BID DOCUMENTS COVER SHEET

CONTRACT DOCUMENTS
FOR

DVC EXTERIOR PAINTING PROJECT
AT
DIABLO VALLEY COLLEGE
321 Golf Club Rd, Pleasant Hill, CA 94523

PAINTING SPECIFICATIONS BY:
Daniel J. TerAvest
DVC Program Director – Capital Projects
Phone: (925) 969-4281
Email: dteravest@dvc.edu

APRIL 30, 2015

Jovan Esprit (May 2015)
CCCCD Contract Manager – Purchasing
**SECTION 00010**

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Contra Costa Community College District  
Diablo Valley College  
DVC Exterior Painting Project
SECTION 00015
PROJECT DIRECTORY

OWNER: Contra Costa Community College District
500 Court St, Martinez, CA 94553

CAMPUS: DIABLO VALLEY COLLEGE
321 Golf Club Rd, Pleasant Hill, CA 94523

DVC OFFICERS: PETER GARCIA
President

JOHN NAHLEN
Vice President, Business & Administrative Services
(925) 969-2018

DANIEL TERAVEST
Program Director – Capital Projects
(925) 969-4281

DISTRICT OFFICE: DAVID WETMORE
Director of Purchasing & Contract Services
(925) 229-6955

JOVAN ESPRIT
Contract Manager – Purchasing & Contract Services
(925) 229-6959

END OF SECTION 00015
NOTICE INVITING BIDS

DVC EXTERIOR PAINTING
Diablo Valley College, 321 Golf Club Rd, Pleasant Hill, CA 94523

NOTICE IS HEREBY GIVEN that the Governing Board of the Contra Costa Community College District, Martinez, California, will receive sealed bid proposals for the furnishing of all labor, materials, equipment, transportation and services for the construction of the project entitled DVC EXTERIOR PAINTING. Construction Cost Estimate = $1,000,000.00; License Required: B-General; C33– Painting Contractors

SCOPE OF WORK - In general, the Work consists of exterior painting of selected buildings on Campus. Repair of dry rot and other damaged areas as needed. Per Painting Specifications by Daniel Teravest, Program Director – Capital Projects, Diablo Valley College; Phone: (925) 969-4281; Email: dteravest@dvc.edu

CAMPUS PLANS AND PAINTING SPECS - Download copies of campus building plans and painting specifications at the District Website link (Open Solicitations): http://www.4cd.edu/webapps/purchasingviewbids/default.aspx Submit correct Email Address to receive any Addendum automatically when uploaded by the District.

REQUEST FOR INFORMATION - All questions related to this project are to be directed to: Jovan Esprit, Contract Manager, CCCCD Purchasing, in writing via Email Message (jesprit@4cd.edu) no later than May 28, 2015 at 2:00 PM for any Addendum to be issued by DVC Campus on June 4, 2015.

BID BOND - Each bid shall be made on the bid form, which is included in the Bid Documents and when submitted, shall be accompanied by a Bid Bond or Certified Cashier’s Check in the amount of 10% of bid (made payable to the Contra Costa Community College District). The District reserves the right to forfeit Bid Bond submitted for failure of the successful bidder to secure Payment & Performance Bonds.

IMPORTANT INFORMATION: Pre-Bid Meeting and Job Walk: May 22, 2015 @ 10:00 AM (MANDATORY) Location: DVC Buildings & Grounds Office; Bid Opening: June 11, 2015 prior to 2:00 PM Location: DVC Buildings & Grounds Office, Attention: Daniel J. Teravest, Director – Capital Projects, DVC. Bids shall be monitored and recorded by Jovan Esprit – Districtwide Contracts Manager – Purchasing.

PAYMENT & PERFORMANCE BONDS - The successful bidder will be required to furnish a labor and material bond in an amount equal to one hundred percent (100%) of the contract price and a faithful performance bond in an amount equal to one hundred percent (100%) of the contract price, said bonds to be secured from a surety company acceptable to the Contra Costa Community College District and authorized to execute such surety in the State of California.

PREVAILING WAGE RATES - This project is a public works project and is subject to prevailing wage rate laws. A copy of the prevailing rates of wages is on file with the Purchasing & Contracts Services Office of the Contra Costa Community College District. Said rates of wages shall be included in the contract for the work by this reference.

DIR CONTRACTOR REGISTRATION AND PWC-100 REQUIREMENT – (SB 854) this project is subject to compliance monitoring and enforcement by the Department of Industrial Relations (DIR/DLSE). No contractor or subcontractor may be listed on a bid proposal for a public works project unless registered with the DIR pursuant to Labor Code section 1725.5 [with limited exceptions from this requirement for bid purposes only under Labor Code section 1771.1(a)]. No contractor or subcontractor may be awarded a contract for public work on a public works project unless registered with the DIR. Certified Payroll shall be filed by the Contractor directly to the DIR. The District (Owner) shall fill out and submit to DIR all information required at PWC-100 Form for all public projects valued at $1,000 and above with limited exceptions as contained at the DLSE Public Works Manual, Section 2.8 – 2.8.5)
SUBCONTRACTORS - Attention is directed to Section 4100 through 4113 of the Public Contract Code concerning Subcontractors with emphasis on Section 4104, known as the “Subletting and Subcontracting Fair Practices Act, effective July 1, 2014.

LIQUIDATED DAMAGES - Liquidated Damages shall be set at Five Hundred Dollars ($500.00) for each calendar day the work is delayed.

BID WITHDRAWAL - The Governing Board of the Contra Costa Community College District reserves the right to reject any and all bids and/or waive any informality or irregularity in any bid received. No bidder may withdraw their Bid for a period of thirty (30) days after the date set for opening thereof.

END OF DOCUMENT
1.1 ISSUING OF DOCUMENTS

A. Complete set of Bidding Documents is available at the District website link: [http://www.4cd.edu/webapps/purchasingviewbids/default.aspx](http://www.4cd.edu/webapps/purchasingviewbids/default.aspx)

You may also access it this way:
1) [www.4cd.edu](http://www.4cd.edu)
2) Click on Administrative Services;
3) Scroll and click on Purchasing Department;
4) On the right side you will see “Resources”;
5) Click on “Open Solicitations”
6) Click on any project you wish to look at;
7) It will ask you to type in your email address;
8) Click on “Submit”;
9) Use the “back” button to browse on the references under each project.

B. Project documents including but not limited to plans, specifications, addenda, bidders lists, bid results, etc. can also be viewed at online plan service through the Contra Costa Builders Exchange (CCBX) at: [http://onlineplanservice.com/PublicWorks/ProjectList.aspx?Agency=49](http://onlineplanservice.com/PublicWorks/ProjectList.aspx?Agency=49)

1.2 QUALIFICATIONS OF BIDDERS

A. Bidders may be required to furnish evidence satisfactory to the District and the Architect that he has sufficient means and has had sufficient experience in the class of work called for to enable him to complete the Contract in a satisfactory manner.

B. Bidders shall be Contractors properly licensed in accordance with the laws of the State of California.

C. The successful Bidder shall furnish satisfactory Certificates of Insurance coverage as specified in the Contract Documents.

1.3 RECEIPT AND OPENING OF BIDS

A. Contra Costa Community College District and the Campus hereinafter referred to as the Owner / District, will receive Bids at the same time and place specified in the Notice inviting Bids.

B. Complete the Bid Form included in the Bid / Contract Documents.

C. The envelopes containing the Bids shall be sealed, addressed to Diablo Valley College, and designated as “DVC EXTERIOR PAINTING PROJECT”. The envelope shall contain the name and address of the Bidder.

D. Bids that are mailed shall have the previously described envelope placed inside an envelope addressed to: DIABLO VALLEY COLLEGE, 321 Golf Club Rd, Pleasant Hill, CA 94523
ATTENTION: DANIEL TERAVEST, PROGRAM DIRECTOR - CAPITAL PROJECTS. Bids should be mailed in time to be received prior to the time set forth in the Notice Inviting Bids.

E. Bids which are conditional (or which make alterations, omissions, or reservations to the terms of the Bidding Documents) may be rejected as non-responsive.

F. All monetary figures are required, both in writing and in numerals. In event of conflict between written quotations and numerical quotations, written quotations shall govern.

G. Type or print all bid data legibly in ink except signatures which shall be in script. Mistakes may be crossed out and corrections inserted, if each is initialed in ink by signer of Bid.

H. Bidder's business address and signature shall be on the Bid. A Bid by a partnership shall furnish the full names of partners and be signed in the partnership name by one member of the partnership, or by authorized representative, followed by the signature and designation of the person signing. Bids by corporations, with corporate seal affixed, shall be signed with the legal name of the corporation followed by the name of the state of incorporation and by the signature and designation of the person authorized to bind it to the matter. The name of each person signing shall also be typed or printed below the respective signatures. When required by the District, satisfactory evidence of authority of the office signing in behalf of the corporation shall be furnished.

I. No Bids will be received after the date and time set forth in the Notice Inviting Bids.

1.4 BID SECURITY

A. Submit with the Bid a Bid Security in the amount of 10 percent (10%) of the Bid.

B. The District reserves the right to forfeit the Bid Bond submitted for failure of the successful bidder to secure Payment & Performance Bonds.

1.5 SURETY BONDS

A. The successful Bidder shall furnish a Labor and Material Payment Bond in the amount equal to one hundred percent (100%) of the Contract Price and a faithful Performance Bond in the amount equal to 100 percent (100%) of the Contract Price as security for the successful performance of the work and payment of persons performing labor and furnishing materials. The Bonds shall be executed by a surety company or companies acceptable to the District and authorized to execute such in the State in which the Project is located and shall be furnished within 10 days after Notice of Acceptance of said Bid. Surety shall be made in favor of the District and shall cover the guarantee periods as well as the construction period.

1.6 WITHDRAWAL OR REVISIONS OF BID

A. This Bid may be withdrawn or revised prior to the scheduled time for receipt. Bids not withdrawn prior to the scheduled time for receipt may not be withdrawn for a period of 30 days.
1.7 BID PROTESTS

A. Inquiries or questions based on alleged patent ambiguity of the plans, specifications or estimate must be communicated as a bidder inquiry prior to bid opening. Any such inquiries or questions, submitted after bid opening, will not be treated as a bid protest.

B. Bidder may file a protest with the District against the Bid of other Bidder or Bidders (“Bid Protest”) subject to the provisions of this Article. The procedures and time limits set forth in this Article are mandatory and are a Bidder’s sole and exclusive remedy in protesting other Bidders’ bids. Failure to comply with these procedures shall constitute a waiver of any right to pursue a Bid Protest, or to contest the District’s award of the contract for the work that is the subject of the Bid, in any legal proceeding before any authority with jurisdiction.

C. Bid Protests and Responses shall be governed by the following time limitations:

1. Bidder must deliver any Bid Protest to the District in writing before June 18, 2015 at 2:00 PM. The District will reject any Bid Protest not received by the District by this deadline. Bidder must concurrently deliver a copy of its Bid Protest to all Bidders against whose Bids the Bid Protest is directed. The Bidder must include with its Bid Protest written proof to the District’s satisfaction that Bidder has delivered a copy of its Bid Protest to the other Bidder whose bid is the subject of the Bid Protest.

2. A Bidder whose Bid is the subject of a Bid Protest must deliver its written response, if any, (“Response”) to the District, before June 24, 2015 at 2:00 PM. The District will reject any Response not received by the District by this deadline.

D. Delivery of Bid Protest or Response:

1. Bidder may deliver a Bid Protest to the District by personal delivery or electronic transmission such as by facsimile. Bidder is solely responsible for ensuring that the District receives any Bid Protest or Response by the deadlines set forth herein.

2. The District will not consider Bid Protests or Responses by telephone conversation or any other non-written communication.

3. Bidder shall submit any Bid Protest or Response to:
   David Wetmore, Director of Purchasing & Contract Services - CCCCD

E. Content of Bid Protest:

1. A Bid Protest must state the basis for the protest and provide supporting evidence.

2. A Bid Protest must refer to the specific portion of the Bid that forms the basis of the protest.

3. A Bid Protest must include the name, address, and telephone number of the person representing the protesting Bidder.

4. A Bid Protest must be clearly identified as a Bid Protest.

1.8 AWARD AND REJECTION OF BIDS

A. In awarding or rejecting Bids, the District reserves the following rights:

1. Identification of successful Bidder will not be determined at time of opening Bids.

2. To obtain opinion of counsel on legality and sufficiency of bids.

3. To reject all Bids, to re-bid, or waive irregularities or informalities in a Bid, and to accept or reject alternates.
4. Request proof that the successful Bidder can provide performance and payment bonds as required.

1.9 EXAMINE DOCUMENTS AND VISIT SITE

A. Before submitting a Bid, the Bidder shall examine the Bidding Documents, visit the site of the work, attend the required site visit arranged by the Campus / District and obtain Certification of Attendance signed by the Campus, ascertain existing conditions and limitations, including those of labor, and include in the Bid a sum to cover the cost of all items described in the Contract Documents.

B. No consideration will be granted for alleged misunderstanding of the materials to be furnished or work to be done. The tender of a Bid carries with it the agreement to terms and conditions referred to in the Contract Documents.

1.10 DISCREPANCIES, AMBIGUITIES, OR CONFLICTS

A. If the Bidder is in doubt as to the true meaning of any part of the Contract Documents; finds discrepancies, errors or omissions therein; or finds variances in any of the Contract Documents with applicable rules, regulations, ordinances and/or laws, a written request for an interpretation or correction thereof must be submitted to the District’s Contract Manager. Bidders are solely responsible for submitting to District’s Contract Manager such request. Ambiguities or inconsistencies arising as a result of separation of sections or portions of the drawings or specifications by or for subcontractor bidding shall not relieve the Contractor for providing the complete Work without increase to or adjustment in the Contract Price or the Time for performance. Interpretations or corrections of the Contract Documents will be by written addendum issued by the Architect. 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.

1.11 ADDENDA

A. Cost for work included in any Addenda issued during the time of bidding shall be included in the Bid, and will become a part of the Contract. List Addenda received as indicated on the Bid Form.

1.12 FORM OF AGREEMENT

A. The form of agreement to be used for the Contract is provided by the District and is included in the Bid Documents.

1.13 AWARD OF CONTRACT

A. The District will be allowed a period of thirty (30) days after Bid Opening Date for evaluating the Bids.
B. Bidders of record will be notified of the results of the District’s evaluation of bids and Award of Contract, if any.

C. The contractor shall begin work within ten (10) calendar days of receipt of Notice to Proceed.

END OF SECTION 00200
SECTION 00300
BID PROPOSAL FORM

PROJECT NAME: DVC EXTERIOR PAINTING PROJECT

CAMPUS / LOCATION: DIABLO VALLEY COLLEGE, 321 Golf Club Rd, Pleasant Hill, CA 94523

OWNER: DIABLO VALLEY COLLEGE

DISTRICT: CONTRA COSTA COMMUNITY COLLEGE DISTRICT
500 Court St, Martinez, CA 94553

Herein Referred to as "Owner / District"

1. INTRODUCTION

   A. The Bidder proposes to perform the Work for the Contract Sum and within the proposed Contract Time, based upon an examination of the site and the Bid and Contract Documents.

   B. The Bidder certifies this Bid is submitted in good faith.

   C. The signed copy of the Certification of the Visit to the Site shall be attached to the Bid Form Submittal.

   D. A fully executed Statement of Bidder's Qualifications signed by an authorized officer of the Bidder submitting the Bid shall be attached to the Bid Form.

   E. A fully executed Non-Collusion Affidavit signed by an authorized officer of the Bidder submitting Bid shall be attached to the Bid Form.

   F. The District shall award the contract to the lowest responsive and responsible Bidder.

2. CONTRACT SUM

   A. BID AMOUNT: (TOTAL AMOUNT FOR ALL BUILDINGS)

   For labor, materials, bonds, fixtures, equipment, tools, transportation, services, sales taxes and other costs necessary to complete the general construction in accordance with the Contract Documents, for a stipulated Contract Sum in the amount of:

   ___________________________________________________________ Dollars ($______________________)

Contra Costa Community College District
Diablo Valley College
DVC Exterior Painting Project
B. **Note to Bidders:** You are required to provide individual pricing for the following buildings. The District reserves the right to eliminate selected buildings from the project, if necessary, as budget allows. Bid award will be made on the total aggregate price (Total Bid Amount) above.

**Two (2) Coat buildings:**
- Administration Building (AB) $______________
- Performing Arts & Theater (PAC, PA, AR) $______________
- Physical Sciences and Planetarium (PS, PL) $______________

**One (1) Coat buildings:**
- Art (A) $______________
- Counselling (C) $______________
- Liberal Arts (LA) $______________
- Faculty Offices (FO) $______________
- Science Center (SC) $______________

Dry rot and other damaged areas shall be repaired at the direction of the Owner / District at Time and Material based on Prevailing Wage Rates of the required trade and yard tags for material plus 10%

3. **COMPLETION TIME**
   A. For establishing the Date of Final Completion the contract time shall be **90 calendar days** after date of the Notice to Proceed. This time may be subject to modification to facilitate the work as mutually agreed upon at a later date.
   
   B. The Bidder certifies that the Bid is based on the Contract Time for completion as stated above and in the Contract Documents. Bidder further certifies that the Base Bid amount is sufficient to cover all labor, materials, central office and construction site overhead, profit, and all other costs related to the completion of the Project for the entire Project construction time for both the General Contractor and all Subcontractors, as stated above in paragraphs 2 and 3.

4. **ADDENDA**
   A. The Bidder acknowledges receipt of the following Addenda, and certifies the Bid has provided for all modifications and considerations required therein.

   None [ ]

   Addendum No.: _________ dated ________________

   Addendum No.: _________ dated ________________

   B. List of Additional Addenda Attached: Yes [ ] No. [ ].

Contra Costa Community College District
Diablo Valley College
DVC Exterior Painting Project

Section 000300
Bid Proposal Form
5. **DESIGNATION OF SUBCONTRACTORS**
   A. The Bidder has set forth a complete list indicating the type of work, name, and business address of each Subcontractor who will perform work in excess of one-half of one percent of the Contract Sum.
   
   B. Any portion of the work in excess of the specified amount having no designated Subcontractor shall be performed by the Bidder.
   
   C. Substitution of listed Subcontractors will not be permitted unless approved in advance by the District.
   
   D. Prior to signing the Contract, the District reserves the right to reject any listed Subcontractor.

<table>
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<th>Type of Work</th>
<th>Subcontractor's</th>
<th>Business Address</th>
<th>License #</th>
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<td>(3)</td>
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</table>

E. Complete list of Subcontractors is attached: Yes [ ] No [ ]

F. Continuation list of Subcontractors is attached: Yes [ ] No [ ]

6. **ACCEPTANCE AND AWARD**
   A. The District reserves the right to reject this Bid and to negotiate changes before or after execution of the Contract. This Bid shall remain open and shall not be withdrawn for a period of 30 days after Bid Opening date.

   B. If written notice of acceptance of this Bid is mailed or delivered to the Bidder within 90 days after the date set for the receipt of this Bid, or other time before it is withdrawn, the Bidder will execute and deliver to the District a Contract prepared by District with the required Surety Bonds and Certificates of Insurance, within 10 days after personal delivery or deposit in the mail of the notification of acceptance.

   C. Notice of acceptance or request for additional information may be addressed to the Bidder at the address provided.

   D. No contractor or subcontractor may be listed on a bid proposal for a public works project (submitted on or after March 1, 2015) unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5 [with limited exceptions from this requirement for bid purposes only under Labor Code section 1771.1(a)].

   E. No contractor or subcontractor may be awarded a contract for public work on a public works project (awarded on or after April 1, 2015) unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5.

   F. This project is subject to compliance monitoring and enforcement by the Department of Industrial Relations.
7. **BID SECURITY**
   A. The required 10 percent (10%) Bid Security for this Bid is attached in the form of:
      ( ) Bid Bond Issued By: ________________________________
      ( ) Certified or Cashier's Check No._______________________
      Issued by: __________________________________________

8. **BIDDER'S BUSINESS INFORMATION**

   A. **Individual [ ]:** ________________________________
      Personal Name: ________________________________
      Business Name: ________________________________
      Address: ________________________________
      ___________ Zip Code: ___________
      Telephone: ________________________________
      Fax Number: ________________________________

   B. **Partnership [ ]:** ________________________________
      Co-partners' Names: ________________________________
      Business Name: ________________________________
      Address: ________________________________
      ___________ Zip Code: ___________
      Telephone: ________________________________
      Fax Number: ________________________________

   C. **Corporation [ ]:** ________________________________
      Firm Name: ________________________________
Address:  


Zip Code  


Telephone:  


Fax Number:  


State of Incorporation:  


President:  


Secretary:  


Treasurer:  


Manager:  


D.  **Power of Attorney:**  Name:  


Title:  


E.  **Contractor License No.**  


State of  


F.  Bidder is submitting this proposal on behalf of a Joint Venture. Names, license numbers, and relevant information are given on a separate attachment:  


Yes [ ] No [ ].  


G.  Upon request, furnish appropriate documentation to substantiate and/or support the data given.
9. The undersigned hereby certifies under penalty of perjury under the laws of the State of California that all the information submitted by the Bidder in connection with this Bid and all the representations herein made are true and correct.

Executed this day of ____________________________

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Firm Name

Signature

By (Print or Type Name)

Title

End of Section 00300
Section 00350

NONCOLLUSION AFFIDAVIT
(TO BE EXECUTED BY BIDDER AND SUBMITTED WITH BID)

State of California

County of Contra Costa

_____________________________________________________, being first duly sworn, deposes and says that he or she is of __________________________________________________, the party making the foregoing bid that the bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the bid is genuine and not collusive or sham; that the bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or that anyone shall refrain from bidding; that the bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder, or to secure any advantage against the public body awarding the contract of anyone interested in the proposed contract; that all statements contained in the bid are true; and, further, that the bidder has not, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid.

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

Date: ______________________ Signature: __________________________________

State of California

County of Contra Costa

On ______________________, before me, _______________________ , Notary Public personally appeared ________________________________________, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

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

WITNESS my hand and official seal.

Date: ______________________ Signature: __________________________________

[SEAL] END OF SECTION 00350
Contra Costa Community College District (District), in accordance with Public Contract Code Section 20651.5, requires each prospective bidder for a contract, as described under Section 20651, to complete and submit to the district a standardized questionnaire and financial statement in a form specified by the district, including a complete statement of the prospective bidder’s financial ability and experience in performing public works. The questionnaire and financial statement shall be verified under oath by the bidder in the manner in which civil pleadings in civil actions are verified. The questionnaire responses of prospective bidders and their financial statements shall not be deemed public records and shall not be open to public inspection. All information requested must be provided and be current as of the date of the Bid.

I, ________________________________________________ being first duly sworn, depose and say:

(Name)

I am the ___________________________ of __________________________________

(Title)      (Company / Entity)

Firm Name: __________________________________ Check One: □ Corporation
(as it appears on license) □ Partnership
□ Sole Proprietor
□ Joint Venture

Contact Person: __________________________________

Address: __________________________________________

Phone: ___________________    Fax: ___________________

Email: _________________________    Tax ID No.:______________

If firm is a sole proprietor or partnership:

Owner(s) of Company __________________________________

Contractor’s License Number(s): (California State License Board Classification)

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
For Bidders That Are Corporations:

1a. Date incorporated: ________________________________

1b. Under the laws of what state: ___________________________

1c. Provide all the following information for each person who is either (a) an officer of the corporation (president, vice president, secretary, treasurer), or (b) the owner of at least ten percent of the corporation’s stock.

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Years with Co.</th>
<th>% Ownership</th>
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</table>

1d. Identify every construction firm that any person listed above has been associated with (as owner, general partner, limited partner or officer) at any time during the last five years.

NOTE: For this question, “owner” and “partner” refer to ownership of ten percent or more of the business, or 10 percent or more of its stock, if the business is a corporation.

