor DIR Registration Status. An affirmative and on-going obligation of the Contractor under the Contract Documents is the Contractor's verification that all Subcontractors are at all times during performance of the Work in full and strict compliance with DIR contractor registration requirements. The Contractor shall not permit or allow any Subcontractor to perform any Work without the Contractor's verification that the Subcontractor is in full and strict compliance with DIR contractor registration requirements.

5.2.3 Contractor Obligation to Request Substitution of Listed Subcontractor Who Is Not DIR Registered Contractor. If any Subcontractor identified in the Contractor's Subcontractors List submitted with the Contractor's proposal for the Work is not a DIR registered contractor at the time of opening of proposals for the Work or if a Subcontractor's DIR contractor registration lapses prior to or during a Subcontractor's performance of Work, the Contractor shall request the District's consent to substitute the Subcontractor who is not a DIR registered contractor pursuant to Labor Code §1771.1(c)(3) and/or Labor Code §1771.1(d).

5.3 Substitution of Listed Subcontractor.

5.3.1 Substitution Process. Request of the Contractor to substitute a listed Subcontractor will be considered only if in strict conformity with this Article 5.2 and California Public Contract Code §4107. All costs incurred by the District, including without limitation, costs of the District's Inspector, the Architect, the Project Manager or attorneys' fees in the review and evaluation of a request to substitute a listed Subcontractor shall be borne by the Contractor; such costs may be deducted by the District from the Contract Price then or thereafter due the Contractor.

5.3.2 Responsibilities of Contractor Upon Substitution of Subcontractor. The District's consent to Contractor's substitution of a listed Subcontractor shall not relieve Contractor from its obligation to complete the Work within the Contract Time and for the Contract Price. The substitution of a listed Subcontractor shall not, under any circumstance, result in, or give rise to any to any increase of the Contract Price or the Contract Time on account of such substitution. If the District consents to substitution of a listed Subcontractor, the Architect shall determine the extent to which, if any, revised or additional Submittals will be required of the newly substituted Subcontractor ("Substituted Subcontractor"). If the Architect determines that revised or additional Submittals are required of a Substituted Subcontractor, the Architect shall promptly notify the Contractor, in writing, of such requirement. In such event, revised or additional Submittals shall be submitted to Architect not later than thirty (30) days following the date of the Architect's written notice to the Contractor pursuant to the foregoing sentence; provided that if in the reasonable and good faith judgment of the Architect, the progress of the Work or completion of the Work requires submission of additional or revised Submittals by a Substituted Subcontractor in less than thirty (30) days, the Architect shall so state in its written notice to the Contractor. If the revised or additional Submittals are not submitted by Contractor within thirty (30) days, or such earlier time as determined by the Architect pursuant to the preceding sentence, following the Architect's written notice of the requirement for revised or additional Submittals, Contractor shall be subject to the per diem assessments for late Submittals as set forth in Article 4.7.2.1 of these General Conditions. Any revised or additional Submittals required pursuant to this Article 5.3.2 shall conform to the requirements of Article 4.7 of these General Conditions. Contractor shall reimburse the District for all fees and costs, including without limitation fees of the Architect, the District's administrative costs and DSA fees, incurred or associated with the processing, review and evaluation of any revised or additional Submittals required pursuant to this Article 5.3.2; the District may deduct such fees and costs from any portion of the Contract Price then or thereafter due the Contractor. In the event that additional or revised Submittals are required pursuant to this Article 5.3.2, such requirement shall not result in an increase to the Contract Time or the Contract Price.

- 5.4 Subcontractors' Work. Whenever the Work of a Subcontractor is dependent upon the Work of the Contractor or another Subcontractor, the Contractor shall require the Subcontractor to: (i) coordinate its Work with the dependent Work; (ii) provide necessary dependent data and requirements; (iii) supply and/or install items to build into the dependent Work of others; (iv) make appropriate provisions for dependent Work of others; (v) carefully examine and understand the portions of the Contract Documents (including Drawings, Specifications and Field Clarifications) and Submittals relating to the dependent Work; and (vi) examine the existing dependent Work and verify that the dependent Work is in proper condition for the Subcontractor's Work. If the dependent Work is not in a proper condition, the Subcontractor shall notify the Contractor in writing and not proceed with the Subcontractor's Work until the dependent Work has been corrected or replaced and is in a proper condition for the Subcontractor's Work.

ARTICLE 6: INSURANCE; INDEMNITY; BONDS

- 6.1 Workers' Compensation Insurance; Employer's Liability Insurance. The Contractor shall purchase and maintain Workers' Compensation Insurance as will protect the Contractor from claims under workers' or workmen's compensation, disability benefit and other similar employee benefit acts which are applicable to the Work to be performed, whether such operations be by the Contractor or by a Subcontractor or by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable. Contractor shall purchase and maintain Employer's Liability Insurance covering bodily injury (including death) by accident or disease to any employee which arises out of the employee's employment by Contractor. The Employer's Liability Insurance required of Contractor hereunder may be obtained by Contractor as a separate policy of insurance or as an additional coverage under the Workers' Compensation Insurance required to be obtained and maintained by Contractor hereunder. The limits of liability for the Employer's Liability Insurance required hereunder shall be as set forth in the Special Conditions.
- 6.2 Commercial General Liability. The Contractor shall purchase and maintain Commercial General Liability, including coverage for the types of claims set forth below which may arise out of or result from Contractor's performance of the Work: (i) claims for damages because of bodily injury, sickness or disease or death of any person other than the Contractor's employees; (ii) claims for damages insured by usual personal injury liability coverage; (iii) claims for damages, other than to the Work itself, because of injury to or destruction of tangible property, including loss of use resulting therefrom; (iv) claims for damages because of bodily injury, death of a person or property damages arising out of ownership, maintenance or use of a motor vehicle; (v) contractual liability insurance applicable to the Contractor's obligations under the Contract Documents; (vi) Completed Operations; and (vii) Contractor's Pollution Liability.
- 6.3 Builder's Risk "All-Risk" Insurance. The Contractor, during the progress of the Work and until Final Acceptance of all Work by the District, shall maintain Builder's Risk "All-Risk" Completed Value Insurance Coverage on all insurable Work included under the Contract Documents which coverage is to provide extended coverage and insurance against vandalism and malicious mischief, perils of fire, sprinkler leakage, civil authority, sonic boom, collapse and flood upon the entire Work which is the subject of the Contract Documents, and including completed Work and Work in progress to the full insurable value thereof. Contractor's Builders Risk Insurance shall include coverage and insurance against the perils of earthquake if so indicated in the Special Conditions. Such insurance shall include the District as an additional named insured, and any other person with an insurable interest designated by the District as an additional named insured. The risk of damage to the Work due to the perils covered by the Builder's Risk "All Risk" Insurance, as well as any other hazard which might result in damage to the Work, is that of the Contractor and the Surety, and no claims for such loss or damage shall be recognized by the District, nor will such loss or damage excuse the complete and satisfactory performance of the Contract by the Contractor.

6.4 Insurance Requirements.

6.4.1 Coverage Limits. Minimum coverage limits for each policy of insurance required of the Contractor hereunder are set forth in the Special Conditions.

6.4.2 Deductibles. The Contractor is solely and exclusively responsible for the payment of deductibles, if any, under any policy of insurance required of the Contractor hereunder, without adjustment to the Contract Price on account thereof.

6.4.3 No Modification or Cancellation Without Prior Notice to District. Coverages afforded under policies of insurance required of the Contractor shall include provisions to the effect that coverage thereunder will not be canceled or allowed to expire until at least thirty (30) days prior written notice has been given to the District. Should any policy of insurance be canceled before Final Acceptance of the Work by the District and the Contractor fails to immediately procure replacement insurance as required, the District reserves the right to procure such insurance and to deduct the premium cost thereof and other costs incurred by the District in connection therewith from any sum then or thereafter due the Contractor under the Contract Documents.

6.4.4 District Additional Insured. The District shall be an additional insured under the Contractor's Commercial Liability and Builders Risk policies of insurance. The additional Insured acknowledgement shall be submitted as a separate declaration from the Contractor's insurance provider (ACCORD form modifications are not acceptable).

6.4.5 Certificates of Insurance. Prior to commencing the Work, Contractor shall deliver to the District Certificates of Insurance evidencing the insurance coverages required by the Contract Documents. Failure or refusal of the Contractor to so deliver Certificates of Insurance may be deemed by the District to be a default of a material obligation of the Contractor under the Contract Documents, and thereupon the District may proceed to exercise any right or remedy provided for under the Contract Documents or at law. The Contractor shall, from time to time, furnish the District, when requested, with satisfactory proof of coverage of each type of insurance required by the Contract Documents; failure of the Contractor to comply with the District's request may be deemed by the District to be a default of a material obligation of the Contractor under the Contract Documents.

6.5 Subcontractors' Insurance. Contractor shall require that every Subcontractor, to obtain and maintain the policies of insurance set forth in Articles 6.1, 6.2 and 6.4 of these General Conditions; the coverages and limits of liability of such policies of insurance to be obtained and maintained by Subcontractors shall be as set forth in the Special Conditions. The policies of insurance to be obtained and maintained by Subcontractors hereunder are in addition to, and not in lieu of, Contractor obtaining and maintaining such policies of insurance. Each of the policies of insurance obtained and maintained by a Subcontractor hereunder shall conform with the requirements of this Article 6. Upon request of the District, Contractor shall promptly deliver to the District Certificates of Insurance evidencing that the Subcontractors have obtained and maintained policies of insurance in conformity with the requirements of this Article 6. Failure or refusal of the Contractor to provide the District with Subcontractors' Certificates of Insurance evidencing the insurance coverages required hereunder is a material default of Contractor hereunder.

6.6 Maintenance of Insurance. Any insurance bearing on the adequacy of performance of Work shall be maintained after the District's Final Acceptance of all of the Work for the full one year correction of Work period and any longer specific guarantee or warranty periods set forth in the Contract Documents. Should such insurance be canceled before the end of any such periods and the Contractor fails to immediately procure replacement insurance as specified, the District reserves the right to procure such insurance and to charge the cost thereof to the Contractor. Nothing contained in these insurance requirements is to be construed as limiting the extent of the Contractor's responsibility for payment of damages resulting from its operations or performance of the Work under the Contract Documents, including without limitation the Contractor's obligation to pay Liquidated Damages. In no instance will the District's exercise of its option to occupy and use completed

portions of the Work relieve the Contractor of its obligation to maintain insurance required under this Article until the date of Final Acceptance of the Work by the District, or such time thereafter as required by the Contract Documents. The insurer providing any insurance coverage required hereunder shall be to the reasonable satisfaction of the District.

- 6.7 Contractor's Insurance Primary. All insurance and the coverages thereunder required to be obtained and maintained by Contractor hereunder, if overlapping with any policy of insurance maintained by the District, shall be deemed to be primary and non-contributing with any policy maintained by the District and any policy or coverage thereunder maintained by District shall be deemed excess insurance. To the extent that the District maintains a policy of insurance covering property damage arising out of the perils of fire or other casualty covered by the Contractor's Builder's Risk Insurance or the Comprehensive General Liability Insurance of the Contractor or any Subcontractor, the District, Contractor and all Subcontractors waive rights of subrogation against the others. The costs for obtaining and maintaining the insurance coverages required herein shall be included in the Contract Price.
- 6.8 Indemnity. Unless arising solely out of the active negligence, gross negligence or willful misconduct the District or the Architect, the Contractor shall indemnify, defend and hold harmless the Indemnified Parties who are: (i) the District and its Board of Trustees, officers, employees, agents and representatives (including the District's Inspector); (ii) the Architect its respective agents and employees; and (iii) if one is designated by the District for the Work, the Project Manager and its agents and employees. The Contractor's obligations hereunder includes indemnity, defense and hold harmless of the Indemnified Parties from and against any and all damages, losses, claims, demands or liabilities whether for damages, losses or other relief, including, without limitation attorneys' fees and costs which arise, in whole or in part, from the Work, the Contract Documents or the negligent, grossly negligent or willful acts, omissions or other conduct of the Contractor, any Subcontractor or any person or entity engaged by them for the Work. The Contractor's obligations under the foregoing include without limitation: (i) injuries to or death of persons; (ii) damage to property; or (iii) theft or loss of property; (iv) Stop Payment Notice claims asserted by any person or entity in connection with the Work; and (v) other losses, liabilities, damages or costs resulting from, in whole or part, any acts, omissions or other conduct of Contractor, any of Contractor's Subcontractors, of any tier, or any other person or entity employed directly or indirectly by Contractor in connection with the Work and their respective agents, officers or employees. If any action or proceeding, whether judicial, administrative, arbitration or otherwise, shall be commenced on account of any claim, demand or liability subject to Contractor's obligations hereunder, and such action or proceeding names any of the Indemnified Parties as a party thereto, the Contractor shall, at its sole cost and expense, defend the named Indemnified Parties in such action or proceeding with counsel reasonably satisfactory to the named Indemnified Parties. In the event that there shall be any judgment, award, ruling, settlement, or other relief arising out of any such action or proceeding to which any of the Indemnified Parties are bound by, Contractor shall pay, satisfy or otherwise discharge any such judgment, award, ruling, settlement or relief; Contractor shall indemnify and hold harmless the Indemnified Parties from any and all liability or responsibility arising out of any such judgment, award, ruling, settlement or relief. The Contractor's obligations hereunder are binding upon Contractor's Performance Bond Surety and these obligations shall survive notwithstanding Contractor's completion of the Work or the termination of the Contract.
- 6.9 Payment Bond; Performance Bond. Prior to commencement of the Work, the Contractor shall furnish a Performance Bond as security for Contractor's faithful performance of the Contract and a Labor and Material Payment Bond as security for payment of persons or entities performing work, labor or furnishing materials in connection with Contractor's performance of the Work under the Contract Documents. Unless otherwise stated in the Special Conditions, the amounts of the Performance Bond and the Payment Bond required hereunder shall be one hundred percent (100%) of the Contract Price. Said Labor and Material Payment Bond and Performance Bond shall be in the form

and content set forth in the Contract Documents. The failure or refusal of the Contractor to furnish either the Performance Bond or the Labor and Material Payment Bond in strict conformity with this Article 6.9 may be deemed by the District as a default by the Contractor of a material obligation hereunder. The Surety on any bond required under the Contract Documents shall be an Admitted Surety Insurer as that term is defined in California Code of Civil Procedure §995.120.

ARTICLE 7: CONTRACT TIME

7.1 Completion of the Work Within Contract Time. Unless otherwise expressly provided in the Contract Documents, the Contract Time is the period of time, including authorized adjustments thereto, allotted in the Contract Documents for achieving Completion of the Work. The date for commencement of the Work is the date established by the Notice to Proceed issued by the District pursuant to the Agreement, which shall not be postponed by the failure to act of the Contractor or of persons or entities for whom the Contractor is responsible. The date of Completion is the date certified by the Architect and the District's Inspector as such in accordance with the Contract Documents.

7.2 Progress and Completion of the Work.

7.1.1 Time of Essence. Time limits stated in the Contract Documents are of the essence. By executing the Agreement, the Contractor confirms that the Contract Time is a reasonable period for performing and achieving Completion of the Work. The Contractor shall employ and supply a sufficient force of workers, material and equipment, and prosecute the Work with diligence so as to maintain progress, to prevent Work stoppage and to achieve Completion of the Work within the Contract Time.

7.1.2 One Hundred Percent Completion. Completion is that stage in the progress of the Work when the Work or any designated portion thereof (whether described as milestones, phases, segments or other similar terms) is complete in accordance with the Contract Documents so the District can occupy or use the Work or designated portion thereof for its intended purpose. Completion shall be determined by the Architect, Project Manager, if any, and the District's Inspector upon request by the Contractor in accordance with the Contract Documents. The good faith and reasonable determination of Completion by the District's Inspector, Project Manager, if any and the Architect shall be controlling and final.

7.1.3 Correction or Completion of the Work After One Hundred Percent Completion.

7.1.3.1 Punchlist. Upon achieving Completion of the Work, the District, the District's Inspector, the Project Manager, if any, the Architect and the Contractor shall jointly inspect the Work and prepare a comprehensive list of items of the Work to be corrected or completed by the Contractor ("the Punchlist"). The exclusion of, or failure to include, any item on the Punchlist shall not alter or limit the obligation of the Contractor to complete or correct any portion of the Work in accordance with the Contract Documents.

7.1.3.2 Time for Completing Punchlist Items. In addition to establishing the Punchlist items pursuant to Article 7.2.3.1, the Project Manager, if any, Contractor and Architect shall, after the joint inspection, establish a reasonable time for Contractor's completion of all Punchlist items. If mutual agreement is not reached to establish the time for the Contractor's completion of Punchlist items, the Architect shall determine such time, and in such event, the time determined by the Architect shall be final and binding upon the District and Contractor so long as the Architect's determination is made in good faith. The Contractor shall promptly and diligently proceed to complete all Punchlist items within the time established. If the Contractor fails or refuses, for any reason, to complete all Punchlist items within the time established, Contractor shall be subject to assessment of Liquidated Damages in accordance with Article 7.4 hereof. The foregoing notwithstanding, if the Contractor fails or refuses to complete all Punchlist items, the District may in its sole and exclusive discretion and without further notice to Contractor, elect to cause the completion of all remaining Punchlist items provided, however that

such election by the District is in addition to and not in lieu of any other right or remedy of the District under the Contract Documents or at law. If the District elects to complete Punchlist items of the Work, pursuant to the foregoing, Contractor shall be responsible for all costs incurred by the District in connection herewith and the District may deduct such costs from the Contract Price then or thereafter due the Contractor, if these costs exceed the remaining Contract Price due to the Contractor, the Contractor and the Performance Bond Surety are jointly and severally liable to District for any such excess costs.

7.1.4 Final Completion. Final Completion is that stage of the Work when all Work has been completed in accordance with the Contract Documents, including without limitation, all Punchlist items noted upon One Hundred Percent Completion, and the Contract has been otherwise fully performed by the Contractor. Final Completion shall be determined by the Architect, Project Manager, if any and the District's Inspector upon request of the Contractor. The good faith and reasonable determination of Final Completion by the District's Inspector, Project Manager, if any, and the Architect shall be controlling and final.

7.1.5 Contractor Responsibility for Multiple Inspections. If the Contractor requests determination of Completion or Final Completion by the District's Inspector, Project Manager, if any, and the Architect and it is determined by the District's Inspector, Project Manager, if any, or the Architect that the Work does not then justify certification of Completion or Final Completion and re-inspection is required at a subsequent time to make such determination, the Contractor shall be responsible for all costs of such re-inspection, including without limitation, the fees of the Architect, Project Manager, if any, and the District's Inspector. The District may deduct such costs from the Contract Price then due or thereafter due to the Contractor.

7.1.6 Final Acceptance. Final Acceptance of the Work shall occur upon approval of the Work by the District's Board of Trustees; such approval shall be submitted for adoption at the next regularly scheduled meeting of the District's Board of Trustees after the determination of Final Completion. The commencement of any warranty or guarantee period under the Contract Documents is the date upon which the District's Board of Trustees approves of the Final Acceptance of the Work.

7.2 Construction Schedule.

7.2.1 Submittal of Preliminary Construction Schedule. Within five (5) days following execution of the Agreement, the Contractor shall prepare and submit to the District, the Project Manager, if any, and the Architect a Preliminary Construction Schedule indicating, in graphic form, the estimated rate of progress and sequence of all Work required under the Contract Documents. The purpose of the Preliminary Construction Schedule is to assure adequate planning and execution of the Work so that it is completed within the Contract Time and to permit evaluation of the progress of the Work. Unless otherwise provided in the Special Conditions, the Construction Schedules required under this Article 7 shall; (i) be prepared with a commercially available computer software program in a critical path format; (ii) indicate the date(s) for commencement and completion of various portions of the Work including without limitation, procurement, fabrication and delivery of major items, materials or equipment; (iii) indicate manpower and other resources required for completion of each Construction Schedule activity; (iv) indicate costs for completion of each Construction Schedule activity; (v) identify each Submittal required by the Contract Documents, the date for the Contractor's submission of each Submittal and the date for the return of the reviewed Submittal to the Contractor. The Contractor may submit a Preliminary Construction Schedule depicting completion of the Work in a duration shorter than the Contract Time; provided that such Preliminary Construction Schedule shall not be a basis for adjustment to the Contract Price in the event that completion of the Work shall occur after the time depicted therein, nor shall such Preliminary Construction Schedule be the basis for any extension of the Contract Time, the Contractor's entitlement to any extension of

the Contract Time shall be based upon the Contract Time and not on any shorter duration which may be depicted in the Contractor's Preliminary Construction Schedule. If the Construction Schedules required under this Article 7.3 incorporate therein any "float" time, such float shall be deemed to jointly belong to and owned by the District and the Contractor. As used herein, "float time" shall be deemed to refer to the time between earliest finish date and the latest finish date of each activity shown on the Construction Schedule.

7.2.2 Review of Preliminary Construction Schedule. The District, the Project Manager, if any, and the Architect shall review the Preliminary Construction Schedule submitted by the Contractor pursuant to Article 7.3.1 above for conformity with the requirements of the Contract Documents. Within fifteen (15) days of the date of receipt of the Preliminary Construction Schedule, the Preliminary Construction Schedule will be returned to the Contractor with comments to the form or content thereof. Review of the Preliminary Construction Schedule and any comments thereto by the District, the Project Manager and/or the Architect shall not be deemed to be the assumption of construction means, methods or sequences by the District, the Project Manager or the Architect, all of which remain the Contractor's obligations under the Contract Documents.

7.2.3 Preparation and Submittal of Contract Construction Schedule. Within ten (10) days of the District's return of the Preliminary Construction Schedule to the Contractor pursuant to Article 7.3.2 above, the Contractor shall prepare and submit to the Architect and the Project Manager, if any, the Construction Schedule which incorporates therein the comments to the Preliminary Construction Schedule. Upon the Contractor's submittal of such Construction Schedule, the District, the Project Manager and the Architect shall review the same for purposes of determining conformity with the requirements of the Contract Documents. Within fifteen (15) days of the receipt of the Construction Schedule, the District will approve such Construction Schedule or will return the same to the Contractor with comments to the form or content. In the event there are comments to the form or content thereof, the Contractor, shall within seven (7) days of receipt of such comments, revise and resubmit the Construction Schedule incorporating therein such comments. Upon the District's approval of the form and content of a Construction Schedule, the same shall be deemed the "Approved Construction Schedule." The District's approval of a Construction Schedule shall be for the sole and limited purpose of determining conformity with the requirements of the Contract Documents. By the Approved Construction Schedule, the District shall not be deemed to have exercised control over, or approval of, construction means, methods or sequences, all of which remain the responsibility and obligation of the Contractor in accordance with the terms of the Contract Documents. Further, the Approved Construction Schedule shall not operate to limit or restrict any of Contractor's obligations under the Contract Documents nor relieve the Contractor from the full, faithful and timely performance of such obligations in accordance with the terms of the Contract Documents. The activities, commencement and completion dates of activities, and the sequencing of activities depicted on the Approved Construction Schedule shall not be modified or revised by the Contractor without the prior consent, or direction, of the District and the Architect. Updates to the Approved Construction Schedule pursuant to Article 7.3.5 below shall not be deemed revisions to the Approved Construction Schedule. If the Approved Construction Schedule depicts completion of the Work in a duration shorter than the Contract Time, the same shall not be a basis for an adjustment of the Contract Time or the Contract Price in the event that actual completion of the Work shall occur after such the time depicted in such Approved Construction Schedule. In such event, the Contract Price shall not be subject to adjustment on account of any additional costs incurred by the Contractor to complete the Work prior to the Contract Time, as adjusted in accordance with the terms of the Contract Documents. Any adjustment of the Contract Time or the Contract Price shall be based upon the Contract Time set forth in the Contract Documents and not any shorter duration which may be depicted in the Approved Construction Schedule.

7.2.4 Revisions to Approved Construction Schedule. In the event that the progress of the

Work or the sequencing of the activities of the Work shall materially differ from that indicated in the Approved Construction Schedule, as determined by the District in its reasonable discretion and judgment, the District may direct the Contractor to revise the Approved Construction Schedule; within fifteen (15) days of the District's direction, the Contractor shall prepare and submit to the Architect and the Project Manager a revised Approved Construction Schedule, for review and approval by the District. The Contractor may request consent of the District to revise the Approved Construction Schedule. Any such request shall be considered by the District only if in writing setting forth the Contractor's proposed revision(s) to the Approved Construction Schedule and the reason(s) therefor. The District may consent to, or deny, any such request of the Contractor to revise the Approved Construction Schedule in its reasonable discretion.

7.2.5 Updates to Approved Construction Schedule. The Contractor shall monitor and update the Approved Construction Schedule on a monthly basis, or more frequently as required by the conditions or progress of the Work, or as may be requested by the District. The Contractor shall provide the District, the Project Manager and the Architect with updated Approved Construction Schedules indicating progress achieved and activities commenced or completed within the prior updated Approved Construction Schedule. Updates to the Approved Construction Schedule shall not include any revisions to the activities, commencement and completion dates of activities or the sequencing of activities depicted on the Approved Construction Schedule. Any such revisions to the Approved Construction Schedule shall result in the District's rejection of such update and Contractor shall, within seven (7) days of the District's rejection of such update, submit to the Architect and the Project Manager an Updated Approved Construction Schedule which does not incorporate any such revisions. If requested by the District, the Contractor shall also submit, with its updates to the Approved Construction Schedule a narrative statement including a description of current and anticipated problem areas of the Work, delaying factors and their impact, and an explanation of corrective action taken or proposed by the Contractor. If the progress of the Work is behind the Approved Construction Schedule, the Contractor shall indicate what measures will be taken to place the Work back on schedule. The District may, from time to time, and in the District's sole and exclusive discretion, transmit to the Contractor's Performance Bond Surety the Approved Construction Schedule, any updates thereof and the narrative statement described hereinabove. The District's election to transmit, or not to transmit such information, to the Contractor's Performance Bond Surety shall not limit the Contractor's obligations under the Contract Documents.

7.2.6 Contractor Responsibility for Construction Schedule. The Contractor shall be responsible for the preparation, submittal and maintenance of the Construction Schedules required by the Contract Documents, and any failure of the Contractor to do so may be deemed by the District as the Contractor's default in the performance of a material obligation under Contract Documents. Any and all costs or expenses required or incurred to prepare, submit, maintain, and update the Construction Schedules shall be solely that of the Contractor and no such cost or expense shall be charged to the District. The Contract Price shall not be subject to adjustment on account of costs, fees or expenses incurred or associated with the Contractor's preparation, submittal, and maintenance or updating of the Construction Schedules.

7.3 Adjustment of Contract Time. If Completion is delayed, adjustment, if any, to the Contract Time on account of such delay shall be in accordance with this Article 7.4.

7.3.1 Excusable Delays. If Completion of the Work is delayed by Excusable Delays, the Contract Time shall be subject to adjustment for such reasonable period of time as determined by the Architect; Excusable Delays shall not result in any increase in the Contract Price. Excusable Delays refer to unforeseeable and unavoidable casualties or other unforeseen causes beyond the control, and without fault or neglect, of the Contractor, any Subcontractor, Material Supplier or other person directly or indirectly engaged by the Contractor in performance of any portion of the Work. Excusable Delays include unanticipated and unavoidable labor disputes, unusual and unanticipated delays in transportation of equipment, materials or

Construction Equipment reasonably necessary for completion and proper execution of the Work, unanticipated unusually severe weather conditions or DSA directive to stop the Work. Neither the financial resources of the Contractor or any person or entity directly or indirectly engaged by the Contractor in performance of any portion of the Work shall be deemed conditions beyond the control of the Contractor. If an event of Excusable Delay occurs, the Contract Time shall be subject to adjustment hereunder only if the Contractor establishes: (i) full compliance with all applicable provisions of the Contract Documents relative to the method, manner and time for Contractor's notice and request for adjustment of the Contract Time; (ii) that the event(s) forming the basis for Contractor's request to adjust the Contract Time are outside the reasonable control and without any fault or neglect of the Contractor or any person or entity directly or indirectly engaged by Contractor in performance of any portion of the Work; and (iii) that the event(s) forming the basis for Contractor's request to adjust the Contract Time directly and adversely impacted the progress of the Work as indicated in the Approved Construction Schedule or the most recent updated Approved Construction Schedule relative to the date(s) of the claimed event(s) of Excusable Delay. The foregoing provisions notwithstanding, if the Special Conditions set forth a number of "Rain Days" to be anticipated during performance of the Work, the Contract Time shall not be adjusted for rain related unusually severe weather conditions until and unless the actual number of Rain Days during performance of the Work exceeds those noted in the Special Conditions and such additional Rain Days directly and adversely impact the critical path progress of the Work as depicted in the Approved Construction Schedule or the most recent updated Approved Construction Schedule relative to the date(s) of such additional Rain Days.

7.3.2 Compensable Delays. If Completion of the Work is delayed and such delay is caused by the acts or omissions of the District, the Architect, or separate contractor employed by the District (collectively "Compensable Delays"), upon Contractor's request and notice, in strict conformity with Articles 7 and 9 of these General Conditions, the Contract Time will be adjusted by Change Order for such reasonable period of time as determined by the Architect and the District. In accordance with California Public Contract Code §7102, if the Contractor's progress is delayed by any of the events described in the preceding sentence, Contractor shall not be precluded from the recovery of damages directly and proximately resulting therefrom, provided that the District is liable for the delay, the delay is unreasonable under the circumstances involved and the delay was not within the reasonable contemplation of the District and the Contractor at the time of execution of the Agreement. In such event, Contractor's damages, if any, shall be limited to direct, actual and unavoidable additional costs of labor, materials or Construction Equipment directly resulting from such delay, and shall exclude indirect or other consequential damages, including without limitation, home office expenses, bond capacity impairment or loss of prospective economic advantage. Except as expressly provided for herein, Contractor shall not have any other claim, demand or right to adjustment of the Contract Price arising out of delay, interruption, hindrance or disruption to the progress of the Work. Adjustments to the Contract Price and the Contract Time, if any, on account of Changes to the Work or Suspension of the Work shall be governed by the applicable provisions of the Contract Documents, including without limitation, Articles 9 and 14 of these General Conditions.

7.3.3 Unexcusable Delays. Unexcusable Delays refer to any delay to the progress of the Work caused by events or factors other than those specifically identified in Articles 7.4.1 and 7.4.2 above. Neither the Contract Price nor the Contract Time shall be adjusted on account of Unexcusable Delays.

7.3.4 Adjustment of Contract Time.

7.3.4.1 Procedure for Adjustment of Contract Time. The Contract Time shall be subject to adjustment only in strict conformity with applicable provisions of the Contract Documents. Failure of Contractor to request adjustment(s) of the Contract Time in strict

conformity with applicable provisions of the Contract Documents shall be deemed Contractor's waiver of the same.

7.3.4.2 Limitations Upon Adjustment of Contract Time on Account of Delays. Any adjustment of the Contract Time on account of an Excusable Delay or a Compensable Delay shall be limited as set forth herein. If an Excusable Delay and a Compensable Delay occur concurrently, the maximum extension of the Contract Time shall be the number of days from the commencement of the first delay to the cessation of the delay which ends last. If an Unexcusable Delay occurs concurrently with either an Excusable Delay or a Compensable Delay, the maximum extension of the Contract Time shall be the number of days, if any, which the Excusable Delay or the Compensable Delay exceeds the period of time of the Unexcusable Delay. In addition to the foregoing limitations upon extension of the Contract Time, no adjustment of the Contract Time shall be made on account of any Excusable Delays or Compensable Delays unless such delay(s) actually and directly impact Work or Work activities on the critical path of the then current and updated Approved Construction Schedule as of the date on which such delay first occurs. The District shall not be deemed in breach of, or otherwise in default of any obligation hereunder, if the District shall deny any request by the Contractor for an adjustment of the Contract Time for any delay which does not actually and directly impact Work or Work activities on the critical path of the then current and updated Approved Construction Schedule.

- 7.4 Liquidated Damages.** Should the Contractor neglect, fail or refuse to: (i) submit Submittals in accordance with the Approved Construction Schedule; (ii) achieve Completion of the Work or designated portions thereof within the Contract Time, (subject to adjustments authorized under the Contract Documents); (iii) or to complete Punchlist items within the time established pursuant to the Contract Documents, the Contractor agrees to pay to the District the amount of per diem Liquidated Damages set forth in the Special Conditions, not as a penalty but as Liquidated Damages, for every day beyond the Contract Time, as adjusted, until Submittals are submitted, Completion or completion of the Punchlist items are achieved. The Liquidated Damages amounts set forth in the Special Conditions are agreed upon by and between the Contractor and the District because of the difficulty of fixing the District's actual damages in the event of delayed submission of Submittals, Completion or completion of Punchlist items. The Contractor and the District specifically agree that said amounts are reasonable estimates of the District's damages in such event, and that such amounts do not constitute a penalty. Liquidated Damages may be deducted from the Contract Price then or thereafter due the Contractor. The Contractor and the Surety shall be liable to the District for any Liquidated Damages exceeding any amount of the Contract Price then held or retained by the District. In the event that the Contractor shall fail or refuse to complete Punchlist items and the District elects to exercise its right to cause completion or correction of such items pursuant to Article 7.2.3.2 hereof, the District's assessment of Liquidated Damages pursuant to the foregoing shall be in addition, and not in lieu of, the District's right to charge Contractor with the cost of completing or correcting such items of the Work, as provided for under Article 7.2.3.2. The Contractor and the District acknowledge and agree that the provisions of this Article 7.5 are reasonable under the circumstances existing at the time of the Contractor's execution of the Agreement.

ARTICLE 8: CONTRACT PRICE

- 8.1 Contract Price.** The Contract Price is the amount stated in the Agreement and subject to adjustments thereto in accordance with the Contract Documents, is the total amount payable by the District to the Contractor for completion of the Work and other obligations of the Contractor under the Contract Documents. The District's payment of the Contract Price to the Contractor shall be in accordance with the Contract Documents.
- 8.2 Cost Breakdown.** Within fifteen (15) days of the execution of the Agreement by Contractor,

Contractor shall furnish, in a form acceptable to the District, a detailed estimate and complete Cost Breakdown of the Contract Price. The Cost Breakdown is subject to the District's review and approval of the form and content thereof. If the District objects to any portion of the Cost Breakdown, within ten (10) days of the District's receipt of the Cost Breakdown, the District shall notify the Contractor, in writing of the District's objection(s) to the Cost Breakdown. Within five (5) days of the date of the District's written objection(s), Contractor shall submit a revised Cost Breakdown to the District for review and approval. The foregoing procedure for the preparation, review and approval of the Cost Breakdown shall continue until the District has approved of the entirety of the Cost Breakdown. Upon the District's approval of the Cost Breakdown, the Cost Breakdown shall not be thereafter modified or amended by the Contractor without the prior consent and approval of the District, which may be granted, conditioned or withheld in the sole discretion of the District. Notwithstanding any provision of the Contract Documents to the contrary, payment of the Contractor's overhead, supervision and general conditions costs and profit, as such items are reflected in the Cost Breakdown, shall be made by the District in equal installments with its disbursements of Progress Payments and the Final Payment with the amount of each such installment equal to the aggregate amount of such items as reflected in the Cost Breakdown divided by the number of months of the Contract Time.

8.3 Progress Payments.

8.3.1 Applications for Progress Payments. During the Contractor's performance of the Work, the Contractor shall submit monthly, on the first working day of each month, to the District, District's Inspector, Project Manager, if any, and the Architect, Applications for Progress Payments ("Payment Applications"), on forms approved by the District, setting forth an itemized estimate of Work completed in the preceding month for the purpose of the District's making of Progress Payments thereon. Values utilized in the Payment Applications shall be based upon the District approved Cost Breakdown pursuant to Article 8.2 above provided that such values are only for determining the basis of Progress Payments to Contractor, and shall not be considered as fixing a basis for adjustments, whether additive or deductive, to the Contract Price, or for determining the extent of Work actually completed.

8.3.2 Payment Application Review for Determination of Proper Payment Application. Pursuant to Public Contract Code §20104.50, upon receipt of a Payment Application, the District's Inspector, the Project Manager, if any, and the Architect will review the Payment Application as soon as practicable for the purpose of determining that the Payment Application is a proper Payment Application. A Payment Application is "proper" only if information required by the form of Payment Application is completely and accurately provided by the Contractor and the Payment Application is accompanied by: (i) a summary listing of the Subcontractors/Material Suppliers entitled to payment of any portion of the requested Progress Payment, along with the amount of payment each Subcontractor/Material Supplier is entitled to receive from the Contractor from the proceeds of the requested Progress Payment; (ii) completed and executed form of Verification of Certified Payroll Records Submittal To Labor Commissioner; (iii) duly completed and executed forms of Conditional Waiver and Release of Rights Upon Progress Payment in accordance with California Civil Code §8132 of the Contractor and Subcontractors/Material Suppliers covering the Progress Payment requested; (iv) duly completed and executed forms of Unconditional Waiver and Release of Rights upon Progress Payment in accordance with California Civil Code §8134 of the Contractor and Subcontractors/Material Suppliers covering the Progress Payment received by the Contractor under the immediately preceding Payment Application; (v) if applicable, a current union statement reflecting that the Contractor and Subcontractors are current in the payment of any supplemental fringe benefits required pursuant to any collective bargaining agreement to which the Contractor or any such Subcontractor is a party to or is otherwise bound by; and (vi) a certification by the Contractor that it has continuously maintained the Record Drawings reflecting the actual as-built conditions of the Work performed be for which the Progress Payment is

requested, it being understood that such certification is subject to verification by the District, Architect or the Project Manager prior to disbursement of the Progress Payment. Pursuant to Public Contract Code §20104.50, if a Payment Application determined by the District not to be a proper Payment Application it shall be returned by the District to the Contractor as soon as is practicable after receipt thereof, but in no event not more than seven (7) days after receipt. The District's return of any Payment Application pursuant to the preceding sentence shall be accompanied by a written document setting forth the reason(s) why the Payment Application is not proper.

8.3.3 Verification of Work Completed. Upon receipt of a Payment Application, the Architect, Project Manager, if any and the District's Inspector shall inspect and verify the Work to determine whether it has been performed in accordance with requirements of the Contract Documents and to determine the portion of the Payment Application which is properly due to the Contractor under the terms of the Contract Documents.

8.3.4 District's Disbursement of Progress Payments.

8.3.4.1 Timely Disbursement of Progress Payments. Pursuant to Public Contract Code §20104.50, within thirty (30) days after the District's receipt of a proper Payment Application, there shall be paid, by District, to Contractor a sum equal to ninety-five percent (95%) of the value of the Work indicated in the Payment Application which is actually in place as of the date of the Payment Application, as verified by the District's Inspector, Project Manager, if any, and the Architect and the pro rata portion of the Contractor's overhead, supervision and general conditions costs and profit for that month; provided, however, that the District's obligation to disburse any Progress Payment shall be subject to the District's receipt of all documents set forth in Article 8.3.2 above, each and all of which are conditions precedent to the District's obligation to disburse Progress Payments. If a Payment Application is determined not to be proper due to the failure or refusal of the Contractor to submit documents with the Payment Application, as required by Article 8.3.2, or incompleteness or inaccuracies in any such documents submitted or if it is reasonably determined that the Record Drawings have not been continuously maintained to reflect the actual as built conditions of the Work completed in the period for which the Progress Payment is requested, the thirty (30) day period hereunder for the District's timely disbursement of a Progress Payment is deemed to commence on the date that the District is actually in receipt of documents not submitted with the Payment Application, or corrections to documents with the Payment Application so as to render them complete and accurate, or the date upon which the Contractor accurately and fully completes preparation of the Record Drawings relating to the Work for which the Progress Payment is requested.

8.3.4.2 Untimely Disbursement of Progress Payments. Pursuant to Public Contract Code §20104.50, if the District fails to make a Progress Payment within thirty (30) days after receipt of an undisputed and proper Payment Application, the District shall pay the Contractor interest on the undisputed amount of such Payment Application at the legal rate of interest set forth in California Code of Civil Procedure §685.010(a). The foregoing notwithstanding, if the District determines that any Payment Application is not proper, pursuant to Article 8.3.2 above, and the District does not return such Payment Application within the seven (7) day period provided for in Article 8.3.2, the period of time for the District's disbursement of the Progress Payment on such Payment Application without incurring interest liability shall be reduced by the number of days exceeding the seven (7) day return period.

8.3.4.3 District's Right to Disburse Payments by Joint Checks. The District, may, in its sole discretion, issue joint checks to the Contractor and Subcontractors/Material Suppliers in satisfaction of its obligation to make Progress Payments or the Final Payment due hereunder.

8.3.4.4 No Waiver of Defective or Non-Conforming Work. The approval of any Payment Application or the disbursement of any Progress Payment to the Contractor shall not be

deemed nor constitute acceptance of defective or non-conforming Work.

8.3.5 Progress Payments for Changed Work. The Contractor's Payment Applications may include requests for payment on account of Changes in the Work which have been properly authorized and approved by the District's Inspector, the Architect and all other governmental agencies with jurisdiction over such Change in accordance with the terms of the Contract Documents and for which a Change Order has been issued. Except as provided for herein, no other payment shall be made by the District for Changes in the Work.

8.3.6 Materials or Equipment Not Incorporated Into the Work.

8.3.6.1 Limitations Upon Payment. Except as expressly provided for herein, no payments shall be made by the District on account of any item of the Work, including without limitation, materials or equipment which, at the time of the Contractor's submittal of a Payment Application, has/have not been incorporated into and made a part of the Work.

8.3.6.2 Materials or Equipment Delivered and Stored at the Site. The District may, in its sole and exclusive discretion, make payment for materials or equipment not yet incorporated into the Work if, at or prior to the time of the Contractor's submittal of a Payment Application requesting payment for such materials or equipment if all of the following are complied with: (i) the materials or equipment have been delivered to the Site; (ii) adequate arrangements, reasonably satisfactory to the District, have been made by the Contractor to store and protect such materials or equipment at the Site including without limitation, insurance reasonably satisfactory to the District, covering and protecting against the risk of loss, destruction, theft or other damage to such materials or equipment while in storage; and (iii) the establishment of procedures reasonably satisfactory to the District by which title to such materials or equipment will be vested in the District upon the District's payment therefor. The Contractor acknowledges that the discretion to make, or not to make, payment for materials or equipment delivered or stored at the Site pursuant to the preceding sentence shall be exercised exclusively by the District; the District's exercise of discretion not to make payment shall not be deemed the District's default hereunder. If the District elects to make payment for materials or equipment delivered and stored at the Site, the costs and expenses incurred to comply with the requirements of (ii) and (iii) of this Article 8.3.6.2 shall be borne solely and exclusively by the Contractor and no payment shall be made by the District on account of such costs and expenses.

8.3.6.3 Materials or Equipment Not Delivered or Stored at the Site. No payments shall be made by the District for materials or equipment to be incorporated into the Work where such materials or equipment have not been delivered or stored at the Site or which are in the process of fabrication or transportation to the Site.

8.3.7 Exclusions From Progress Payments. In addition to the District's right to withhold disbursement of any Progress Payment provided for in the Contract Documents, neither the Contractor's Payment Application shall include, nor shall the District be obligated to disburse any portion of the Contract Price for amounts which the Contractor does not intend to pay any Subcontractor or Material Supplier because of a dispute or any other reason.

8.3.8 Title to Work. The Contractor warrants that title to all Work covered by an Payment Application will pass to the District no later than the time of payment. The Contractor further warrants that upon submittal of a Payment Application, all Work for which a Progress Payment has been previously disbursed and the Contractor has received payment from the District therefor shall, to the best of the Contractor's knowledge, information and belief, be free and clear of liens, claims, security interests or encumbrances in favor of the Contractor, Subcontractors, Material Suppliers or other persons or entities making a claim by reason of having provided labor, materials and equipment relating to the Work.

8.3.9 Substitute Security for Retention. Pursuant to California Public Contract Code §22300, eligible and equivalent securities may be substituted for any monies withheld by the District to

ensure the Contractor's performance under the Contract Documents at the request and expense of the Contractor and in conformity with the provisions of California Public Contract Code §22300. The foregoing and the provisions of California Public Contract Code §22300 notwithstanding, failure of the Contractor to request the substitution of eligible and equivalent securities for monies to be withheld by the District within ten (10) days following the date of award of the Contract to Contractor shall be deemed a waiver of such right.

8.4 Final Payment.

8.4.1 Application for Final Payment. When the Contractor has achieved Final Completion of the Work and has otherwise fully performed its obligations under the Contract Documents, the Contractor shall submit an Application for Final Payment on such form as approved by the District. Thereupon, the Architect, Project Manager, if any, and the District's Inspector will promptly make a final inspection of the Work and when the Architect, Project Manager, if any and the District's Inspector find the Work acceptable under the Contract Documents and that the Contract has been fully performed by the Contractor, the Architect, Project Manager, if any, and the District's Inspector will thereupon promptly approve the Application for Final Payment, stating that to the best their knowledge, information and belief, the Work has been completed in accordance with the terms of the Contract Documents. The Final Payment shall include the remaining balance of the Contract Price and any retention from Progress Payments previously withheld by the District.

8.4.2 Conditions Precedent to Disbursement of Final Payment. Neither Final Payment nor any remaining Contract Price shall become due until the Contractor submits to the District each and all of the following, the submittal of which are conditions precedent to the District's obligation to disburse the Final Payment: (i) an affidavit or certification by the Contractor that payrolls, bills for materials and other indebtedness incurred in connection with the Work for which the District or the District's property may or might be responsible or encumbered have been paid or otherwise satisfied; (ii) a certificate evidencing that insurance required by the Contract Documents to remain in force after the Contractor's receipt of Final Payment is currently in effect; (iii) a written statement that the Contractor knows of no One Hundred Percent reason that the insurance will not be renewable to cover any period following Final Payment as required by the Contract Documents; (iv) consent of the Surety on the Labor and Material Payment Bond and Performance Bond, to Final Payment if required; (v) duly completed and executed forms of Conditional or Unconditional Waivers and Releases of rights upon Final Payment of the Contractor, Subcontractors/Material Suppliers in accordance with California Civil Code §§8136 or 8138, with each of the same stating that there are, or will be, no claims for additional compensation after disbursement of the Final Payment; (vi) Operations and Maintenance manuals and separate warranties provided by any manufacturer or distributor of any materials or equipment incorporated into the Work; (vii) the Record Drawings; (viii) the form of Guarantee included in the Contract Documents duly executed by an authorized representative of the Contractor; (ix) any and all other items or documents required by the Contract Documents to be delivered to the District upon completion of the Work; (x) the completion and submittal of all reports required by the Contract Documents, including without limitation, verified reports required by applicable provisions of the California Code of Regulations; and (xi) if required by the District, such other data establishing payment or satisfaction of obligations such as receipts, releases and waivers of liens, Stop Payment Notices, claims, security interest or encumbrances arising out of the Contract to the extent and in such form as may be required by the District.

8.4.3 Disbursement of Final Payment. Provided that the District is then in receipt of all documents and other items in Article 8.4.2 above as conditions precedent to the District's obligation to disburse Final Payment, not later than sixty (60) days following Final Acceptance the District shall disburse the Final Payment to the Contractor. Pursuant to California Public Contract Code §7107, if there is any dispute between the District and the Contractor at the time that disbursement of the Final Payment is due, the District may withhold from disbursement of

the Final Payment an amount not to exceed one hundred fifty percent (150%) of the amount in dispute. If the Contractor fails to timely submit completed DSA Reports in accordance with Article 4.21.1 above, the Final Payment due the Contractor shall be reduced in accordance with Article 4.21.2 above.

8.4.4 Waiver of Claims. The Contractor's acceptance of the Final Payment is a waiver and release by the Contractor of any and all claims against the District for compensation or otherwise in connection with the Contractor's performance of the Contract.

8.4.5 Claims Asserted After Final Payment. Any lien, Stop Payment Notice or other claim filed or asserted after the Contractor's acceptance of the Final Payment by any Subcontractor, laborer, Material Supplier or others in connection with or for Work performed under the Contract Documents shall be the sole and exclusive responsibility of the Contractor and the Surety. The Contractor and Surety shall indemnify, defend and hold harmless the District and its officers, agents, representatives and employees from and against any claims, demands or judgments arising or associated therewith, including without limitation attorney's fees incurred by the District in connection therewith.

8.5 Withholding of Payments. The District may withhold any Progress Payment or the Final Payment, in whole or in part, or backcharge the Contractor to the extent it may deem advisable to protect the District on account of: (i) defective Work or Work not in conformity with the requirements of the Contract Documents which is not remedied; (ii) failure of the Contractor to make payments when due Subcontractors/Material Suppliers; (iii) claims filed or reasonable evidence of the probable filing of claims by Subcontractors, laborers, Material Suppliers, or others performing any portion of the Work under the Contract Documents for which the District may be liable or responsible including, without limitation, Stop Payment Notice Claims filed with the District pursuant to California Civil Code §9350 et seq.; (iv) a reasonable doubt that the Contract can be completed for the then unpaid balance of the Contract Price; (v) tax demands filed in accordance with California Government Code §12419.4; (vi) other claims, penalties and/or forfeitures for which the District is required or authorized to retain funds otherwise due the Contractor; (vii) any amounts due from the Contractor to the District under the terms of the Contract Documents; or (viii) the Contractor's failure to perform any of its obligations under the Contract Documents, its default under the Contract Documents or its failure to maintain adequate progress of the Work. In addition to the foregoing, the District shall not be obligated to process any Payment Application or Application for Final Payment, nor shall Contractor be entitled to any Progress Payment or Final Payment so long as any lawful or proper direction concerning the Work or the performance thereof or any portion thereof, given by the District, the District's Inspector, the Architect or any public authority having jurisdiction over the Work, or any portion thereof, shall not be fully and completely complied with by the Contractor. When the District is reasonably satisfied that the Contractor has remedied any such deficiency, payment shall be made of the amount withheld.

8.6 Payments to Subcontractors. The Contractor shall pay all Subcontractors for and on account of Work of the Contract performed by such Subcontractors in accordance with the terms of their respective subcontracts and as provided for pursuant to California Public Contract Code §10262, the provisions of which are deemed incorporated herein by this reference. If the Contractor fails to make payment to Subcontractors in conformity with California Public Contract Code §10262, the provisions of California Public Contract Code §10253 shall apply; by this reference, the provisions of California Public Contract Code §10253 are incorporated herein in its entirety, except that the references in said Section 10253 to "the director" shall be deemed to refer to the District. The Contractor shall timely make payment of retention due Subcontractors in accordance with Public Contract Code §7107.

8.7 Computerized Job Cost Reporting System.

8.7.1 Job Cost Reporting. The Contractor and each Subcontractor with a Subcontract valued at One Million Five Hundred Thousand Dollars (\$1.5M) or greater shall maintain a computerized job cost reporting system conforming to the requirements set forth herein. The computer program(s) utilized by the Contractor and applicable Subcontractors shall be subject to the

review and acceptance by the District. The job cost reporting systems for the Work shall be updated in regular intervals of not more than one (1) calendar month.

8.7.2 Job Cost Reporting System Requirements. The computerized job cost programs utilized by the Contractor and applicable Subcontractors shall conform and comply with generally accepted accounting principles applied in a consistent manner and with recognized and generally accepted construction industry accounting standards, guidelines and procedures. The job cost reporting system format and configuration shall follow the general format of the District approved Cost Breakdown and budgets established for each line item shall be traceable to a bid estimate of costs. The job cost reporting systems utilized by the Contractor and applicable Subcontractors shall be capable of: (i) providing overall cost status on a monthly and cumulative basis; (ii) providing comparative analysis of the original budgeted costs, actual costs, remaining budget, and projected cost of completion; the job cost reporting system shall be capable of providing comparative analysis for individual line items and the totality of the Work reflected in the job cost report and; (ii) tracking adjustments to original budget amounts for Changes to the Work (including, without limitation, issued, pending and potential Change Orders).

8.7.3 Job Cost System Information. Upon request of the District, the Contractor and applicable Subcontractors shall make available written job cost reports and/or provide the District with the electronic files of the then current or requested job cost report. The Contractor's obligations hereunder are material.

ARTICLE 9: CHANGES

9.1 Changes in the Work. The District, at any time, by written order, may make Changes within the general scope of the Work under the Contract Documents or issue additional instructions, require additional Work or direct deletion of Work. The Contractor shall not proceed with any Change involving an increase or decrease in the Contract Price or the Contract Time without prior written authorization from the District. The foregoing notwithstanding, the Contractor shall promptly commence and diligently complete any Change to the Work subject to the District's written authorization issued pursuant to the preceding sentence; the Contractor is not relieved or excused from its obligation to promptly commence and diligently complete any Change subject to the District's written authorization by virtue of the absence or inability of the Contractor and the District to agree upon the extent of any adjustment to the Contract Time or the Contract Price on account of such Change. The issuance of a Change Order pursuant to this Article 9 in connection with any Change authorized by the District under this Article 9.1 is not a condition precedent to Contractor's obligation to promptly commence and diligently complete any such Change authorized by the District hereunder. The District's right to make Changes shall not invalidate the Contract nor relieve the Contractor of any liability or other obligations under the Contract Documents. Any requirement of notice of Changes in the scope of Work to the Surety shall be the responsibility of the Contractor. Changes to the Work depicted or described in the Drawings or the Specifications shall be subject to approval by the DSA. The District may make Changes to bring the Work or the Project into compliance with environmental requirements or standards established by state or federal statutes and regulations enacted after award of the Contract.

9.2 Construction Change Directive. A Construction Change Directive is a written instrument issued by or on behalf of the District directing a Change to the Work prior to the Contractor and District reaching full agreement on an adjustment of the Contract Time and/or Contract Price on account of such Change. The Contractor shall promptly commence and diligently complete any Change to the Work subject to a Construction Change Directive issued hereunder. The issuance of a Change Order pursuant to this Article 9 in connection with any Construction Change Directive authorized by the District is not a condition precedent to Contractor's obligation to promptly commence and

diligently complete any such Construction Change Directive. Upon completion of the Work subject to a Construction Change Directive, if the Contractor and District have not agreed on the adjustment of Contract Time and/or Contract Price for such Change, District shall issue a Unilateral Change Order pursuant to this Article 9.

9.3 Oral Order of Change in the Work. Any oral order, direction, instruction, interpretation, or determination from the District or the Architect which in the opinion of the Contractor constitutes a Change to the Work, or otherwise requires an adjustment to the Contract Price or the Contract Time, shall be treated as a Change only if the Contractor gives the Architect, Project Manager, if any and the District's Inspector written notice within ten (10) days of the order, directions, instructions, interpretation or determination and prior to acting in accordance therewith. Time is of the essence in Contractor's written notice pursuant to the preceding sentence. Accordingly, Contractor acknowledges that its failure, for any reason, to give written notice within ten (10) days of such order, direction, instruction, interpretation or determination is the Contractor's waiver of any right to assert or claim any entitlement to an adjustment of the Contract Time or the Contract Price on account of such order, direction, instruction, interpretation or determination. The written notice shall state the date, circumstances, extent of adjustment to the Contract Price or the Contract Time, if any, requested, and the source of the order, directions, instructions, interpretation or determination that the Contractor regards as a Change. Unless the Contractor acts in strict accordance with this procedure, any such order, direction, instruction, interpretation or determination shall not be treated as a Change and the Contractor waives any claim for any adjustment to the Contract Price or the Contract Time on account thereof.

9.4 Contractor Submittal of Data. Within thirty (30) days after receipt of a written order directing a Change in the Work or furnishing the written notice regarding any oral order directing a Change in the Work, the Contractor shall submit to the Architect, Project Manager, if any, the District's Inspector and the District a detailed written statement setting forth the general nature of the Change, the adjustment to the Contract Price on account thereof, properly itemized and supported by sufficient substantiating data to permit evaluation of the same, and the extent of adjustment of the Contract Time, if any, required by such Change. No claim or adjustment to the Contract Price or the Contract Time shall be allowed if not asserted by the Contractor in strict conformity herewith or if asserted after Final Payment is made under the Contract Documents.

9.5 Adjustment to Contract Price and Contract Time on Account of Changes to the Work.

9.5.1 Adjustment to Contract Price. Adjustments to the Contract Price due to Changes in the Work shall be determined by application of one of the following methods, in the following order of priority:

9.5.1.1 Mutual Agreement. By negotiation and mutual agreement, on a lump sum basis, between the District and the Contractor on the basis of the estimate of the actual and direct increase or decrease in costs on account of the Change. Upon request of the District, Project Manager, if any, or the Architect, the Contractor shall provide a detailed estimate of increase or decrease in costs directly associated with performance of the Change along with cost breakdowns of the components of the Change and supporting data and documentation. The Contractor's estimate of increase or decrease in costs pursuant to the foregoing, if requested, shall be in sufficient detail and in such form as to allow the District, the District's Inspector and the Architect to review and assess the completeness and accuracy thereof. The Contractor shall be solely responsible for any additional costs or additional time arising out of, or related in any manner to, its failure to provide the estimate of costs within the time specified in the request of the District or the Architect for such estimate.

9.5.1.2 Determination by the District. By the District, whether or not negotiations are initiated pursuant to Article 9.5.1.1 above, based upon actual and necessary costs incurred by the Contractor as determined by the District on the basis of the Contractor's

records. In the event that the procedure set forth in this Article 9.5.1.2 is utilized to determine the extent of adjustment to the Contract Price on account of Changes to the Work, promptly upon determining the extent of adjustment to the Contract Price, the District shall notify the Contractor in writing of the same; the Contractor is deemed to have accepted the District's determination of the amount of adjustment to the Contract Price on account of a Change to the Work unless Contractor notifies the District, the Architect, Project Manager, if any and the District's Inspector, in writing, not more than fifteen (15) days from the date of the District's written notice, of any objection to the District's determination. Failure of the Contractor to timely notify the District, the Architect and the District's Inspector of Contractor's objections to the District's determination of the extent of adjustment to the Contract Price shall be deemed Contractor's acceptance of the District's determination and a waiver of any right or basis of the Contractor to thereafter protest or otherwise object to the District's determination. Notwithstanding any objection of the Contractor to the District's determination of the extent of any adjustment to the Contract Price pursuant to this Article 9.5.1.2, Contractor shall, pursuant to Article 9.8 below, diligently proceed to perform and complete any such Change.

9.5.1.3 Basis for Adjustment of Contract Price. If Changes in the Work require an adjustment of the Contract Price pursuant to Articles 9.5.1.1 or 9.5.1.2 above, the basis for adjustment of the Contract Price shall be as follows:

9.5.1.3.1 Labor. Contractor shall be compensated for the costs of labor actually and directly utilized in the performance of the Change. Such labor costs shall be limited to field labor for which there is a prevailing wage rate classification. Wage rates for labor shall not exceed the prevailing wage rates in the locality of the Site and shall be in the labor classification(s) necessary for the performance of the Change. Use of a labor classification which would increase labor costs associated with any Change shall not be permitted. Labor costs shall exclude costs incurred by the Contractor in preparing estimate(s) of the costs of the Change, in the maintenance of records relating to the costs of the Change, coordination and assembly of materials and information relating to the Change or performance thereof, or the supervision and other overhead and general conditions costs associated with the Change or performance thereof.

9.5.1.3.2 Materials and Equipment. Contractor shall be compensated for the costs of materials and equipment necessarily and actually used or consumed in connection with the performance of Changes. Costs of materials and equipment may include reasonable costs of transportation from a source closest to the site of the Work and delivery to the Site. If discounts by Material Suppliers are available for materials necessarily used in the performance of Changes, they shall be credited to the District. If materials and/or equipment necessarily used in the performance of Changes are obtained from a supplier or source owned in whole or in part by the Contractor, compensation therefor shall not exceed the current wholesale price for such materials or equipment. If, in the reasonable opinion of the District, the costs asserted by the Contractor for materials and/or equipment in connection with any Change is excessive, or if the Contractor fails to provide satisfactory evidence of the actual costs of such materials and/or equipment from its supplier or vendor of the same, the costs of such materials and/or equipment and the District's obligation for payment of the same shall be limited to the then lowest wholesale price at which similar materials and/or equipment are available in the

quantities required to perform the Change. The District may elect to furnish materials and/or equipment for Changes to the Work, in which event the Contractor shall not be compensated for the costs of furnishing such materials and/or equipment or any mark-up thereon.

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

9.5.1.3.4 Mark-up on Costs of Changes to the Work. In determining the cost to the District and the extent of increase to the Contract Price resulting from a Change adding to the Work, the allowance for mark-ups on the costs of the Change for all overhead (including home office and field overhead), general conditions costs and profit associated with the Change shall not exceed the percentage set forth in the Special Conditions, regardless of the number of Subcontractors, of any tier, performing any portion of any Change to the Work. If a Change to the Work reduces the Contract Price, no profit, general conditions or overhead costs shall be paid by the District to the Contractor for the reduced or deleted Work. In such event, the adjustment to the Contract Price shall be the actual cost reduction realized by the reduced or deleted Work multiplied by the percentage set forth in the Special Conditions for mark-ups on the cost of a Change adding to the scope of the Work.

9.5.1.4 Contractor Maintenance of Records. If the Contractor is directed to perform any Changes to the Work pursuant to Article 9.1, 9.2 or 9.3, or should the Contractor encounter conditions which the Contractor believes to obligate the District to adjust the Contract Price and/or the Contract Time, Contractor shall maintain detailed records on a daily basis. Such records shall include without limitation hourly records for labor and Construction Equipment and itemized records of materials and equipment used that day in connection with the performance of any Change to the Work. If more than one Change to the Work is performed by the Contractor in a calendar day, Contractor shall maintain separate records of labor, Construction Equipment, materials and equipment for each such Change. If any Subcontractor provides or performs any portion of a Change to the Work, Contractor shall require that each such Subcontractor maintain records in accordance with this Article. Each daily record maintained hereunder shall be signed by Contractor's Superintendent or Contractor's authorized representative which shall constitute the Contractor's representation and warranty to the District that all information contained therein is true, accurate, complete and relate only to the Change referenced therein. All records maintained by a Subcontractor relating to the costs of a Change to the Work shall be signed by such Subcontractor's authorized representative or Superintendent. All records maintained hereunder shall be subject to inspection, review and/or reproduction by the District, the Architect, Project Manager, if any or the District's Inspector upon request. If the Contractor fails or refuses, for any reason, to maintain or make available for inspection, review and/or reproduction such records and the adjustment to the Contract Price on account of any Change to the Work, the District's reasonable good faith determination of the extent of adjustment to the Contract Price on account of such Change shall be final, conclusive, dispositive and binding upon Contractor. Contractor's obligation to maintain records hereunder is in addition to, and not in lieu of, any other Contractor obligation under the Contract Documents with respect to Changes to the Work.