<table>
<thead>
<tr>
<th>Person’s Name</th>
<th>Construction Firm</th>
<th>Dates of Person’s Participation with Firm</th>
</tr>
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<tbody>
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</table>
**For Bidders That Are Partnerships:**

1a. Date of formation: ________________________________________

1b. Under the laws of what state: _______________________________

1c. Provide all the following information for each partner who owns 10 per cent or more of the firm.

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Years with Partnership</th>
<th>% Ownership</th>
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</table>

1d. Identify every construction company that any partner has been associated with (as owner, general partner, limited partner or officer) at any time during the last five years.

**NOTE:** For this question, “owner” and “partner” refer to ownership of ten per cent or more of the business, or ten per cent or more of its stock, if the business is a corporation.

<table>
<thead>
<tr>
<th>Person’s Name</th>
<th>Construction Company</th>
<th>Dates of Person’s Participation with Company</th>
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</table>
**For Bidders That Are Sole Proprietorships:**

1a. Date of commencement of business. __________________________

1b. Tax ID number of company owner __________________________

1c. Identify every construction firm that the business owner has been associated with (as owner, general partner, limited partner or officer) at any time during the last five years.

**NOTE:** For this question, “owner” and “partner” refer to ownership of ten per cent or more of the business, or ten per cent or more of its stock, if the business is a corporation.

<table>
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<tr>
<th>Person’s Name</th>
<th>Construction Company</th>
<th>Dates of Person’s Participation with Company</th>
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**For Bidders That Intend to Make a Bid as Part of a Joint Venture:**

1a. Date of commencement of joint venture. __________________________

1b. Provide all of the following information for each firm that is a member of the joint venture that expects to bid on one or more projects:

<table>
<thead>
<tr>
<th>Name of Firm</th>
<th>% Ownership of Joint Venture</th>
</tr>
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</tbody>
</table>
For All Bidders

2. Has there been any change in ownership of the firm at any time during the last five years?
   **NOTE:** A corporation whose shares are publicly traded is not required to answer this question.
   ☐ Yes ☐ No
   If “yes,” explain on a separate signed page (referring to this question).

3. Is the firm a subsidiary, parent, holding company or affiliate of another construction firm?
   **NOTE:** Include information about other firms if one firm owns 50 per cent or more of another, or if an owner, partner, or officer of your firm holds a similar position in another firm.
   ☐ Yes ☐ No
   If “yes,” explain on a separate signed page (referring to this question).

4. Are any corporate officers, partners or owners connected to any other construction firms?
   **NOTE:** Include information about other firms if an owner, partner, or officer of your firm holds a similar position in another firm.
   ☐ Yes ☐ No
   If “yes,” explain on a separate signed page (referring to this question).

5. List all California construction license numbers, classifications and expiration dates of the California contractor licenses held by your firm:
   ____________________________________________________________
   ____________________________________________________________
   If more space is needed add a separate signed page (referring to this question).

6. If any of your firm’s license(s) are held in the name of a corporation or partnership, list below the names of the qualifying individual(s) listed on the CSLB records who meet(s) the experience and examination requirements for each license.
   ____________________________________________________________
   ____________________________________________________________
   If more space is needed add a separate signed page (referring to this question).

7. Has your firm changed names or license number in the past five (5) years?
   ☐ Yes ☐ No
   If “yes,” explain on a separate signed page, including the reason for the change, and all former names under which the firm has conducted business.

8. Has any owner, partner or (for corporations) officer of your firm operated another construction firm under any other name in the last five (5) years?
   ☐ Yes ☐ No
   If “yes,” explain on a separate signed page (referring to this question), including the reason for the change.

9. Have you attached your latest copy of a REVIEWED OR AUDITED financial statement with accompanying notes and supplemental information?
10. Is the attached Financial Statement for the identical organization of the Bidder?
☐ Yes ☐ No

If “no”, explain the relationship and financial responsibility of the organization whose financial statement of provided (i.e., parent/subsidiary, etc.)

________________________________________________________________________

If more space is needed add a separate signed page (referring to this question).

11. Contractor possesses a VALID AND CURRENT California Contractor’s license for the project or projects for which it intends to submit a bid.
☐ Yes ☐ No

12. List the categories of work your firm typically performs with its own forces, and check the adjacent boxes of those categories of work that will be self-performed on this project

☐ ___________________________________ ☐ ___________________________________

☐ ___________________________________ ☐ ___________________________________

☐ ___________________________________ ☐ ___________________________________

13. On a separate signed page (referring to this question), list all construction projects your organization has in progress and for each project listed, state; (i) a general description of the work performed or to be performed by your organization; (ii) the owner’s name, name of the owner’s representative, the owner’s address and telephone number; (iii) the project architect, address and telephone number; (iv) percent presently completed and (v) the scheduled completion date.

14. On a separate signed page (referring to this question), list all construction projects completed by your organization in the past three years, and for each project, state: (i) a general description of the work performed by your organization on the project; (ii) the owner’s name, name of the owner’s representative, the owner’s address and telephone number; (iii) the initial and final contract amount; (iv) the initial and final dates of completion; and (v) whether the project was completed within contract time and contract budget.

15. Has a claim or other demand ever been made against your organization’s California Contractors License Bond?
☐ Yes ☐ No

If yes, on a separate signed page (referring to this question), state the following: (i) the name, address and telephone number of each person or entity making claim or demand; (ii) the date of...
each claim or demand; (iii) the circumstances giving rise to each such claim or demand; and (iv) the disposition of each such claim or demand.

16. Has a complaint ever been filed against your organization’s California Contractors License with the California Contractors State License Board (CSDL)?
   ☐ Yes ☐ No
   If yes, on a separate signed page (referring to this question), state the following for each complaint: (i) the name, address and telephone number of each person or entity making the complaint; (ii) the date of each complaint; (iii) the circumstances giving rise to each such complaint; and (iv) the disposition of each such complaint, including without limitation, any disciplinary or other action imposed or taken by the California Contractors State License Board as a result of any such complaint.

17. Have any lawsuits or other proceedings ever been brought against your organization or any of its principals or officers in connection with any construction contract or construction project?
   ☐ Yes ☐ No
   If “yes,” on a separate signed page (referring to this question) describe the circumstances, the amount or relief sought and the disposition of each such lawsuit or other proceeding.

18. Has your organization ever filed a lawsuit or initiated other proceedings in connection with any construction contract or construction project?
   ☐ Yes ☐ No
   If “yes,” on a separate signed page (referring to this question) describe the circumstances, the amount or relief sought and the disposition of each such lawsuit or other proceeding.

19. Are there any judgments, orders or arbitration awards pending, outstanding or by which your organization or any of its officers or principals are bound by?
   ☐ Yes ☐ No
   If “yes,” on a separate signed page (referring to this question) describe each such judgment, order or arbitration award and the present status of the satisfaction or discharge thereof.

20. Has any California State License Board (CSDL) license held by your firm, or its Responsible Managing Employee (RME) or Responsible Managing Officer (RMO) been suspended or revoked within the last five (5) years?
    ☐ Yes ☐ No

21. Has your organization ever failed to complete a construction contract?
    ☐ Yes ☐ No
    If “yes,” on a separate signed page (referring to this question) state the following; (i) describe each such contract; (ii) the owner’s name, address and telephone number; (iii) a description of the project; and (iv) the circumstances of the failure to complete.

22. Has your organization ever been declared in default of a construction contract?
    ☐ Yes ☐ No
    If “yes,” on a separate signed page (referring to this question) state the following: (i) describe each such contract; (ii) the owner’s name, address and telephone number; (iii) a description of the project; and (iv) the circumstances of the declaration of default.

23. Has a claim or other demand ever been asserted against any Bid Bond, Performance Bond or
Labor and Material Payment Bond posted by your organization in connection with any construction contract or your submittal of a bid or proposal on a construction contract?

☐ Yes ☐ No

If “yes,” on a separate signed page (referring to this question) state the following: (i) state the name, address and telephone number of each such claimant; (ii) the date of the claim; and (iii) the disposition thereof.

24. At the time of submitting this qualification form, is your firm ineligible to bid on or be awarded a public works contract, or perform as a subcontractor on a public works contract, pursuant to either Labor Code section 1777.1 or Labor Code section 1777.7?

☐ Yes ☐ No

25. At any time during the last five (5) years, has your firm, or any of its owners, officers, or partners been convicted of a crime involving the awarding of a contract of a government or Public construction project, or the bidding or performance of a government or Public contract?

☐ Yes ☐ No

26. Has your firm or any of its owners, officers, or partners ever been convicted of a crime involving any federal, state, or local law related to bidding, awarding, or performance of any construction contract?

☐ Yes ☐ No

27. Has your firm or any of its owners, officers or partners ever been found liable in a civil suit or found guilty in a criminal action for making any false claim or material misrepresentation to any public agency or entity in any way related to any construction contract?

☐ Yes ☐ No

28. Is your firm CURRENTLY the debtor in a bankruptcy case?

☐ Yes ☐ No

29. In the last twelve (12) months has your firm, or any firm with which any of your company’s owners, officers or partners was associated, been debarred, disqualified, removed or otherwise prevented from bidding on, or completing, any government agency or public works project for any reason?

NOTE: “Associated with” refers to another construction firm in which an owner, partner or officer of your firm held a similar position.

☐ Yes ☐ No

If YES, on a separate signed page (referring to this question) state the following: (i) describe each such project; (ii) the owner’s name, address and telephone number; (iii) the circumstances and specific reason given for being prevented from bidding on or completing the project.

30. Has your organization ever refused to sign a contract awarded to it?

☐ Yes ☐ No

If YES, on a separate signed page (referring to this question) state the following: (i) describe each such contract; (ii) the owner's name, address and telephone number; (iii) a description of the project; and (iv) the circumstances of the refusal to sign the contract.

31. In the last twelve (12) months has your firm been denied an award of a public works contract based on a finding by a public agency that your company was NOT a responsible bidder?
☐ Yes ☐ No
If YES, on a separate signed page (referring to this question) state the following: (i) describe each such contract; (ii) the owner's name, address and telephone number; (iii) a description of the project; and (iv) the circumstances of the determination.

32. Contractor has CURRENT workers’ compensation insurance policy as required by the Labor Code or is legally self-insured pursuant to Labor Code section 3700 et. seq.
☐ Yes ☐ No
Contractor is exempt from this requirement, because it has no employees

33. Within the last two (2) years has there ever been a period when your firm had employees but was without Workers’ Compensation insurance or state-approved self-insurance?
☐ Yes ☐ No

34. Attach to this statement true and correct copies of the following:

34.1 Your organization's California Contractor's License (the copy must clearly and legibly show: (i) the licensee name; (ii) the expiration date; and (iii) the classification(s) of licensure).

34.2 The Contractor's License Bond posted by your organization in connection with your organization's California Contractor's License pursuant to California Business & Professions Code 7071.5 and 7071.6 (the copy must clearly and legibly show; (i) the Bond number or other information sufficient for identification; (ii) the name, address and telephone number of the Surety on the Bond; (iii) the signature of the individual executing the Bond on behalf of the Surety and if such individual's authority is conferred by a power of attorney or by such individual's authority is conferred by a power of attorney or by such individual's designation as an attorney in fact on behalf of the Surety, include a clear and legible copy of such power of attorney or attorney in fact designation; (iv) the principal on such Bond; and (v) the expiration date of such Bond).

34.3 If your organization's California Contractor's License is issued by virtue of the qualification of a responsible managing employee or responsible managing officer of your organization, the Qualifier's Bond, if required pursuant to California business & Professions Code 7071.9 (the copy must clearly and legibly show; (i) the bond number or other information sufficient for identification; (ii) the name, address and telephone number of the Surety on the Bond; (iii) the signature of the individual executing the Bond on behalf of the Surety and if such individual's authority is conferred by a power of attorney or by such individual's designation as an attorney in fact on behalf of the Surety, include a clear and legible copy of such power of attorney or attorney in fact designation; (iv) the principal on such Bond; and (v) the expiration date of such Bond).

35. Certification

The responses to each and all of the foregoing are complete and accurate; there are no omissions of material fact or information such that would render any of the foregoing false or misleading; there are no misstatements of fact in any of the foregoing.

I, the undersigned, certify and declare that I have read all the foregoing answers to this Section and know their contents. The matters stated in the above answers are true of my own
knowledge and belief, except as to those matters stated on information and belief, and as to those matters I believe them to be true. I declare under penalty of perjury under the laws of the State of California, that the foregoing is correct.

Dated: ______________

(Printed Name)

(Signature)

NOTARY PUBLIC

ACKNOWLEDGEMENT (By Corporation, Partnership or Individual)

STATE OF CALIFORNIA  )
COUNTY OF CONTRA COSTA  ) ss.

On ______________, before me, _____________________________, Notary Public, personally appeared ______________________________, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

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

Witness my hand and official seal.

________________________________
Notary Public

[SEAL]

END OF SECTION 00400
CERTIFICATION OF SITE VISIT

The Governing Board of the
Contra Costa Community College District
500 Court Street
Martinez, California  94553

Gentlemen/Ladies:

I visited the **DVC EXTERIOR PAINTING PROJECT** job site,

on  **MAY 22, 2015 at  10:00  A.M.**

to inspect the proposed work, which would be turned over to me in its present condition, with a representative of the Contra Costa Community College District in order to acquaint myself with the proposed work so that I might fully understand the facilities, difficulties, and restrictions attending the execution of the work under the contract, and acknowledge I had the opportunity to check the Record Drawing as-built drawings and/or previous Contract Documents, site conditions and Bid Documents with the authorized representative of the District.

**Owner / Campus Representative:**

Dan Teravest, Program Director-Capital Projects  Date
Diablo Valley College

**Bidder:**

Name of Firm or Company

Name and Title  Signature

Address

Phone Number  Fax Number

**NOTE:** Any bidder who fails to return this CERTIFICATION, fully executed, including signature of company representative AND a Contra Costa Community College District representative, with the proposal form, may have their bid rejected as non-responsive.

END OF SECTION 00450
SECTION 00600

CONSTRUCTION AGREEMENT

CONTRACT NO. ____________________
(Construction Agreement)

This Agreement shall not be enforceable until ratified and approved by the Contra Costa Community College District’s Governing Board. The estimated board meeting date is [edit].

1.0 SPECIAL TERMS. These special terms are incorporated below by this reference.

$(§1.1)$ Parties: (Public Agency) CONTRA COSTA COMMUNITY COLLEGE DISTRICT
500 Court St, Martinez, CA 94553

(Contractor)
____________________________________________
Address: _______________________________________
_______________________________________
_______________________________________
Contact: ______________________________
Title: ______________________________
Phone: ______________________________
Email: ______________________________

CSLB License No _________________ Exp. _________________
DIR Registration _________________ Exp. _________________

$(§1.2)$ Effective Date: _______________________

$(§1.3)$ Substantial Completion Time: [edit] Calendar Days from the Notice to Proceed.

$(§1.4)$ Final Completion Time: [edit] Calendar Days from the Notice to Proceed.

$(§1.4.1)$ Phase Completion: [delete entire paragraph if not needed, edit days if needed]
Phase 1 - edit Calendar Days from Notice to Proceed
Phase 2 - edit Calendar Days from the Notice to Proceed; concurrent with Phase 1.

$(§1.5)$ Liquidated Damages: [delete rest of this, leaving only paragraph title if no phasing] The Bidder acknowledges that this project consists of phases and bidder agrees that each phase of the project must be substantially completed and accepted by the Owner before a written “Notice to Proceed” is issued for the next phase of the Project. Bidder also agrees to pay, as liquidated damages the amounts specified below for each consecutive calendar day after the expiration of the consecutive calendar days allowed for each phase.

$(§1.5.1)$ Liquidated Damages, Substantial Completion[, by Phase; delete this and Phases below if not needed]: $[edit] per calendar day.

Phase 1 - edit per calendar day Work is delayed
Phase 2 - edit per calendar day Work is delayed
§1.5.2 Liquidated Damages, Remaining Work[, All Phases and Final Completion; delete this sentence if no phasing]: $[edit] / per calendar day Remaining Work is delayed

§1.6 Public Agency's Agent: CONTRA COSTA COMMUNITY COLLEGE DISTRICT ("District")

§1.7 Contract Sum: MILLION THOUSAND, HUNDRED DOLLARS and NO CENTS ($00,000,000.00)

2. SCOPE OF WORK:
[edit or get from architect].

3. WORK CONTRACT, CHANGES
(a) By their signatures below, effective on the above date, these parties promise and agree as set forth in this Agreement, incorporating by these references labor and materials contained in Section 2, Scope of Work.
(b) Contractor shall, at Contractor's own cost and expense, and in a workmanlike manner, fully and faithfully perform and complete the work; and will furnish all materials, labor, services, equipment, and transportation necessary, convenient and proper in order fairly to perform the requirements of this contract, all strictly in accordance with the Public Agency's plans, drawings and specifications.
(c) The work can be changed only with Public Agency's prior written order specifying such change and its cost agreed to by the parties; and the Public Agency shall never have to pay more than specified in Section 1.7 without such an order.

4. TIME: NOTICE TO PROCEED AND ACCEPTANCE
(a) Contractor shall start this work as directed in the specifications or the Notice to Proceed and shall be substantially complete as specified in §1.3, Substantial Completion Time, of this Agreement.
(b) Contractor shall start this work as directed in the specifications or the Notice to Proceed and all Work shall be complete as specified in §1.4, Final Completion Time, of this Agreement.
(c) Remaining Work after Substantial Completion. If the Architect or District determines that the work required by the Contract is Substantially Complete during any inspection conducted pursuant to this Agreement or Specification Section 01770, Contract Closeout Procedures, the Contractor shall be notified of that determination and the District shall determine if there is Remaining Work. A list of Remaining Work shall be issued only by the District or the Architect and only after the District has certified Substantial Completion. In addition to the list of Remaining Work provided by the District or the Architect, all administrative requirements required by the Contract Documents are deemed to be items of Remaining Work if not already complete whether or not they are specifically listed by the District or Architect. The Contractor shall immediately comply with and execute such instructions, and shall comply with all other administrative requirements of the Contract Documents within the Final Contract Time. Upon due notice from the Contractor of completion of the entire project another inspection shall be made that shall constitute the Final Inspection, provided the Remaining Work and administrative requirements have been completed to the satisfaction of the District. If all Work of the Contract Documents has been completed to the satisfaction of the District, the District shall make the final acceptance and notify the Contractor in writing of this acceptance as of the date of Final Inspection.
(d) Default for failure to Complete Remaining Work. In the event the Final Contract Time expires before the Remaining Work is completed to the satisfaction of the District, the District may provide notice to the Contractor that the Remaining Work shall be completed by Contractor to the satisfaction of the District within ten consecutive calendar days from the date of such notice. The failure of the Contractor to satisfactorily complete the Remaining Work within the ten days shall entitle to District to declare Contractor in default and thereafter terminate the Contract. The ten-day notice provided under this paragraph shall not be construed as adding any time to the Final Contract Time and is a time period solely for the purposes of providing notice.
Application for Final Payment. After the Contractor has completed all Remaining Work to the satisfaction of the District and delivered all maintenance and operating instructions, schedules, guarantees, warranties, bonds, certificates of inspection, marked-up record documents and other documents as required by the Contract, and after the District or Architect has indicated that the work is acceptable, Contractor may make application for final payment following the Payments Procedures for progress payments. The final application for payment shall be accompanied by all documentation called for in the Contract Documents, together with complete and legally effective releases or waivers (satisfactory to the District) of all liens arising out of or filed in connection with the work on the project.

(e) Final Payment and Acceptance. If the Architect determines that the work has been completed and the Contractor’s other obligations under the Contract have been fulfilled, the Architect shall, within ten working days after receipt of the final application for payment, indicate in writing the Architect’s recommendation of payment and present the application to District for payment. Thereupon the Architect shall prepare a Certificate of Final Completion. Otherwise, Architect shall return the application to Contractor indicating in writing the reasons for refusing to recommend final payment. Contractor shall make the corrections identified in the Architect’s refusal to recommend final payment. Thirty days after presentation to District of the application and accompanying documentation, with the Architect’s recommendation and notice of acceptability of the work, the amount recommended by Architect shall be due and payable by District to Contractor.

5. LIQUIDATED DAMAGES

5.1 LIQUIDATED DAMAGES - SUBSTANTIAL COMPLETION

If the Contractor fails to complete this contract and this Work or Phase of Work within the time fixed therefore, allowance being made for contingencies as provided herein, Contractor becomes liable to the Public Agency for all its loss and damage there from; and because, from the nature of the case, it is and will be impracticable and extremely difficult to ascertain and fix the Public Agency's actual damage from any delay in performance hereof, it is agreed that Contractor will pay as liquidated damages to the Public Agency the reasonable sum specified in Section 1, the result of the parties' reasonable endeavor to estimate fair average compensation therefore, for each calendar day's delay in finishing said Work or Phase of Work; and if the same be not paid, Public Agency may, in addition to its other remedies, deduct the same from any money due or to become due Contractor under this Contract. If the Public Agency for any cause authorizes or contributes to a delay, suspension of work or extension of time, its duration shall be added to the time allowed for completion, but it shall not be deemed a waiver nor be used to defeat any right of the Agency to damages for non-completion or delay hereunder. Pursuant to Government Code Section 4215, the Contractor shall not be assessed liquidated damages for delay in completion of the work, when such delay was caused by the failure of the Public Agency or the owner of a utility to provide for removal or relocation of existing utility facilities.

5.2 LIQUIDATED DAMAGES-THE REMAINING WORK

The Remaining Work, as such work is determined by the Public Agency or Public Agency’s Representative, shall be completed within the Contract Time or any proper extension thereof granted by Public Agency. If the Contractor shall neglect, fail or refuse to complete the Remaining Work within the Contract Time or any proper extension thereof granted by the Public Agency, then the Contractor does hereby agree, as part consideration for the awarding of this Contract, to pay to the Public Agency the amount specified in the Contract, not as a penalty but as liquidated damages for the Remaining Work for each such breach of Contract set forth herein for each and every consecutive calendar day that the Contractor shall be in default after expiration of the Contract Time.
6. **INTEGRATED DOCUMENTS**

The plans, drawings and specifications and special provisions of the Public Agency’s Notice Inviting Bids, and Contractor’s accepted bid for this work are hereby incorporated into this Contract; and they are intended to cooperate, so that anything exhibited in the plans or drawings and not mentioned in the specifications or special provisions, or vice versa, is to be executed as if exhibited, mentioned and set forth in both, to the true intent and meaning thereof when taken all together; and differences of opinion concerning these shall be finally determined by the Public Agency.

7. **PAYMENT**

(a) For strict and literal fulfillment of these promises and conditions, and full compensation for all this work, the Public Agency shall pay the Contractor the sum specified in Section 1, except that in unit price contracts the payment shall be for finished quantities at unit bid prices.

(b) On or about the first day of each calendar month, the Contractor shall submit to the Public Agency a verified application for payment, supported by a statement showing all materials actually installed during the preceding month, the labor expended thereon, and the cost thereof; whereupon, after checking, the Public Agency shall issue to Contractor a certificate for the amount determined to be due, minus ten (10%) percent thereof pursuant to the Public Agency’s General Terms and Conditions, but not until defective work and materials have been removed, replaced and made good.

8. **PAYMENTS WITHHELD**

(a) The Public Agency or its agent may withhold any payment, or because of later discovered evidence nullify all or any certificate for payment, to such extent and period of time only as may be necessary to protect the Public Agency from loss because of:

1. Defective work not remedied, or work not completed, or
2. Claims filed or reasonable evidence indicating probable filing, or
3. Failure to properly pay subcontractors or for material or labor, or
4. Reasonable doubt that the work can be completed for the balance then unpaid, or
5. Damage to another contractor, or
6. Damage to the Public Agency, other than damage due to delays.

(b) The Public Agency shall use reasonable diligence to discover and report to the Contractor, as the work progresses, the materials and labor which are not satisfactory to it, so as to avoid unnecessary trouble or cost to the Contractor in making good any defective work or parts.