9.5.2 Adjustment to Contract Time. If any Change to the Work authorized pursuant to this Article 9, the Contract Time affects the critical path of the Work, the Contract Time shall be extended or reduced by Change Order for a period of time commensurate with the time reasonably necessary to perform such Change. The Contractor is solely responsible for submitting scheduling data, analysis and other materials necessary or required by the District to substantiate the Contract Time adjustment requested by the Contractor for a Change. The District is not obligated to consider any adjustment to the Contract Time on account of a Change until the Contractor has submitted such scheduling data, analysis and other materials.

9.5.3 Addition or Deletion of Alternate Bid Item(s). If the Bid Proposal for the Work includes proposal(s) for Alternate Bid Item(s), during Contractor's performance of the Work, the District may elect, pursuant to this Article to add any such Alternate Bid Item(s) if the same did not form a basis for award of the Contract or delete any such Alternate Bid Item(s) if the same formed a basis for award of the Contract. If the District elects to add or delete any such Alternate Bid Item(s) pursuant to the foregoing, the cost or credit for such Alternate Bid Item(s) shall be as set forth in the Contractor's Bid. If any Alternate Bid Item is added or deleted from the Work pursuant to the foregoing, the Contract Time shall be adjusted by the number of days allocated for the added or deleted Alternate Bid Item in the Contract Documents; if days are not allocated for any Alternate Bid Item added or deleted pursuant to the foregoing, the Contract Time shall be equitably adjusted.

9.6 Change Orders. If the District approves of a Change, a written Change Order prepared by the Architect on behalf of the District shall be forwarded to the Contractor describing the Change and setting forth the adjustment to the Contract Time and the Contract Price, if any, on account of such Change. All Change Orders shall be in full payment and final settlement of all claims for direct, indirect and consequential costs, including without limitation, costs of delays or impacts related to,

or arising out of, items covered and affected by the Change Order, as well as any adjustments to the Contract Time. Any claim or item relating to any Change incorporated into a Change Order not presented by the Contractor for inclusion in the Change Order shall be deemed waived. The Contractor shall execute the Change Order prepared pursuant to the foregoing; once the Change Order has been prepared and forwarded to the Contractor for execution, without the prior approval of the District which may be granted or withheld in the sole and exclusive discretion of the District, the Contractor shall not modify or amend the form or content of such Change Order, or any portion thereof. The Contractor's attempted or purported modification or amendment of any such Change Order, without the prior approval of the District, shall not be binding upon the District; any such unapproved modification or amendment to such Change Order shall be null, void and unenforceable. Unless otherwise expressly provided for in the Contract Documents or in the Change Order, any Change Order issued hereunder shall be binding upon the District only upon action of the District's Board of Trustees approving and ratifying such Change Order. In the event of any amendment or modification made by the Contractor to a Change Order for which there is no prior approval by the District, in accordance with the provisions of this Article 9.6, unless otherwise expressly stated in its approval and ratification of such Change Order, any action of the Board of Trustees to approve and ratify such Change Order shall be deemed to be limited to the Change Order as prepared by the Architect; such approval and ratification of such Change Order shall not be deemed the District's approval and ratification of any unapproved amendment or modification by the Contractor to such Change Order.

9.7 Contractor Notice of Changes. If the Contractor claims that any instruction, request, the Drawings, the Specifications, action, condition, omission, default, or other situation obligates the District to increase the Contract Price or to extend the Contract Time, the Contractor shall notify the Project Manager, if any, the District's Inspector and the Architect, in writing, of such claim within ten (10) days from the date of its actual or constructive notice of the factual basis supporting the same. The District shall consider any such claim of the Contractor only if sufficient supporting documentation is submitted with the Contractor's notice to the District's Inspector and the Architect. Time is of the essence in Contractor's written notice pursuant to the preceding sentence so that the District can promptly investigate and consider alternative measures to the address such instruction, request, Drawings, Specifications, action, condition, omission, default or other situation. Accordingly, Contractor acknowledges that its failure, for any reason, to give written notice (with sufficient supporting documentation to permit the District's review and evaluation) within ten (10) days of its actual or constructive knowledge of any instruction, request, Drawings, Specifications, action, condition, omission, default or other situation for which the Contractor believes there should an adjustment of the Contract Time or the Contract Price shall be deemed Contractor's waiver, release, discharge and relinquishment of any right to assert or claim any entitlement to an adjustment of the Contract Time or the Contract Price on account of any such instruction, request, Drawings, Specifications, action, condition, omission, default or other situation. In the event that the District determines that the Contract Price or the Contract Time are subject to adjustment based upon the events, circumstances and supporting documentation submitted with the Contractor's written notice under this Article 9.7, any such adjustment shall be determined in accordance with the provisions of Articles 9.5.1 and 9.5.2.

9.8 Disputed Changes. If there is any dispute or disagreement between the Contractor and the District or the Architect regarding the characterization of any item as a Change to the Work or as to the appropriate adjustment of the Contract Price or the Contract Time on account thereof, the Contractor shall promptly proceed with the performance of such item of the Work, subject to a subsequent resolution of such dispute or disagreement in accordance with the terms of the Contract Documents. The Contractor's failure or refusal to so proceed with such Work may be deemed to be Contractor's default of a material obligation of the Contractor under the Contract Documents.

9.9 Emergencies. In an emergency affecting or threatening the safety of persons, or which affects or

threatens the Work, or property, the Contractor, without special instruction or prior authorization from the District, Project Manager or the Architect, is permitted to act at its discretion to prevent such threatened loss or injury. Any compensation claimed by the Contractor on account of such emergency work shall be submitted and determined in accordance with this Article 9.

- 9.10 Minor Changes in the Work. The Architect may order minor Changes in the Work not involving an adjustment in the Contract Price or the Contract Time and not inconsistent with the intent of the Contract Documents. Such Changes shall be effected by written order and shall be binding on the District and the Contractor. The Contractor shall carry out such orders promptly.
- 9.11 Unauthorized Changes. Any Work beyond the lines and grades shown on the Contract Documents, or any extra Work performed or provided by the Contractor without notice to the Architect and the District's Inspector in the manner and within the time set forth in Articles 9.2 or 9.7 shall be considered unauthorized and at the sole expense of the Contractor. Work so done will not be measured or paid for, no extension to the Contract Time will be granted on account thereof and any such Work may be ordered removed at the Contractor's sole cost and expense. The failure of the District to direct or order removal of such Work shall not constitute acceptance or approval of such Work nor relieve the Contractor from any liability on account thereof.

ARTICLE 10: SEPARATE CONTRACTORS

- 10.1 District's Right to Award Separate Contracts. The District reserves the right to perform construction or operations related to the Project with the District's own forces or to award separate contracts in connection with other portions of the Project or other construction or operations at or about the Site. If the Contractor claims that delay or additional cost is involved because of such action by the District, the Contractor shall seek an adjustment to the Contract Price or the Contract Time as provided for in the Contract Documents. Failure of the Contractor to request such an adjustment of the Contract Time or the Contract Price in strict conformity with the provisions of the Contract Documents applicable thereto shall be deemed a waiver of the same.
- 10.2 District's Coordination of Separate Contractors. The District shall provide for coordination of the activities of the District's own forces and of each separate contractor with the Work of the Contractor, who shall cooperate with them. The Contractor shall participate with other separate contractors and the District in reviewing their respective Construction Schedules when directed to do so. The Contractor shall make any revisions to the Approved Construction Schedule for the Work hereunder deemed necessary after a joint review and mutual agreement. The Construction Schedules shall then constitute the Construction Schedules to be used by the Contractor, separate contractors and the District until subsequently revised.
- 10.3 Mutual Responsibility. The Contractor shall afford the District and separate contractors of the District reasonable opportunity for storage of their materials and equipment and performance of their activities at the Site and shall connect and coordinate the Contractor's Work, construction and operations with theirs as required by the Contract Documents.
- 10.4 Discrepancies or Defects. If part of the Contractor's Work depends for proper execution or results upon construction or operations by the District or a separate contractor, the Contractor shall, prior to proceeding with that portion of the Work, promptly report to the Architect, Project Manager, if any and the District's Inspector any apparent discrepancies or defects in such other construction that would render it unsuitable for such proper execution and results. Failure of the Contractor to so report shall constitute an acknowledgment that the District's or separate contractors' completed or partially completed construction is fit and proper to receive the Contractor's Work, except as to defects not then discoverable by the Contractor's reasonable diligence.

ARTICLE 11: TESTS AND INSPECTIONS

- 11.1 Tests; Inspections; Observations.
- 11.1.1 Contractor's Notice. If the Contract Documents, the Laws or any public authority with

jurisdiction over the Work requires the Work, or any portion thereof, to be specially tested, inspected or approved, the Contractor shall give the Architect, the Project Manager and the District's Inspector written notice of the readiness of such Work for observation, testing or inspection at least two (2) working days prior to the time for the conducting of such test, inspection or observation. The Contractor shall not cover up any portion of the Work subject to tests, inspections or observations prior to the completion and satisfaction of the requirements of such test, inspection or observation. If any portion of the Work subject to tests, inspection or approval is covered up by Contractor prior to completion and satisfaction of the requirements of such tests, inspection or approval, Contractor shall be responsible for the uncovering of such portion of the Work as is necessary for performing such tests, inspection or approval without adjustment of the Contract Price or the Contract Time on account thereof.

11.1.2 Cost of Tests and Inspections. The District will pay for fees, costs and expenses for the initial tests/inspections of materials/equipment which are conducted at the Site or locations within a one hundred (100) mile radius of the Site. All fees, costs or expenses for subsequent tests/inspections or for tests/inspections conducted at a location more than a one hundred (100) mile radius from the Site (including without limitation, travel and travel-related expenses) shall be borne solely and exclusively by the Contractor.

11.1.3 Testing/Inspection Laboratory. The District shall select duly qualified person(s) or testing laboratory(ies) to conduct the tests and inspections to be paid for by the District and required by the Contract Documents. All such tests and inspections shall be in conformity with the Laws, including without limitation, Title 24 of the California Code of Regulations. Where inspection or testing is to be conducted by an independent laboratory or testing agency, materials or samples thereof shall be selected by the laboratory, testing agency, the District's Inspector, the Project Manager or the Architect and not by the Contractor.

11.1.4 Additional Tests, Inspections and Approvals. If the Architect, the Project Manager, the District's Inspector or public authorities having jurisdiction over the Work determine that portions of the Work require additional testing, inspection or approval, the Architect or Project Manager, if any will, upon written authorization from the District, instruct the Contractor to make arrangements for such additional testing, inspection or approval by an entity acceptable to the District, and the Contractor shall give timely notice to the Architect, the Project Manager and the District's Inspector of when and where tests and inspections are to be made so the District's Inspector and the Architect may observe such procedures. The District shall bear the costs of such additional tests, inspections or approvals, except to the extent that such additional tests, inspections or approvals reveal any failure of the Work to comply with the requirements of the Contract Documents, in which case the Contractor shall bear all costs made necessary by such failures, including without limitation, the costs of corrections, repeat tests, inspections or approvals and the fees of the Architect, Project Manager, if any, and the District's Inspector in connection therewith.

11.2 Delivery of Certificates. Required certificates of testing, inspection or approval shall, unless otherwise required by the Contract Documents, be secured by the Contractor and promptly delivered to the Architect.

11.3 Timeliness of Tests, Inspections and Approvals. Tests or inspections required and conducted pursuant to the Contract Documents shall be made or arranged by Contractor to avoid delay in the progress of the Work.

ARTICLE 12: UNCOVERING AND CORRECTION OF WORK

12.1 Inspection of the Work.

12.1.1 Access to the Work. All Work and all materials and equipment forming a part of the Work or incorporated into the Work are subject to inspection by the District, the Project Manager, the Architect and the District's Inspector for conformity with the Contract Documents. The Contractor shall, at its cost and without adjustment to the Contract Price or the Contract Time,

furnish any facilities necessary for sufficient and safe access to the Work for purposes of inspection by the District, the Project Manager, the Architect, the District's Inspector, DSA or any other public or quasi-public authority with jurisdiction over the Work or any portion thereof.

12.1.2 Limitations Upon Inspections. Inspections, tests, measurements, or other acts of the Architect and the District's Inspector hereunder are for the sole purpose of assisting them in determining that the Work, materials, equipment, progress of the Work, and quantities generally comply and conform with the requirements of the Contract Documents. These acts or functions shall not relieve the Contractor from performing the Work in full compliance with the Contract Documents. No inspection by the Architect or the District's Inspector shall constitute or imply acceptance of Work inspected. Inspection of the Work hereunder is in addition to, and not in lieu of, any other testing, inspections or approvals of the Work required under the Contract Documents.

12.2 Uncovering of Work. If any portion of the Work is covered contrary to the request of the Architect, the District's Inspector or the requirements of the Contract Documents, it must, if required by the Architect or the District's Inspector, be uncovered for observation by the Architect and the District's Inspector and be replaced at the Contractor's expense without adjustment of the Contract Time or the Contract Price.

12.3 Rejection of Work. Prior to the District's Final Acceptance of the Work, any Work or materials or equipment forming a part of the Work or incorporated into the Work which is defective or not in conformity with the Contract Documents may be rejected by the District, the Project Manager the Architect or the District's Inspector and the Contractor shall correct such rejected Work without any adjustment to the Contract Price or the Contract Time, even if the Work, materials or equipment have been previously inspected by the Architect or the District's Inspector or even if they failed to observe the defective or non-conforming Work, materials or equipment.

12.4 Correction of Work. The Contractor shall promptly correct any portion of the Work rejected by the District, the Project Manager, the Architect or the District's Inspector for failing to conform to the requirements of the Contract Documents, or which is determined by them to be defective, whether observed before or after Completion and whether or not fabricated, installed or completed. The Contractor shall bear all costs of correcting such rejected Work, including additional testing and inspections and compensation for the Architect's services and expenses made necessary thereby. The Contractor shall bear all costs of correcting destroyed or damaged construction, whether completed or partially completed, of the District or separate contractors, caused by the Contractor's correction or removal of Work which is not in accordance with the requirements of the Contract Documents, or which is defective.

12.5 Removal of Non-Conforming or Defective Work. The Contractor shall, at its sole cost and expense, remove from the Site all portions of the Work which are defective or are not in accordance with the requirements of the Contract Documents which are neither corrected by the Contractor nor accepted by the District.

12.6 Failure of Contractor to Correct Work. If the Contractor fails to commence to correct defective or non-conforming Work within three (3) days of notice of such condition and promptly thereafter complete the same within a reasonable time, the District may correct it in accordance with the Contract Documents. If the Contractor does not proceed with correction of such defective or non-conforming Work within the time fixed herein, the District may remove it and store the salvable materials or equipment at the Contractor's expense. If the Contractor does not pay costs of such removal and storage after written notice, the District may sell such materials or equipment at auction or at private sale and shall account for the proceeds thereof, after deducting costs and damages that should have been borne by the Contractor, including without limitation compensation for the Architect's services, attorneys fees and other expenses made necessary thereby. If such proceeds

of sale do not cover costs which the Contractor should have borne, the Contract Price shall be reduced by the deficiency. If payments of the Contract Price then or thereafter due the Contractor are not sufficient to cover such amount, the Contractor and the Surety shall be jointly and severally liable to the District for any such excess amount.

- 12.7 Acceptance of Defective or Non-Conforming Work. The District may, in its sole and exclusive discretion, elect to accept Work which is defective or which is not in accordance with the requirements of the Contract Documents, instead of requiring its removal and correction, in which case the Contract Price shall be reduced as appropriate and equitable. The District's determination of the extent of reduction of the Contract Price on account of defective or non-conforming Work accepted by the District shall be binding, conclusive, dispositive and not subject to appeal or other dispute resolution procedures, unless such determination is manifestly unreasonable.

ARTICLE 13: WARRANTIES

- 13.1 Workmanship and Materials. The Contractor warrants to the District that: (i) all materials and equipment furnished under the Contract Documents conform to requirements of the Contract Documents and are new, of good quality and of the most suitable grade and quality for the purpose intended, unless otherwise specified in the Contract Documents; and (ii) all Work and workmanship is of good quality, free from faults and defects and in conformity with the requirements of the Contract Documents. If required by the Architect or the District, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment incorporated into the Work. Any Work or portion thereof not conforming to these requirements, including substitutions or alternatives not properly approved in accordance with the Contract Documents may be deemed defective. Where there is an approved substitution of, or alternative to, material or equipment specified in the Contract Documents, the Contractor warrants to the District that such installation, construction, material, or equipment will equally perform the function and have the quality of the originally specified material or equipment. The Contractor expressly warrants the merchantability, the fitness for use, and quality of all substitute or alternative items in addition to any warranty given by the manufacturer or supplier of such item.
- 13.2 Warranty Work. If, within one (1) year after the date of Final Acceptance, or such other time frame set forth elsewhere in the Contract Documents, any of the Work is found to be defective or not in accordance with the requirements of the Contract Documents, or otherwise contrary to the warranties contained in the Contract Documents, the Contractor shall commence all necessary corrective action not more than seven (7) days after receipt of a written notice from the District to do so, and to thereafter diligently complete the same. In the event that Contractor shall fail or refuse to commence correction of any such item within said seven (7) day period or to diligently prosecute such corrective actions to completion, the District may, without further notice to Contractor, cause such corrective Work to be performed and completed. In such event, Contractor and Contractor's Performance Bond Surety shall be responsible for all costs in connection with such corrective Work, including without limitation, general administrative overhead costs of the District in securing and overseeing such corrective Work. Nothing contained herein shall be construed to establish a period of limitation with respect to any obligation of the Contractor under the Contract Documents. The obligations of the Contractor hereunder shall be in addition to, and not in lieu of, any other obligations imposed by any special guarantee or warranty required by the Contract Documents, guarantees or warranties provided by any manufacturer of any item or equipment forming a part of, or incorporated into the Work, or otherwise recognized, prescribed or imposed by law. Neither the District's Final Acceptance, the making of Final Payment, any provision in Contract Documents, nor the use or occupancy of the Work, in whole or in part, by District shall constitute acceptance of Work not in accordance with the Contract Documents nor relieve the Contractor or the Contractor's Performance Bond Surety from liability with respect to any warranties or responsibility for faulty or defective Work or materials, equipment and workmanship incorporated therein.

13.3 Guarantee. Upon completion of the Work, Contractor shall execute and deliver to the District the form of Guarantee included with the Contract Documents. The Contractor's execution and delivery of the form of Guarantee is an express condition precedent to any obligation of the District to disburse the Final Payment to the Contractor.

13.4 Survival of Warranties; Surety Obligations. The Contractor's warranty obligations hereunder shall survive the Contractor's completion of Work under the Contract Documents, the District's Final Acceptance or the termination of the Contract. The obligations of the Surety issuing the Performance Bond shall include assumption and discharge of the Contractor's warranty obligations if the Contractor fails or refuses to perform its warranty obligations hereunder in strict conformity herewith.

ARTICLE 14: SUSPENSION OF WORK

14.1 District's Right to Suspend Work. The District may, without cause, and without invalidating or terminating the Contract, order the Contractor, in writing, to suspend, delay or interrupt the Work in whole or in part for such period of time as the District may determine. The Contractor shall resume and complete the Work suspended by the District in accordance with the District's directive, whether issued at the time of the directive suspending the Work or subsequent thereto.

14.2 Adjustments to Contract Price and Contract Time. If the District directs suspension of the Work, an adjustment shall be made to the Contract Price for increases in the direct cost of performance of the Work of the Contract Documents, actually caused by suspension, delay or interruption ordered by the District; provided however that no adjustment of the Contract Price shall be made to the extent: (i) that performance is, was or would have been so suspended, delayed or interrupted by another cause for which the Contractor is responsible under the Contract Documents; or (ii) that an equitable adjustment is made or denied under another provision of the Contract Documents. The foregoing notwithstanding, any such adjustment of the Contract Price shall not include any adjustment to increase the Contractor's overhead, general administrative costs or profit, all of which will remain as reflected in the Cost Breakdown submitted by the Contractor pursuant to the Contract Documents. In the event of the District's suspension of the Work, the Contract Time shall be equitably adjusted.

ARTICLE 15: TERMINATION

15.1 Termination for Cause

15.1.1 District's Right to Terminate. The District may terminate the Contract upon the occurrence of any one or more of the following events of the Contractor's default: (i) if the Contractor refuses or fails to prosecute the Work with diligence as will insure Completion of the Work within the Contract Time, or if the Contractor fails to One Hundred Percent Complete the Work within the Contract Time; (ii) if the Contractor becomes bankrupt or insolvent, or makes a general assignment for the benefit of creditors, or if the Contractor or a third party files a petition to reorganize or for protection under any bankruptcy or similar laws, or if a trustee or receiver is appointed for the Contractor or for any of the Contractor's property on account of the Contractor's insolvency, and the Contractor or its successor in interest does not provide adequate assurance of future performance in accordance with the Contract Documents within ten (10) days of receipt of a request for such assurance from the District; (iii) if the Contractor repeatedly fails to supply sufficient skilled workmen or suitable materials or equipment; (iv) if the Contractor repeatedly fails to make prompt payments to any Subcontractor, of any tier, or Material Suppliers or others for labor, materials or equipment; (v) if the Contractor disregards laws, ordinances, rules, codes, regulations, orders applicable to the Work or similar requirements of any public entity having jurisdiction over the Work; (iv) if the Contractor disregards proper directives of the Architect, the District's Inspector or District under the Contract Documents; (vii) if the Contractor performs Work which deviates from the

Contract Documents and neglects or refuses to correct such Work; or (viii) if the Contractor otherwise violates in any material way any provisions or requirements of the Contract Documents. Once the District determines that sufficient cause exists to justify the action, the District may terminate the Contract without prejudice to any other right or remedy the District may have, after giving the Contractor and the Surety at least seven (7) days advance written notice of the effective date of termination. The District shall have the sole discretion to permit the Contractor to remedy the cause for the termination without waiving the District's right to terminate the Contract, or otherwise waiving, restricting or limiting any other right or remedy of the District under the Contract Documents or at law.

15.1.2 District's Rights Upon Termination. If the Contract is terminated pursuant to this Article 15.1, the District may take over the Work and prosecute it to completion, by contract or otherwise, and may exclude the Contractor from the site. The District may take possession of the Work and of all of the Contractor's tools, appliances, construction equipment, machinery, **materials, and plant which may be on or about the Site, and use the same to the full extent they could be used by the Contractor without liability to the Contractor.** In exercising the District's right to prosecute the completion of the Work, the District may also take possession of all materials and equipment at or about the Site or for which the District has paid the Contractor but which are stored elsewhere, and finish the Work as the District deems expedient. In exercising the District's right to prosecute the completion of the Work, the District shall have the right to exercise its sole discretion as to the manner, methods, and reasonableness of the costs of completing the Work and the District shall not be required to obtain the lowest price for completion of the Work. If the District takes bids for remedial Work or completion of the Work, the Contractor shall not be eligible for the award of such contract(s).

15.1.3 Completion by the Surety. If the Contract is terminated pursuant to this Article 15.1, the District may demand that the Surety take over and complete the Work. The District may require that in so doing, the Surety not utilize the Contractor in performing and completing the Work. Upon the failure or refusal of the Surety to take over and begin completion of the Work within twenty (20) days after demand therefor, the District may take over the Work and prosecute it to completion as provided for above.

15.1.4 Assignment and Assumption of Subcontracts. The District shall, in its sole and exclusive discretion, have the option of requiring any Subcontractor or Material Supplier to perform in accordance with its Subcontract or Purchase Order with the Contractor and assign the Subcontract or Purchase Order to the District or such other person or entity selected by the District to complete the Work.

15.1.5 Costs of Completion. In the event of termination under this Article 15.1, the Contractor shall not be entitled to receive any further payment of the Contract Price until the Work is completed. If the unpaid balance of the Contract Price as of the date of termination exceeds the District's direct and indirect costs and expenses for completing the Work, including without limitation, attorneys' fees, fees for additional professional and consultant services, and the District's administrative costs, such excess shall be used to pay the Contractor for the cost of the Work performed prior to the effective date of termination with a reasonable allowance for overhead and profit. If the District's costs and expenses to complete the Work exceed the unpaid Contract Price, the Contractor and Surety are jointly and severally liable for payment of such difference to the District.

15.1.6 Contractor Responsibility for Damages. The Contractor and the Surety shall be jointly and severally liable for all damage sustained by the District resulting from, in any manner, the termination of Contract under this Article 15.1, including without limitation, attorneys' fees, and for all costs necessary for repair and

completion of the Work exceeding the Contract Price.

15.1.7 Conversion to Termination for Convenience. In the event the Contract is terminated under this Article 15.1, and it is determined, for any reason, that the Contractor was not in default under the provisions hereof, the termination shall be deemed a Termination for Convenience of the District and thereupon, the rights and obligations of the District and the Contractor shall be determined in accordance with Article 15.2 hereof.

15.1.8 District's Rights Cumulative. In the event the Contract is terminated pursuant to this Article 15.1, the termination shall not affect or limit any rights or remedies of the District against the Contractor or the Surety. The rights and remedies of the District under this Article 15.1 are in addition to, and not in lieu of, any other rights and remedies provided by the Laws or under the Contract Documents. Any retention or payment of monies to the Contractor by the District shall not be deemed to release the Contractor or the Surety from any liability hereunder.

15.2 Termination for Convenience of the District. The District may at any time, in its sole and exclusive discretion, by written notice to the Contractor, terminate the Contract in whole or in part when it is in the interest of, or for the convenience of, the District. In such case, the Contractor shall be entitled to payment for: (i) Work actually performed and in place as of the effective date of such termination for convenience of the District, with a reasonable allowance for profit and overhead on such Work, and (ii) reasonable termination expenses for reasonable protection of Work in place and suitable storage and protection of materials and equipment delivered to the site of the Work but not yet incorporated into the Work, provided that such payments exclusive of termination expenses shall not exceed the total Contract Price as reduced by payments previously made to the Contractor and as further reduced by the value of the Work as not yet completed. The Contractor shall not be entitled to profit and overhead on Work which was not performed as of the effective date of the termination for convenience of the District. The District may, in its sole discretion, elect to have Subcontracts assigned pursuant to Article 15.1.4 above after exercising the right hereunder to terminate for the District's convenience.

ARTICLE 16: MISCELLANEOUS

16.1 Governing Law. This Contract shall be governed by and interpreted in accordance with the laws of the State of California.

16.2 Marginal Headings; Interpretation. The titles of the various Articles of these General Conditions and elsewhere in the Contract Documents are used for convenience of reference only and are not intended to, and shall in no way, enlarge or diminish the rights or obligations of the District or the Contractor and shall have no effect upon the construction or interpretation of the Contract Documents. The Contract Documents shall be construed as a whole in accordance with their fair meaning and not strictly for or against the District or the Contractor.

16.3 Successors and Assigns. Except as otherwise expressly provided in the Contract Documents, all terms, conditions and covenants of the Contract Documents shall be binding upon, and shall inure to the benefit of the District and the Contractor and their respective heirs, representatives, successors-in-interest and assigns.

16.4 Cumulative Rights and Remedies; No Waiver. Duties and obligations imposed by the Contract Documents and rights and remedies available thereunder shall be in addition to and not in lieu of or otherwise a limitation or restriction of duties, obligations, rights and remedies otherwise imposed or available by law. No action or failure to act by the District shall constitute a waiver of a right or remedy afforded it under the Contract Documents or at law nor shall such

an action or failure to act constitute approval of or acquiescence in a breach hereunder, except as may be specifically agreed in writing.

16.5 Severability. In the event any provision of the Contract Documents shall be deemed illegal, invalid, unenforceable and/or void, by a court or any other governmental agency of competent jurisdiction, such provision shall be deemed to be severed and deleted from the Contract Documents, but all remaining provisions hereof, shall in all other respects, continue in full force and effect.

16.6 No Assignment by Contractor. The Contractor shall not sublet or assign the Contract, or any portion thereof, or any monies due thereunder, without the express prior written consent and approval of the District, which approval may be withheld in the sole and exclusive discretion of the District. The District's approval to such assignment shall be upon such terms and conditions as determined by the District in its sole and exclusive discretion.

16.7 Gender and Number. Whenever the context of the Contract Documents so require, the neuter gender shall include the feminine and masculine, the masculine gender shall include the feminine and neuter, the singular number shall include the plural and the plural number shall include the singular.

16.8 Independent Contractor Status. In performing its obligations under the Contract Documents, the Contractor is an independent contractor to the District and not an agent or employee of the District.

16.9 Notices. Except as otherwise expressly provided for in the Contract Documents, all notices which the District or the Contractor may be required, or may desire, to serve on the other, shall be effective only if delivered by personal delivery or by postage prepaid, First Class Certified Return Receipt Requested United States Mail, addressed to the District or the Contractor at their respective address set forth in the Contract Documents, or such other address(es) as either the District or the Contractor may designate from time to time by written notice to the other in conformity with the provisions hereof. In the event of personal delivery, such notices shall be deemed effective upon delivery, provided that such personal delivery requires a signed receipt by the recipient acknowledging delivery of the same. In the event of mailed notices, such notice shall be deemed effective on the third working day after deposit in the mail.

16.10 Disputes; Continuation of Work. Notwithstanding any claim, dispute or other disagreement between the District and the Contractor regarding performance under the Contract Documents, the scope of Work thereunder, or any other matter arising out of or related to, in any manner, the Contract Documents, the Contractor shall proceed diligently with performance of the Work in accordance with the District's written direction, pending any final determination or decision regarding any such claim, dispute or disagreement.

16.11 Dispute/Claims Resolution.

16.11.1 Public Contract Code §9204 Claims Resolution Procedures. Claims of the Contractor are subject to the non-binding dispute resolution procedures set forth in Public Contract Code §9204 ("Section 9204") provided, however, that the Contractor's initiation of Section 9204 procedures is expressly subject to the Contractor's prior full and timely compliance with requirements and procedures of the Contract Documents relating to procedures for resolution of claims, change orders, disputes and other matters in controversy under the Contract Documents.

16.11.1.1 Claim Defined. The term "Claim" shall be as defined in Section 9204.

16.11.1.2 Claim Documentation. The Contractor shall furnish reasonable documentation to support each Claim. "Reasonable documentation" includes, without limitation: (i) contractual and legal basis establishing Claim entitlement or merit; (ii)

factual basis establishing District liability for the Claim; (iii) detailed breakdown of labor, materials, equipment and other costs included in the Claim; and (iv) detailed basis, including Construction Schedule analysis and fragnets supporting any Contract Time adjustment or Liquidated Damages relief included in the scope of a Claim.

16.11.1.3 District Claim Review Statement. Within forty five (45) days (or such other time mutually agreed to by the District and the Contractor) after receipt of a properly submitted and properly documented Claim, the District will conduct a reasonable review of the Claim and provide the Contractor with a written statement identifying the disputed and undisputed portions of the Claim ("Claim Review Statement"). If the District does not provide the Contractor with the Claim Review Statement for any Claim within forty five (45) days (or other time mutually agreed to by the District and the Contractor) after receipt of a properly submitted and properly documented Claim, the Claim is deemed rejected in its entirety and thereupon, the Contractor may initiate the Meet and Confer process described below. A Claim deemed rejected pursuant to the foregoing does not constitute an adverse finding of Claim merit or the Contractor's responsibility or qualifications. If the Claim Review Statement identifies any undisputed portion of a Claim ("Undisputed Claim") and payment is due from the District on the Undisputed Claim, the District shall process and make payment on the Undisputed Claim within sixty (60) days after the issuance date of the Claim Review Statement.

16.11.1.4 Meet and Confer.

16.11.1.4.1 Meet and Confer Demand. If the Contractor disputes any portion of the Claim Review Statement, or if a Claim is deemed rejected by the District not providing the Contractor with the Claim Review Statement within the time permitted under Section 9204, the Contractor may demand an informal conference to meet and confer with the District for settlement of the issues in dispute ("Meet and Confer"). The Contractor's Meet and Confer request must be submitted to the District: (i) in writing; (ii) by registered mail or certified mail, return receipt requested; and (iii) within ten (10) days after the Claim Review Statement is submitted to the Contractor or within ten (10) days after the date the Claim is deemed rejected, as applicable. Failure of the Contractor to strictly comply with the foregoing is deemed a waiver of the Contractor's right to request the Meet and Confer and the Non-Binding Mediation procedures under Section 9204. If the Contractor strictly complies with the foregoing, the District will schedule the Meet and Confer conference within thirty (30) days of the Contractor's Meet and Confer request for settlement of disputed portions of the Claim Review Statement.

16.11.1.4.2 Meet and Confer Statement. Within ten (10) business days after conclusion of the Meet and Confer conference, if any portion of a Claim remains disputed, the District shall provide the Contractor a written statement identifying the disputed and undisputed portions of the Claim ("Meet and Confer Statement"). If the Meet and Confer Statement identifies any Undisputed Claim and payment is due from the District on the Undisputed Claim, the District shall process and make payment on the Undisputed Claim within sixty (60) days after date the Meet and Confer Statement is issued.

16.11.1.5 Non-Binding Mediation.

16.11.1.5.1 Contractor Initiation. The Contractor may request nonbinding mediation ("Mediation") of disputed portions of a Claim identified in the Meet and

Confer Statement. The Contractor's Mediation demand must be submitted to the District: (i) in writing; (ii) by registered mail or certified mail, return receipt requested; (iii) within ten (10) days after the Meet and Confer Statement is submitted to the Contractor; and (iv) with specific identification of the disputed Claims issues subject to Mediation. Failure of the Contractor to strictly comply with the foregoing is deemed a waiver of the Contractor's right to demand Mediation procedures under Section 9204.

16.11.1.5.2 Mediator Selection. The District and Contractor shall mutually agree to a mediator within ten (10) business days after the date of the Contractor's demand for Mediation. If the District and Contractor do not mutually agree to a mediator, the District and Contractor shall each select a mediator and the District/Contractor selected mediators shall select a qualified neutral third party to mediate the disputed portion of the Claim.

16.11.1.5.3 Mediation Procedures. Mediation includes any nonbinding process, including, but not limited to, neutral evaluation or a dispute review board, in which an independent third party or board assists the District and Contractor in dispute resolution through negotiation or by issuance of an evaluation.

16.11.1.5.4 Mediation Costs. All costs, fees and expenses of the mediator(s) and mediation administration shall be shared equally by the District and Contractor. The foregoing notwithstanding, the Contractor and District shall each bear the costs, fees and expenses of their own attorneys, experts and consultants.

16.11.1.5.5 Post-Mediation Disputed Claims. Any Claims issues in dispute after Mediation shall be resolved in accordance with the applicable provisions of the Contract Documents.

16.11.1.5.6 Waiver. The District and Contractor may mutually agree to waive, in writing, Mediation under Section 9204 and subject to the Contractor's compliance with Government Code Claim requirements, proceed directly to commencement of a civil action or binding arbitration.

16.11.2 Payments of Undisputed Claims. If a payment due from the District for Undisputed Claims identified in the Claim Review Statement or the Meet and Confer Statement issued for a Claim is not made within the time established under Section 9204 the overdue portion of such payment shall bear interest at the rate of seven percent (7%) per annum from the date due. The District's credit application of any amount due for an Undisputed Claim against amounts due from the Contractor under the Contract Documents shall be deemed payment of the Undisputed Claim.

16.11.3 Subcontractor Claims.

16.11.3.1 Subcontractor Claim Submittal. If a Subcontractor, of any tier (collectively "Subcontractor") lacks legal standing to assert a Claim against the District because privity of contract does not exist, the Contractor may present the District a Claim on behalf of the Subcontractor ("Subcontractor Claim"). Each Subcontractor requesting submittal of a Subcontractor Claim to the District shall furnish reasonable documentation to support the Subcontractor Claim. Within forty-five (45) days of receipt of a Subcontractor's written request to submit a Subcontractor Claim, the Contractor shall notify the Subcontractor in writing as to whether the Contractor presented the Subcontractor Claim to the District. If the Contractor did not present the Subcontractor Claim, the Contractor shall provide the Subcontractor with a statement of the reasons

for not having done so.

16.11.3.2 Contractor Certification of Subcontractor Claim. The District's review of Subcontractor Claims is expressly subject to the Contractor's submittal of a duly completed and executed form of Contractor Certification of Subcontractor Claim certifying that the Contractor has thoroughly reviewed the Subcontractor Claim and based on the Contractor's review, certify that: (i) the Subcontractor Claim is made by the Subcontractor in good faith; (ii) the Subcontractor Claim is supported by reasonable documentation establishing entitlement to the relief requested and District liability therefor; and (iii) the Subcontractor Claim does not incorporate any request constituting a False Claim under applicable law, including the California False Claim Act (Government Code §12650 et seq). The form of Contractor Certification of Subcontractor Claim is included in the Contract Documents.

16.11.3.3 District Review of Subcontractor Claim. Subcontractor Claims presented by the Contractor to the District are subject to the Section 9204 non-binding dispute resolution procedures set forth above, as modified herein. Requests for the District to conduct Meet and Confer and/or non-binding mediation procedures must be submitted jointly by the Contractor and the Subcontractor submitting the Subcontractor Claim. If Mediation proceedings are initiated in connection with a Subcontractor Claim, mediator and mediation administration fees and costs shall be borne equally by the District, Contractor and Subcontractor.

16.11.3.4 Disputed Subcontractor Claims. Subcontractor Claims which are not fully resolved by the Section 9204 non-binding dispute resolution procedures shall be resolved by Section 20104.4 Dispute Resolution Procedures or binding arbitration, as applicable. Commencement of Section 20104.4 Dispute Resolution Procedures or binding arbitration proceedings in connection with any Subcontractor Claim is subject to compliance with Government Code Claims requirements.

16.11.4 Government Code Claim Requirements. Pursuant to Government Code §930.6, any claim, demand, dispute, disagreement or other matter in controversy asserted by the Contractor, whether on behalf of itself or a Subcontractor, against the District for money or damages, including without limitation Claims or portions thereof remaining in dispute after completion of the Section 9204 non-binding dispute resolution procedures described above are deemed a "suit for money or damages" and shall be subject to the provisions of Government Code §§945.4, 945.6 and 946 ("Government Code Claims Process"). An express condition precedent to the Contractor's initiation of Section 20104.4 Dispute Resolution Procedures or binding arbitration proceedings pursuant to the following is the Contractor's compliance with the Government Code Claims Process, including without limitation, presentation of the claim, demand, dispute, disagreement or other matter in controversy between the Contractor and the District seeking money or damages to the District and acted upon or deemed rejected by the District in accordance with Government Code §900, et seq.

16.11.5 Section 20104.4 Dispute Resolution Procedures; Claims Less Than \$375,000. Any Claim, or portion thereof, in dispute after completion of the Section 9204 non-binding dispute resolution procedures and the Government Code Claims Process which is equal to or less \$375,000 shall be resolved in accordance with the civil action procedures established in Public Contract Code §20104.4. Unless otherwise agreed to by the District and the Contractor in writing, the mediation conducted pursuant to Section 9204 procedures shall excuse any further obligation under Section 20104.4 to mediate after litigation has been commenced.

16.11.5.1 Binding Arbitration of Claims Exceeding \$375,000.

16.11.5.1.1 JAMS Arbitration. Any Claim, or portion thereof in dispute after

completion of the Section 9204 procedures and the Government Code Claims Process which exceeds \$375,000 and any other claims, disputes, disagreements or other matters in controversy between the District and the Contractor arising out of, or related, in any manner, to the Contract Documents, or the interpretation, clarification or enforcement thereof shall be resolved by binding arbitration conducted before one (1) retired judge in accordance with the Construction Arbitration Rules and Procedures of Judicial Arbitration Mediation Services ("JAMS") in effect as of the date that a Demand for Arbitration is filed, except as expressly modified herein. The locale for any arbitration commenced hereunder shall be the regional office of the JAMS closest to the Site.

- 16.11.5.2 Demand for Arbitration. A Demand for Arbitration shall be filed and served within a reasonable time after the occurrence of the claim, dispute or other disagreement giving rise to the Demand for Arbitration, but in no event shall a Demand for Arbitration be filed or served after the date when the institution of legal or equitable proceedings based upon such claim, dispute or other disagreement would be barred by the applicable statute of limitations. If more than one Demand for Arbitration is filed by either the District or the Contractor relating to the Work or the Contract Documents, all Demands for Arbitration shall be consolidated into a single arbitration proceeding, unless otherwise agreed to by the District and the Contractor. The Contractor's Surety, a Subcontractor or Material Supplier to the Contractor and other third parties may be permitted to join in and be bound by an arbitration commenced hereunder if required by the terms of their respective agreements with the Contractor, except to the extent that such joinder would unduly delay or complicate the expeditious resolution of the claim, dispute or other disagreement between the District and the Contractor, in which case an appropriate severance order shall be issued by the Arbitrator(s).
- 16.11.5.3 Discovery. In connection with any arbitration proceeding commenced hereunder, the discovery rights and procedures provided for in California Code of Civil Procedure §1283.05 shall be applicable, and the same shall be deemed incorporated herein by this reference.
- 16.11.5.4 Arbitration Award. The award rendered by the Arbitrator(s) ("Arbitration Award") shall be final and binding upon the District and the Contractor only if the Arbitration Award is: (i) supported by One Hundred Percent evidence; (ii) based on applicable legal standards in effect at the time the Arbitration Award is issued; and (iii) supported by written findings of fact and conclusions of law in conformity with California Code of Civil Procedure §1296. Any Arbitration Award that does not conform to the foregoing is invalid and unenforceable. The District and Contractor hereby expressly agree that the Court shall, subject to California Code of Civil Procedure §§1286.4 and 1296, vacate the Arbitration Award if, after review, the Court determines either that the Arbitration Award does not fully conform to the foregoing. The confirmation, enforcement, vacation or correction of an arbitration award rendered hereunder shall be made by the Superior Court of the State of California for the county in which the Site is situated. The substantive and procedural rules for such post-award proceedings shall be as set forth in California Code of Civil Procedure §1285 et seq.
- 16.11.5.5 Arbitration Fees and Expenses. The expenses and fees of the Arbitrator(s) shall be divided equally among all of the parties to the arbitration. Each party to any arbitration commenced hereunder shall be responsible for and shall bear its own attorneys' fees, witness fees and other costs or expenses incurred in connection with such arbitration. The foregoing notwithstanding, the Arbitrator(s) may award arbitration costs, including Arbitrators' fees but excluding attorneys' fees, to the prevailing party. By this arbitration provision, the District and the Contractor acknowledge and agree that neither shall

recover from the other any attorney's fees associated with or arising out of any legal, administrative or other proceedings filed or instituted in connection with or arising out of the Contract Documents or the performance of either the District or the Contractor thereunder. The limited exceptions in the Contract Documents that provide attorney's fees for specific issues shall neither be construed as applying to this arbitration provision under California Civil Code §1717(a) nor be deemed to be "authorized by the Laws."

16.11.5.6 Limitation on Arbitrator. The Superior Court for the State of California for the County in which the Project Site is situated has the sole and exclusive jurisdiction, and an arbitrator has no authority, to hear and/or determine a challenge to the commencement or maintenance of an arbitration proceeding on the grounds that: (i) the subject matter of the arbitration proceeding is barred by the applicable statute of limitations; (ii) the subject matter of the arbitration proceeding is barred by a provision of the California Government Claims Act; (iii) the subject matter of the arbitration proceeding is outside the scope of the arbitration clause; (iv) the Contractor has failed to satisfy all conditions precedent to commencement or maintenance of an arbitration proceeding; (v) waiver of the right to compel arbitration; (vi) grounds exist for the revocation of the arbitration agreement; and/or, (vii) there is the prospect that a ruling in arbitration would conflict or potentially with a ruling in a pending proceeding regarding the Project on a common issue of law or fact.

16.11.6 Inapplicability to Bid Bond. The arbitration proceedings described above are not applicable to disputes, disagreements or enforcement of rights or obligations under the Bid Bond. All claims, disputes and actions to enforce rights or obligations under the Bid Bond shall be adjudicated only by judicial proceedings commenced in a court of competent jurisdiction.

- 16.12 Limitation on Special/Consequential Damages. In the event of the District's breach or default of its obligations under the Contract Documents, the damages, if any, recoverable by the Contractor shall be limited to general damages which are directly caused by the breach or default of the District and shall exclude any and all special or consequential damages, if any. The Contractor expressly acknowledges the foregoing limitation to recovery of only general damages from the District if the District is in breach or default of its obligations under the Contract Documents; the Contractor expressly waives and relinquishes any recovery of special or consequential damages from the District.
- 16.13 Capitalized Terms. Except as otherwise expressly provided, capitalized terms used in the Contract Documents shall have the meaning and definition for such term as set forth in the Contract Documents.
- 16.14 Attorneys' Fees. Except as expressly provided for in the Contract Documents, or authorized by law, neither the District nor the Contractor shall recover from the other any attorney's fees or other costs associated with or arising out of any legal, administrative or other proceedings filed or instituted in connection with or arising out of the Contract Documents or the performance of either the District or the Contractor thereunder.
- 16.15 Provisions Required by Law Deemed Inserted. Each and every provision of law and clause required by law to be inserted in the Contract Documents is deemed to be inserted herein and the Contract Documents shall be read and enforced as though such provision or clause are included herein, and if through mistake, or otherwise, any such provision or clause is not inserted or if not correctly inserted, then upon application of either party, the Contract Documents shall forthwith be physically amended to make such insertion or correction.
- 16.16 Days. Unless otherwise expressly stated, references to "days" in the Contract

Documents shall be deemed to be calendar days.

- 16.17 Entire Agreement. The Contract Documents contain the entire agreement and understanding between the District and the Contractor concerning the subject matter hereof, and supersedes and replaces all prior negotiations, proposed agreements or amendments, whether written or oral. No amendment or modification to any provision of the Contract Documents shall be effective or enforceable except by an agreement in writing executed by the District and the Contractor.

[END OF SECTION]

SPECIAL CONDITIONS

1. Application of Special Conditions. These Special Conditions for a part of the Contract Documents for the Work described as **BID #2024-10 Career Center Interiors Upgrades.**
2. Project Manager. The District will manage the project.
3. Drawings and Specifications. (Available Electronically), The number of sets of the Drawings and Specifications which the District will provide to the Contractor, pursuant to Article 2.1.3 of the General Conditions is **Choose an item.** Additional sets of the Drawings and Specifications may be obtained by the Contractor from the District at the cost of reproduction.
4. Insurance Coverages.

- 4.1. Contractor Insurance. Pursuant to Article 6 of the General Conditions, the Contractor shall obtain and maintain the following insurance coverages with minimum coverage amounts as set forth below:

Policy of Insurance	Minimum Coverage Amount
Commercial General Liability Insurance	Per Occurrence: Two Million Dollars (\$2,000,000)
	Aggregate: Four Million Dollars (\$4,000,000)
Workers Compensation	In accordance with the Laws
Employers Liability	One Million Dollars (\$1,000,000)
Builders Risk	Full insurable value of the Work; Seismic coverage: Choose an item.

- 4.2. Subcontractor Insurance. Pursuant to Article 6 of the General Conditions, each Subcontractor shall obtain and maintain the following insurance coverages with minimum coverage amounts as set forth below

Policy of Insurance	Minimum Coverage Amount
Commercial General Liability Insurance	Per Occurrence: One Million Dollars (\$1,000,000)
	Aggregate: Two Million Dollars (\$2,000,000)
Workers Compensation	In accordance with the Laws
Employers Liability	One Million Dollars (\$1,000,000)

5. Contract Time. The commencement date of the Contract Time of the Work shall be as set forth in the Notice to Proceed issued by or on behalf of the District. The Contractor shall achieve One Hundred Percent (100%) Completion of the Work by **75 days from the Notice to Proceed.** The Contract Time shall not be extended if the Contractor commences Work after the date established in the Notice to Proceed for commencement of Work without fault or neglect of the District.
6. Liquidated Damages. The per diem rate of Liquidated Damages for delayed One Hundred Percent Completion, delayed submission of Submittals and delayed completion of Punchlist shall be as set forth herein.
 - 6.1. Delayed One Hundred Percent Completion. If Completion is not achieved on or before

expiration of the Contract Time, the Contractor shall be liable to the District for Liquidated Damages from the date of expiration of the Contract Time to the date that the Contractor achieves Completion of the Work at the per diem rate of Five Hundred Dollars (\$500.00) a day.

- 6.2. Delayed Submission of Submittals. If the Contractor fails to submit a Submittal in accordance with the Submittal Schedule, the Contractor shall be liable to the District for Liquidated Damages for each delayed Submittal at the per diem rate of Five Hundred Dollars (\$500.00) from the date that such Submittal was due to be submitted pursuant to the Submittal Schedule and the date that the Contractor actually submits the Submittal to the Architect.
 - 6.3. Delayed Punchlist Completion. If the Contractor fails to complete Punchlist within the time established pursuant to the Contract Documents, the Contractor shall be liable to the District for Liquidated Damages from the date established for completion of Punchlist until the date that all Punchlist is actually completed at the per diem rate of Five Hundred Dollars (\$500.00).
 - 6.4. Surety Liability. Subject only to limitations established by the penal sum of the Performance Bond, the Surety issuing the Performance Bond shall be liable to the District for Liquidated Damages due from the Contractor.
7. Mark-Ups on Changes to the Work. In the event of Changes to the Work, pursuant to Article 9 of the General Conditions, the mark-up for all overhead (including home and field office overhead), general conditions costs and profit, shall not exceed the percentage of allowable direct actual costs for performance of the Change as set forth below.
 - 7.1. Subcontractor Performed Changes. For the portion of any Change performed by Subcontractors of any tier, the percentage mark-up on allowable actual direct labor and materials costs incurred by all Subcontractors of any tier shall be **Ten Percent (10%)**. In addition, for the portion of any Change performed by a Subcontractor of any tier, the Contractor may add an amount equal to Choose an item. of the allowable actual direct labor and materials costs of Subcontractors performing the Change; the foregoing mark-up shall not be applied to the Subcontractor mark-up.
 - 7.2. Contractor Performed Changes. For the portion of any Change performed by the Contractor's own forces, the mark-up on the allowable actual direct labor and materials costs of such portion of a Change shall be **Ten Percent (10%)**.
 - 7.3. Bond Premium Costs. In addition to the foregoing mark-ups on the direct costs of labor and materials, a bond premium expense in an amount equal to the lesser of the Contractor's actual bond premium rate of One Percent (1%) of the total actual direct costs of labor and materials (before Subcontractor and Contractor mark-ups) will be allowed.
 - 7.4. Exclusions From Mark-Up of Actual Costs. Mark-ups on the actual cost of materials/equipment incorporated into a Change or for purchase/rental of Construction Equipment shall not be applied to any portion of such costs which are for sales, use or other taxes arising out of the purchase of materials/equipment and/or for purchase/rental of Construction Equipment.
 8. Rain Days.
 - 8.1. Rain Days Defined and Limitations on Rain Days. In addition to the requirements and limitations set forth in the Contract Documents, including without limitation Article 7.4.1 of the General Conditions, the Contract Time will be adjusted for unusually severe weather conditions resulting from rainfall only if: (i) the Contractor has taken reasonable measures to proceed with the Work notwithstanding inclement weather conditions; (ii) the Contractor demonstrates (by schedule analysis or other means) to the reasonable satisfaction of the District that the progress of Work on the critical path of the then current Construction Schedule was affected by unusually severe weather conditions resulting from rainfall; and

(iii) the Contractor demonstrates to the reasonable satisfaction of the District that the Contractor could not re-sequence Work so that Work activities (whether or not on the critical path of the then current Construction Schedule) not affected by rainfall could have been performed on a Rain Day. The occurrence of precipitation by itself shall not constitute a Rain Day. For purposes of the Contract Documents, a Rain Day occurs when: (i) there is measurable rainfall occurring on a day when Work is scheduled to be performed at the Site; (ii) there is rainfall sufficiently continuous for at least a three (3) hour period; (iii) the rainfall is sufficiently severe to prevent performance of Work at the Site (rainfall is not deemed sufficiently severe to prevent Work at the Site if there are Work activities which are not materially affected by rainfall and which can be reasonably performed by the Contractor by re-sequencing Work activities); and (iv) after a Rain Day (as defined in (i), (ii) and (iii) above) has occurred, the conditions at the Site are adversely affected by rainfall so that a period of time is necessary to permit sufficient "drying out" of wet conditions at the Site sufficient to permit the continuation of Work.

- 8.2. Rain Days Incorporated Into Construction Schedules. Construction Schedules prepared by the Contractor shall incorporate the following Rain Days. The Contract Time shall not be subject to adjustment for unusually severe weather conditions until the number of Rain Days noted below are exceeded.

Month	Rain Days
January	four (4)
February	four (4)
March	three (3)
April	two (2)
May	two (2)
June	none
July	none
August	none
September	none
October	two (2)
November	three (3)
December	four (4)

9. Hours and Days of Work at the Site.

- 9.1. Work Hours/Days. Subject to limitations set forth elsewhere in the Contract Documents and below, the hours/days of Work at the Site are: 7am – 5pm Mondays through Fridays, except for holiday days.
- 9.2. Limitations on Work Hours/Days. Work activities at the Site will be limited or prohibited on days: (i) devoted to student testing or when testing of students may be adversely affected by Work activities at the Site; or (ii) when other special events or functions are scheduled. The Contractor shall familiarize itself with District activities at the Site to avoid Work activity interferences or disturbances to such District activities. The Contractor's Construction Schedule shall take into account the District activities which limit or preclude Work activities at the Site.
- 9.3. Facilities/Services for District Inspector. Unless otherwise expressly provided in the Contract Documents, pursuant to Article 4.14.2 of the General Conditions, the Contractor, without adjustment of the Contract Price, shall provide, or cause to be provided, for use by the District Inspector during prosecution of the Work, the following: (i) lockable temporary office space consisting of sufficient space to accommodate Project Inspectors assigned to the Work; (ii) furniture and furnishings consisting of desks and chairs for use by Project Inspectors assigned to the Work, file storage, one (1) conference table and

seating sufficient to accommodate seating for at least four (4) people; (iii) landline phone; (iv) plain paper fax machine; (v) landline telephone and fax service; (vi) internet service; and (vii) plain paper copier with copy speed of no greater than thirty five (35) pages per minute.

10. Permits, Fees and Approvals. In addition to permits or approvals obtained by the District for the Work, the Contractor shall obtain the following permits, approvals and other authorizations from any public agency with jurisdiction over any portion of the Work. The Contractor shall obtain the permits, approvals and/or authorizations set forth below: (i) without adjustment of the Contract Price, unless otherwise indicated below; and (ii) without adjustment of the Contract Time.

Contractor Obtained Permit, Approval or Authorization	Cost Reimbursement
Deferred Approval Items (N/A)	No reimbursement to Contractor; cost included in Contract Price.
	No reimbursement to Contractor, cost included in Contract Price.
	Choose an item.

For any off-site work requiring City or County review and/or approval, Contractor shall coordinate and schedule inspections with City or County.

11. Construction Utilities. The Contractor shall obtain and pay for all site utilities required to complete the Work.

12. Use of Site.

12.1. Staging/Storage. Staging/storage areas shall be restricted to areas designated in the Contract Documents for such purposes. The Contractor, without adjustment of the Contract Price or the Contract Time, shall secure and pay for the use of additional storage, staging areas, or work areas needed for operations. The Contractor and Subcontractors are responsible for following the requirements established in the Contract Documents for deliveries, storage trailers, office trailers and temporary utilities. The Contractor and Subcontractors shall coordinate material and equipment deliveries with the District and to ensure that materials can be off-loaded efficiently and that Site use operations are maintained in an orderly fashion. If any materials or equipment stored at the Site obstruct the performance of any portion of the Project or otherwise interfere with District operations or activities, these materials shall be removed and relocated by the Contractor without adjustment of the Contract Price or the Contract Time. If the Contractor fails or refuses to comply with the foregoing staging/storage requirements and limitations within a reasonable time, but not more than twenty four (24) hours after notice, the District reserves the right to take measures to comply with such requirements or limitations, with the costs of such measures being the sole responsibility of the Contractor.

12.2. Site Logistics Plan. Prior to commencement of Work at the Contractor, the Contractor prepare a Site Logistics Plan which include, without limitation: delivery routes, storage/staging areas, jobsite trailer locations, wash out areas, and other similar activities. The Site Logistics Plan shall: (i) take into account emergency vehicle ingress/egress; pedestrian paths of travel and disabled persons paths of travel; (ii) be subject to review and acceptance by the District; and (iii) be subject to modification during performance of the Work.

12.3. Parking. Personnel of the Contractor, Subcontractors and others performing Work at the Site will be allowed to park vehicles in areas outside the Site, with a valid District parking permit, in the parking spaces at a location designated by the District. Parking permit

charges, if any, shall be borne and paid by the Contractor without adjustment of the Contract Price. The foregoing notwithstanding, the extent or location of parking for such personnel may be limited, restricted, eliminated or modified by the District as reasonably necessary to facilitate and accommodate necessary parking for the District's students, staff and visitors. Neither the Contract Price nor the Contract Time shall be adjusted as a result of any such District modifications to the extent or location of parking.

- 12.4. Prohibition on Smoking. The District has implemented policies and practices limiting and restricting smoking on District property, including the Site. The Contractor is solely responsible for obtaining the District's current non-smoking policy and: (i) notifying Subcontractors of the District's non-smoking policies; (ii) informing employees of the Contractor and Subcontractors of the District's non-smoking policies; (iii) posting notices at the Site summarizing the District's non-smoking policies; (iv) complying with the Laws relating to smoking limitations and restrictions; and (v) taking appropriate actions if the District's non-smoking policies are violated or limitations/restrictions imposed by the Laws are violated, including without limitation, removal of personnel violating such policies, limitations or restrictions.

[END OF SECTION]

PROJECT MANUAL FOR

CAREER CENTER INTERIOR UPGRADES

MERCED COMMUNITY COLLEGE DISTRICT
3600 M STREET
MERCED, CA 95348

PREPARED BY:
DARDEN ARCHITECTS, INC.
ARCHITECTURE•PLANNING•INTERIORS
6790 N. WEST AVENUE
FRESNO, CALIFORNIA 93711

END OF SECTION

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CONTRACT REQUIREMENTS

Provided by Owner

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DIVISION 10 – SPECIALTIES

10 14 00	IDENTIFYING DEVICES
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END OF SECTION

SECTION 01 33 00 – SUBMITTAL PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes the following:
 - 1. Provide all material, labor, equipment and services necessary to completely provide all required submittals and other related items necessary to complete the Project as indicated by the Contract Documents.
- B. Related Sections: The following Project Manual Sections contain requirements that relate to this section:
 - 1. DIVISION 00 SPECIFICATION SECTIONS.
 - 2. DIVISION 01 SPECIFICATION SECTIONS.
 - 3. SPECIFICATION SECTIONS IN THE FACILITY CONSTRUCTION SUBGROUP.
 - 4. SPECIFICATION SECTIONS IN THE FACILITY SERVICES SUBGROUP.

1.2 SUBMITTALS

- A. Contractor's responsibilities:
 - 1. The Contractor shall check, verify, and be responsible for all field measurements.
 - 2. The Contractor shall submit a schedule indicating when the required shop drawings and submittals will be submitted to the Architect.
 - a. Submit schedule within the amount of days as indicated in Specification Section - CONSTRUCTION SCHEDULES.
 - 3. Submit copies as scheduled below, checked and approved by the Contractor for all submittals required for the work of the various trades. Deliver submittals promptly to avoid delays in delivery of materials or execution of the work.
 - a. The Contractor (or Subcontractor) shall mark-up the submittals as to project specifics. If the specifications contains a schedule prepared by the Architect (i.e. paint symbols such as DW-1, M-1, CB-1, etc., or tile symbols such as CT-1, CT-2, or IWA, IWB, IWC, etc.), then the submittal will also contain those designations. Submittals without project specifics will be returned to the Contractor as not being properly prepared.
 - b. The Contractor shall stamp the Submittals utilizing any language requested by the Owner in the General Conditions and the following minimum language:

"This submittal has been reviewed by (Name of Contractor) and approved with respect to the means, methods, techniques, sequences, and procedures of construction, and safety precautions and programs incidental thereto. The Contractor has reviewed and approved not only the field dimensions, but the construction criteria, and has also made written notation regarding any information in the Shop Drawings that does not conform to the Contract Documents. The Contractor has reviewed this submittal and coordinated with all other Shop Drawings received to date by the Contractor and this duty of coordination has not been delegated to subcontractors, material suppliers, the Architect, or the design consultants on this project. The Contractor shall also have indicated that it has not relied upon the dimensions shown on the drawings, specifications and schedules, and that the Contractor has double-checked all dimensions for accuracy and fit. (Name of Contractor) also warrants that this submittal complies with the Contract Documents and comprises no variation thereto."

By: _____ Contractor's Signature

_____ Contractor's Typed Name

Date: _____

- c. Substitutions on shop drawings or in product submittals will not be considered without prior approval in accordance with Specification Section - SUBSTITUTION PROCEDURES. Submittals containing unacceptable items will be rejected.
 - d. The Contractor shall make any corrections required by the Architect during the Architect's initial review, and re-submit the required corrected copies for final review and distribution.
- B. Architect's responsibilities:
 - 1. The Architect will make any desired corrections with reasonable promptness, and return the submittal to the Contractor.
 - 2. The Architect's review of such drawings or schedules shall not relieve the Contractor of responsibility for deviations from the drawings or specifications, unless he has, in writing, called the Architect's attention to such deviations at the time of submission, and secured written acceptance.
 - a. The Architect's review shall be for general conformance with the design concept for the project and general compliance with the information given in the Contract Documents.
 - b. The Architect's review shall not be construed as an "approval," or to relieve the Contractor(s) and material suppliers of responsibility for errors or omissions in the submitted documents.
 - c. Modifications or comments made on the submittals or shop drawings during this review do not relieve the Contractor from compliance with the requirements of the drawings and specifications.
 - d. Acceptance of a specific item does not include acceptance of the assembly of which the item is a component.
- C. The following list of items, definitions and required quantities is a minimum required for this project. Verify with FACILITY SERVICES SUBGROUP sections for additional quantities required within those divisions.
 - 1. Product Data: Illustrations, standard schedules, performance charts, instructions, brochures, diagrams, other product information, color choices and/or manufacturer's catalog sheets shall be specially prepared for the Project (marked-up with project specifics) and shall be submitted in sequential sets for each category of work:
 - a. Quantity:
 - 1) Unless otherwise indicated in the Contract Documents, provide Six (6) sets.
 - b. Material Safety Data Sheets (MSDS): MSDS are not required, but it is recognized that applicable federal and state laws require the submission of these data sheets to an Owner. MSDS shall be turned over to the Owner (without review by the Architect or it's consultants) in compliance with federal and state laws.
 - 2. Shop Drawings: Newly prepared information, drawn to accurate scale, consisting of drawings, diagrams, schedules, and other data specifically prepared for the Project by the Contractor, a Subcontractor, manufacturer, supplier or distributor to illustrate some portion of the Project. Do not reproduce Contract Documents or copy Standard information as the basis of Shop Drawings. Standard information prepared without specific reference to the Project is not considered Shop Drawings.
 - a. Quantity: Provide One (1) reproducible original (vellum, sepia or mylar) and Three (3) opaque (blue-line or black-line xerographic) prints for each sheet or detail.
 - 1) The contractor shall receive the marked-up reproducibles and copy the required number of sets to the subcontractor, manufacturer's and/or material suppliers.
 - b. Contractor's use of Architect's Electronic CAD Files.