(c) Thirty-five (35) calendar days after Public Agency files its notice of completion of the entire work, it shall issue a certificate to the Contractor and pay the balance of the contract price after deducting all amounts withheld under this contract, provided the Contractor shows that all claims for labor and materials have been paid, no claims have been presented to the Public Agency based on acts or omissions of the Contractor, and no liens or withhold notices have been filed against the work or site, and provided there are not reasonable indications of defective or missing work or of late-recorded notices of liens or claims against Contractor.

9. **INSURANCE**

Before the commencement of the Work, the Contractor shall purchase from and maintain in a company or companies lawfully authorized to do business in California as admitted carriers with a financial rating of at least A status as rated in the most recent edition of Best’s Insurance Reports or as amended by the Supplementary General Conditions, such insurance as will protect the Public Agency from claims set forth below, which may arise out of or result from the Contractor’s operations under the Contract and for which the Contractor may be legally liable, whether such operations are by the Contractor, by a Subcontractor, by
anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable.

a. Claims for damages because of bodily injury, sickness, disease, or death of any person District would require indemnification and coverage for employee claim;
b. Claims for damages insured by usual personal injury liability coverage, which are sustained by a person as a result of an offense directly or indirectly related to employment of such person by the Contractor or by another person;
c. Claims for damages because of injury or destruction of tangible property, including loss of use resulting therefrom, arising from operations under the Contract Documents;
d. Claims for damages because of bodily injury, death of a person, or property damage arising out of the ownership, maintenance, or use of a motor vehicle, all mobile equipment, and vehicles moving under their own power and engaged in the Work;
e. Claims involving contractual liability applicable to the Contractor’s obligations under the Contract Documents, including liability assumed by and the indemnity and defense obligations of the Contractor and the Subcontractors; and
f. Claims involving Completed Operations, Independent Contractors’ coverage, and Broad Form property damage, without any exclusions for collapse, explosion, demolition, underground coverage, and excavating.

(XCU)
g. Claims involving sudden or accidental discharge of contaminants or pollutants.

**Additional Insured Endorsement Requirement:** The Contractor shall name, on any policy of insurance, the District, Architect, Inspector, the State of California, their officers, employees, agents and independent contractors as Additional Insured. Subcontractors shall name the Contractor, the District, Architect, Inspector, the State of California, their officers, employees, agents and independent contractors as Additional Insured.

The Additional Insured Endorsement included on all such insurance policies shall state that coverage is afforded the additional insured with respect to claims arising out of operations performed by or on behalf of the insured. If the Additional Insured have other insurance which is applicable to the loss, such other insurance shall be on an excess or contingent basis. The insurance provided by the Contractor must be designated in the policy as primary to any insurance obtained by the Public Agency. The amount of the insurer’s liability shall not be reduced by the existence of such other insurance.

**Specific Insurance Requirement:** Contractor shall take out and maintain and shall require all subcontractors, if any, whether primary or secondary, to take out and maintain:

a) Comprehensive General Liability Insurance with an aggregate of not less than $2,000,000.00; Per occurrence, $1,000,000.00

b) Automotive (any auto) where operated in amounts $1,000,000.00

c) Workers’ Compensation Insurance: $1,000,000.00; Contractor is aware of and complies with Labor Code Section 3700 and the Worker’s Compensation Law.

10. **BONDS**

**Bond Requirements:** Prior to commencing any portion of the Work, the Contractor shall furnish separate payment and performance bonds for its portion of the Work which shall cover 100% faithful performance of and payment of all obligations arising under the Contract Documents and/or guaranteeing the payment in full of all claims for labor performed and materials supplied for the Work. All bonds shall be provided by a corporate surety authorized and admitted to transact business in California as sureties.

To the extent, if any, that the Contract Price is increased in accordance with the Contract Documents, the Contractor shall, upon request of the Public Agency, cause the amount of the bonds to be increased accordingly and shall promptly deliver satisfactory evidence of such increase to the Public Agency. To the extent available, the bonds shall further provide that no change or alteration of the Contract Documents (including, without
limitation, an increase in the Contract Price, as referred to above), extensions of time, or modifications of the
time, terms, or conditions of payment to the Contractor will release the surety. If the Contractor fails to furnish
the required bonds, the Public Agency may terminate the Contract for cause.
On signing this contract, Contractor shall deliver to Public Agency for approval good and sufficient bonds with
sureties, in amount(s), specified in the specifications or special provisions, guaranteeing faithful performance of
this contract and payment for all labor and materials hereunder.

11. FAILURE TO PERFORM

If the Contractor at any time refuses or neglects, without fault of the Public Agency or its agent(s), to supply
sufficient materials or workers to complete this agreement and work as provided herein, for a period of ten days
or more after written notice thereof by the Public Agency, the Public Agency may furnish same and deduct the
reasonable expenses thereof from the contract price.

12. LAWS APPLY: General

Both parties recognize the applicability of various federal, state and local laws and regulations, especially Chapter
1 of Part 7 of the California Labor Code (beginning with Section 1720, and including Sections 1735, 1777.5, 1777.6,
forbidding discrimination) and intend that this agreement complies therewith. The parties specifically stipulate
that the relevant penalties and forfeitures provided in the Labor Code, especially in Sections 1775, 1776, and
1813, concerning prevailing wages and hours, shall apply to this agreement as though fully stipulated herein.

13. SUBCONTRACTORS

Public Contract Code Sections 4100-4113 are incorporated herein.

14. WAGE RATES

(a) Pursuant to Labor Code Section 1773, the Director of the Department of Industrial Relations has
ascertained the general prevailing rates of wages per diem, and for holiday and overtime work, in the
locality in which this work is to be performed, for each craft, specified in the call for bids for this work and
are on file with the Public Agency, and are hereby incorporated herein.

(b) This schedule of wages is based on a working day of eight (8) hours unless otherwise specified; and the
daily rate is the hourly rate multiplied by the number of hours constituting the working day. When less
than that number of hours are worked, the daily wage rage is proportionately reduced, but the hourly rate
remains as stated.

(c) The Contractor, and all subcontractors, must pay at least these rates to all persons on this work, including
all travel, subsistence, and fringe benefit payments provided for by applicable collective bargaining
agreements. All skilled labor not listed above must be paid at least the wage scale established by collective
bargaining agreement for such labor in the locality where such work is being performed. If it becomes
necessary for the Contractor or any subcontractor to employ any person in a craft, classification or type of
work (except executive, supervisory, administrative, clerical or other non-manual workers as such) for
which no minimum wage rate is specified, the contractor shall immediately notify the Public Agency which
shall promptly determine the prevailing wage rate therefore and furnish the Contractor with the minimum
rate based thereon, which shall apply from the time of the initial employment of the person affected and
during the continuance of such employment.

(d) SB 854 DIR REGISTRATION NUMBER

No contractor or subcontractor may be listed on a bid proposal for a public works project
(submitted on or after March 1, 2015) unless registered with the Department of Industrial
Relations pursuant to Labor Code section 1725.5 [with limited exceptions from this requirement
for bid purposes only under Labor Code section 1771.1(a)].
No contractor or subcontractor may be awarded a contract for public work on a public works project (awarded on or after April 1, 2015) unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5.

This project is subject to compliance monitoring and enforcement by the Department of Industrial Relations.

15. **HOURS OF LABOR**

Eight hours of labor in one calendar day constitutes a legal day's work, and no worker employed at any time on this work by the Contractor or by any subcontractor shall be required or permitted to work longer thereon except as provided in Labor Code Sections 1810-1815.

16. **APPRENTICES**

Properly indentured apprentices may be employed on this work in accordance with Labor Code Sections 1777.5 and 1777.6, forbidding discrimination.

17. **PREFERENCE FOR MATERIALS**

The Public Agency desires to promote the industries and economy of Contra Costa County, and the Contractor therefore promises to use the products, workers, laborers and mechanics of this County in every case where the price, fitness and quality are at least equal.

18. **ASSIGNMENT**

This agreement binds the heirs, successors, assigns, and representatives of the Contractor; but Contractor cannot assign it in whole or in part, nor any monies due or to become due under it, without the prior written consent of the Public Agency and the Contractor's surety or sureties, unless they have waived notice of assignment.

19. **NO WAIVER BY PUBLIC AGENCY**

Inspection of the work and/or materials, or approval of work and/or materials inspected, or statement by any officer, agent or employee of the Public Agency indicating the work or any part thereof complies with the requirements of this contract, or acceptance of the whole or any part of said work and/or materials, or payments therefore, or any combination of these acts, shall not relieve the Contractor of Contractor's obligation to fulfill this contract as prescribed; nor shall the Public Agency be thereby stopped from bringing any action for damages or enforcement arising from the failure to comply with any of the terms and conditions hereof.

20. **HOLD HARMLESS AND INDEMNITY**

(a) Contractor promises to and shall hold harmless and indemnify from the liabilities as defined in this section.

(b) The indemnities benefited and protected by this promise are the Public Agency and its elective and appointive boards, commissions, officers, agents and employees.

(c) The liabilities protected against are any liability or claim for damage of any kind allegedly suffered, incurred or threatened because of actions defined below, including personal injury, death, property damage, inverse
condemnation, or any combination of these, regardless of whether or not such liability, claim or damage was unforeseeable at any time before the Public Agency approved the improvement plan or accepted the improvements as completed, and including the defense of any suit(s) or action(s) at law or equity concerning these.

(d) The actions causing liability are any act or omission (negligent or non-negligent) in connection with the matters covered by this contract and attributable to the contractor, subcontractor(s), or any officer(s), agent(s), or employee(s) of one or more of them.

(e) Non-conditions: The promise and agreement in this section is not conditioned or dependent on whether or not any Indemnities has prepared, supplied, or approved any plan(s), drawing(s), specifications(s) or special provision(s) in connection with this work, has insurance or other indemnification covering any of these matters, or that the alleged damage resulted partly from any negligent or willful misconduct of any Indemnities.

21. EXCAVATION

Contractor shall comply with the provisions of Labor Code Section 6705, if applicable, by submitting to Public Agency a detailed plan showing the design of shoring, bracing, sloping, or other provisions to be made for worker protection from the hazard of caving ground during trench excavation.

22. GOVERNMENT CODE SECTION 10532

Contractor shall be subject to the examination and audit of the Auditor General for a period of three years after final payment under the contract.

23. WARRANTY

(a) In addition to any other warranties or guaranties in the Contract Documents, the Contractor warrants, except as provided in paragraph (i) of this clause, that work performed under this contract conforms to the contract requirements and is free of any defect in equipment, material, or design furnished, or workmanship performed by the Contractor or any subcontractor or supplier at any tier.

(b) This warranty shall continue for a period of 1 year from the date of final acceptance of the Work or Phase of Work, unless otherwise provided or extended in the Contract Documents. If the District takes possession of any part of the work before final acceptance, this warranty shall continue for a period of 1 year from the date the District takes possession.

(c) The Contractor shall remedy at the Contractor’s expense any failure to conform, or any defect. In addition, the Contractor shall remedy at the Contractor’s expense any damage to District-owned or controlled real or personal property, when that damage is the result of—

(1) The Contractor’s failure to conform to contract requirements; or

(2) Any defect of equipment, material, workmanship, or design furnished.

(d) The Contractor shall restore any work damaged in fulfilling the terms and conditions of this clause. The Contractor’s warranty with respect to work repaired or replaced will run for 1 year or as otherwise provided or extended from the date of repair or replacement.

(e) The District shall notify the Contractor, in writing, within a reasonable time after the discovery of any failure, defect, or damage.
(f) If the Contractor fails to remedy any failure, defect, or damage within a reasonable time after receipt of notice, the District shall have the right to replace, repair, or otherwise remedy the failure, defect, or damage at the Contractor’s expense.

(g) With respect to all warranties, express or implied, from subcontractors, manufacturers, or suppliers for work performed and materials furnished under this contract, the Contractor shall—

   (1) Obtain all warranties that would be given in normal commercial practice;

   (2) Require all warranties to be executed, in writing, for the benefit of the District, if directed by the District; and

   (3) Enforce all warranties for the benefit of the District, if directed by the District.

(h) In the event the Contractor’s warranty under paragraph (b) of this clause has expired, the District may bring suit at its expense to enforce a subcontractor’s, manufacturer’s, or supplier’s warranty.

(i) Unless a defect is caused by the negligence of the Contractor or subcontractor or supplier at any tier, the Contractor shall not be liable for the repair of any defects of material or design furnished by the District nor for the repair of any damage that results from any defect in District-furnished material or design.

(j) This warranty shall not limit the District’s rights under the Inspection and Acceptance clause of this contract with respect to latent defects, gross mistakes, or fraud.

24. CONSEQUENTIAL DAMAGES

The Contractor and Public Agency waive Claims against each other for consequential damages arising out of or relating to this Contract. This mutual waiver includes:

(a) Damages incurred by the Public Agency for rental expenses, for losses of use, income, profit, financing, business and reputation, and for loss of management or employee productivity or of the services of such persons; and

(b) Damages incurred by the Contractor for principal office expenses including the compensation of personnel stationed there, for losses of financing, business and reputation, and for loss of profit except anticipated profit arising directly from the Work.

This mutual waiver is applicable, without limitation, to all consequential damages due to either party’s termination. Nothing contained in this subparagraph shall be deemed to preclude an award of liquidated direct damages, when applicable, in accordance with the requirements of the Contract Documents.

25. HAZARDOUS MATERIALS

(a) If reasonable precautions will be inadequate to prevent foreseeable bodily injury or death to persons resulting from a material or substance, including but not limited to asbestos, lead or polychlorinated biphenyl (PCB), encountered on the site by the Contractor, the Contractor shall, upon recognizing the condition, immediately stop Work in the affected area and report the condition to the Public Agency in writing.

(b) The Public Agency shall obtain the services of a licensed laboratory to verify the presence or absence of the material or substance reported by the Contractor and, in the event such material or substance is found to be present, to verify that it has been rendered harmless. The Public Agency shall furnish in writing to the Contractor the names and qualifications of persons or entities who are to perform tests verifying the
presence or absence of such material or substance or who are to perform the task of removal or safe containment of such material or substance. When the material or substance has been rendered harmless, Work in the affected area shall resume upon written notification from the Public Agency and Contractor. The Contract Time shall be extended appropriately.

26. SAFETY

a. **Safety Programs.** In addition to and as required by other Sections of the Contract Documents, 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. Prior to commencement of Work, the Contractor shall meet with the campus Buildings and Grounds Manager, Project Manager, and Construction Manager to review Contractor’s safety precautions and implementation of safety programs during the Work.

b. **Safety Precautions.** In addition to and as required by other Sections of the Contract Documents, 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 the Contractor’s Subcontractors or Sub-subcontractors; and (iii) other property or items at the site of the Work, or adjacent thereto, such as trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction. The Contractor shall take adequate precautions and measures to protect existing roads, sidewalks, curbs, pavement, utilities, adjoining property and improvements thereon (including without limitation, protection from settlement or loss of lateral support) and to avoid damage thereto. Without adjustment of the Contract Price or the Contract Time, the Contractor shall repair, replace or restore any damage or destruction of the foregoing items as a result of performance or installation of the Work.

c. **Safety Signs, Barricades.** In addition to and as required by other Sections of the Contract Documents, 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, promulgating safety regulations and notifying Districts and users of adjacent sites and utilities.

d. **Safety Notices.** In addition to and as required by other Sections of the Contract Documents, the Contractor shall give or post all notices required by applicable law and comply with applicable laws, ordinances, rules, regulations and lawful orders of public authorities bearing on safety of persons or property or their protection from damage, injury or loss.

27. SIGNATURES AND ACKNOWLEDGEMENT

**Public Agency**, By: ____________________________

**Note to Contractor:** (1) Execute acknowledgement form below, and (2) if a corporation, affix Corporate Seal.
Contractor, hereby also acknowledging awareness of and compliance with Labor Code S1861 concerning Worker’s Compensation Law.

Contractor:  

By: _______________________________________________ (CORPORATE SEAL)  
(Designate Official Capacity – COMPANY NAME)

__________________________________________________________________________  
Print NAME and TITLE

__________________________________________________________________________  
License Number Federal ID Number

NOTARY PUBLIC

=================================================================================================

State of California )ss. ACKNOWLEDGEMENT (By Corporation, Partnership or Individual)
County of Contra Costa )

The person(s) signing above for Contractor, known to me in individual and business capacity as stated, personally appeared before me today and acknowledged that he/she/they executed it and that the corporation or partnership named above executed it.

Dated: ___________________________________________________________________

__________________________________________________________________________  
(NOTARIAL SEAL)

END OF SECTION 00600
## 00700

### GENERAL CONDITIONS

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ARTICLE 1

GENERAL CONDITIONS

1.1 BASIC DEFINITIONS

1.1.1 Action of the Governing Board is a vote of a majority of the District’s governing board.

1.1.2 Approval for a Contract, Agreement, or Change Order means written authorization through action of the governing board unless specific delegation of approval authority is delegated to a District representative.

1.1.3 Approved. The term “approved,” when used to convey Architect’s action on Contractor’s submittals, applications, and requests, is limited to Architect’s duties and responsibilities as stated in the Conditions of the Contract.

1.1.4 Architect means the architect, engineer, or other design professional engaged by the District to design and perform general observation of the work of construction and interpret the drawings and specifications for the Project.

1.1.5 As shown, as indicated, as detailed refer to drawings accompanying this specification.

1.1.6 Bid/Bidders. The term Bid and Proposal have the same meaning, and the same is true for Bidders and Proposers.

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

1.1.8 Contract Time. Contract Time means the number of consecutive calendar days specified in the contract immediately after the date to commence work issued by Owner in the Notice to Proceed and includes both the time allowed for completion of the work required to achieve Substantial Completion and the time allowed to complete the Remaining Work.

1.1.9 Contractor. Whenever the term “Contractor” is used in the Contract or elsewhere in the Contract Documents, it refers to a person or entity that has an agreement directly with the District to perform any of the work for the Project. The term Contractor is referred to throughout the Contract Documents as if singular in number and masculine in gender and means a Contractor or his authorized representative. The term Contractor does not include any contractors under separate and direct contract with the District. A Subcontractor is a person or entity that has a direct or indirect contract with the Contractor to perform any of the Work at the site.

1.1.10 Contractor’s Construction Schedule. The document prepared by the Contractor, which details the events of construction and establishes completion dates for the various stages of the Work and the entire project.

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

1.1.12 Contractor, District, and Architect are those mentioned as such in the Agreement. They are treated throughout the Contract Documents as if they are of singular number and neuter gender. Any reference to “Owner” shall mean “District.”

1.1.13 Construction Manager. Whenever the term “Construction Manager” or “CM” is used in the contract or elsewhere in the Contract Documents, it refers to the District assigned Construction Manager, or the District Project Manager if no CM is assigned.

1.1.14 Days means calendar days, unless otherwise noted as working days.

1.1.15 Directed. Terms such as “directed,” “requested,” “authorized,” “selected,” “approved,” “required,” and “permitted” mean directed by the Architect or the District, requested by the Architect or District, and similar phrases.

1.1.16 District. Whenever the term “District” is used in the Contract Documents, it refers to the Contra Costa Community College District or those persons designated by the District to act in/on its behalf.

1.1.17 The Drawings are graphic and pictorial portions of the Contract Documents prepared for the Project and approved changes thereto, wherever located and whenever issued, showing the design, location, and scope of the Work, generally including plans, elevations, sections, details, schedules, and diagrams as drawn or approved by the Architect.

1.1.18 Emergency shall be defined as a sudden, unexpected occurrence, involving a clear and imminent danger, demanding immediate action to prevent or mitigate loss of, or damage to, life, health, property, or essential public services. Emergency includes such occurrences as fire, flood, earthquake, or other soil or geologic movements, as well as such occurrences as riot, accident, or sabotage.

1.1.19 Exposed. Whenever this term is used it shall be understood to mean any item or surface, exterior, or interior, which can be seen by a person outside the building, or seen by a person inside any usable space within the building during normal activity. Mechanical and electrical rooms, utility and service tunnels, air handling rooms, and penthouses or platforms shall be considered to have exposed surfaces, as shall the mechanical and electrical construction within them. The interior of closets and alcoves shall be considered exposed surfaces, and shall be finished to match the finish of the adjoining room or space, unless another finish is shown. The interiors of cabinets shall be considered...
exposed, but a finish different from that of the exterior may be permitted or specified. Spaces which are not normally occupied or used by occupants or building staff, such as shafts, hoistways, ceiling plenums, attics and crawl spaces shall be considered “concealed” spaces, unless finishes are shown or specified for their surfaces.

1.1.20 **Final Completion.** The date when all Work for the total project has been completed in accordance with the terms of the Contract Documents and has been inspected following completion of Work identified in the Punchlist Inspection and accepted by the Architect and the District.

1.1.21 **Furnish.** Whenever this term is used it shall be understood to mean “purchase and deliver to the project site” ready for unloading, unpacking, assembly, installation, and similar operations.

1.1.22 **Governing Dictionary.** The definitions of words used in these Specifications, which are not defined, The General Conditions, or in referenced standards, are as given in “The American Heritage Dictionary of the English Language”.

1.1.23 **Indicated.** The term “indicated” refers to graphic representations, notes, or schedules on Drawings or to other paragraphs or schedules in Specifications and similar requirements in the Contract Documents. Terms such as “shown,” “noted,” “scheduled,” and “specified” are used to help the user locate the reference.

1.1.24 **Inspector of Record** is the individual retained by the District in accordance with titles 21 and 24 of the California Code of Regulations and who will be assigned to the Project. May also be referred to as the Project Inspector.

1.1.25 **Install.** Whenever this term is used it shall be understood to mean “receive, unload, inventory, store and be responsible for at the project site, transport from point of receipt to final destination, protect, unpack, erect, install in place, anchor, connect, apply, and place in operation or finish, cleaning, complete for intended use.”

1.1.26 **Installer.** An installer is the Contractor or another entity engaged by Contractor as an employee, Subcontractor, or Sub subcontractor, to perform a particular construction operation, including installation, erection, application, and similar operations. Using a term such as “carpentry” does not imply that certain construction activities must be performed by accredited or unionized individuals of a corresponding generic name, such as “carpenter.” It also does not imply that requirements specified apply exclusively to trades people of the corresponding generic name.

1.1.27 **Locality in which the work is performed** means the county in which the Project is located.

1.1.28 **Option.** Whenever this term is used it shall be understood to mean a choice from among the specified products or procedures which shall be made by the Contractor. The choice is not “whether” the work is to be performed, but “which” product or “which” procedure is to be used. The product or procedure chosen by the Contractor shall be provided at no increase in the cost to the District with no lessening of the Contractor’s responsibility for its performance. All or any options selected or proposed are still subject to all requirements for submittals and for approval of same.
1.1.29 **Or Equal** and Or Approved Equal. The terms “or equal” and “or approved equal” shall mean “or equal as approved in writing by the Architect”.

1.1.30 **The Project** is the complete construction of the Work performed in accordance with the Contract Documents.

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

1.1.32 **The Project Site.** Project site is the space available for performing construction activities. The extent of Project site is shown on Drawings and may or may not be identical with the description of the land on which Project is to be built.

1.1.33 **Provide** shall include “provide complete in place,” that is “furnish and install.” Complete and ready for the intended use.

1.1.34 **Punch List Inspection.** The inspection performed by the Construction Manager, Architect and the District upon written notification by the Contractor that the Work is substantially complete.

1.1.35 **Regulations.** The term “regulations” includes laws, ordinances, statutes, and lawful orders issued by authorities having jurisdiction, as well as rules, conventions, and agreements within the construction industry that control performance of the Work.

1.1.36 **Remaining Work.** Remaining Work means the work required by the Contract, but not required for Substantial Completion, that the District or Architect determines has not been satisfactorily completed at the time of Substantial Completion, deferred commissioning requirements, deferred and seasonal testing, and all maintenance and operating instructions, schedules, reports, guaranties, warranties, bonds, certificates of inspection, marked-up record documents, prevailing wage compliance reports and all other documents as required by the Contract Documents. Remaining Work may also be referred to as Punch List work.

1.1.37 **Safety Orders** are those issued by any cognizant city, county, state or federal agency.

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

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

1.1.40 **Specification Language.** These Specifications are written in the imperative mood, as defined in the Construction Specifications Institute’s Manual of Practice. Imperative language is directed to the Contractor. The indicative mood is employed on occasion when such sentence structure is necessary to convey the intended meaning in a more accurate or understandable form. The text is streamlined, with the colon (:) employed as a symbol for the words “shall be”, “shall have”, “shall
conform with”, “shall comply with”, or “shall meet the requirements of”. The colon is also used to separate a paragraph title or heading from the text that follows.

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

1.1.42 Subcontractor, as used herein, includes those having direct or indirect contracts with Contractor and ones who furnished labor, material or services for a special design according to drawings and specifications of this Work, but does not include ones who merely furnish material not so worked.

1.1.43 Substantial Completion. The date on which the Work or designated portion thereof, as certified by the District Project Manager and Architect, is sufficiently complete, in accordance with the Contract Documents, so the District, may occupy or utilize the Work or designated portion thereof for the use for which it is intended.

1.1.44 Surety is the person, firm, or corporation that executes as surety the Contractor’s Performance Bond and Payment Bond.

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

1.1.46 Workers includes laborers, workers, and mechanics.

1.2 EXECUTION, CORRELATION AND INTENT

1.2.1 Correlation and Intent

1.2.1.1 Documents Complementary and Inclusive. The Contract Documents are complementary; what is required by one shall be as binding as if required by all. The Contract Documents will be construed in accordance with the laws of the State of California and applicable building codes and statutes of the City and/or County where the Project is located. The intent of the Contract Documents is to describe and provide for a functionally complete and operational Project (or part thereof) to be constructed in accordance with the Contract Documents. All Work, materials, and equipment that may reasonably be inferred from the Contract Documents or from prevailing custom or trade usage as necessary to properly execute and complete the Work to conform to the requirements of the Contract Documents and provide for a functionally complete and operational Project shall be provided by Contractor with no change in the Contract Sum or Contract Time. A typical or representative detail on the Drawings shall constitute the standard for workmanship and material throughout corresponding parts of the Work. Where necessary, and
where reasonably inferable from the Drawings, Contractor shall adapt such representative detail for application to such corresponding parts of the Work with no change in the Contract Sum or Contract Time. The details of such adaptation shall be submitted to the City for approval. Repetitive features shown in outline on the Drawings shall be in exact accordance with corresponding features completely shown. All Contract Documents form the Contractor’s contract with the District. Any item of Work mentioned in the Specifications and not shown on the Drawings, or shown on the Drawings and not mentioned in the Specifications, shall be provided by Contractor as if shown or mentioned in both. Ambiguities or inconsistencies arising as a result of separation of sections or portions of the drawings or specifications by or for subcontractor bidding shall not relieve the Contractor for providing the complete Work at the Contract Price and within the Contract Time.

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

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

1.2.1.4 Conformance With Laws. Each and every provision of law required by law to be inserted in this Contract shall be deemed to be inserted herein, and the Contract shall be read and enforced as though it were included herein, even if through mistake or otherwise any such provision is not inserted, or is not correctly inserted. Before commencing any portion of the Work, Contractor shall check and review the Drawings and Specifications for such portion for conformance and compliance with all laws, ordinances, codes, rules and regulations of all governmental authorities and public and municipal utilities affecting the construction and operation of the physical plant of the Project, all quasi-governmental and other regulations affecting the construction and operation of the physical plant of the Project, and other special requirements, if any, designated in the Contract Documents. Such checking shall include Title 21 and Title 24 of the California Code of Regulations, California Building Code, local utility, local water connection, local grading and all other applicable agencies. In the event Contractor observes any violation of any law, ordinance, code, rule or regulation, or inconsistency with the Contract Documents, Contractor shall, within five (5) days, notify Architect and District in writing of same and shall ensure that any such violation or inconsistency shall be corrected in the manner provided hereunder prior to the construction of that portion of the Project. The Contractor shall bear all expenses of correcting Work done contrary to said laws, ordinances, rules, and regulations if the Contractor performed same (1) without first consulting the Architect.
for further instructions regarding said Work or (2) disregarded the Architect’s instructions regarding said work.

1.2.1.5 Ambiguity and Inconsistency. Before commencing any portion of the Work, Contractor shall carefully examine all Drawings and Specifications and other information given to Contractor as to materials and methods of construction and other Project requirements. Contractor shall, within five (5) days, notify Architect and District in writing of any perceived or alleged error, inconsistency, conflict, ambiguity, or lack of detail or explanation in the Drawings and Specifications in the manner provided herein. If the Contractor or its Subcontractors, material or equipment suppliers, or any of their officers, agents, and employees performs, permits, or causes the performance of any Work under the Contract Documents, which it knows or should have known to be in error, inconsistent, or ambiguous, or not sufficiently detailed or explained, Contractor shall bear any and all costs arising therefrom including, without limitation, the cost of correction thereof without increase or adjustment to the Contract Price or the time for performance. If Contractor performs, permits, or causes the performance of any Work under the Contract Documents prepared by or on behalf of Contractor which is in error, inconsistent or ambiguous, or not sufficiently detailed or explained, Contractor shall bear any and all resulting costs, including, without limitation, the cost of correction, without increase to or adjustment in the Contract Price or the Time for performance. Ambiguities or inconsistencies arising as a result of separation of sections or portions of the drawings or specifications by or for subcontractor bidding shall not relieve the Contractor for providing the complete Work without increase to or adjustment in the Contract Price or the Time for performance.

1.2.2 Addenda and Deferred Approvals

1.2.2.1 Addenda are the changes in specifications, drawings, and contract documents, which have been authorized in writing by the District or Architect prior to receipt of bids, and which alter, explain, or clarify the contract documents. Addenda shall govern over all other Contract Documents. Subsequent addenda issued shall govern over prior addenda unless otherwise specified in the addenda.

1.2.2.2 Deferred Approvals. Contract Documents which require deferred approval items are meant to be for illustration purposes only. Contractor is responsible for all deferred approval requirements set forth in the Contract Documents. Contractor is responsible to comply with all laws, building codes, and regulations necessary to obtain all necessary approvals, including those required from the Division of the State Architect (“DSA”) and the State Fire Marshall. Contractor shall not be granted an extension of time for failure to obtain necessary approvals due to failure to comply with laws, building codes, and other regulations (including Title 24 of the California Code of Regulations). Contractor shall schedule all deferred approval items in its progress schedule pursuant to Specification Section 01310, Construction Scheduling. If Contractor fails to include deferred-approval items in its schedule which results in a critical path delay, then Contractor shall be subject to the assessment of liquidated damages.

1.2.2.3 Deferred Approval Requirements. Deferred approvals shall be submitted and processed pursuant to the requirements of Division 1 of the Specifications. All deferred approvals shall be prepared by Contractor or Contractor’s agent early enough so as to not delay the Project. Contractor is aware that Title 21 California Code of Regulations Section 17(g) and Title 24 California Code of Regulations Section 4-317 have specific requirements for deferred approval as
to governing agencies and as to the Architect and Engineer for the Project. As a result, any delay associated with the time for approval by applicable agencies or by the Architect or Architect’s consultants shall be Contractor’s.

1.2.3 Specification Interpretation

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

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

1.2.3.3 General Conditions. The General Conditions and supplementary general conditions are a part of each and every section of the Specifications.

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

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

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

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

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

(a) General Notes, when identified as such, shall be incorporated into other portions of Drawings.

(b) Schedules, when identified as such, are complementary with other notes and other portions of Drawings including those identified as General Notes.

(c) Larger scale drawings shall take precedence over smaller scale drawings.

(d) At no time shall the Contractor base construction on scaling of drawings.

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

1.2.4.3 If Contractor observes that drawings and specifications are in conflict, Contractor shall, within five (5) days, notify the Architect in writing for the purposes of obtaining an interpretation of the Contract Documents.

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

(a) General Conditions take precedence over Drawings and Specifications.

(b) Special Conditions take precedence over General Conditions.

(c) The Agreement shall take precedent over the Special Conditions.

(d) In the case of disagreement or conflict between or within standards, specifications, and drawings, the more stringent, higher quality, and greater quantity of Work shall apply.

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

The Drawings, Specifications, and other contract documents for the Project are the property of the District and/or Architect pursuant to Education Code § 17316. The Contractor may retain one contract record set. Neither the Contractor nor any Subcontractor, or material or equipment supplier shall own or claim a copyright in the Drawings, Specifications, and other documents prepared by the Architect. All copies except the Contractor’s record set, shall be returned or properly accounted for upon completion of the Work. The Drawings, Specifications, and other documents prepared by the Architect, and copies thereof furnished to the Contractor are not to be used by the Contractor or any Subcontractor, Sub-subcontractor, or material or equipment supplier on other projects or for additions to this Project outside the scope of the Work. The District and/or Architect hereby grants the Contractor, Subcontractors, Sub-subcontractors, and material or equipment suppliers a limited license to use applicable portions of the Drawings, Specifications, and other documents prepared for the Project in the execution of their Work under the Contract Documents. Submittal or distribution to meet official
regulatory requirements or for other purposes in connection with this Project is not to be construed as publication in derogation of the District’s property interest or other reserved right.

ARTICLE 2

DISTRICT

2.1 INFORMATION AND SERVICES REQUIRED OF THE DISTRICT

2.1.1 Site Survey.

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

2.1.2 Soils.

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

2.1.3 Contractor Reliance.

A soils investigation report has been obtained from test holes at the Site, and such report is available for the Contractor’s use in preparing its bid and Work under this Contract. The soils report is provided for review. Any information obtained from such report or any other information given on drawings as to subsurface soil condition or to elevations of existing grades or elevations of underlying rock is approximate only. If, during the course of Work under this Contract, Contractor encounters subsurface conditions which differ materially from those indicated in the soils investigation report, then Contractor shall notify the District within five (5) calendar days of discovery of the condition, and changes to the contract price may be made in accordance with Specification Section 01250 entitled “Contract Modification Procedures.” Contractor agrees that no claim against District will be made by Contractor for damages and hereby waives any rights to damages in the event the Contractor fails to notify District within the five-day period mentioned above.

WARNING: DISTRICT DOES NOT WARRANT THE SOILS AT THE PROJECT SITE. SOILS INVESTIGATION REPORT IS PROVIDED FOR CONTRACTORS INFORMATION ONLY. CONTRACTOR HAS CONDUCTED AN INDEPENDENT INVESTIGATION OF THE PROJECT SITE AND THE SOILS CONDITIONS OF THE SITE. DISTRICT DOES NOT WARRANT THE SOILS CONDITIONS OF THE SITE AND CONTRACTOR IS FULLY RESPONSIBLE TO ASCERTAIN SITE CONDITIONS FOR THE PURPOSES OF DETERMINING CONSTRUCTION MEANS AND METHODS PRIOR TO COMMENCING CONSTRUCTION. THE SOILS INVESTIGATION REPORT IS NOT A CONTRACT DOCUMENT.
2.1.4 Utilities.

2.1.4.1 Regional Notification Center. Contractor, except in an emergency, shall contact the appropriate regional notification center at least two working days prior to commencing any excavation if the excavation will be conducted in an area or in a private easement which is known, or reasonably should be known, to contain subsurface installations other than the underground facilities owned or operated by the District, and obtain an inquiry identification number from that notification center. No excavation shall be commenced and carried out by the Contractor unless such an inquiry identification number has been assigned to the Contractor or any subcontractor of the Contractor and the District has been given the identification number by the Contractor. Any damages arising from failure to make appropriate regional notification shall be at the sole risk of Contractor. Any delays caused by failure to make appropriate regional notification shall be at the sole risk of Contractor and shall not be considered for extension of time pursuant to Paragraph 8.4.

2.1.4.2 Utilities – Removal and Restoration

The District has endeavored to determine the existence of utilities at the Site of the Work from the records of the District of known utilities in the vicinity of the Work. The positions of these utilities as derived from such records are shown in the Contract Documents.

No excavations were made to verify the locations shown for underground utilities. The service connections to these utilities may not be shown on the drawings. It shall be the responsibility of the Contractor to determine the exact location of all service connections. The Contractor shall make its own investigations, including exploratory excavations, to determine the locations and type of service connections, prior to commencing work which could result in damage to such utilities. The Contractor shall immediately notify the District’s representative as to any utility discovered by Contractor in a different position than shown in the Contract Documents or which is not shown on the Contract Documents.

Contractor shall coordinate its Work with all utilities, including, but not limited to electricity, water, gas and telephone and meet with said utilities prior to the start of any work.

2.1.4.3 Other Utilities.

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

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

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

When it is necessary to remove, relocate, or temporarily maintain a utility which is not shown
on the drawings or is in a position different from that shown on the drawings and were it in the position
shown on the drawings would not need to be removed, relocated, or temporarily maintained, and the
cost of which is not required to be borne by the owner thereof, the District will make arrangements with
the owner of the utility for such work to be done at no cost to the Contractor, or will require the
Contractor to do such work in accordance with Specification Section 01250 or will make changes in the
alignment and grade of the Work to obviate the necessity to remove, relocate, or temporarily maintain
the utility. Changes in alignment and grade will be ordered in accordance with Specification Section
01250.

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

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

2.1.5 Existing Utility Lines; Removal, Relocation.

2.1.5.1 Main or Trunkline Facilities

If the Contractor while performing the contract discovers utility facilities not identified by the
District in the Contract Documents, Contractor shall, within five (5) days, notify the District and utility in
writing.

The District has the responsibility to identify, with reasonable accuracy, main or trunkline
facilities on the drawings and specifications. In the event that main or trunkline utility facilities are not
identified with reasonable accuracy in the drawings and specifications, District shall assume the
responsibility for their timely removal, relocation, or protection.

The owner of 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.

The Contractor shall exercise reasonable care and shall be compensated by the District for the
actual verified field costs of locating, and removing, relocating, protecting or temporarily maintaining
such main or trunkline utility facilities not indicated with reasonable accuracy in the drawings and
specifications, and for equipment in use on the project necessarily idled during such work. This work
shall be performed in accordance with Specification Section 01250 of these Contract Documents.

Alternatively, District may make changes in the alignment and grade of the work to obviate the
need to remove, relocate, or temporarily maintain the utility, in accordance with Specification Section
01250 or District may make arrangements with the owner of the utility for such work to be done at no
cost to the Contractor.
The Contractor shall not be assessed a forfeiture for delay in completion of the Project when such delay is caused by the failure of the District or the owner of the utility to provide for the removal, relocation, protection or temporary maintenance of all such main or trunkline facilities not indicated with reasonable accuracy.

Nothing herein shall preclude the District from pursuing any appropriate remedy against the utility for delays which are the responsibility of the utility.

Nothing herein shall be construed to relieve the utility from any obligation as required either by law or by contract to pay the cost of removal or relocation of existing utility facilities.

2.1.5.2 Assessment. These subparagraphs shall not be construed to preclude assessment against the Contractor for any other delays in completion of the Work. Nothing in these subparagraphs shall be deemed to require the District to indicate the presence of existing service laterals or appurtenances whenever the presence of such utilities on the Site can be inferred from the presence of other visible facilities, such as buildings, or meter junction boxes on or adjacent to the Site.

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

2.1.6 Easements.

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

2.2 DISTRICT’S RIGHT TO CARRY OUT THE WORK

If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents, including, but not limited to:

1. Failure to supply adequate workers on the entire Project or any part thereof;
2. Failure to supply a sufficient quantity of materials;
3. Failure to perform any provision of this Contract;
4. Failure to comply with safety requirements, or due to Contractor is creation of an unsafe condition;
5. In the case of bona fide emergency;
6. Failure to order materials in a timely manner;
7. Failure to prepare deferred-approval items or shop drawings in a timely manner;
8. Failure to comply with Contractor’s schedule which would result in a delay to the critical path;
If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents, and fails (within a five-day period after receipt of written notice or a shorter time period expressly stated in the written notice from the District in an emergency situation) to commence and continue correction of such default with diligence and promptness, the District may correct such deficiencies without prejudice to other remedies the District may have, including those set forth in Article 14 after providing five-day written notice to Contractor and Surety. If during this five (5) day period, Surety personally delivers notice to District that it intends to perform such work, District shall allow Surety seven (7) days to perform. In an emergency situation, the District may correct such deficiencies without prejudice to other remedies the District may have, including those set forth in Article 14 after providing 48 hours notice to the Contractor. In either case, the Contractor will be invoiced the cost of correcting such deficiencies, including compensation for additional services and expenses made necessary by such default, or neglect. The invoice amount shall be deducted from the next payment due the Contractor. If payments then or thereafter due the Contractor are not sufficient to cover such amounts, the Contractor shall pay the difference to the District.
ARTICLE 3

THE CONTRACTOR

3.1  SUPERVISION AND CONSTRUCTION PROCEDURES

3.1.1  Contractor.

The Contractor shall continually supervise and direct 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, procedures; and shall coordinate all portions of the Work under the Contract, unless the Contract Documents give other specific instructions concerning these matters. The Contractor shall not perform the Work without utilizing the Contract Documents or, where required, approved shop drawings, product data, or samples for any such portion of the work. If any of the Work is performed by contractors retained directly by the District, Contractor shall be responsible for the coordination and sequencing of the work of those other contractors so as to avoid any impact on the project schedule pursuant to the requirements of Article 6 and Article 8. Specific duties of the Contractor shall include those set out in Section 43 of Title 21 of the California Code of Regulations and Section 4-343 of Title 24 of the California Code of Regulations. These duties include, but are not limited to the following:

(a) Responsibilities. It is the duty of the Contractor to complete the Work covered by his or her contract in accordance with the approved drawings and specifications. The Contractor in no way is relieved of any responsibility by the activities of the Architect, Engineer, Inspector or DSA in the performance of their duties.

(b) Performance of the work. The Contractor shall carefully study the approved drawings and specifications and shall plan its schedule of operations well ahead of time. If at any time it is discovered that work is being done which is not in accordance with the approved drawings and specifications, the contractor shall correct the work immediately.

All inconsistencies or times which appear to be in error in the drawings and specifications shall promptly be called to the attention of the Architect or, Engineer, for interpretation or correction. Local conditions which may affect the structure shall be brought to the Architect’s attention at once. In no case, shall the instruction of the Architect be construed to cause work to be done which is not in conformity with the approved drawings, specifications, change orders, construction change directives, and as required by law.

The Contractor shall not carry on Work except with the knowledge of the Inspector of Record.

(c) Verified Reports. The Contractor shall make and submit to the District from time to time, verified reports as required in Section 36 of Title 21 and Section 4-366 of Title 24.

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

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

3.1.3 Obligations not Changed by Architect’s Actions.

The Contractor shall not be relieved of obligations to perform the Work in accordance with the Contract Documents either by activities or duties of the Architect in the Architect’s administration of the Contract or by tests, inspections, or approvals required or performed by persons other than the Contractor.

3.1.4 Acceptance/Approval of Work.

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

3.1.5 Performance of Work With Own Force.

Contractor shall perform at least 15% of the Work, exclusive of supervisory and clerical work without the services of any subcontractor. Contractor shall supervise and direct the work competently and efficiently, devoting such attention thereto and applying such skills as may be necessary to perform the Work in accordance with the Contract Documents.

3.2 SUPERVISION

3.2.1 Full Time Supervision.

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

3.2.2 Staff.

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

3.2.3 Right to Remove.

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

3.3 LABOR AND MATERIALS

3.3.1 Contractor to Provide.

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

3.3.2 Quality.

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

3.3.3 Replacement.

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

3.3.4 Discipline.

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

3.3.5 Personnel.

Contractor shall conduct criminal background checks of all employees of Contractor assigned to the Project site, and shall certify that no employees who have been convicted of serious or violent felonies, as specified in Education Code Section 45125.1, will have contact with students. As part of such certification, Contractor must provide the District with a list of all employees providing services pursuant to this Agreement. In performing the services set forth in this Agreement, Contractor shall not utilize any employees who are not included on the above-referenced list. Contractor’s failure to comply with this law shall be considered a material breach of this Agreement upon where this Agreement may be terminated, at District’s sole discretion, without any further compensation to Contractor.

3.3.6 Noise, Drugs, Tobacco, and Alcohol.

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

3.3.7 Delivery of Material.

Contractor shall place orders for materials or equipment so that the Work may be completed in accordance with the Construction schedule for the Work as set forth in Article 8 of this Agreement. Contractor shall, upon demand from the Architect, furnish to the Architect documentary evidence including, but not limited to purchase orders, invoices, bills of materials, work orders and bills of lading, showing that orders have been placed.

3.3.8 Liens and Other Security Interests of Subcontractors and Material Suppliers.

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

The title to new materials or equipment for the Work of this Contract, and attendant liability for its protection and safety, shall remain with Contractor until incorporated in the Work of this Contract and accepted by the District and Architect; no part of said materials shall be removed from its place of storage, and Contractor shall keep an accurate inventory of all said materials and equipment in a manner satisfactory to the District or its authorized representative.

3.3.10 Assemblies.

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

3.4 NOISE CONTROL

The Contractor shall be responsible for the installation and maintenance of noise reducing devices on construction equipment. Contractor shall comply with the requirements of the city and county having jurisdiction with regard to noise ordinances governing construction sites and activities. Construction equipment noise is subject to the control of the Environmental Protection Agency’s Noise Control Program (Part 204 of Title 40, Code of Federal Regulations).

3.5 WARRANTY

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

(a) In addition to any other warranties and guaranties provided elsewhere, Contractor shall, and hereby does, warrant all Work after the date of Notice of Completion of Work by District and shall repair or replace any or all such work, together with any other work, which may be displaced in so doing that may prove defective in workmanship or materials within a one (1) year period from date of completion as defined in Public Contract Code Section 7107(c) without expense whatsoever to District, ordinary wear and tear, unusual abuse or neglect excepted. District will give notice of observed defects with reasonable promptness. Contractor shall notify District upon completion of repairs.

(b) In the event of failure of Contractor to comply with above mentioned conditions within one week after being notified in writing, District is hereby authorized to proceed to have defects
repaired and made good at expense of Contractor who hereby agrees to pay costs and charges therefore immediately on demand.

(c) If, in the opinion of the District, defective Work creates a dangerous condition or requires immediate correction or attention to prevent further loss to the District, the District will attempt to give the notice required by this Article. If the Contractor cannot be contacted or does not comply with the District’s requirements for correction within a reasonable time as determined by the District, the District may, notwithstanding the provisions of this article, proceed to make such correction or attention which shall be charged against Contractor. Such action by the District will not relieve the Contractor of the guarantee provided in this Article or elsewhere in this Contract.

(d) This Article does not in any way limit the guarantee on any items for which a longer warranty or guaranty is specified or on any items for which a manufacturer gives a guarantee for a longer period. Contractor shall furnish District all appropriate guaranty or warranty certificates upon completion of the project.

3.6 **TAXES**

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

3.7 **PERMITS, FEES AND NOTICES**

3.7.1 Payment.

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

3.7.2 Compliance.

The Contractor shall comply with and give notices required by any law, ordinance, rule, regulation, and lawful order of public authorities bearing on performance of the Work.

3.7.3 Responsibility.

The Contractor shall perform all Work in conformance with every applicable law, statute, ordinance, building code, rule or regulation. The Contractor shall assume full responsibility for such Work and shall bear the attributable cost of correction or project delay.
3.8 **DSA VERIFIED REPORTS AND CERTIFICATE OF COMPLIANCE**

3.8.1 **Contractor Actions.**

The Contractor acknowledges and agrees that a material obligation of the Contractor under the Contract Documents is the completion by the Contractor of all actions and activities which by the Contract Documents or by operation of applicable law, code, rule or regulation 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 Project construction. 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 Project Final Completion. The Contractor shall provide the Project Inspector, Architect, Construction Manager retained by the District for the Project and the District with copies of all Verified Reports completed by the Contractor and submitted to DSA; such copies shall be provided to the Project Inspector, Architect, the Construction Manager and the District concurrently with the Contractor’s submission thereof to DSA.