SUBMITTAL PROCEDURES

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- 1) Upon written request by Contractor, copies of the Architect's electronic CAD files may be available for Contractor's use in connection with this Project.
 - a) Contractor's written request shall be on the Architect's "Contractor's Document Usage Agreement for Requested Documents" and may include an additional Architect's Consultant's Agreements, outlining conditions for providing files.
 - b) Contractor's request shall be limited to drawings directly applicable to the Shop Drawings the Contractor wishes to create for submittal.
 - c) Contractor shall pay the Architect for work incurred for providing the requested files. Payment shall be submitted with the request.
 - 2) The Architect's electronic CAD files are limited to files that already exist and that not all files may be available at the Architect's and Architect's Consultant's discretion.
 - 3) The Architect's electronic CAD files are not part of the Contract Documents and have limitations to the accuracy, incorporating modifications, CAD system formats, CAD entity attributes and layering.
 - 4) The Architect's electronic CAD files have restrictions on Contractor's use, transmittal and delivery of files.
3. Samples: Physical examples specially prepared for the Project (marked-up with project specifics) which illustrate materials, equipment, or workmanship and establish standards by which the Work will be judged.
- a. Quantity:
 - 1) Unless otherwise indicated in the Contract Documents, provide Four (4) sets.
 - b. Color samples shall be submitted on 8-1/2" x 11" cards for all colors scheduling paint types specified utilizing the paint symbols designated by the Architect in the drawings and specifications.
 - c. Manufactured devices or equipment items:
 - 1) Quantity: One (1) sample, returned to supplier and which, when approved, may be incorporated into the Project.
4. Quality Assurance/Control submittals: Consists of design data, test reports, certificates, manufacturers instructions, and /or manufacturer's field reports.
- a. Quantity:
 - 1) Unless otherwise indicated in the Contract Documents, provide Six (6) sets.
5. Closeout submittals: Maintenance data, operating manuals, project documents, engineering calculations, and/or warranties shall be submitted when required in the various specification sections:
- a. Quantity:
 - 1) Unless otherwise indicated in the Contract Documents, provide Two (2) sets.
6. Field Samples: Sample panels of in place construction, or selected area of completed substrates or work showing the anticipated compliance with specified characteristics in order to establish a standard of quality.
- a. Quantity:
 - 1) See specific specification section requirements.
7. Mockups: Full-sized erected assemblies, used for coordination purposes or for testing in a laboratory, or required for approval in a finish form before the actual Project construction begins.
- a. Quantity:
 - 1) See specific specification section requirements.
- D. Substitution, Dispute or Claim Submittals:

SUBMITTAL PROCEDURES

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1. Any substitution, dispute or claim submittals relating to this contract, or any Contract breach, which are not disposed of by agreement shall be promptly submitted in accordance with the GENERAL CONDITIONS, as a claim to and decided by the Architect who shall issue a written decision on the dispute.
2. Adequate supporting data shall include, but is not limited; a statement of the reasons for the asserted entitlement, the certified payroll, invoice for material and equipment rental, and an itemized breakdown of any adjustment sought.
3. If no "SUBMISSION UNDER PENALTY OF PERJURY" clause is provided within the GENERAL CONDITIONS, then the Contractor shall certify, at the time of submission of a substitution, dispute or claim, as follows:

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SUBMITTAL PROCEDURES

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SUBMISSION UNDER PENALTY OF PERJURY

I _____, being the _____ (Must be an officer), declare under penalty of perjury under the laws of the State of California, and do personally certify and attest that: I have thoroughly reviewed the attached substitution, dispute or claim for additional compensation and/or extension of time, and know its contents, and said claim is made in good faith; the supporting data is truthful and accurate; that the amount required accurately reflects the contract adjustment for which the Contractor believes the Owner is liable; and further, that I am familiar with California Government Code Section 12650, et seq. pertaining to false claims, and further know and understand that submission of certification of a false claim may lead to fines, imprisonment and/or other severe legal consequences.

By: _____ Contractor's Signature

_____ Contractor's Typed Name

Date: _____

Submission of a substitution, dispute or claim, properly certified, with all required supporting documentation, and written rejection or denial or all or part of the claim by Owner, is a condition precedent to any action, proceeding, litigation, suit or demand for arbitration by Contractor.

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PART 2 - PRODUCTS

NOT APPLICABLE

PART 3 - EXECUTION

3.1 SCHEDULES

- A. The following schedule was prepared to assist the Contractor in knowing the required submittals for this project, but may not be complete. Specific submittal information as to what is required is contained within the individual specification sections and those individual sections shall govern in the event of a question.

B. SUBMITTAL SCHEDULE

1. 01 11 13 - SUMMARY OF WORK
 - a. QUALITY ASSURANCE/ CONTROL SUBMITTALS
2. 01 25 00 - SUBSTITUTION PROCEDURES
 - a. SUBSTITUTION REQUEST FORMS
3. 01 29 73 - SCHEDULE OF VALUES
 - a. SCHEDULE OF VALUES
4. 01 32 16 - CONSTRUCTION SCHEDULES
 - a. CONSTRUCTION SCHEDULE, SHOP DRAWING SUBMITTAL SCHEDULE, CRITICAL PATH SCHEDULES, FRAGNETS.
5. 01 32 26 - FORMS AND REPORTS
 - a. AS REQUIRED BY THIS SPECIFICATION SECTION AND OTHER SPECIFICATION SECTIONS.
6. 01 33 00 - SUBMITTAL PROCEDURES
 - a. SHOP DRAWING AND SUBMITTAL SCHEDULE, COLOR SAMPLES OF ALL FINISH MATERIALS FOR COLOR BOARD SELECTION.
7. 01 45 29 - TESTING LABORATORY SERVICES
 - a. TESTING SCHEDULE, TEST REPORTS
8. 01 71 23 - FIELD ENGINEERING
 - a. COORDINATION DRAWINGS, QUALITY ASSURANCE/CONTROL SUBMITTALS, CLOSEOUT SUBMITTALS.
9. 01 77 20 - PROJECT CLOSEOUT
 - a. ANOTATED CONTRACTOR'S AND ARCHITECT'S PUNCH LIST. ALL OPERATIONAL DATA, ALL MAINTENANCE MANUALS, ALL EXTRA MATERIALS.
10. 01 78 36 - WARRANTIES
 - a. ALL GUARANTEES AND WARRANTIES
11. 01 78 39 - PROJECT DOCUMENTS
 - a. PROJECT "AS-BUILT" DOCUMENTS, PROJECT "RECORD" DOCUMENTS AND PROJECT "CERTIFICATION" DOCUMENTS.
12. 03 11 01 - CONCRETE FORMWORK
 - a. PRODUCT DATA, SAMPLES, QUALITY ASSURANCE/CONTROL SUBMITTALS, CLOSEOUT SUBMITTALS.
13. 03 15 14 - DRILLED ANCHORS
 - a. PRODUCT DATA, ICC EVALUATION SERVICE REPORTS, DSA APPROVAL LETTERS.
14. 03 20 00 - REINFORCEMENT
 - a. SHOP DRAWINGS, QUALITY ASSURANCE/CONTROL SUBMITTALS, CLOSEOUT SUBMITTALS.
15. 03 30 00 - CAST-IN-PLACE CONCRETE

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- a. PRODUCT DATA, QUALITY ASSURANCE/CONTROL SUBMITTALS, CLOSEOUT SUBMITTALS.
- 16. 03 35 10 - POLISHED CONCRETE FINISHING
 - a. PRODUCT DATA, SHOP DRAWINGS, QUALITY ASSURANCE/ CONTROL SUBMITTALS, CLOSEOUT SUBMITTALS.
- 17. 03 52 13 - INSULATING CONCRETE
 - a. PRODUCT DATA, QUALITY ASSURANCE/CONTROL SUBMITTALS, CLOSEOUT SUBMITTALS.
- 18. 04 21 13 - THIN BRICK VENEER
 - a. SAMPLES, COLOR SAMPLES, PRODUCT DATA CERTIFICATION.
- 19. 04 22 00 - CONCRETE MASONRY UNITS
 - a. SAMPLES, COLOR SAMPLES, PRODUCT DATA CERTIFICATION.
- 20. 04 23 00 - GLASS MASONRY UNITS
 - a. SAMPLES, COLOR SAMPLES, PRODUCT DATA CERTIFICATION.
- 21. 05 12 00 - STEEL AND FABRICATIONS
 - a. PRODUCT DATA, SHOP DRAWINGS, SAMPLES, QUALITY ASSURANCE/CONTROL SUBMITTALS, CLOSEOUT SUBMITTALS.
- 22. 05 30 00 - METAL DECK
 - a. PRODUCT DATA, SHOP DRAWINGS, QUALITY ASSURANCE/CONTROL SUBMITTALS, CLOSEOUT SUBMITTALS.
- 23. 05 52 00 - RAILING SYSTEMS
 - a. MATERIALS LIST, SHOP DRAWINGS, AND WARRANTIES.
- 24. 06 10 00 - ROUGH CARPENTRY
 - a. PRODUCT DATA, CERTIFIATES OF COMPLIANCE, AND WARRANTIES.
- 25. 06 18 00 - GLUE-LAMINATED CONSTRUCTION
 - a. SHOP DRAWINGS, VERIFIED REPORTS, AND WARRANTIES.
- 26. 06 22 00 - MILLWORK
 - a. PRODUCT DATA, SHOP DRAWINGS, AND WARRANTIES.
- 27. 06 41 23 - MODULAR CASEWORK
 - a. SHOP DRAWINGS, MANUFACTURER'S SPECIFICATIONS, COLOR SAMPLES, MOCK-UP, WI CERTIFICATION.
- 28. 06 61 16 - SOLID SURFACING
 - a. SHOP DRAWINGS, MANUFACTURER'S SPECIFICATIONS, COLOR SAMPLES, MOCK-UP, WI CERTIFICATION.
- 29. 07 14 16 - FLUID-APPLIED WATERPROOFING
 - a. PRODUCT DATA, INSTALLATION INSTRUCTIONS, CLOSEOUT SUBMITTALS.
- 30. 07 18 50 - VAPOR-ALKALINITY CONTROL
 - a. PRODUCT DATA, INSTALLATION INSTRUCTIONS, CLOSEOUT SUBMITTALS.
- 31. 07 21 00 - INSULATION
 - a. PRODUCT DATA, INSTALLATION INSTRUCTIONS, CLOSEOUT SUBMITTALS.
- 32. 07 31 13 - SHINGLES
 - a. PRODUCT DATA, SHOP DRAWINGS, SAMPLES, CLOSOUT SUBMITTALS.
- 33. 07 40 00 - METAL PANELS
 - a. PRODUCT DATA, SHOP DRAWINGS, SAMPLES, CLOSOUT SUBMITTALS.
- 34. 07 40 12 - MCM PANELS
 - a. PRODUCT DATA, SHOP DRAWINGS, SAMPLES, CLOSEOUT SUBMITTALS.
- 35. 07 42 43 - FIBER-CEMENT PANELS
 - a. PRODUCT DATA, SHOP DRAWINGS, SAMPLES, CLOSEOUT SUBMITTALS.

36. 07 51 13 - BUILT-UP ROOFING
 - a. PRODUCT DATA, SHOP DRAWINGS AND WARRANTIES.
37. 07 53 16 - ELASTOMERIC MEMBRANE ROOFING
 - a. PRODUCT DATA, SHOP DRAWINGS AND WARRANTIES.
38. 07 53 29 - ELASTOMERIC MEMBRANE ROOFING
 - a. PRODUCT DATA, SHOP DRAWINGS AND WARRANTIES.
39. 07 60 00 - SHEET METAL
 - a. SHOP DRAWINGS
40. 07 72 00 - ROOF ACCESSORIES
 - a. PRODUCT DATA, SHOP DRAWINGS, SAMPLES AND WARRANTIES.
41. 07 81 16 - FIREPROOFING
 - a. MATERIALS LIST, COLORS, MANUFACTURER'S DATA, TEST DATA AND SAMPLES.
42. 07 84 00 - FIRESTOPPING
 - a. PRODUCT DATA, CERTIFICATIONS, SHOP DRAWINGS QUALIFICATION DATA ON INSTALLERS.
43. 07 92 00 - SEALANTS
 - a. PRODUCT DATA, COLORS AND WARRANTIES.
44. 07 95 00 - EXPANSION JOINTS
 - a. MATERIALS LIST, SHOP DRAWINGS, AND WARRANTIES.
45. 08 11 00 - METAL DOORS AND FRAMES
 - a. PRODUCT DATA AND SHOP DRAWINGS.
46. 08 14 16 - WOOD DOORS
 - a. PRODUCT DATA AND SHOP DRAWINGS.
47. 08 15 13 - LAMINATE-FACED WOOD DOORS
 - a. PRODUCT DATA AND SHOP DRAWINGS.
48. 08 33 00 - COILING DOORS
 - a. PRODUCT DATA, SHOP DRAWINGS AND WARRANTIES.
49. 08 34 73 - ACOUSTICAL DOORS AND FRAMES
 - a. PRODUCT DATA, SHOP DRAWINGS AND WARRANTIES.
50. 08 41 00 - STOREFRONTS
 - a. PRODUCT DATA, SHOP DRAWINGS AND WARRANTIES.
51. 08 51 13 - ALUMINUM WINDOWS
 - a. PRODUCT DATA, SHOP DRAWINGS AND WARRANTIES.
52. 08 56 59 - SERVICE WINDOWS
 - a. PRODUCT DATA, SHOP DRAWINGS AND WARRANTIES.
53. 08 63 00 - SKYLIGHTS
 - a. PRODUCT DATA, SHOP DRAWINGS AND WARRANTIES.
54. 08 70 00 - HARDWARE
 - a. HARDWARE SCHEDULE AND CERTIFICATES.
55. 08 80 00 - GLASS
 - a. PRODUCT DATA, MATERIALS LIST, SAMPLES AND CERTIFICATES.
56. 08 91 00 - LOUVERS
 - a. PRODUCT DATA, SHOP DRAWINGS, CERTIFICATES AND COLORS.
57. 09 22 16 - METAL FRAMING
 - a. PRODUCT DATA (INCLUDING INSTALLATION METHODS) AND MATERIALS LIST.
58. 09 24 00 - CEMENT PLASTER
 - a. PRODUCT DATA (INCLUDING INSTALLATION METHODS) AND MATERIALS LIST.
59. 09 26 13 - VENEER PLASTER

- a. PRODUCT DATA (INCLUDING INSTALLATION METHODS) AND MATERIALS LIST.
- 60. 09 29 00 - GYPSUM BOARD
 - a. PRODUCT DATA, FASTENING SCHEDULE AND SAMPLES.
- 61. 09 30 00 - TILE
 - a. PRODUCT DATA, COLORS, SAMPLES, CERTIFICATES, MAINTENANCE MATERIAL AND WARRANTIES.
- 62. 09 51 00 - ACOUSTICAL CEILINGS
 - a. ACOUSTICAL TILE SAMPLES, SUSPENSION SYSTEM SAMPLES AND DSA APPROVED CEILING BRACING DRAWINGS.
- 63. 09 64 29 - HARDWOOD FLOOR
 - a. PRODUCT DATA, SHOP DRAWINGS, QUALITY ASSURANCE/CONTROL SUBMITTALS, CLOSEOUT SUBMITTALS AND WARRANTIES.
- 64. 09 64 66 - RESILIENT WOOD FLOOR
 - a. PRODUCT DATA, SHOP DRAWINGS, QUALITY ASSURANCE/CONTROL SUBMITTALS, CLOSEOUT SUBMITTALS AND WARRANTIES.
- 65. 09 65 10 - RESILIENT BASE AND ACCESSORIES
 - a. PRODUCT DATA, SHOP DRAWINGS, QUALITY ASSURANCE/CONTROL SUBMITTALS, CLOSEOUT SUBMITTALS AND WARRANTIES.
- 66. 09 65 16 - RESILIENT SHEET
 - a. PRODUCT DATA, SHOP DRAWINGS, QUALITY ASSURANCE/CONTROL SUBMITTALS, CLOSEOUT SUBMITTALS AND WARRANTIES.
- 67. 09 65 19 - RESILIENT TILE
 - a. PRODUCT DATA, SHOP DRAWINGS, QUALITY ASSURANCE/CONTROL SUBMITTALS, CLOSEOUT SUBMITTALS AND WARRANTIES.
- 68. 09 67 23 - RESINOUS FLOORING
 - a. PRODUCT DATA, SHOP DRAWINGS, QUALITY ASSURANCE/CONTROL SUBMITTALS, CLOSEOUT SUBMITTALS AND WARRANTIES.
- 69. 09 68 40 - CARPET
 - a. PRODUCT DATA, SHOP DRAWINGS, QUALITY ASSURANCE/CONTROL SUBMITTALS, CLOSEOUT SUBMITTALS AND WARRANTIES.
- 70. 09 72 00 - WALL COVERINGS
 - a. PRODUCT DATA, SHOP DRAWINGS, QUALITY ASSURANCE/CONTROL SUBMITTALS, CLOSEOUT SUBMITTALS AND WARRANTIES.
- 71. 09 91 00 - PAINTING
 - a. PRODUCT DATA, MATERIALS LIST, COLORS, MAINTENANCE INFORMATION AND WARRANTIES.
- 72. 10 05 00 - MISCELLANEOUS SPECIALTIES
 - a. PRODUCT DATA, COLORS AND SAMPLES (WHERE APPLICABLE) FOR ALL ITEMS.
- 73. 10 11 00 - VISUAL DISPLAY BOARDS
 - a. PRODUCT DATA AND SAMPLE COLORS.
- 74. 10 13 00 - DIRECTORIES
 - a. PRODUCT DATA, SHOP DRAWINGS, QUALITY ASSURANCE/CONTROL SUBMITTALS, CLOSEOUT SUBMITTALS AND WARRANTIES.
- 75. 10 14 00 - IDENTIFYING DEVICES
 - a. PRODUCT DATA, SHOP DRAWINGS, QUALITY ASSURANCE/CONTROL SUBMITTALS, CLOSEOUT SUBMITTALS AND WARRANTIES.
- 76. 10 14 53 - ROAD AND PARKING SIGNAGE
 - a. PRODUCT DATA, SHOP DRAWINGS, QUALITY ASSURANCE/CONTROL SUBMITTALS, CLOSEOUT SUBMITTALS AND WARRANTIES.
- 77. 10 21 13 - TOILET PARTITIONS
 - a. PRODUCT DATA, SHOP DRAWINGS, CERTIFICATES AND COLORS.

- 78. 10 26 00 - WALL AND CORNER GUARDS
 - a. PRODUCT DATA, SHOP DRAWINGS, QUALITY ASSURANCE/CONTROL SUBMITTALS, CLOSEOUT SUBMITTALS AND WARRANTIES.
- 79. 10 28 13 - TOILET ACCESSORIES
 - a. PRODUCT DATA, SHOP DRAWINGS, QUALITY ASSURANCE/CONTROL SUBMITTALS, CLOSEOUT SUBMITTALS AND WARRANTIES.
- 80. 10 44 00 - FIRE PROTECTION SPECIALTIES
 - a. PRODUCT DATA, SHOP DRAWINGS, QUALITY ASSURANCE/CONTROL SUBMITTALS, CLOSEOUT SUBMITTALS AND WARRANTIES.
- 81. 10 51 13 - METAL LOCKERS
 - a. PRODUCT DATA, SHOP DRAWINGS, QUALITY ASSURANCE/CONTROL SUBMITTALS, CLOSEOUT SUBMITTALS AND WARRANTIES.
- 82. 10 56 13 - METAL STORAGE SHELVING
 - a. PRODUCT DATA, SHOP DRAWINGS, QUALITY ASSURANCE/CONTROL SUBMITTALS, CLOSEOUT SUBMITTALS AND WARRANTIES.
- 83. 11 16 16 - SAFES
 - a. PRODUCT DATA, SHOP DRAWINGS, CERTIFICATES AND COLORS.
- 84. 11 40 00 - FOOD SERVICE EQUIPMENT
 - a. PRODUCT DATA, SHOP DRAWINGS, QUALITY ASSURANCE/CONTROL SUBMITTALS, CLOSEOUT SUBMITTALS AND WARRANTIES.
- 85. 11 53 00 - LAB CASEWORK AND EQUIPMENT
 - a. PRODUCT DATA, SHOP DRAWINGS, QUALITY ASSURANCE/CONTROL SUBMITTALS, CLOSEOUT SUBMITTALS AND WARRANTIES.
- 86. 11 66 00 - ATHLETIC EQUIPMENT
 - a. PRODUCT DATA, SHOP DRAWINGS, QUALITY ASSURANCE/CONTROL SUBMITTALS, CLOSEOUT SUBMITTALS AND WARRANTIES.
- 87. 11 66 43 - SCOREBOARDS
 - a. PRODUCT DATA, SHOP DRAWINGS, QUALITY ASSURANCE/CONTROL SUBMITTALS, CLOSEOUT SUBMITTALS AND WARRANTIES.
- 88. 11 68 00 - PLAYFIELD EQUIPMENT
 - a. PRODUCT DATA, SHOP DRAWINGS, QUALITY ASSURANCE/CONTROL SUBMITTALS, CLOSEOUT SUBMITTALS AND WARRANTIES.
- 89. 12 21 00 - BLINDS
 - a. PRODUCT DATA, SHOP DRAWINGS, QUALITY ASSURANCE/CONTROL SUBMITTALS, CLOSEOUT SUBMITTALS AND WARRANTIES.
- 90. 12 61 00 - FIXED SEATING
 - a. PRODUCT DATA, SHOP DRAWINGS, QUALITY ASSURANCE/CONTROL SUBMITTALS, CLOSEOUT SUBMITTALS AND WARRANTIES.
- 91. 12 66 13 - TELESCOPING BLEACHERS
 - a. PRODUCT DATA, SHOP DRAWINGS, QUALITY ASSURANCE/CONTROL SUBMITTALS, CLOSEOUT SUBMITTALS AND WARRANTIES.
- 92. 12 66 23 - TELESCOPING CHAIR PLATFORMS
 - a. PRODUCT DATA, SHOP DRAWINGS, QUALITY ASSURANCE/CONTROL SUBMITTALS, CLOSEOUT SUBMITTALS AND WARRANTIES.
- 93. 13 34 23 - CUSTOM PORTABLE BUILDINGS
 - a. PRODUCT DATA, SHOP DRAWINGS, QUALITY ASSURANCE/CONTROL SUBMITTALS, CLOSEOUT SUBMITTALS AND WARRANTIES.
- 94. 13 49 00 - RADIATION PROTECTION
 - a. PRODUCT DATA, SHOP DRAWINGS, QUALITY ASSURANCE/CONTROL SUBMITTALS, CLOSEOUT SUBMITTALS AND WARRANTIES.
- 95. 14 24 23 - HYDRAULIC ELEVATORS
 - a. PRODUCT DATA, SHOP DRAWINGS, QUALITY ASSURANCE/CONTROL SUBMITTALS, CLOSEOUT SUBMITTALS AND WARRANTIES.

SUBMITTAL PROCEDURES**2329.ID**

- 96. 14 42 00 - WHEELCHAIR LIFTS
 - a. PRODUCT DATA, SHOP DRAWINGS, QUALITY ASSURANCE/CONTROL SUBMITTALS, CLOSEOUT SUBMITTALS AND WARRANTIES.
- 97. 14 45 00 - VEHICLE LIFTS
 - a. PRODUCT DATA, SHOP DRAWINGS, QUALITY ASSURANCE/CONTROL SUBMITTALS, CLOSEOUT SUBMITTALS AND WARRANTIES.
- 98. DIV 21 - FIRE SUPPRESSION SECTIONS
 - a. REFER TO APPROPRIATE SPECIFICATION SECTION REQUIREMENTS.
- 99. DIV. 22 - PLUMBING SECTIONS
 - a. REFER TO APPROPRIATE SPECIFICATION SECTION REQUIREMENTS.
- 100. DIV. 23 -HEATING, VENTILATING AND AIR CONDITIONING SECTIONS
 - a. REFER TO APPROPRIATE SPECIFICATION SECTION REQUIREMENTS.
- 101. DIV. 25- INTEGRATED AUTOMATION SECTIONS
 - a. REFER TO APPROPRIATE SPECIFICATION SECTION REQUIREMENTS.
- 102. DIV. 26- ELECTRICAL SECTIONS
 - a. REFER TO APPROPRIATE SPECIFICATION SECTION REQUIREMENTS.
- 103. DIV. 27 -COMMUNICATIONS SECTIONS
 - a. REFER TO APPROPRIATE SPECIFICATION SECTION REQUIREMENTS.
- 104. DIV. 28- ELECTRONIC SAFETY AND SECURITY SECTIONS
 - a. REFER TO APPROPRIATE SPECIFICATION SECTION REQUIREMENTS.
- 105. 31 20 00 - EARTHWORK
 - a. PRODUCT DATA, SHOP DRAWINGS, QUALITY ASSURANCE/CONTROL SUBMITTALS, PROJECT RECORD DOCUMENTS, AND WARRANTIES, AND DRAWINGS SHOWING KNOWLEDGE OF THE EXTENT OF ENGINEERED PADS.
- 106. 31 31 00- SOIL TREATMENT
 - a. PRODUCT DATA, SHOP DRAWINGS, QUALITY ASSURANCE/CONTROL SUBMITTALS, PROJECT RECORD DOCUMENTS, AND WARRANTIES.
- 107. 32 12 00- PAVEMENT
 - a. PRODUCT DATA, SHOP DRAWINGS, QUALITY ASSURANCE/CONTROL SUBMITTALS, PROJECT RECORD DOCUMENTS, AND WARRANTIES.
- 108. 32 80 00- LANDSCAPE IRRIGATION
 - a. PRODUCT DATA, SHOP DRAWINGS, QUALITY ASSURANCE/CONTROL SUBMITTALS, PROJECT RECORD DOCUMENTS, AND WARRANTIES.
- 109. 33 40 00- STORM DRAINAGE
 - a. PRODUCT DATA, SHOP DRAWINGS, QUALITY ASSURANCE/CONTROL SUBMITTALS, PROJECT RECORD DOCUMENTS, AND WARRANTIES.

END OF SECTION

SECTION 01 73 29 – CUTTING AND PATCHING

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes the following:
 - 1. Provide all material, labor, equipment and services necessary for cutting and patching existing materials, accessories and other related items necessary to remodel the Project as indicated by the Contract Documents.
- B. Related Sections: The following Project Manual Sections contain requirements that relate to this section:
 - 1. DIVISION 00 SPECIFICATION SECTIONS.
 - 2. DIVISION 01 SPECIFICATION SECTIONS.
 - 3. SPECIFICATION SECTIONS IN THE FACILITY CONSTRUCTION SUBGROUP.
 - 4. SPECIFICATION SECTIONS IN THE FACILITY SERVICES SUBGROUP.

1.2 DEFINITIONS

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

1.3 SUBMITTALS

- A. Submit in accordance with Specification Section - SUBMITTAL PROCEDURES:
 - 1. Coordination Drawings:
 - a. Submit any installer's coordination drawings indicating the work of this section with that of related work of other sections for proper interface of the completed work. Installer shall coordinate and obtain approvals from the work of other related sections prior to submitting to the Architect.

1.4 QUALITY ASSURANCE

- A. Cutting and Patching Conference: Before proceeding, meet at Project site with parties involved in cutting and patching, including mechanical and electrical trades.
 - 1. Review areas of potential interference and conflict.
 - 2. Coordinate procedures and resolve potential conflicts before proceeding.
- B. Structural Elements: Do not cut and patch structural elements in a manner that could change their load-carrying capacity or load-deflection ratio.
- C. Operational Elements: Do not cut and patch operating elements and related components in a manner that results in reducing their capacity to perform as intended or that results in increased maintenance or decreased operational life or safety.
- D. Visual Requirements: Do not cut and patch construction in a manner that results in visual evidence of cutting and patching. Do not cut and patch construction exposed on the exterior or in occupied spaces in a manner that would, in Architect's opinion, reduce the building's aesthetic qualities. Remove and replace construction that has been cut and patched in a visually unsatisfactory manner.

- E. The Contractor shall do all cutting, fitting or patching of existing construction and his work as may be required to make the several parts come together properly and ready to receive or be received by work of other contractors as shown, or reasonably implied by the drawings and specifications for the completed structure. All work shall be as directed by the Architect to achieve the intended work and degree of finish shown.
- F. Any cost caused by defective or ill-timed work shall be borne by the party responsible therefor.

1.5 WARRANTY

- A. Existing Warranties: Remove, replace, patch, and repair materials and surfaces cut or damaged during cutting and patching operations, by methods and with materials so as not to void existing warranties.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. General: Comply with requirements specified in other Sections of these Specifications.
- B. Existing Materials: Use materials identical to existing materials. For exposed surfaces, use materials that visually match existing adjacent surfaces to the fullest extent possible.
 - 1. If identical materials are unavailable or cannot be used, use materials that, when installed, will match the visual and functional performance of existing materials.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine surfaces to be cut and patched and conditions under which cutting and patching are to be performed.
 - 1. Compatibility: Before patching, verify compatibility with and suitability of substrates, including compatibility with existing finishes or primers.
 - 2. Proceed with installation only after unsafe or unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Temporary Support: Provide temporary support of Work to be cut.
- B. Protection: Protect existing construction during cutting and patching to prevent damage. Provide protection from adverse weather conditions for portions of Project that might be exposed during cutting and patching operations.
- C. Adjoining Areas: Avoid interference with use of adjoining areas or interruption of free passage to adjoining areas.
- D. Existing Services: Where existing services are required to be removed, relocated, or abandoned, bypass such services before cutting to avoid interruption of services to occupied areas.

3.3 FIELD QUALITY CONTROL

- A. General: Employ skilled workers to perform cutting and patching. Proceed with cutting and patching at the earliest feasible time, and complete without delay.
 - 1. Cut existing construction to provide for installation of other components or performance of other construction, and subsequently patch as required to restore surfaces to their original condition.

- B. Cutting: Cut existing construction by sawing, drilling, breaking, chipping, grinding, and similar operations, including excavation, using methods least likely to damage elements retained or adjoining construction. If possible, review proposed procedures with original Installer; comply with original Installer's written recommendations.
1. In general, use hand or small power tools designed for sawing and grinding, not hammering and chopping. Cut holes and slots as small as possible, neatly to size required, and with minimum disturbance of adjacent surfaces. Temporarily cover openings when not in use.
 2. Existing Finished Surfaces: Cut or drill from the exposed or finished side into concealed surfaces.
 3. Concrete or Masonry: Cut using a cutting machine, such as an abrasive saw or a diamond-core drill. **Do not overcut concrete corners** – hand chip all corners to prevent over-cutting lines. Cut any masonry pavers at grout lines, and **don't overcut** into adjacent brick that is to remain.
 4. Excavating and Backfilling: Comply with requirements in applicable Division 2 Sections where required by cutting and patching operations.
 5. Mechanical and Electrical Services: Cut off pipe or conduit in walls or partitions to be removed. Cap, valve, or plug and seal remaining portion of pipe or conduit to prevent entrance of moisture or other foreign matter after cutting.
 6. Proceed with patching after construction operations requiring cutting are complete.
- C. Grinding and Sandblasting: Where grinding and sandblasting is required of existing construction, perform in accordance with industry standards for proper preparation of new construction or finishes.
- D. Patching: Patch construction by filling, repairing, refinishing, closing up, and similar operations following performance of other Work. Patch with durable seams that are as invisible as possible. Provide materials and comply with installation requirements specified in other Sections of these Specifications.
1. Inspection: Where feasible, test and inspect patched areas after completion to demonstrate integrity of installation.
 2. Exposed Finishes: Restore exposed finishes of patched areas and extend finish restoration into retained adjoining construction in a manner that will eliminate evidence of patching and refinishing.
 - a. All hard paving and walk replacement shall be flush with adjacent existing construction. Compact existing subgrade so that there is no settling of adjacent horizontal surfaces greater than 1/4", and that all surfaces are ADA compliant.
 - b. When altering surfaces in brick paving, match nearby adjacent horizontal concrete surfaces in color and texture. Take care to protect adjacent brick surfaces from concrete slurry and finishing operations. Clean exposed surfaces of brick immediately so that no signs of adjacent concrete work is seen.
 - c. Match existing adjacent exposed aggregate concrete paving (color and texture) when construction is proposed for areas paved with exposed aggregate concrete.
 - d. Match existing adjacent colored concrete paving (color and texture) when construction is proposed for areas paved with colored concrete.
 3. Floors and Walls: Where walls or partitions that are removed extend one finished area into another, patch and repair floor and wall surfaces in the new space. Provide an even surface of uniform finish, color, texture, and appearance. Remove existing floor and wall coverings and replace with new materials, if necessary, to achieve uniform color and appearance.
 - a. Where patching occurs in a painted surface, apply primer and intermediate paint coats over the patch and apply final paint coat over entire unbroken surface containing the patch. Provide additional coats until patch blends with adjacent surfaces.
 4. Ceilings: Patch, repair, or rehang existing ceilings as necessary to provide an even-plane surface of uniform appearance.

CUTTING AND PATCHING

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5. Exterior Building Enclosure: Patch components in a manner that restores enclosure to a weathertight condition.
- E. Insert specific installation requirements if not specified elsewhere. Specific installation requirements are better specified in individual Sections.

END OF SECTION

SECTION 01 74 19 – CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL

PART 1 - GENERAL

1.1 SUMMARY

- A. This section includes the following:
 - 1. Requirements governing execution of the work including, but not limited to, the following:
 - a. Salvaging non-hazardous demolition waste.
 - b. Recycling non-hazardous construction and demolition waste.
 - c. Disposing of non-hazardous construction and demolition waste.
- B. Related Sections: The following Project Manual Sections contain requirements that relate to this section:
 - 1. DIVISION 00 SPECIFICATION SECTIONS
 - 2. DIVISION 01 SPECIFICATION SECTIONS
 - 3. SPECIFICATION SECTIONS IN THE FACILITY CONSTRUCTION SUBGROUP
 - 4. SPECIFICATION SECTIONS IN THE FACILITY SERVICES SUBGROUP

1.2 DEFINITIONS

- A. Construction Waste: Building and site improvement materials and other solid waste resulting from construction, modernization, remodeling, renovation, or repair operations. Construction waste includes packaging.
- B. Demolition Waste: Building and site improvement materials resulting from demolition or selective demolition and site clearing operations.
- C. Disposal: Removal off-site of construction and demolition waste and subsequent sale, recycling, reuse, or deposit in landfill acceptable to authorities having jurisdiction.
- D. Recycle: Recovery of construction or demolition waste for subsequent processing in preparation for reuse.
- E. Salvage: Recovery of construction or demolition waste and subsequent sale or reuse in another facility.

1.3 SYSTEM DESCRIPTION

- A. Performance Requirements
 - 1. General:
 - a. Achieve end-of-project rate for salvage/recycling of minimum [65][75][90] percent by weight of total non-hazardous construction and demolition waste generated by the Work.
 - b. Practice efficient waste management in the use of materials in the course of the Work.
 - c. Use all reasonable means to divert construction demolition waste from landfills and incinerators.

1.4 SUBMITTALS

- A. Submit in accordance with Specification Section – SUBMITTAL PROCEDURES:
 - 1. Quality Assurance/Control Submittal:
 - a. Waste Management Plan.
 - b. Waste Management Progress Reports.

**CONSTRUCTION WASTE
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1.5 QUALITY ASSURANCE

A. Regulatory Requirements:

1. In accordance with Specification Section - REGULATORY REQUIREMENTS and the following:
 - a. CARB Materials and equipment used for this project shall comply with the current applicable regulations of the California Air Resources Board and the Environmental Protection Agency (EPA), in the area where the project is located.
 - b. CAL/OSHA California Division of Occupational Safety and Health Administration.
 - c. CF County of Fresno, codes and ordinances.
 - d. EPA Environmental Protection Agency.

B. Waste Management Plan:

1. Prior to commencing the Work, submit Waste Management Plan. The Plan must include, but not limited to, the following:
 - a. Contractor's name and project identification information.
 - b. Procedures to be implemented.
 - c. Materials to be salvaged, recycled, or disposed.
 - d. Estimated quantities of material broken down by material categories.
 - e. Names and locations of entities who receive salvaged and recycled materials.
 - f. Tonnage calculations that demonstrate that the Contractor will salvage, re-use, or recycle the minimum percentage by weight of the construction and demolition waste materials generated by the Work.

C. Waste Management Progress Reports:

1. Submit the Report with each application for progress payment.
 - a. Failure to submit the Report and its supporting documentation can render the application for progress payment incomplete and delay the progress payment.
2. Each Report must include, but not limited to, the following:
 - a. List of material categories.
 - b. Weight quantity of waste by material category.
 - c. Weight quantity of waste salvaged.
 - d. Weight quantity of waste recycled.
 - e. Total weight quantity of salvaged and recycled waste by material category.
 - f. Weight percentage of waste salvaged and recycled by material category.
 - g. Include manifests, weight tickets, receipts, and invoices specifically identifying the salvaged, reused, and recycled materials.
 - h. Signature line for Contractor.

D. Meetings:

1. Pre- Demolition.....Schedule prior to the start of work.
 - a. Coordinate the work with other work being performed.
 - b. Identify any potential problems, which may impede the proper disposal of materials.
 - c. Review areas where waste and recycle bins will be located.
 - d. Review where salvaged materials will be stored.
 - e. Review demolition waste disposal and material recycling procedures and environmental goals per Waste Management Plan with all subcontractors and waste haulers.
2. Progress:.....Scheduled by the Contractor during the performance of the work.
 - a. Review for maintaining proper procedures.
 - b. Inspect and identify any problems and acceptable corrective measures.
3. Completion:.....Scheduled by the Contractor upon proper completion of the work.
 - a. Inspect and identify any problems.

**CONSTRUCTION WASTE
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- b. Submit final Progress Report summarizing total construction and demolition waste weights, percentages salvaged, recycled, and disposed.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Cleaning, handling, and packing:
 - 1. Salvaged Items shall be handled in such a manner as to assure that they are free from damage.
 - 2. Salvaged Items shall be cleaned and packed or cleaned and palletized before off-site transport.
- B. Storage and protection
 - 1. Salvaged Items shall be stored in a dry, protected area prior to transport.
 - 2. Cover with protective waterproof covering providing for adequate air circulation and ventilation.

1.7 PROJECT CONDITIONS

- A. Environmental requirements;
 - 1. Comply with federal, state, and local regulations pertaining to solid waste, recycling, chemical waste, sanitary waste, and noise pollution.
 - 2. Perform work in a manner as to minimize the spread of dust and flying particles.
 - 3. No burning will be allowed on-site.
- B. Existing conditions:
 - 1. Examine project site and building(s) and compare it with the drawings and specifications. Thoroughly investigate and verify conditions under which the work is to be performed. No allowance will be made for extra work resulting from negligence or failure to be acquainted with all available information concerning conditions necessary to estimate the difficulty or cost of the work.
 - 2. Conduct work so as not to interfere unnecessarily with adjacent buildings, roads, streets, drives, and walks.
 - a. Do not close or obstruct streets, alleys, walks, or passageways without permission from authorities having jurisdiction and coordinating same with immediate neighbors whose business operation may be affected.
 - b. Safety measures shall be taken to insure an uninterrupted flow of traffic around the site as required by local Police and Fire Departments.
 - 3. Storage or sale of removed items on-site is not permitted.
 - 4. It is not expected that hazardous materials will be encountered in the Work.
 - a. Hazardous materials will be removed and disposed of by Owner prior to start of the Work.
 - b. If suspected hazardous materials are encountered, do not disturb; immediately notify Architect and Owner.
 - 5. Hazardous materials are present in buildings and structures to be selectively demolished. The Owner has prepared a report for the Contractor to review and use.
 - a. Hazardous material remediation is specified in Specification Section -
HAZARDOUS MATERIAL PROCEDURES.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Furnish all materials, tools, equipment, facilities, and services as required for performing the construction and demolition waste disposal work.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Verification of conditions:

1. Report unacceptable conditions to the Architect. Do not begin work until unacceptable conditions have been corrected.
2. Execution of work under this specification section shall constitute acceptance of existing conditions.
3. Obtain all necessary permits and authorizations by regulatory agencies required to perform the Work under this Section.

3.2 PREPARATION

A. Coordination:

1. Before proceeding, verify plans match existing conditions.
2. Review documents of existing construction provided by Owner against existing conditions.
3. If conflicts are encountered, report it to the Architect. Then prepare recommendation(s) for correction and submit to Architect for review.
4. Coordinate work under this specification section with work specified under other sections.

B. Protection:

1. Property:
 - a. Provide temporary weather protection to prevent damage to salvage and recycled items.
 - b. All damage inflicted on public and private property and the property of the Owner shall be repaired or restored to the original condition prior to the start of this Work. All repair or replacement work shall be done at no additional cost to the owner.

3.3 IMPLEMENTATION

A. General:

1. Implement waste management plan as submitted.
2. Provide handling, containers, storage, signage, transportation, and other items as required to implement waste management plan during the entire duration of the contract.
3. Designate and label specific areas on project site necessary for separating materials that are to be salvaged, recycled, reused, and donated.

B. Demolition Waste:

1. Salvaged items for delivery to Owner or other entity:
 - a. Clean salvaged items.
 - b. Pack or crate items after cleaning. Identify contents of containers.
 - c. Store items in a secure area until pick-up or delivery to Owner.
 - d. Transport item to Owner's storage area [on-site][off-site][list address].
 - e. Protect items from damage during transport and storage.
2. Salvaged items for reuse in the work:
 - a. Clean salvaged items.
 - b. Store items in a secure and dry area until ready for installation.
3. Recyclable materials:
 - a. Prepare and maintain recyclable waste materials according to recycling facility requirements.
 - b. Maintain materials free of dirt, adhesives, solvents, petroleum contamination, and other substances deleterious to the recycling process.

**CONSTRUCTION WASTE
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- c. Separate recyclable demolition waste from other waste materials. Separate recyclable waste by material type at project site to the maximum extent practical according to approved waste management plan.
- d. Separate recyclable demolition waste from other waste materials. All recyclables may be co-mingled into one bin and separated off-site at the appropriate recycling facility.
 - 1) Provide appropriately marked containers or bins for controlling recyclable waste until they are removed from the project site.
 - 2) Include a list of acceptable and unacceptable materials at each container or bin.
 - 3) Inspect containers and bins for contamination and remove contaminated materials if found.
 - 4) Processed materials stockpiled on site shall not be mixed with other materials. Shape stockpiles to drain surface water. Cover stockpiles to prevent windblown dust.
 - 5) Processed material shall be stockpiled away from construction. Do not stockpile within drip line of remaining trees.
- e. Remove recyclable demolition waste off project property and transport to recycling receiver or processor.
- f. The following list is of common material types which can be recycled. The list of material types is in no way complete but is representative of materials that can be sorted and recycled as per the intent of this specification section.
 - 1) Concrete: Remove reinforcement and other metals from concrete and sort with other metals.
 - 2) Wood: Sort and stack members according to size, type, and length of member.
 - 3) Metals: Separate metal by type. Stack structural steel members according to size and length. Remove bolts, nuts, washers, and other hardware from members.
 - 4) Gypsum Board: Stack large clean pieces on wood pallets in a dry location. Remove edge trim and sort with other metals.
 - 5) Acoustical Ceiling Tile: Stack large clean pieces on wood pallets in a dry location.
 - 6) Metal Suspension System: Separate metal members including trim and other metals from acoustical ceiling tile and sort with other metals.
 - 7) Carpet: Roll large pieces tightly after removing debris, trash, adhesive, and any tack strips. Store carpet in a dry location.
 - 8) Piping: Reduce piping to straight lengths and store by type and size. Separate supports, hangers, valves, sprinklers, and other components by type and size.
 - 9) Conduit: Reduce conduit to straight lengths and store by type and size.
- 4. Site clearing waste:
 - a. Excavated top soil and land clearing debris not recycled and reused on-site shall be removed to an off-site recycling location or disposed of at a landfill that accepts inert material.
- C. Construction Waste:
 - 1. Recyclable materials:
 - a. Prepare and maintain recyclable waste materials according to recycling facility requirements.
 - b. Maintain materials free of dirt, adhesives, solvents, petroleum contamination, and other substances deleterious to the recycling process.
 - c. Recycle paper and beverage containers used by on-site workers.

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- d. Separate recyclable construction waste from other waste materials. Separate recyclable waste by material type at project site to the maximum extent practical according to approved waste management plan.
 - e. Separate recyclable construction waste from other waste materials. All recyclables may be co-mingled into one bin and separated off-site at the appropriate recycling facility.
 - 1) Provide appropriately marked containers or bins for controlling recyclable waste until they are removed from the project site.
 - 2) Include a list of acceptable and unacceptable materials at each container or bin.
 - 3) Inspect containers and bins for contamination and remove contaminated materials if found.
 - f. Remove recyclable construction waste off project property and transport to recycling receiver or processor.
 - g. The following list is of common material types which can be recycled. The list of material types is in no way complete but is representative of materials that can be sorted and recycled as per the intent of this specification section.
 - 1) Cardboard Packaging: Breakdown into flat sheets. Bundle and store in a dry place.
 - 2) Polystyrene Packaging: Separate and bag materials.
 - 3) Pallets: As much as possible, require deliveries using pallets to remove pallets from the project site. For pallets that remain on-site, breakdown 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.
 - 5) Wood: Clean cut-Offs of lumber and grind or chip into small pieces.
 - 6) Gypsum Board: Stack large clean pieces on wood pallets in a dry location.
- D. Disposal of Waste:
- 1. Except for items or materials to be salvaged, recycled, or otherwise reused remove and transport waste materials from project site and legally dispose of them in a manner acceptable to authorities having jurisdiction.
 - 2. Do not allow waste material to accumulate on site.
 - 3. Transport waste in a manner that will prevent spillage on adjacent surfaces and areas.

3.4 CLEANING

- 1. Clean in accordance with Specification Section – PROJECT CLOSEOUT:
 - a. Immediately clean any soiled surfaces to remain.

END OF SECTION

SECTION 01 77 20 – PROJECT CLOSEOUT

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes the following:
 - 1. Provide all material, labor, equipment and services necessary to completely install all materials, accessories and other related items necessary to complete the Project as indicated by the Contract Documents.
- B. Related Sections: The following Project Manual Sections contain requirements that relate to this section:
 - 1. DIVISION 00 SPECIFICATION SECTIONS.
 - 2. DIVISION 01 SPECIFICATION SECTIONS.
- C. Work Included:
 - 1. Project cleanup and coordination of all cleaning work required under all sections of this specification.
 - 2. Compile and assemble all required documents, operation data, maintenance manuals, and parts lists for all equipment items provided for this project.
 - 3. .
 - 4. Compile and assemble all guarantees, warranties, or other written documentation to establish the requirements outlined under all sections of this specification.
 - 5. Repair and touch-up on all items damaged during the construction and handling processes.
 - 6. Furnish maintenance material and spare parts as specified within DIVISIONS 02 through 49 of these specifications.
 - 7. Deliver to the Architect all assembled copies of those items required in Articles 1 through 6 above for presentation to the Owner.
- D. It shall be the responsibility of the Contractor to provide all labor and materials necessary to achieve completion of the items listed under Paragraph A, B and C above, although certain items may be specified under the work of other trades. Periodic removal of debris, cleaning, repair, and testing of times in various areas of the construction site shall be carried out under the direction of the Contractor.

1.2 SUBMITTALS

- A. Submit in accordance with Specification Section - SUBMITTAL PROCEDURES:
 - 1. Quality Assurance/Control Submittals:
 - a. Design Data.
 - 1) All design data as required by the Contract Documents.
 - b. Manufacturer's Instructions:
 - 1) Submit three (3) copies of manufacturer's instructions.
 - 2. Closeout Submittals in accordance with Specification Sections in Division One:
 - a. Maintenance Data in accordance with Specification Section - PROJECT CLOSEOUT.
 - b. Operation Data in accordance with Specification Section - PROJECT CLOSEOUT.
 - c. Warranty in accordance with Specification Section - WARRANTIES.

3. Project Record Documents:
 - a. Various Sections of the detailed specifications require Project Record Drawings to be prepared by the Contractor(s). These drawings shall be collected by the Contractor, checked for conformance to the specific requirements, and when completed, delivered to the Architect. The Contractor shall also be responsible for collecting bound operating and maintenance manuals required of all trades supplying equipment, and for delivering them to the Architect.

1.3 QUALITY ASSURANCE:

- A. Safety, Fire and Environmental Protection, and Insurance standards shall be strictly adhered to in all phases of the construction work. It shall be the responsibility of the Contractor to determine the standards applicable to this project as set forth in all codes, regulations, and ordinances having jurisdiction, and as set forth elsewhere in the Specifications.
- B. All specific requirements stipulated in, or required by code references included under all sections of DIVISIONS 02 through 49 inclusive of this specification, and as detailed under Article 3.4 of this Section, shall be required under this Contract.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Cleaning Materials:
 1. Use only those specified materials or types of materials recommended and approved by the manufacturer of the item to be cleaned.
- B. Touch-Up Materials:
 1. Use only those materials furnished by or as recommended and approved by the manufacturer of the item to be touched up. Colors and finish characteristics shall exactly match the base material and extra materials, labor, and services required to achieve this result shall be provided by the Contractor(s).
- C. Replacement Materials:
 1. Materials that are damaged and not repairable, or materials that are destroyed shall be replaced with equal and identical materials of the same manufacture and shall function in conjunction with the remaining portions of that material. Items no longer manufactured or available shall be replaced with comparable materials as approved by the Architect and at no additional cost to the Owner.
 2. Materials that are required for maintenance replacement by the owner after the guarantee period has expired, or by the contractor during the guarantee period shall exactly match those materials installed as to make, style, color lot, etc., under this contract, and shall be delivered to the owner in marked, identified containers.
- D. Extra Materials:
 1. Carefully examine the requirements of the applicable Sections of all DIVISIONS and specifically of DIVISION 09 and deliver the materials required to the Owner.

PART 3 - EXECUTION

3.1 REPAIR AND RESTORATION

- A. All damaged items shall be repaired and replaced as directed using proper materials and craftsmen skilled in that particular trade. Materials shall be as follows:
 - 1. All repair or replacement parts shall be of the same equality and manufacturer as the item being repaired.
 - 2. All touch-up paint shall be as provided by the item manufacturer for that purpose and shall exactly match the original color and finish.

3.2 FIELD QUALITY CONTROL

- A. Final Reviews:
 - 1. In addition to all items covered under those Sections of Divisions 02 through 49 inclusive, the Contractor shall comply with the requirements stated herein.
 - a. The Contractor shall request in writing a final review (see Contractor's Request for Final Review form at the end of this Specification Section).
 - 1) The Contractor shall allow a forty-eight (48) hour time period of advance notification prior to the requested date and time indicated on the Review Request form.
 - 2) The Contractor represents that the work has been carefully inspected by the Contractor to determine that the work is complete and in compliance with all requirements set forth.
 - b. The Contractor shall prepare and shall submit the initial Contractor's Punch List identifying the items that remain uncompleted forty-eight (48) hours prior to the scheduled final review by the Architect.
 - c. Under no circumstances shall the Contractor ask the Architect or his representative to make these determinations for him.
 - 2. The Architect shall review the initial Contractor's Punch List along with the Owner determine together whether or not the Project is ready for final review. If approved, the Architect or its representative will make the final review on the date and time requested in the Contractor's Request for Final Review form, except under the following conditions:
 - a. Upon reviewing a portion of the Project and finding quantities of work incomplete or not in compliance, the review shall cease, and the Architect will notify the Contractor.
 - b. If the Contractor has assured the Architect of the completeness and/or accuracy of the work, and the review does not bear this contention out.
 - 3. The above conditions will be adhered to rigidly to prevent the Architect from being required to act as a supervisory agent of the Contractor by being asked to determine the degree of completion.
 - a. When the Contractor requests additional reviews, he shall reimburse the Architect for all time and expense incurred as indicated on the Contractor's Request for Final Review form at the end of this Specification Section.
 - b. The Architect is herein defined as any of those firms or individuals listed by references on the drawings, including all consultants identified herein.
 - c. All requests for Project Final Review (and re-review) shall be made in writing on the form provided at the end of this Specification Section.
 - 4. When the Architect does approve of the degree of readiness for the Project based on the initial Contractor's Punch List and the readiness of the Project, the Architect will make his final review, adding to the Contractor's Punch List any other items that require further completion.

5. The Contractor shall take the initial Contractor's Punch List, together with the Architect's Punch List, and initial and date each item on each list as to when it was completed.
6. Once both lists are completed and signed by the Project Inspector, the Contractor shall submit to the Architect the completed lists for final review and approval prior to filing for Substantial Completion.

3.3 CLEANING

A. During Construction:

1. Oversee cleaning and ensure that building and grounds are maintained free from accumulations of waste materials and rubbish.
2. Sprinkle dusty debris with water.
3. At reasonable intervals during progress of work, clean up site and access and dispose of waste materials, rubbish, and debris.
4. Provide suitable containers and locate on site for collection of waste materials, rubbish, and debris.
5. Do not allow waste materials, rubbish and debris to accumulate and become an unsightly or hazardous condition.
6. Remove waste materials, rubbish and debris from the site and legally dispose of at public or private dumping areas off the Owner's property.
7. Vacuum clean interior building areas when ready to receive finish painting and continue vacuum cleaning on an as-needed basis until building is ready for acceptance or occupancy.
8. Lower waste materials in a controlled manner with as few handling as possible; do not drop or throw materials from heights.
9. Schedule cleaning operations so that dust and other contaminants resulting from cleaning process will not fall on wet, newly painted surfaces.

B. Final Cleaning:

1. Use experienced professional cleaners for final cleaning.
2. At completion of construction and just prior to acceptance or occupancy, conduct a final review of exposed interior and exterior surfaces.
3. Remove grease, dust, dirt, stains, labels, fingerprints, and other foreign materials from interior and exterior surfaces.
4. Repair, patch, and touch-up marred surfaces to match adjacent finishes.
5. Broom clean paved surfaces; rake clean other surfaces of grounds.
6. Replace air conditioning filters if units were operated during construction.
7. Clean ducts, blowers, and coils if air conditioning units were operated during construction.
8. Maintain cleaning until the building, or portion thereof, is accepted by the Owner.

3.4 SCHEDULES

- #### A.
- See next page for Request for Final Review from the Contractor(s):

(The rest of this page is left intentionally blank)

**CONTRACTOR'S REQUEST
FOR
FINAL REVIEW FORM**

PROJECT: _____
(Name of Project and DA Project Number)

TO: **DARDEN ARCHITECTS, INC.**
6790 N. West Avenue
FRESNO, CA 93711

FROM: _____
(Contractor)

(Address)

WE HEREBY request Final Review on _____ **and** _____.
(Date) (Time)

WE HEREBY, request and certify:

1. The project is ready for Final Review.
2. The undersigned will compensate the Architect at a rate of \$176.00 an hour for further review, investigation and comments if it is determined that the Project is not ready for final review as indicated earlier within this Specification Section. The Architect is herein defined as any of those firms or individuals listed by reference on the Drawings, including all Consultants identified herein.

Submitted By (Contractor)

Signature _____
Firm _____
Address _____
Date _____
Telephone _____

Below is**for Use by Design Consultant only**

____ Conditions for Final Review Accepted
____ Final Review Accepted as Noted
____ Final Review Not Accepted

By _____
Date _____
Remarks _____

END OF SECTION

SECTION 01 78 36 – WARRANTIES

PART 1 - GENERAL

1.1 SUMMARY

- A. In addition to providing all other warranties specified in the Project Manual and without affecting any rights of Owner under State or Federal law, Contractor shall warrant that the Work done under this Project Manual will be free from faulty materials or workmanship and hereby agrees, upon receiving notification from the Owner or his Agent, to immediately remedy, repair or replace, without cost to the Owners and to his entire satisfaction, all defects, damages or imperfections appearing in said work within a period of one (1) year unless specified otherwise, after date of final acceptance by the Owner of all work done under this Project Manual, regardless of whether or not the Owner or persons operating under contract with the Owner partially or wholly occupies any portion of the work prior to acceptance. For work performed after completion, the one (1) year period shall be extended by the period of time between the date of final acceptance by Owner and actual performance of the work. This obligation shall survive acceptance of the work and termination of the Contract.
 - 1. Warranties shall be in the form outlined below and shall be submitted in duplicate to the Contractor and submitted on his own letterhead.
- B. Related Sections: The following Project Manual Sections contain requirements that relate to this section:
 - 1. DIVISION 00 SPECIFICATION SECTIONS.
 - 2. DIVISION 01 SPECIFICATION SECTIONS.

1.2 SUBMITTALS

Warranty Form: (following page.)

(Contractor's Letterhead)

Project Number: _____

Project Name: _____

WARRANTY FOR

We hereby warrant and the General Contractor warranties that

has been done in accordance with the Drawings and the Specifications and that the Work as installed will fulfill the requirements of the warranty included in the Project Manual. We agree to repair, replace any or all of our work together with any other adjacent work which may be displaced or damaged by so doing that may prove to be defective in its workmanship or materials within a period of _____ years from date of acceptance of the above-named without any expense to the Owner, ordinary wear and tear and unusual abuse or neglect excepted. In the event of our failure to comply with above-mentioned conditions within ten (10) days after being notified in writing by the Owner or his agent, we collectively or separately, do hereby authorize the Owner to proceed to have said defects repaired and made good at our expense and we will honor and pay the costs and charges therefor upon demand.

(Signature of Subcontractor)

(Signature of Contractor)

Date: _____

- A. Submit 2 copies of all manufacturer's or installer/applicator's warranties and bonds as specified within Division 02 –49.
- B. Submit to Architect together with Project Record Documents.
- C. Accompany submittals with transmittal letter in duplicate.
- D. When Product Submittals are required, submit copy of warranty with product submittal.

PART 2 - PRODUCTS - NOT APPLICABLE

PART 3 - EXECUTION - NOT APPLICABLE

END OF SECTION

SECTION 02 41 19 - SELECTIVE DEMOLITION

PART 1 - GENERAL

1.1 SUMMARY

- A. This section includes the following:
 - 1. Section includes requirements governing execution of the work including, but not limited to, the following:
 - a. Demolition and removal of selected portions of building or structure.
 - b. Demolition and removal of selected site elements.
 - c. Salvage of existing items to be reused or recycled.
 - d. Demolition of entire small buildings or structures.
- B. Related Sections: The following Project Manual Sections contain requirements that relate to this section:
 - 1. DIVISION 00 SPECIFICATION SECTIONS
 - 2. DIVISION 01 SPECIFICATION SECTIONS

1.2 REFERENCES

- A. Standards:
- B. In accordance with the latest edition of the following standards:
 - 1. ANSI A10.6 American National Standards Institute

1.3 DEFINITIONS

- A. Remove: Detach items from existing site or building (s) and legally dispose or recycle off-site.
- B. Remove and Salvage to Owner: Carefully detach from existing site or building (s), in a manner to prevent damage, and deliver to Owner.
- C. Remove and Reinstall: Detach items from existing site or building (s), prepare for reuse, and reinstall where indicated.
- D. Existing to Remain: Existing item(s) within project site that are not to be permanently removed and that are not otherwise indicated to be removed, removed and salvaged, or removed and reinstalled.

1.4 SUBMITTALS

- A. Submit in accordance with Specification Section - SUBMITTAL PROCEDURES:
 - 1. Shop Drawings:
 - a. Proposed Protection Measures - Submit report and drawings that indicates the measures proposed for protecting individuals and property for dust and noise control.
 - 1) Indicate proposed locations and construction of barriers.
 - 2) Indicate occupant paths of egress and travel.
 - 3) Indicate how long utility services will be interrupted.
 - b. Salvaged Item Inventory List
 - 1) Indicate items to be salvaged and delivered to Owner.
 - 2. Closeout Submittals:
 - a. Existing Warranties
 - b. Pre-demolition Photographs

1.5 QUALITY ASSURANCE

A. Regulatory Requirements:

1. In accordance with Specification Section - REGULATORY REQUIREMENTS and the following:
 - a. CAL/OSHA California Division of Occupational Safety and Health Administration.
 - b. CF County of Fresno, codes and ordinances
 - c. EPA Environmental Protection Agency

B. Meetings:

1. Pre- Demolition: Schedule prior to the start of work.
 - a. Coordinate the work with other work being performed.
 - b. Review requirements of work performed by others that rely on substrates exposed by selective demolition work.
 - c. Identify any potential problems that may impede planned progress and proper demolition of work.
 - d. Review structural load limitations of existing structure.
 - e. Review areas where existing construction is to remain and requires protection.
 - f. Review demolition waste disposal and material recycling procedures.
2. Progress: Scheduled by the Contractor during the performance of the work.
 - a. Review for proper work progress.
 - b. Identify any problems and acceptable corrective measures.
 - c. Identify any measures to maintain or regain project schedule if necessary.
3. Completion: Scheduled by the Contractor upon proper completion of the work.
 - a. Inspect and identify any problems.
 - b. Establish method and procedures to maintain protections while progressing to project completion.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Cleaning, handling, and packing:

1. Salvaged Items and Reinstalled Items shall be handled in such a manner as to assure that they are free from damage.
2. Salvaged Items shall be cleaned and packed or cleaned and palletted.
3. Reinstalled Items shall be cleaned.

B. Storage and protection

1. Salvaged Items and Reinstalled Items shall be stored in a dry, protected area.
2. Salvaged Items and Reinstalled Items shall be stored above ground on level platforms, six (6) inches above ground, allowing air circulation underneath.
3. Cover with protective waterproof covering providing for adequate air circulation and ventilation.

C. Waste Management and Disposal:

1. Disposal of all selective demolition items shall be per Specification Section - CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL.

1.7 PROJECT CONDITIONS

A. Environmental requirements:

1. Dust control - perform site, exterior, and interior work in a manner as to minimize the spread of dust and flying particles.
 - a. Thoroughly moisten appropriate surfaces as required to prevent dust from being a nuisance to the occupants, public, and neighbors.
2. Noise control - perform work in a manner as to minimize construction noise.
 - a. When a certain level of noise is unavoidable and is objectionable to the occupants of the adjacent spaces, buildings, or premises, coordinate with Owner and make arrangements to perform such work at the most appropriate time periods of the day.

B. Existing conditions:

1. Examine project site and building(s) and compare it with the drawings and specifications. Thoroughly investigate and verify conditions under which the work is to be performed. No allowance will be made for extra work resulting from negligence or failure to be acquainted with all available information concerning conditions necessary to estimate the difficulty or cost of the work.
2. Conduct work so as not to interfere unnecessarily with adjacent buildings, roads, streets, drives, and walks.
 - a. Do not close or obstruct streets, alleys, walks, or passageways without permission from authorities having jurisdiction and coordinating same with immediate neighbors whose business operation may be affected.
 - b. Safety measures shall be taken to insure an uninterrupted flow of traffic around the site as required by local Police and Fire Departments
3. Owner will occupy portions of building immediately adjacent to selective demolition area. Conduct selective demolition so Owner's operations will not be disrupted.
4. Maintain existing utilities indicated to remain in service and protect against damage during selective demolition work.
 - a. Maintain fire-protection facilities in service during the work.
5. Demolition waste becomes the property of the Contractor.
6. Storage or sale of removed items on-site is not permitted.
7. It is not expected that hazardous materials will be encountered in the Work.
 - a. If suspected hazardous materials are encountered, do not disturb; immediately notify Architect and Owner.

1.8 WARRANTY

A. Existing Warranties:

1. Remove, replace, patch, and repair materials and surfaces cut or damaged during selective demolition, by methods and with materials so as not to void existing warranties. Notify warranter before proceeding.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Furnish all materials, tools, equipment, facilities, and services as required for performing the selective demolition and removal work.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Verification of conditions:

1. Report unacceptable conditions to the Architect. Do not begin work until unacceptable conditions have been corrected.
2. Execution of work under this specification section shall constitute acceptance of existing conditions.
3. Obtain all necessary permits and authorizations by regulatory agencies required to perform the Work under this Section.
4. Verify that utilities have been disconnected and capped before starting selective demolition operations.
5. Verify that rooftop utilities and service piping have been shut-off prior to roof selective demolition.

6. Record existing conditions by use of Pre-demolition Photographs.
 - a. Inventory and record the condition of items to be salvaged and/or re-installed.

3.2 PREPARATION

A. Coordination:

1. Before proceeding, verify plans match existing conditions.
2. Review documents of existing construction provided by Owner against existing conditions.
3. If conflicts are encountered, report it to the Architect. Then prepare recommendation(s) for correction and submit to Architect for review.
4. Coordinate work under this specification section with work specified under other sections.
5. Coordinate any utility and HVAC unit shut-down with owner 48 hours in advance of the anticipated shut-down.
 - a. Do not interrupt utilities and HVAC units serving occupied or used facilities, except when authorized in writing by the Owner.
 - b. Provide temporary service during interruptions to existing facilities, as may be required by the Owner to maintain essential services.

B. Protection:

1. Structure and Property:
 - a. Provide temporary barricades and other protection required to prevent injury to people and damage to adjacent buildings, landscape, and facilities to remain.
 - b. All damage inflicted on public and private property and the property of the Owner shall be repaired or restored to the original condition prior to the start of this Work. All repair or replacement work shall be done at no additional cost to the owner.
 - c. Provide protection to ensure safe passage of people around selective demolition area and to and from occupied portions of building and site.
 - d. Provide temporary weather protection, during interval between selective demolition of existing construction on exterior surfaces and new construction, to prevent water leakage and other weather damage to building envelope, structure, and interior areas.
 - e. Protect walls, ceilings, floors, and other existing finish work that are to remain or that are exposed during selective demolition operations.
 - f. Protect and maintain utility services and mechanical/electrical systems to remain.
 - g. Cover and protect furniture, furnishings, and equipment that have not been removed.
 - h. Cover all air supply and return ducts to remain before proceeding with demolition work.
 - i. Cover air intake louvers before proceeding with work that will affect indoor air quality.
 - j. During roof selective demolition have sufficient and suitable materials on-site to facilitate rapid installation of temporary protection in the event of unexpected rain.
2. Temporary Shoring:
 - a. Provide and maintain shoring, bracing, and structural supports as required to preserve stability and prevent movement, settlement, or collapse of construction and finishes to remain, and to prevent unexpected or uncontrolled movement or collapse of construction being demolished.
 - 1) Strengthen or add new supports when required during progress of selective demolition.

3.3 APPLICATION

A. General:

SELECTIVE DEMOLITION

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1. Selective demolition shall include the removal of all components of the existing building and/or site described in the documents to be removed. Unless otherwise specified, the component identified for removal shall include all materials, accessories and fabrications associated with that component.
 2. Neatly cut openings and holes plumb, square, and true to dimensions required. Use cutting methods least likely to damage construction to remain or adjoining construction.
 - a. Temporarily cover opening to remain.
 - b. Use hand tools or small power tools designed for sawing or grinding, not hammering and chopping, to minimize disturbance of adjacent surfaces.
 3. Cut or drill from the exposed or finished side into concealed surfaces to avoid marring existing finished surfaces.
 4. When removing structural framing members, lower to ground by method suitable to avoid free fall and to prevent ground impact or dust generation.
 5. Locate selective demolition equipment and demolished debris so as not to impose excessive loads on supporting walls, floors, or framing.
 6. Locate, identify, disconnect, and seal or cap off indicated utility services and mechanical/electrical systems.
 7. Demolished items and materials that are recyclable or slated for disposal shall be promptly dealt with
 8. Removed and Salvaged items:
 - a. Clean salvaged items.
 - b. Pack or crate items after cleaning. Identify contents of containers.
 - c. Store items in a secure area until delivery to Owner.
 - d. Transport item to area as designated by Owner.
 - e. Protect items from damage during transport and storage.
 - f. In addition to items indicated elsewhere, salvaged items that the Owner wants to retain in usable condition are as follows:
 - 1) All door hardware
 - 2) All unit heater and controls
 - 3) All energy management controls
 - 4) All security system devices
 9. Removed and Reinstalled items:
 - a. Clean and repair items to functional condition adequate for intended reuse.
 - b. Pack or crate items after cleaning and repairing. Identify contents of containers.
 - c. Protect items from damage during transport and storage.
 - d. Reinstall items in locations indicated. Comply with installation requirements for new materials and equipment. Provide connections, supports, and miscellaneous materials necessary to make item functional for use indicated.
 10. Existing Items to Remain:
 - a. Protect construction indicated to remain against damage and soiling during selective demolition.
- B. Site Selective Demolition:
1. Utility lines to be abandoned within the construction area shall be removed and stubbed off outside the limits of construction.
 2. Maintain existing storm drainage system to remain in functioning condition. Prevent debris from entering or blocking drains and piping. Use drain plugs specifically for this purpose. Remove drain plugs at the end of each work day.
 3. Refer to drawings for trees and shrubs to be removed. Protect certain trees as indicated.
 - a. Remove tops, trunks, and roots of trees and shrubs to a minimum depth of 3 feet or to a depth required to remove all roots 1/4 inch diameter and larger.
 - b. Chip removed trees, shrubs, and roots.
 - 1) Removed chipped material to recycling station.
 - 2) Recycle chipped material into mulch for this project. Refer to Specification Section - LANDSCAPE PLANTING for treatment.

SELECTIVE DEMOLITION

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4. Remove debris, concrete, asphalt, and any other obstruction to the extent indicated.
5. Remove all:
 - a. Buried objects which will interfere with the Work.
 - b. Irrigation lines, irrigation risers, and irrigation valves.
 - c. Stand pipes.
 - d. Water wells and pumps.
 - e. Electrical service and power poles.
6. At building pads, site improvements, or trenching, strip topsoil which contains:
 - a. Grass, weeds, and natural vegetation to a minimum depth of [12][18][24] inches.
 - b. Stumps and roots 1/4 inch and larger.
7. Remove non-soil materials from topsoil, including clay lumps, gravel, trash, debris, weeds, roots, other waste materials, and objects more than 1/2 inch in diameter.
8. Stockpile reusable topsoil away from excavation and where work is to proceed.
 - a. Do not stockpile topsoil within drip line of remaining trees.
9. Non-soil materials removed from topsoil shall be separated into like materials and recycled either within the project or removed from the project site to a recycling station.
 - a. Those waste materials that are non-recyclable shall be legally disposed off of the project site.

3.4 CLEANING

- A. Clean in accordance with Specification Section - PROJECT CLOSEOUT:
 1. Clean any soiled surfaces to remain immediately.
 2. Existing substrates shall be clean and ready for the installation of any additional materials.
 3. Leave site areas level and free of any ruts or debris. Appearance of earth surface shall be equal to or better than adjacent undisturbed surfaces.

END OF SECTION

SECTION 061000 – ROUGH CARPENTRY

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes the following:
 - 1. Provide all material, labor, equipment and services necessary to complete all rough carpentry, accessories and other related items necessary to complete the Project as indicated by the Construction Documents unless specifically excluded.
- B. Related Sections: The following Sections contain requirements that relate to this Section:
 - 1. DIVISION 00 SPECIFICATION SECTIONS.
 - 2. DIVISION 01 SPECIFICATION SECTIONS.
 - 3. 08 11 00 METAL DOORS AND FRAMES
 - 4. 09 29 00 GYPSUM BOARD
 - 5. 09 50 00 ACOUSTICAL CEILINGS
 - 6. 09 65 10 RESILIENT BASE AND ACCESSORIES
 - 7. 09 65 19 RESILIENT TILE
 - 8. 09 68 40 CARPET
 - 9. 10 14 00 IDENTIFYING DEVICES

1.2 REFERENCES

- A. Standards:
 - 1. In accordance with the following standards:
 - a. ALSC American Lumber Standards Committee
 - b. ANSI American National Standards Institute
 - c. APA The Engineered Wood Association (Formerly the American Plywood Association)
 - d. ASME American Society of Mechanical Engineers International
 - e. AWWA American Wood Protection Association
 - f. CABO Council of American Building Officials
 - g. FS Federal Specification
 - h. ICC International Code Council
 - i. NDS National Design Specification for Wood Construction
 - j. NIST National Institute of Standards and Technology
 - k. PS Product Standards of the U.S. Department of Commerce
 - l. RIS Redwood Inspection Service
 - m. WCLIB West Coast Lumber Inspection Bureau
 - n. WWPA Western Wood Products Association

1.3 SUBMITTALS

- A. Submit in accordance with Specification Section - SUBMITTAL PROCEDURES:
 - 1. Product Data:
 - a. Submit manufacturer's data for Wood-Preservative Treatment.
 - b. Submit manufacturer's data for Fire-Retardant Treatment.
 - c. Submit manufacturer's data for power driven fasteners, metal-framing connectors, and metal framing anchors.
 - 2. Quality Assurance/Control Submittals:
 - a. Material Certificates: Submit Material Certificates of Compliance to Standards and Regulatory Requirements.

1.4 QUALITY ASSURANCE

A. Qualifications:

1. Installer Qualifications:

- a. Engage an experienced Installer who has successfully completed three (3) projects of similar scope and size to that indicated for this Project.

B. Regulatory Requirements:

1. In accordance with Specification Section - REGULATORY REQUIREMENTS, and the following:

- a. CARB Materials and equipment used for this Project shall comply with the current applicable regulations of the California Air Resources Board (CARB) and the Environmental Protection Agency (EPA), in the area where the project is located.

C. Meetings:

1. Pre-Installation: Scheduled by the Contractor prior to the start of work.

- a. Coordinate the work with other work being performed.
- b. Identify any potential problems that may impede planned progress and proper installation of work regarding quality of installation and warranty requirements.

2. Progress: Scheduled by the Contractor during the performance of the work.

- a. Review for proper installation of work progress.
- b. Identify any installation problems and acceptable corrective measures.
- c. Identify any measures to maintain or regain project schedule if necessary.

3. Completion: Scheduled by the Contractor upon proper completion of the work.

- a. Inspect and identify any problems that may impede issuance of warranties or guaranties.
- b. Maintaining installed work until the Notice of Substantial Completion has been executed.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Deliver undamaged products to project site in manufacturer's sealed containers or bundles with tags and labels intact.

B. Storage and Protection:

1. Products shall be stored above ground on level platforms, six (6) inches above ground, allowing air circulation under stacked units.
2. Cover materials with protective waterproof covering providing for adequate air circulation and ventilation.

1.6 PROJECT CONDITIONS

A. Environmental Requirements:

1. Dust Control: Perform work in a manner as to minimize the spread of dust and flying particles.
2. Burning: No burning will be allowed on-site.
3. Rain: Work under this section shall not be started or maintained under threat of rain unless the work is not affected by the rain.

B. Existing Conditions:

1. Examine site and compare it with the drawings and specifications. Thoroughly investigate and verify conditions under which the work is to be performed. No allowance will be made for extra work resulting from negligence or failure to be acquainted with all available information concerning conditions necessary to estimate the difficulty or cost of the work.

1.7 WARRANTY

A. Contractor's General Warranty:

1. In accordance with Specification Section - WARRANTIES.
- B. Manufacturer's Warranty:
 1. In accordance with manufacturer's written standard warranty:
 - a. Warranty Period One (1) Year.
- C. Installer's Warranty:
 1. In accordance with the terms of the Specification Section - WARRANTIES
 - a. Warranty Period One (1) Year.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. These products listed herein establish the size, pattern, color range and function selected by the Architect for this Project. Manufacturers that are listed as acceptable alternative manufacturers and substitutions must still comply with the requirements of this project and the products listed in order to be approved as an equivalent during the Submittal Process. If the acceptable alternative manufacturers listed or substitutions are not approved during the Submittal Process due to non-compliance with the contract documents, then the Contractor shall submit product specified.
 1. Power Driven Fastener specified product manufacturer:
 - a. HILTI FASTENING SYSTEMS.
 2. Metal Framing Anchor specified product manufacturer:
 - a. SIMPSON STRONG-TIE COMPANY.
 - b. Acceptable alternative manufacturers:
 - 1) Manufacturers of Alternative Metal Framing Anchors shall have Model Code Research Evaluation Reports and Published allowable design loads that are determined from empirical data, or by rational engineering analysis, that are demonstrated by comprehensive testing performed by a qualified testing agency acceptable by the Architect or its Designated Design Consultant, and DSA.
 3. Metal Timber Framing Connector specified product manufacturer:
 - a. SIMPSON STRONG-TIE COMPANY.
 - b. Acceptable alternative manufacturers:
 - 1) Do not substitute connectors manufactured by others than SIMPSON STRONG-TIE COMPANY without prior written review by the Architect or its Designated Design Consultant, and DSA.
- B. Products from other manufacturers not listed must submit in accordance with Specification Section - SUBSTITUTION PROCEDURES.

2.2 MATERIALS

- A. Wood:
 1. Douglas Fir - Larch:
 - a. Standards and Requirements: In accordance with WCLIB "Standard Grading and Dressing Rules" No. 17, latest edition, and WWPA "Western Lumber Grading Rules," latest edition.
 - 1) All wood shall be "DRY" and having a moisture content of less than 19 percent at the time of installation, in accordance with WWPA.
 - 2) Provide wood of S4S unless otherwise noted.
 - 3) Factory mark each piece of wood with the grade stamp of the grading agency.
 - b. Grading and Use Requirements:

ROUGH CARPENTRY

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Item	Sizes	Grade	Maximum Moisture Content at Initial Use (Installation)
Studs	2x	No. 1	19%
Studs	3x, 4x, 6x	No. 1	19%
Sills & Plates	2x	No. 1	19%
Sills & Plates	3x, 4x, 6x	No. 1	19%
Beams	4x, 6x	No. 1	19%
Joists	2x	No. 1	19%
Posts	4x, 6x, 8x	No. 1	19%
Ledgers	2x	No. 1	19%
Ledgers	3x, 4x, 6x	No. 1	19%
Blocking	2x, 3x, 4x, 6x	No. 1	19%
Sheathing and Stripping	Up to 1-1/2" thick 2" width and wider	No. 1	19%
Stripping	2x, 3x, 4x, 6x	Construction	19%
Nailers & Grounds	2x, 3x, 4x, 6x	Construction	19%
Furring	2x, 3x, 4x, 6x	Construction	19%
T & G Decking	2x	Select Dex	15%

- 1) Initial use shall be that point at which screws or other fasteners or the holes for said fasteners are installed into the wood.
- 2) The Contractor shall use whatever means necessary, including site drying to ensure that the moisture contents listed above are not exceeded.

B. Plywood:

1. Soft Plywood:

- a. Standards and Requirements: In accordance with PS1-09, Group 1 Douglas-Fir and PS2-10.

- 1) Factory mark each piece of plywood with the APA Grade Stamp.
- 2) Maximum Moisture Content at Initial Use (Installation) shall be 15 percent.

- b. Grading and Use Requirements:

- 1) Wall, Roof, and Parapet Sheathing:
 - a) APA Rated Sheathing - Structural 1.
 - b) Span Rating as required to suit stud or joist spacing.
 - c) Exposure Durability Classification - Exposure 1.
 - d) Species Group 1.
 - e) Grade C-C 3 ply for 1/4 inch thickness and C-D 5 ply for 1/2 and 5/8 inch thickness.
- 2) Subflooring, Floor Sheathing as underlayment, Equipment Platform Sheathing:
 - a) APA Rated "Sturdi-Floor."
 - b) Span Rating as required to suit joist spacing.
 - c) Exposure Durability Classification - Exposure 1.
 - d) Species Group 1.
 - e) Grade C-C plugged.
- 3) Backing panels for Electrical Equipment.
 - a) APA Rated Sheathing - Structural 2.
 - b) Exposure Durability Classification - Exterior.
 - c) Species Group 1.
 - d) Grade C-C.
 - e) Shall be 3/4 inch minimum thickness.
- 4) Backing panels for Telecommunication Equipment:
 - a) APA Rated Sheathing - Structural 2.
 - b) Exposure Durability Classification - Exterior.

- c) Species Group 1.
- d) Grade A-B.
- e) Shall be 3/4 inch minimum thickness.

2.3 FINISHES

A. Preservative Treatment:

1. Pressure Treat Wood and Plywood, with CARB Complying, EPA Registered, preservatives in accordance with AWPAs Standards "U," "T," and "P."
 - a. Do not use material that does not comply with the requirements for untreated material.
 - b. After treatment, kiln-dry wood to a maximum moisture content of 19 percent.
 - c. After treatment, dry plywood to a maximum moisture content of 15 percent.
 - d. Factory mark each treated item with the treatment quality mark of an Independent Inspection Agency approved by the ALSC Treated Wood Program.
2. Non-pressure treat Wood and Plywood, with CARB Complying, EPA Registered preservatives in accordance with AWPAs Standards "U," "T," "P," □ and "N."

B. Fire Retardant Treatment:

1. Fire Retardant Treat Wood and Plywood with pressure treatment materials that comply with performance requirements of CBC 2303.2.
 - a. Use Exterior Type.
 - b. Use treatment for which chemical manufacturer publishes physical properties of treated wood after exposure to elevated temperatures when tested by a qualified independent testing agency and is acceptable to Fire and Life Safety authorities.
 - c. Use treatment that does not promote corrosion of metal fasteners.
 - d. After treatment, kiln-dry wood to a maximum moisture content of 19 percent.
 - e. After treatment, dry plywood to a maximum moisture content of 15 percent.
 - f. Factory mark each treated item with the treatment quality mark of an Independent Inspection Agency.

2.4 ACCESSORIES

A. Fasteners: All types shall comply with standards and dimensions of the latest edition of NDS. All types of fasteners exposed to wet or exterior conditions, in-ground contact, in pressure or preservative treated woods, in concrete or masonry, or in an area of high relative humidity shall be hot-dipped galvanized in accordance with ASTM A 153 "Specification for Zinc Coating (Hot Dip) on Iron and Steel Hardware."

1. Nails: Common wire nails or spikes complying with ASTM F 1667 "Specification for Driven Fasteners: Nails, Spikes, and Staples," and CBC Section 2304.10. Box nails and sinker nails are not permitted. Vinyl coating is permitted on common nails.
2. Bolts: Steel bolts complying with ASTM A 307 "Specification for Carbon Steel Bolts and Standards, 60,000 PSI Tensile Strength," Grade A, hex head.
 - a. Provide hex head nuts complying with ASTM A 307 "Specification for Carbon Steel Bolts and Standards, 60,000 PSI Tensile Strength," and standard flat washers complying with ANSI/ASME B18.22.1, Type A, Wide pattern.
3. Lag Bolts: Shall comply with ANSI/ASME B18.2.1, hex head.
 - a. Provide standard flat washers complying with ANSI/ASME B18.22.1, Type A, Wide pattern.
4. Wood Screws: Shall comply with ANSI/ASME B18.6.1.
 - a. Screws for fastening wood to Metal Framing shall comply with ASTM C 954 "Specification for Steel Drill Screws for the Application of Gypsum Panel Products or Metal Plaster Bases to Steel Studs from 0.033 in. (0.84 mm) to 0.112 in. (2.84 mm) in Thickness."
5. Power Driven Fasteners: Tempered Steel pins with corrosive resistant plating or coating complying with ICC ESR-1539.

- B. Metal Framing Anchors: All anchors shall comply with ASTM A 653 "Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process," G60 Coating Designation for hot-dipped zinc-coated steel sheet. Provide structural, commercial, or lock-forming quality as standard with manufacturer for type of anchor indicated.
- C. Metal Timber Framing Connectors: All connectors shall have specific ICC Approval and be fabricated from hot-dipped galvanized steel.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Site verification of conditions:
 - 1. Prior to the execution of the work under this specification section, inspect the installed work executed under other sections of this Project Manual, which affect the execution of work under this specification section.
 - 2. Report unacceptable conditions to the Architect. Do not begin work until unacceptable conditions have been corrected.
 - 3. Execution of work under this specification section shall constitute acceptance of existing conditions.
 - 4. Verify that work under this Section may be performed in strict accordance with the original design and all pertinent codes and regulations.

3.2 PREPARATION

- A. Coordination:
 - 1. Coordinate work under this specification section with work specified under other sections to ensure proper and adequate interface of work.
- B. Protection:
 - 1. Protect all materials from damage occurring from work called for under this specification section.
- C. Preservative Treatment:
 - 1. Members requiring pressure treatment:
 - a. Sills, Plates, Ledgers, Studs, Joists, Blocking, Nailers and Furring attached or resting on or against concrete or masonry construction.
 - b. Pressure treated members cut in the field shall have the cut ends painted with preservative until the wood or plywood absorbs no more preservative.
 - 2. Members requiring field treatment:
 - a. All wood and plywood members at exterior walls within two feet of the ground surface.
 - b. Treat all surfaces of the member.
 - c. Treat by dipping the required portion of the member into preservative for 15 minutes or paint until the wood or plywood absorbs no more preservative. Wait a minimum of two hours after dipping or painting is complete to incorporate member into project.
 - d. Test treat items for compatibility where additional finish coats (stain or paint) may occur.
- D. Fire Retardant Treatment:
 - 1. All wood and plywood members as indicated.
 - 2. All plywood panels for Telecommunication Equipment.

3.3 INSTALLATION

- A. General:

1. In accordance with manufacturer's instructions and recommendations unless specifically noted otherwise.
 2. In accordance with approved submittals.
 3. In accordance with Regulatory Requirements.
 4. Selection of wood and plywood pieces:
 - a. Carefully select all members.
 - b. Select individual pieces so that knots and obvious defects will not interfere with placing bolts, proper nailing, and making proper connections.
 - c. Cut out and discard all defects which will render a piece unable to serve its intended function.
 - d. Wood and plywood may be rejected by the Architect or its Designated Design Consultant, and DSA whether or not it has been installed for excessive warp, twist, bow, crook, mildew, fungus, or mold as well as for improper cutting, fitting and treatment when required.
 5. All wood and plywood shall be accurately cut to lengths required.
 6. All work shall produce joints true, tight, level, plumb, and all members are securely anchored.
 - a. Do not shim any framing member.
- B. Layout:
1. Lines shall be straight and true.
- C. Fastening:
1. Nails:
 - a. All nailing shall be as required by CBC Table 2304.10.2 "Fastening Schedule."
 - b. Machine nailing may be approved subject to the approval of the Architect or its Designated Design Consultant, and DSA.
 - 1) The use of machine nailing is subject to a satisfactory job site demonstration for each project. The approval is subject to continued satisfactory performance.
 - 2) In plywood, if the nail heads penetrate beyond flush with the surface of the sheathing, or if minimum allowable edge distances are not maintained, the performance will be deemed unsatisfactory.
 - 3) Machine nailing will not be accepted in 5/16" plywood.
 - c. Penetration of nails or spikes shall be one-half the length of the nail or spike into the piece receiving the point.
 - d. 16d nails shall be used to connect pieces 2" in thickness unless otherwise indicated.
 - e. Clinch nails protruding through members.
 - f. Bore holes for nails where necessary to prevent splitting.
 - g. Use Finish or Casing Nails for finish work.
 2. Lag Bolts:
 - a. Lag Bolts shall be screwed into place. No driving is allowed.
 - b. For the Shank portion, holes shall be bored the same depth and diameter as the shank. For threaded portion, holes shall be between 60% and 75% of the shank diameter.
 - c. Malleable Iron or Steel plate washers shall be used where bolt heads bear on wood or plywood. Washers shall have an area equal to 16 times the area of the bolt.
 - 1) Steel plate washers shall have a thickness not less than 1/10 the length of the washer's longest side.
 - 2) Malleable Iron washers shall have a bearing surface for the head equal in diameter to not less than the long diameter of the head.
 - d. Tighten all bolts and screws prior to concealing within structure.
 3. Bolts:
 - a. Holes shall be 1/16" larger than bolt diameter.

- b. Malleable Iron or Steel plate washers shall be used where bolt head and nuts bear on wood or plywood. Washers shall have an area equal to 16 times the area of the bolt.
 - 1) Steel plate washers shall have a thickness not less than 1/10 the length of the washer's longest side.
 - 2) Malleable Iron washers shall have a bearing surface for the head or nut equal in diameter to not less than the long diameter of the head or nut.
- c. Tighten all bolts prior to concealing within structure.
- 4. Power Driven Anchors
 - a. Fastening shall be accomplished by low-velocity piston-driven power activated tool.
 - b. Pins shall have guide washers to accurately control penetration.
- 5. Expansion Anchors (Post-Installed Concrete Anchors):
 - a. Refer to Specification Section - DRILLED ANCHORS.
- 6. Metal Framing Anchors
 - a. Use half-length nails where required or indicated.
- 7. Metal Timber Framing Connectors
 - a. Nailing shall conform to manufacturer's instructions with a nail provided for each punched hole.
- D. Sills:
 - 1. Shall be in long lengths of sizes as indicated.
 - 2. Fasten with a minimum of two (2) anchor bolts per piece and bolt within 9", but not nearer than 6", from the end of piece.
 - 3. Malleable iron or steel plate washers shall be placed under anchor bolt nuts bearing on wood.
 - 4. Set Sill level and true.
- E. Studs and Posts:
 - a. Shall be full length.
- 2. Cut members to provide full bearing at ends.
- F. Plates:
 - 1. Shall be in long lengths and spliced as indicated.
- G. Joists and Beams:
 - 1. Shall be in long lengths and spliced over bearings unless otherwise indicated. Do not overcut.
 - 2. Install with crown side up.
 - 3. Beams or headers indicated to be built-up of two or more joists shall be constructed on the project site using full length members.
- H. Blocking:
 - 1. Blocking shall be same thickness and width of studs or joists unless otherwise indicated.
 - 2. Install blocking at all wall, floor, or roof penetrations.
 - a. Blocking shall provide surface for fastening applied interior or exterior flashings or flanges.
 - 3. Install blocking at all plywood joints.
 - a. Install blocking at plywood edges including crickets and parapet wall bracing.
 - 4. Shall be provided for all fixtures, equipment, casework, toilet partitions, toilet accessories, handrails, visual display boards, identifying devices, finish hardware, flashing, wall and ceiling finishes, and other items as indicated. See also Specification Section - OWNER FURNISHED ITEMS for listing of N.I.C. items that will require blocking coordination.
 - a. Coordinate placement of blocking and supports with manufacturer or supplier of items.
 - 5. Fireblocking shall be provided to cut off all horizontal and vertical concealed draft openings in accordance with CBC Section 718.2.

- a. Horizontal Fireblocking in walls shall be typically placed at 4'-0" above finished floor, at 8'-0" above finished floor, at mezzanine floor plane unless otherwise indicated, and at ceiling line plane.
 - 6. Bridging shall be installed in all joist members deeper than 8 inches unless otherwise indicated.
 - a. Bridging shall extend the full depth of the joists.
 - b. Drill bridging within attics to provide ventilation as indicated.
 - I. Plywood Sheathing Panels:
 - 1. For panels with different veneer face grades, the exposed face shall always be the higher grade.
 - 2. Space panels 1/8 inch at all edge and end joints, and in accordance with APA.
 - 3. Panels shall be applied with the long dimension (or strength axis) across the framing.
 - 4. Fasten from the field of the panel first and then to the ends and edges to reduce stressing of the panel surfaces.
 - 5. Center all joints over bearing supports.
 - 6. Wall panels shall continue uninterrupted by ceilings or soffits from floor to floor or roof unless otherwise indicated.
 - J. Sheathing:
 - 1. Shall be in accordance with the following:
 - a. Wall Sheathing: CBC Section 2304.6 and Table 2304.6.1.
 - b. Floor and Roof Sheathing: CBC Section 2304.8.
 - c. Structural Floor Sheathing: CBC Section 2304.8.1.
 - d. Structural Roof Sheathing: CBC Section 2304.8.2.
 - e. Lumber Decking: CBC Section 2304.9.
 - K. Nailers and Grounds:
 - 1. Shall be installed as indicated and where required for attaching other work.
 - 2. Form to shapes indicated.
 - 3. Coordinate locations with other work involved.
 - 4. Provide nailers at all flashing and edge terminations when required by roofing manufacturer for metal and concrete roof decks. When the roof system is required to be Class A use fire-retardant treated wood.
 - 5. Provide permanent Grounds of dressed, pressure-preservative-treated, Key-beveled wood and of thickness required to bring face of ground to exact finish thickness of finish material. Remove temporary grounds when no longer required.
 - L. Furring and Stripping
 - 1. Shall be installed as indicated and where required to provide fastening material or space for the passage of pipes, conduits, etc. not accommodated including ceiling stripping.
 - M. Sealant:
 - 1. When indicated, Primer shall be in accordance with sealant manufacturer recommendations.
 - 2. When indicated, Joint Sealer shall be in accordance with Specification Section - SEALANTS.
- 3.4 CONSTRUCTION
- A. Draftstopping:
 - 1. Shall be provided in floor, attic, and ceiling areas in accordance with CBC Section 718.3 and 718.4.
 - B. Pipes:
 - 1. Frame to avoid cutting or drilling for passage of pipes, ducts, and conduit.
 - 2. Follow criteria as indicated for cutting or drilling. Unusual edge distances and awkward spacing and sizes shall be brought to the Architects attention for remedy.
 - C. Chimneys and Flues:
 - 1. Keep all framing 2 inches away from chimney or flues in accordance with CBC Section 2304.5.

- D. Cant Strips and Crickets:
 - 1. Shape to sizes indicated.
 - 2. Rigidly fasten to construction.
 - 3. Block all joints of plywood panel construction.
 - 4. Form neat and mitered corners.
- E. Temporary Enclosures:
 - 1. Provide and maintain all barricades and enclosures required to protect the work in progress.
- F. Shoring or Bracing:
 - 1. Shore or brace for temporary support of all work as required during the construction period except any shoring and bracing specified and included under other sections of this Project Manual.
- G. Wood Curbs for Equipment:
 - 1. Construct all wood curbs for roof mounted equipment.
 - 2. Provide all miscellaneous blocking, bracing, supports, and other wood items to complete the work.

3.5 FIELD QUALITY CONTROL

- A. Site Tests:
 - 1. As required by Regulatory Requirements.
 - 2. Project Inspector shall verify by means of a handheld moisture content meter that all wood and plywood supplied at the time of incorporation into structure(s) has met applicable moisture content requirements.
 - 3. Project Inspector shall test all stud cavity walls to ensure that studs are a maximum of 19 percent moisture content prior to any other construction that encloses the wall cavity.
- B. Inspection:
 - 1. As required by Regulatory Requirements.
 - 2. Schedule inspections and notify the Architect, Project Inspector and any other regulatory agencies of the time at least 48 hours prior to the inspection.
 - 3. No work shall be without the inspections required by Regulatory Requirements.

3.6 CLEANING

- A. Removal of Debris:
 - 1. Remove all Wood, including form lumber, chips, shavings and sawdust in or on the ground from the areas inside buildings. Do not bury debris in fill.

END OF SECTION

SECTION 081100 – METAL DOORS AND FRAMES

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes the following:
 - 1. Provide all material, labor, equipment and services necessary to fabricate and install all Custom Metal Door Panels and Metal Frame materials, accessories and other related items necessary to complete the Project as indicated by the Contract Documents.
 - a. Fire-Rated and Smoke-Rated Assemblies.
 - 2. Provide all material, labor, equipment and services necessary to fabricate and install Temperature Rise Fire-Rated Assemblies.
- B. Related Sections: The following Project Manual Sections contain requirements that relate to this section:
 - 1. DIVISION 00 SPECIFICATION SECTIONS.
 - 2. DIVISION 01 SPECIFICATION SECTIONS.
 - ?. 08 15 13 LAMINATE-FACED WOOD DOORS
 - 3. 08 80 00 GLASS
 - 4. 09 29 00 GYPSUM BOARD
 - 5. 09 65 19 RESILIENT TILE
 - 6. 09 68 40 CARPET
 - 7. 09 91 00 PAINTING
 - 8. 10 14 00 IDENTIFYING DEVICES

1.2 REFERENCES

- A. Standards:
 - 1. In accordance with the following standards:
 - a. ANSI American National Standards Institute
 - b. ASTM American Society of Testing and Materials
 - c. AWS American Welding Society
 - d. HMMA Hollow Metal Manufacturers Association (Division of NAAMM)
 - e. NAAMM National Association of Architectural Metal Manufacturers
 - f. NFPA National Fire Protection Association
 - g. NILECJ National Institute of Law Enforcement and Criminal Justice
 - h. UL Underwriter's Laboratory, Inc.
 - i. USSG U.S. Standard Gages
 - j. WH Warnock Hersey International

1.3 DEFINITIONS

- A. Minimum Thickness: Base metal thickness without coatings.
- B. Custom Hollow Metal Work: Hollow metal work fabricated according to ANSI / NAAMM-HMMA.
- C. Glazing Molding: Portion of the assembly retaining glazing materials or in-fill panels in a hollow metal door which contain the integral glazing stop, or to which a glazing stop is attached.

- D. Glazing Stop: A formed metal section used to secure glazing in a door or frame.
- E. Prepared Opening: Existing opening or wall constructed prior to installation of frames.

1.4 SYSTEM DESCRIPTION

- A. Design Requirements:
 - 1. Metal Door and Frame Assemblies.
 - a. All Doors shall be custom in accordance to NAAMM-HMMA Standards for Hollow Metal Doors.
 - b. All Frames shall be custom in accordance to NAAMM-HMMA Standards for Hollow Metal Frames.

1.5 SUBMITTALS

- A. Submit in accordance with Specification Section - SUBMITTAL PROCEDURES.
 - 1. Contractor shall check all drawings and verify all dimensions (including wall thickness) in the field prior to fabrication.
 - 2. Contractor shall verify that shop drawings include all required materials and material clearances.
- B. Product Data:
 - 1. Include construction details, material descriptions, core descriptions, label compliance, fire-resistance ratings, temperature-rise ratings, and finishes for each type of product indicated.
 - a. Provide information indicating all the Structural Properties of the steel materials.
- C. Shop Drawings:
 - 1. Include, but not limited to, the following information:
 - a. Elevations of each door design and frame configuration.
 - b. Details of doors, including vertical and horizontal edge details.
 - c. Frame details for each frame type, including dimensioned profiles.
 - d. Details and location of reinforcement and preparations for hardware.
 - e. Details of each different wall opening condition.
 - f. Details of anchorages, joints, field splices, and connection.
 - g. Details of accessories.
 - h. Details of moldings, removable stops, and glazing.
 - i. Details of louvers, including sizes and location in doors, where required.
 - j. Details of conduit and preparations for power, signal, and control systems.
 - 2. Provide a Schedule, prepared by or under the supervision of supplier for doors, panels, and frames using same reference numbers for details and openings as those on the Drawings.
 - a. Coordinate with door hardware. Contractor to Coordinate with owner on Hardware Standards for the Campus.
 - 3. Provide setting drawings, templates, and directions for installing anchorage, including sleeves, concrete inserts, anchors, bolts, and items with integral anchors for installation coordination.
 - 4. Manufacturer's printed instructions for preparation, installation and care requirements for installers and inspecting authorities.
- D. Samples:
 - 1. When factory applied color is indicated, provide manufacturer's full range of factory applied color finishes for selection.

2. Provide typical frame joint section and sample showing typical edge condition specified.
3. When Stainless Steel is indicated, provide samples of 3 inches by 5 inches for each type of exposed finish required.
 - a. Frames: Provide fabrication samples of profile and corner joints.
 - b. Doors: Provide fabrication sample of corner showing vertical edges and top.

E. Quality Assurance/Control Submittals:

1. Design Data:
2. Test Reports:
 - a. Product Test Reports based on evaluation of comprehensive test performed by a qualified testing agency, for each type of fire-rated metal door, panel, and frame assembly.
 - b. Water Tightness Test Reports.
3. Certificates:
 - a. Oversized Construction Certification.
 - b. Installer Certification for Temperature Rise Fire Rated Framing System.

F. Closeout Submittals in accordance with the following:

1. General Construction Warranty.
2. Workmanship and Materials Warranty.

1.6 QUALITY ASSURANCE

A. Qualifications:

1. Material Qualifications:
 - a. Fire-Rated Door and Frame Assemblies shall be labeled by an DSA/FLS approved agency and shall comply with NFPA 80 "Standard for Fire Doors and Other Opening Protectives" and UL 1784 "Air Leakage Test for Door Assemblies."
 - b. Oversized Door Assemblies required to be fire rated and exceeds the limitations of labeled assemblies, a certificate of inspection shall be furnished by an approved testing agency in lieu of an Oversized Fire Door Label.
2. Installer Qualifications:
 - a. Installer shall be experienced and shall have-successfully completed three (3) projects of similar scope and size to that indicated for this Project.
3. Manufacturer/Supplier Qualifications:
 - a. Manufacturer/Supplier shall have successfully produced/supplied products similar to that required for this Project, and shall have sufficient production/supply capacity to produce/supply required units without causing delay in the work.
 - b. Manufacturers must be members of the HMMA, who have been engaged for at least two years in the production for sale of swing steel doors and frames on a national basis.
 - 1) All doors and frames shall be manufactured and supplied by the same manufacturer.
 - c. Manufacturer/Supplier of Temperature Rise Fire Rated Framing System shall provide experienced mechanics familiar with this type of specialized work.

B. In accordance with Specification Section - Regulatory Requirements.

C. Certifications:

1. Oversized Construction Certification for Fire-Rated Door Assemblies shall state that the door conforms to the requirements of the design, materials and construction, but has not been subjected to the fire test.

2. Manufacturer of Temperature Rise Fire-Rated Framing System shall certify the Installer, in writing, as qualified to install manufacturer's systems in accordance with manufacturer's warranty requirements.

D. Meetings:

1. Pre-Installation: Scheduled by Contractor prior to the start of work.
 - a. Coordinate the work with all other related work.
 - b. Identify any potential problems that may impede planned progress and proper installation of work regarding quality of installation and warranty requirements.
2. Progress: Scheduled by the Contractor during the performance of the work.
 - a. Review for proper installation of work progress.
 - b. Identify any installation problems and acceptable corrective measures.
 - c. Identify any measures to maintain or regain project schedule if necessary.
3. Completion: Scheduled by the Contractor upon proper completion of the work.
 - a. Inspect and identify any problems that may impede issuance of warranties or guaranties.
 - b. Establish protection procedures to maintain installed work until the Notice of Substantial Completion has been executed.

1.7 DELIVERY, STORAGE, AND HANDLING

A. Packing, shipping, handling, and unloading:

1. Doors and Frames shall be palletized, wrapped, or crated to provide protection during transit and Project-Site storage. Do not use non-vented plastic.
 - a. Provide additional protection to prevent dents, scratches and other damage.

B. Acceptance at Site:

1. Do not deliver doors and frames to project site until Installer is ready and the site conditions will accommodate the installation of frames.
2. Damaged products will not be accepted.

C. Storage and Protection:

1. Storage and protection shall be in accordance with NAAMM-HMMA 840 Standard, "Installation and Storage of Hollow Metal Doors and Frames."
2. Store Doors and Frames under cover at Project Site. Stored on level platforms, minimum six (6) inches above ground, allowing air circulation under stacked units.
 - a. Doors and Frames shall be placed in the up-right position, spaced by blocking to allow ventilation between units.
 - b. Cover materials with protective waterproof covering providing for adequate air circulation and ventilation.

1.8 PROJECT CONDITIONS

A. Existing Conditions:

1. Examine site and compare it with the drawings and specifications. Thoroughly investigate and verify conditions under which the work is to be performed. No allowance will be made for extra work resulting from negligence or failure to be acquainted with all available information concerning conditions necessary to estimate the difficulty or cost of the work.
2. Field Measurements: Verify openings by field measurements before fabrication and indicate measurements on Shop Drawings.

- a. Established Dimensions: Where field measurements cannot be made without delaying the Work, establish opening dimensions for the fabrication of custom frames. Coordinate wall construction to ensure that actual opening dimensions correspond to established dimensions.

1.9 WARRANTY

- A. Contractor's General Warranty:
 - 1. In accordance with Specification Section - WARRANTIES.
- B. Manufacturer's Warranty:
 - 1. Doors and Frames in accordance with manufacturer's written standard warranty:
 - a. Warranty Period One (1) Year.
 - 2. Provide the Temperature Rise Rated Framing system warranty against defective workmanship and materials.
 - a. Warranty Period Five (5) years upon project completion and acceptance.
- C. Installer's Warranty:
 - 1. Issue to the Owner a warranty against defective workmanship and materials.
 - a. Warranty period Four (4) Years.
 - b. In accordance with the terms of the Specification Section - WARRANTIES.
 - c. Warranty shall include the responsibility for the repairs of any failure that is the result of defects in materials and workmanship.
 - d. Warranty shall certify that the installation of all exterior Metal Doors and Frames were done in accordance with the method and procedures established with the successful Mock-Up for water tightness.
 - e. The Warranty shall be co-endorsed by the General Contractor, the Metal Door and Frame Material Manufacturer, the Metal Door and Frame Installer and Glazing Installer.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. These products listed herein establish the size, pattern, color range and function selected by the Architect for this Project. Manufacturers that are listed as acceptable alternative manufacturers and substitutions must still comply with the requirements of this project and the products listed in order to be approved as an equivalent during the Submittal Process. If the acceptable alternative manufacturers listed or substitutions are not approved during the Submittal Process due to non-compliance with the contract documents, then the Contractor shall submit product specified.
 - 1. Custom Metal Doors and Frames:
 - a. SECURITY METAL PRODUCTS CORPORATION.
 - b. Acceptable alternative manufacturers:
 - 1) CURRIES COMPANY.
 - 2) METAL MANUFACTURING CO., INC.
 - 3) STILES CUSTOM METAL, INC.
 - c.
- B. Products from other manufacturers not listed must submit in accordance with Specification Section - SUBSTITUTION PROCEDURES.

2.2 MATERIALS

- A. Cold-Rolled Steel Sheet: Commercial Steel (CS), Type B, conforming with ASTM A 1008/A 1008M "Standard Specification for Steel Sheet, Cold-Rolled, Carbon, Structural, High-Strength Low-Alloy and High-Strength Low-Alloy with Improved Formability, Solution Hardened, and Bake Hardenable." Steel shall be suitable for exposed to view applications.
- B. Hot-Rolled Steel Sheet: Commercial Steel (CS), Type B, conforming with ASTM A 1011/A 1011M "Standard Specification for Steel, Sheet and Strip, Hot-Rolled, Carbon, Structural, High-Strength Low-Alloy, High-Strength Low-Alloy with Improved Formability, and Ultra-High Strength." The steel shall be pickled and oiled, free of scale, pitting, coil-breaks or other surface defects.
- C. Metallic-Coated Steel Sheet: Commercial Steel (CS), Type B, complying with ASTM A 653/A 653M "Standard Specifications for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process." The steel shall have a minimum G60 (Z180) zinc (galvanized) or A60 (ZF 180) zinc-iron-alloy (galvannealed) coating designation.
- D. Stainless Steel Sheet: Complying with ASTM A 666 "Standard Specification for Annealed or Cold-Worked Austenitic Stainless Steel Sheet, Strip, Plate and Flat Bar."
- E. Inserts, Bolts and Fasteners: Hot-dip galvanized according to ASTM A 153/A 153M "Standard Specification for Zinc Coating (Hot-dip) on Iron and Steel Hardware."
- F. Grout:
 - 1. Concrete Walls: Comply with ASTM C476 "Standard Specification for Grout for Masonry," with a maximum slump of 4 inches, as measured according to ASTM C 143/C 143M "Standard Test Method for Slump of Hydraulic-Cement Concrete."
 - 2. Masonry Walls: Mortar comply with Specification Section - CONCRETE MASONRY UNITS.
- G. Insulation:
 - 1. Mineral-Fiber Insulation: ASTM C 665 "Specification for Mineral-Fiber Blanket Thermal Insulation for Light Frame Construction and Manufactured Housing," Type I (blankets without membrane facing): consisting of fibers manufactured from slag or rock wool with 6- to 12-lb/cu. ft. density; with maximum flame-spread and smoke-developed indexes of 25 and 50 respectively; passing ASTM E 136 "Test method for Behavior of Materials in a Vertical Tube Furnace at 750 degrees C," for combustion characteristics.
 - a. Fire Rated Doors and Frames: Provide insulation that provides fire protection and/or temperature rise ratings as indicated.
 - 2. Expanded Foam Insulation suitable for injection into frame cavity.
 - a. Spray Polyurethane Foam Insulation: ASTM C 1029, Type II, closed cell, with maximum flame-spread and smoke-developed indexes of 75 and 450, respectively, per ASTM E 84.
 - 3. Exterior Doors: Provide core with thermal polyisocyanurate insulation cores.
 - 4. Exterior Door Frames: Solidly packed mineral insulation.
 - 5. Insulation for Miscellaneous work:
 - a. Glass-Fiber Insulation: ASTM C 764, Type II, loose fill; with maximum flame-spread and smoke-developed indexes of 5, per ASTM E 84.
- H. Bituminous Coating: Cold-applied asphalt mastic, SSPC-Paint 12, compounded for 15-mil dry film thickness per coat. Provide inert-type non-corrosive compound free of asbestos fibers, sulfur components, and other deleterious impurities.
- I. Sealants: Comply with Specification Section – SEALANTS.

1. Sealants shall be compatible with glazing and frames.

2.3 MANUFACTURED UNITS

A. General:

1. Exterior Doors and Frames: In accordance with NAAMM-HMMA Standard 862, "Guide Specifications for Commercial Security Hollow Metal Doors and Frames," Class IV Door in accordance with NILECJ-STD-0306.00.
2. Interior Doors and Frames: In accordance with NAAMM-HMMA 861 Standard, "Guide Specifications for Commercial Hollow Metal Doors and Frames," unless otherwise indicated in the Contract Documents.
3. Stainless Steel Doors and Frames: Shall comply with all requirements of Exterior and Interior Doors and Frames, except as follows:
 - a. Highly Corrosive: Shall be constructed using Type 316 Stainless Steel sheets for all internal and external components and parts.
 - b. Moderately Corrosive: Doors and frames shall be constructed using Type 304 Stainless Steel sheet for all internal and external components and parts.
 - c. Aesthetic: door and frame external components and parts shall be constructed using Type 304 Stainless Steel sheets. Internal components and parts shall comply with all requirements of Exterior and Interior Doors, Panels, and Frames.
4. Temperature Rise Fire-Rated Framing System: In accordance with specified Manufacturer's product system. TECHNICAL GLASS PRODUCTS' "Fire Frames Heat Barrier Series."

B. Doors:

1. Design shall be custom seamless hollow construction in the flush type variations as indicated.
 - a. Thickness 1-3/4 inch.
2. Face Sheets:
 - a. Exterior Doors shall be fabricated from Metallic-Coated Steel Sheets with zinc-iron-alloy (galvannealed) coating designation.
 - 1) Exterior Doors 14 gage minimum.
 - b. Interior Doors shall be fabricated from Cold-Rolled Steel Sheets.
 - 1) Interior Doors 18 gage minimum.
3. Core:
 - a. Steel Stiffened with continuous vertical formed steel sections fabricated from same materials as face sheets.
 - 1) Exterior Door 18 gage minimum.
 - 2) Interior Door 22 gage minimum.
 - b. Spaces between stiffeners shall be insulated the full height of the door.
4. Top and Bottom Edges:
 - a. Close with continuous recessed and flush filler channels fabricated from same material as face sheets.
 - 1) Exterior Door 12 gage minimum.
 - 2) Interior Door 16 gage minimum.
 - b. All doors shall have an additional flush filler channel at top and flush filler channel at bottom edges, unless recess channel at bottom is required for hardware.
 - c. All channels shall be fabricated from same material as face sheets.
5. Jamb Edges:
 - a. Reinforce with continuous "U" channels fabricated from same material as face sheets.
 - 1) Exterior Door 12 gage minimum.
 - 2) Interior Door 16 gage minimum.

- b. All channels shall be galvanized at exterior doors.
 - c. Astragals shall be fabricated from same material as face sheets. 14-gage minimum.
- 6. Hardware Reinforcements:
 - a. Exterior Doors: Reinforcing Plates shall be fabricated from the same material as the face sheets in the minimum thickness as follows:
 - 1) Hinges and Pivots 1/4" plate.
 - 2) Continuous hinges 14-gage.
 - 3) Mortise Hardware 7-gage.
 - 4) Locks, Exit Devices, Flush Bolts, Concealed Holders, Concealed Hardware or Surface-Mounted Closures 12-gage.
 - 5) Pull Plates, Bars and all other Surface-Mounted Hardware 12-gage.
 - b. Interior Doors: Reinforcing Plates shall be fabricated from the same material as the face sheets in the minimum thickness as follows:
 - 1) Hinges and Pivots 7-gage.
 - 2) Continuous Hinges 14-gage.
 - 3) Mortise Hardware 10-gage.
 - 4) Locks, Exit Devices, Flush Bolts, Concealed Holders, Concealed Hardware or Surface-Mounted Closures 12-gage.
 - 5) Pull Plates, Bars and all other Surface-Mounted Hardware 16-gage.
- 7. Glazing Moldings and Stops:
 - a. Fabricate from the same material as the door face sheets.
 - 1) Exterior Doors 16-gage minimum.
 - 2) Interior Doors 20-gage minimum.
- 8. Door Louvers: In accordance with NAAMM-HMMA Standard 810 "Hollow Metal Doors" and fabricate from the same material as the door face sheets.
 - a. Exterior Doors:
 - 1) Internal Channels 12-gage minimum.
 - 2) Vanes 12-gage minimum.
 - a) Reinforcement 0.25inch x 1.5 inch minimum.
 - 3) Insect Screens 12-gage minimum.
 - b. Interior Doors:
 - 1) Internal Channels 16-gage minimum.
 - 2) Vanes 18-gage minimum.
 - a) Reinforcement 0.25inch x 1.5 inch minimum.
 - c. Fire-Rated Doors:
 - 1) Movable vanes closed by actuation fusible link and listed and labeled for use in fire-rated door assemblies of type and fire-resistance rating indicated.
 - d. Non-Rated Doors: Provide sightproof louver of stationary vanes of inverted "Y" Type blade construction with a 30 percent free area, unless noted otherwise.
- C. Panels:
 - 1. Metal Panels shall be made of the same materials, construction and finishes complying with all requirements for Metal Doors.
 - 2. Attachment:
 - a. Attach securely to frame with concealed anchorage and machine screws.
 - b. Attachment including screws shall be fully concealed when door is closed.
- D. Frames:
 - 1. Design shall be custom seamless hollow construction in the variety of configurations as indicated.
 - 2. Exterior Frames shall be fabricated from Metallic-Coated Steel Sheets with zinc-iron-alloy (galvannealed) coating designation.
 - a. All Opening sizes 12-gage minimum.

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3. Interior Frames shall be fabricated from Cold-Rolled Steel Sheets.
 - a. Openings 4'-0" or less 16-gage minimum.
 - b. Openings greater than 4'-0" 14-gage minimum.
4. Glazing Stops shall be fabricate from the same material as Frames.
 - a. Exterior Frames 16-gage minimum.
 - b. Interior Frames 20-gage minimum.
5. Internal Frame Stiffeners shall be fabricated from the same material as Frames.
 - a. Head of Frames 12-gage.
6. Internal Reinforcing Tabs shall be fabricate from the same material and gage thickness as Frame.
7. Hardware Reinforcements:
 - a. Exterior Frames: Reinforcing Plates shall be fabricated from the same material as the Frame in the minimum thickness as follows:
 - 1) Hinges and Pivots 1/4" plate full width of frame x 10".
 - 2) Continuous Hinges 14-gage full width of frame x entire frame length.
 - 3) Strike Hardware 7-gage.
 - 4) Flush Bolts 7-gage.
 - 5) Closers 7-gage.
 - 6) Surface-Mounted Hardware 7-gage.
 - 7) Hold-Open Arms 7-gage.
 - 8) Surface Panic Devices 7-gage.
 - b. Interior Frames: Reinforcing Plates shall be fabricated from the same material as the Frame in the minimum thickness as follows:
 - 1) Hinges and Pivots 7-gage full width of frame x 10".
 - 2) Continuous Hinges 14-gage full width of frame x entire frame length.
 - 3) Strike Hardware 12-gage.
 - 4) Flush Bolts 12-gage.
 - 5) Closers 12-gage.
 - 6) Surface-Mounted Hardware 12-gage.
 - 7) Hold-Open Arms 12-gage.
 - 8) Surface Panic Devices 12-gage.
8. Grout Guards: Grout Guards shall be fabricated from the same material as the Frame in minimum 22-gage thickness.

E. Frame Anchors:

1. Exterior Frames: Frame Anchors shall be fabricated from Metallic-Coated Steel Sheets, unless indicated otherwise.
 - a. Masonry Wall not less that 2" wide x 10" long Anchors.
 - 1) Non Grouted Frames 14 gage T-Strap Anchors.
 - 2) Grouted Frames 14-gage perforated Adjustable Strap & Stirrup Anchors.
 - a) Wire Loop Anchors of 0.156" diameter steel wire may be used at non-fire-rated frames that are fully grouted.
 - b. Concrete Walls 14-gage Pour In Place Anchors.
 - c. Stud Frame Walls 16-gage Combination Wood/Steel Stud Anchors.
 - 1) Anchor shall be not less than 2" wide x 10" long.
 - d. Jamb Base 14-gage Fixed Floor Anchors.
 - e. Floor Base 14-gage Existing Wall Anchors.
 - 1) Where indicated 14 gage continuous Rough Buck Anchors.
 - f. Prepared Openings 14-gage Existing Wall Anchors.
 - 1) Where indicated 14 gage continuous Rough Buck Anchors.
2. Interior Frames: Frame Anchors shall be fabricated from Cold-Rolled Steel Sheets or Hot-Rolled Steel Sheets, unless indicated otherwise.
 - a. Masonry Wall not less that 2" wide x 10" long Anchors.
 - 1) Non Grouted Frames 16 gage T-Strap Anchors.

- 2) Grouted Frames 16 gage perforated Adjustable Strap & Stirrup Anchors.
 - a) Wire Loop Anchors of 0.156" diameter steel wire may be used at non-fire-rated frames that are fully grouted.
- b. Concrete Walls 16 gage Pour In Place Anchors.
- c. Wood Stud Frame Walls 18 gage Wood Stud Anchors.
 - 1) Anchor shall be not less than 2" wide x 10" long.
- d. Metal Stud Frame Walls 18-gage Metal Channel Stud Anchors.
- e. Jamb Base 14-gage Fixed or Adjustable Floor Anchors.
- f. Floor Base 16 gage Existing Wall Anchors.
 - 1) Where indicated 16 gage Fixed Mullion Anchors.
- g. Prepared Openings 16-gage Existing Wall Anchors.
 - 1) Where indicated 16 gage continuous Rough Buck Anchors.

F. Fasteners:

1. Screws, bolts, washers, shields, spacers and other similar fastening devices:
 - a. Provide stainless steel vandal resistant screws when outside exterior face glass stops are indicated.
 - b. Furnish and install as required by frame installer.
 - c. Provide Stainless Steel fasteners at Stainless Steel Frames.

2.4 FABRICATION

A. Shop Assembly:

1. General:
 - a. Fabricate in accordance NAAMM-HMMA Standard 810 "Hollow Metal Doors" and NAAMM-HMMA Standard 820 "Hollow Metal Frames," and NAAM-HMMA Standard 850 "Fire-Rated Hollow Metal Doors and Frames."
 - b. Fabricate to the required size and profiles by accurately forming, welding edges straight, sharp and true. Corner bends shall be true and straight and of minimum radius for the gage of metal used.
 - c. All finish work shall be strong, rigid and neat in appearance with corners, hairline joints and surfaces free from warp, wave, buckle, tool marks, surface imperfections or other defects.
 - d. Welding to conform to applicable standards of AWS for high grade finished metal fabrication. All exposed welds shall be ground, filled and dressed smooth with no voids, tool marks, surface imperfections or ridges showing to make them invisible and provide a smooth flush surface.
 - e. Assemblies shall be shop fabricated and permanently assembled before shipment.
 - 1) Where shipping limitations so dictate, frames for large openings shall be fabricated and prepared in section designated for assembly in the field and clearly identified.
2. Metal Door Fabrication:
 - a. General: All doors shall be of the types and sizes required and shall be fully welded seamless construction with smooth surfaces without visible joints of seams on exposed faces or edges.
 - 1) Glazed Lites shall be factory cut openings in doors.
 - 2) Provide weep-hole openings in the bottom of exterior doors to permit the escape of entrapped moisture.
 - b. Face Sheets: Door faces shall be joined at their vertical edges by a continuous weld extending the full height of the door.
 - c. Core: Stiffeners shall extending full-door height and spanning the full thickness of the interior space between door faces.