3.8.2 **Final Verified Report Retention.**

Notwithstanding any provision of the Contract Documents to the contrary, 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 Twelve Thousand Dollars ($12,000) of the Contract Price due the Contractor under this Agreement (“the Final Verified Report Retention”). The Final Verified Report Retention is in addition to, and not in lieu of, retention withheld and retained by the District from Progress Payments disbursed to the Contractor during Project construction. The District’s disbursement of the Final Verified Report Retention to the Contractor shall be made by the District within thirty (30) days of the presentation by the Contractor to the Project Inspector, Architect, Construction Manager and District of reasonably satisfactory written evidence that the Contractor has filed the Contractor’s Final Verified Report with DSA in accordance with the preceding and the submission of a billing statement by the Contractor to the District for payment of the Final Verified Report Retention. If the Contractor fails to file the Final Verified Report with DSA within ten (10) days of the determination of Project Final Completion, notwithstanding the preparation or filing of such Final Verified Report by the Contractor thereafter, the District may in the sole and exclusive discretion of the District retain and withhold from disbursement to the Contractor all or any part of the Final Verified Report Retention as damages for the failure of the Contractor to have timely discharged its obligations hereunder.

3.9 **[RESERVED]**

3.10 **DOCUMENTS AND SAMPLES AT THE SITE**

The Contractor shall maintain at the Site for the District one current copy of the International Building Code, Titles 19, 21 and 24 of the California Code of Regulations and one record copy of the Drawings, Specifications, Addenda, Change Orders, and other Modifications, in good order and marked currently to record changes and selections made during construction. In addition, the Contractor shall maintain at the Site approved Shop Drawings, Product Data, Samples, and similar required submittals. These documents shall be available to the Architect and shall be delivered to the Architect for delivery to the District upon completion of the Work.
3.11 SUBSTITUTIONS

3.11.1 NOT USED

3.11.2 NOT USED

3.11.3 NOT USED

3.11.4 PRODUCT SUBSTITUTIONS

3.11.4.1 One Product Specified. Unless the Specifications state that no substitution is permitted, whenever the Contract Documents indicate any specific article, device, equipment, product, material, fixture, patented process, form, method, or type of construction or any specific name, make, trade name, or catalog number, with or without the words “or equal,” such specification shall be deemed to be used for the purpose of facilitating description of the material, process, or article desired and shall be deemed to be followed by the words “or equal” unless the Contract Documents specify “no substitution allowed,” “no equal,” “no equivalent,” “to match campus standard,” or other language with similar meaning, in which case no substitutions will be allowed. Pursuant to Paragraph 3.11.4.3, the Contractor may, unless otherwise stated, at time of bid offer any material, process, article, etc., which shall be materially equal or better in every respect to that so indicated or specified (“Specified Item”) and will completely accomplish the purpose of the Contract Documents.

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

3.11.4.3 Substitution Request Form. Requests for substitutions of products, materials, or processes in place of a Specified Item must be submitted in writing on the District’s Substitution Request Form (“Request Form”) at the time of submitting bids to the District, except as provided for in Paragraph 3.11.4.2.

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

1. Is equal in quality/service/ability to the Specified Item;
2. Will entail no changes in detail, construction, and scheduling of related work;
3. Will be acceptable in consideration of the required design and artistic effect;
4. Will provide no cost disadvantage to the District;
5. Will require no excessive or more expensive maintenance, including adequacy and availability of replacement parts; and
6. Will required no change of the construction schedule.

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

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

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

3.11.4.7 If the Architect and District accept a proposed substitution, the Contractor agrees to pay for all engineering and design services, including, without limitation, compensation to the Architect and affected engineers for their required time to process such substitution through the Division of the State Architect, if required, and to make all changes and adjustments in materials or the work of all trades directly or indirectly affected by the substituted item or items at no cost to the District.

3.12 INTEGRATION OF WORK

3.12.1 Scope.

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

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

3.12.3 Subsequent Removal.

Permission to patch any areas or items of the Work shall not constitute a waiver of the District’s or the Architect’s right to require complete removal and replacement of the areas of items of the Work if, in the opinion of the Architect or the District, the patching does not satisfactorily restore quality and appearance of the Work or does not otherwise conform to the Contract Documents.

3.13 CLEANING UP

3.13.1 Contractor’s Responsibility.

Contractor at all times shall keep premises free from debris such as waste, dust, excess water, storm water runoffs, rubbish, and excess materials and equipment. Contractor shall not leave debris under, in, or about the premises, but shall promptly remove same from the premises and dispose of it in a lawful manner. Disposal receipts or dump tickets shall be furnished to the Architect within five (5) days of request. Upon completion of Work, Contractor shall clean interior and exterior of buildings, including fixtures, equipment, walls, floors, ceilings, roofs, window sills and ledges, horizontal projections, and any areas where debris has collected, so surfaces are free from foreign material or discoloration; Contractor shall clean and polish all glass, plumbing fixtures, equipment, finish hardware and similar finish surfaces. Upon completion of the Work, Contractor shall also remove temporary utilities, fencing, barricades, planking, sanitary facilities and similar temporary facilities from Site.

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

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

(a) Remove putty stains from glazing, then wash and polish glazing.

(b) Remove marks, stains, fingerprints and other soil or dirt from painted, stained or decorated work.

(c) Remove temporary protection and clean and polish floors and waxed surfaces.

(d) Clean and polish hardware and plumbing trim; remove stains, dust, dirt, plaster and paint.
(e) Remove spots, soil, plaster and paint from tile work, and wash tile.

(f) Clean all fixtures and equipment, remove excess lubrication, clean light fixtures and lamps, polish metal surfaces.

(g) Vacuum-clean carpeted surfaces.

(h) Remove debris from roofs, down spout and drainage system.

3.13.2 Failure to Cleanup.

If the Contractor fails to clean up as provided in the Contract Documents, the District may do so, and the cost thereof shall be the responsibility of the Contractor and deducted from the next progress payment.

3.14 ACCESS TO WORK

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

CONTRACTOR IS AWARE THAT THIS CONTRACT MAY BE SPLIT INTO SEVERAL PHASES AS ADDRESSED IN ARTICLE 6.

3.15 ROYALTIES AND PATENTS

3.15.1 Payment and indemnity for Infringement.

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

3.15.2 Review.

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

3.16 INDEMNIFICATION

3.16.1 Contractor.

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

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

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

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

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

Contractor, at Contractor’s own expense, cost, and risk, shall defend any and all claims, actions, suits, or other proceedings that may be brought or instituted against the District, its officers, agents or employees, on any such claim or liability, and shall pay or satisfy any judgment that may be rendered against the District, its officers, agents or employees in any action, suit or other proceedings as a result thereof.

Contractor shall ensure that its contract with each of its subcontractors contains provisions requiring the subcontractors to defend, indemnify and hold harmless the District, Architect, Inspector, the State of California to a minimum level as set forth in this Article and consistent with the language of 3.15.1.

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

3.17 SUBMISSION OF DAILY REPORTS

3.17.1 General.

At the close of each working day, the Contractor shall submit a daily report to the District and the Inspector, on forms approved by the District, together with applicable delivery tickets, listing all labor, materials, and equipment involved for that day. An attempt shall be made to reconcile the report daily, and it shall be signed by a District representative and the Contractor. In the event of disagreement, pertinent notes shall be entered by each party to explain points which cannot be resolved that day. Each party shall retain a signed copy of the report. Reports by subcontractors or others shall be submitted through the Contractor.

3.17.2 Labor.

The report required by Paragraph 3.17.1 shall show names of workers, classifications, hours worked and hourly rate. Project superintendent expenses are not allowed.

3.17.3 Materials.

The report required by Paragraph 3.17.1 shall describe and list quantities of materials used and unit costs.

3.17.4 Equipment.

The report required by Paragraph 3.17.1 shall show type of equipment, size, identification number, and hours of operation, including loading and transportation, if applicable, and hourly/daily cost. Move-on and move-off fees, if allowable, shall be noted.

3.17.5 Other Services and Expenditures.

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

ARTICLE 4

ADMINISTRATION OF THE CONTRACT

4.1 ARCHITECT

4.1.1 Replacement of Architect.

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

4.2 ARCHITECT’S ADMINISTRATION OF THE CONTRACT

4.2.1 Status.

Pursuant to Titles 24 and 21 of the California Code of Regulations and as required pursuant to the Field Act, Education Code 17280 et. Seq. the Architect will provide administration of the Contract Documents and the Work, and will be a District representative during construction, as well as during the one (1) year period following the commencement of any warranties or guaranties. The Architect will have authority to act on behalf of the District only to the extent provided in the Contract Documents.

4.2.2 Site Visits.

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

4.2.3 Limitations of Construction Responsibility.

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

4.2.4 Communications Facilitating Contract Administration.

Except as otherwise provided in the Contract Documents the Contractor shall communicate through the District representative. The District representative shall be promptly informed, and shall receive copies of all written communications. Contractor shall not rely upon any communications from the District that is not from the District’s representative. Communications by and with the Architect’s consultants shall be through the Architect. Communications by and with Subcontractors and material or equipment suppliers shall be through the Contractor.

4.2.5 Payment Applications.

The Architect will review and make recommendations to the District regarding the amounts due the Contractor on the Certificates for Payment pursuant to Specification Section 01290 and subject to the Inspector’s approval and Architect’s observation.
4.2.6 Rejection of Work.

In addition to the rights, duties, and obligations of the Inspector under this Article, the Architect may recommend to the District that the District reject Work which does not conform to the Contract Documents. Whenever the Architect considers it necessary or advisable to achieve the intent of the Contract Documents, the Architect may recommend to the District that the District require additional inspection or testing of the Work in accordance with Paragraph 13.5, whether or not such Work is fabricated, installed, or completed. However, neither this authority of the Architect nor a decision made in good faith either to exercise or not to exercise such authority shall give rise to a duty or responsibility of the Architect to the Contractor, Subcontractors, material and equipment suppliers, their agents or employees, or other persons performing portions of the Work.

4.2.7 Warranties and Guaranties Upon Completion.

The Architect, in conjunction with the District and Inspector will conduct field reviews of the Work to determine the date of completion, shall receive and forward to the District for the District’s review and records written warranties, guaranties, and related documents required by the Contract and assembled by the Contractor, and will issue a final Certificate for Payment when the Architect believes the Work has been completed in compliance with the requirements of the Contract Documents. The handling by the Architect of such warranties, guaranties, maintenance manuals, or similar documents shall not diminish or transfer to the Architect any responsibilities or liabilities required by the Contract Documents of the Contractor or other entities, parties, or persons performing or supplying the Work.

The Architect will conduct a field review of the Contractor’s comprehensive list of items to be completed or corrected (final punch list) and one (1) follow-up field review if required. The cost incurred by the District for further field reviews or the preparation of further punch lists by the Architect shall be invoiced to the Contractor and deducted from the final payment.

4.2.8 Interpretation.

The Architect will interpret and decide matters concerning performance and requirements of the Contract Documents.

4.2.9 Additional Instructions.

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

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

4.3.1 General.

One or more project inspectors employed by the District and approved by the Division of the State Architect will be assigned to the Work in accordance with the requirements of Title 24 of the California Code of Regulations. The Inspector(s) duties are as specifically defined in Title 24.

4.3.2 Inspector’s Duties.

All Work shall be under the observation of the Inspector. The Inspector shall have free access to any or all parts of the Work at any time. The Contractor shall furnish the Inspector such information as may be necessary to keep the Inspector fully informed regarding progress and manner of Work and character of materials. Such observations shall not, in any way, relieve the Contractor from responsibility for full compliance with all terms and conditions of the Contract, or be construed to lessen to any degree the Contractor’s responsibility for providing efficient and capable superintendence. The Inspector is not authorized to make changes in the drawings or specifications nor shall the Inspector’s approval of the Work and methods relieve the Contractor of responsibility for the correction of subsequently discovered defects, or from its obligation to comply with the Contract Documents.

4.3.3 Inspector’s Authority to Reject or Stop Work.

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

4.3.4 Inspector’s Facilities.

Within seven (7) days after notice to proceed, the Contractor shall provide the Inspector with the temporary facilities as required under Division 1 of the Specifications.

4.3.5 Testing Times.

The District will provide inspection and testing at its cost during the normal eight (8) hour day Monday through Friday (except holidays). Work by the Contractor outside of the normal eight (8) hour day shall constitute an authorization from the Contractor to the District to provide inspection and testing as required outside of the normal eight (8) hour day. Contractor shall reimburse District for any additional costs associated with inspection and testing (including re-inspection and re-testing) outside the normal eight-hour day and for any retests caused by the Contractor.

4.4 Responsibility for Additional Charges Incurred by the District for Professional Services

If at any time prior to the completion of the requirements under the Contract Documents, the District is required to provide or secure additional professional services for any reason by any act of the
Contractor, the Contractor shall be invoiced by the District for any costs incurred for any such additional services, which costs shall be deducted from the next progress payment. Such invoicing shall be independent from any other District remedies and shall not be considered a waiver of any District rights or remedies. If payments then or thereafter due to the Contractor are not sufficient to cover such amounts, the Contractor shall pay the difference to the District. Additional services shall include, but shall not be limited to, the following:

(a) Services made necessary by the default of the Contractor.
(b) Services made necessary due to the defects or deficiencies in the Work of the Contractor.
(c) Services required by failure of the Contractor to perform according to any provision of the Contract Documents.
(d) Services in connection with evaluating substitutions of products, materials, equipment, Subcontractors’ proposed by the Contractor, and making subsequent revisions to drawings, specifications, and providing other documentation required (except for the situation where the specified item is no longer manufactured or available).
(e) Services for evaluating and processing claims submitted by the Contractor in connection with the Work outside the established Change Order process.
(f) Services required by the failure of the Contractor to prosecute the Work in a timely manner in compliance within the specified time of completion.
(g) Services in conjunction with the testing, adjusting, balancing and start-up of equipment other than the normal amount customarily associated for the type of Work involved.
(h) Services in conjunction with more than one (1) re-review of submittals of shop drawings, product data, samples, etc.

4.5 DISPUTES

4.5.1 Decision of Architect.

Disputes between District and Contractor involving money or time, including those alleging an error or omission by the Architect, shall be referred initially to the Architect for action as provided in Paragraph 4.5.2. A decision by the Architect, as provided in Paragraph 4.5.5, shall be required as a condition precedent to proceeding with remedies set forth in Paragraph 4.5.6 as to all such matters arising prior to the date final payment is due, regardless of whether such matters relate to execution and progress of the Work, or the extent to which the Work has been completed. The decision by the Architect in response to a Claim shall not be a condition precedent to the remedies under Paragraph 4.5.2 through 4.5.5 in the event: (1) the position of Architect is vacant; (2) the Architect has not received evidence or has failed to render a decision within agreed time limit; (3) the Architect has failed to take action required under Paragraph 4.6.4 within thirty (30) days after the Claim is made, forty-five (45) days have passed after the Claim has been referred to the Architect; or (4) the Claim relates to a
Stop Notice Claim not arising from any extra change order or Construction Change Directive for which approval has not been provided.

4.5.2 Architect’s Review.

The Architect will review Claims and take one or more of the following preliminary actions within ten (10) days of receipt of a Claim: (1) request additional supporting data from the Claimant; (2) submit a schedule to the parties indicating when the Architect expects to take action; (3) reject the Claim in whole or in part, stating reasons for rejection; (4) recommend approval of the Claim; or (5) suggest a compromise. The Architect may also, but is not obligated to, notify the surety, if any, of the nature and amount of the Claim.

4.5.3 Documentation if Resolved.

If a Claim has been resolved, the Architect will prepare or obtain appropriate documentation.

4.5.4 Actions if Not Resolved.

If a Claim has not been resolved and all documentation requested pursuant to Paragraph 4.5.2 has been provided, the party making the Claim shall, within ten (10) days after the Architect’s preliminary response, take one or more of the following actions: (1) modify the initial Claim; (2) notify the Architect that the initial Claim stands; or (3) supplement with additional supporting data.

4.5.5 Architect’s Written Decision.

If a Claim has not been resolved after consideration of the foregoing and of other evidence presented by the parties or requested by the Architect, the Architect will notify the parties in writing that the Architect’s decision will be made within twenty (20) days. Upon expiration of such time period, the Architect will render to the parties its written decision relative to the Claim, including any change in the Contract Sum or Contract Time or both. The Architect may, but is not obligated to, notify the surety and request the surety’s assistance in resolving the controversy.

4.5.6 Continuing Contract Performance.

Pending final resolution of a Claim, including, negotiation, mediation, arbitration, or litigation, the Contractor shall proceed diligently with performance of the Contract, and the District shall continue to make any undisputed payments in accordance with the Contract. If the dispute is not resolved, Contractor agrees it will neither rescind the contract nor stop the progress of the work, but Contractor’s sole remedy shall be to submit such controversy to determination by a court of competent jurisdiction in the county where the project is located, after the project has been completed, and not before. At the District’s sole option, the District may submit individual disputes for binding arbitration and Contractor agrees to the resolution determined for each individual dispute by Arbitrator, including resolution of time and delays. If binding arbitration is utilized for individual disputes, such resolution is full and final as to that particular Claim.
4.5.7 Claims for Concealed Trenches or Excavations Greater Than Four Feet Below the Surface.

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

(a) Immediately upon discovery, The Contractor shall promptly, and before the following conditions are disturbed, notify the District, by telephone and in writing, of the condition except:

1. If such condition is a hazardous waste condition, and Contractor’s bid includes removal or disposal of hazardous substances. Material that the Contractor believes may be a material that is hazardous waste, as defined in Section 25117 of the Health and Safety Code, that is required to be removed to a Class I, Class II, or Class III disposal site in accordance with the provisions of existing law. In such case, the notice bulletin procedures of Specification Section 01250 apply.

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

3. Unknown physical conditions at the Site of any unusual nature, different materially from those ordinarily encountered and generally recognized as inherent in Work of the character provided for in the Contract.

(b) The District shall investigate the conditions, and if District finds that the conditions do materially so differ, do involve hazardous waste, and cause a decrease or increase in the Contractor’s cost of, or the time required for, performance of any part of the Work shall issue a change order or construction change directive under the procedures described in the Contract.

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

4.5.8 Claims for Extension of Time.

If Contractor and District cannot agree upon an extension of time, whether compensable or not, then Contractor must have first completed the procedures set forth in Paragraph 8.4. Upon completion of the procedures set forth under Paragraph 8.4, Contractor must then comply with the requirements in this Article including those set forth under Paragraph 4.5.9.

4.5.9 Claims Procedures.

4.5.9.1 Procedure applicable to all Claims:
(a) Definition of Claim: A “Claim” means a separate demand by the Contractor for (1) time extension, (2) payment of money or damages arising from Work done by or on behalf of the Contractor pursuant to the CONTRACT and payment of which is not otherwise expressly provided for or the Claimant is not otherwise entitled to, or (3) and amount the payment of which is disputed by the District.

(b) Filing Claim is Not Basis To Discontinue Work: The Contractor shall promptly comply with Work under the Contract or Work requested by the District even though a written Claim has been filed. The Contractor and the District shall make good faith efforts to resolve any and all Claims that may arise during the performance of the Work covered by this contract.

(c) Claim Notification: The Contractor shall within seven (7) calendar days after the Claim arises, submit a notification, in writing, with the District stating clearly the basis for the Claim. If the notification is not submitted within seven (7) days after the Claim arises, the Contractor shall be deemed to have waived all right to assert the Claim, and the Claim shall be denied. Claims submitted after the final payment date shall also be considered null and void by the District. All Claims shall be reviewed pursuant to Paragraph 4.5.1, 4.5.2, and 4.5.5. In order to qualify as a Claim, the written notice must state that it is a Claim submitted under this paragraph of these General Conditions.

(d) Formal Claim Appeal Submission: If the Contractor does not concur with the District’s decision regarding the Claim Notification, the Contractor will issue a formal Claim Appeal within fourteen (14) days of receipt of the District’s decision and all detailed information in support of the Claim Appeal within thirty (30) days. All appeals shall be submitted before final payment. If the Claim Appeal is not submitted within fourteen (14) calendar days and detailed information within thirty (30) days, the Contractor shall be deemed to have waived its right to assert the Claim and the Claim shall be denied. Contractor’s failure to submit any detailed information which is in the possession of Contractor shall render such information inadmissible by Contractor at trial or arbitration.

(e) Appeal Claim Format: The Contractor shall provide all written detailed documentation which supports the Claim, including but not limited to: arguments, justifications, cost, estimates, schedule analysis and detailed documentation. The format of the Claim Appeal shall be as follows:

1. Cover letter.
2. Summary of factual basis of Claim and amount of Claim.
3. Summary of the basis of the Claim, including the specific clause and section under the Contract under which the Claim is made.
4. Documents relating to the Claim, including:
   a. Specifications
   b. Drawings
   c. Clarifications (RFI's)
   d. Other relevant information
e. Analysis of claim merit.
f. Analysis of claim cost.
g. For Claims relating to time extensions, an analysis and supporting documentation evidencing any effect upon the critical path.
h. Certification.
i. Chronology of events and related correspondence.
j. Daily reports and logs.

(f) Certification: The Contractor (and subcontractors, if applicable) shall submit with the Claim a certification under penalty of perjury:

(1) That the Contractor has reviewed the Claim and that such Claim is made in good faith;

(2) Supporting data are accurate and complete to the best of the Contractor’s knowledge and belief;

(3) The amount requested accurately reflects the amount of compensation for which the Contractor believes the District is liable.

(4) That the Contractor is familiar with Government Code Sections 12650 et seq. and Penal Code Section 72 and that false Claims can lead to substantial fines and/or imprisonment.

(g) Signature of Certification: If the Contractor is not an individual, the certification shall be executed by an officer or general partner of the Contractor having overall responsibility for the conduct of the Contractor’s affairs.

(h) Mandatory Claim Appeal Procedure: The Contractor’s Claim Appeal shall be denied if it fails to provide the written basis of the Claim and certification as set forth herein.

(i) District May Request Additional Information: Within thirty (30) days of receipt of the Claim Appeal and the information under this Article, the District may request in writing any additional documentation supporting the Claim or documentation relating to defenses to the Claim which the District may assert.

4.5.9.2 Binding Arbitration of Individual Claim Issues. At the District’s sole option, the District may submit individual disputes, or Claims, to binding arbitration and Contractor agrees to the resolution determined for each individual dispute by Arbitrator, including resolution of time and delays. If binding arbitration is utilized, such resolution is a full and final resolution of the particular Claim or dispute. Under no circumstances may the Contractor stop work, rescind its contract or otherwise slow the progress of Work during resolution of individual Claims in binding Arbitration.

4.5.9.3 Resolution of Disputes in Court of Competent Jurisdiction. If Claims are not resolved under the procedure set forth and pursuant to Article 4.5.9.2, such Claim or controversy shall be submitted to a court in the county of competent jurisdiction after the Project has been completed, and not before.
4.5.9.4 **Warranties, Guaranties and Obligations.** The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto, and, in particular but without limitation, the warranties, guaranties and obligations imposed upon Contractor by the General Conditions and amendments thereto; and all of the rights and remedies available to District and Architect thereunder, are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by laws or regulations by special warranty or guaranty or by other provisions of the Contract Documents, and the provisions of this Paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right and remedy to which they apply.

**ARTICLE 5**

**SUBCONTRACTORS**

**5.1 DEFINITIONS**

5.1.1 Subcontractual Relations

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

5.1.2 Subcontractor Licenses.

All subcontractors shall be properly licensed by the California State Licensing Board.