- 1) Space Stiffeners no more than 6" apart and securely attached to both face sheets by spot welds spaced a maximum of 5" o.c..
- 2) Solidly pack cavities the entire height of door with mineral-fiber insulation.
 - a) Fire Door Cores: As required to provide fire-protection and temperature-rise ratings as indicated.
- d. Top and Bottom Edges: Closing Channels shall extend the full width of the door at top and bottom edges.
 - 1) All doors shall have recessed Closing Channels, spot welded to both faces. When left exposed, fill all gaps with epoxy sealer and filler, sand smooth with no tool marks or surface imperfections.
 - 2) All doors shall have flush-filler Closing Channels in addition to recessed Closing Channels. Channels shall be continuously welded and ground smooth with no marks at all doors.
 - a) Flush-filler Closing Channel shall be omitted at bottom edge when recess channel is required for hardware.
- e. Jamb Edges: Reinforcing Channels shall extend the full height of the door.
 - 1) Edge profiles shall be provided on both vertical edges of doors as follows:
 - a) Single-Acting Swing Doors beveled 1/8" in 2".
 - b) Double-Acting Swing Doors rounded on 2-1/8" radius.
 - 2) Astragal: Flat x 1-1/2 inch, continuous welded to panel, ground smooth with no tool marks or surface imperfections. Extend minimum 3/4 inch beyond edge of door on which astragal is mounted.
 - a) Provide overlapping astragal on one leaf of pairs of doors where required for fire-performance rating or where indicated.
 - b) At exterior doors, provide overlapping astragal at strike. Cope astragal around strike plate.
- f. Hardware Reinforcements: Doors shall be mortised, reinforced, drilled and tapped at the factory for fully templated hardware only, in accordance with the approved hardware schedule and templates provided by the hardware contractor.
 - 1) Where surface-mounted hardware is to be applied, doors shall have reinforcing plates only under the face of door.
- g. Glazing Moldings and Stops: Provide glazing moldings and stops to secure glazing material and louvers. Moldings and stops shall be flush with face sheets of door. Use the same trim profile on all Fire-Rated and Non Fire-Rated Openings.
 - 1) Fixed Glazing Moldings shall be securely welded to both face sheets of door.
 - 2) Removable Glazing Stops shall be channel shaped and have mitered hairline corner joints. Drill and dimple stop for countersinking and concealment of fasteners spaces equally at 9" o.c. maximum and a maximum of 2" from ends. Snap-on attachments will not be permitted.
 - 3) Metal surfaces underneath the glazing stops and the inside of the glazing stops shall be treated for maximum paint adhesion and painted with a rust inhibitive primer prior to installation in the door.
 - 4) Coordinate depth and rabbet width between fixed and removable stops with type of glazing and type of installation indicated.
- h. Louvers: Flush opening with all welded construction.
 - 1) Internal channels securely welded to the inside of both face sheets of door.
 - 2) Provide vertical reinforcement at midpoint when louver width exceeds 18" inches.
3. Metal Panel Fabrication: Comply with all requirements for Metal Doors.
 - a. Attach securely to frame with concealed anchorage and machine screws.
 - 1) Attachment, including screws, shall be fully concealed when door is closed.
4. Metal Frame Fabrication:

- a. General: All frames shall be welded units of the sizes and profiles indicated and shall be of seamless hollow construction with smooth surfaces without visible joints of seams on exposed faces or edges.
 - 1) Metal Frame Spreaders shall be temporarily attached at bottom of all open frames for shipping and storage.
- b. Frame Sections: All frames are to be rolled and brake formed with integral nailing flanges, back bends, faces, rabbits, stops, and soffits, unless indicated otherwise.
 - 1) Provide 3 ½ inch wide integral Nailing Flanges at exterior frames. The flange shall be continuous all around the frame at head, jambs and wall sills without gaps at the corner joints. Coordinate flange length with height of concrete curb.
 - 2) Punch and Dimple frames at attachment points for countersinking and concealment of all through the frame anchorage fasteners.
- c. Frame Joints:
 - 1) Perimeter Corners: Head, Jamb and Wall Sills Members shall be saw-mitered and fully (continuously) welded along entire joint from the throat or the unexposed side at Flanges, Returns, Faces, Rabbet, Stops, and Soffits.
 - 2) Perimeter Butts: Entire joint shall be fully (continuously) welded along entire joint at Flanges, Returns, Faces, Rabbet, Stops, and Soffits from the throat or the unexposed side of the frame.
 - a) Interior Frames: Continuously weld only the Faces. Rabbits, Stops and Soffits shall to be tightly fitted and appear as a hairline seams.
 - b) Vertical Mullions members shall extend through Floor Sill Members to floor. Floor Sill Members Stops are to be notched.
 - 3) Internal Flush and Indented Butts: Vertical Mullions Members shall be continuous, butt to Head and Sill Members and extend through Horizontal Rail Members. Vertical Mullion Stops are to be notched at Head and Sill Members and the Horizontal Rail Stops are to be notched to Vertical Member. Continuously weld only the Faces.
 - a) Exterior Frames: Body Putty continuously along entire joint at returns, rabbets, stops, and soffits creating a water tight joint. Sand flush and smooth with no voids or ridges.
 - b) Interior Frames: Rabbits, Stops and Soffits shall to be tightly fitted and appear as a hairline seams.
- d. Alignment and Reinforcing Tabs: Provide internal alignment and reinforcing tabs at each joint of field splices with a minimum overlap of 2".
- e. Internal Frame Stiffeners: Provide additional continuous steel "U" Channel extending the full width of frame and shall be factory welded into head of frame.
 - 1) Grouted Frames with openings greater than 4'-0" width.
 - 2) Frames with openings greater than 12'-0" in width.
- f. Hardware Reinforcements: Frame shall be mortised, reinforced, drilled and tapped at the factory for fully templated hardware only, in accordance with the approved hardware schedule and templates provided by the hardware contractor.
 - 1) Where surface-mounted hardware is to be applied, frames shall have reinforcing plates only under face of frame.
- g. Grout Guards: Provide at all hardware preparations, tapped mounting holes, glazing stop screws, silencers, and electrical box preparations on frames that are to be grouted.
 - 1) Weld guards to inside of frame at throat.
- h. Glazing Stops: Provide channel shaped removable Glazing Stops to secure glazing material or panels. Glazing Stops shall be continuous and have butted hairline corner joints.

- 1) Coordinate stop depth and rabbit width between fixed and removable stops with type of glazing and type of installation indicated.
 - a) Stop Depth 5/8" depth minimum.
 - 2) Drill and Dimple stops for countersinking and concealment of fasteners uniformly spaced at 9 inches o.c. maximum and not more than 2 inches maximum from each corner.
 - 3) Metal surfaces underneath the glazing stops and the inside of the glazing stops shall be treated for maximum paint adhesion and painted with a rust inhibitive primer prior to installation in the door.
5. Frame Anchors:
- a. Coordinate the type of frame anchors with the type of frame insulation or grout being used so that the frame is fully packed with no voids.
 - b. All Frame Anchors shall be securely welded to the throat at inside of frames.
 - c. Frame Anchor Spacing: All Frame Anchors at head, jamb and sill shall be placed a maximum of 8" from frame corners, and ends, with the remainder of the anchors to be equally spaced, not to exceed a maximum of 24" o.c. for all wall types unless indicated otherwise.
 - 1) Masonry Walls: The spacing of anchors shall be equally spaced, not to exceed a maximum of 24" o.c.. Total number of anchors provided on each jamb shall be not less than the following:
 - a) Frames up to 7'-6" height 4 anchors.
 - b) Frames 7'-6" to 8'-0" height 5 anchors.
 - c) Frames over 8'-0" height provide five (5) anchors plus one (1) additional anchor for each 2'-0" or fraction thereof in height over 8'-0".
 - 2) Stud Framed Walls: The spacing of anchors shall be equal spaced, not to exceed a maximum of 18" o.c.. Total number of anchors provided on each jamb shall be not less than the following:
 - a) Frames up to 4'-0" height 4 anchors.
 - b) Frames 4'-0" to 7'-6" high 5 anchors.
 - c) Frames 7'-6" to 8'-0" height 6 anchors.
 - d) Frames over 8'-0" height provide six (6) anchors plus one (1) additional anchor for each 2'-0" or fraction thereof in height over 8'-0".
 - 3) Jamb Base: Provide floor anchors for each jamb and mullion that extends to floor.
 - a) When conditions do not permit the use of a floor anchor, an additional jamb anchor shall be substituted at a location not to exceed 8" from the base of the jamb.
 - 4) Floor Base: When conditions do not permit the use of Existing Wall Anchors at floor sill members, provide continuous rough buck for frame anchorage.
6. Rubber Door Silencers: Except on weather/sound strip or fire gasket doors, drill stops to receive door silencers as follows. Keep holes clear during construction.
- a. Single Swing Door Frames Provide and install three (3) at strike jamb.
 - b. Double Swing Door Frames Provide and install four (4) at head.

B. Fabrication Tolerances:

1. General: Clearances and Tolerances shall be in accordance with NAAMM-HMMA Standard 862 for Exterior Assemblies and NAAMM-HMMA Standard 861 for Interior Assemblies.

2.5 FINISHES

A. Shop Priming:

1. After fabrication, all tool marks and surface imperfections shall be dressed, filled and sanded as required to make all faces and vertical edges smooth, level and free of all irregularities.
2. Clean and chemically treat (phosphatize) the metal to insure maximum paint adhesion in preparation for primer paint.
3. Apply rust-inhibitive primer paint to all surfaces, minimum dry thickness of 0.7 mils. Manufacturer to provide primer for prolonged exposure that are compatible with substrate and field-applied coatings.
 - a. Coordinate primer used with field-applied paint finishes that are indicated and specified.
 - b. Shop Primer shall not be considered as a substitution for any primer required as part of the field-applied paint finishes.
 - c. Rust-inhibitive primer shall be fully cured before packaging and shipment.

B. Shop Finishes:

1. Factory-applied Paint Finish:
2. Exposed Metal Finishes:
 - a. Stainless Steel Finish: Comply with NAAMM HMMA 802 Manufacturing of Hollow Metal Doors and Frames "Finishes for Stainless Steel." Refer to NAAMM's "Metal Finishes Manual" for recommendations relative to applying and designating stainless steel finishes.
 - 1) Unpolished Finish: No. 2B, bright cold rolled finish.
 - 2) Polished Finishes:
 - a) No. 6 Soft Satin Finish, low reflectivity and produced by Tampico brushing the No. 4 finish using a medium abrasive.
 - b) No. 8 Most Reflective Finish, produced by polishing with successively finer abrasive, then budding with a very fine buffing compound until free of grit lines caused by preliminary grinding.
 - 3) All grained finishes applied to frames and jambs shall be vertical. Finishes applied to the frame header and sills shall be horizontal.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Site Verification of Conditions:

1. Prior to the installation of the work under this specification section, examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of work under this specification section.
 - a. Temperature Rise Rated Framing System:
 - 1) Openings shall be plumb, square and within allowable tolerances recommended by manufacturer. Maximum 3/8" shim space at all walls.
2. Examine roughing-in for embedded and built-in anchors to verify actual locations before frame installation.
3. Report conditions detrimental to performance of the work under this specification section. Proceed with installation only after unsatisfactory conditions have been corrected.
4. Installation of work under this specification section shall constitute acceptance of existing conditions.

3.2 PREPARATION

- A. Protection:
 - 1. Protect all adjacent surfaces from damage from work under this specification section.
- B. Surface preparation:
 - 1. Remove welded-in shipping spreaders installed at factory. Restore exposed finish by grinding, filling and dressing, as required to repair area smooth, flush and invisible on exposed faces.
 - 2. Prior to installation, All frames with temporary spreaders removed, shall be checked for size, and swing, and corrected to installation tolerance for squareness, alignment, twist and plumbness. Securely brace frames and maintain installation tolerances within the following limits.
 - a. Opening Width: Plus 1/16 inch, minus 1/32 inch, measured from rabbet to rabbet at top, middle and bottom of frame.
 - b. Opening Height: Plus 1/16 inch, minus 1/32 inch, measured measured vertically between the frame head rabbet and top of floor or bottom of frame minus jamb extension at each jamb and cross the head.
 - c. Squareness: Plus or minus 1/16 inch, measured at door rabbet on a line 90 degrees from jamb perpendicular to frame head.
 - d. Alignment: Plus or minus 1/16 inch, measured at jambs on a horizontal line parallel to plane of wall.
 - e. Twist: Plus or minus 1/16 inch, measured at opposite face corners of jambs on parallel lines and perpendicular to plane of wall.
 - f. Plumbness: Plus or minus 1/16 inch, measured at jambs on a perpendicular line from head to floor.
 - 3. Drill and tap doors and frames to receive non-templated, mortised, and surface-mounted door hardware.

3.3 INSTALLATION

- A. General:
 - 1. Install metal doors and frames plumb, rigid, properly aligned and securely fastened in place; comply with NAAMM-HMMA Standard 840, "Installation and Storage of Hollow Metal Doors and Frames."
 - 2. Install in accordance with manufacturer's instructions and recommendations unless specifically noted otherwise.
 - 3. Install Fire-Rated and Smoke-Control Assemblies in accordance with NFPA 80 "Standard for Fire Doors and Other Opening Protectives" and NFPA 105 "Standard for the Installation of Smoke Door Assemblies and Other Openings."
- B. Frames:
 - 1. Set frames accurately in position, plumbed, aligned, and temporarily braced secure, until permanent anchors are set. After wall construction is complete, remove temporary braces, leaving surfaces smooth and undamaged.
 - a. Check plumbness, squareness, and twist of frames as walls are constructed. Shim as necessary to comply with installation tolerances.
 - b. Where frames are fabricated in sections because of shipping or handling limitations, field splice at approved locations by welding face joint continuously; grind, fill, dress, and make splice smooth, flush, and invisible on exposed faces.
 - 1) At exterior frames, Body Putty smooth entire joint continuously along returns, rabbets, stops, and soffits creating a watertight joint. Sand flush with no voids or ridges.

2. Solidly insulate within the throat of all non-grouted exterior and interior frames for the full depth, width and length of frame.
 - a. Provide fire-rated mineral fiber insulation as required to provide fire-protection and temperature-rise ratings as indicated at Fire Rated Assemblies.
 - b. Inject expanding foam insulation as required.
 3. Jamb Base: Secure in place frame anchors to floor with post-installed expansion anchors.
 4. Floor Base: Secure frames in place with post-installed expansion anchors to floor. Countersink fasteners, fill with body putty, sand smooth and flush with no voids or ridges. Conceal installed fasteners as to be invisible at exposed faces.
 5. Masonry and Concrete Walls: Coordinate installation of frames to allow the solidly fill the space between frames and masonry or concrete with grout. Take precautions, grout in lifts and brace frames, to ensure that frames are not deformed or damaged by grout forces.
 - a. Field apply bituminous coating to backs of all frames that are filled with grout.
 - b. Install door silencers in frames before grouting.
 6. In-Place Concrete or Masonry Construction: Secure frames in place with post-installed expansion anchors. Countersink fasteners, fill with body putty, sand smooth and flush with no voids or ridges. Conceal installed fasteners as to be invisible at exposed faces.
 7. Stud Frame Walls: Secure frames in place with screw fasteners at frame anchors to wall framing.
 8. In-Place Stud Frame Walls: Secure frames in place with screw fasteners at frame anchors to wall framing. Countersink fasteners, fill with body putty, sand smooth and flush with no voids or ridges. Conceal installed fasteners as to be invisible at exposed faces.
 9. Frame and Wall Joints: Provide joint sealants to maintain watertight and airtight continuous seals that aesthetically join dissimilar materials without causing staining or deterioration of joint substrates. Application of sealants shall be in strict compliance with manufacturer's instructions.
 - a. Provide integral color sealants at exterior joints and paintable sealants at interior joints.
 - b. Clean out joint between frames and masonry or concrete to a depth of 3/4 inch. Fill with rod and sealants.
 10. Field-apply compatible and paintable sealant at all frame joints that are exposed to the exterior for the full depth of the frame at returns, rabbits, stops and soffits.
- C. Doors: Fit doors accurately in frames, within clearances specified below. Shim as necessary.
1. Non-Fire-Rated Doors:
 - a. Between door and frame at jambs and head 3/16 inch maximum.
 - b. Between edges of pairs of doors 3/16 inch maximum.
 - c. Door Sill Clearances: Coordinate with threshold conditions and floor materials.
 - 1) Between bottom of door and top of threshold 3/8 inch maximum.
 - 2) Between bottom of door and floor with no threshold 3/4 inch maximum.
 2. Fire-Rated and Smoke-Control Doors: Install doors with clearances according to NFPA 80 "Standard for Fire Doors and Other Opening Protectives" and NFPA 105 "Standard for the Installation of Smoke Door Assemblies and Other Openings."
 - a. Between bottom of door and floor covering surface 1/2 inch maximum.
- D. Glazing Stops:
1. Coordinate and comply with installation requirements for all glazing indicated and specified.
 2. Secure Glazing Stops to frames and doors with corrosion resistant countersunk flat or oval-head machine screws.

- a. All exterior screws (head, jamb and sills) shall be attached with a bed of sealant at the penetration point into the frame for a positive seal against water intrusion.
 - b. Countersink fasteners, fill with body putty, sand smooth and flush with no voids or ridges. Conceal installed fasteners as to be invisible at exposed faces.
 3. All exterior stops shall receive a full bed of sealant at back channel leg for the full length of opening, during final glazing installation for positive seal against water intrusion.
 - a. Coordinate sealants with the requirements of the glazing specified.
- E. Temperature Rise Rated Framing System:
1. Install per Manufacturer's written instructions.
 2. Set continuous sill members and flashing in full sealant bed to produce watertight installation.
 3. Firmly pack perimeter of framing system to rough opening with mineral wool fire safing / fire stop insulation or appropriately rated intumescent sealant.
 4. Do not install damaged frames or chipped glazing units.
 5. Install plumb and true. Limit out of plumb or true to 1/8 inch in 10'-0" in any dimensions.
 6. Fasteners: Type and spacing as recommended by manufacturer.
 7. Install glazing in strict accordance with fire resistant glazing material manufacturer's specifications.
 - a. The glazing material perimeter shall be separated from the perimeter framing system with approved flame retardant glazing tape.
 - b. The glazing panels shall be caulked continuously around the edge to the tube steel frame utilizing neutral cure silicone.
 - c. Set glass using calcium silicate, or setting blocks.

3.4 FIELD QUALITY CONTROL

- A. Site Tests:
1. As required by Regulatory Requirements.
- B. Inspection:
1. Notification: Schedule all inspections. Notify the Architect, Project Inspector and any regulatory agencies of the time at least 48 hours prior to the inspection.
 2. Regulatory Requirements: No work shall be excepted without the required inspections being performed.

3.5 ADJUSTING

- A. Check and readjust operating hardware items immediately before final inspection. Leave work in complete and proper operation condition. Coordinate with hardware suppliers for function and use.
- B. Remove and replace defective work, including work that is warped, bowed, or other wise unacceptable.

3.6 CLEANING

- A. Clean in accordance with Specification Section - TEMPORARY FACILITIES AND CONTROLS.
1. Immediately clean all adjacent surfaces from all foreign materials.

METAL DOORS AND FRAMES

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2. Immediately remove grout, sealants and any foreign materials from bonding to metal doors and frames.
 3. In accordance with manufacturer's instructions and recommendations.
- B. Metal Doors and Frames finishes shall be clean and ready of application of any additional finishes after installation.
1. Prime-Coat Surfaces: Immediately after erection, sand smooth rusted or damaged areas of prime coat and apply touchup of compatible air-drying, rust-inhibitive primer.
 2. Metallic-Coated Surfaces: Clean abraded areas and repair with galvanizing repair paint according to manufacturer's written instructions.
 3. Stainless Steel Surfaces: Scratched and marred surfaces (including field welding) shall be cleaned and promptly be finished smooth. Refinish to match original finish.
- C. Temperature Rise Rated Framing System: Limit repair and touch-up to minor repair of small scratches. Use only manufacturer's recommended products.
1. Repairs shall match original finish for quality, material and view.
 2. Repairs and touch-up shall not be visible from a distance of 5 feet, Owner and Architect to approve.

3.7 PROTECTION

- A. Protect and maintain conditions that ensures the work is without damage or deterioration until the time of Completion has been executed.
1. Maintain in a manner acceptable to manufacturer's and installer's warranty.

END OF SECTION

SECTION 08 15 13 – LAMINATE-FACED WOOD DOORS

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes the following:
 - 1. Provide all material, labor, equipment and services necessary to completely install all Laminate-Faced Wood Door materials, accessories and other related items necessary to complete the Project as indicated by the Contract Documents.
- B. Related Sections: The following Project Manual Sections contain requirements that relate to this section:
 - 1. DIVISION 00 SPECIFICATION SECTIONS.
 - 2. DIVISION 01 SPECIFICATION SECTIONS.
 - 3. 08 11 00 METAL DOORS AND FRAMES
 - 4. 08 80 00 GLASS
 - 5. 09 91 00 PAINTING

1.2 REFERENCES

- A. Standards:
- B. In accordance with the following standards:
 - a. AWS Architectural Woodwork Standards, Section 9.
 - b. BHMA Builders Hardware Manufacturers Association, Inc.
 - c. DHI Door Hardware Institute.
 - d. NEMA National Electrical Manufacturers Association, LD-3, Latest Edition.
 - e. NFPA National Fire Protection Association, NFPA No. 80 "Fire Doors and Windows."
 - f. WDMA Window and Door Manufacturers Association - 1A "Industry Standard for Architectural Wood Flush Doors."
 - g. CRSC California Referenced Standards Code, CRSC 12-7-4, "Fire Door Assembly Tests."
 - h. UL Underwriter's Laboratories "Fire Tests of Door Assemblies" (UL 10 (b)).

1.3 SUBMITTALS

- A. Submit in accordance with Specification Section - SUBMITTAL PROCEDURES:
 - 1. Product Data.
 - a. Submit manufacturer's literature describing products.
 - 2. Shop Drawings.
 - a. Submit shop drawings from manufacturer detailing equipment assemblies and indicating dimensions, weights, loading, required clearances, method of field assembly, components, and location and size of each field connection.
 - b. Submit door type, details and location with reference to Architect's door mark and hardware group.
 - 3. Samples.
 - a. Provide samples of each door color, finish and pattern.
 - 4. Quality Assurance/Control Submittals:
 - a. Manufacturer's Written Instructions:
 - 1) Submit three (3) copies of manufacturer's written instructions.
 - 5. Closeout Submittals in accordance with the following:

- a. Maintenance Data in accordance with Specification Section - PROJECT CLOSEOUT.
- b. Warranty in accordance with Specification Section - WARRANTIES.

1.4 COORDINATION

- A. Coordinate requirements for installation of door hardware, electrified door hardware, and access control and security systems.
- B. Coordinate locations of door glazing with door hardware items.

1.5 QUALITY ASSURANCE

- A. Qualifications:
 - 1. Installer Qualifications:
 - a. Engage an experienced Installer who has successfully completed three (3) projects of similar scope and size to that indicated for this Project.
 - b. Engage an experienced Installer who is certified in writing by the manufacturer listed herein as qualified to install manufacturer's product (or system) in accordance with manufacturer's warranty requirements.
 - 2. Manufacturer/Supplier Qualifications:
 - a. Firm experienced in successfully producing/supplying products similar to that indicated for this Project, with sufficient production/supply capacity to produce/supply required units without causing delay in the work.
 - 3. Testing Agency Qualifications:
 - a. Testing Agency shall be approved and recognized by enforcing agency and provide inspection of materials and workmanship during fabrication and assembly.
- B. In accordance with Specification Section - REGULATORY REQUIREMENTS
- C. Meetings:
 - 1. Pre-Installation: Scheduled by the Contractor prior to the start of work.
 - a. Coordinate the work with other work being performed.
 - b. Identify any potential problems that may impede planned progress and proper installation of work regarding quality of installation and warranty requirements.
 - 2. Progress: Scheduled by the Contractor during the performance of the work.
 - a. Review for proper installation of work progress.
 - b. Identify any installation problems and acceptable corrective measures.
 - c. Identify any measures to maintain or regain project schedule if necessary.
 - 3. Completion: Scheduled by the Contractor upon proper completion of the work.
 - a. Inspect and identify any problems that may impede issuance of warranties or guaranties.
 - b. Maintaining installed work until the Notice of Substantial Completion has been executed.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Packing, shipping, handling, and unloading:
 - 1. Products shall be individually wrapped.
 - 2. Products shall be handled in such a manner as to assure that they are free from dents, scratches and other damage. Damaged products will not be accepted at final inspection.
- B. Acceptance at Site:
 - 1. Products must be in manufacturer's original unopened containers with labels (including any fire labels) indicating brand name, model, and grade.
- C. Storage and protection:
 - 1. Products shall be stored above ground on level platforms, six (6) inches above ground, allowing air circulation under stacked units.

- a. Cover materials with protective waterproof covering providing for adequate air circulation and ventilation.

1.7 PROJECT CONDITIONS

- A. Environmental requirements:
 - 1. Temperature: Maintain ambient temperature in space to receive products in accordance with the latest edition of WDMA I. S. 1-A. Inform the Owner of ambient temperature requirements for products installed and maintain until Substantial Completion and turn-over of the building or facility to the Owner.
 - 2. Humidity: Maintain humidity in space to receive products in accordance with the latest edition of WDMA I. S. 1-A.. Inform the Owner of humidity requirements for products installed and maintain until Substantial Completion and turn-over of the building or facility to the Owner.
- B. Existing Conditions:
 - 1. Examine site and compare it with the drawings and specifications. Thoroughly investigate and verify conditions under which the work is to be performed. No allowance will be made for extra work resulting from negligence or failure to be acquainted with all available information concerning conditions necessary to estimate the difficulty or cost of the work.

1.8 WARRANTY

- A. Contractor's General Warranty:
 - 1. In accordance with Specification Section - WARRANTIES.
- B. Manufacturer's Warranty:
 - 1. Materials Warranty:
 - a. In accordance with manufacturer's written standard warranty.
 - b. Warranty Period: Life of Installation.
 - 1) Doors shall be warranted for life of installation against warp or twist in excess of 1/4" in any face including full diagonal.
 - 2) Replacement shall include finishing of new replacement door, hardware damaged by malfunction of original door, and hanging in satisfactory operating condition.
- C. Installer's Warranty:
 - 1. In accordance with the terms of the Specification Section - WARRANTIES:
 - a. Warranty period Five (5) years.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. These products listed herein establish the size, pattern, color range and function selected by the Architect for this Project. Manufacturers that are listed as acceptable alternative manufacturers and substitutions must still comply with the requirements of this project and the products listed in order to be approved as an equivalent during the Submittal Process. If the acceptable alternative manufacturers listed or substitutions are not approved during the Submittal Process due to non-compliance with the contract documents, then the Contractor shall submit product specified.
 - 1. Specified Plastic Laminate- Faced Wood Door product manufacturer:
 - a. VT INDUSTRIES.
 - b. Acceptable alternative manufacturers:
 - 1) DOORMERICA

- 2) MARSHFIELD DOOR SYSTEMS.
 2. Specified High Pressure Decorative Laminate product manufacturer:
 - a. WILSONART
 - B. Products from other manufacturers not listed must submit in accordance with Specification Section - SUBSTITUTION PROCEDURES.
- 2.2 PLASTIC-LAMINATE-FACED DOORS
- A. Interior Solid-Core Doors:
 1. Grade: WDMA I.S. 1-A "Premium."
 2. Plastic-Laminate Faces: High-pressure decorative laminates complying with NEMA LD 3, Grade VGS.
 3. Colors, Patterns, and Finishes: As selected by Architect from laminate manufacturer's full range of products.
 4. Exposed Vertical Edges: Plastic laminate that matches faces applied before faces.
 5. Core:
 - a. Non-Rated Solid Core Doors:
 - 1) PC-HPDL-5, particle board core (ANSI A208.1, grade 1-LD-2), hot press bonded under pressure to stiles and rails.
 - 2) SCLC-HPDL-5, structural composite lumber core, hot press bonded under high pressure to stiles and rails
 - B. Shop Assembly:
 1. All doors marked for opening numbers shown on the drawings and with protective wrapping.
 - a. Doors shall be Type I adhesive doors regardless of exposure.
 - C. Hardware:
 1. Hardware shall be coordinated with Owner to match Campus Standard.
 - a. Coordinate the hardware templates for field fitting and installation into the doors.
 2. Doors shall be pre-fit and machined in the factory for mortised hardware, including pilot holes for hinges, according to templates and WDMA.
- 2.3 ACCESSORIES
- A. Door Glass and glazing materials.
 1. Door Glass: Type as required by code. Conform to provisions of Section 08800.
 2. Rated and Non-Rated Metal Vision Frames: AIR LOUVERS, INC., Low Profile Beveled Vision Lite, Web Site <http://www.AirLouvers.com>, specified for type and quality.
- 2.4 FABRICATION
- A. Fabricate in accordance with ANSI/WDMA I.S.1-A.
 - B. Structural composite Stiles, Rails, and Hardware Blocking: Securely bond to core and face veneers with Type I glue. Before applying face veneer, abrasively plane glued unit smooth, both sides.
 - C. Finish door top and bottom edges, mortises, and edges of cutouts.
 - D. Hardware Blocking: Provide following ANSI/WDMA I.S. 1-A, Blocking (Reinforcement) options:
 1. Structural Composite Core Doors: Not required.
 2. Particle Board Core Doors:
 - a. 6 inch top rail HB-1.
 - b. 5 inch by 18 inch hardware blocking HB-4 at mortise lock side.
 - c. Other as required for hardware installation.
 3. Incombustible Mineral Core Doors (flame resistant reinforcement)
 - a. 6 inch top rail HB-1, 5 inch middle, and bottom rails HB-2, and HB 6.

- b. 5 inch by 18 inch hardware blocking HB-4 at both stiles.
- c. Other as required for hardware installation.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Site verification of conditions:

- 1. Prior to the execution of the work under this specification section, inspect the installed work executed under other sections of this Project Manual which affect the execution of work under this specification section.
- 2. Report unacceptable conditions to the Architect. Do not begin work until unacceptable conditions have been corrected.
- 3. Execution of work under this specification section shall constitute acceptance of existing conditions.

3.2 PREPARATION

A. Coordination:

- 1. Coordinate work under this specification section with work specified under other sections to ensure proper and adequate interface of work.
- 2. Examine opening and hardware schedules to verify proper coordination.

B. Protection:

- 1. Protect all adjacent surfaces from drips, spray, air pollution of surrounding environment, and other damage from work under this specification section.

C. Surface preparation:

- 1. Prepare surface in accordance with manufacturer's written instructions and recommendations.
- 2. Clean substrates of substances (oil, grease, rolling compounds, incompatible primers, loose mill scale, etc.) which could impair bond of materials specified within this section.

3.3 INSTALLATION

A. General:

- 1. In accordance with DHI A115.1G, manufacturer's written instructions and recommendations unless specifically noted otherwise.
- 2. In accordance with approved shop drawings.
- 3. In accordance with Regulatory Requirements.
- 4. Set plumb, level, and square.

B. Layout:

- 1. Lines shall be straight and true.

C. Non-Rated Doors:

- 1. Clearance at jambs and heads: 1/8-inch.
- 2. Per leaf clearance at meeting stiles for pairs of doors: 1/8-inch.
- 3. Clearance from bottom of door to top of decorative floor finish or covering: 1/8-inch.
- 4. Where threshold is shown or scheduled, provide 1/4-inch clearance from bottom of door to top of threshold.

D. Install door hardware in strict accordance with the manufacturers written recommendations, eliminating hinge-bound conditions and making all items smoothly operating and firmly anchored into position.

3.4 REPAIR / RESTORATION

A. Defective Work:

1. Replace, rework or otherwise make good as required doors, finish, frames or hardware found broken, damaged, disfigured or defaced.
2. Incomplete, misaligned, or incorrectly located products will not be accepted.

3.5 CLEANING

A. Clean in accordance with Specification Section - PROJECT CLOSEOUT.

1. Clean any soiled surfaces immediately.
2. Finish shall be clean and ready for the application of any additional finishes.
3. In accordance with manufacturer's written instructions and recommendations.

3.6 PROTECTION

A. Protection from traffic:

1. Provide final protection and maintain conditions, in a manner acceptable to manufacturer and installer, which ensures the work of this section being without damage or deterioration until the time of Substantial Completion.

END OF SECTION

SECTION 08 80 00 – GLASS

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes the following:
 - 1. Provide all material, labor, equipment and services necessary to completely install all glass materials, accessories and other related items necessary to complete the Project as indicated by the Contract Documents.
- B. Related Sections: The following Project Manual Sections contain requirements that relate to this section:
 - 1. DIVISION 00 SPECIFICATION SECTIONS.
 - 2. DIVISION 01 SPECIFICATION SECTIONS.
 - 3. 08 11 00 METAL DOORS AND FRAMES
 - 4. 08 15 13 LAMINATE-FACED WOOD DOORS
 - 5. 09 91 00 PAINTING
 - 6. 10 14 00 IDENTIFYING DEVICES

1.2 REFERENCES

- A. Standards:
 - 1. In accordance with the following standards:
 - a. AAMA American Architectural Manufacturers Association.
 - b. ANSI American National Standards Institute.
 - c. ASTM American Society for Testing and Materials.
 - d. CSPC Consumer Products Safety Commission.
 - e. FGMA Flat Glass Marketing Association Glazing Manual, 1990 Edition.
 - f. GANA Glass Association of North America
 - g. GTA Glass Tempering Association.
 - h. IGCC Insulating Glass Certification Council.
 - i. LSGA Laminated Safety Glass Association.
 - j. SGCC Safety Glazing Certification Council.
 - k. SIGMA Sealed Insulating Glass Manufacturers Association.

1.3 DEFINITIONS

- A. Manufacturer is used in this Section to refer to a firm that produces primary glazing, fabricated glazing, or both as defined in the referenced glazing standards.
 - 1. Deterioration of Coated Glass: Defects developed from normal use that are attributed to the manufacturing process and not to causes other than glass breakage and practices for maintaining and cleaning coated glass contrary to manufacturer's written directions. Defects include peeling, cracking, and other indications of deterioration in metallic coating.
 - 2. Deterioration of Laminated Glass: Defects developed from normal use that are attributed to the manufacturing process and not to glass breakage and practices for maintaining and cleaning laminated glass contrary to manufacturer's written directions. Defects include edge separation, delamination materially obstructing vision through glass, and blemishes exceeding those allowed by referenced laminated glass standard.

3. Deterioration of Insulating Glass: Failure of the hermetic seal under normal use that is attributed the manufacturing process and not to causes other than glass breakage and improper practices for maintaining, and cleaning insulating glass contrary to manufacturers written instructions. Evidence of failure is the obstruction of vision by dust, moisture, or film on the interior surfaces of glass.
4. f.o.b. – "Free On Board".
5. Glass Surfaces:
 - a. Single Glazed:
 - 1) Surface #1: exposed to outdoors.
 - 2) Surface #2: exposed to indoors.
 - b. Dual Glazed:
 - 1) Exterior Lite:
 - a) Surface #1: exposed to outdoors.
 - b) Surface #2: faces insulating "air" space. Primary location for energy efficient coatings.
 - 2) Interior Lite:
 - a) Surface #3: faces insulating "air" space. Secondary location for energy efficient coatings.
 - b) Surface #4: exposed to indoors.

1.4 SYSTEM DESCRIPTION

- A. Performance Requirements: It is the intention of this specification and the drawings to form a guide for a completely sealed glazing system. Any items not specifically noted but necessary for a completely sealed glazing system shall be provided under this section.
 1. Provide glazing systems that are produced, fabricated, and installed to withstand normal thermal movement, wind loading, and impact loading (where applicable), without failure, including loss or glazing breakage attributable to the following: defective manufacture, fabrication, and installation; failure of sealants or gaskets to remain watertight and airtight; deterioration of glazing materials; and other defects in construction.
 2. Glass Design: Glass thickness indicate minimums and are for detailing only. Confirm glass thicknesses by analyzing Project loads and in-service conditions. Provide glass lites for the various size openings in the thicknesses and strengths (annealed or heat-treated) to meet or exceed the following criteria:
 - a. Minimum glass thickness for lites in exterior walls shall be not less than 6.0mm (1/4" nom.).
 3. Thermal Movement: Provide glazing that allows for thermal movement resulting from the following maximum change (range) in ambient and surface temperatures acting on glass-framing members and glazing components. Base engineering calculation on material's actual surface temperatures due to both solar heat gain and nighttime sky heat loss.
 - a. Temperature Change Range: 120 deg F, ambient; 180 deg F, material surfaces..

1.5 SUBMITTALS

- A. Submit in accordance with Specification Section - SUBMITTAL PROCEDURES:
 1. Coordination Drawings:
 - a. Submit installer's coordination drawings indicating the work of this section with that of related work of other sections for proper interface of the completed work. Installer shall coordinate and obtain approvals from the work of other related sections prior to submitting to the Architect.
 2. Product Data.
 - a. Submit manufacturer's product data for each glazing product and accessory material indicated.

3. Samples.
 - a. Provide 12 inch square sample of each glass type, color and pattern selected.
 - b. Provide 12 inch long samples of each type of glazing sealant, gasket or glazing tape. Install sealant or glazing material sample between two strips of material representative in color of the adjoining framing system.
4. Quality Assurance/Control Submittals:
 - a. Test Reports:
 - 1) Compatibility and Adhesion Test: From sealant manufacturer indicating that glazing sealants were tested for adhesion to glass and glazing channel substrates and compatibility with glass and other glazing material.
 - b. Certificates:
 - 1) Contractor's Certification.
 - 2) Qualification Data:
 - a) Material Qualifications.
 - b) Installer Qualifications.
 - c) Manufacturer/Supplier Qualifications.
 - 3) Product Certificates:
 - a) Fire-Resistive Ceramic Glazing materials.
 - c. Manufacturer's Written Instructions:
 - 1) Manufacturer's written installation instructions for all products.
5. Closeout Submittals in accordance with the following:
 - a. Maintenance Data in accordance with Specification Section - PROJECT CLOSEOUT.
 - b. Record Documents in accordance with Specification Section - RECORD DOCUMENTS.
 - c. Warranty in accordance with Specification Section - WARRANTIES.
 - 1) Special Warranties:
 - a) Coated Glass Products.
 - b) Laminated Glass Products.
 - c) Insulated Glass Products.
 - d) Insulated Glazing Products.

1.6 QUALITY ASSURANCE

- A. Qualifications:
 1. Material Qualifications:
 - a. Comply with published recommendations of glazing product manufacturers and organizations listed, except where more stringent requirements are indicated. Refer to these publications for glazing terms not otherwise defined in this Section or in referenced standards.
 - b. Obtain glazing from one source for each product indicated.
 2. Installer Qualifications:
 - a. An experienced Installer who has completed three (3) projects similar in materials, design and extent to that indicated for this Project; whose work has resulted in glass installation with a record of successful in-service performance..
 3. Manufacturer/Supplier Qualifications:
 - a. Firm experienced in successfully producing/supplying products similar to that indicated for this Project, with sufficient production/supply capacity to produce/supply required units without causing delay in the work.
- B. Regulatory Requirements:
 1. In accordance with Specification Section - REGULATORY REQUIREMENTS, and the following:
 - a. All glazing shall comply with provisions of CBC Chapter 24 for quality standards and CBC Section 2403.1 for identification.

- b. All glazing subject to Hazardous Locations shall comply with Safety Glazing Requirements and CBC Chapter 2406.

C. Certificates:

- 1. Contractor's Certification: Provide a letter on Contractor's Letterhead certifying work provided, meets or exceeds, the Code Minimum requirements, and the other specified requirements of this Section.
- 2. Qualification Data: Contractor's installation certificates.
- 3. Product Certificates: Glazing materials manufacturers certifying that their products comply with specified requirements.
- 4. Fire-Resistive Ceramic Glazing materials certification that products comply with CPSC Requirements.

D. Meetings:

- 1. Pre-Installation: Schedule prior to the start of work.
 - a. Coordinate the work with other work being performed.
 - b. Identify any potential problems that may impede planned progress and proper installation of work regarding quality of installation and warranty requirements.
 - c. Pre-glazing conference: Scheduled by the Contractor prior to the start of any glazing operation for the proper performance of the work.
 - 1) Minimum agenda shall be to review the work required; discuss field observations, problems, and decisions; corrective measures if necessary; and maintenance of quality and work standards in accordance with manufacturer's warranty requirements.
- 2. Progress: Scheduled by the Contractor during the performance of the work.
 - a. Review for proper installation of work progress.
 - b. Identify any installation problems and acceptable corrective measures.
 - c. Identify any measures to maintain or regain project schedule if necessary.
- 3. Completion: Scheduled by the Contractor upon proper completion of the work.
 - a. Inspect and identify any problems that may impede issuance of warranties or guaranties.
 - b. Maintaining installed work until the Notice of Substantial Completion has been executed.

1.7 DELIVERY, STORAGE, AND HANDLING

A. Packing, shipping, handling, and unloading:

- 1. Products shall be handled in such a manner as to assure that they are free from dents, scratches and other damage.
 - a. Protect glazing materials to comply with manufacturer's written directions and as needed to prevent damage to glazing and glazing materials from condensation, temperature changes, direct exposure to sun, or other causes.
- 2. Where insulating glass units will be exposed to substantial altitude changes, comply with insulating glass fabricator's recommendations for venting and sealing to avoid hermetic seal ruptures.

B. Acceptance at Site:

- 1. Products must be in manufacturer's original unopened containers with labels indicating brand name, model, and grade.
- 2. Damaged products will not be accepted.

C. Storage and Protection:

- 1. Products shall be stored above ground on level platforms, six (6) inches above ground, allowing air circulation under stacked units.
 - a. Cover materials with protective waterproof covering providing for adequate air circulation and ventilation.

1.8 PROJECT CONDITIONS

A. Environmental Requirements:

1. Do not proceed with glazing when ambient and substrate temperature conditions are outside the limits permitted by glazing materials manufacturer or when glazing channel substrates are wet from rain, frost, condensation, or other causes.
 - a. Do not install liquid sealants when ambient and substrate temperature conditions are outside of limits by glazing sealant manufacturer or below 40 deg F.

1.9 WARRANTY

A. Contractor's General Warranty:

1. In accordance with Specification Section - WARRANTIES.

B. Manufacturer's Warranty:

1. In accordance with manufacturer's written standard warranty.
2. Manufacturer's Warranty on Coated Glass Products:
 - a. Submit written warranty signed by coated glass manufacturer agreeing to replace coated glass units that deteriorate as defined in "Definitions" article, f.o.b. the nearest shipping point of Project Site, within specified warranty period.
 - b. Warranty Period: Five (5) Years.
 - 1) From date of Substantial Completion.
3. Manufacturer's Warranty on Laminated Glass Products:
 - a. Submit written warranty signed by insulating glass manufacturer agreeing to replace laminated glass units that deteriorate as defined in the "Definitions" article, f.o.b. the nearest shipping point of Project Site, within specified warranty period.
 - b. Warranty Period: Five (5) Years.
 - 1) From date of Substantial Completion.

C. Installer's Warranty:

1. In accordance with the terms of the Specification Section - WARRANTIES:
 - a. Warranty period One (1) Year.
 - 1) From date of Substantial Completion.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. These products listed herein establish the size, pattern, color range and function selected by the Architect for this Project. Manufacturers that are listed as acceptable alternative manufacturers and substitutions must still comply with the requirements of this project and the products listed in order to be approved as an equivalent during the Submittal Process. If the acceptable alternative manufacturers listed or substitutions are not approved during the Submittal Process due to non-compliance with the contract documents, then the Contractor shall submit product specified.

1. Specified Annealed Float Glass product manufacturer, or approved equivalent:
 - a. Class 1 materials:
 - 1) VITRO ARCHITECTURAL GLASS (formerly PPG INDUSTRIES, INC.).
 - 2) Acceptable Alternative Class 1 Manufacturers:
 - a) AFG INDUSTRIES, INC.
 - b) CARDINAL GLASS INDUSTRIES.
 - c) GUARDIAN INDUSTRIES CORPORATION
 - d) PILKINGTON SALES (NORTH AMERICA) LTD.
 - b. Class 2 materials, Pyrolytic Coated (On-Line Process):
 - 1) VITRO ARCHITECTURAL GLASS (formerly PPG INDUSTRIES, INC.), "Graylite" Tinted Glass.

- 2) Acceptable Alternative Class 2 Pyrolytic (On-Line) manufacturers:
 - a) AFG INDUSTRIES, INC.
 - b) PILKINGTON SALES (NORTH AMERICA) LTD.
- c. Class 2 materials, Applied Coating:
 - 1) VIRACON INC.
 - 2) Acceptable Alternative Class 2 Applied Coating manufacturers:
 - a) AFG INDUSTRIES, INC.
 - b) CARDINAL GLASS INDUSTRIES.
 - c) GUARDIAN INDUSTRIES CORPORATION.
 - d) PILKINGTON SALES (NORTH AMERICA) LTD.
 - e) VITRO ARCHITECTURAL GLASS (formerly PPG INDUSTRIES, INC.)
- 2. Specified Glazing Tapes and other Accessory manufacturer, or approved equivalent:
 - a. TREMCO, Glass Tapes "440 Tape".
 - b. Acceptable Alternative Accessory Manufacturer:
 - 1) ADCO "ADCOSEAL GT-1 or GT-4".
- B. Products from other manufacturers not listed must submit in accordance with Specification Section - SUBSTITUTION PROCEDURES.

2.2 MATERIALS

- A. General:
 - 1. All glazing shall comply with all provisions of CBC Chapter 24.
 - a. Provide the required strength of glazing to comply with the area limitation set forth in CBC Table 2403.2.1 for individual lites.
 - 2. Refer to the Glass Schedule of this section for the class of each Glazing Type.
 - 3. Refer to the Insulating Glazing Panel Schedule of this section for the class of each Insulated Glazing Panel Type.
- B. Annealed Float Glass: ASTM C 1036 "Specification for Flat Glass," Type I, and and ASTM C 1048 "Specification for Heat-Treated Flat Glass-Kind HS, Kind FT Coated and Uncoated Glass," Type (transparent glass, flat), Quality q3 (glazing select), of Class indicated.
- C. Heat-Treated Float Glass: ASTM C 1048 "Specification for Heat-Treated Flat Glass-Kind HS, Kind FT Coated and Uncoated Glass," Type I (transparent glass, flat), Quality q3 (glazing select), of class, kind and condition indicated.
 - 1. Fabrication Process: By vertical (tong-held) or horizontal (roller-hearth) process, at manufacturer's option, except provide horizontal process where indicated as tongless or free of tong marks.
 - 2. Provide Kind HS (Heat-Strengthened) float glass in place of annealed float glass where needed to resist thermal stresses indicated by differential shading of individual glass lites and to comply with glass design requirements.
 - 3. Uncoated Glass: Comply with the requirements for Condition A.
 - 4. Coated Glass: Comply with the requirements for Condition C.
 - 5. Tempered: Provide Kind FT (Fully Tempered) float glass in place of annealed or Kind HS (Heat Strengthened) float glass where safety glass is indicated.
 - 6. Fire-Protection-Rated Glazing Labeling: In accordance with CBC Table 716.1 (2). Permanently mark fire-protection-rated glazing with certification label of a testing agency acceptable to authorities having jurisdiction. Label shall indicate manufacturer's name; test standard; whether glazing is permitted to be used in doors or openings; if permitted in openings, whether glazing has passed hose-stream test; whether glazing meets 450 deg F temperature-rise limitation; and fire-resistance rating in minutes.
- D.
 - 1.

2.3 ACCESSORIES

A. Elastomeric Glazing Sealants:

1. General: Provide products of type indicated, complying with the following requirements:
 - a. Compatibility: Select glazing sealants and tapes of proven compatibility with other materials they will contact, including glazing products, seals of insulating glass units, and glazing channel substrates, under conditions of installation and service, as demonstrated by testing and field experience.
 - b. Suitability: Comply with sealant and glazing manufacturer's written recommendations for selecting glazing sealants and tapes that are suitable for applications indicated and conditions existing at time of installation.
 - c. Colors: Provide color of exposed joint sealants to comply with the following:
 - 1) Match colors indicated by reference to manufacturer's standard designations.
 - 2) Provide selections made by Architect from manufacturer's full range of standard colors for products of type indicated.
2. Standard: Provide manufacturer's standard chemically curing, elastomeric sealants of base polymer indicated that comply with ASTM C 920 "Specification for Elastomeric Joint Sealants," requirements indicated in Specification Section - SEALANTS, including those referencing ASTM classifications for Type, Grade, Class and Uses.

B. Glazing Sealants for Fire-Rated Glazing Products:

1. Products that are approved by testing agencies that listed and labeled fire-resistant glazing products with which they are used for applications and fire-protection ratings indicated.

C. Glass Tapes:

1. Back-Bedding Mastic Glazing Tape: Preformed, butyl-based elastomeric tape with a solids content of 100 percent, non-staining and non-migrating in contact with nonporous surfaces, with or without spacer rod as recommended in writing by tape and glazing manufacturers for application indicated, packaged on rolls with a release paper backing, and complying with ASTM C 1281 "Specification for Preformed Tape Sealants for Glazing Applications," and AAMA 800 "Voluntary Specifications and Test methods for Sealants" for products indicated below:
 - a. AAMA Section 807.3 tape, for glazing applications in which tape is not subject to continuous pressure.

D. Miscellaneous Glass Materials:

1. General: Provide products of material, size, and shape complying with referenced glazing standard, requirements of manufacturers of glass and other glass materials involved for glass application indicated, and with a proven record of compatibility with surfaces contacted in installation.
2. Cleaners, Primers and Sealers: Type recommended by sealant or gasket manufacturer.
3. Setting Blocks: Elastomeric material with a Shore Type A durometer hardness of 85 plus or minus 5.
4. Spacers: Elastomeric blocks or continuous extrusions with a Shore Type A durometer hardness required by glass manufacturer to maintain glass lites in place for installation indicated.
5. Edge Blocks: Elastomeric material of hardness needed to limit glass lateral movement (side-walking).
6. Plastic Foam Joint Fillers: Pre-formed, compressible, resilient, nonstaining, nonextruding, nonoutgassing, strips of closed-cell plastic foam of density, size, and shape to control sealant depth and otherwise contribute to produce optimum sealant performance.
7. Perimeter Insulation for Fire-Resistive Glass: Identical to product used in test assembly to obtain fire-resistive rating.

2.4 FABRICATION

- A. Fabricate glass and other glass products in sizes required to glaze openings indicated for Project, with edge and face clearances, edge and surface conditions, and bite complying with written instruction and recommendations of product manufacturer and referenced glazing standard, to comply with system performance requirements.
- B. Clean cut or flat grind vertical edges of butt-glazed monolithic lites in a manner that produces square edges with slight kerfs at junctions with indoor and outdoor faces.
- C. Grind smooth and Polish exposed glass edges and corners.

PART 3 - EXECUTION**3.1 EXAMINATION**

- A. Site verification of conditions:
 - 1. Prior to the execution of the work under this specification section, inspect the installed work executed under other sections of this Project Manual which affect the execution of work under this specification section.
 - a. Examine glass framing, with glazier present, for compliance with the following:
 - 1) Manufacturing and installation tolerances, including those for size, squareness, offsets at corners.
 - 2) Presence and functioning of weep system for aluminum framing systems, and proper sealing of hollow metal frame systems with no weep systems.
 - 3) Minimum required face or edge clearances.
 - 4) Effective sealing between joints of glass-framing members.
 - 2. Report unacceptable conditions to the Architect. Do not begin work until unacceptable conditions have been corrected.
 - 3. Execution of work under this specification section shall constitute acceptance of existing conditions.

3.2 PREPARATION

- A. Coordination:
 - 1. Coordinate work under this specification section with work specified under other sections to ensure proper and adequate interface of work.
- B. Protection:
 - 1. Protect all adjacent surfaces from drips, spray, air pollution of surrounding environment, and other damage from work under this specification section.
- C. Surface preparation:
 - 1. Prepare surface in accordance with manufacturer's written instructions and recommendations.
 - 2. Clean substrates of substances (oil, grease, rolling compounds, incompatible primers, loose mill scale, etc.) which could impair bond of materials specified within this section.
 - 3. Clean glass channels and other framing members receiving glass immediately before glazing.
 - 4. Remove coatings that are not firmly bonded to substrates.
 - 5. Wipe down any mirror backing with alcohol before applying mirror adhesives.

3.3 INSTALLATION

- A. Glass, General:
 - 1. Comply with installation standards of CBC Chapter 24.
 - a. Glass subject to human impact shall be installed in accordance with CBC 2406.

2. Comply with combined written instructions and recommendations of manufacturers of glass, insulated glass panels, sealants, gaskets, and other glass materials, except where more stringent requirements are indicated, including those in referenced glazing publications.
 3. Glass channel dimensions, as indicated on Drawings, provide necessary bite on glazing, minimum edge and face clearances, and adequate sealant thicknesses, with reasonable tolerances. Adjust as required by Project conditions during installation.
 4. Protect glass from edge damage during handling and installation as follows:
 - a. Use a rolling block in rotating glass units to prevent damage to glass corners. Do not impact glass with metal framing. Use suction cups to shift glass units within openings; do not raise or drift glass with a pry bar. Rotate glass lites with flares or bevels on bottom horizontal edges so edges are located at top of opening, unless otherwise indicated by manufacturer's label.
 - b. Remove damaged glass from Project site and legally dispose of off site. Damaged glass is glass with edge damage or other imperfections that, when installed, weaken glass and impair performance and appearance.
 5. Apply primers to joint surfaces where required for adhesion of sealants, as determined by preconstruction sealant-substrate testing.
 6. Install setting blocks in sill rabbets, sized and located to comply with referenced glazing standard, unless otherwise required by glass manufacturer. Set blocks in thin course of compatible sealant suitable for heel bead.
 7. Do not exceed edge pressures stipulated by glass manufacturers for installing glass lites.
 8. Provide spacers for glass sizes larger than 50 united inches (length plus height) as follows:
 - a. Locate spacers inside, outside, and directly opposite each other. Install correct size and spacing to preserve required face clearances, except where gaskets and glass tapes are used that have demonstrated ability to maintain required face clearances and comply with system performance requirements.
 - b. Provide 3.0mm (1/8" nom.) minimum bite of spacers on glass and use thickness equal to sealant width. With glass tape, use thickness slightly less than final compressed thickness of tape.
 9. Provide edge blocking to comply with requirements of referenced glazing publications, unless otherwise required by glass manufacturer.
 10. Set glass lites in each series with uniform pattern, draw, bow, and similar characteristics.
- B. Tape Glazing:
1. Position tapes on fixed stops so that when compressed by glass their exposed edges are flush with or protrude slightly above sight-line of stops.
 - a. Slightly recess tape at exterior conditions, and continuously cap bead with elastomeric sealant leaving no open joints.
 2. Install tapes continuously but not in one continuous length.
 - a. Do not stretch tapes to make them fit opening.
 3. Where framing joints are vertical, cover these joints by applying tapes to heads and sills first and then to jambs.
 4. Where framing joints are horizontal, cover these joints by applying tapes to jambs and then to heads and sills.
 5. Place joints in tapes at corners of opening with adjoining lengths butted together, not lapped.
 6. Do not remove release paper from tape until just before each lite is installed.
 7. Seal joints in tapes with compatible sealant approved by tape manufacturer.
 - a. Apply continuous heel bead of elastomeric sealant at all exterior hollow metal framing stops.
 - b. Install a continuous toe bead of elastomeric sealant at all exterior hollow metal framing stops on installations with Laminated Glass, Wire Glass or Insulated Glazing Panels.
 - c. Apply continuous cap bead of elastomeric sealant over exposed edge of tape.

8. Install tapes on all fixed and loose stops.

C. Sealant glazing (Wet):

1. Install continuous spacers between glass lites and glass stops to maintain glass face clearances and to prevent sealant from extruding into glass channel weep systems (if any) until sealants cure.
 - a. Secure spacers in place and in position to control depth of installed sealant relative to edge clearance for optimum sealant performance.
2. Force sealant into glass channels to eliminate voids and to ensure complete wetting or bond of sealant to glass and channel surfaces.
3. Tool exposed surfaces of sealants to provide a substantial wash away from glass.
 - a. Install pressurized gaskets to protrude slightly out of channel to eliminate dirt and moisture pockets.

3.4 CLEANING

A. Clean in accordance with Specification Section - PROJECT CLOSEOUT.

1. Wash glass on both faces in each area of Project not more than 4 days prior to date scheduled for inspections that establish date of Substantial Completion.
 - a. Wash glass as recommended in writing by glazing manufacturer.

3.5 PROTECTION

A. Protection from traffic:

1. Provide final protection and maintain conditions, in a manner acceptable to manufacturer and installer, which ensures the work of this section being without damage or deterioration until the time of Substantial Completion.
2. Protect exterior glass from breakage immediately after installation by attaching crossed streamers to framing held away from glass.
 - a. Do not apply markers to glass surface.
 - b. Remove nonpermanent labels, and clean surfaces.
3. Protect glass from contact with contaminating substances resulting from construction operations including weld splatter.
 - a. If, despite such protection, contaminating substances do come into contact with glass, remove them immediately as recommended in writing by glass manufacturer.
4. Examine glass surfaces adjacent to or below exterior concrete and other masonry surfaces at frequent intervals during construction, but not less than once a month, for build-up of dirt, scum, alkali deposits, or stains, and remove as recommended in writing by glass manufacturer.
5. Remove and replace glass that is broken, chipped, cracked, abraded, or damaged in any way, including natural causes, accidents and vandalism, during construction period.

3.6 GLASS SCHEDULE

A. **Gray Tinted Glass:**

B. **Clear Float Glass:**

1. **C1-1T Tempered Clear Float:**

- | | |
|--|----------------------|
| a. Thickness | 6 mm (1/4" nominal). |
| b. Heat Treated, per ASTM C1048 | Kind FT. |
| c. Minimum Visible Light (%) Transmittance | 89. |
| d. Solar Heat Gain Coefficient (SHGC) | 0.81. |
| e. "U" Factor: | |
| 1) Winter Night-time | 1.03. |
| 2) Summer Daytime | 0.93. |
| f. 19 mm (3/4" nominal). | |

END OF SECTION

GLASS

2329.ID

GYPSUM BOARD

SECTION 09 29 00 – GYPSUM BOARD

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes the following:
 - 1. Provide all material, labor, equipment and services necessary to completely install all gypsum board materials, suspension systems, furring, accessories and other related items necessary to complete the Project as indicated by the Contract Documents.
- B. Related Sections: The following Project Manual Sections contain requirements that relate to this section:
 - 1. DIVISION 00 SPECIFICATION SECTIONS.
 - 2. DIVISION 01 SPECIFICATION SECTIONS.
 - 3. 08 11 00 METAL DOORS AND FRAMES
 - 4. 08 15 13 LAMINATE-FACED WOOD DOORS
 - 5. 09 50 00 ACOUSTICAL CEILINGS
 - 6. 09 65 10 RESILIENT BASE AND ACCESSORIES
 - 7. 09 65 19 RESILIENT TILE
 - 8. 09 68 40 CARPET
 - 9. 10 14 00 IDENTIFYING DEVICES

1.2 REFERENCES

- A. Standards:
 - 1. In accordance with the following standards:
 - a. CISCA Ceilings & Interior Systems Construction Association.
 - b. DITF Drywall Industry Trust Fund.
 - c. GA Gypsum Association.
 - d. MPI Master Painters Institute
 - e. PDCA Painting and Decorating Contractors of America.
 - f. PDSM Plaster and Drywall Systems Manual, ©1988 by BNI and McGraw-Hill, Inc., Third Edition.

1.3 SYSTEM DESCRIPTION

- A. Suspension System Design Requirements: In accordance with allowable values and properties assigned and approved by CBC.
 - 1. Lateral Load Design: ASCE 7, Chapter 13.
 - 2. Design Weight for lateral loads: Total Weight does not exceed four (4) pounds per square foot, including air conditioning grilles and light fixtures.
 - 3. System is not to support lateral loads from partitions.
 - 4. Fasteners into concrete:
 - a. Must be capable of sustaining, without failure, a load equal to 200 lbs. tension for hangar wires and 440 lbs. tension for bracing wires.

1.4 SUBMITTALS

- A. Submit in accordance with Specification Section - SUBMITTAL PROCEDURES:
 - 1. Product Data.
 - a. Gypsum board fastening schedule: Indicate type, size and spacing of fasteners for each type of framing and fire resistive condition.

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- b. Manufacturer's written recommended construction instructions or handbook for all gypsum board panel products and accessories.
- c. Manufacturer's written recommended construction instructions or handbook for all suspension system products and accessories
- d. Manufacturer's data for all types of gypsum board used on this project.
- 2. Samples.
 - a. Provide 24 inch square samples for all textures for each level of finish.
 - b. Provide 4 inch lineal samples of each piece of metal trim accessory specified.
 - c. Provide 12 inch lineal samples of Suspension System components for each type of system specified.
- 3. Quality Assurance/Control Submittals:
 - a. Test Reports:
 - 1) Site Tests of suspended gypsum board ceiling fasteners and anchors provided by Testing Agency.
 - b. Certificates:
 - 1) General Construction: Certificate signed by the Contractor on Contractor's letterhead.
 - 2) Products: Certificates signed by manufacturers of gypsum board assembly components.
- 4. Closeout Submittals in accordance with Specification Section -PROJECT DOCUMENTS.
 - a. Warranty in accordance with Specification Section - WARRANTIES.

1.5 QUALITY ASSURANCE

A. Qualifications:

- 1. Material Qualifications:
 - a. Where fire-rated gypsum board assemblies are indicated, provide materials and construction identical to those of assemblies tested for fire resistance per ASTM E 119 "Test methods for Fire Tests of Building Construction and Materials," by an independent testing and inspecting agency acceptable to CSFM.
 - b. Empty containers shall not be removed from site without the Project Inspector's approval.
- 2. Installer Qualifications:
 - a. Engage an experienced Installer who has successfully completed three (3) projects of similar scope and size to that indicated for this Project.
 - 1) Helpers and apprentices used for such work shall be under full and constant supervision at all times by thoroughly skilled gypsum board installers.
 - 2) In the acceptance or rejection of installed gypsum board, no allowance will be made for lack of skill on the part of installers.

B. Regulatory Requirements:

- 1. In accordance with Specification Section - REGULATORY REQUIREMENTS, and the following:
 - a. IR Interpretation of Regulations.

C. Certificates:

- 1. General Construction: Contractor to certify that work provided, meets or exceeds the requirements of this section.
- 2. Manufacturers of gypsum board assembly components certify that their products comply with specified requirements.
 - a. Certify that all adhesive and compound materials have a good shelf life longer than the construction period of this project.

D. Meetings:

- 1. Pre-Installation: Scheduled by the Contractor prior to the start of work.
 - a. Coordinate the work with other work being performed.

GYPSUM BOARD

- b. Identify any potential problems that may impede planned progress and proper installation of work regarding quality of installation and warranty requirements.
2. Progress: Scheduled by the Contractor during the performance of the work.
 - a. Review for proper installation of work progress.
 - b. Identify any installation problems and acceptable corrective measures.
 - c. Identify any measures to maintain or regain project schedule if necessary.
3. Completion: Scheduled by the Contractor upon proper completion of the work.
 - a. Inspect and identify any problems that may impede issuance of warranties or guaranties.
 - b. Maintain installed work until the Notice of Substantial Completion has been executed.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Packing, shipping, handling, and unloading:
 1. Products shall be handled in such a manner as to assure that they are free from dents, scratches and other damage.
- B. Acceptance at Site:
 1. Products must be in manufacturer's original unopened containers with labels indicating brand name, model, and grade.
 2. Damaged products will not be accepted.
- C. Storage and protection:
 1. Products shall be stored above ground on level platforms, six (6) inches above ground, allowing air circulation under stacked units.
 - a. Cover materials with protective waterproof covering providing for adequate air circulation and ventilation.

1.7 WARRANTY

- A. Contractor's General Warranty:
 1. In accordance with Specification Section - WARRANTIES.
- B. Manufacturer's Warranty:
 1. In accordance with manufacturer's written standard warranty:
 - a. Warranty Period One (1) Year.
- C. Installer's Warranty:
 1. In accordance with the terms of the Specification Section - WARRANTIES:
 - a. Warranty period One (1) Year.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. These products listed herein establish the size, pattern, color range and function selected by the Architect for this Project. Manufacturers that are listed as acceptable alternative manufacturers and substitutions must still comply with the requirements of this project and the products listed in order to be approved as an equivalent during the Submittal Process. If the acceptable alternative manufacturers listed or substitutions are not approved during the Submittal Process due to non-compliance with the contract documents, then the Contractor shall submit product specified.
 1. Specified gypsum board products manufacturer:
 - a. NATIONAL GYPSUM COMPANY.
 - 1) Wallboard "REGULAR"
 - 2)
 - 3) PABCO:

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- a) Wallboard "REGULAR" AND "TYPE X"
 - b) Moisture-Resistant "MOLD CURB PLUS"
 - c) Shaftwall "MOLD CURB PLUS SHAFLINER"
 - d) Sheathing "GLASS SHEATHING"
 - e) Soffit "EXTERIOR SOFFIT"
 - 4) UNITED STATES GYPSUM COMPANY - "SHEETROCK"
 - a) Wallboard "SW EDGE"
 - b) Moisture-Resistant: "MOLD TOUGH"
 - c) Shaftwall "LINER PANEL-MOLD TOUGH"
 - d) Sheathing "SECUROCK GLASS-MAT SHEATHING"
 - e) Soffit "EXTERIOR GYPSUM CEILING BOARD"
2. Specified Impact and Abuse board products manufacturer:
- a. NATIONAL GYPSUM COMPANY
 - 1) Impact Board "HI-IMPACT XP"
 - 2) Abuse Resistant "HI-ABUSE XP"
 - b. Acceptable alternative manufacturers:
 - 1) PABCO.
 - a) Impact Board "HI-IMPACT"
 - b) Abuse Resistant "ABUSE CURB"
 - 2) UNITED STATES GYPSUM COMPANY - Walls only.
 - a) Impact Board "MOLD TOUGH VHI"
 - b) Abuse Resistant "MOLD TOUGH AR"
3. Specified Roof Board board products manufacturer:
- a. G-P GYPSUM "DENS-DECK"
 - b. Acceptable alternative manufacturers
 - 1) UNITED STATES GYPSUM COMPANY
 - a) SECUROCK Roof Cover Board.
4. Specified gypsum board accessories product manufacturer:
- a. Prep. Coat (Drywall Primer):
 - 1) WESTPAC MATERIALS "PREP COAT"
 - 2) Acceptable alternative manufacturer:
 - a) UNITED STATES GYPSUM - SECUROCK First Coat Primer.
 - b. Primer-Surfacer: "TUFF-HIDE"
 - 1) UNITED STATES GYPSUM COMPANY.
 - c. Other Accessories:
 - 1) CLARK DIETRICH BUILDING SYSTEMS, LLC (CDBS).
5. Specified revel molding products manufacturer:
- a. FRY REGLET CORPORATION.
- B. Products from other manufacturers not listed must submit in accordance with Specification Section - SUBSTITUTION PROCEDURES.

2.2 MATERIALS

- A. Furring:
- 1. Metal Angles: 24 gage galvanized steel.
 - a. 1-3/8 inch x 7/8 inch 190 lbs./1000 feet weight.
 - 2. Cold Rolled Channels: 16 gage galvanized steel.
 - a. For furred walls and ceilings:
 - 1) 3/4 inch x 1/2 inch flange: 300 lbs./1000 feet weight.
 - 2) 1-1/2 inch x 17/32 inch flange: 500 lbs./feet weight.
 - 3) 2 inch x 17/32 inch flange: 590 lbs./1000 feet weight.
 - 3. Resilient Channels (USG's RC-1): 25 gage corrosion resistant steel.

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- a. Pre-punched holes at 4 inches on center in the flange to facilitate screw attachment only into framing. For improving sound transmission loss through framed partitions and ceilings.
 - 1) 1/2 inch flange x 2-1/2 inch overall w/1-1/2 inch offset flange x 1/2 inch offset:
 - a) 200 lbs./1000 feet weight.
 4. Zee Channels: 24 gage corrosion resistant steel.
 - a. 1 inch thick x 7/8 inch x 1-1/4 inch 224 lbs./1000 feet weight.
 - b. 1-1/2 inch x 7/8 inch x 1-1/4 inch 269 lbs./1000 feet weight.
 - c. 2 inch x 7/8 inch x 1-1/4 inch 313 lbs./1000 feet weight.
 - d. 3 inch x 7/8 inch x 1-1/4 inch 400 lbs./1000 feet weight.
 5. Hat Channels:
 - a. 7/8 inch x 2-9/16 inch 276 lbs./1000 feet weight (25 gage).
 - b. 7/8 inch x 2-9/16 inch 515 lbs./1000 feet weight (20 gage).
 6. Channel Clips:
 - a. Pre-formed galvanized wire used for attaching metal furring channels to cold rolled channels and single gypsum panel systems only.
 - 1) 1-1/2 inch x 2-3/4 inch 38 lbs./1000 feet weight.
- B. Suspension System:
1. General: Comply with ASTM C754 "Standard Specification for Installation of Steel Framing Members to Receive Screw-Attached Gypsum Panel Products," for conditions indicated.
 2. Wires: ASTM A641 "Standard Specification for Zinc-Coated (Galvanized) Carbon Steel Wire," Class 1 zinc coating, soft temper:
 - a. Tie: 0.0625 inch diameter wire (16 gage), or double strand of 0.0475 inch diameter (18 gage) wire.
 - b. Hanger: 0.162 inch diameter (8 gage).
 - c. Brace: 0.106 inch diameter (12 gage).
 3. Anchors:
 - a. General: Fabricate from corrosion-resistant material with holes or loops for attaching hanger and brace wires.
 - 1) Ceiling Clips: 3/4 inch wide x 0.0934 inch galvanized sheet (13 gage).
 - 2) Steel Straps:
 - a) 1 inch wide x length as required x 0.108 inch galvanized sheet (12 gage).
 - b) 3 inches wide x 4 inches long x 0.108 inch galvanized sheet (12 gage).
 4. Main Runners:
 - a. Hot Rolled Channels:
 - 1) 1-1/2 inch web x 1/2 inch flange x 1/8 inch thick 1,120 lbs./1000 feet weight.
 5. Cross Furring:
 - a. Hat Channels:
 - 1) 7/8 inch thick x 2-9/16 inch 276 lbs./1000 feet weight.
 6. Compression Struts (Metal angles, galvanized steel):
 - a. 1/8 inch thick x 1 inch x 1 inch 800 lbs./1000 feet weight.
 - b. 3/16 inch thick x 1-1/4 inch x 1-1/4 inch 1,480 lbs./1000 feet weight.
 - c. 3/16 inch thick x 1-1/2 inch x 1-1/2 inch 1,800 lbs./1000 feet weight.
 - d. 3/16 inch thick x 1-3/4 inch x 1-3/4 inch 2,120 lbs./1000 feet weight.
 - e. 3/16 inch thick x 2 inch x 2 inch 2,440 lbs./1000 feet weight.
 - f. 3/16 inch thick x 2 inch x 2-1/2 inch 3,070 lbs./1000 feet weight.
 - g. 3/16 inch thick x 3 inch x 3 inch 3,710 lbs./1000 feet weight.
 - h. 1/4 inch thick x 3-1/2 inch x 3-1/2 inch 5,800 lbs./1000 feet weight.
 - i. 1/4 inch thick x 4 inch x 4 inch 6,600 lbs./1000 feet weight.

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- j. Alternate Compression Struts Refer to drawings.
 - 1) Must be submitted to and approved by DSA.
- 7. Shaft Wall Framing: Shaft Wall Steel Framing listed below are manufactured by USG, or approved equivalent.
 - a. CR-Runners: 2"-width 25 gage.
 - b. J-Runners: 2-1/2", 4" or 6" as required 20 gage.
 - c. E-Studs: 2-1/2", 4" or 6" as required 20 gage.
 - d. C-H Studs: 2-1/2", 4" or 6" as required 20 gage.
 - e. Jamb Studs: 2-1/2", 4" or 6" as required 20 gage.
 - f. H-Studs: 2"-width 25 gage.
- C. Wallboard: For interior walls and ceilings.
 - 1. Standard: In accordance with ASTM C 1396 "Standard Specification for Gypsum Board."
 - 2. Size: See drawings for specific thickness locations.
 - a. 5/8 inch thick by 4 foot wide maximum by practical length to minimize joints.
 - 1) When curved walls are indicated on the drawings, provide multiple layers of 1/4 inch & 3/8 inch thick by 4 foot wide maximum by practical length to minimize joints.
 - 3. Long Edges: SW Tapered.
 - 4. Core Type:
 - a. Non-Fire Rated: Regular.
 - b. Fire Rated: Type X at fire-resistive-rated assemblies.
 - 5. Finish: Natural-finish face paper suitable for paint, wallpaper or other decorations.
- D. Impact Board: For interior walls requiring greater impact resistance.
 - 1. Standard: In accordance with ASTM C 1629 "Standard Classification for Abuse-Resistant Nondecorated Interior Gypsum Panel Products and Fiber-Reinforced Cement Panels."
 - a. Surface Abrasion Resistance: ASTM D 4977 "Test method for Granule Adhesion to Mineral Surfaced Roofing by Abrasion": Level 3.
 - b. Indentation Resistance: ASTM D 5420 "Test Method for Impact Resistance of Flat, Rigid Plastic Specimen by Means of a Striker Impacted by a falling Weight (Gardner Impact)": Level 1.
 - c. Impact/Penetration Resistance, Soft Body: ASTM E 695 "Standard Method for Measuring Relative Resistance of Wall, Floor, and Roof Construction to Impact Loading": Level 3.
 - d. Impact/Penetration Resistance, Hard Body: ASTM C 1629 "Standard Classification for
 - e.
- E. Metal Accessories:
 - 1. Corner Beads:
 - a. Outside Corner, 1-1/4 inch x 1-1/4 inch galvanized:
 - 1) CDBS / USG "Dur-A-Bead" #103.
 - 2. Edge Trim:
 - a. "U"-Shaped 1 inch galvanized CDBS / USG #200-A, size to fit gypsum board.
 - b. "L"-Shaped 1 inch galvanized CDBS / USG #200-B, size to fit gypsum board.
 - 1) When "U"-Shaped molding above cannot be used.
 - 3. Control Joint:
 - a. 1-3/4" wide, 1/4" wide center channel with removable tape strip:
 - 1) CDBS / USG #093.
 - 4. Reveal Moldings (Aluminum Trim): Moldings listed below are manufactured by FRY REGLETS, or approved equivalent.
 - a. Reveal Molding Sized to fit gypsum board.
 - b. "L" Trim Molding Sized to fit gypsum board.

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| c. | "F" Reveal Molding | Sized to fit gypsum board. |
| d. | Snap-In Reveal | Sized to fit gypsum board. |
| e. | "Z" Reveal Molding | Sized to fit gypsum board. |
| f. | Reveal Channel Screed | Sized to fit gypsum board. |
| g. | "F" Reveal | Sized to fit gypsum board. |
| h. | "T" Molding | Sized to fit gypsum board. |

2.3 ACCESSORIES

- A. Water:
 - 1. Clean, fresh and free from deleterious amounts of foreign material.
- B. Fasteners:
 - 1. At Gypsum Board: In accordance with the manufacturer's written recommendations and the following:
 - a. Nails: In accordance with CBC Chapter 7 and ASTM C 514 "Standard Specification for Nails for the Application of Gypsum Board."
 - b. Screws: In accordance with CBC Chapter 7, ASTM C 1002 "Standard Specification for Steel Self-Piercing Tapping Screws for the Application of Gypsum Panel Products or Metal Plaster Bases to Wood Studs or Steel Studs," type S, G, and W, and ASTM C 954 "Standard Specification for Steel Drill Screws for the Application of Gypsum Panel Products or Metal Plaster Bases to Steel Studs from 0.033 in. (0.84 mm) to 0.112 in. (2.84 mm) in Thickness," Type S-12.
 - 1) Provide "Bugle Head" screws that help prevent damage to the gypsum core and face paper.
 - c. Adhesives: In accordance with ASTM C 475 "Standard Specification for Joint Compound and Joint Tape for Finishing Gypsum Board."
 - 1) Commercial adhesives bridging minor irregularities in the base or framing at "non-fire-rated" construction.
 - a) In accordance with ASTM C 557 "Standard Specification for Adhesives for Fastening Gypsum Wallboard to Wood Framing."
- C. Joint reinforcement tape and joint compounds:
 - 1. In accordance with ASTM C 474 "Standard Test Methods for Joint Treatment Materials for Gypsum Board Construction" and C 475 "Standard Specification for Joint Compound and Joint Tape for Finishing Gypsum Board," and Gypsum Board Manufacturer's written recommendations of both the manufacturers of sheet products and of joint treatment materials for each application indicated.
 - a. Joint Tapes:
 - 1) Paper reinforcing tape, unless otherwise indicated.
 - 2) Polymer-coated, open glass-fiber mesh for cementitious backer units.
 - b. Setting-Type Joint compounds for gypsum board: Factory-packaged, job-mixed, chemical-hardening powder products formulated for uses indicated.
 - 1) When used for taping and filling only, use formulation that is compatible with other joint compounds applied over it.
 - 2) When used for pre-filling gypsum board joints, use formulation recommended by gypsum board manufacturer for this purpose.
 - 3) When used for filling joints and treating fasteners of moisture-resistant gypsum backing board behind base for ceramic tile, use formulation recommended by the gypsum board manufacturer for this purpose.
 - 4) When used for topping compound, use sandable formulation.
- D. Prep. Coat: Provide a preparation coat of the specified material to gypsum board surfaces to be decorated with all paints.
- E. Primer-Surfacer: "TUFF-HIDE" by USG, Interior White Latex High Build Spray for a smoother paint finish over all types of drywall, 9.8 to 13 mils DFT in one spray application

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- F. Textured Finish Coats: Gypsum Board manufacturer supplying the products to this project shall also supply the Texture Finishes to provide distinctive appearance and surface decoration to gypsum board panel walls and ceilings, and as scheduled at the end of this Specification Section.
- G. Other Materials: All other miscellaneous materials, not specifically described, but required for a complete and proper installation of gypsum board, shall be as selected by the Contractor subject to the approval of the Architect.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Site verification of conditions:
 - 1. Prior to the execution of the work under this specification section, inspect the installed work executed under other sections of this Project Manual which affect the execution of work under this specification section.
 - 2. Report unacceptable conditions to the Architect. Do not begin work until unacceptable conditions have been corrected.
 - 3. Execution of work under this specification section shall constitute acceptance of existing conditions.

3.2 PREPARATION

- A. Coordination:
 - 1. Coordinate work under this specification section with work specified under other sections to ensure proper and adequate interface of work.
 - 2. Coordinate proper placement of ceiling mounted tracks, accessories, light fixtures, HVAC, registers and other items, which are to be integrated with gypsum board ceilings.
- B. Protection:
 - 1. Do not begin work until all rooms have been protected against the weather, and the building is covered and fully enclosed. Wet gypsum board after installation shall be removed and replaced at no extra cost to the Owner.
 - 2. Protect all adjacent surfaces from drips, spray, air pollution of surrounding environment, and other damage from work under this specification section.
- C. Surface preparation:
 - 1. Prepare surface in accordance with manufacturer's written instructions and recommendations.
 - 2. Clean substrates of substances (oil, grease, rolling compounds, incompatible primers, loose mill scale, etc.) which could impair bond of materials specified within this section.

3.3 INSTALLATION

- A. General:
 - 1. In accordance with manufacturer's written instructions and recommendations unless specifically noted otherwise.
 - 2. In accordance with Regulatory Requirements.
 - a. DSA's IR 25-3 "Suspended Gypsum Board Ceiling."
 - 3. Set plumb, level, and square.
- B. Layout:
 - 1. Lines shall be straight and true.
 - 2. Control Joints:
 - a. Layout in accordance with GA-234-08 for both Non-Rated and Rated wall and ceiling conditions as follows:

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- 1) Provide Control Joints at in an uninterrupted straight plane exceeding 30 ft. in length and total area between control joints, such that no area exceeds 900 sq.ft.
- C. Suspension System Installation: In accordance with DSA's IR 25-3.
1. Hanger and Main Runner Installation:
 - a. Vertical hanger wires shall be #8 gage and galvanized; use #12 gage wire in "non-accessible" ceiling areas.
 - b. Hanger spacing shall be 4'-0" o.c. with 1-1/2 inch hot rolled main runners (weighing 1.12 lbs./ft.).
 - c. Bracing assemblies shall not be greater than a 12' by 12' on center spacing.
 - 1) Provide bracing assemblies at locations not more than 1/2 the spacing given above, from each perimeter wall and at edge of vertical ceiling offsets.
 - 2) The slope of these wires shall not exceed 45 degrees from the plane of the ceiling and shall be taut. Splices in bracing wires are not to be permitted without special DSA approval.
 - 3) Ceiling grid members may be attached to not more than two (2) adjacent walls. Ceiling grid members shall be at least 1/2" free of other walls.
 - 4) If walls run diagonally to ceiling grid system runners, one end of main and cross runners shall be free, and a minimum of 1/2" clear of wall.
 - 5) Suspended ceiling systems with an area of 144 square feet or less, and fire rated ceiling systems with an area of 96 square feet or less, surrounded by walls which connect directly to the structure above, do not require bracing assemblies when attached to at least two adjacent walls.
 - d. Fasten hanger wires with not less than three tight turns.
 - 1) Fasten bracing wires with not less than four tight turns.
 - 2) Make all tight turns within a distance of 1-1/2 inches.
 - 3) Hanger or Bracing Wire anchors to the structure shall be installed in such a manner that the direction of the wire aligns as closely as possible with the direction of the forces acting on the wire.
 - a) Wire turns made by machine where both strands have been deformed or bent in wrapping can waive the 1-1/2" requirement, but the number of turns shall be maintained, and be as tight as possible.
 - 4) Separate all ceiling and bracing wires at least six inches (6") from all unbraced ducts, pipes, conduit, etc. It is acceptable to attach lightweight items, such as single electrical conduit not exceeding 3/4" nominal diameter, to hanger wires using connectors acceptable to DSA.
 - e. Hangers shall be saddle-tied around main runners to develop the full strength of the hangers.
 - f. Main Runners shall be spliced by lapping and interlocking flanges 12 inches minimum and tying near each end with double loops of #16 gage wire.
 - g. Provide trapeze or other supplementary support members at obstructions to typical hanger spacing. Provide additional hangers, struts or braces as required at all ceiling breaks, soffits or discontinuous areas. Hanger wires that are more than 1 in 6 out of plumb shall have countersloping wires.
 - h. All recessed or drop-in light fixtures, as well as ceiling mounted mechanical air terminals and services, shall be supported directly by main runners or by supplemental framing which is supported by main runners and positively attached with screws or other approved connectors.
 - i. Surface mounted fixtures shall be attached to a main runner with a positive clamping device made of material with a minimum of 14 gage. **ROTATIONAL SPRING CLAMPS DO NOT COMPLY.**
 2. Cross-Furring:
 - a. Cross-Furring shall be 7/8 inch, 25 gage galvanized hat sections at 24 inches on center maximum.

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- b. Cross-Furring shall be saddle-tied to the main runners with one strand of #16 gage, or two strands of #18 gage tie wire.
 - c. Cross-Furring shall be spliced by lapping and interlocking the pieces eight inches minimum and tying near each end with double loops of #16 gage wire.
- D. Furring Channels:
 - 1. Attach hat channels at 16" o.c. to framing members at 24" o.c. maximum with one 1-1/2" Type "G" screw at each bearing point. Stagger screws to opposite sides at every bearing surface.
- E. Gypsum Board:
 - 1. General:
 - a. During Winter Weather Installation periods, follow the GA-220 GYPSUM BOARD WINTER RELATED INSTALLATION RECOMMENDATIONS.
 - 2. Install in accordance with CBC Chapter 25, DITF and GA recommendations, gypsum board panel manufacturer's written recommendations and in accordance with fire-rated design numbers.
 - a. At Ceilings and Soffits:
 - 1) At gypsum board ceilings and soffit areas, install the ceiling prior to installing the walls.
 - 2) Float the interior ceiling angles, and where permitted by code,
 - b. At Sound and Acoustical Walls:
 - 1) Set all gypsum board panels on each side of the partition in a continuous 1/4 inch bead of acoustical sealant furnished and installed in accordance with the provisions of Specification Section -- SEALANTS.
 - c. At Moisture Resistant Walls:
 - 1) Install where scheduled and in all areas where high moisture conditions are present, or ceramic tile, or wall coverings are scheduled over gypsum board.
 - 2) In all areas to be tiled, treat all edges, cutouts, utility holes and joints, corners and nailheads with an approved sealant material in lieu of standard taping. Joints not to be covered by tile shall be treated as regular gypsum board. Do not use standard joint compound under ceramic tile.
 - d. At Sheathing:
 - 1) Screw-attach sheathing to exterior of each stud with 1" Type "S-12" corrosion resistant screws spaced 3/8" from ends and edges and approximately 8" o.c. Apply sealant around sheathing perimeter at interface with other materials and install flashing.
 - 3. Install gypsum board panels horizontally on walls, floor to ceiling.
 - 4. At metal frames terminate wall board panel edge inside frame. Do not terminate gypsum board panel edge against metal frame trim unless otherwise indicated.
- F. Cutting:
 - 1. Cut gypsum board panels by scoring and breaking or by sawing, working from the face side.
 - a. When cutting by scoring, cut through the face paper and then snap the panel back away from the cut face; then break the backpaper by snapping the panel in the reverse direction or by cutting the back paper.
 - 2. Smooth all cut ends and edges of panels as necessary to obtain a smooth joint.
 - 3. For cut-outs in panels for pipes, fixtures, and other small openings, make holes and cut-outs by sawing or by such other method as will not fracture the core or tear the covering and with such accuracy that plates, escutcheons, or trim will cover the edges.
 - 4. The use of "score-and-knockout" method will not be permitted.
- G. Metal Accessories:
 - 1. Corner Beads:
 - a. Install at all corners with galvanized screws at nine (9) inch intervals in both flanges with fasteners placed opposite one another the full length of the corner bead. Clinch-on fastening is not allowed.

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- 1) Fasteners shall be driven below the anticipated finished joint compound surface.
 - b. Install in one piece except when length of corner exceeds stock lengths – then put splice up high away from people traffic.
 2. Edge Trim: Install at all exposed joints where gypsum board panels abut another material with galvanized screws at nine (9) inch intervals the full length of the edge trim. Clinch-on fastening is not allowed.
 - a. Fasteners shall be driven below the anticipated finished joint compound surface.
 - b. Provide joint sealer in accordance with Specification Section -- SEALANTS.
 - 1) Provide fire sealant in accordance with Specification Section -- FIRSTOPPING or Specification Section -- SEALANTS, when the wall or ceiling is part of a fire-rated situation.
 3. Control Joints:
 - a. Install at 30'-0" o.c. maximum at all interior walls or partitions with uninterrupted planes that exceed 30' in length.
 - 1) Opening frames that are full height of wall or partition may be considered a control joint.
 - b. Install at 50'-0" o.c. maximum at all interior ceilings and shall not exceed 2,500 sq.ft. in total area with perimeter relief.
 - c. Install at 30'-0" o.c. maximum at all interior ceilings and shall not exceed 900 sq.ft. in total area without perimeter relief.
- H. Fastening:
 1. Properly space all fasteners in careful accordance with the manufacturer's written recommendations and code requirements, with heads driven slightly below the surface for proper cementing, but without breaking the paper face.
 2. Loosely butt all joints to be taped; firmly butt all joints to be left untreated.
 3. Stagger all end joints and the joints between panels to achieve a maximum of bridging and a minimum of continued joints.
- I. Taping and Finishing:
 1. First Coat:
 - a. Spread compound evenly over all joints, using suitable tools designed for the purpose.
 - b. Fill all joint recesses and metal trim.
 - c. Center the reinforcing tape on the joint and press into the fresh compound at all joints, wiping down with sufficient pressure to remove excess compound but leaving sufficient compound under the tape for proper bond.
 - d. Feather all edges and leave the surface free from blisters and tape wrinkles.
 - e. Apply compound to all fastener recesses, leaving flush with the adjacent surfaces.
 - f. Fold reinforcing tape along its centerline and apply to all interior angles, following the same procedure as for joints.
 - g. Surfaces shall be free of excess joint compound.
 2. Second Coat:
 - a. Lightly sand the dry compound with fine sandpaper to remove all irregularities.
 - b. Apply a second coat of compound to all joints, feathering approximately three inches beyond edges of tape.
 - c. Apply second coat to all fastener recesses.
 - d. Surfaces shall be free of excess joint compound.
 3. Third Coat:
 - a. Lightly sand the dry compound with fine sandpaper to remove irregularities.
 - b. Apply final skim coat, feathering out approximately two inches beyond second coat.
 - c. Third coat all fastener recesses and metal trim, and all interior angles; allow to dry.
 - d. Surfaces shall be free of excess joint compound.
- J. Prep. Coat (Drywall Primer):

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1. Apply Prep. Coat material at approximately 200 sq.ft. per gallon for all painted wall surfaces. Follow manufacturer's written recommendations for proper preparation of material, mixing and installation at recommended minimum coverage rates.
 - a. For smooth walls with no texture, provide airless sprayer application in accordance with manufacturer's written recommendations.
 - 1) Fine finish: Sand wall surface with 220 grit mesh screen after application of Prep. Coat. **Do not oversand!**
 - b. For textured walls: Provide roller application with a 3/8" to 1/2" nap roller before texture application is applied in accordance with manufacturer's written recommendations.
- K. Primer - Surfacers:
 1. Apply Primer - Surfacers material at manufacturer's written recommendations for proper preparation of material, mixing and installation, and at recommended minimum coverage rates.
 - a. For smooth walls with no texture, provide airless sprayer application in accordance with manufacturer's written recommendations.
 - 1) Fine finish: Sand wall surface with 220 grit mesh screen after application of Primer - Surfacers. **Do not oversand!**
 - b. For textured walls: Provide roller application with a 3/8" to 1/2" nap roller before texture application is applied in accordance with manufacturer's written recommendations.
- L. Textured Finish Coats: After taping and finishing, apply Textured Finish Coats as indicated in the schedule at the end of this Specification Section.

3.4 FIELD QUALITY CONTROL

- A. Marking and Identification:
 1. Where there is an accessible concealed floor, floor-ceiling or attic space, fire walls, fire barriers, fire partitions, smoke barriers and smoke partitions or any other wall required to have protected openings or penetrations shall be effectively and permanently identified with signs or stenciling in the concealed space and shall comply with all of the following:
 - a. Be located in accessible concealed floor, floor/ceiling, or attic spaces.
 - b. Be located within 15 feet of the end of each wall and at intervals not exceeding 30 feet measured horizontally along the wall or partition.
 - c. Include lettering not less than 3 inches in height with a minimum 3/8 inch stroke in a contrasting color identifying the wall type and its fire-resistance rating.
 - 1) "FIRE AND/OR SMOKE BARRIER-PROTECT ALL OPENINGS," or other wording.
- B. Site Tests:
 1. Testing Agency: The Owner's Testing Laboratory Agency shall perform field tests and Inspections and prepare test reports.
 - a. Testing and inspecting of completed installations of suspended gypsum board ceiling fasteners and anchors shall take place in successive stages, in areas of extent and using methods as follows. Do not proceed with installations of gypsum board ceiling hangers for the next area until test results for previously completed installations of acoustical panel ceiling hangers show compliance with requirements.
 2. Extent of Each Test Area: When installation of ceiling suspension systems on each floor has reached 20 percent completion but no panels have been installed:
 - a. Concrete Anchors:

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- 1) Must be capable of sustaining, without failure, a load equal to 200 lbs. tension for hanger wires and 440 lbs. tension for bracing wires by construction as determined by testing according to ASTM E 488 "Test Methods for Strength of Anchors in Concrete and Masonry Elements," by a qualified independent testing agency.
 - a) Hanger Wire Anchors 1 in 10 must be field tested.
 - b) Bracing Wire Anchors 1 in 2 must be field tested.
3. Remove and replace gypsum board ceiling hangers where test results indicate that they do not comply with specified requirements.
4. Additional testing and inspecting, at Contractor's expense, will be performed to determine compliance of replaced or additional work with specified requirements.
 - a. When testing discovers fasteners and anchors that do not comply with requirements, testing agency will test those anchors or previously tested until 20 pass consecutively and then will resume initial testing frequency.
- C. Inspection:
 1. As required by Regulatory Requirements.
 2. Schedule inspections and notify the Architect, Project Inspector and any other regulatory agencies of the time at least 48 hours prior to the inspection.
 3. No work shall be without the inspections required by Regulatory Requirements.

3.5 CLEANING

- A. Clean in accordance with Specification Section - PROJECT CLOSEOUT.
 1. Clean any soiled surfaces immediately.
 2. Clean any soiled surfaces at the end of each day, minimum.
 3. Finish shall be clean and ready for the application of any additional finishes.
 4. In accordance with manufacturer's written instructions and recommendations.

3.6 PROTECTION

- A. Protection from weather:
 1. Protect newly installed work from moisture after installation.
- B. Protection from traffic:
 1. Provide final protection and maintain conditions, in a manner acceptable to manufacturer and installer, which ensures the work of this section being without damage or deterioration until the time of Substantial Completion.

3.7 SCHEDULES

- A. The following textured finish coat finishes shall be applied to the board surfaces within the scope of this section prior to covering with other finish materials.
 1. Refer to the Material and Finish Schedule for specific locations of each substrate finish.
 2. Where no specific substrate finish is called for on the drawings, select the appropriate level of substrate finish from the descriptions below for the final finish material.
 3. Where no determination can be made from the descriptions below, provide a minimum of GB-2 substrate finish.
 4. Where sound, smoke control or fire-ratings are required, details of construction shall be in accordance with reports of tested assemblies meeting the requirements.
- B. GB-2 - Architect's Finish Designation:
 1. Level 4 - GYPSUM ASSOCIATION'S LEVEL OF GYPSUM BOARD FINISH:
 - a. All joints and interior angles shall have tape embedded in joint compound and two separate coats of joint compound applied over all flat joints and one separate coat of joint compound applied over interior angles. Fastener heads and accessories shall be covered with three separate coats of joint compound. All joint compound surfaces shall be smooth and free of tool marks and ridges.

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- b. Architect's Finish:
 - 1) Uniformly smooth and ready to receive light textures ("Spray-Splatter," "Orange Peel" (light or heavy) "Stipple" or "Skip Trowel" finishes), or medium grade wall-coverings.
 - 2) Use "Orange Peel" light texture finish when walls and ceilings are scheduled to be painted, unless otherwise noted.

END OF SECTION

SECTION 09 50 00 – ACOUSTICAL CEILINGS

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes the following:
 - 1. Provide all material, labor, equipment and services necessary to completely install all Acoustical Ceiling Materials, Suspension Systems, accessories and other related items necessary to complete the Project as indicated by the Contract Documents.
- B. Related Sections: The following Project Manual Sections contain requirements that relate to this section:
 - 1. DIVISION 00 SPECIFICATION SECTIONS.
 - 2. DIVISION 01 SPECIFICATION SECTIONS.
 - 3. 09 29 00 GYPSUM BOARD
 - 4. 09 91 00 PAINTING
 - 5. SPECIFICATION SECTIONS IN THE FACILITY SERVICES SUBGROUP.

1.2 REFERENCES

- A. Standards:
 - 1. In accordance with the following standards:
 - a. Cisca Ceilings & Interior Systems Construction Association.

1.3 SYSTEM DESCRIPTION

- A. Suspension System Design Requirements: In accordance with allowable values and properties assigned and approved by CBC.
 - 1. Heavy Duty in accordance with ASTM C 635 "Standard Specification for the Manufacture, Performance, and Testing of Metal Suspension Systems for Acoustical Tile and lay-in Panel Ceilings," ASTM E 580 "Practice for Application of Ceiling Suspension Systems for Acoustical Tile and Lay-in Panels in Areas Requiring Seismic Restraint," Section 5.1, ASCE 7 as modified by CBC Sections 1617A.1.21, 2506.2.1, and DSA IR 25-2.
 - 2. Design Weight: Total Weight does not exceed four (4) pounds per square foot, including air conditioning grilles and light fixtures.
 - 3. System is not to support lateral loads from partitions.
 - 4. Fasteners must be capable of sustaining, without failure, hanger wires with 200 lbs. tension load and bracing wires with 440 lbs. tension load.

1.4 SUBMITTALS

- A. Submit in accordance with Specification Section - SUBMITTAL PROCEDURES:
 - 1. Product Data.
 - a. Manufacturers Product Information for each type of Acoustical Ceiling Tile or Panel scheduled to be used.
 - b. Manufacturers Product Information for each component of the Suspension System specified or scheduled.
 - 2. Shop Drawings.
 - a. Submit shop drawings from manufacturer detailing ceiling suspension system assemblies and indicating dimensions, method of field assembly (including hanger and bracing wires, compression struts, wall angle attachments), other components, and location and detail of each suspension system grid connection.
 - 1) Submit drawings showing details of Hanger Wires, Brace Wires, expansion joint locations, and Compression Strut connections to structure and to suspension system.
 - 3. Samples.

- a. Provide 4 to 6 inch square sample for each type of Acoustical Ceiling Tile or Panel scheduled to be used.
- b. Provide 12 inch lineal sample of Suspension System components for each type of system specified or scheduled.
- 4. Quality Assurance/Control Submittals:
 - a. Test Reports:
 - 1) Tension Tests of acoustical ceiling wire anchors provided by Testing Agency.
 - b. Certificates:
 - 1) General Construction: Certification signed by the Contractor on Contractor's letterhead.
 - 2) Certificates signed by manufacturers of Acoustical Ceiling components certifying that their products comply with specified requirements.
 - c. Manufacturer's Written Instructions:
 - 1) Manufacturer's written instructions showing their suspension grid installation methods.
- 5. Closeout Submittals in accordance with the following:
 - a. In accordance with Specification Section - PROJECT DOCUMENTS.
 - b. Warranty in accordance with Specification Section - WARRANTIES.

1.5 QUALITY ASSURANCE

A. Qualifications:

- 1. Material Qualifications:
 - a. Where fire-rated Acoustical Ceiling assemblies are indicated, provide materials and construction identical to those of assemblies tested for fire resistance per UL or ASTM E 119 "Test Methods for Fire Tests of Building Construction and Materials," by an independent testing and inspecting agency acceptable to the California State Fire Marshal.
 - b. Source Limitations:
 - 1) Acoustical Ceiling Tiles or Panels: Obtain each type through one source from a single manufacturer.
 - 2) Suspension Systems: Obtain each type through one source from a single manufacturer.
- 2. Installer Qualifications:
 - a. Engage an experienced Installer who has successfully completed three (3) projects of similar scope and size to that indicated for this Project.
 - 1) Helpers and apprentices used for such work shall be under full and constant supervision at all times by thoroughly skilled Acoustical Ceiling and Suspension System installers.
 - 2) In the acceptance or rejection of installed Acoustical Ceiling or Suspension Systems, no allowance will be made for lack of skill on the part of the installers.
- 3. Manufacturer/Supplier Qualifications:
 - a. Firm experienced in successfully producing/supplying products similar to that indicated for this Project, with sufficient production/supply capacity to produce/supply required units without causing delay in the work.
 - b. Products, materials and evaluation reports to comply with IR-A5.

B. Regulatory Requirements:

- 1. In accordance with Specification Section - REGULATORY REQUIREMENTS, and the following:
 - a. CBC California Building Code (CBC 803.1.1)

- b. CDPH California Department of Public Health, “Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers”
 - c. CSFM California State Fire Marshal.
 - d. FDA Food and Drug Administration, a department of US Department of Health and Human Services.
 - e. IR Interpretation of Regulations.
 - f. USDA/FSIS United States Department of Agriculture., Food Safety and Inspection Service.
- C. Certificates:
- 1. General Construction: Contractor to certify that work provided meets or exceeds the requirements of this section.
 - 2. Products: Manufacturers of Acoustical Ceiling components shall certify that their products comply with specified requirements.
- D. Meetings:
- 1. Pre-Installation: Scheduled by the Contractor prior to the start of work.
 - a. Coordinate the work with other work being performed.
 - b. Identify any potential problems that may impede planned progress and proper installation of work regarding quality of installation and warranty requirements.
 - 2. Progress: Scheduled by the Contractor during the performance of the work.
 - a. Review for proper installation of work progress.
 - b. Identify any installation problems and acceptable corrective measures.
 - c. Identify any measures to maintain or regain project schedule if necessary.
 - 3. Completion: Scheduled by the Contractor upon proper completion of the work.
 - a. Inspect and identify any problems that may impede issuance of warranties or guaranties.
 - b. Maintain installed work until the Notice of Substantial Completion has been executed.
- 1.6 DELIVERY, STORAGE, AND HANDLING
- A. Packing, shipping, handling, and unloading:
- 1. Products shall be handled in such a manner as to assure that they are free from dents, scratches and other damage.
- B. Acceptance at Site:
- 1. Products must be in manufacturer's original unopened containers with labels indicating brand name, model, and grade.
 - 2. Damaged products will not be accepted.
- C. Storage and protection:
- 1. Products shall be stored in a fully enclosed, conditioned space and protected against damage from moisture, humidity, temperature extremes, direct sunlight, surface contamination and other causes.
- 1.7 PROJECT CONDITIONS
- A. Environmental requirements:
- 1. Do not install acoustical ceilings until spaces are enclosed and weatherproof.
 - 2. Wet work and dry work in spaces is completed, dry and dust free.
 - 3. Work above ceilings is completed.
 - 4. Ambient temperature and humidity conditions are maintained at the levels indicated for Project when occupied for its intended use.
- B. Existing Conditions:
- 1. Examine site and compare it with the drawings and specifications. Thoroughly investigate and verify conditions under which the work is to be performed. No allowance will be made for extra work resulting from negligence or failure to be acquainted with all

available information concerning conditions necessary to estimate the difficulty or cost of the work.

1.8 SEQUENCING AND SCHEDULING

A. Coordination:

1. Coordinate layout and installation of Acoustical Ceiling Tiles, Panels and the Suspension Systems with other construction that penetrates ceilings or is supported, including light fixtures, HVAC equipment, smoke monitoring and fire-suppression systems.

1.9 WARRANTY

A. Contractor's General Warranty:

1. In accordance with Specification Section - WARRANTIES.

B. Manufacturer's Warranty:

1. In accordance with manufacturer's written standard warranty:
 - a. Warranty Period One (1) Year.

C. Installer's Warranty:

1. In accordance with the terms of the Specification Section - WARRANTIES:
 - a. Warranty period [One (1) Year.][Five (5) years.]

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Products specified are from companies listed below, or approved equivalent. These products listed herein establish the size, pattern, color range and function selected by the Architect for this Project. Manufacturers listed as acceptable alternative manufacturers must still comply with the requirements of the products listed in order to be approved as an equivalent during the Submittal Process. If the acceptable alternative manufacturers listed are not approved during the Submittal Process due to non-compliance with the contract documents, then the Contractor shall submit product specified.

1. Specified Tile and Panel product manufacturer:
 - a. ARMSTRONG WORLD INDUSTRIES.
 - b. Acceptable alternative manufacturers:
 - 1) CERTAINTEED.
 - 2) UNITED STATES GYPSUM COMPANY, USG INTERIORS.
2. Specified Suspension System product manufacturer:
 - a. ARMSTRONG WORLD INDUSTRIES.
 - b. Acceptable alternative manufacturers:
 - 1) ROCKFON NORTH AMERICA - CHICAGO METALLIC CORPORATION.

- B. Products from other manufacturers not listed must submit in accordance with Specification Section - SUBSTITUTION PROCEDURES.

2.2 MATERIALS

A. Tile or Panel:

1. General:
 - a. Standard: Provide manufacturer's standard tile or panels of configuration indicated that comply with ASTM E 1264 "Standard Classification for Acoustical Ceiling Products" classifications as designed by type, pattern, acoustical rating, light reflectance, and fire-rating, unless otherwise indicated.
 - b. Colors and Patterns: Match appearance characteristics indicated for each product type.
 - c. Antimicrobial Treated:

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- 1) Coating-Based: Provide tile or panel face surfaces (front and back) with coated antimicrobial treatment consisting of manufacturer's standard formulation with fungicide added to inhibit growth of mold and mildew and showing no mold or mildew growth when tested according to ASTM D 3273 "Standard Test method for Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber."
- 2) Panel-Base: Provide tiles or panels treated with manufacturers standard antimicrobial solution that inhibits fungus, mold, mildew, gram-positive and gram-negative bacteria.
2. See the Acoustical Tile and Panel Schedule at the end of this section for specified tile or panel types.
- B. Suspension Systems:
 1. General:
 - a. Classification of Suspension System Grid is Heavy Duty in accordance with ASTM C 635 "Standard Specification for the Manufacture, Performance, and Testing of Metal Suspension Systems for Acoustical Tile and lay-in Panel Ceilings," ASTM E 580 "Practice for Application of Ceiling Suspension Systems for Acoustical Tile and Lay-in Panels in Areas Requiring Seismic Restraint," Section 5.1, ASCE 7 as modified by CBC Sections 1617A.1.21, 2506.2.1, and DSA IR 25-2.
 - b. Provide Underwriter's Laboratory (UL) design number or California State Fire Marshal (CSFM) Listing number for the fire-rated ceiling assembly.
 - 1) The components and installation details must conform in every respect with the UL or CSFM approval for the design number specified.
 - 2) Custom designs which combine components from different approval designs but have not been tested as a complete assembly are not acceptable.
 - 3) See Exposed Grid at end of this section for specified system numbers.
 2. Wire:
 - a. Soft temper, Class 1 zinc coating, in accordance with ASTM A 641 "Specification for Zinc-Coated (Galvanized) Carbon Steel Wire."
 - 1) Hanger: 12 gage (0.106 inch diameter).
 - 2) Brace: 12 gage (0.106 inch diameter).
 3. Clip Attachments:
 - a. General: Fabricate from corrosion-resistant material with holes or loops for attaching hanger and brace wires.
 - 1) Ceiling Clips: 3/4" wide x 13 gage, galvanized steel.
 - 2) Steel Straps:
 - a) 1" wide x length as required, 12 gage galvanized steel.
 - b) 3" wide x 4" long x 12 gage galvanized steel.
 4. Grid:
 - a. Grid System shall be manufactured from commercial quality galvanized steel.
 - b. All Tee Grid System Numbers are from ARMSTRONG WORLD INDUSTRIES.
 - 1) Exposed Non-Rated 15/16" Tee Grid System "Prelude XL" (P-XL).
 - 2) Exposed Fire-Rated 15/16" Tee Grid System "Prelude XL Fire Guard" (P-XL).
 - 3) Exposed Non-Rated 9/16" Tee Grid System "Suprafine XL" (S-XL).
 - c. Main Runners:
 - 1) Main Runner – Non-Rated 15/16" #P-XL 7301.
 - 2) Main Runner – Fire-Rated 15/16" #P-XL 8301.
 - 3) Main Runner - Non-Rated 9/16" #S-XL 7501.

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- 4) Capped, Double-Web roll-formed from cold-rolled steel sheets, pre-painted with factory punched cross runner slots, hanger holes and integral bayonet style and couplings.
- 5) Fire-rated: Manufactured with fire-expansion reliefs.
- d. Cross Runners:
 - 1) 2' Non-Rated Cross Runner 15/16" #P-XL 7328.
 - 2) 4' Non-Rated Cross Runner 15/16" #P-XL 7341.
 - 3) 2' Fire-Rated Cross Runner 15/16" #P-XL 8323.
 - 4) 4' Fire-Rated Cross Runner 15/16" #P-XL 8341.
 - 5) 2' Non-Rated Cross Runner 9/16" #S-XL 7520.
 - 6) 4' Non-Rated Cross Runner 9/16" #S-XL 7540.
 - 7) Capped, Double-Web roll-formed from cold-rolled steel sheets, pre-painted with factory punched cross runner slots and hanger holes.
 - 8) Fire-rated: Manufactured with fire-expansion reliefs.
- e. Wall Angles:
 - 1) "Angle" Ceiling Edge Trim, hemmed exposed edges, 7/8" x 7/8", #7800.
 - 2) "Angle" Ceiling Edge Trim, hemmed exposed edges, 2" x 2", #7808.
 - 3) Roll-formed of sheet metal of same gage and finish as the main runners.
 - 4) Provide wall angles fabricated to diameter required to fit circular penetrations of ceilings exactly.
- f. Panel Hold Down Clips:
 - 1) Hold Down Clip #P-XL 414.
- g. Compression Struts (Metal angles, galvanized steel):
 - 1) 1/8 inch thick x 1 inch x 1 inch 800 lbs./1000 feet weight.
 - 2) 3/16 inch thick x 1-1/4 inch x 1-1/4 inch 1,480 lbs./1000 feet weight.
 - 3) 3/16 inch thick x 1-1/2 inch x 1-1/2 inch 1,800 lbs./1000 feet weight.
 - 4) 3/16 inch thick x 1-3/4 inch x 1-3/4 inch 2,120 lbs./1000 feet weight.
 - 5) 3/16 inch thick x 2 inch x 2 inch 2,440 lbs./1000 feet weight.
 - 6) 3/16 inch thick x 2 inch x 2-1/2 inch 3,070 lbs./1000 feet weight.
 - 7) 3/16 inch thick x 3 inch x 3 inch 3,710 lbs./1000 feet weight.
 - 8) 1/4 inch thick x 3-1/2 inch x 3-1/2 inch 5,800 lbs./1000 feet weight.
 - 9) 1/4 inch thick x 4 inch x 4 inch 6,600 lbs./1000 feet weight.
 - 10) Alternate Compression Struts Refer to drawings.
 - a) Must be submitted to and approved by DSA.
- h. Seismic Clips:
 - 1) Seismic Perimeter Clips #BERC2.
- i. Cold Rolled Channels, 16 gage galvanized steel:
 - 1) 1-1/2" x 17/32" flange 475 lbs/1000 feet weight.

2.3 ACCESSORIES

A. Fasteners:

1. Wood Construction:
 - a. Provide corrosion-resistant materials.
 - b. Eye screws, minimum 1/4 inch diameter, 1-1/4 inch minimum embedment.
 - c. Staples, 1-1/2 inch x 0.148 inch diameter (9 gage).
 - d. Nails, STRONGHOLD "J" nails.
2. Steel Framing:
 - a. Shot-in Anchors.
3. Metal Deck or Metal Deck without Structural Concrete:
 - a. Self-tapping Screws.
4. Metal Deck or Metal Deck with Structural Concrete or Concrete:

- a. Shot-in Anchors (hanger wire only).
- b. Drilled-in Anchors.
- 5. Suspension System Fasteners, runner to wall angle:
 - a. Pop rivets as standard with the manufacturer, heads to match the finish of the main runners.
 - 1) Pop-rivets, screws or other attachments are not acceptable unless specifically detailed on the manufacturer's drawings and approved by UL and the CSFM.
- B. Adhesives:
 - 1. Provide adhesives that comply with all requirements of ASTM D 1779 "Standard Specification for Adhesive for Acoustical Materials," for non-rated and fire-rated assemblies, and shall be compatible with the substrate to which the tile is to be installed as well as the tile material selected, and shall be UL Labeled for Class 0 - 25 Flame Spread..
- C. Sealants:
 - 1. Acoustical Sealant for Exposed and Concealed Joints: Manufacturer's standard non-sag, paintable, non-staining latex sealant complying with ASTM C 834 "Specification for Latex Sealants," and effective in reducing airborne sound transmission through perimeter joints and openings in building construction as demonstrated by testing representative assemblies according to ASTM E 90 "Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements."
 - 2. Acoustical Sealant for Concealed Joints: Manufacturer's standard non-drying, non-hardening, non-skinning, non-staining, gunnable, synthetic-rubber sealant recommended for sealing interior concealed joints to reduce airborne sound transmission.
- D. Other Materials: All other miscellaneous materials, not specifically described, but required for a complete and proper installation of acoustical ceilings, shall be as selected by the Contractor subject to the approval of the Architect.

2.4 FINISHES

- A. Factory Finish:
 - 1. Suspension System: Manufacturer's standard baked-on enamel finish to all members. All fasteners shall match the main runner finishes.
 - a. General: Comply with NAAMM's "Metal Finishes manual for Architectural and Metal Products" for recommendations for applying and designating finishes.
 - 2. Tile or Panel: Refer to Tile and Panel Schedule for finishes.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Site verification of conditions:
 - 1. Prior to the execution of the work under this specification section, examine substrates, areas, and conditions, including structural framing to which acoustical ceilings attach or abut, with installer present, for compliance with requirements specified in this and other Sections that affect ceiling installation and anchorage and with requirements for installation tolerances and other conditions affecting performance of acoustical ceilings.
 - 2. Report unacceptable conditions to the Architect. Do not begin work until unacceptable conditions have been corrected.
 - 3. Execution of work under this specification section shall constitute acceptance of existing conditions.

3.2 PREPARATION

- A. Coordination:
 - 1. Coordinate work under this specification section with work specified under other sections to ensure proper and adequate interface of work.

2. Coordinate proper placement of ceiling mounted tracks, accessories, light fixtures, HVAC registers and other items which are to be integrated with acoustical ceilings.
 3. Measure each ceiling area and establish layout of acoustical tiles or panels to balance border widths at opposite edges of each ceiling. Avoid using less-than-half-width tiles or panels at borders, and comply with layout shown on reflected ceiling plans.
- B. Protection:
1. Do not begin work until all rooms have been protected against the weather.
 2. Protect all adjacent surfaces from drips, spray, air pollution of surrounding environment, and other damage from work under this specification section.
- C. Surface preparation:
1. Prepare surface in accordance with manufacturer's written instructions and recommendations.
 2. Clean substrates of substances (oil, grease, rolling compounds, incompatible primers, loose mill scale, etc.) which could impair bond of materials specified within this section.

3.3 INSTALLATION

- A. General:
1. In accordance with manufacturer's written instructions and recommendations along with CISCA's "Ceiling Systems Handbook" and USDA.
 2. In accordance with approved Submittals.
 3. In accordance with Regulatory Requirements.
 4. Installation shall comply with ASTM C 636 "Practice for Installation of Metal Ceiling Suspension Systems for Acoustical Tile and Lay-In Panels," and ASTM E 580 "Practice for Application of Ceiling Suspension Systems for Acoustical Tile and Lay-in Panels in Areas Requiring Seismic Restraint," Section 5.2.
 5. Installation shall also comply with CBC Section 1617A.1.21, 2506.2.1, and DSA IR 25-2.
- B. Layout:
1. Lines shall be straight and true.
 2. Set plumb, level, and square.
- C. Suspension System:
1. 12 gage (minimum) hanger wires may be used for up to and including 4'-0" x 4'-0" grid spacing and attached to main runners. Splices will not be permitted in any hanger wires unless specifically approved by DSA/SSS.
 2. Provide 12 gage hanger wires at ends of all main and cross runners within 8" from the support or within 1/4 of the length of the end tee, whichever is least, for the perimeter of the ceiling area.
 - a. End connections for runners, which are designed and detailed to resist the applied horizontal forces may be used in lieu of the 12 gage hanger wires subject to DSA/SSS review and approval.
 - b. Perimeter wires are not required when the length of the end tee is 8" or less.
 3. Provide trapeze or other supplementary support members at obstructions to maintain hanger spacing.
 - a. Provide additional hangers, struts or braces as required at all ceiling breaks, soffits or discontinuous areas.
 - b. Hanger wires that are more than 1 in 6 out of plumb are to have counter-sloping wires.
 4. Ceiling grid members may be attached to not more than 2 adjacent walls. Ceiling grid members should be at least 3/4 inch free of other walls.
 - a. If walls run diagonally to ceiling grid system runners, one end of main and cross runners should be free and a minimum of 3/4 inch clear of wall.
 - b. Pop rivets, screws, or other attachments in fire-rated ceilings shall not be acceptable unless specifically detailed on the manufacturer's drawings and approved by UL and DSA/FLS.

5. At the perimeter of the ceiling area where main or cross runners are not connected to the adjacent wall, provide Seismic Perimeter Clip, installed in accordance with manufacturer's instructions and ICC-ES Evaluation Report.
6. Provide bracing assemblies consisting of a compression strut and slotted angle spacer of four (4) 12 gage splayed bracing wires oriented 90 degrees from each other.
 - a. Bracing assemblies shall be provided for each 144 square feet of ceiling area.
 - 1) Spaced not more than 12 feet by 12 feet on center.
 - b. Bracing assemblies shall be located not more than 1/2 the above spacing from each perimeter wall or at the edge of vertical ceiling offsets.
 - c. The slope of these wires should not exceed 45 degrees from the plane of the ceiling and should be taut without causing the ceiling to lift.
 - d. Splices in bracing wires are not permitted unless specifically approved by DSA/SSS.
 - e. Fire-Rated Assemblies shall have a bracing assembly for each 96 square feet.
 - 1) The first bracing assembly is required not more than four feet (4'-0") from each wall.
 - 2) A minimum of one bracing assembly is required between any two adjacent expansion cut-outs on runners being braced.
 - f. Bracing assemblies are not required where the ceiling area is:
 - 1) 144 sq.ft. or less.
7. Fasten hanger wires with not less than 3 tight turns. Fasten bracing wires with 4 tight turns.
 - a. Make all tight turns within a distance of 1-1/2 inches.
 - b. Hanger or bracing wire anchors to the structure should be installed in such a manner that the direction of the wire aligns as closely as possible with the direction of the forces acting on the wire.
8. Separate all ceiling hanging and bracing wires at least 6 inches from all unbraced ducts, pipes, conduit, etc.
 - a. It is acceptable to attach lightweight items, such as single electrical conduit not exceeding 3/4" nominal diameter, to hanger wires using connectors acceptable to DSA/SSS.
9. Attach all light fixtures and ceiling mounted air terminals or services to the ceiling grid runners to resist a horizontal force equal to the weight of the fixtures.
 - a. Approved screws or fasteners are required.
10. Flush or recessed light fixtures weighing less than 56 pounds and mechanical terminals and services weighing less than 20 lbs. may be supported directly on the runners of a heavy duty grid system but, in addition, they must have a minimum of two (2) 12 gage slack safety wires attached to the fixture at diagonal corners and anchored to the structure above.
 - a. All 4 ft. x 4 ft. fixtures must have slack safety wires at each corner.
11. All flush or recessed light fixtures weighing 56 pounds or more and mechanical terminals and services weighing 20 lbs. or more shall be independently supported by not less than four (4) taut #12 gage wires each attached to the fixture.
 - a. Wires and their attachment to the structure must be capable of supporting 4 times the weight of the unit and attached to the structure above regardless of the type of ceiling grid system used.
12. Support surface mounted light fixtures by at least two positive devices which surround the runner and which are each supported from the structure above with 12 gage wire.
 - a. Spring clips or clamps that connect only the runner are not acceptable.
 - b. Provide additional supports when light fixtures are 8'-0" or longer.

13. Support pendant mounted light fixtures directly from the structure above with hanger wires or cables passing through each pendant hanger and capable of supporting four (4) times the weight of the fixture.
 - a. Bracing assembly is required where the pendant hanger penetrates the ceiling.
 - b. Pendant hanger is required to attach to the bracing assembly to transmit horizontal forces.
 - c. Maximum spacing between supports shall not exceed 8 feet.
 14. Ceiling Edge Condition:
 - a. Where Grid System abuts wall, fasten wall angles to framing in wall structure.
 - 1) At Wood Framing, attach to backing with No. 10 x 3" Screws at 16" o.c.
 - 2) At Metal Framing, attach to metal framing backing with No. 8 self-tapping sheet metal screws at 16" o.c.
 - b. Where Grid System terminates free from wall, fasten wall angles to Grid system with Fasteners. No screw or rivets shall appear on any exposed surface.
 15. Supplemental Support Members:
 - a. Where the width of ducts or other obstructions interfere with typical hangers and bracing assemblies, provide and install supplemental members and hangers in the form of trapeze or equivalent devices.
 - b. Provide additional hangers, struts, or braces at all ceiling breaks, soffits, or discontinuous areas.
 - c. Hanger wires that are more than one (1) horizontal in six (6) vertical shall have counter-sloping wires.
 16. Expansion Joints:
 - a. Expansion Joints shall be provided and installed in the ceiling at intersections of corridors and junctions of corridors with lobbies or other similar areas.
 17. Expansion Joints shall be provided and installed in ceiling areas exceeding 2,500 sq.ft. in order to separate ceilings into areas not exceeding 2,500 sq.ft.
- D. Suspended Acoustical Ceiling Panels:
1. Install acoustical ceiling panels with undamaged edges and fit accurately into suspension system runners and wall angles. Scribe and cut panels at borders and penetrations to provide a neat, precise fit.
 - a. Install panels with pattern running in one direction.
 2. Paint cut edges of panels remaining exposed after installation.
 - a. Match color of exposed panel surfaces using coating recommended in writing for this purpose by acoustical ceiling manufacturer.
 3. Install hold down clips at all Fire-Rated acoustical ceiling assemblies, food preparation areas, and at locker/shower areas.
 4. Penetrations through the ceiling for sprinkler heads and other similar devices that are not integrally tied to the ceiling system in the lateral direction shall have a two (2) inch oversized ring, sleeve, or adapter through the ceiling tile to allow free movement of one (1) inch in all horizontal directions. Alternatively, swing joints may be provided per ASTM E 580, Section 5.2.8.5.
- E. Adhesively applied Acoustical Tiles:
1. Installation shall comply to ASTM D 1779 "Standard Specification for Adhesive for Acoustical Materials."

3.4 FIELD QUALITY CONTROL

A. Site Tests:

1. Testing Agency: The Owner's Testing Laboratory Agency shall perform field tests and Inspections and prepare test reports.
 - a. Testing and inspecting of completed installations of acoustical ceiling fasteners and anchors shall take place in successive stages, in areas of extent and using methods as follows.

- b. Do not proceed with installations of acoustical panel ceiling hangers for the next area until test results for previously completed installations of acoustical panel ceiling hangers show compliance with requirements.
 - 2. Extent of Each Test Area: When installation of ceiling suspension systems on each floor has reached 20 percent completion but no panels have been installed:
 - a. Concrete Anchors:
 - 1) Must be capable of sustaining, without failure, a load equal to 200 lbs. tension for hanger wires and 440 lbs. tension for bracing wires by construction as determined by testing according to ASTM E 488 "Test methods for Strength of Anchors in Concrete and Masonry Elements," by a qualified independent testing agency.
 - a) Hanger Wire Anchors 1 in 10 must be field tested.
 - b) Bracing Wire Anchors 1 in 2 must be field tested.
 - 3. Remove and replace acoustical panel ceiling hangers where test results indicate that they do not comply with specified requirements.
 - 4. Additional testing and inspecting, at Contractor's expense, will be performed to determine compliance of replaced or additional work with specified requirements.
 - a. When testing discovers fasteners and anchors that do not comply with requirements, testing agency will test those anchors not previously tested until 20 pass consecutively and then will resume initial testing frequency.
 - B. Inspection:
 - 1. As required by Regulatory Requirements.
 - 2. Schedule inspections and notify the Architect, Project Inspector and any other regulatory agencies of the time at least 48 hours prior to the inspection.
 - 3. No work shall be without the inspections required by Regulatory Requirements.
- 3.5 CLEANING
- A. Clean in accordance with Specification Section - PROJECT CLOSEOUT.
 - 1. Clean any soiled surfaces immediately.
 - 2. Clean any soiled surfaces at the end of each day, minimum.
 - 3. Finish shall be clean and ready for the application of any additional finishes.
 - B. Clean exposed surfaces of acoustical ceilings, including trim, edge moldings, and suspension system members. Comply with manufacturers written instructions for cleaning and touchup of minor finish damage. Remove and replace ceiling components that cannot be successfully cleaned and repaired to permanently eliminate evidence of damage.
- 3.6 SCHEDULES
- A. Tile and Panel Schedule:
 - 1. TYPE ACT-II:
 - a. Design "School Zone Fine Fissured" No. 1811, Panel.
 - b. Manufacturer ARMSTRONG WORLD INDUSTRIES.
 - c. Material:
 - 1) Wet-Formed mineral fiber, with factory-applied vinyl latex paint surface finish.
 - d. Size 24" x 48" x 5/8" panel – "Square Cut" lay-in edge.
 - e. Mounting 15/16" Fire-Rated exposed tee grid.
 - f. NRC Rating 0.70.
 - g. CAC 40.
 - h. Light Reflectance per ASTM E 1477 "Test method for Luminous Reflectance Factor of Acoustical Materials by Use of Integrating-Sphere Reflectometers":
 - 1) 0.81.
 - i. ASTM Classification per ASTM E 1264 "Classification for Acoustical Ceiling Products":

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- 1) Type III, Form 2, Pattern C D.
- j. Class A per ASTM E 84 "Test method for Surface burning Characteristics of Building Materials":
 - 1) Flame Spread Index 25 or under.
 - 2) Smoke Density Developed Index 50 or less.
- k. Color "White."
- l. Antimicrobial Treatment Bio Block.
- m. Design:
- n.

END OF SECTION

SECTION 09 65 10 – RESILIENT BASE AND ACCESSORIES

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes the following:
 - 1. Provide all material, labor, equipment and services necessary to completely install all Resilient Base and Accessories and other related items necessary to complete the Project as indicated by the Contract Documents.
- B. Related Sections: The following Project Manual Sections contain requirements that relate to this section:
 - 1. DIVISION 00 SPECIFICATION SECTIONS.
 - 2. DIVISION 01 SPECIFICATION SECTIONS.
 - 3. 09 29 00 GYPSUM BOARD
 - 4. 09 56 19 RESILIENT TILE
 - 5. 09 68 40 CARPET
 - 6. 09 91 00 PAINTING

1.2 REFERENCES

- A. Standards:
 - 1. In accordance with Specification Section - Regulatory Requirements, and the following standards:
 - a. ADAAG Americans with Disabilities Act Accessibilities Guidelines.
 - b. RFCI The Resilient Floor Covering Institute.

1.3 SUBMITTALS

- A. Submit in accordance with Specification Section - SUBMITTAL PROCEDURES:
 - 1. Product Data:
 - a. For each type of resilient base and accessory indicated.
 - b. Manufacturer's specified pattern and color on Sheet A/A801.
 - c. Design Data for all compounds, fillers, adhesives, etc.
 - 2. Samples.
 - a. Provide 6 inch linear sample
 - 3. Quality Assurance/Control Submittals:
 - a. Manufacturer's Written Installation Instructions.
 - b. Certificate from resilient base installer that all products supplied for installation comply with local regulations in the area where the project is located controlling the use of Volatile Organic Compounds (VOC's).
 - c. Statement of Installer's Qualifications.
 - 4. Closeout Submittals in accordance with Specification Sections in Division One:
 - a. Maintenance Data (including recommended polish and buffing procedures) in accordance with Specification Section - PROJECT CLOSEOUT.
 - b. Warranty in accordance with this Specification Section, and Specification Section – WARRANTIES.

1.4 QUALITY ASSURANCE

- A. Qualifications:
 - 1. Installer Qualifications:
 - a. Engage an experienced Installer who has successfully completed three (3) projects of similar scope and size to that indicated for this Project, and is competent in the techniques required by the manufacturer.