5.1.3 Substitution of Subcontractor

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

5.1.4 Contingent Assignment of Subcontracts and Other Contracts

Each subcontract and other contract or agreement for any portion of the Work is hereby assigned by the Contractor to the District provided that:
(a) Such assignment is effective only after termination of this contract with the Contractor by the District as provided herein and only for those subcontracts and other contracts and agreements that the District accepts by notifying the Subcontractor or Materialman (as may be applicable) in writing; and

(b) Such assignment is subject to the prior rights of the Surety(ies) obligated under the Payment Bond and Performance Bond.

The Contractor shall include adequate provisions for this contingent assignment of subcontracts and other contracts and agreements in each such document.

ARTICLE 6

CONSTRUCTION BY DISTRICT OR BY SEPARATE CONTRACTORS

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

6.1.1 Separate Contracts.

(a) District reserves the right to let other contracts in connection with this Work. Contractor shall afford other contractors reasonable opportunity for (1) introduction and storage of their materials; (2) access to the Work; and (3) execution of their work. Contractor shall properly connect and coordinate its work with that of other Contractors.

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

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

(d) Contractor shall ascertain to its own satisfaction the scope of the Project and nature of any other contracts that have been or may be awarded by District in prosecution of the Project and the potential impact of such work on Contractor’s schedule.

(e) Nothing herein contained shall be interpreted as granting to Contractor the exclusive occupancy at the site of Project. Contractor shall not cause any unnecessary hindrance or delay to any other contractor working on the Project Site. If execution of any contract by the District is likely to cause interference with Contractor’s performance of its contract, District shall decide which contractor shall cease work temporarily and which contractor shall continue, or whether work can be coordinated so that contractors may proceed simultaneously.
(f) District shall not be responsible for any damages suffered or extra costs incurred by Contractor resulting directly or indirectly from award or performance or attempted performance of any other contract or contracts at the Project, or caused by any decision or omission of District respecting the order of precedence in performance of contracts.

CONTRACTOR IS AWARE THAT THIS CONTRACT MAY BE SPLIT INTO SEVERAL PHASES. IF THE CONTRACT IS SPLIT INTO PHASES THEN CONTRACTOR HAS MADE ALLOWANCE FOR ANY DELAYS OR DAMAGES WHICH MAY ARISE FROM COORDINATION WITH CONTRACTORS FOR OTHER PHASES. IF ANY DELAYS SHOULD ARISE FROM ANOTHER CONTRACTOR WORKING ON A DIFFERENT PHASE, CONTRACTOR’S SOLE REMEDY FOR DAMAGES, INCLUDING DELAY DAMAGES, SHALL BE AGAINST THE CONTRACTOR WHO CAUSED SUCH DAMAGE AND NOT THE DISTRICT. CONTRACTOR SHALL PROVIDE ACCESS TO OTHER CONTRACTORS FOR OTHER PHASES AS NECESSARY TO PREVENT DELAYS AND DAMAGES TO OTHER CONTRACTORS WORKING ON OTHER PHASES OF CONSTRUCTION.

6.1.2 District’s Right to Carry Out the Work.

See Paragraph 2.2.

6.1.3 Designation as Contractor.

When separate contracts are awarded to contractors on the Project Site, the term “Contractor” in the Contract Documents in each case shall mean the Contractor who executes each separate District/Contractor Agreement.

6.1.4 Contractor Duties.

The Contractor shall have overall responsibility to reasonably coordinate and schedule Contractor’s activities with 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 construction schedules when directed to do so. The Contractor shall make any revisions to the construction schedule and Contract Sum deemed necessary after a joint review and mutual agreement. The construction schedules shall then constitute the schedules to be used by the Contractor, separate contractors, and the District until subsequently revised. Additionally, Contractor shall coordinate with Architect and District inspector to ensure timely and proper progress of work.

6.2 CONSTRUCTIVE OWNERSHIP OF PROJECT SITE AND MATERIAL

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

If a dispute arises among the Contractor, separate contractors, and the District as to the responsibility under their respective contracts for maintaining the premises and surrounding area free from waste materials and rubbish as described in Paragraph 3.12, the District may clean up and allocate the cost among those it deems responsible.
ARTICLE 7

NOT USED
ARTICLE 8

TIME

8.1 DEFINITIONS

8.1.1 Contract Time.

Contractor shall perform and complete all Work under this Contract within the time specified in the Agreement Form. Moreover, Contractor shall perform its Work in strict accordance with any completion schedule, construction schedule or Project milestones developed pursuant to the provisions of the Contract including, but not limited to the Project Schedule set forth in the Specifications.

8.1.2 Notice to Proceed.

District may give a notice to proceed within three (3) months of the award of the bid by District. Once Contractor has received the notice to proceed, Contractor shall complete the Work in the period of time referenced in the Contract Documents.

In the event that District desires to postpone the giving of the notice to proceed beyond this three-month period, it is expressly understood that with reasonable notice to the Contractor, the giving of the date to proceed may be postponed by District. It is further expressly understood by Contractor, that Contractor shall not be entitled to any Claim of additional compensation as a result of the postponement of the giving of the notice to proceed.

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

8.1.3 Computation of Time.

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

The Contractor will only be allowed a time extension for unusually severe weather if it results in precipitation or other conditions which in the amount, frequency, or duration is in excess of the norm at the location and time of year in question as established by National Oceanic and Atmospheric Administration (NOAA) weather data. No less than 45 work days allocated equally across the Contract Time will be identified as non-working weather days in the contractor’s schedule for the entire contract period of performance. The weather days shall be shown on the schedule and if not used will become float for the Project’s use. A day-for-day extension will only be allowed for those days in excess of the norm. The Contractor is expected to work seven (7) days per week (if necessary, irrespective of
inclement weather), to maintain access, and to protect the Work under construction from the effects of inclement weather.

If the weather is unusually severe and is in excess of the NOAA data norm and prevents the Contractor from beginning work at the usual daily starting time, or prevents the Contractor from proceeding with seventy-five (75%) of the normal labor and equipment force towards completion of the day’s current controlling item on the accepted schedule for a period of at least five hours, and the crew is dismissed as a result thereof, the Architect will designate such time as unavoidable delay and grant one (1) work-day extension.

8.2 HOURS OF WORK.

8.2.1 Sufficient Forces.

Contractors and Subcontractors shall continuously furnish sufficient forces to ensure the prosecution of the Work in accordance with the Construction Schedule.

8.2.2 Performance During Working Hours.

Work shall be performed during regular working hours as permitted by the appropriate governmental agency except that in the event of an emergency, or when required to complete the Work in accordance with job progress, Work may be performed outside of regular working hours with the advance written consent of the District and approval of any required governmental agencies.

8.2.3 Costs for After Hours Inspections.

If the Contract Documents require Work to be done outside the Inspector’s regular working hours, the costs of any after hour inspections, shall be borne by the District.

If the District allows the Contractor to do Work outside regular working hours for the Contractor’s convenience, or if required to maintain schedule, the costs of any inspections required outside regular working hours shall be invoiced to the Contractor by the District and deducted from the next Progress Payment.

If the Contractor elects to perform Work outside the Inspector’s regular working hours, costs of any inspections required outside regular working hours shall be invoiced to the Contractor by the District and deducted from the next Progress Payment.

8.3 PROGRESS AND COMPLETION.

8.3.1 Time of the Essence.

Time limits stated in the Contract Documents are of the essence to the Contract. By executing the Agreement, the Contractor confirms that the Contract Time is a reasonable period for performing the Work.
8.4 EXTENSIONS OF TIME – LIQUIDATED DAMAGES

8.4.1 Liquidated Damages.

Contractor and District hereby agree that the exact amount of damages for failure to complete the Work within the time specified is extremely difficult or impossible to determine. If the Work is not completed within the time specified in the Contract Documents, it is understood that the District will suffer damage. It being impractical and unfeasible to determine the amount of actual damage, it is agreed the Contractor shall pay to District as fixed and liquidated damages, and not as a penalty, the amount specified in the Construction Agreement for each calendar day of delay in completion. Any liquidated damages recovered by the District shall not, however, limit the District’s right to separately recover any actual out-of-pocket damages it suffers due to Contractor’s delay. Contractor and his surety shall be liable for the amount thereof pursuant to Government Code section 53069.85.

8.4.2 Excusable Delay.

Contractor shall not be charged for liquidated damages because of any delays in completion of Work which are not the fault or negligence of Contractor or its subcontractors, including acts of God, as defined in Public Contract Code Section 7107, acts of enemy, epidemics and quarantine restrictions. Contractor shall within five (5) calendar days of beginning of any such delay notify District in writing of causes of delay; thereupon District shall ascertain the facts and extent of delay and grant extension of time for completing Work when, in its judgment, the findings of fact justify such an extension. Extensions of time shall apply only to that portion of Work affected by delay, and shall not apply to other portions of Work not so affected. An extension of time may only be granted after proper compliance with the Specification Sections requiring preparation and submission of a properly prepared CPM schedule.

No extended overhead, general conditions costs, impact costs, out-of-sequence costs or any other type of compensation, by any name or characterization, shall be paid to the Contractor for any delay to any activity not designated as a critical path item on the latest approved Project schedule.

The Contractor shall notify the Architect in writing of any anticipated delay and its cause, in order that the Architect may take immediate steps to prevent, if possible, the occurrence or continuance of delay, and may determine whether the delay is to be considered avoidable or unavoidable, how long it continues, and to what extent the prosecution and completion of the Work might be delayed thereby.

In the event the Contractor requests an extension of Contract time for unavoidable delay, such request shall be submitted in accordance with the provisions in the Contract Documents governing changes in work. When requesting time, i.e., extensions, for proposed Change Orders, they must be submitted with the proposed Change Order with full justification and documentation. If the Contractor fails to submit justification with the proposed Change Order it waives its right to a time extension at a later date. Such justification must be based on the official Contract schedule as updated at the time of occurrence of the delay or execution of Work related to any changes to the scope of work. The justification must include, but is not limited to, the following information:
(a) The duration of the activity relating to the changes in the Work and the resources (manpower, equipment, material, etc.) required to perform these activities within the stated duration.

(b) Logical ties to the official Contract schedule for the proposed changes and/or delay showing the activity/activities in the schedule whose start or completion dates are affected by the change and/or delay. (A fragment of any delay of over ten (10) days must be provided.)

The Contractor and District understand and expressly agree that insofar as Public Contract Code Section 7102 may apply to changes in the Work or delays under this contract, the actual delays and damages, if any, and time extensions are intended to, and shall provide, the exclusive and full method of compensation for changes in the Work and construction delays.

8.4.3 Notice by Contractor Required.

The Contractor shall within five (5) calendar days of beginning of any such delay notify the District in writing of causes of delay with justification and supporting documentation. District will then ascertain the facts and extent of the delay and grant an extension of time for completing the Work when, in its judgment, the findings of fact justify such an extension. Extensions of time shall apply only to that portion of the Work affected by the delay and shall not apply to other portions of the Work not so affected. The sole remedy of Contractor for extensions of time under Paragraph 8.4.2 shall be an extension of the Contract Time at no cost to the District.

Claims relating to time extensions shall be made in accordance with applicable provisions of Specification Section 01250.

8.4.4 No Additional Compensation for Delays within Contractor’s Control

CONTRACTOR IS AWARE THAT GOVERNMENTAL AGENCIES, SUCH AS THE DEPARTMENT OF GENERAL SERVICES, GAS COMPANIES, ELECTRICAL UTILITY COMPANIES, WATER DISTRICTS AND OTHER AGENCIES MAY HAVE TO APPROVE CONTRACTOR PREPARED DRAWINGS OR APPROVE A PROPOSED INSTALLATION. CONTRACTOR HAS INCLUDED DELAYS AND DAMAGES WHICH MAY BE CAUSED BY SUCH AGENCIES IN CONTRACTOR’S BID. THUS, CONTRACTOR IS NOT ENTITLED TO MAKE CLAIM UPON THE DISTRICT FOR DAMAGES OR DELAYS ARISING FROM THE DELAYS CAUSED BY SUCH AGENCIES. FURTHERMORE, THE CONTRACTOR HAS SCHEDULED FOR SUCH DELAYS AND IS NOT ENTITLED TO AN EXTENSION OF_TIME FOR DELAYS CAUSED BY GOVERNMENTAL AGENCIES WHICH CONTRACTOR MUST OBTAIN APPROVALS FROM AND, THUS, CONTRACTOR IS NOT ENTITLED TO AN EXTENSION OF TIME.

CONTRACTOR SHALL ONLY BE ENTITLED TO COMPENSATION FOR DELAY WHEN THE FOLLOWING CONDITIONS ARE MET: (1) THE DISTRICT IS RESPONSIBLE FOR THE DELAY; (2) THE DELAY IS UNREASONABLE UNDER THE CIRCUMSTANCES INVOLVED; AND (3) THE DELAY WAS NOT WITHIN THE CONTEMPLATION OF DISTRICT AND CONTRACTOR.
ARTICLE 9

NOT USED
ARTICLE 10

NOT USED
ARTICLE 11
INSURANCE AND BONDS

11.1 CONTRACTOR’S LIABILITY INSURANCE

11.1.1 Insurance Requirements.

Before the commencement of the Work, the Contractor shall purchase from and maintain in a company or companies lawfully authorized to do business in California as admitted carriers with a financial rating of at least an A status as rated in the most recent edition of Best’s Insurance Reports or as amended by the Supplementary General Conditions, such insurance as will protect the District from claims set forth below, which may arise out of or result from the Contractor’s operations under the Contract and for which the Contractor may be legally liable, whether such operations are by the Contractor, by a Subcontractor, by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable:

(a) Claims for damages because of bodily injury, sickness, disease, or death of any person District would require indemnification and coverage for employee claim;

(b) Claims for damages insured by usual personal injury liability coverage, which are sustained by a person as a result of an offense directly or indirectly related to employment of such person by the Contractor or by another person;

(c) Claims for damages because of injury or destruction of tangible property, including loss of use resulting therefrom, arising from operations under the Contract Documents;

(d) Claims for damages because of bodily injury, death of a person, or property damage arising out of the ownership, maintenance, or use of a motor vehicle, all mobile equipment, and vehicles moving under their own power and engaged in the Work;

(e) Claims involving contractual liability applicable to the Contractor’s obligations under the Contract Documents, including liability assumed by and the indemnity and defense obligations of the Contractor and the Subcontractors; and

(f) Claims involving Completed Operations, Independent Contractors’ coverage, and Broad Form property damage, without any exclusions for collapse, explosion, demolition, underground coverage, and excavating. (XCU)

(g) Claims involving sudden or accidental discharge of contaminants or pollutants.

11.1.2 Subcontractor Insurance Requirements.

The Contractor shall require its Subcontractors to take out and maintain similar public liability insurance and property damage insurance required under Paragraph 11.1.1 in like amounts. A “claims made” or modified “occurrence” policy shall not satisfy the requirements of Paragraph 11.1.1 without prior written approval of the District.
11.1.3 Additional Insured Endorsement Requirements.

The Contractor shall name, on any policy of insurance required under Paragraph 11.1, the District, Architect, Inspector, the State of California, their officers, employees, agents and independent contractors as additional insureds. Subcontractors shall name the Contractor, the District, Architect, Inspector, the State of California, their officers, employees, agents and independent contractors as additional insureds. The Additional Insured Endorsement included on all such insurance policies shall be a CG 2010 (11/85) or CG 2010 (10/93) form and state that coverage is afforded the additional insured with respect to claims arising out of operations performed by or on behalf of the insured. If the additional insureds have other insurance which is applicable to the loss, such other insurance shall be on an excess or contingent basis. The insurance provided by the Contractor pursuant to 11.1.1 must be designated in the policy as primary to any insurance obtained by the District. The amount of the insurer's liability shall not be reduced by the existence of such other insurance.

11.1.4 Specific Insurance Requirements.

Contractor shall take out and maintain and shall require all subcontractors, if any, whether primary or secondary, to take out and maintain:

1. Comprehensive General Liability Insurance with a combined single limit per occurrence of not less than $1,000,000.00 and $2,000,000 project specific aggregate, or Commercial General Liability Insurance (including automobile insurance) which provides limits of not less than:

   (a) Per occurrence (combined single limit) ........................................ $1,000,000.00
   (b) Project Specific Aggregate (for this project only) ............... $2,000,000.00
   (c) Products and Completed Operations ............................................ $1,000,000.00
   (d) Personal and Advertising Injury Limit ......................................... $1,000,000.00

2. Insurance Covering Special Hazards

   The following Special hazards shall be covered by riders or riders to above mentioned public liability insurance or property damage insurance policy or policies of insurance, in amounts as follows:

   (a) Automotive and truck where operated in amounts ............... $1,000,000.00
   (b) Material Hoist where used in amounts ......................... $1,000,000.00
   (c) Explosion, Collapse and Underground (XCU coverage) ........................................ $1,000,000.00

3. In addition, provide Excess Liability Insurance coverage in the amount of Two Million Dollars ($2,000,000.00).

11.2 WORKERS' COMPENSATION INSURANCE

During the term of this Contract, the Contractor shall provide workers' compensation insurance for all of the Contractor's employees engaged in Work under this Contract on or at the Site of the
Project and, in case any of the Contractor’s Work is subcontracted, the Contractor shall require the Subcontractor to provide workers’ compensation insurance for all the Subcontractor’s employees engaged in Work under the subcontract. Any class of employee or employees not covered by a Subcontractor’s insurance shall be covered by the Contractor’s insurance. In case any class of employees engaged in Work under this Contract on or at the Site of the Project is not protected under the Workers’ Compensation laws, the Contractor shall provide or cause a Subcontractor to provide adequate insurance coverage for the protection of those employees not otherwise protected. The Contractor shall file with the District certificates of insurance as required under Paragraph 11.6 and in compliance with Labor Code § 3700.

11.3 **BUILDER’S RISK/ “ALL RISK” INSURANCE**

11.3.1 Course-of-Construction Insurance Requirements.

The Contractor, during the progress of the Work and until final acceptance of the Work by District upon completion of the entire Contract, shall maintain Builder’s Risk, Course of Construction or similar first party property coverage issued on a replacement cost value basis consistent with the total replacement cost of all insurable Work and the Project included within the Contract Documents. Coverage is to insure against all risks of accidental direct physical loss, and must include, by the basic grant of coverage or by endorsement, the perils of vandalism, malicious mischief (both without any limitation regarding vacancy or occupancy), fire, sprinkler leakage, civil authority, sonic boom, earthquake, flood, collapse, wind, lightning, smoke and riot. The coverage must include debris removal, demolition, increased costs due to enforcement of building ordinance and law in the repair and replacement of damage and undamaged portions of the property, and reasonable costs for the Architect’s and engineering services and expenses required as a result of any insured loss upon the Work and Project which is the subject of the Contract Documents, including completed Work and Work in progress, to the full insurable value thereof. Such insurance shall include the District and the Architect as additional named insureds, and any other person with an insurable interest as designated by the District.

The Contractor shall submit to the District for its approval all items deemed to be uninsurable. The risk of the 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.

11.4 **FIRE INSURANCE**

Before the commencement of the Work, the Contractor shall procure, maintain, and cause to be maintained at the Contractor’s expense, fire insurance on all Work subject to loss or damage by fire. The amount of fire insurance shall be sufficient to protect the Project against loss or damage in full until the Work is accepted by the District.

11.5 **OTHER INSURANCE**

The Contractor shall provide all other insurance required to be maintained under applicable laws, ordinances, rules, and regulations.
11.6 **PROOF OF INSURANCE**

The Contractor shall not commence Work nor shall it allow any Subcontractor to commence Work under this Contract until all required insurance and certificates have been obtained and delivered in duplicate to the District for approval subject to the following requirements:

(a) Certificates and insurance policies shall include the following clause:

“This policy shall not be non-renewed, canceled, or reduced in required limits of liability or amounts of insurance until notice has been mailed to the District. Date of cancellation or reduction may not be less than thirty (30) days after the date of mailing notice.”

(b) Certificates of insurance shall state in particular those insured, the extent of insurance, location and operation to which the insurance applies, the expiration date, and cancellation and reduction notices.

(c) Certificates of insurance shall clearly state that the District and the Architect are named as additional insureds under the policy described and that such insurance policy shall be primary to any insurance or self-insurance maintained by District.

(d) The Contractor and its Subcontractors shall produce a certified copy of any insurance policy required under this Section upon written request of the District.

11.7 **COMPLIANCE**

In the event of the failure of any contractor to furnish and maintain any insurance required by this Article 11, the Contractor shall be in default under the Contract. Compliance by Contractor with the requirement to carry insurance and furnish certificates or policies evidencing the same shall not relieve the Contractor from liability assumed under any provision of the Contract Documents, including, without limitation, the obligation to defend and indemnify the District and the Architect.

11.8 **WAIVER OF SUBROGATION**

Contractor waives (to the extent permitted by law) any right to recover against the District for damages to the Work, any part thereof, or any and all claims arising by reason of any of the foregoing, but only to the extent that such damages and/or claims are covered by property insurance and only to the extent of such coverage (which shall exclude deductible amounts) by insurance actually carried by the District.

The provisions of this section are intended to restrict each party to recovery against insurance carriers only to the extent of such coverage and waive fully and for the benefit of each, any rights and/or claims which might give rise to a right of subrogation in any insurance carrier. The District and the Contractor shall each obtain in all policies of insurance carried by either of them, a waiver by the insurance companies thereunder of all rights of recovery by way of subrogation for any damages or claims covered by the insurance.
11.9 PERFORMANCE AND PAYMENT BONDS

11.9.1 Bond Requirements.

Unless otherwise specified in the Special Conditions, prior to commencing any portion of the Work, the Contractor shall furnish separate payment and performance bonds for its portion of the Work which shall cover 100% faithful performance of and payment of all obligations arising under the Contract Documents and/or guaranteeing the payment in full of all claims for labor performed and materials supplied for the Work. All bonds shall be provided by a corporate surety authorized and admitted to transact business in California as sureties.

To the extent, if any, that the Contract Price is increased in accordance with the Contract Documents, the Contractor shall, upon request of the District, cause the amount of the bonds to be increased accordingly and shall promptly deliver satisfactory evidence of such increase to the District. To the extent available, the bonds shall further provide that no change or alteration of the Contract Documents (including, without limitation, an increase in the Contract Price, as referred to above), extensions of time, or modifications of the time, terms, or conditions of payment to the Contractor will release the surety. If the Contractor fails to furnish the required bonds, the District may terminate the Contract for cause.

11.9.2 Surety Qualification.

Only bonds executed by admitted Surety insurers as defined in Code of Civil Procedure § 995.120 shall be accepted. Surety must be a California-admitted surety and listed by the U.S. Treasury with a bonding capacity in excess of the Project cost.

11.9.3 Alternate Surety Qualifications.

If a California-admitted surety insurer issuing bonds does not meet these requirements, the insurer will be considered qualified if it is in conformance with § 995.660 of the California Code of Civil Procedure and proof of such is provided to the District.

ARTICLE 12

UNCOVERING AND CORRECTION OF WORK

12.1 UNCOVERING OF WORK

12.1.1 Uncovering Work for Required Inspections.

If a portion of the Work is covered without Inspector or Architect approval or not in compliance with the Contract Documents, it must, if required in writing by the Inspector or the Architect, be uncovered for the Inspector’s or the Architect’s observation and be replaced at the Contractor’s expense without change in the Contract Sum or Time.
12.1.2 Costs for Inspections not Required.

If a portion of the Work has been covered which the Inspector or the Architect has not specifically requested to observe prior to its being covered, the Inspector or the Architect may request to see such Work, and it shall be uncovered by the Contractor. If such Work is in accordance with the Contract Documents, costs of uncover and replacement shall, by appropriate Change Order, be charged to the District. If such Work is not in accordance with Contract Documents, the Contractor shall pay such costs unless the condition was caused by the District or a separate contractor, in which event the District shall be responsible for payment of such costs to the Contractor.