2. Manufacturer/Supplier Qualifications:
 - a. Firm experienced in successfully producing/supplying products similar to that indicated for this Project, with sufficient production/supply capacity to produce/supply required units without causing delay in the work.
 - B. Regulatory Requirements:
 1. In accordance with Specification Section - REGULATORY REQUIREMENTS, and the following:
 - a. CBC California Building Code (CBC 11B-302.1)
 - C. Meetings:
 1. Pre-Installation: Scheduled by the Contractor prior to the start of work.
 - a. Coordinate the work with other work being performed.
 - b. Identify any potential problems that may impede planned progress and proper installation of work regarding quality of installation and warranty requirements.
 - c. Review delivery, storage, and handling procedures.
 - d. Review Project Conditions.
 - e. Review subfloor preparation procedures.
 2. Progress: Scheduled by the Contractor during the performance of the work.
 - a. Review for proper installation of work progress.
 - b. Identify any installation problems and acceptable corrective measures.
 - c. Identify any measures to maintain or regain project schedule if necessary.
 3. Completion: Scheduled by the Contractor upon proper completion of the work.
 - a. Inspect and identify any problems that may impede issuance of warranties or guaranties.
 - b. Maintain installed work until the Notice of Substantial Completion has been executed.
- 1.5 DELIVERY, STORAGE, AND HANDLING
- A. Packing, shipping, handling, and unloading:
 1. Products shall be handled in such a manner as to assure that they are free from dents, scratches and other damage.
 - B. Acceptance at Site:
 1. Products must be in manufacturer's original unopened containers with labels indicating brand name, type, color, and size.
 2. Damaged products will not be accepted.
 - C. Storage and protection:
 1. Products shall be stored in a dry, protected, interior area above ground on level platforms, six (6) inches above ground, allowing air circulation under stacked units.
 - a. Cover materials with protective waterproof covering providing for adequate air circulation and ventilation.
 - b. Maintain temperature in the storage space between fifty (50) degrees Fahrenheit and ninety (90) degrees Fahrenheit.
 - 1) Seven (7) days prior to installation, acclimate products to environmental requirements of the article titled PROJECT CONDITIONS of this specification section, and the Paragraph titled "Environmental Requirements."
- 1.6 PROJECT CONDITIONS
- A. Environmental requirements:
 1. Temperature: Maintain temperature in space to receive products at sixty-eight (68) degrees Fahrenheit for two (2) days prior, during, and two (2) days following installation.
 - a. After this period, maintain a temperature of not less than fifty-five (55) degrees Fahrenheit.

- b. After installation, at no such time shall the temperature exceed eighty-five (85) degrees Fahrenheit.
- B. Existing Conditions:
 - 1. Examine site and compare it with the drawings and specifications. Thoroughly investigate and verify conditions under which the work is to be performed. No allowance will be made for extra work resulting from negligence or failure to be acquainted with all available information concerning conditions necessary to estimate the difficulty or cost of the work.
 - 2. Field Measurements:
 - a. Take and be responsible for field measurements as required.
 - b. Report any significant differences between field dimensions and drawings to the Architect.

1.7 WARRANTY

- A. Contractor's General Warranty:
 - 1. In accordance with Specification Section - WARRANTIES.
- B. Manufacturer's Warranty:
 - 1. In accordance with manufacturer's written standard warranty:
 - a. Rubber Base Two (2) Years.
 - b. Transitions Two (2) years.
- C. Installer's Warranty:
 - 1. In accordance with the terms of the Specification Section - WARRANTIES:
 - a. Warranty Period Two (2) Years.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. These products listed herein establish the size, pattern, color range and function selected by the Architect for this Project. Manufacturers that are listed as acceptable alternative manufacturers and substitutions must still comply with the requirements of this project and the products listed in order to be approved as an equivalent during the Submittal Process. If the acceptable alternative manufacturers listed or substitutions are not approved during the Submittal Process due to non-compliance with the contract documents, then the Contractor shall submit product specified.
 - 1. Rubber Base manufacturer:
 - a. MANNINGTON COMMERCIAL
 - b. Acceptable alternative manufacturers:
 - 1) ROPPE CORPORATION.
 - 2. Transitions manufacturer:
 - a. MANNINGTON COMMERCIAL.
 - b. Acceptable alternative manufacturers:
 - 1) ROPPE CORPORATION.
 - 3. Underlayment Compound manufacturer:
 - a. ARDEX INCORPORATED.
 - b. Acceptable alternative manufacturers:
 - 1) CHEMREX.
 - a) A compatible bonding agent is needed for this product to adhere to the Vapor-Alkalinity Control System and be considered as equivalent.
 - 4. Crack and Joint Filler manufacturer:
 - a. ARDEX INCORPORATED.

- B. Products from other manufacturers not listed must submit in accordance with Specification Section - SUBSTITUTION PROCEDURES.

2.2 MATERIALS

A. General:

1. Resilient base and accessories shall be of first quality and the product of one manufacturer.
2. Colors and patterns shall be selected from manufacturer's standard line (including premium) except as noted otherwise.
3. All resilient base and accessories shall be impervious to water damage.
4. Minimize seams.

B. Rubber Base:

1. Shall comply with ASTM F 1861 "Standard Specification for Resilient Wall Base," for Type TS (Vulcanized Rubber), Group 1 (Solid and Homogeneous).
 - a. Critical Radiant Flux shall be Class 1, not less than 0.45 W/sq.cm. per ASTM E 648 "Test Method for Critical Radiant Flux of Floor Covering Systems Using a Radiant Heat Energy Source."
2. Base shall be [Coved]
3. Thickness: 0.125".
4. Base height shall be [4"]
5. Length: as long as possible to reduce seams.
6. Provide factory molded inside and outside base corners from the same dye lot as the rubber base.

C. Transitions:

1. Include molding caps, dividers, edges, cove supports, feature strips, reducers, stair nosings, etc.
2. Shall be composed of Thermoplastic Vinyl throughout item.
3. Critical Radiant Flux shall be Class 1, not less than 0.45 W/sq.cm. per ASTM E 648 "Test Method for Critical Radiant Flux of Floor Covering Systems Using a Radiant Heat Energy Source."
4. Shall comply to dimension requirements of section 4.5.2 (changes in level) and section 4.5.3 (carpet-edge trim) of the ADAAG.

2.3 ACCESSORIES

A. Underlayment Compound:

1. Provide free-flowing, self-leveling, pumpable, cement based compound (ARDEX K-15) for applications from 1 inch thick to feathered edges, 4000 psi minimum in accordance with ASTM C 109-modified for air cure only "Test Method for Compressive Strength of Hydraulic Cement Mortars (Using 2-in. Cube Specimens)."
 - a. ARDEX "K-15."

B. Crack and Joint Filler:

1. Provide low viscosity rigid polyurethane filler, tensile strength of 4,000 psi minimum, in accordance with ASTM D 638 "Test method for Tensile Properties of Plastics."
 - a. ARDEX "ARDIFIX".

C. Concrete Primer (if applicable):

1. Nonstaining type as recommended in writing by flooring manufacturer.

D. Adhesives:

1. Adhesive as recommended in writing by resilient base manufacturer.
 - a. Provide manufacturer's written recommended epoxy adhesive at all rubber stair accessories and rubber stair nosings.
2. Compatible with Vapor-Alkalinity Control System, if installed.
3. Shall comply with requirements in the place where the project is located.
4. Shall be water and mildew resistant.

5. Shall bond to non-porous substrate surfaces.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Site verification of conditions:

1. Prior to the execution of the work under this specification section, inspect the installed work executed under other sections of this Project Manual that affect the execution of work under this specification section.
2. Insure that all flooring has been installed, fitted close to the wall to provide even support to the resilient base, and to insure a tight, smooth fit along the floor.
3. Report unacceptable conditions to the Architect. Do not begin work until unacceptable conditions have been corrected.
4. Execution of work under this specification section shall constitute acceptance of existing conditions.

B. Concrete Subfloors:

1. Verify that concrete slabs comply with ASTM F 710 "Practice for Preparing Concrete Floors to Receive Resilient Flooring."
2. Verify that substrates are dry and free of curing compounds, sealers, hardeners, and other materials that may interfere with adhesive bond.
3. Verify that subfloors are free of cracks, ridges, depressions, scale, and foreign deposits.
4. Evaluate the RH (Relative Humidity) and pH (Alkalinity) for compliance with adhesives and resilient tile manufacturer's written substrate preparation recommendations.
 - a. If a Vapor-Alkalinity Control System product has been installed to reduce water vapor emission or phosphates thereby negating the RH and pH Test Results, evaluate products for compatibility with adhesives and resilient base products.
5. Determine adhesion characteristics by performing bond tests recommended by the resilient base and accessory manufacturer.

3.2 PREPARATION

A. Coordination:

1. Coordinate work under this specification section with work specified under other sections to ensure proper and adequate interface of work.

B. Protection:

1. Protect all adjacent surfaces from drips, spray, air pollution of surrounding environment, and other damage from work.

C. Surface preparation:

1. Prepare surface in accordance with manufacturer's written instructions and recommendations.
2. Wall substrates to receive resilient base must be completely clean, dry, smooth and free of oil, grease, rust, paint, varnish, shellac, or any other foreign substance.
3. From floor substrates, remove coatings, including curing compounds, and other substances that are incompatible with adhesives and that may contain soap, wax, oil, or silicone, without using solvents. Use mechanical methods recommended in writing by the resilient base and accessory manufacturer.
 - a. If a Vapor-Alkalinity Control System has been installed, do not remove this system.
4. Fill all cracks, joints, etc. with a Crack and Joint Filler according to manufacturer's written instructions.
5. Install self-leveling underlayment compound at depressed or uneven floor conditions.
6. Vacuum clean substrates to be covered immediately before installation.
7. After cleaning, examine substrates for moisture, alkaline salts, carbonation, or dust.
8. Proceed only after unsatisfactory conditions have been corrected.

9. Perform manufacturer recommended bond test to verify adhesion of resilient base and accessory to substrate.
10. Apply any recommended primers over the leveling compounds or treated concrete slabs prior to the installation of any resilient base or accessory products if recommended by the manufacturer.

3.3 INSTALLATION

A. General:

1. In accordance with manufacturer's written instructions and recommendations unless specifically noted otherwise.
2. In accordance with approved submittals.
3. In accordance with Regulatory Requirements.
4. Set plumb, level, and square.

B. Layout:

1. Lines shall be straight and true.
2. Refer to Floor Pattern Drawing(s) for transitions in color.

C. Resilient Base installation:

1. For base installations on primed metal or enameled surfaces, provide manufacturer's written recommended co-adhesive method of installation applied to both surfaces with contact bond adhesive.
2. On dry, absorbent surfaces, the base shall be adhered with manufacturer's written recommended adhesive and firmly pressed to the walls.
3. Apply resilient base to walls, columns, pilasters, casework and cabinets in toe spaces, and other permanent fixtures in rooms and areas where base is required.
4. Install in lengths as long as possible to minimize seams.
5. Minimize gaps at seams.
6. Align tops of adjacent pieces.
7. Tightly adhere resilient base to substrate throughout length of piece, with base in continuous contact with horizontal and vertical substrates.
8. Do not stretch resilient base during installation.
9. On masonry surfaces, or other similar irregular substrates, fill voids along top edge of resilient base with manufacturer's recommended adhesive filler material.
10. Pre-molded Corners: Install pre-molded corners before installing straight pieces.
11. After the installation, remove all excess adhesive before it dries.
12. Allow adhesive to set firm for approximately 24 hours before washing or applying any pressure.

D. Transition installation:

1. Measure and trim to fit transition pieces prior to installing.
2. Use appropriate approved manufacturer written adhesives for each substrate.
3. After installation, immediately remove all excess adhesive before it dries.

3.4 CLEANING

A. Cleaning:

1. Clean in accordance with Specification Section - PROJECT CLOSEOUT.
2. Clean any soiled surfaces immediately.
3. Clean any soiled surfaces at the end of each day, minimum.
4. Finish shall be clean and ready for the application of any additional finishes.
5. In accordance with manufacturer's written instructions and recommendations.

3.5 PROTECTION

A. Protection from traffic:

1. Provide final protection and maintain conditions, in a manner acceptable to manufacturer and installer, which ensures the work of this section being without damage or deterioration until the time of Substantial Completion.

**RESILIENT BASE AND
ACCESSORIES**

2329.ID

END OF SECTION

SECTION 09 65 19 – RESILIENT TILE

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes the following:
 - 1. Provide all material, labor, equipment and services necessary to completely install all Resilient Tile Floor Covering materials, accessories and other related items necessary to complete the Project as indicated by the Contract Documents.
- B. Related Sections: The following Project Manual Sections contain requirements that relate to this section:
 - 1. DIVISION 00 SPECIFICATION SECTIONS.
 - 2. DIVISION 01 SPECIFICATION SECTIONS.
 - 3. 08 11 00 METAL DOORS AND FRAMES
 - 4. 09 29 00 GYPSUM BOARD
 - 5. 09 65 10 RESILIENT BASE AND ACCESSORIES
 - 6. 09 65 16 RESILIENT SHEET
 - 7. 09 68 40 CARPET

1.2 REFERENCES

- A. Standards:
 - 1. In accordance with the following standards:
 - a. ADAAG Americans with Disabilities Act Accessibilities Guidelines
 - b. ASTM American Society of Testing Materials
 - c. RFCI The Resilient Floor Covering Institute.

1.3 SUBMITTALS

- A. Submit in accordance with Specification Section - SUBMITTAL PROCEDURES:
 - 1. Product Data.
 - a. For each type of resilient tile flooring indicated.
 - b. Manufacturer's full color range (including any standard and premium colors).
 - c. Design Data for all components, fillers, adhesives, etc.
 - 2. Samples.
 - a. Provide 7.72" x 51.97" sample of each color and pattern selected.
 - 3. Quality Assurance/Control Submittals:
 - a. Manufacturer's Written Installation Instructions.
 - b. Certificates:
 - 1) Certificate from floor covering installer that all products supplied for installation comply with local regulations in the area where the project is located controlling the use of Volatile Organic Compounds (VOC's).
 - c. Statement of Installer's Qualifications.
 - 4. Closeout Submittals in accordance with the following:
 - a. Maintenance Data in accordance with Specification Section - PROJECT CLOSEOUT.
 - b. Record Documents in accordance with Specification Section - PROJECT DOCUMENTS.
 - c. Warranty in accordance with this specification and Specification Section - WARRANTIES.

1.4 QUALITY ASSURANCE

A. Qualifications:

1. Installer Qualifications:
 - a. Engage an experienced Installer who has successfully completed three (3) projects of similar scope and size to that indicated for this Project and is competent in techniques required by the manufacturer.
2. Manufacturer/Supplier Qualifications:
 - a. Firm experienced in successfully producing/supplying products similar to that indicated for this Project, with sufficient production/supply capacity to produce/supply required units without causing delay in the work.

B. Regulatory Requirements:

1. In accordance with Specification Section - REGULATORY REQUIREMENTS, and the following:
 - a. CBC California Building Code (CBC 11B-302.1)
 - b. CDPH California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers"

C. Meetings:

1. Pre-Installation: Scheduled by the Contractor prior to the start of work.
 - a. Coordinate the work with other work being performed.
 - b. Identify any potential problems that may impede planned progress and proper installation of work regarding quality of installation and warranty requirements.
 - c. Review delivery, storage, and handling procedures.
 - d. Review the article titled PROJECT CONDITIONS of this specification section.
 - e. Review subfloor preparation procedures.
2. Progress: Scheduled by the Contractor during the performance of the work.
 - a. Review for proper installation of work progress.
 - b. Identify any installation problems and acceptable corrective measures.
 - c. Identify any measures to maintain or regain project schedule if necessary.
3. Completion: Scheduled by the Contractor upon proper completion of the work.
 - a. Inspect and identify any problems that may impede issuance of warranties or guaranties.
 - b. Maintain installed work until the Notice of Substantial Completion has been executed.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Packing, shipping, handling, and unloading:

1. Products shall be handled in such a manner as to assure that they are free from dents, scratches and other damage.

B. Acceptance at Site:

1. Products must be in manufacturer's original unopened containers with labels indicating brand name, model, and grade.
2. Damaged products will not be accepted.

C. Storage and protection:

1. Products shall be stored in a dry, protected, interior area above ground on level platforms, six (6) inches above ground, allowing air circulation under stacked units.
 - a. Cover materials with protective waterproof covering providing for adequate air circulation and ventilation.
 - b. Maintain temperature in the storage space between fifty (50) degrees Fahrenheit and ninety (90) degrees Fahrenheit.
 - 1) Seven (7) days prior to installation, acclimate products to environmental requirements of the article titled PROJECT CONDITIONS of this specification section, and the Paragraph titled "Environmental Requirements."

- c. Do not double stack.

1.6 PROJECT CONDITIONS

A. Environmental requirements:

1. Temperature: Maintain ambient temperature in space to receive products at sixty-eight (68) degrees Fahrenheit for two (2) days prior, during, and two (2) days minimum following installation.
 - a. After this period, maintain a temperature of not less than 55 degrees Fahrenheit.
 - b. After installation, at no such time shall the temperature exceed 85 degrees Fahrenheit.
 - c. Inform the Owner of ambient temperature requirements for products installed and maintain until Substantial Completion and turn-over of the building or facility to the Owner.

B. Existing Conditions:

1. Examine site and compare it with the drawings and specifications. Thoroughly investigate and verify conditions under which the work is to be performed. No allowance will be made for extra work resulting from negligence or failure to be acquainted with all available information concerning conditions necessary to estimate the difficulty or cost of the work.
2. Field Measurements:
 - a. Take and be responsible for field measurements as required.
 - b. Report any significant differences between field dimensions and drawings to the Architect.

1.7 WARRANTY

A. Contractor's General Warranty:

1. In accordance with Specification Section - WARRANTIES.

B. Manufacturer's Warranty:

1. In accordance with manufacturer's written standard warranty:
 - a. Luxury Vinyl Tile 15 Years.

C. Installer's Warranty:

1. In accordance with the terms of the specification section - WARRANTIES:
2. Warranty period Five (5) years.

1.8 MAINTENANCE

A. Extra Materials:

1. Furnish not less than one box for each 50 boxes or fraction thereof, of each class, wearing surface, color, pattern and size of resilient floor tile installed.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- ### A.
- These products listed herein establish the size, pattern, color range and function selected by the Architect for this Project. Manufacturers that are listed as acceptable alternative manufacturers and substitutions must still comply with the requirements of this project and the products listed in order to be approved as an equivalent during the Submittal Process. If the acceptable alternative manufacturers listed or substitutions are not approved during the Submittal Process due to non-compliance with the contract documents, then the Contractor shall submit product specified.

1. Luxury Vinyl Tile manufacturer:

2. MOWHAWK GROUP Underlayment Compound:
 - a. ARDEX INCORPORATED.
 - b. Acceptable alternative manufacturers:
 - 1) CHEMREX
 - a) A compatible bonding agent is needed for this product to adhere to the Vapor-Alkalinity Control System and be considered as equivalent.
3. Crack and Joint Filler manufacturer:
 - a. ARDEX INCORPORATED.
- B. Products from other manufacturers not listed must submit in accordance with Specification Section - SUBSTITUTION PROCEDURES.

2.2 MATERIALS

- A. General:
 1. Resilient Tile Flooring shall be the product of one manufacturer and shall to the maximum extent possible be of a single lot number.
 2. Resilient Tile Flooring shall be slip resistant by achieving a minimum 0.6 or greater static coefficient of friction as recommended in Appendix A4.5 of the ADAAG by testing per ASTM D 2047 "Test method for Static Coefficient of Friction of Polish-Coated Flooring Surfaces as Measured by the James Machine."
 - a. Resilient Tile Flooring installed on ramps shall achieve a minimum 0.8 or greater static coefficient of friction as recommended in Appendix A4.5 of the ADAAG by testing per ASTM D 2047 "Test method for Static Coefficient of Friction of Polish-Coated Flooring Surfaces as Measured by the James Machine."
 3. Colors and patterns Are indicated on Sheet A/A801.
 4. All Resilient Tile Flooring shall be impervious to water damage.

2.3 ACCESSORIES

- A. Underlayment Compound:
 1. Provide free-flowing, self-leveling, pumpable, cement based compound for applications from 1 inch thick to feathered edges, 4000 psi minimum in accordance with ASTM C 109 "Test Method for Compressive Strength of Hydraulic Cement Mortars (Using 2-in. Cube Specimens)," modified for air cure only.
 - a. ARDEX "K-15."
- B. Crack and Joint Filler:
 1. Provide low viscosity rigid polyurethane filler, tensile strength of 4,000 psi minimum, in accordance with ASTM D 638 "Test method for Tensile Properties of Plastics."
 - a. ARDEX "ARDIFIX."
- C. Concrete Primer (if applicable):
 1. Nonstaining type as recommended in writing by flooring manufacturer.
- D. Adhesives:
 1. Adhesive as recommended in writing by resilient tile manufacturer.
 2. Compatible with Vapor-Alkalinity Control System, if installed.
 3. Shall comply with requirements in the place where the project is located.
 4. Shall be water and mildew resistant.
 5. Shall bond to non-porous substrate surfaces.
- E. Polish (if applicable):
 1. Provide manufacturer's written recommended acrylic floor polish, compatible with resilient flooring materials.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Site verification of conditions:

1. Prior to the execution of the work under this specification section, inspect the installed work executed under other sections of this Project Manual which, affect the execution of work under this specification section.
2. Check sub-floor variation with long straight edge.
3. Report unacceptable conditions to the Architect. Do not begin work until unacceptable conditions have been corrected.
4. Execution of work under this specification section shall constitute acceptance of existing conditions.

B. Concrete Subfloors:

1. Verify that concrete slabs comply with ASTM F 710 "Practice for Preparing Concrete Floors to Receive Resilient Flooring."
2. Verify that substrates are dry and free of curing compounds, sealers, hardeners, and other materials that may interfere with adhesive bond.
3. Verify that subfloors are free of cracks, ridges, depressions, scale, and foreign deposits.
4. Evaluate the RH (Relative Humidity) and pH (Alkalinity) test results for compliance with adhesives and resilient tile manufacturer's written substrate preparation recommendations.
 - a. If a Vapor-Alkalinity Control System product has been installed to reduce water vapor emission or phosphates thereby negating the RH and pH Test Results, evaluate products for compatibility with adhesives and resilient tile products.
5. Determine adhesion characteristics by performing bond tests recommended by the resilient tile manufacturer.

3.2 PREPARATION

A. Coordination:

1. Coordinate work under this specification section with work specified under other sections to ensure proper and adequate interface of work.

B. Protection:

1. Protect all adjacent surfaces from drips, spray, air pollution of surrounding environment, and other damage from work.

C. Surface preparation:

1. Prepare surface in accordance with manufacturer's written instructions and recommendations.
2. Remove coatings, including curing compounds, and other substances that are incompatible with adhesives and that may contain soap, wax, oil, or silicone, without using solvents. Use mechanical methods recommended in writing by the resilient tile manufacturer.
 - a. If a Vapor-Alkalinity Control System has been installed, do not remove this system.
3. Fill all cracks, joints, etc. with a Crack and Joint filler according to manufacturer's written instructions.
4. Install self-leveling underlayment compound at depressed or uneven floor conditions.
5. Broom and vacuum clean substrates to be covered immediately before installing resilient tile.
6. After cleaning, examine substrates for moisture, alkaline salts, carbonation, or dust.
7. Proceed with installation only after unsatisfactory conditions have been corrected.
8. Apply any recommended primers over the leveling compounds or treated concrete slabs prior to the installation of any resilient tile products.

9. Concrete (Previous Flooring Material Removed): Remove existing adhesive by grinding with a concrete grinding machine and moist sand. Do not use solvents to remove adhesive.

3.3 INSTALLATION

A. General:

1. In accordance with manufacturer's written instructions and recommendations unless specifically noted otherwise.
2. In accordance with approved submittals.
3. In accordance with Regulatory Requirements.

B. Layout:

1. Lines shall be straight and true.
2. Refer to Floor Pattern Drawing(s) on Sheet A/A801.

C. Resilient Tile installation:

1. Apply adhesive in accordance with manufacturer's current written recommendations.
 - a. Do not apply adhesive too far in advance of the tile installation. Adhesive must be sufficiently "tacky" in accordance with adhesive manufacturer's written recommendations for the proper installation of the tile.
2. Start installation at center line of room, unless indicated otherwise, and work towards the borders.
3. Border tiles shall not be less than half a tile.
4. Scribe, cut, and fit resilient tile flooring to butt tightly to vertical surfaces, permanent fixtures, and built-in furniture, including cabinets, pipes, outlets, edgings, thresholds, and nosing's.
5. Extend resilient tile flooring into toe spaces, door reveals, closets, and similar openings.
6. Installation shall be true, level, and even with tight joints.
7. Check work to see that all tile are lying down and setting in.
8. Maintain reference markers, holes or openings that are in place or plainly marked for future cutting by repeating on finish flooring as marked on subfloor. Use chalk or other non-permanent marking device.

3.4 CLEANING

A. Cleaning:

1. Clean in accordance with Specification Section - PROJECT CLOSEOUT.
2. Clean any soiled surfaces immediately.
3. Clean any soiled surfaces at the end of each day, minimum.
4. Finish shall be clean and ready for the application of any additional finishes.
5. In accordance with manufacturer's written instructions and recommendations.

B. Polishing (If applicable refer to Manufacturer):

1. Prior to final acceptance for occupancy, all resilient tile flooring surfaces shall be polished and buffed with a minimum of three coats without diminishing any polish's slip resistance characteristics in accordance with manufacturer's written recommendations.

3.5 DEMONSTRATION

A. In accordance with Specification Section – PROJECT CLOSEOUT.

1. Provide the services of a manufacturer-authorized service representative to demonstrate and train Owner's maintenance personnel as specified below.
 - a. Train Owner's maintenance personnel on cleaning procedures and schedules related to cleaning and preventative maintenance,
 - b. Schedule training with the Owner's maintenance personnel with at least seven (7) days advance notice.

3.6 PROTECTION

A. Protection from traffic:

1. Provide final protection and maintain conditions, in a manner acceptable to manufacturer and installer, which ensures the work of this section being without damage or deterioration until the time of Substantial Completion.

3.7 SCHEDULES

A. Luxury Vinyl Tile

1. Manufacturer: MOHAWK GROUP
2. Product Name: Living Local Collection, Premium Wood C0194
3. Physical Characteristics:
 - a. Surface Profile: Overall Emboss with Micro-beveled Edge.
 - b. Classification ASTM F1700, Class III, Type B
 - c. Overall Thickness: 2.5 mm
 - d. Tile Size: 7.72" x 51.97"
 - e. Finish: M-Force Ultra

END OF SECTION

SECTION 09 68 40 - CARPET

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes the following:
 - 1. Provide all material, labor, equipment and services necessary to completely install all carpet materials, accessories and other related items necessary to complete the Project as indicated by the Contract Documents.
- B. Related Sections: The following Project Manual Sections contain requirements that relate to this section:
 - 1. DIVISION 00 SPECIFICATION SECTIONS.
 - 2. DIVISION 01 SPECIFICATION SECTIONS.
 - 3. 08 11 00 METAL DOORS AND FRAMES
 - 4. 09 29 00 GYPSUM BOARD
 - 5. 09 65 10 RESILIENT BASE AND ACCESSORIES
 - 6. 09 65 19 RESILIENT TILE
 - 7. 09 91 00 PAINTING

1.2 REFERENCES

- A. Standards:
 - 1. In accordance with the following standards:
 - a. AATCC American Association of Textile Colorists and Chemists.
 - b. ASTM American Society of Testing Materials.
 - c. CRI Carpet and Rug Institute Recommendations and Standards.

1.3 SUBMITTALS

- A. Submit in accordance with Specification Section - SUBMITTAL PROCEDURES:
 - 1. Product Data.
 - a. For each type of carpet indicated:
 - b. Manufacturer's specified pattern and color.
 - c. Design data for all adhesives, tape, etc. for all carpet accessories.
 - 2. Shop Drawings.
 - a. Seaming diagrams.
 - 1) Changes at carpet types, patterns, colors, and field seams shall be identified.
 - 3. Samples.
 - a. Provide 24" x 24" sample of each color and pattern selected.
 - 4. Quality Assurance/Control Submittals:
 - a. Manufacturer's Written Installation Instructions.
 - b. Certificates:
 - 1) Certificates from the manufacturer that the installation was in compliance with manufacturer's written instructions.
 - c. Statement of Installer's Qualifications.
 - 5. Closeout Submittals in accordance with the following:
 - a. Maintenance Data (indicating all recommended cleaning and maintenance instructions) in accordance with Specification Section - PROJECT CLOSEOUT.
 - b. Project Record Documents in accordance with Specification Section - PROJECT RECORD DOCUMENTS.
 - c. Warranty in accordance with this specification and Specification Section - WARRANTIES.

1.4 QUALITY ASSURANCE

A. Qualifications:

1. Installer Qualifications:

- a. Engage an experienced Installer who has successfully completed three (3) projects of similar scope and size to that indicated for this Project.

B. Regulatory Requirements:

1. In accordance with Specification Section - REGULATORY REQUIREMENTS, and the following:
 - a. CBC California Building Code (CBC 804.1 and CBC 11B-302.1 and 11B-302.2)
 - b. CDPH California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers"
 - c. NFPA National Fire Protection Agency
 - d. SCAQMD South Coast Air Quality Management District, Rule 1168

C. Meetings:

1. Pre-Installation: Scheduled by the Contractor prior to the start of work.
 - a. Coordinate the work with all other related work.
 - b. Identify any potential problems that may impede planned progress and proper installation of work regarding quality of installation and warranty requirements.
 - c. Review delivery, storage and handling procedures.
 - d. Review project conditions.
 - e. Review subfloor preparation procedures.
2. Progress: Scheduled by the Contractor during the performance of the work.
 - a. Review for proper installation of work progress.
 - b. Identify any installation problems and acceptable corrective measures.
 - c. Identify any measures to maintain or regain project schedule if necessary.
3. Completion: Scheduled by the Contractor upon proper completion of the work.
 - a. Inspect and identify any problems that may impede issuance of warranties or guaranties.
 - b. Maintain installed work until the Notice of Substantial Completion has been executed.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Packing, shipping, handling, and unloading:

1. Products shall be individually wrapped in the original protective wrapping with legible registration labels indicating manufacturer's name, style, color and dye lot.

B. Storage and protection:

1. Products shall be stored in a dry, protected interior area.
 - a. Carpet shall be stored flat and shall not have anything stacked on top.
 - b. Maintain temperature in the storage space between fifty (50) degrees Fahrenheit and ninety (90) degrees Fahrenheit.
 - 1) Seven (7) days prior to installation, acclimate products to environmental requirements of the article titled PROJECT CONDITIONS of this specification section, and the Paragraph titled "Environmental Requirements."

1.6 PROJECT CONDITIONS

A. Environmental requirements:

1. Temperature: Maintain ambient temperature in space to receive products between sixty-eight (68) degrees Fahrenheit and eighty (80) degrees Fahrenheit for seven (7) days prior, during, and seven (7) days minimum following installation.

- a. Inform the Owner of ambient temperature requirements for products installed and maintain until Substantial Completion and turn-over of the building or facility to the Owner.
 2. Humidity: Maintain humidity in space to receive products between 6 percent to 9 percent for four (4) days minimum prior, during, and following installation in accordance with manufacturer's written recommendations.
 - a. Inform the Owner of humidity requirements for products installed and maintain until Substantial Completion and turn-over of the building or facility to the Owner.
- B. Existing Conditions:
 1. Examine site and compare it with the drawings and specifications. Thoroughly investigate and verify conditions under which the work is to be performed. No allowance will be made for extra work resulting from negligence or failure to be acquainted with all available information concerning conditions necessary to estimate the difficulty or cost of the work.
 2. Space shall be dry.
 - a. Concrete slab shall be a minimum of 4 months old.
 3. Field Measurements:
 - a. Take and be responsible for field measurements as required.
 - b. Report any significant differences between field dimensions and drawings to Architect.

1.7 WARRANTY

- A. Contractor's General Warranty:
 1. In accordance with Specification Section - WARRANTIES.
- B. Manufacturer's Warranty:
 1. In accordance with manufacturer's written standard warranty:
 - a. Modular Tile Life of the Carpet.
 - b.
 2. Shall cover Wear, Anti-shock, Edge Ravel, Tuft Bind, Dimensional Stability, Zippering, Static Protection, and Backing Delamination.
- C. Installer's Warranty:
 1. In accordance with the terms of the specification section - WARRANTIES:
 - a. Warranty Period Two (2) Years.
 - b. Shall be co-endorsed by the General Contractor.

1.8 OWNER'S INSTRUCTIONS

- A. Provide the services of a manufacturer's-authorized service representative to demonstrate and train the Owner's maintenance personnel prior to substantial completion as specified below:
 1. Proper maintenance and cleaning procedures in accordance with manufacturer's written recommended instructions.

1.9 MAINTENANCE

- A. Extra Materials:
 1. Modular Tile:
 - a. Provide five percent (5 percent) of each color, in accordance with Specification Section - PROJECT CLOSEOUT.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. These products listed herein establish the size, pattern, color range and function selected by the Architect for this Project. Manufacturers that are listed as acceptable alternative manufacturers and substitutions must still comply with the requirements of this project and the products listed in order to be approved as an equivalent during the Submittal Process. If the acceptable alternative manufacturers listed or substitutions are not approved during the Submittal Process due to non-compliance with the contract documents, then the Contractor shall submit product specified.
 - 1. Specified underlayment compound manufacturer:
 - a. ARDEX INCORPORATED
 - b. Acceptable alternative manufacturer: CHEMREX
 - 1) A compatible bonding agent is needed for this product to adhere to the Vapor-Alkalinity Control System and be considered as equivalent.
 - 2. Specified crack and joint filler manufacturer:
 - a. ARDEX INCORPORATED.
- B. Products from other manufacturers not listed must submit in accordance with Specification Section - SUBSTITUTION PROCEDURES.

2.2 MATERIALS

- A. General:
 - 1. All materials shall be newly manufactured and of a quality consistent with industry standards and this specification.
 - 2. Colors and patterns shall be selected from manufacturer's standard line (including premium) except as otherwise specified. See Carpet Schedule at the end of this section for carpet types required and Sheet A/A801.
 - 3. Carpet shall have integral static protection.
 - 4. Carpet shall be impervious to water damage.
 - 5. The stain resistant properties must be permanent and cannot be removed by commercial cleanings or abrasive wear. Test data as follows:
 - a. Red Dye 40 must be released by water only, after exposure to 150,000+ cycles in a tetra pod walker and after sample is allowed to soak in 10:1 solution of water and ammonia.
 - 6. Topical stain resistant treatments will not be acceptable. Stain resistant properties must be inherent.
 - 7. Carpet must meet or exceed qualifications for environmental standards of the Carpet and Rug Institute's Green Label Program.

2.3 ACCESSORIES

- A. Underlayment Compound:
 - 1. Provide free-flowing, self-leveling, pumpable, cement based compound (ARDEX K-15) for applications from 1 inch thick to feathered edges, 4,000 psi minimum in accordance with ASTM C 109 "Test Method for Compressive Strength of Hydraulic Cement Mortars (Using 2-in. Cube Specimens)," modified for air cure only.
 - a. ARDEX "K-15."
- B. Crack and Joint Filler:
 - 1. Provide low viscosity rigid polyurethane filler, tensile strength of 4,000 psi minimum, in accordance with ASTM D 638 "Test method for Tensile Properties of Plastics."
 - a. ARDEX "ARDIFIX."
- C. Concrete Primer (if applicable):
 - 1. Nonstaining type as recommended in writing by flooring manufacturer.

- D. Adhesives:
1. Adhesive as recommended in writing by carpet manufacturer.
 2. Compatible with VAPOR-ALKALINITY CONTROL SYSTEM, if installed.
 3. Shall comply with requirements in the place where the project is located.
 4. Shall be non-staining and water and mildew resistant.
 5. Complies with flammability requirements for installed carpet.
 6. Shall bond to non-porous substrate surfaces.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Site verification of conditions:
1. Prior to the execution of the work under this specification section, inspect the installed work executed under other sections of this Project Manual, which affect the execution of work under this specification section.
 2. Check sub-floor variation with long straight edge.
 3. Report unacceptable conditions to the Architect. Do not begin work until unacceptable conditions have been corrected.
 4. Execution of work under this specification section shall constitute acceptance of existing conditions.
- B. Concrete Subfloors:
1. Verify that concrete slabs comply with ASTM F 710 "Practice for Preparing Concrete Floors to Receive Resilient Flooring."
 2. Verify that substrates are dry and free of curing compounds, sealers, hardeners, and other materials that may interfere with adhesive bond.
 3. Verify that subfloors are free of cracks, ridges, depressions, scale, and foreign deposits.
 4. Evaluate the RH (Relative Humidity) and pH (Alkalinity) test results for compliance with adhesives and carpet manufacturer recommendations.
 - a. If a Vapor-Alkalinity Control System product has been installed to reduce water vapor emission or phosphates thereby negating the RH and pH test results, evaluate products for compatibility with adhesives and carpet products.
 5. Determine adhesion characteristics by performing bond tests recommended by the carpet manufacturer.

3.2 PREPARATION

- A. Coordination:
1. Coordinate work under this specification section with work specified under other sections to ensure proper and adequate interface of work.
- B. Protection:
1. Protect all adjacent surfaces from drips, spray, air pollution of surrounding environment, and other damage from work.
- C. Surface preparation:
1. General: Comply with CRI, Section 7, "Site Conditions- All Installations" and carpet manufacturer's written installation instructions for preparing substrates indicated to receive carpet installation.
 2. Remove coatings, including curing compounds, and other substances that are incompatible with adhesives and that contain soap, wax, oil, or silicone, without using solvents. Use mechanical methods recommended in writing by the carpet manufacturer.
 - a. If a Vapor-Alkalinity Control System has been installed do not remove this system.
 3. Use crack and joint filler according to manufacturer's written instructions, to fill cracks, holes, and spalls in substrates.
 4. Install self-leveling underlayment compound at depressed or uneven floor conditions.

5. Broom and vacuum clean substrates to be covered immediately before installing carpet.
6. After cleaning, examine substrates for moisture, alkaline salts, carbonation, or dust.
7. Proceed with installation only after unsatisfactory conditions have been corrected.
8. Concrete (Previous Flooring Material Removed): Remove existing adhesive by grinding with a concrete grinding machine and moist sand. Do not use solvents to remove adhesive.

3.3 INSTALLATION

A. General:

1. In accordance with manufacturer's written instructions and recommendations unless specifically noted otherwise.
2. In accordance with approved submittals.
3. In accordance with Regulatory Requirements.

B. Layout:

1. Lines shall be straight and true.
2. Refer to Floor Pattern Drawing(s) on Sheet A/A801.

C. Carpet Installation:

1. Direct-Glue-Down Installation: Comply with CRI, Section 13, "Direct Glue-Down Installation."
2. Double-Glue-Down Installation: Comply with CRI, Section 14, "Double Glue-Down Installation."
3. Comply with carpet manufacturer's written recommendations for seam locations and direction of carpet; maintain uniformity of carpet direction and lay of pile. At doorways, center seams under the door in closed position.
 - a. Level adjoining edges at seams with hand shears.
 - b. Level adjoining edges.
4. Do not bridge building expansion joints with carpet.
5. Cut and fit carpet to butt tightly to vertical surfaces, permanent fixtures, and built-in furniture including cabinets, pipes, outlets, edgings, thresholds, and nosing's. Bind or seal cut edges as recommended in writing by carpet manufacturer.
6. Extend carpet into toe spaces, door reveals, closets, open-bottomed obstructions, removable flanges, alcoves, and similar openings.
7. Maintain reference markers, holes, and openings that are in place or marked for future cutting by repeating on carpet as marked on subfloor. Use nonpermanent, nonstaining marking device.

D. Modular Tile:

1. Pattern: Brick Ashlar, unless otherwise noted.

3.4 CLEANING

A. Perform the following operations immediately after installing carpet:

1. Remove and dispose of debris and recycle all unusable scrap.
2. Remove excess adhesive and other surface blemishes using cleaner recommended in writing by carpet manufacturer.
3. Remove yarns that protrude from carpet surface.
4. Vacuum carpet using commercial machine with face-beater element.

3.5 DEMONSTRATION

A. In accordance with Specification Section - PROJECT CLOSEOUT.

1. Provide the services of a manufacturer-authorized service representative to demonstrate and train Owner's maintenance personnel as specified below.
 - a. Train Owner's maintenance personnel on cleaning procedures and schedules related to cleaning and preventative maintenance.

- b. Schedule training with the Owner's maintenance personnel with at least seven (7) days advance notice.

3.6 PROTECTION

- A. Protect installed carpet to comply with CRI, Section 20, "Protecting Indoor Installations."
- B. Protect carpet against damage from construction operations and placement of equipment and fixtures during the remainder of construction period. Use protection methods indicated or recommended in writing by carpet manufacturer.

3.7 SCHEDULES

- A. Modular Tile
 1. Manufacturer: MANNINGTON COMMERCIAL.
 2. Product Name: Script
 3. Physical Characteristics:
 - a. Construction Type: Patterned Loop
 - b. Fiber Content: Type 6 Nylon
 - c. Density: 5,538
 - d. PileThickness : 0.091" inches.
 - e.
 - f. Gage: 5/64 ends per inch.
 - g. Face Weight: 14 oz/sq. yd.
 - h. Primary Backing: Infinity 2 Modular
 - i. Size: 24" x 24"

END OF SECTION

SECTION 09 91 00 - PAINTING

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes the following:
 - 1. Provide all material, labor, equipment and services necessary to furnish and install Painting, accessories and other related items necessary to complete the Project as indicated by the Contract Documents unless specifically excluded.
 - 2. Material and Equipment to be Painted: Paint all piping, unwrapped ductwork, electric conduits exposed to view. Prime and paint all factory finished mechanical and electrical equipment and accessories exposed to view.
 - 3. Material and Equipment not to be Painted: Do not paint piping, ductwork, equipment and machinery located in attic spaces, above furred or suspended ceilings, in furred pipe or duct spaces. Do not paint factory finished equipment or machinery located in mechanical rooms or mechanical buildings, attics, furred or suspended ceilings.
- B. Related Sections: The following Project Manual Sections contain requirements that relate to this section:
 - 1. DIVISION 00 SPECIFICATION SECTIONS.
 - 2. DIVISION 01 SPECIFICATION SECTIONS.
 - 3. 08 11 00 METAL DOORS AND FRAMES
 - 4. 08 15 13 LAMINATE-FACED WOOD DOORS
 - 5. 09 29 00 GYPSUM BOARD
 - 6. 09 50 00 ACOUSTICAL CEILINGS
 - 7. 09 65 10 RESILIENT BASE AND ACCESSORIES
 - 8. 09 68 40 CARPET

1.2 REFERENCES

- A. Standards:
 - 1. In accordance with the following standards:
 - a. MPI Master Painters Institute
 - 1) MPI - Architectural Painting Specification Manual.
 - 2) MPI – Maintenance Repainting Manual.
 - a) MPI RSP Master Painters Institute Repaint Surface Preparation Standards, Chapter 6, Section 2.
 - 3) MPI – Glossary.
 - b. PDCA Painting and Decorating Contractors of America, latest edition of the Architectural Specification Manual, as prepared by Specification Services, Inc., Washington State Council of the PDCA.

1.3 DEFINITIONS

- A. The following definitions are just some of the more important definitions used within this section, and were taken from the MPI Glossary Manual, or used to simplify language used by the Architect. These definitions and others stated within the Manual apply for this Specification Section.
 - 1. Acrylic Latex An aqueous dispersion of acrylic resins.
 - 2. Acrylic Resin A/R - Synthetic resins made by polymerizing esters of acrylic acid.
 - 3. A/U Aliphatic Urethane
 - 4. A/A/U Aliphatic Acrylic Urethane

5. Blocking Sticking or bonding together of two painted surfaces that are in direct contact. Most often caused by stacking painted articles before dry or reaching a "block free" (or "non-blocking") stage.
6. DFT Dry Film Thickness – the depth or thickness of a coating in the dry state. Expressed in mils (1/1000 inch) or microns.
7. DRY FALL A Fog Paint designed to be applied by spray and dries fast enough that the overspray will be a dry powder after falling a certain distance. The dust can then be swept or vacuumed up.
8. ODFT "Overall Dry Film Thickness" – the depth or thickness of a complete coating system in the dry state. Expressed in mils (1/1000 inch) or microns.

1.4 SUBMITTALS

A. Submit in accordance with Specification Section - SUBMITTAL PROCEDURES:

1. Product Data.
 - a. Submit manufacturer's full color range, including standard, premium and custom colors, for selection by the Architect.
 - b. Material Safety Data Sheets will be turned over to the Owner in compliance with local rules and regulations, but will not be reviewed.
 - c. Materials List: Format in accordance with Paint Finish Schedule.
 - d. Additional submittals to substantiate proposed equivalent systems.
2. Samples.
 - a. Brushouts: In accordance with Specification Section - SUBMITTAL PROCEDURES.
 - b. For each color and finish selected provide paint brushouts showing color tint graduation of each coat to and including the final color coat.
 - 1) Selected colors and finishes:
 - a) Size: 8 1/2" x 11" boards.
 - b) Quantity: 3 boards of each color and finish.
 - c) Board material wherever possible and for transparent finishes shall be same as material to be finished. Opaque finishes may be on heavy card stock.
3. Closeout Submittals in accordance with the following:
 - a. Maintenance Data in accordance with Specification Section - PROJECT CLOSEOUT.
 - b. Project Documents in accordance with Specification Section - PROJECT DOCUMENTS.
 - c. Warranty in accordance with Specification Section - WARRANTIES.

1.5 QUALITY ASSURANCE

A. Qualifications:

1. Material Qualifications:
 - a. Where possible (except for specified materials), paint materials shall be products of only one manufacturer.
 - b. All materials, preparation and workmanship shall conform to requirements of the specified edition of the Architectural Painting Specification Manual by the Master Painters Institute (hereafter referred to as the MPI Painting Manual), unless otherwise indicated.
 - c. Flame Spread Ratings in accordance with ASTM E 84 "Standard Test Method for Surface Burning Characteristics of Building Materials":
 - 1) Paint finishes in required exit stairways, corridors and exitways must meet flame spread ratings as required by regulatory agencies.

PAINTING

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- 2) Class A - Tunnel Test 0-25 for enclosed required exit stairways and other exit ways.
- 3) No interior paint or wall finish will be permitted having a tunnel test in excess of 200. All paint materials must be certified that materials meet these requirements.
- d. Manufacturer's Written Instructions - One for the Architect, Contractor and the Owner:
 - 1) Submit three (3) copies of manufacturer's written instructions.
- e. Compatibility:
 - 1) Paint materials and equipment shall be compatible in use.
 - 2) Finish coats shall be compatible with prime coat.
 - 3) Prime coats shall be compatible with surface to be coated.
 - 4) Tools and materials shall be compatible with coating to be applied.
- f. Air Quality:
 - 1) Paint materials and equipment used for application will comply with CARB Air Quality Control Standards in effect at the Project Site and at the time of application.
2. Installer Qualifications:
 - a. Engage an experienced Installer who has successfully completed three (3) projects of similar scope and size to that indicated for this Project.
 - 1) Only qualified journeypersons, as defined by local jurisdiction, shall be engaged in painting and decorating work. Apprentices may be employed provided they work under the direct supervision of a qualified journeyperson in accordance with trade regulations.
3. Manufacturer/Supplier Qualifications:
 - a. Firm experienced in successfully producing/supplying products similar to that indicated for this Project, with sufficient production/supply capacity to produce/supply required units without causing delay in the work.
- B. Regulatory Requirements:
 1. In accordance with Specification Section - REGULATORY REQUIREMENTS, and the following:
 - a. CA-CHPS California High Performance Schools
 - b. CAL/OSHA California/Occupational Safety and Health Act
 - c. SCAQMD South Coast Air Quality Management District, Rule 1168
- C. Meetings:
 1. Pre-Installation: Scheduled by the Contractor prior to the start of work.
 - a. Coordinate the work with all other related work.
 - b. Identify any potential problems that may impede planned progress and proper installation of work regarding quality of installation and warranty requirements.
 2. Progress: Scheduled by the Contractor during the performance of the work.
 - a. Review for proper installation of work progress.
 - b. Identify any installation problems and acceptable corrective measures.
 - c. Identify any measures to maintain or regain project schedule if necessary.
 3. Completion: Scheduled by the Contractor upon proper completion of the work.
 - a. Inspect and identify any problems that may impede issuance of warranties and guaranties.
 - b. Maintain installed work until the Notice of Substantial Completion has been executed.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Acceptance at Site:
 1. Products must be in manufacturer's original unopened containers with labels indicating brand name, model, and grade.

2. Damaged products will not be accepted.
- B. Storage and protection:
 1. Products shall be stored above ground on level platforms, six (6) inches above ground, allowing air circulation under stacked units, in a locked, clean and neat, well ventilated area.
 - a. All receiving, opening and mixing shall be done in this area.
 - b. Oily rags and waste shall be removed from area each night and all other precautions shall be taken to avoid danger of fire.
 - c. Empty containers shall not be removed from site, unless otherwise approved by the Architect.
 - d. Cover materials with protective waterproof covering providing for adequate air circulation and ventilation.

1.7 PROJECT CONDITIONS

- A. Environmental requirements:
 1. Rain or Fog:
 - a. No work under this section shall be started or maintained under threat of rain.
 - b. Surfaces shall be painted only when they are free from moisture.
 - c. No painting of exterior surfaces shall be done less than 72 hours of actual drying weather after a rain or during periods of dew or fog.
 - d. Perform no painting or decorating work when the maximum moisture content of the substrate exceeds:
 - 1) 12 percent for concrete and masonry (clay and concrete brick / block).
 - 2) 15 percent for wood.
 - 3) 12 percent for plaster and gypsum board.
 - e. Perform no painting or decorating work when the relative humidity is above 85 percent or when the dew point is less than 5 degrees F variance between the air / substrate temperature.
 2. Temperature: No painting shall be done when ambient air and substrate temperatures are below 50 degrees F.
 3. Alkalinity: An alkali level of between 7.0 and 8.5 pH is suitable for painting. Any reading above that level, then the surface shall be neutralized as required for the surface to be painted.
 - a. Methods shall be consistent with MPI - Architectural Painting Specification Manual, and shall not result in any adverse condition causing inadequate adhesion, improper curing and drying, or durability of paint system.
 4. No exterior painting shall be done during winds or dusty conditions.
 5. Perform no exterior painting and decorating work unless environmental conditions are within MPI and paint manufacturer's requirements or until adequate weather protection is provided.
 - a. Where required to meet project schedules, suitable weatherproof covering and sufficient heating facilities shall be in place to maintain minimum ambient air and substrate temperatures for 24 hours before, during and after paint application.
 6. Perform no interior painting or decorating work unless adequate continuous ventilation and sufficient heating facilities are in place to maintain minimum ambient air and substrate temperatures above minimum requirements for 24 hours before, during and after paint application.
 - a. Where required to meet project schedules, provide supplemental ventilating and heating equipment if ventilation and heating from existing system is inadequate to meet minimum requirements.
- B. Existing Conditions:
 1. Examine site and compare it with the drawings and specifications. Thoroughly investigate and verify conditions under which the work is to be performed. No allowance will be made for extra work resulting from negligence or failure to be acquainted with all

available information concerning conditions necessary to estimate the difficulty or cost of the work.

2. Concrete and masonry surfaces shall be installed at least 28 days prior to painting and decorating work and shall be visually dry on both sides.
3. Conduct all moisture tests using a properly calibrated electronic Moisture Meter, except test concrete floors for moisture using a simple cover patch test.
4. Test concrete, masonry and plaster surfaces for alkalinity as required.
5. Contractor shall provide a minimum lighting level of 323 Lux (30 foot candles) on surfaces to be painted or decorated.

1.8 WARRANTY

A. Contractor's General Warranty:

1. In accordance with Specification Section - WARRANTIES.
 - a. Original adherence of all materials and no evidence of any surface defect shall be maintained during warranty period.
 - b. Color at end of warranty period shall remain free from serious fading and any discernible variations shall be uniform.

B. Manufacturer's Warranty:

1. In accordance with manufacturer's written standard warranty:
2. Provide Paint Manufacturer's special ten (10) year Material Warranty co-endorsed by the installer for exterior paint application of cement plaster surfaces.
 - a. Warranty period: Ten (10) Years.
3. Provide Water-Repellent Manufacturer's special Weatherproofing Warranty co-endorsed by the installer for exterior sealer application of concrete or concrete block surfaces.
 - a. Warranty period: Ten (10) Years.

C. Installer's Warranty:

1. Paint Installer's Warranty:
 - a. Warranty period: Two (2) Years.
 - b. Installer will certify that a Paint Manufacturer's Representative tested the substrate according to Paint Manufacturer's standard procedures and have submitted project information and test patch forms.
 - c. Installer shall certify that Paint Manufacturer's products were installed on the structure in accordance with manufacturer's specification requirements.
 - d. Installer further agrees that if installer fails to fulfill their obligation under this certification statement within 30 days notice of the complaint, Paint Manufacturer may proceed with the investigation and repairs and shall pay the entire material cost, providing it wasn't the installer's responsibility.
2. Water-Repellent Installer's Warranty:
 - a. Warranty period: Two (2) Years.
 - b. Installer will certify that a Water-Repellent Manufacturer's Representative tested the substrate according to Water-Repellent Manufacturer's standard procedures and have submitted project information and test patch forms.
 - c. Installer shall certify that Water-Repellent Manufacturer's products were installed on the structure in accordance with manufacturer's specification requirements.
 - d. Installer agrees:
 - 1) Investigate all complaints of leakage and/or water absorption on surfaces to which Water-Repellent Manufacturer's weatherproofing products were applied and provide a written report of the cause to Water-Repellent Manufacturer within thirty (30) days of the complaint.
 - 2) Re-apply Water-Repellent Manufacturer's weatherproofing products according to Water-Repellent Manufacturer's standard procedures at installer's cost for labor and material if the leakage and/or water absorption is due to improper surface preparation, application and/or improper use of material.

- 3) Request authority from Water-Repellent Manufacturer to re-apply Water-Repellent Manufacturer's weatherproofing products at Water-Repellent Manufacturer's expense to areas, which were not rendered hydrophobic due to imperfect weatherproofing materials.
- e. Installer further agrees that if installer fails to fulfill their obligation under this certification statement within 30 days notice of the complaint, Water-Repellent Manufacturer may proceed with the investigation and repairs and shall pay the entire cost, providing it wasn't the installer's responsibility.

1.9 MAINTENANCE

A. Extra Materials:

1. Quantity: 10 percent of quantity needed to paint Project, but not to exceed one gallon, of each type and color of finish coat used.
2. Identification: At project completion, provide an itemized list complete with manufacturer, paint type and color coding for all colors used, and locations within the Project for Owner's later use in maintenance.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. These products listed herein establish the size, pattern, color range and function selected by the Architect for this Project. Manufacturers that are listed as acceptable alternative manufacturers and substitutions must still comply with the requirements of this project and the products listed in order to be approved as an equivalent during the Submittal Process. If the acceptable alternative manufacturers listed or substitutions are not approved during the Submittal Process due to non-compliance with the contract documents, then the Contractor shall submit product specified.
 1. Specified paint coating product manufacturer, or approved equivalent:
 - a. PPG PAINTS.
 - 1) Composed of the following companies: AMERITONE PAINT, DECRATREND, DEFT, DEVOE COATINGS, DEVOE PAINT, FLOOD WOOD CARE, FULLER O'BRIEN, GLIDDEN, and SINCLAIR PAINT.
 - b. Also specified: GEMINI and MONOPOLE.
 - c. Acceptable alternative manufacturers:
 - 1) DUNN EDWARDS, KELLY MOORE PAINTS, SHERWIN WILLIAMS, BENJAMIN MOORE and VISTA PAINT. Submittals by these manufacturers, subject to specification requirements, must be in accordance with Section - SUBMITTAL PROCEDURES.
 - a) Paint material quality and systems shall be equal to numbers and systems listed in Paint Finish Schedule at the end of this section.
 - b) If submitted paint numbers differ from Darden Architects, Inc. Paint Equivalency List, additionally submit explanation of difference and certification letter from the installer attesting that the different product is equal to or better than specified; i.e. equivalent or better percentage of solids, system ODFT, and VOC compliant. Paint Equivalency List published by Darden Architects, Inc. is available only for this project at written request.
 2. Specified water-borne Alkyltrialkoxysilane water repellent product manufacturer, or approved equivalent:
 - a. EVONIK DEGUSSA CORPORATION.
 3. Specified Graffiti coating manufacturer, or approved equivalent:
 - a. Sacrificial:

- 1) VISUAL POLLUTION TECH, INC.
- b. Non-sacrificial:
 - 1) BASF HYDROZO.
 - 2) EVONIK DEGUSSA CORPORATION.
 - 3) THIS STUFF WORKS - TSW
- 4. Specified Intumescent Paint Manufacturer, or approved equivalent:
 - a. ISOLATEK INTERNATIONAL
- 5. Specified High Gloss Epoxy Pool Paint and Primer Manufacturer, or approved equivalent:
 - a. RAMUC.
- B. Products from other manufacturers not listed must submit in accordance with Specification Section - SUBSTITUTION PROCEDURES.

2.2 MATERIALS

- A. Material Compatibility: Provide block fillers, primers, and finish-coat materials that are compatible with one another and with the substrates indicated under conditions of service and application, as demonstrated by manufacturer based on testing and field experience.
 - 1. Shop Primers or Coil-Coated Primers: It shall be assumed that all Shop Primed or Coil-Coated primed metals do not meet the requirements for primer material and mil thickness as defined herein. As such, all Shop Primed or Coil-Coated primed metals shall be field primed as indicated in the schedule.
- B. Material Quality: Provide manufacturer's best-quality coating material of the various coating types specified that are factory formulated and recommended by manufacturer for application indicated. Paint-material containers not displaying manufacturer's product identification will not be acceptable.
 - 1. All materials used shall be lead and mercury free and shall have low VOC content to meet the applicable standards in the area where the Project is located.
 - 2. All paint materials shall have good flowing and brushing properties and shall dry or cure free of blemishes, sags, air entrapment, etc.
 - 3. All Water-Repellant Coatings shall comply with the following:
 - a. Provide Alkyltrialkoxo Silane combination with a ratio concentration and application procedure as recommended by the manufacturer with the ability to cover in one or more applications for a ten year warranty in accordance with the following substrates:
 - 1) Thin Brick.
 - 2) Concrete.
 - 3) Concrete Masonry Units
 - 4) Split-Faced Concrete Masonry Units.
 - b. Color: Clear.
 - c. Active Substance: Alkyltrialkoxo Silane.
 - d. Active Content: 100 percent.
 - e. Solvent: Water.
 - f. Flash Point (Concentrate): 93 degrees F.
 - g. Flash Point (Mixed): 200 degrees F.
 - h. Density: 7.77 lbs./gallon.
 - i. VOC (19:1): 50 g/liter (Maximum).
 - j. VOC (9:1): 100 g/liter (Maximum).
 - k. VOC (6:1): 200 g/liter (Maximum).
 - 4. All Bituminous Paint:
 - a. Shall comply with Cold-Applied Asphalt-Mastic paint complying with SSPC-Paint 12 requirements, except containing no asbestos, formulated for 30-mil thickness per coat.

2.3 MIXES

A. Mixing and Tinting:

1. Unless otherwise specified herein or pre-approved, all paint shall be ready-mixed and pre-tinted at the factory. Re-mix all paint in containers prior to and during application to ensure break-up of lumps, complete dispersion of settled pigment, and color and gloss uniformity.
2. Paste, powder or catalyzed paint mixes shall be mixed in strict accordance with manufacturer's written instructions.
3. Where thinner is used, addition shall not exceed paint manufacturer's written recommendations.
4. Do not use kerosene or any such organic solvents to thin water-based paints.
5. Thin paint for spraying in strict accordance with paint manufacturer's written instructions. If directions are not on the container, obtain instructions in writing from the manufacturer and provide one copy of instructions to the Project Inspector.

2.4 FINISHES

A. Finish Colors:

1. Unless otherwise specified herein, all painting work shall be in accordance with MPI Premium Grade finish requirements as a minimum.
2. Determined by Architect prior to or as work progresses.
 - a. Colors to be selected from paint manufacturer's full color systems, including standard, premium and custom colors.
3. When deep or 'Ultra colors' are selected, submit to Architect proposed revision to specified system product numbers, according to manufacturer's written recommendations.
 - a. When deep or ultra colors are selected for use on walls or special color treatments such as graphics or many color changes are desired, the areas and extent of use will be clarified upon request of the Contractor.
4. Gloss standards, in accordance with MPI standards, using the ASTM D 523 "Test for Specular Gloss", are as follows:

Gloss Level	Description	Units at 60 degrees	Units at 85 degrees
G1	Matte or Flat Finish	0 to 5	10 max.
G2	Velvet Finish	0 to 10	10 to 35
G3	Eggshell Finish	10 to 25	10 to 35
G4	Low Sheen or Satin Finish	20 to 35	35 min.
G5	Semi-Gloss Finish	35 to 70	
G6	Gloss Finish	70 to 85	
G7	High-Gloss Finish	Greater than 85	

PART 3 - EXECUTION

3.1 EXAMINATION

A. Site verification of conditions:

1. Prior to the execution of the work under this specification section, inspect the installed work executed under other sections of this Project Manual that affects the execution of work under this specification section.
 - a. Thoroughly examine (and test as required, if necessary) all conditions and surfaces to be painted and report in writing to the Contractor and the Architect any conditions or surfaces that will adversely affect the work of this section.
 - b. The Installer is responsible for verifying the compatibility of items primed by others and the finish coat or coats required by the Contract Documents. Should an

incompatibility occur, the Installer (along with the manufacturer's technical representative) will recommend compatible alternatives for the Architect's approval.

2. Report unacceptable conditions to the Architect. Do not begin work until unacceptable conditions have been corrected.
3. Execution of work under this specification section shall constitute acceptance of existing conditions.

3.2 PREPARATION

A. Protection before Application:

1. Protect all adjacent surfaces from drips, spray, air pollution of surrounding environment, and other damage from work under this specification section.
2. Removal of Hardware and Miscellaneous Items:
 - a. Coordinate the work with other trades so that they remove electrical outlet and switch plates, mechanical diffusers, escutcheons, registers, surface hardware, fittings, fastenings, and the like prior to starting work under this Section.
 - b. Store during painting work. Coordinate cleaning and reinstallation after painting work is finished.
 - c. Do not use solvent or cleaning agents detrimental to permanent finishes.
 - d. Remove doors before painting to paint bottom and top edges, and then re-hang.
3. Protect adjacent surfaces against damage from painting operations. Correct damage to work of other trades by cleaning, repairing, replacing, and refinishing, as approved by Architect, and leave in an undamaged condition.
 - a. Protective means include: Drop cloths, shields, masking templates, etc.
 - b. Exterior surfaces include: landscaping, walks, drives, adjacent building surfaces, glazing, aluminum surfaces, etc.
 - c. Interior surfaces include: rating and instruction labels on doors, frames, equipment, piping, etc.

B. Surface preparation:

1. General:
 - a. In accordance with MPI Standards.
 - b. Surfaces to be finished shall be clean, dry and free of dirt, passivators, oils, loose paint and any other contamination that would adversely affect adhesion, protective properties or appearance of the coating.
 - c. All oil, grease, dirt or other foreign matter shall be removed by washing with a solution of cleaner and water, rinse and allow to dry.
 - d. If efflorescence, alkali or glazed surfaces exist, neutralize with acid wash followed by thorough water rinsing.
 - 1) Protect all adjacent substrates or materials that could be affected by acid washing or water rinsing. Collect all washing & rinsing residue and dispose of away from structures.
2. Wood Substrates - (New and Repaint Surfaces):
 - a. Interior Surfaces: MPI Interior Surface Preparation, Chapter 3, Section 3.
 - b. Exterior Surfaces: MPI Exterior Surface Preparation, Chapter 2, Section 3.
 - c. Fill holes and other imperfections with putty or plastic wood to match natural finish before and after application of prime or seal coat.
 - d. Provide necessary extra treatment over knots, pitch pockets, sappy portions and other defects to produce a proper base for painting.
 - e. Sand down raised grain or rough surfaces.
 - f. Clean surfaces free of dust, soil and other foreign material.
3. Gypsum Board Substrates - (New and Repaint Surfaces):
 - a. Interior Surfaces: MPI Interior Surface Preparation, Chapter 3, Section 3.
 - b. Clean surfaces of dirt, laitance, excess mortar and foreign matter.
 - c. Do all necessary minor sanding.

- d. Fill minor cracks, scratches, holes and nail heads.
- 4. Plaster Substrates - (New and Repaint Surfaces):
 - a. Interior Surfaces: MPI Interior Surface Preparation, Chapter 3, Section 3.
 - b. Exterior Surfaces: MPI Exterior Surface Preparation, Chapter 2, Section 3.
 - c. Clean surfaces of dirt, laitance, excess mortar and foreign matter.
 - d. Neatly patch, flush and smooth, minor cracks, holes, pits and other imperfections in plaster or concrete surfaces.
- 5. Concrete Substrates - (New and Repaint Surfaces):
 - a. Interior Surfaces: MPI Interior Surface Preparation, Chapter 3, Section 3.
 - b. Exterior Surfaces: MPI Exterior Surface Preparation, Chapter 2, Section 3.
 - c. Clean surfaces of dirt, laitance, excess mortar and foreign matter.
 - d. Neatly patch, flush and smooth, minor cracks, holes, pits and other imperfections in plaster or concrete surfaces.
- 6. Metal Substrates - (New and Repaint Surfaces):
 - a. Interior Surfaces: MPI Interior Surface Preparation, Chapter 3, Section 3.
 - b. Exterior Surfaces: MPI Exterior Surface Preparation, Chapter 2, Section 3.
 - c. Shop Primed or Factory Primed Surfaces:
 - 1) Shop Primed or Factory Primed Surfaces are considered "un-primed" due to their mil thicknesses provided, and common incompatibility issues with specified coating system; and are suitable only for protection during transit (shipment and storage) until incorporated into the Project.
 - 2) Remove dust, oil and rust.
 - 3) Sand surface lightly.
 - 4) Touch up imperfections, scratches, surface damage, etc. with the appropriate primer.
 - 5) Field connection welds, soldered joints, burned and abraded portions shall be spot primed with the appropriate primer.
 - d. Coil-Coated Product Surfaces:
 - 1) Coil-Coated Product Surfaces are considered "un-primed" due to their mil thicknesses provided, and the common incompatibility issues with specified coating system; and are suitable only for protection during shipment and storage until incorporated into the Project.
 - 2) Remove dust, oil and rust.
 - 3) Touch up imperfections, scratches, surface damage, etc. with the appropriate primer.
 - 4) Field connection welds, burned and abraded portions shall be spot primed with the appropriate primer.
 - 5) Field apply manufacturer's written recommended primer coat over entire surface compatible with substrate finish and finish coats indicated on the paint schedule.
 - e. Un-primed Surfaces:
 - 1) Remove dust, rust, mill scale, grease and foreign matter by sand blasting or wire brushing.
 - 2) Surfaces to be smooth and ready to receive coatings.
 - f. Non-Ferrous Metal, Galvanized, Aluminum, and Copper Surfaces:
 - 1) Metal Etch and Solvent Clean per SSPC-SP 1 or clean with TSP or other appropriate cleaner followed by thorough water rinsing.
 - 2) Brush Blast to standards of SSPC-SP 16, or if blasting is not feasible, sand thoroughly, wipe clean and apply a test patch for the coating specified.
 - 3) Allow system to cure at least one week, then test adhesion per ASTM D 3359 "Standard Test Methods for Measuring Adhesion by Tape Test."
- 7. Concrete Block Surfaces - (New and Repaint Surfaces):
 - a. Interior Surfaces: MPI Interior Surface Preparation, Chapter 3, Section 3.
 - b. Exterior Surfaces: MPI Exterior Surface Preparation, Chapter 2, Section 3.

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- c. Clean and free of all dirt, dust, rust, oil and free from all foreign matter.
- d. Test for moisture content.
 - 1) Do not coat if moisture is present.
 - 2) Concrete Blocks to be thoroughly dry and cured prior to coating.
- e. Do not coat Masonry wall if joints are not properly pointed, has excessive mortar drippings cracked units or shows signs of excessive efflorescence.
 - 1) Notify Architect promptly through General Contractor.
 - 2) Do not coat until unsatisfactory and unacceptable Concrete Block surfaces are corrected suitable for coating.
- f. Do not apply opaque finishes to Concrete Block with airless sprayer unless "backrolled."

3.3 APPLICATION

A. Standards:

- 1. In accordance with MPI Painting Manual.
- 2. In accordance with manufacturer's specifications.

B. Method:

- 1. Apply by brush, roller or spray in accordance with MPI Painting Manual and the coating manufacturer's written recommendations except where specified otherwise in Schedule of Paint Finishes.
- 2. Painting of doors by rollers shall only be allowed only if the applicator uses a 1/4 inch nap or less roller.

C. Coatings:

- 1. All coatings shall be applied without reduction except as specifically required by label directions, or required to be reduced by this Specification. In such cases, reduction shall be the minimum permitted and shall not exceed VOC limits.
- 2. Apply each coat evenly and allow each coat to dry prior to applying succeeding coats. Each coat to have enough consistency to conceal work to which it is applied.
 - a. Follow manufacturer's recommendations for recoat windows when using high performance coatings, epoxys, and urethanes.
- 3. Cut into a true line and leave smooth and clean without overlapping. Coat doors and windows in open position.
- 4. Sand finishes on smooth surfaces to assure proper adhesion of subsequent coats.
- 5. Tint each undercoat a lighter shade to facilitate identification of each coat, if multiple coats of same material are to be applied. Tint undercoats to match color of topcoat, but provide sufficient difference in shade of undercoats to distinguish each separate coat.
- 6. Apply coating systems so as to obtain not less than the dry film mil thickness recommended by the manufacturer.
- 7. Sand metal work only as necessary to provide for the complete bonding of coats.
- 8. Project Inspector to inspect and approve each coat and operation before succeeding coats are applied.
- 9. Finish work to be free from runs, sags, defective application and improper workmanship.
- 10. Back prime all woodwork and casework coming in contact with plaster, masonry or concrete immediately upon delivery to project.
- 11. Post sign promptly following application of coatings.

3.4 FIELD QUALITY CONTROL

A. All surfaces, preparation and paint applications shall be inspected by the Project Inspector.

B. Painted exterior and interior surfaces shall be considered to lack uniformity and soundness if any of the following defects are apparent to the Painting Inspection by the Project Inspector:

- 1. Brush / Roller marks, streaks, laps, runs, sags, drips, heavy stippling, hiding or shadowing by inefficient application methods, skipped or missed areas, and foreign materials in paint coatings.

2. Evidence of poor coverage at rivet heads, plate edges, lap joints, crevices, pockets, corners and re-entrant angles.
 3. Damage due to touching before paint is sufficiently dry or any other contributory cause.
 4. Damage due to application on moist surfaces or caused by inadequate protection from the weather.
 5. Damage and / or contamination of paint due to blown contaminants (dust, spray paint, etc.).
- C. Painted surfaces shall be considered unacceptable if any of the following are evident under natural lighting source for exterior surfaces and final lighting source (including daylight) for interior surfaces:
1. Visible defects are evident on vertical surfaces when viewed at normal viewing angles from a distance of not less than 39 inches.
 2. Visible defects are evident on horizontal surfaces when viewed at normal viewing angles from a distance of not less than 39 inches.
 3. Visible defects are evident on ceiling, soffit and other overhead surfaces when viewed at normal viewing angles.
 4. When the final coat on any surface exhibits a lack of uniformity of color, sheen, texture, and hiding across full surface area.
- D. Painted surfaces rejected by the Project Inspector shall be made good at the expense of the Contractor. Small affected areas may be touched up; large affected areas or areas without sufficient dry film thickness of paint shall be repainted. Runs, sags of damaged paint shall be removed by scraper or by sanding prior to application of paint.

3.5 CLEANING

- A. Clean in accordance with Specification Section - TEMPORARY FACILITIES AND CONTROLS and PROJECT CLOSEOUT.
- B. Remove all paint where spilled, splashed, splattered or sprayed as work progresses using means and materials that are not detrimental to affected surfaces.
- C. Keep work area free from unnecessary accumulation of tools, equipment, surplus materials and debris.
- D. Remove combustible rubbish materials and empty paint cans each day and safely dispose of same in accordance with requirements of authorities having jurisdiction.
- E. Clean equipment and dispose of wash water / solvents as well as all other cleaning and protective materials (e.g., rags, drop cloths, masking papers, etc.), paints, thinners, paint removers / strippers in accordance with the safety requirements of authorities having jurisdiction in the place where the Project is located.
- F. Protect and safeguard work of other trades.

3.6 PROTECTION

- A. Protection from Weather:
 1. Protect newly installed work from moisture for a period of time as recommended by the manufacturer after application.
- B. Protection from Traffic:
 1. Erect barriers or screens and post signs to warn of or limit or direct traffic away or around work area as required.
- C. Provide final protection and maintain conditions, in a manner acceptable to manufacturer and installer, which ensures the work of this section being without damage or deterioration until the time of Substantial Completion.

3.7 SCHEDULES

- A. Refer to Exterior and Interior Finish Schedules on Drawings for applicable finishes used. This is a guide only and paint sub-contractor is responsible to check all drawings and be responsible

for all paint work required to cover the complete painting and finishing of the interior and exterior including specialty items.

- B. It is the intent of the specifications and drawings to cover the complete painting and finishing of the Project whether or not it is specifically called for in the Specifications, Schedule of Paint Finishes, or indicated on the Drawings. Surfaces not specified in Paint Finishes Schedule shall be in accordance with manufacturer's written recommendations.
 - 1. Inform the Architect of any changes caused by stricter Air Quality Standards as part of the submittal process.
 - 2. Provide products compliant with Local Air Quality Control District requirements at the time of installation.
- C. Exception: When the Project involves remodel work, the scope of work is limited to the remodel area and adjacent existing substrates to minimize visible color incompatibility.
- D. Provide coating system minimum ODFT specified.
 - 1. Do not apply thicker coats than specified to achieve ODFT. Apply additional coats if necessary for uniform color.
- E. "Ultra Color" Note: A fourth and/or fifth coat may be required to achieve uniform chromatic hue without ghosting from undercoat or substrate.
 - 1. The Contractor shall consider all Metal Paint Finishes noted "Ultra-color" as requiring as many as five (5) total coats.

3.8 INTERIOR PAINT FINISHES:

A. INTERIOR WOODWORK

- 1. W-2 Semi-Gloss Acrylic Non-Blocking Enamel Minimum ODFT 4.0 MILS.
 - a. 1st Coat SPEEDHIDE ZERO (SPH-0) Primer 6-4900XI
 - b. 2nd Coat Semi-Gloss 0 VOC (SPH-0) 6-4510XI
 - c. 3rd Coat Semi-Gloss 0 VOC (SPH-0) 6-4510XI

B. INTERIOR GYPSUM BOARD

- 1. DW-2 Eggshell Acrylic Non-Blocking Enamel Minimum ODFT 4.0 MILS.
 - a. 1st Coat SPEEDHIDE ZERO (SPH-0) Primer 6-4900XI
 - b. 2nd Coat Eggshell 0 VOC (SPH-0) 6-4310XI
 - c. 3rd Coat Eggshell 0 VOC (SPH-0) 6-4310XI
 - d.

C. INTERIOR METALS

- 1. PRIMER NOTE: Metals that are shop primed shall be considered "un-primed" and shall be primed with appropriate primer and thicknesses listed below:
 - a. Ferrous Metal:
 - 1) PPG PITT-TECH PLUS 4020 "Red" Mult-Purp. Metal Primer DFT 3.0 mils.
 - b. Non-Ferrous Metal, Galvanized Metal or Aluminum:
 - 1) PPG PITT-TECH PLUS 4020 "White" Mult-Purp. Metal Primer DFT 3.0 mils.
- 2. COIL-COATED PRODUCTS NOTE: Metal products primed with coil-coated products are to be assumed to be "un-primed" products and shall be additionally coated (or primed again) as follows:
 - a. Coil-Coated Products:
 - 1) Field apply manufacturer's recommended primer coat and mil thickness over entire surface compatible with substrate finish and finish coats indicated on paint schedule.
- 3. M-2 Semi-Gloss "Ultra Color" Industrial Acrylic Minimum ODFT 11.0 MILS.
 - a. 1st Coat Primer See primer note above.
 - b. 2nd Coat Acrylic Semi-Gloss PITT-TECH PLUS 90-1610
 - c. 3rd Coat Acrylic Semi-Gloss PITT-TECH PLUS 90-1610
 - d. texture.

END OF SECTION

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SECTION 10 14 00 – IDENTIFYING DEVICES

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes the following:
 - 1. Provide all material, labor, equipment and services necessary to completely install all Identifying Devices Plastic Signs, Acrylic Signs and Decals, materials, accessories and other related items necessary to complete the Project as indicated by the Contract Documents.
- B. Related Sections: The following Sections contain requirements that relate to this Section:
 - 1. DIVISION 00 SPECIFICATION SECTIONS.
 - 2. DIVISION 01 SPECIFICATION SECTIONS.
 - 3. 08 11 00 METAL DOORS AND FRAMES
 - 4. 08 34 73 ACOUSTICAL DOORS AND FRAMES
 - 5. 08 80 00 GLASS
 - 6. 09 29 00 GYPSUM BOARD

1.2 DEFINITIONS

- C. Definitions pertaining to signage are as follows:
 - 1. Characters Shall mean all letters, numbers, symbols or pictograms.

1.3 SYSTEM DESCRIPTION

- D. Design Requirements for Tactile Signage:
 - 1. Characters and Graphics:
 - a. Finish and Contrast: Characters and their background shall have a non-glare finish. Characters shall contrast with their background, either light characters on a dark background or dark characters on a light background – CBC Section 11B-703.5.1, 11B-703.6.2, and 11B-703.7.1.
 - b. Character Type: Characters on signs shall be raised 1/32 inch (0.794 mm) minimum and letters and numbers shall be sans serif uppercase characters accompanied by contracted (Grade 2) Braille complying with CBC Section 11B-703.3 and Table 11B-703.3.1.
 - c. Character Size: Raised characters (letters and numbers) shall be a minimum of 5/8 inch (15.9 mm) and a maximum of 2 inches (51 mm) high.
 - d. Pictorial symbol signs (pictograms): Pictorial symbol signs (pictograms) shall be accompanied by the verbal description placed directly below the pictogram. the outside dimension of the pictogram field shall be a minimum of 6 inches (152 mm) in height.
 - e. Character Placement: Characters and Braille shall be in a horizontal format. Braille shall be placed a minimum of 3/8 inch (9.5 mm) and a maximum of 1/2 inch (12.7 mm) directly below the tactile characters; flush left or centered. When tactile text is multilined, all Braille shall be placed together below all lines of tactile text.
 - f. Proportions: Raised characters on signs shall be selected from fonts where the width of the uppercase letter "O" is 60 percent minimum and 110 percent maximum of the height of the uppercase letter "I." Stroke thickness of the uppercase "I" shall be 15 percent maximum of the height of the character.
 - 1) For Braille Text, capitalization shall conform to CBC Section 11B-703.3.1.
 - 2. Braille:
 - a. California Contracted Grade 2 Braille shall be used wherever Braille is required in other portions of these standards. Braille shall accompany all raised characters – CBC Section 11B-703.3 and Table 11B-703.3.1.

- 1) Dots shall be rounded or domed.
 - 2) Below measured as a minimum in inches and maximum in inches:
 - 3) Dot Base Diameter: 0.059 (1.5 mm) to 0.063 (1.6 mm).
 - 4) Distance between two dots in the same cell (measured center-to-center): 0.100 (2.5 mm).
 - 5) Distance between corresponding dots in adjacent cells (measured center-to-center): 0.300 (7.6 mm).
 - 6) Dot Height: 0.025 (0.6 mm) to 0.037 (0.9 mm).
 - 7) Distance between corresponding dots from one cell directly below:
 - a) 0.395 (10 mm) to 0.400 (10.2 mm).
3. Signs shall be installed on the wall adjacent to the latch side of the door.
- a. Where there is no space on the latch side, including at double leaf doors, signs shall be placed on the nearest adjacent wall, preferably on the right.
 - b. Mounting height shall be as indicated in details on the drawings and in compliance with 11B-703.4.1 and 11B-703.4.2.
4. Inspection: Signage shall be field inspected after installation per CBC 11B-703.1.1.2.
- E. Performance Requirements: It is the intention of this specification section and the drawings to form a guide for a complete, operable system signage system that is compliant with State and Federal Accessibility Regulations. Any items not specifically noted but necessary for a complete, operable and accessible system shall be provided under this section.

1.4 SUBMITTALS

- F. Submit in accordance with Specification Section - SUBMITTAL PROCEDURES:
1. Product Data.
 - a. Submit manufacturer's full color range (including any standard, premium and custom colors) for selection by the Architect within thirty days of receipt of the NOTICE TO PROCEED.
 - 1) Provide actual 2-inch x 2-inch sample colors and patterns available from the manufacturers for color selection.
 2. Shop Drawings.
 - a. Submit shop drawings showing fabrication and installation of the work of this section including plans, elevations, sections, details of components, and attachments to other units of work, including accessibility dimensions for mounting heights.
 - b. Submit drawings indicating Room numbers shown on the Contract Documents coordinated with Owner's Room Numbers.
 3. Samples.
 - a. Provide actual 2-inch x 2-inch sample of each sign type specified.
 4. Quality Assurance/Control Submittals:
 - a. Certificates:
 - 1) Submit four (4) copies of certificates.
 - 2) Upon completion of the installation, submit a Certificate from the Contractor (on the Contractor's Letterhead) and co-endorsed by the manufacturer/supplier, sub-contractor/installer that the signage supplied for this project requiring braille complies with the California Contracted Grade 2 Braille and the CBC Section 11B-703.3.
 - a) Those attesting to the compliance certificate above shall also acknowledge that they are aware of the Submission Under Penalty Of Perjury per California Government Code Section 12650, et seq, pertaining to false claims, and further know and understand that submission of certification of a false claim may lead to fines, imprisonment and/or other severe legal consequences.
 - b. Manufacturer's Instructions:

- 1) Submit three (3) copies of manufacturer's instructions.
 5. Closeout Submittals in accordance with the following:
 - a. Maintenance Data in accordance with Specification Section - PROJECT CLOSEOUT.
 - b. Record Documents in accordance with Specification Section - RECORD DOCUMENTS.
 - c. Warranty in accordance with Specification Section - WARRANTIES and this section.
- 1.5 QUALITY ASSURANCE
- G. Qualifications:
1. Installer Qualifications:
 - a. Engage an experienced Installer who has been approved by the manufacturer.
 2. Manufacturer's/Supplier's Qualifications:
 - a. Firm's experienced in successfully producing/supplying products similar to those indicated for this Project, with sufficient production/supply capacity to produce/supply required units without causing delay in the work.
- H. Regulatory Requirements:
1. In accordance with Specification Section - Regulatory Requirements, and the following:
 - a. ADA Americans with Disabilities Act of 1990.
 - b. CBC California Building Code - California Contracted Grade 2 Braille when required.
 2. Inspection: Tactile signs shall be field inspected for compliance after installation (11B-703.1.1.2).
- 1.6 DELIVERY, STORAGE, AND HANDLING
- I. Packing, shipping, handling, and unloading:
1. Products shall be handled in such a manner as to assure that they are free from dents, scratches and other damage.
- J. Acceptance at Site:
1. Products must be in manufacturer's original unopened containers with labels indicating brand name, model, and grade.
 2. Damaged products will not be accepted.
- K. Storage and protection:
1. Products shall be stored in a dry, protected area.
 2. Products shall be stored in locked storage building.
- 1.7 WARRANTY
- L. Contractor's General Warranty:
1. In accordance with Specification Section - WARRANTIES.
- M. Manufacturer's Warranty:
1. In accordance with manufacturer's written standard warranty:
 - a. Warranty Period One (1) Year.
- N. Installer's Warranty:
1. In accordance with the terms of the Specification Section - WARRANTIES:
 - a. Warranty period One (1) Year.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- O. These products listed herein establish the size, pattern, color range and function selected by the Architect for this Project. Manufacturers that are listed as acceptable alternative manufacturers and substitutions must still comply with the requirements of this project and the products listed

in order to be approved as an equivalent during the Submittal Process. If the acceptable alternative manufacturers listed or substitutions are not approved during the Submittal Process due to non-compliance with the contract documents, then the Contractor shall submit product specified.

1. Plastic Signs:
 - a. SIGNS OF SUCCESS, INC. Acceptable alternative manufacturer:
 - 1) BEST MANUFACTURING COMPANY.
2. Acrylic Signs:
 - a. SIGNS OF SUCCESS, INC.
3. Decals:
 - a. SETON NAME PLATE COMPANY.

P. Products from other manufacturers not listed must submit in accordance with Specification Section - SUBSTITUTION PROCEDURES.

2.2 MATERIALS

Q. Plastic Signs:

1. Interior / Exterior:
 - a. MP (Melamine Plastic) both sides with contrasting phenolic resin core color. The MP shall be scratch resistant, non-static, fire retardant, washable melamine surface laminate with a non-glare surface with artwork and graphics carved into the face surface.
 - b. Performance Requirements:
 - 1) Weight: 1 lb./sq. Ft.
 - 2) Maximum Continuous Operating Temperature: -225 degrees F.
 - 3) Flexural Strength Flat: 25,000 psi.
 - 4) Tensile Strength: 22,000 psi.
 - 5) Compressive Strength Flat: 47,000 psi.
 - 6) Shear Strength: 16,800 psi.
 - 7) Dielectric Strength Short Time: 330 Volts/Mil.
 - a) Per ASTM D 229 "Sheet Plate Electrical Insulation Testing Equipment / Test Resources."
 - 8) NEMA rating: "Self-extinguishing."
 - c. Mylar, Photopolymers and Polymer Materials are not allowed.
 - d. "Sand Carved" MP plates (including phenolic core):
 - 1) Characters and Pictograms/Symbols:
 - a) Style: Tactile Helvetica Regular upper case.
 - b) Tactile: Raised 1/32" from sign face.
 - c) Braille: California Contracted Grade 2 located below characters:
 - d) Style: Framed.
 - e) Corners: Square.
 - 2) Thickness: Approximately 1/8 inch thick.
 - e. Frame and back-up (mounting) plates:
 - 1) Interior Plastic Frames and back-up plates:
 - a) High Impact Plastic Styrene frames.
 - b) Back-up plates shall be manufacturer's standard 1/8" thick melamine plastic laminate, suitable for interior use only and mechanical attachment to substrates.
 - c) Corner Style: Square.
 - d) Size: 1/2" deep x 1/8" thick walls.
 - e) Reveal: 3/32", black color.

- 2) Aluminum Frames and back-up plates:
 - a) Extruded aluminum angle.
 - b) Back-up plates shall be manufacturer's standard 1/8" thick MP Plates suitable for exterior [**and interior**] use, and mechanical attachment to substrates.
 - c) Corner Style: Square.
 - d) Size: 1/2" deep x 1/16" thick walls.
 - e) Reveal: 3/32", black color.

R. Acrylic Signs:

1. Frameless, Profile Material bonded to Substrate Backup Material.
 - a. All signs shall be made of exterior acrylic materials regardless of location (exterior or interior) within the Project.
 - b. Profile Material:
 - 1) GRAVO-TAC "Exterior," modified acrylic material, 1-ply, 1/32 inch, matte finish, integral color as selected by the Architect.
 - c. Substrate Material:
 - 1) 1/4 inch clear cast acrylic backup sheet.
 - 2) Aluminum Frames and back-up plates:
 - a) Extruded aluminum angle.
 - b) Back-up plates shall be manufacturer's standard 1/8" thick aluminum Plates suitable for exterior [**and interior**] use, and mechanical attachment to substrates.
 - c) Corner Style: Square.
 - d) Size: 1/2" deep x 1/16" thick walls.
 - e) Reveal: 3/32", black color.

S. Decals:

1. Provide outdoor grade permanent vinyl material with die cut graphics, characters and self-adhesive back for bonding to clean, smooth surfaces.

2.3 ACCESSORIES

T. Fasteners:

1. Concealed Attachment: Provide appropriate flathead countersunk stainless steel screws for the substrate backing in which the sign is to be applied.
2. Exposed Attachment – provide appropriate tamper resistant, flathead countersunk stainless steel screws with grommet finish washers for the substrate backing in which the sign is to be applied.
3. Adhesive: "Silastic Adhesive."
4. Foam Tape: SCOTCH MOUNT FOAM TAPE.

2.4 FABRICATION

U. Shop Assembly:

1. Braille Compliance:
 - a. See Part 1 of this specification – SYSTEM DESCRIPTION, and comply with the "Design Requirements for Tactile Signage" □ that requires California Contracted Grade 2 Braille.
2. Plastic Signs:
 - a. Fabricate the plastic signs and backing plates, and then "Sand Carve" the MP plates in accordance with the manufacturer's recommendations and as indicated. Comply with ADA requirement for symbols and California Contracted Grade 2 Braille characters when required, and finish in accordance to the specifications. All components of the signage system shall be ready to install in the field.
3. Acrylic Signs:

- a. Manufacturer's standard Profile Material, computer engineered, adhesive backed, raised graphics, complying with the latest CBC and ADA Accessibility Chapters and Sections, and ANSI A 117.1.
 - 1) Pictograms: All symbols shall match as closely as possible the published "International" symbols. Other interpretations will not be deemed acceptable. All symbols shall be approved prior to fabrication.
 - 2) Do not exceed the depth of profiling as recommended by the manufacturer for the thickness of the material to be profiled.

2.5 FINISHES

V. Plastic Signs:

- 1. Finish: Non-glare, face and core as selected by the Architect from the manufacturer's full color line, including any custom colors from complying with the requirements for contrasting colors of field to Symbols and Braille Text.
- 2. Allow for two color application without the frame – one color for the field, top and bottom rails, and one color for the characters.

W. Acrylic Signs:

- 1. Finish: Non-glare, face and core as selected by the Architect from the manufacturer's full color line, including any custom colors complying with the requirements for contrasting colors of field to Symbols and Braille Text.
- 2. Allow for two-color application – one color for the field, and one color for the characters.

X. Decals:

- 1. Integral non-glare finish from outdoor vinyl and die cut vinyl graphics, characters, in contrasting colors as selected by the Architect.

PART 3 - EXECUTION

3.1 EXAMINATION

Y. Site verification of conditions:

- 1. Prior to the execution of the work under this specification section, inspect the installed work executed under other specification sections of this Project Manual which affect the execution of work under this specification section.
- 2. Report unacceptable conditions to the Architect. Do not begin work until unacceptable conditions have been corrected.
- 3. Execution of work under this specification section shall constitute acceptance of existing conditions.

3.2 PREPARATION

Z. Coordination:

- 1. Coordinate work under this specification section with work specified under other sections to ensure proper and adequate interface of work specified under this specification section.
- 2. Contractor to provide internal wall blocking for all attached identifying devices.

AA. Protection:

- 1. Protect all adjacent surfaces from drips, spray, air pollution of surrounding environment, and other damage from work under this specification section.

BB. Surface preparation:

- 1. Prepare surface in accordance with manufacturer's written instructions and recommendations.
- 2. Clean substrates of substances (oil, grease, rolling compounds, incompatible primers, loose mill scale, etc.) which could impair bond of materials specified within this section.

3.3 INSTALLATION

CC. General:

1. In accordance with manufacturer's written instruction and recommendations unless specifically noted otherwise.
2. In accordance with approved Submittals.
3. In accordance with Regulatory Requirements.
4. Set plumb, level, and square.

DD. Layout:

1. Lines of all signs shall be straight and true.
2. Set plumb, level, and square.
3. Temporary positioning with foam tape.

EE. Plastic Signs:

1. "Blind" screw the back-up plate with four (4) flathead countersunk screws (minimum) so as not to interfere with face plate. Tape attachment is not allowed.
2. Anchor face plate to back-up plate with Silastic Adhesive for permanent attachment.
3. Seal all exposed edges at exterior conditions with compatible sealant, same color as sign back-up plate.

FF. Acrylic Signs:

1. "Blind" screw the back-up plate with four (4) flathead countersunk screws (minimum) so as not to interfere with face plate. Tape attachment is not allowed.
2. Anchor face plate to back-up plate with Silastic Adhesive for permanent attachment.
 - a. Tape attachment is not allowed.
3. Seal all exposed edges at exterior conditions with compatible sealant, same color as sign substrate backup plate.

GG. Mounting Conditions:

1. Metal Stud Framed Wall: Provide solid metal backing, attached to studs, adequate for fastening at all corners of sign.
2. Wood Stud Framed Wall: Provide solid wood backing, attached to studs, adequate for fastening at all corners of sign.
3. Concrete and Concrete Masonry: Provide drilled 1/4" diameter concrete or concrete masonry stainless steel anchors at all corner s of signs.
4. Glass: Provide "Silastic Adhesive" for permanent attachment of back-up plate. Provide blank plate of same material and size as the sign itself. Place on opposite side of glass and aligned with sign. Color as selected by the Architect.
5. Door: Fasten to door with tamper resistant flathead countersunk screws, minimum three (3) stainless steel screws with grommet finish washers per sign.

3.4 FIELD QUALITY CONTROL

HH. Site Tests:

1. As required by Regulatory Requirements.

3.5 CLEANING

II. Clean in accordance with Specification Sections - TEMPORARY FACILITIES AND CONTROLS and PROJECT CLOSEOUT.

1. Leave area level and free of any ruts or debris. Appearance of earth surface shall be equal to or better than adjacent undisturbed surfaces.
2. Clean any soiled surfaces at the end of each day, minimum.
3. Finish shall be clean and ready for the application of any additional finishes.
4. In accordance with manufacturer's written instructions and recommendations.

3.6 PROTECTION

JJ. Protection from traffic:

1. Provide final protection and maintain conditions, in a manner acceptable to manufacturer and installer, which ensures the work of this section being without damage or deterioration until the time of Substantial Completion.

3.7 SCHEDULES

KK. General:

1. All signs with text shall have California Contracted Grade 2 Braille unless otherwise noted.
2. Refer to Plumbing drawings for number and approximate location for "Gas Valve" signs. Signs shall be mounted +2" above Finished Floor.
3. Refer to drawings for various backing requirements.

LL. Sign Material:

1. EM = Exterior Metal.
2. IM = Interior Metal.
3. EP = Exterior Plastic.
4. IP = Interior Plastic.
5. A = Acrylic
6. D = Decal.

MM. Mounting Condition:

1. 1 = Metal Stud Framed Wall.
2. 2 = Wood Stud Framed Wall.
3. 3 = Concrete or Concrete Masonry.
4. 4 = Glass.
5. 5 = Door Mounted.

NN. Sign Types:

1. Sign Type 6 - Tactile Identification:
 - a. 3-1/2"H x 7"L nominal rectangular shape.
 - 1) 3/4" high Tactile Text required.
 - 2) Braille required.
 - b. 3-1/2"H x 15"L nominal rectangular shape.
 - 1) 3/4" high Tactile Text required.
 - 2) Braille required.
 - c. 7"H x 7"L nominal square shape.
 - 1) 3/4" high Tactile Text required.
 - 2) Braille required.
 - d. 7"H x 15"L nominal rectangular shape.
 - 1) 3/4" high Tactile Text required.
 - 2) Braille required.

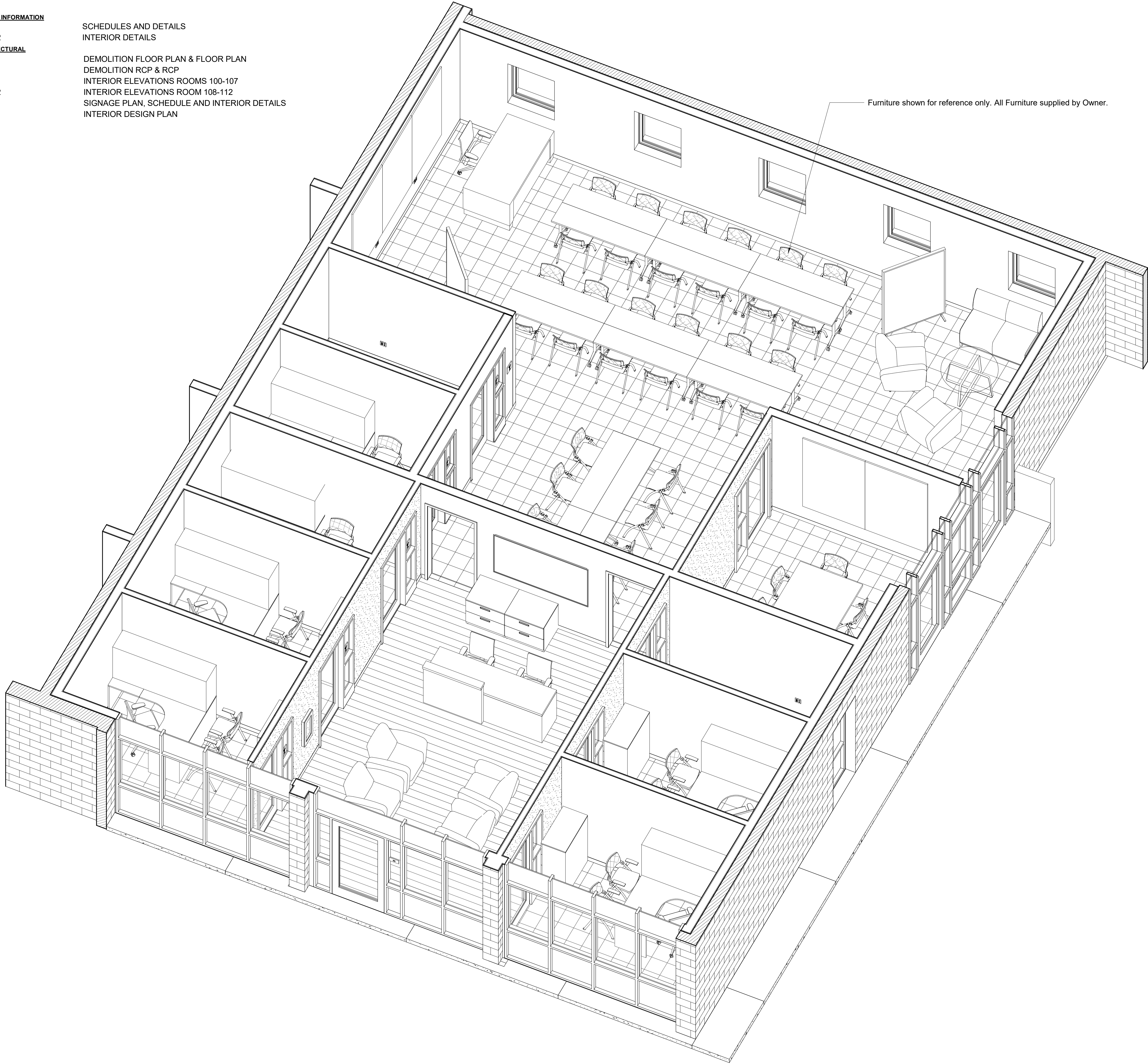
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GENERAL INFORMATION	
G000	COVER SHEET
TYPICAL INFORMATION	
X/A201	SCHEDULES AND DETAILS
X/A602	INTERIOR DETAILS
ARCHITECTURAL	
A/A101	DEMOLITION FLOOR PLAN & FLOOR PLAN
A/A201	DEMOLITION RCP & RCP
A/A601	INTERIOR ELEVATIONS ROOMS 100-107
A/A602	INTERIOR ELEVATIONS ROOM 108-112
A/A701	SIGNAGE PLAN, SCHEDULE AND INTERIOR DETAILS
A/A801	INTERIOR DESIGN PLAN



Furniture shown for reference only. All Furniture supplied by Owner.

All work shall be performed in accordance with current applicable codes and standards including, but not limited to, the following:

California Code of Regulations (CCR)
CCR-T5: Title 5-Education
CCR-T8: Title 8-Industrial Safety
CCR-T19: Title 19-Public Safety
CCR-Title 24:

Building Codes and Standards:

2022 California Building Standards Administrative Code (Part 1, Title 24, CCR)
2022 California Building Code, Volumes 1 and 2 (Part 2, Title 24, CCR)
2022 California Electrical Code (Part 3, Title 24, CCR)
2022 California Mechanical Code (Part 4, Title 24, CCR)
2022 California Plumbing Code (Part 5, Title 24, CCR)
2022 California Energy Code (Part 6, Title 24, CCR)
2022 California Elevator Safety Construction Code (Part 7, Title 24, CCR)
2022 California Fire Code, Part 9, Title 24, CCR)
2022 California Referenced Standards Code (Part 12, Title 24, CCR)
2022 California Green Building Standards Code
NFPA 13, 2016 Edition, The Installation of Automatic Sprinkler Systems
NFPA 14, 2016 Edition, Installation of Standpipe
NFPA 24, 2016 Edition, Installation of Private Fire Service Mains and their Appurtenances
NFPA 72, 2016 Edition, National Fire Alarm Code

Division of the State Architect (DSA):
SSS: Structural Safety Section
ACS: Access Compliance Section
F.L.S: Fire Life Safety
Interpretation of Regulation Manual

M14 Applicable Codes

B14 Project Description

ARCHITECTURAL

Darden Architects, Inc.
6790 N. West Avenue
Fresno, CA 93711
T (559) 448-8051
F (559) 446-1765

Project Information

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PLANNING
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Architect

No.	Revision/Submission	Date

Revision

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Project Number 2329.ID	Checked By:	
Date: 06.20.2023	Reviewed By:	

Sheet: _____ of: _____

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A1

N1

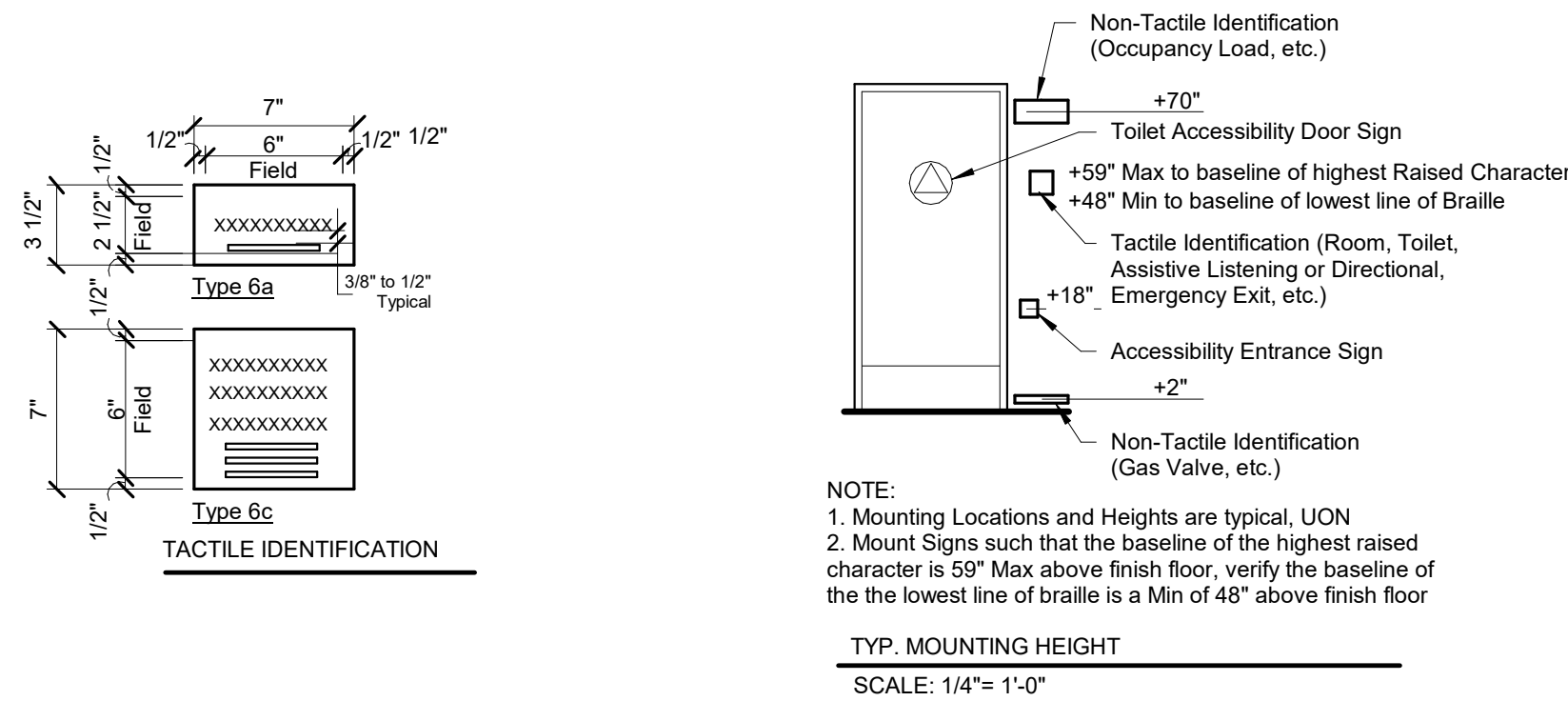
NOT USED

Signage Schedule							
Sign Mark	Door No	Sign Type	Sign Material	Sign Copy Line 1	Sign Copy Line 2	Mtg Height	Remarks
a102	102 a	6c	IP	OFFICE	102	5' - 0"	-
a103	103 a	6c	IP	OFFICE	103	5' - 0"	-
a104	104 a	6c	IP	OFFICE	104	5' - 0"	-
a105	105 a	6c	IP	OFFICE	105	5' - 0"	-
a109	105 a	6c	IP	CONFERENCE ROOM	109	5' - 0"	-
a110	105 a	6c	IP	CAREER CLOSET	110	5' - 0"	-
a111	105 a	6c	IP	OFFICE	111	5' - 0"	-
a112	105 a	6c	IP	OFFICE	112	5' - 0"	-
a101	105 b	6a	IP	EXIT	-	5' - 0"	-
a106	106 a	6c	IP	STORAGE	106	5' - 0"	-
b106	106 a	6c	IP	OFFICE	106	5' - 0"	Sign to be supplied but not installed. Sign is for furture use.
a107	Existing Door	6a	IP	EXIT	-	5' - 0"	-
b109	Existing Door	6a	IP	EXIT	-	5' - 0"	-

Note: Confirm Text and Room Number with Owner prior to fabrication.

P11

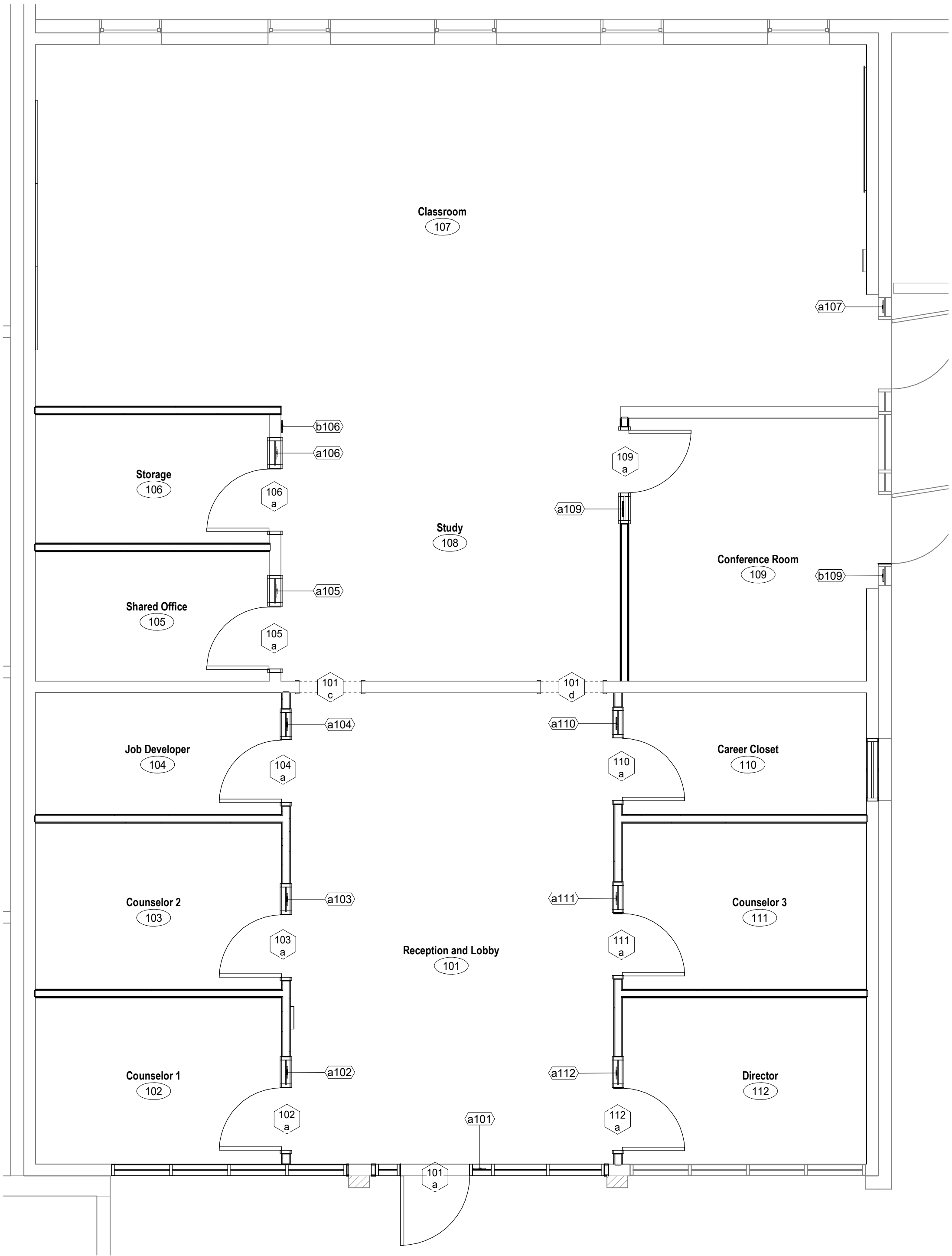
Signage Schedule



L11

IDENTIFYING DEVICES, Signage Locations and Dimensions

1 1/2" = 1'-0"



A11

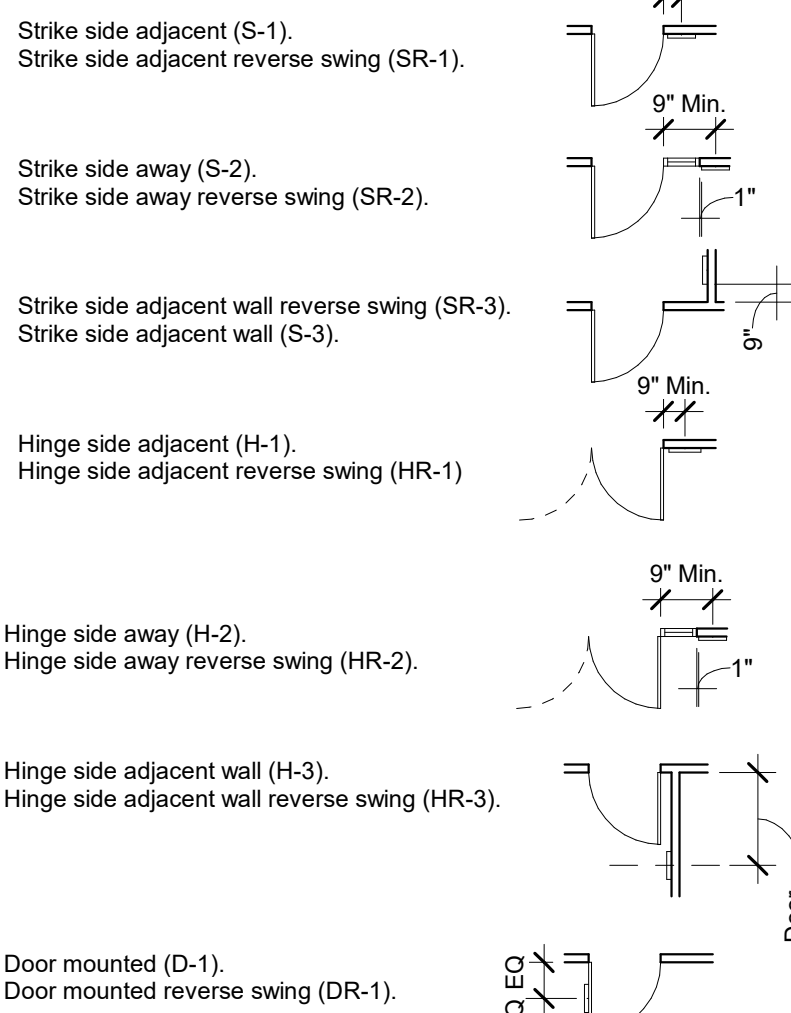
Signage Plan

1/4" = 1'-0"

SIGN MATERIAL

A = Acrylic
EM = Exterior Metal.
IM = Interior Metal.
EP = Exterior Plastic.
IP = Interior Plastic.
D = Decal.

MOUNTING LOCATION



L18

Signage Schedule Legend

No Scale

Refer to N9-A/A701 SIGNAGE SCHEDULE

Career Center Interior Upgrades
Merced College
Merced, CA 95348

Project

STUDENT UNION BUILDING
SIGNAGE PLAN, SCHEDULE AND INTERIOR DETAILS
Drawing

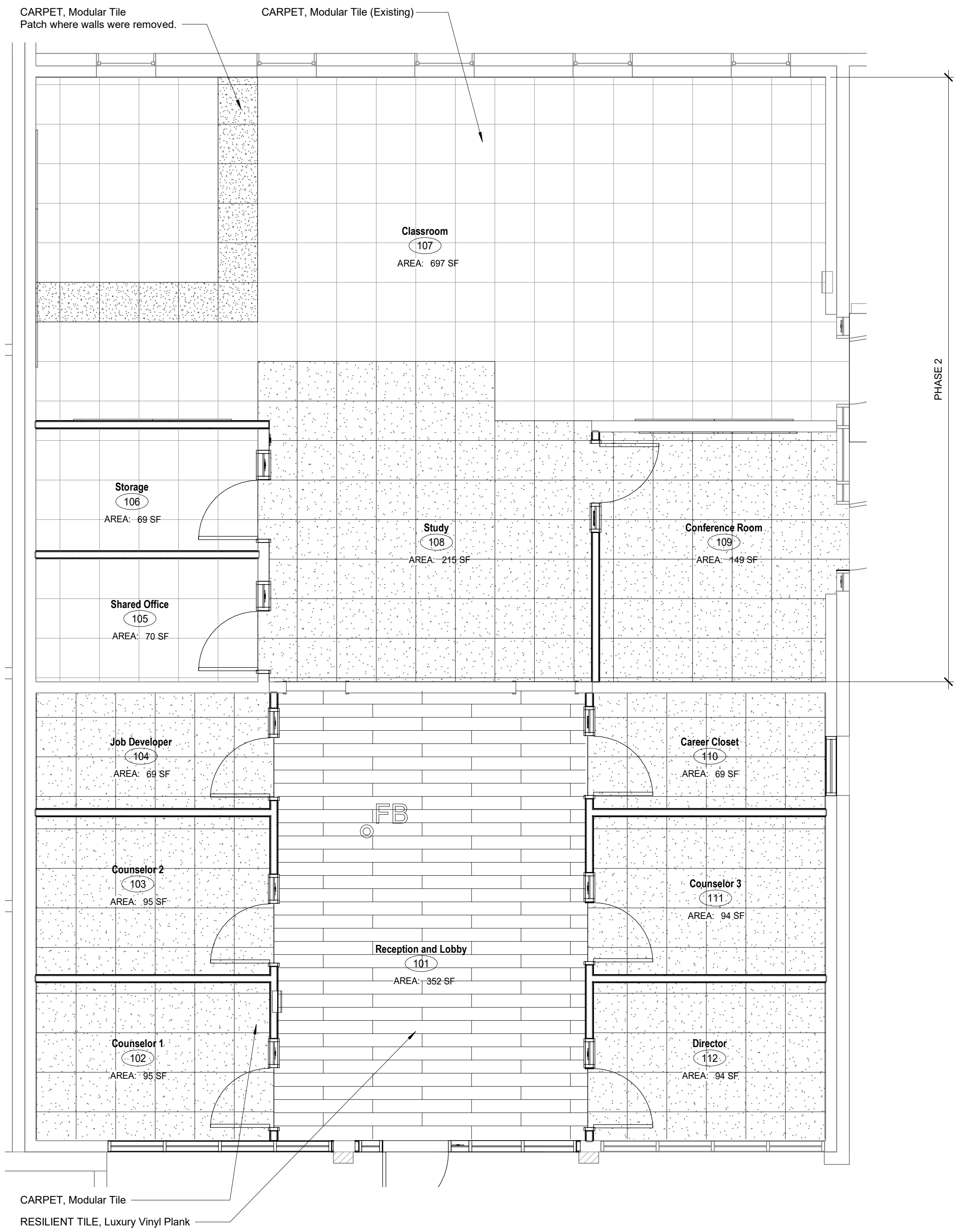
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Architect

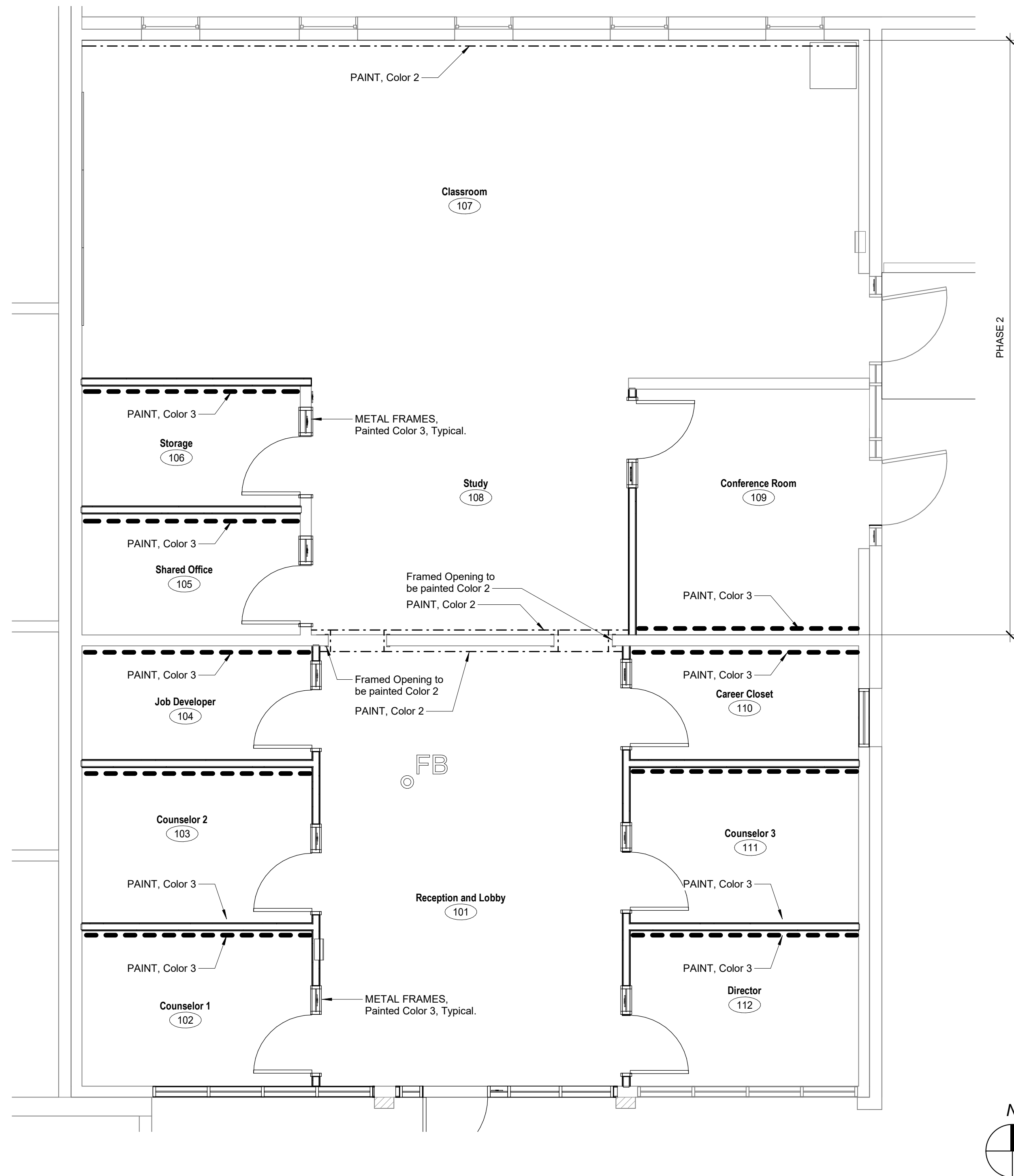
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Revision		
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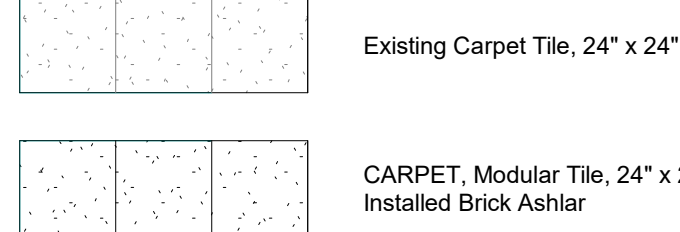
G1 Flooring Plan
1/4" = 1'-0"
Refer to G18 for Legend



G10 Accent Paint Locations
1/4" = 1'-0"
Refer to G18 for Legend.

FLOOR PATTERN LEGEND:

CARPET, Modular Carpet Tile



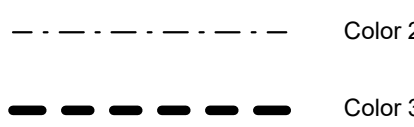
RESILIENT TILE, Luxury Vinyl Plank



ACCENT PAINT LEGEND:

PAINT

All Gypsum Board surfaces to be painted Color 1, Unless otherwise noted.



General Notes:

- Refer to the appropriate specification sections for materials, systems and types
- This drawing is provided for the convenience of the Contractor. Field verify all conditions and dimensions prior to fabrication, installation or application

INTERIOR COLOR SCHEDULE:

MATERIAL:	MANUFACTURER:	REF#:	DESCRIPTION:
WOOD DOORS			
Interior Wood Doors	Wood Doors stained to match Wilsonart 7935K-07 Shaker Cherry.		
PAINT			
Gypsum Board			
Color 1	Kelly-Moore	KM4968	Arctic White (Eggshell Finish)
Note: All Gypsum Board to be painted Color 1, Unless Otherwise noted.			
Color 2	Kelly-Moore	KM4875-3	Midnight Pearl (Eggshell Finish)
Color 3	Kelly-Moore	KM5825	Not My Fault (Eggshell Finish)
Metal Doors/Frames (New and Existing)			
Color 3	Kelly-Moore	KM5825	Not My Fault (Eggshell Finish)
CARPET			
Modular Tile	Mannington Commercial	35216, Script	Ward, Installed Brick Ashlar
RESILIENT BASE AND ACCESSORIES			
Rubber Base/Transitions	Burke Mercer	701	Black
RESILIENT TILE			
Luxury Vinyl Plank			
Color 1	Mohawk	Living Local Collection	Premium Wood C0194, 829 Sandy
IDENTIFYING DEVICES			
Interior and Exterior Signs	Mohawk Signs	-	Match to Existing School Standard

NOTES:

- The intent of this schedule is to clarify and detail the color and patterns of finishes. All information regarding construction conditions, casework, framing and ceiling details, etc. shall be per Architectural Drawings.
- Interior Color Schedule to be used in Conjunction with Architectural Drawings and Specifications.
- Paint colors listed on Interior Color Schedule are for color reference only. Refer to Architectural Specifications and Finish Schedules for information regarding paint systems.
- Change of paint to occur on an inside corner, unless otherwise noted.
- All Gypsum Board surfaces to be painted Color 1, Unless Otherwise Noted.
- All Paint brushouts to be submitted per specifications for approval prior to commencement of work.
- All finishes listed are Merced College District Standards. No Substitutions will be accepted.

A1 Interior Color Schedule

G18 Interior Finish Legend
No Scale

Career Center Interior Upgrades
Merced College
Merced, CA 95348

STUDENT UNION BUILDING
INTERIOR DESIGN PLAN

Project
Drawing

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Architect

No.	Revision/Submission	Date

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Project Number 2329.ID	Checked By:	
Date: 06.20.2023	Reviewed By:	
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