12.2 CORRECTION OF WORK

12.2.1 Correction of Rejected Work.

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

12.2.2 One-Year Warranty or Guaranty Corrections.

If, within one (1) year after the date of Completion of the Work or a designated portion thereof, or after the date for commencement of warranties and guaranties established under this Contract, or by the terms of an applicable special warranty or guaranty required by the Contract Documents, any of the Work is found to be not in accordance with the requirements of the Contract Documents, the Contractor shall correct it promptly after receipt of written notice from the District to do so unless the District has previously given the Contractor a written acceptance of such condition. This period of one (1) years shall be extended with respect to portions of the Work first performed after Completion by the period of time between Completion and the actual performance of the Work. This obligation under this Paragraph 12.2.2 shall survive acceptance of the Work under the Contract and termination of the Contract. The District shall give such notice promptly after discovery of the condition.

12.2.3 District’s Rights if Contractor Fails to Correct.

If the Contractor fails to correct nonconforming Work within a reasonable time, the District may correct it, pursuant to Specification Section 01290.

ARTICLE 13

MISCELLANEOUS PROVISIONS

13.1 GOVERNING LAW

The Contract shall be governed by the law of the place where the Project is located.
13.2 SUCCESSORS AND ASSIGNS

The District and the Contractor respectively bind themselves, their partners, successors, assigns, and legal representatives to the other party hereto and to partners, successors, assigns, and legal representatives of such other party in respect to covenants, agreements, and obligations contained in the Contract Documents. Neither party to the Contract shall assign the Contract as a whole without written consent of the other. If either party attempts to make such an assignment without such consent, that party shall nevertheless remain legally responsible for all obligations under the Contract.

13.3 WRITTEN NOTICE

In the absence of specific notice requirements in the Contract Documents, written notice shall be deemed to have been duly served if delivered in person to the individual, member of the firm or entity, or to an officer of the corporation for which it was intended, or if delivered at or sent by registered or certified mail to the last business address known to the party giving notice.

13.4 RIGHTS AND REMEDIES

13.4.1 Duties and Obligations Cumulative.

Duties and obligations imposed by the Contract Documents and rights and remedies available thereunder shall be in addition to and not a limitation of duties, obligations, rights, and remedies otherwise imposed or available by law.

13.4.2 No Waiver.

No action or failure to act by the Inspector, the District, or the Architect shall constitute a waiver of a right or duty afforded them under the Contract Documents, nor shall such action or failure to act constitute approval of or acquiescence in a breach thereunder, except as may be specifically agreed in writing.

13.5 TESTS AND INSPECTIONS

13.5.1 Compliance.

Tests, inspections, and approvals of portions of the Work required by the Contract Documents will comply with Title 24, and with all other laws, ordinances, rules, regulations, or orders of public authorities having jurisdiction.

13.5.2 Independent Testing Laboratory.

The District will select and pay an independent testing laboratory to conduct all tests and inspections required by regulatory agencies. Selection of the materials required to be tested shall be made by the laboratory or the District’s representative and not by the Contractor. All costs for all other tests shall be included in the Bid Price and shall be paid for by the Contractor. Any costs or expenses of inspection or testing required by regulatory agencies, incurred outside of a fifty (50) mile radius from the Project Site or not located in a contiguous county to the Site, whichever distance is greater, shall be
paid for by the District, invoiced by the District to the Contractor, and deducted from the next Progress Payment.

13.5.3 Advance Notice to Inspector.

The Contractor shall notify the Inspector a sufficient time in advance of its readiness for required observation or inspection so that the Inspector may arrange for same. The Contractor shall notify the Inspector a sufficient time in advance of the manufacture of material to be supplied under the Contract Documents which must, by terms of the Contract Documents, be tested in order that the Inspector may arrange for the testing of the material at the source of supply.

13.5.4 Testing Off-Site.

Any material shipped by the Contractor from the source of supply, prior to having satisfactorily passed such testing and inspection or prior to the receipt of notice from said Inspector that such testing and inspection will not be required, shall not be incorporated in the Work.

13.5.5 Additional Testing or Inspection.

If the Inspector, the Architect, the District, or public authority having jurisdiction determines that portions of the Work require additional testing, inspection, or approval not included under Paragraph 13.5.1, the Inspector will, upon written authorization from the District, make arrangements for such additional testing, inspection, or approval. The District shall bear such costs except as provided in Paragraph 13.5.7.

13.5.6 Costs for Retesting.

If such procedures for testing, inspection, or approval under Paragraphs 13.5.1 and 13.5.2 reveal failure of the portions of the Work to comply with requirements established by the Contract Documents, the Contractor shall bear all costs arising from such failure, including those of re-testing, re-inspection, or re-approval, including, but not limited to, compensation for the Architect’s services and expenses. Any such costs shall be paid by the District, invoiced to the Contractor, and deducted from the next Progress Payment.

13.5.7 Costs for Premature Test.

In the event the Contractor requests any test or inspection for the Project and is not completely ready for the inspection, the Contractor shall be invoiced by the District for all costs and expenses resulting from that testing or inspection, including, but not limited to, the Inspector’s and Architect’s fees and expenses, and the amount of the invoice of shall be deducted from the next Progress Payment.

13.6 TRENCH EXCAVATION

13.6.1 Trenches Greater Than Five Feet.

Pursuant to Labor Code § 6705, if the Contract Price exceeds $25,000 and involves the excavation of any trench or trenches five (5) feet or more in depth, the Contractor shall, in advance of excavation, submit to the District or a registered civil or structural engineer employed by the District or
13.6.2 Excavation Safety.

If such plan varies from the Shoring System Standards established by the Construction Safety Orders, the plan shall be prepared by a registered civil or structural engineer, but in no case shall such plan be less effective than that required by the Construction Safety Orders. No excavation of such trench or trenches shall be commenced until said plan has been accepted in writing by the District or by the person to whom authority to accept has been delegated by the District.

13.6.3 No Tort Liability of District.

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

13.6.4 No Excavation Without Permits.

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

13.7 WAGE RATES, TRAVEL, AND SUBSISTENCE

13.7.1 Wage Rates.

Pursuant to the provisions of Article 2 (commencing at § 1720), Chapter 1, Part 7, Division 2, of the Labor Code, the District has obtained the general prevailing rate of per diem wages and the general prevailing rate for holiday and overtime work in the locality in which this public works project is to be performed for each craft, classification, or type of worker needed for this Project from the Director of the Department of Industrial Relations (“Director”). These rates are on file at the administrative office of the DISTRICT and are also available from the Director of the Department of Industrial Relations. Copies will be made available to any interested party on request. The Contractor shall post a copy of such wage rates at appropriate, conspicuous, weatherproof points at the Site.

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

13.7.2 Holiday and Overtime Pay.

Holiday and overtime work, when permitted by law, shall be paid for at the rate set forth in the prevailing wage rate determinations issued by the Director of the Department of Industrial Relations or at least one and one-half (1½) times the specified basic rate of per diem wages, plus employer payments, unless otherwise specified in the contract documents or authorized by law.
13.7.3 Wage Rates Not Affected by Subcontracts.

The Contractor shall pay and shall cause to be paid each worker engaged in the execution of the Work on the Project not less than the general prevailing rate of per diem wages determined by the Director, regardless of any contractual relationship which may be alleged to exist between the Contractor or any Subcontractor and such workers.

13.7.4 Per Diem Wages.

The Contractor shall pay and shall cause to be paid to each worker needed to execute the Work on the Project per diem wages including, but not limited to, employer payments for health and welfare, pensions, vacation, travel time and subsistence pay as provided for in Labor Code §1773.1.

13.7.5 Forfeiture and Payments.

Pursuant to Labor Code §1775 and the District’s Labor Compliance Program, the Contractor shall forfeit to the District, not more than Fifty Dollars ($50.00) for each calendar day, or portion thereof, for each worker paid less than the prevailing wages rates as determined by the Director of the Department of Industrial Relations, for the work or craft in which the worker is employed for any Work done under the Agreement by the Contractor or by any Subcontractor under it. The amount of the penalty shall be determined by the Labor Commissioner and shall be based on consideration of: (1) whether the Contractor or Subcontractor’s failure to pay the correct rate of per diem wages was a good faith mistake and, if so, the error was promptly and voluntarily correct upon being brought to the attention of the Contractor or Subcontractor; and (2) whether the Contractor or Subcontractor has a prior record of failing to meet its prevailing wage obligations. Further details regarding the enforcement of paying prevailing wage rates, reporting violations, withholding contract payments, forfeitures and hearing to review withholding of contract payments are set forth in the District’s Labor Compliance Program.

13.8 RECORDS OF WAGES PAID

13.8.1 Payroll Records.

(a) Pursuant to §1776 of the Labor Code, each Contractor and Subcontractor shall keep an accurate payroll record showing the name, address, social security number, work classification and straight time and overtime hours worked each day and week, and the actual per diem wages paid to each journeyman, apprentice, worker or other employee employed by him or her in connection with the Project.

(b) All payroll records shall be certified and submitted to the District with each application for payment, but shall not be submitted less than once per month. All payroll records shall be available for inspection at all reasonable hours at the principal office of the Contractor on the following basis:

(1) A certified copy of an employee’s payroll record shall be made available for inspection or furnished to the employee or his or her authorized representative on request.
A certified copy of all payroll records shall be made available for inspection or furnished upon request to a representative of District, the Division of Labor Standards Enforcement or the Division of Apprenticeship Standards of the Department of Industrial Relations.

A certified copy of all payroll records shall be made available upon request by the public for inspection or for copies thereof. However, a request by the public shall be made through the District, the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement. If the requested payroll records have not been provided pursuant to Paragraph (2) above, the requesting party shall, prior to being provided the records, reimburse the costs, according to law for the preparation by the Contractor, Subcontractor(s), and the entity through which the request was made. The public shall not be given access to such records at the principal office of the Contractor.

The certified payroll records shall be on forms provided by the Division of Labor Standards Enforcement or shall contain the same information as the forms provided by the Division of Labor Standards Enforcement.

The Contractor or Subcontractor(s) shall file a certified copy of all payroll records with the entity that requested such records within 10 calendar days after receipt of a written request.

Any copy of records made available for inspection as copies and furnished upon request to the public or any public agency by the District, the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement shall be marked or obliterated to prevent disclosure of an individual’s name, address and social security number. The name and address of the Contractor awarded the Contract or the Subcontractor(s) performing the Contract shall not be marked or obliterated. Any copy of records made available for inspection by, or furnished to, a joint labor-management committee established pursuant to the federal Labor Management Cooperation Act of 1978 (Section 175a of Title 29 of the United States Code) shall be marked or obliterated only to prevent disclosure of an individual’s name and social security number.

The Contractor shall inform the District of the location of all payroll records, including the street address, city and county, and shall, within five working days, provide a notice of a change of location and address.

The Contractor or Subcontractor(s) shall have 10 calendar days in which to comply subsequent to receipt of a written notice requesting payroll records. In the event that the Contractor or Subcontractor(s) fails to comply within the 10-day period, the Contractor or Subcontractor(s) shall, as a penalty to the District, forfeit Twenty-Five Dollars ($25.00) for each calendar day, or portion thereof, for each worker, until strict compliance is effectuated. Upon the request of the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement, these penalties shall be withheld from progress payments then due.

Responsibility for compliance with this Article and the District’s Labor Compliance Program shall rest upon the Contractor.
13.8.2  Withholding of Contract Payments & Penalties.

The District may withhold or delay contract payments to the Contractor and/or any Subcontractor if:

(a) The required prevailing rate of per diem wages determined by the Director of the Department of Industrial Relations is not paid to all workers employed on the Project; or

(b) The Contractor or Subcontractor(s) fail to submit all required certified payroll records with each application for payment, but not less than once per month; or

(c) The Contractor or Subcontractor(s) submit incomplete or inadequate payroll records; or

(d) The Contractor or Subcontractor(s) fail to comply with the Labor Code requirements concerning apprentices; or

(e) The Contractor or Subcontractor(s) fail to comply with the District’s Labor Compliance Program; or

(f) The Contractor or Subcontractor(s) fail to comply with any applicable state laws governing workers on public works projects.

Any withholding of contract payments and penalties are set forth in the District’s Labor Compliance Program.

13.9  APPRENTICES

13.9.1  Apprentice Wages and Definitions.

All apprentices employed by the Contractor to perform services under the Contract shall be paid the standard wage paid to apprentices under the regulations of the craft or trade for which he or she is employed, and as determined by the Director of the Department of Industrial Relations, and shall be employed only at the craft or trade to which he or she is registered. Only apprentices, as defined in §3077 of the Labor Code, who are in training under apprenticeship standards that have been approved by the Chief of the Division of Apprenticeship Standards and who are parties to written apprenticeship agreements under Chapter 4 (commencing with §3070) of Division 3, are eligible to be employed under this Contract. The employment and training of each apprentice shall be in accordance with the apprenticeship standards and apprentice agreements under which he or she is training, or in accordance with the rules and regulations of the California Apprenticeship Council.

13.9.2  Employment of Apprentices.

Contractor agrees to comply with the requirements of Labor Code §1777.5. The Contractor awarded the Project, or any Subcontractor under him or her, when performing any of the Work under the Contract or subcontract, employs workers in any apprenticeable craft or trade, the Contractor and Subcontractor shall employ apprentices in the ratio set forth in Labor Code §1777.5. The Contractor or any Subcontractor must apply to any apprenticeship program in the craft or trade that can provide apprentices to the Project site for a certificate approving the contractor or subcontractor under the
apprenticeship standards for the employment and training of apprentices in the area or industry affected. However, the decision of the apprenticeship program to approve or deny a certificate shall be subject to review by the Administrator of Apprenticeship. The apprenticeship program or programs, upon approving the Contractor or Subcontractor, shall arrange for the dispatch of apprentices to the Contractor or Subcontractor upon the Contractor’s or Subcontractor’s request. “Apprenticeable craft or trade” as used in this Article means a craft or trade determined as an apprenticeable occupation in accordance with the rules and regulations prescribed by the California Apprenticeship Council. The ratio of work performed by apprentices to journeyman employed in a particular craft or trade on the Project shall be in accordance with Labor Code §1777.5.

13.9.3 Submission of Contract Information.

Prior to commencing work on the Project, the Contractor and Subcontractors shall submit contract award information to the applicable apprenticeship program(s) that can supply apprentices to the Project and make the request for the dispatch of apprentices in accordance with the Labor Code. The information submitted shall include an estimate of journeyman hours to be performed under the Contract, the number of apprentices proposed to be employed, and the approximate dates the apprentices would be employed. A copy of this information shall also be submitted to the District. Within 60 days after concluding work on the Project, the Contractor and Subcontractors shall submit to the District, if requested, and to the apprenticeship program a verified statement of the journeyman and apprentice hours performed on the Project.

13.9.4 Apprentice Fund.

The Contractor or any Subcontractor under him or her, who, in performing any of the Work under the Contract, employs journeymen or apprentices in any apprenticeable craft or trade shall contribute to the California Apprenticeship Council the same amount that the Director determines is the prevailing amount of apprenticeship training contributions in the area of the Project. The Contractor and Subcontractors may take as a credit for payments to the California Apprenticeship Council any amounts paid by the Contractor or Subcontractor to an approved apprenticeship program that can supply apprentices to the Project. The Contractor and Subcontractors may add the amount of the contributions in computing his or her bid for the Contract.

13.9.5 Prime Contractor Compliance.

The responsibility of compliance with Article 13 and §1777.5 of the Labor Code for all apprenticeable occupations is with the Prime Contractor. Any Contractor or Subcontractor that knowingly violates the provisions of this Article or Labor Code §1777.5 shall be subject to the penalties set forth in Labor Code §1777.7 and the District’s Labor Compliance Program.

13.10 ASSIGNMENT OF ANTITRUST CLAIMS

13.10.1 Application.

Pursuant to Government Code § 4551, in entering into a public works contract or a subcontract to supply goods, services, or materials pursuant to a public works contract, the Contractor or Subcontractor offers and agrees to assign to the District all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act, (15 U.S.C. § 15) or under the Cartwright Act
(Chapter 2 [commencing with § 16700] of Part 2 of Division 7 of the Business and Professions Code), arising from the purchase of goods, services, or materials pursuant to the public works contract or the subcontract. This assignment shall be made and become effective at the time the awarding body tenders final payment to the Contractor, without further acknowledgment by the parties. If the District receives, either through judgment or settlement, a monetary recovery for a cause of action assigned under Chapter 11 (commencing with § 4550) of Division 5 of Title 1 of the Government Code, the assignor shall be entitled to receive reimbursement for actual legal costs incurred and may, upon demand, recover from the District any portion of the recovery, including treble damages, attributable to overcharges that were paid by the assignor but were not paid by the District as part of the bid price, less the expenses incurred in obtaining that portion of the recovery.

13.10.2 Assignment of Claim.

Upon demand in writing by the assignor, the District shall, within one (1) year from such demand, reassign the cause of action assigned pursuant to this Article if the assignor has been or may have been injured by the violation of law for which the cause of action arose and the District has not been injured thereby or the District declines to file a court action for the cause of action.

13.11 STATE AUDIT

Pursuant to and in accordance with the provisions of Government Code § 10532, or any amendments thereto, all books, records, and files of the District, the Contractor, or any Subcontractor connected with the performance of this Contract involving the expenditure of state funds in excess of Ten Thousand Dollars ($10,000.00), including, but not limited to, the administration thereof, shall be subject to the examination and audit of the Office of the Auditor General of the State of California for a period of three (3) years after final payment is made under this Contract. Contractor shall preserve and cause to be preserved such books, records, and files for the audit period.

13.12 STORM WATER POLLUTION PREVENTION

13.12.1 Application

This Section, and including other Contract Specifications related to Storm Water Pollution Prevention, addresses the preparation, implementation and monitoring of a Storm Water Pollution Prevention Plan (SWPPP) for the purpose of preventing the discharge of pollutants from the construction site. This includes the elimination of pollution discharges such as improper dumping, spills or leakage from storage tanks or transfer areas. When required or specified, the District will not issue a Notice to Proceed until Contractor has prepared and obtained approval of SWPPP from the District and the State Water Resources Control Board. The Contractor shall also secure a certification that the construction project has met all of the conditions of the State Construction General Permit (Order No. 2009-0009-DWQ) and comply with all applicable local, state and federal regulations governing storm water pollution prevention.

13.12.2 References and Materials

○ “Erosion and Sediment Control Field Manual” California Regional Water Quality Control Board (RWQCB)—San Francisco Bay Region.
Use materials of a class, grade and type needed to meet the performance described in the Field Manual and/or the BMP Handbook.

13.12.3 Preparation and Approval

The Contractor shall prepare the Storm Water Pollution Prevention Plan (SWPPP), when required or specified, to comply with storm water pollution regulations for project sites with storm water discharges associated with construction activity such as clearing or demolition, grading, excavation and other land disturbances. The SWPPP shall apply to all areas that are directly related to construction activity, including but not limited to staging areas, storage yards, material borrow areas, and access roads.

13.12.3.1 For project sites, new or existing, with land disturbance of 1 or more acres (or less than 1 acres if part of a common plan of development), the Contractor shall prepare and submit to the District the SWPPP for review and approval. Submittal shall be made by fulfilling all data and attachment requirements required by the California Storm Water Multiple Application and Report Tracking System – SMARTS web-based program.

13.12.3.2 Data required by the SMARTS program shall be entered into the SMARTS program and submitted in time for the District to file a Notice of Intent at least two weeks prior to the commencement of construction activities. Failure by the Contractor to fully schedule and comply with these requirements shall not entitle a claim for delay.

13.12.3.3 Where land disturbance is less than 1 acres, a SWPPP is not required. However, BMPs indicated in the BMP Handbook needed to prevent or minimize storm water pollution shall be submitted to the District and implemented at no extra cost to the District.

13.12.3.4 Within twenty days after Award of Contract by the District, the Contractor shall submit to the District one copy of the SWPPP for review. After the District’s approval, the Contractor shall provide approved copies of the SWPPP as follows: one copy each to the District’s Construction Inspector, District’s Construction Manager, District Architect, and District’s Civil Engineer.

13.12.4 Implementation

The Contractor shall implement the Storm Water Pollution Prevention Plan by doing the following:

(a) Install perimeter controls prior to starting other construction work at the site.

(b) Contain on-site storm water at the jobsite. Do not drain on-site water directly into the storm drain.

(c) Provide SWPPP and BMP implementation training for those responsible for implementing the SWPPP.
(d) Designate trained personnel for the proper implementation of the SWPPP.

(e) Revise the SWPPP to suit changing site conditions and instances when properly installed systems are ineffective.

(f) Maintain data required by the state permit and SMARTS program to ensure that all data is up to date, and that any change in conditions or personnel responsible for the SWPPP is current and compliant.

(g) At the end of Construction Contract.
   i. Leave in place storm water pollution prevention controls needed for post-construction storm water management and remove those that are not needed as determined by the District. Thereafter, left-in-place controls will be maintained by the District.
   ii. Provide Site Monitoring Reports, SWPPP revisions, Compliance Certifications and related documents to the District. Post-construction storm water operation and management plan as mentioned in the compliance certifications are considered to be in place at the end of the Construction Contract.
   iii. Provide and upload all required data and documents required in the SMARTS web-based program to receive an approved Notice of Termination from the State.

13.12.5 Monitoring

The Contractor shall comply with all requirements of the State Construction General Permit (Order No. 2009-0009-DWQ). The Contractor shall conduct examination of storm water pollution prevention controls monthly, as well as before and after each storm event and once each 24-hour period during extended storm events to identify BMP effectiveness and implement repairs or BMP changes as soon as feasible. All maintenance related to a storm event should be completed within 48 hours of the storm event. The Contractor shall also prepare and maintain, at the jobsite, a log of each inspection using Site Monitoring Report forms.

13.12.6 Liabilities and Penalties

(a) Review of the SWPPP and inspection logs by the District shall not relieve the Contractor from liabilities arising from non-compliance with storm water pollution regulations.

(b) Payment of penalties for non-compliance by the Contractor shall be the sole responsibility of the Contractor and will not be reimbursed by the District.

(c) Compliance with the Clean Water Act and storm water pollution regulations pertaining to construction activity is the sole responsibility of the Contractor. For any fine(s) levied against the District due to non-compliance by the Contractor, the District will deduct from the final payment due the Contractor the total amount of the fine(s) levied on the District, plus legal and associated costs.
ARTICLE 14
TERMINATION OR SUSPENSION OF THE CONTRACT

14.1 TERMINATION BY THE CONTRACTOR FOR CAUSE

14.1.1 Grounds for Termination.

The Contractor may terminate the Contract if the Work is stopped for a period of thirty (30) consecutive days through no act or fault of the Contractor, a Subcontractor, a Sub-subcontractor, their agents or employees, or any other persons performing portions of the Work for whom the Contractor is contractually responsible, for only the following reasons:

(a) Issuance of an order of a court or other public authority having jurisdiction; or

(b) An act of government, such as a declaration of national emergency.

14.1.2 Notice of Termination.

If one of the above reasons exists, the Contractor may, upon written notice of seven (7) additional days to the District, terminate the Contract and recover from the District payment for Work executed and for reasonable costs verified by the Architect with respect to materials, equipment, tools, construction equipment, and machinery, including reasonable overhead, profit, and damages.

14.2 TERMINATION BY THE DISTRICT FOR CAUSE

14.2.1 Grounds for Termination.

The District may terminate the Contractor and/or this Contract for the following reasons:

(a) Persistently or repeatedly refuses or fails to supply enough properly skilled workers or proper materials;

(b) Persistently or repeatedly is absent, without excuse, from the job site;

(c) Fails to make payment to Subcontractors, suppliers, materialmen, etc.;

(d) Persistently disregards laws, ordinances, rules, regulations, or orders of a public authority having jurisdiction; or

(e) Otherwise is in substantial breach of a provision of the Contract Documents.

14.2.2 Notification of Termination.

When any of the above reasons exist, the District may, without prejudice to any other rights or remedies of the District and after giving the Contractor and the Contractor’s surety, if any, written notice of seven (7) days, terminate the Contractor and/or this Contract and may, subject to any prior rights of the surety:
(a) Take possession of the Project and of all material, equipment, tools, and construction equipment and machinery thereon owned by the Contractor;

(b) Accept assignment of Subcontracts. Contractor acknowledges and agrees that if the District (in its sole and absolute discretion) decides to takeover completion of the Project, the Contractor agrees to immediately assign all subcontracts to the District which the District has chosen to accept; and

(c) Complete the Work by any reasonable method the District may deem expedient, including contracting with a replacement contractor or contractors.

14.2.3 Payments Withheld.

If the District terminates the Contract for one of the reasons stated in Paragraph 14.2.1, the Contractor shall not be entitled to receive further payment until the Work is complete. All costs associated with the termination and completion of the Project shall be the responsibility of the Contractor and/or its surety.

14.2.4 Payments Upon Completion.

If the unpaid balance of the Contract Sum exceeds costs of completing the Work, including compensation for professional services and expenses made necessary thereby, such excess shall be paid to the Contractor. If such costs exceed the unpaid balance, the Contractor shall pay the difference to the District. The amount to be paid to the Contractor, or District, as the case may be, shall be certified by the Architect upon application. This payment obligation shall survive completion of the Contract.

14.3 TERMINATION OF CONTRACT BY DISTRICT (CONTRACTOR NOT AT FAULT)

14.3.1 Termination for Convenience.

District may terminate the Contract upon fifteen (15) calendar days of written notice to the Contractor and use any reasonable method the District deems expedient to complete the project, including contracting with replacement contractor or contractors, if it is found that reasons beyond the control of either the District or Contractor make it impossible or against the District’s interest to complete the work. In such a case, the Contractor shall have no claims against the District except: (1) the actual cost for labor, materials, and services performed which may be documented through timesheets, invoices, receipts, or otherwise, and (2) ten percent (10%) profit and overhead, and (3) five percent (5%) termination cost of the total of items (1) and (2). Contractor acknowledges and agrees that if the District (in its sole and absolute discretion) decides to takeover completion of the Project, the Contractor agrees to immediately assign all subcontracts to the District which the District has chosen to accept.

14.3.2 Non-Appropriation of Funds/ Insufficient Funds.

In the event that sufficient funds are not appropriated to complete the Project or the DISTRICT determines that sufficient funds are not available to complete the Project, DISTRICT may terminate or suspend the completion of the Project at any time by giving written notice to the Contractor. In the event that the DISTRICT exercises this option, the DISTRICT shall pay for any and all work and materials
completed or delivered onto the site for which value is received, and the value of any and all work then in progress and orders actually placed which cannot be canceled up to the date of notice of termination. The value of work and materials paid for shall include a factor of fifteen percent (15%) for the Contractor’s overhead and profit and there shall be no other costs or expenses paid to Contractor. All work, materials and orders paid for pursuant to this provision shall become the property of the DISTRICT. DISTRICT may, without cause, order Contractor in writing to suspend, delay or interrupt the Project in whole or in part for such period of time as DISTRICT may determine. Adjustment shall be made for increases in the cost of performance of the Agreement caused by suspense, delay or interruption.

14.4 **REMEDIES OTHER THAN TERMINATION**

If a default occurs, the District may, without prejudice to any other right or remedy, including, without limitation, its right to terminate the Contract pursuant to Article 14.2, do any of the following:

(a) Permit the Contractor to continue under this Contract, but make good such deficiencies or complete the Contract by whatever method the District may deem expedient, and the cost and expense thereof shall be deducted from the Contract Price or paid by the Contractor to the District on demand;

(b) If the workmanship performed by the Contractor is faulty or defective materials are provided, erected or installed, then the District may order the Contractor to remove the faulty workmanship or defective materials and to replace the same with work or materials that conform to the Contract Documents, in which event the Contractor, at its sole costs and expense, shall proceed in accordance with the District’s order and complete the same within the time period given by the District in its notice to the Contractor; or

(c) Initiate procedures to declare the Contractor a non-responsible bidder for a period of two to five years thereafter.

All amounts expended by the District in connection with the exercise of its rights hereunder shall accrue interest from the date expended until paid to the District at the maximum legal rate. The District may retain or withhold any such amounts from the Contract Price. If the Contractor is ordered to replace any faulty workmanship or defective materials pursuant to Paragraph (b) above, the Contractor shall replace the same with new work or materials approved by the Architect and the District, and, at its own cost, shall repair or replace, in a manner and to the extent the Architect and the District shall direct, all work or material that is damaged, injured or destroyed by the removal of said faulty workmanship or defective material, or by the replacement of the same with acceptable work or materials. In no event shall anything in this Paragraph be deemed to constitute a waiver by the District of any other rights or remedies that it may have at law or in equity, it being acknowledged and agreed by the Contractor that the remedies set forth in this Paragraph are in addition to, and not in lieu of, any other rights or remedies that the District may have at law or in equity.

**END OF SECTION 00700**
PART 1 - GENERAL

1.1 RELATED DOCUMENTS
   A. All Contract Documents shall be reviewed for applicable provisions related to the provisions in
      this document, and provisions in the General Conditions and other Division 1 Specification
      Sections shall apply to this Section without limitation.

1.2 RELATED REQUIREMENTS SPECIFIED IN OTHER SECTIONS
   A. Section 01290 – “Payment Procedures”
   B. Section 01310 – “Construction Scheduling”
   C. Section 01312 – “Project Meetings”
   D. Section 01330 – “Submittal Procedures”
   E. Section 01400 – “Quality Control Requirements”
   F. Section 01540 – “Site Security and Safety”
   G. Section 01625 – “Product Options and Substitutions”
   H. Section 01740 – “Warrantees and Guarantees”
   I. Section 01745 – “Form of Warrantee”
   J. Section 01770 – “Contract Closeout Procedures”
   K. Section 01780 – “Project Record Documents”
   L. Section 01820 – “Demonstration and Training”

1.3 WORK DESCRIPTIONS WITHOUT FORCE
   A. All general descriptions and/or general summaries of the work noted in this section, or
      elsewhere within the Contract Documents, are without force and effect on the Contract Work
      described and indicated in detail the Construction Documents. These general descriptions and
      summaries are for general reference and descriptive purposes only and in no way offer the
      complete and concise description of all the Work required by the Contract Documents.

1.4 WORK COVERED BY CONTRACT DOCUMENTS
   A. Work of this Contract: DVC EXTERIOR PAINTING PROJECT

1.5 CONTRACTS
   A. Perform the work under a single, fixed-price Contract.
1.6 WORK BY DISTRICT AND SEPARATE CONTRACTORS

A. Items noted “NIC” (Not in Contract) will either be furnished and installed by District or provided under separate contracts. Coordinate with work of District and these separate contracts.

1.7 DISTRICT FURNISHED PRODUCTS

A. Products furnished to site and paid for by District:
   1. None

1.8 WORK SEQUENCE

A. Construct Work in Phases as shown in the Contract Documents. Coordinate construction schedule and construction operations with District and the Campus.

B. The Work shall be carried out so that the entire work is complete within the required time.

C. During construction operations, adjacent facilities will be occupied and their functions maintained. Contractor shall take all measures necessary to avoid any impacts to campus operations.

D. Scheduling of Contractor’s use of the areas and times involved shall be determined in cooperation with the District.

1.9 ADDITIONAL WORK SCHEDULE REQUIREMENTS

A. Saturday Work: In addition to normal schedule work days Monday through Friday, the Contractor shall plan and include in its bid all costs, including but not limited to Contractor and subcontractor (all tiers) resources for direct and premium labor costs for field and office personnel, material, equipment and related services (e.g., utilities) to work on a total of 50 Saturdays between the Notice to Proceed and the Project Substantial Completion date.
   1. At a minimum, the Contractor and its subcontractors shall use these resources on critical path and near critical path schedule activities for the Project.
   2. How the Contractor distributes the Saturday work between its subcontractors, and within each phase, is between the Contractor and its subcontractors, but the Saturday work shall be included in the Contractor’s CPM Schedule as a normal work day, but reserved, at a minimum, for critical path and near critical path schedule activities.
   3. All other schedule requirements for resource loading are applicable to critical path or near critical path work, and the critical path and near critical path crew sizes working Monday through Friday shall be maintained for these Saturdays.

B. Grave Yard Work Shift: In addition to normal schedule work days Monday through Friday, the Contractor shall plan and include in its bid all costs, including but not limited to Contractor and subcontractor (all tiers) resources for direct and premium labor costs for field and office personnel, material, equipment and related services (e.g., utilities) to work on grave yard work shifts, 10 PM – 7 AM between the Notice to Proceed and the Project Substantial Completion date.
   1. At a minimum, the Contractor and its subcontractors shall use these resources on critical path and near critical path schedule activities for the Project.
2. These grave yard days with work hours of 10 PM – 7 AM shall be reserved to complete the following construction activities:
   a. Demolition
   b. Hazardous Material Abatement

C. The Contractor shall allow for non-working days for the Project for College testing periods. No construction related operations and/or activities will be allowed during these designated non-work days without express written approval from the District.

1. The non-working days shall occur during a week in mid-May of each year, a week in mid-December of each year, with the 5 remaining days to be scheduled by the District as the academic calendar is confirmed. The Contractor shall not be entitled to any Contract Time extension or any adjustment of the Contract Amount for alleged delays or incurred costs due to the above non-work days.

D. Contractor shall notify the District, Campus, Project Manager, Buildings and Grounds Manager and Campus Police Services, city and county agencies, as applicable, a minimum of five (5) working days in advance of performing work which necessitates closing or interfering with traffic on campus or public thoroughfares, parking areas, driveways and walkways. Contractor must obtain written permission prior to effecting such closures and interruptions.

1.10 CAMPUS HOLIDAYS
A. The College is closed with no classes held on the following holidays: Labor Day; Native American Day; Veteran’s Day; Thanksgiving; Winter Recess; Martin Luther King Day; President’s Day; Spring Recess. The Contractor may work on these days with prior approval by the District.

1.11 USE OF PREMISES
A. Contractor shall only use the premises for work, storage, staging areas, and vehicular parking as designated in the Contract Documents.

B. If the areas on the premises designated in the Contract Documents are not sufficient for staging and storage, Contractor shall obtain and pay for the use of additional staging and storage areas as needed, without adjustments to Contract Sum or Contract Time. If the areas on the premises designated in the Contract Documents are not sufficient for vehicular parking, the Contractor shall coordinate with the District Project Manager to locate additional parking on the premises as needed. If additional on-premises parking cannot be identified, the Contractor and the District shall negotiate alternative parking or personnel transportation arrangements.

1.12 PROTECTION OF EXISTING STRUCTURES AND UTILITIES
A. The Drawings may not show all existing water, gas, electrical, and hot water lines, and other items known or suspected to exist in the area of the work.

B. Contractor shall locate these installations before proceeding with demolition or other operations which may cause damage, maintain them in service where appropriate, and repair damage caused by the performance of the Work, at no increase in the Contract Sum.

C. In addition to notification, if a structure or utility is damaged, take appropriate action as specified in the General Conditions.
1.13 USE AND OCCUPANCY OF WORK PRIOR TO ACCEPTANCE BY DISTRICT

A. The District / Campus may use and occupy the building before formal acceptance under the following conditions:

1. A Certificate of Substantial Completion shall be prepared and executed as provided in the Contract Documents. See Section 01770 Contract Closeout Procedures. The Certificate of Substantial Completion shall be accompanied by a written endorsement of the Contractor's insurance carrier and surety permitting occupancy by the District during the remaining period of the work.

2. Occupancy by the District / Campus shall not be construed as being an acceptance of that part of the Work occupied.

3. The Contractor will not be held responsible for damage to the occupied part of the Work resulting from the District’s / Campus’ occupancy.

4. Occupancy by the District / Campus shall not be deemed to constitute a waiver of existing claims the District or Contractor may have against each other.


6. The District will pay for utility costs associated with occupancy during construction.

1.14 NOISE CONTROL

A. See Section 01416, Special Procedures, for Noise Control requirements.

1.15 PROTECTION OF EXISTING IMPROVEMENTS

A. Provide barricades, coverings, or other types of protection necessary to prevent damage to existing improvements indicated to remain in place.

B. Protect improvements on adjoining properties as well as those on the District’s / Campus’ property.

C. Protect existing trees and other vegetation indicated to remain in place, against unnecessary cutting, breaking or skinning of roots, skinning and bruising of bark, smothering of trees by stockpiling construction materials or excavated materials within drip line, excess foot or vehicular traffic, or parking of vehicles within drip line.

D. Restore any improvements damaged by this work to their original condition as acceptable to the District / Campus or other parties or authorities having jurisdiction.

1.16 MISCELLANEOUS PROVISIONS

A. Items shown or scheduled to be salvaged will remain the property of the District. Store as directed by the Project Manager.

1.17 SPECIFICATION FORMATS AND CONVENTIONS

A. Specification Format: The Specifications are organized into Divisions and Sections using the numbering system.

B. Specification Content: The Specifications use certain conventions for the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations. These conventions are as follows:
1. Abbreviated Language: Language used in the Specifications and other Contract Documents is abbreviated. Words and meanings shall be interpreted as appropriate. Words implied, but not stated, shall be inferred as the sense requires. Singular words shall be interpreted as plural, and plural words shall be interpreted as singular where applicable as the context of the Contract Documents indicates. Imperative mood and streamlined language are generally used in the Specifications. Requirements expressed in the imperative mood are to be performed by Contractor. Occasionally, the indicative or subjunctive mood may be used in the Section Text for clarity to describe responsibilities that must be fulfilled indirectly by Contractor or by others when so noted. The words "shall," "shall be," or "shall comply with," depending on the context, are implied where a colon (:) is used within a sentence or phrase.

PART 2 - PRODUCTS
Not Used.

PART 3 - EXECUTION
Not Used.

END OF SECTION 01010
SECTION 01250

CONTRACT MODIFICATION PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS
   A. All Contract Documents shall be reviewed for applicable provisions related to the provisions in
      this document, and provisions in the General Conditions and other Division 1 Specification
      Sections shall apply to this Section without limitation.

1.2 RELATED REQUIREMENTS SPECIFIED IN OTHER SECTIONS
   A. Section 01010 – “Summary of Work”
   B. Section 01015 – “Project Phasing”
   C. Section 01310 – “Construction Scheduling”
   D. Section 01311 – “Project Management and Coordination”
   E. Section 1330 – “Submittal Procedures”
   F. Section 1770 – “Contract Closeout Procedures”
   G. Divisions 2 through 16 Sections for Contract Modification Procedures requirements
      for the work in those Sections

1.3 SUMMARY
   A. Any change in scope of Work or deviation from Contract Documents including, without
      limitation, extra work, or alterations or additions to or deductions from the original Work,
      shall not invalidate the original Contract, and shall be performed under the terms and
      conditions of the Contract Documents.
   B. Changes in the work generally will begin with Requests for Information (RFI), followed by a
      response from the District and/or Architect, and possibly a Request for Proposal (RFP), a
      Contractor Proposed Change Order (POC), a negotiated Proposed Change Order, followed by a
      formal Change Order (CO) authorizing the Change in the Work. A Construction Change
      Directive (CCD) may be used in the absence of agreement on the terms of the Change in the
      Work.

1.4 CHANGES - No Changes Without Authorization
   A. There shall be no change whatsoever in the drawings, specifications, or in the Work without a
      District executed Change Order, District executed Construction Change Directive, or District
      approved no cost order by the Architect for a minor change in the Work as herein provided.
   B. District shall not be liable for the cost of any extra work or any substitutions, changes,
      additions, omissions, or deviations from the Drawings and Specifications unless the District’s
      Governing Board has authorized the same and the cost thereof approved in writing by Change
      Order or executed Construction Change Directive.
C. No extension of time for performance of the Work shall be allowed hereunder unless claim for such extension is made at the time changes in the Work are ordered, and such time duly adjusted in writing in the Change Order.

D. The provisions of the Contract Documents shall apply to all such changes, additions, and omissions with the same effect as if originally embodied in the Drawings and Specifications. Notwithstanding anything to the contrary in this Section, all Change Orders shall be prepared and issued by the Architect and shall become effective when executed by the District’s Governing Board, the Architect, and the Contractor.

E. Should any Change Order result in an increase in the Contract price, the cost of such Change Order shall be agreed to, in writing, in advance by Contractor and District and be subject to the monetary limitations set forth in Public Contract Code. In the event that Contractor proceeds with any change in Work without first notifying District and obtaining the Architect’s and District’s consent to a Change Order, Contractor waives any claim of additional compensation for such additional work.

CONTRACTOR UNDERSTANDS, ACKNOWLEDGES, AND AGREES THAT THE REASON FOR THIS NOTICE REQUIREMENT IS SO THAT DISTRICT MAY HAVE AN OPPORTUNITY TO ANALYZE THE WORK AND DECIDE WHETHER THE DISTRICT SHALL PROCEED WITH THE CHANGE ORDER OR ALTER THE PROJECT SO THAT SUCH CHANGE IN WORK BECOMES UNNECESSARY.

1.5 REQUEST FOR INFORMATION (“RFI”)

A. Definition: An RFI is a written request prepared by the Contractor requesting the Architect to provide additional information necessary to clarify or amplify an item which the Contractor believes is not clearly shown or called for in the drawings or specifications, or to address problems which have arisen under field conditions. The Contractor shall not submit an RFI to the District or the Architect if it pertains to a Subcontractor’s request for clarification of the Contractor’s Subcontract or contractor’s construction documents, or any other Contract Documents prepared by the Contractor.

B. Scope: The RFI shall reference all the applicable Contract Documents including specification section, detail, page numbers, drawing numbers, and sheet numbers, etc. The Contractor shall make suggestions and interpretations of the issue raised by the RFI. An RFI cannot modify the Contract Cost, Contract Time, or the Contract Documents. The Contractor shall use RFI format provided by the District.

1. The Contractor shall be responsible for Contractor and Subcontractor costs to implement and administer RFIs throughout the duration of the Project. The Contractor shall maintain an RFI log with all RFIs, including revisions, listed with a short description of the request, the date, the status, and the disposition of the RFI. Regardless of the number of RFIs submitted, the Contractor shall not be entitled to additional compensation.

2. The Contractor shall be responsible for both the District and District consultants costs, including the Architect, for answering RFIs if an RFI requests an interpretation or decision of a matter where the information sought is equally available to the party making such request, as determined by the District; at the District’s discretion, such costs may be deducted from progress payments or the final payment.
3. The Campus or the District may issue a Request for Proposal which includes a detailed description of a proposed change with supplementary or revised Drawings and specifications. The Contractor shall then prepare and submit an estimate within 14 Calendar Days. If the Contractor fails or refuses to submit a Proposal within said 14 day period, the District’s Representative or the District shall determine the fair and reasonable cost of the Work indicated in a Request for Proposal which shall be binding on the Contractor.

4. Supplemental Instruction or Bulletin: The Architect or the District may issue an Architect’s Supplemental Instruction (ASI) or Bulletin to the Contractor.
   a. If the Contractor is satisfied with the Supplemental Instruction or Bulletin and does not request change in Contract Sum or Contract Time, then the direction of the Work shall be executed without a Change Order.
   b. If the Contractor believes that the Supplemental Instruction or Bulletin results in a change in Contract Sum or Contract Time, then the Contractor shall notify the District in writing within seven (7) Calendar Days after receiving the response. If the District disagrees with the Contractor, then the Contractor may give notice of intent to submit a Claim as described in the General Conditions, and submit its Claim within seven (7) Calendar Days of the District’s response. If the District agrees with the Contractor, then the Contractor must submit a cost or time extension proposal within 14 Calendar Days of the District’s response to the RFI. The Contractor’s failure to deliver either the foregoing notice of Claim or proposal by the respective deadlines stated above shall result in waiver of the right to file a proposal or Claim. The Contractor shall reference each RFI to an activity of the Construction Schedule and shall note time criticality of the RFI, indicating time within which a response is required. The Contractor’s failure to reference RFI to an activity on the Construction Schedule and note time criticality on the RFI shall constitute the Contractor’s waiver of any claim for time delay or interruption to the Work resulting from any delay in responding to the RFI. The Contractor must submit time critical RFIs at least 30 Days prior to the scheduled start date of the affected Work activity.
   C. Response Time: The Architect must respond to a RFI in writing within a reasonable time, normally 14 days for routine RFIs, after receiving such request. If the Architect’s response results in a change in the Work, then such change shall be effected by a written CO or Construction Change Directive, if appropriate. If the Architect cannot respond to the RFI within a reasonable time, the Architect shall notify the Contractor, with a copy to the Inspector and the District, of the amount of time that will be required to respond. District or the Architect will endeavor to respond within five (5) working Days from receipt of RFI with a written response to the Contractor, provided that the RFI complies with the paragraph above and is determined by the Architect or District to be time critical. Failure of the Contractor to plan ahead or mitigate problems shall not be cause for a determination that an RFI is time critical. The District or the Architect may return an RFI requesting additional information should the original RFI be incomplete or inadequately describe the information requested or conditions encountered. The Contractor shall distribute responses to all appropriate Subcontractors.
D. If the Contractor is satisfied with the response and does not request a change in Contract Sum or Contract Time, then the response shall be executed without a change.

E. Only the Contractor and/or the District may initiate changes in the scope of Work or deviation from Contract Documents.

1. Contractor may initiate changes by submitting an RFI or a letter providing Notice of Concealed or Unknown Conditions, or Notice of Hazardous Waste Conditions.
   a. RFIs shall be submitted to seek clarification of or request changes in the Contract Documents. RFIs shall not be submitted to the District seeking clarification of any errors or omissions on behalf of the Contractor’s preparation of the construction documents or any other Contract Documents prepared by the Contractor.
   b. Differing Site Conditions: The Contractor shall submit a Notice of Differing Site Conditions by RFI to resolve problems regarding differing conditions encountered in the execution of the Work pursuant to General Conditions, which shall govern. If the District and the Architect determine that a change in Contract Sum or Contract Time is justified, the District and the Architect will issue RFP or CCD.
   c. Hazardous Waste Conditions: The Contractor shall submit Notices of Hazardous Waste Conditions by RFI to resolve problems regarding undocumented hazardous materials encountered in the execution of the Work pursuant in General Conditions, which shall govern. If the District and the Architect determine that a change in Contract Sum or Contract Time is justified, the District and the Architect will issue RFP or CCD.

2. The Contractor may submit to the Architect a written Request for Information (RFI) if one of the following conditions occurs:
   a. Contractor discovers what appears to be an unforeseen condition or circumstance that is not described in the Contract Documents.
   b. The Contractor discovers what appears to be a conflict or inconsistency within the Contract Documents and the intent of the Contract Documents cannot be reasonably inferred.
   c. The Contractors discovers what appears to be an error or omission in the Contract Documents and the intent of the Contract Documents cannot be reasonably inferred.
   d. The Contractor considers a portion of the Contract Documents is not sufficiently explained or detailed for the Contractor to proceed with that portion of the Work.
   e. The Contractor who, after a full search of the Contract Documents and upon exercising required due diligence, fails to locate the required information.

F. If the Contractor believes that the RFI response results in Change in the Contract Sum or the Contract Time, the Contractor shall notify the District in writing within seven (7) calendar Days after receiving the response. If the District disagrees with the Contractor, then the Contractor may give notice of intent to submit a Claim as described in General Conditions, and submit its Claim within 30 Calendar Days of the District’s response. If the District agrees with the Contractor, then the Contractor must submit a cost or time extension proposal within 21 Calendar Days of the District’s response to the RFI. The Contractor’s failure to deliver either
the foregoing notice of Claim or proposal by the respective deadlines stated above shall result in waiver of the right to file a proposal or Claim.

G. Contractor shall identify RFIs with sequential numbering (i.e. 001, 002, 003 etc.) with a separate number assigned to each RFI. Resubmittal of apparent unresolved RFI issues shall be on a new RFI form with the initial RFI number amended with a sequential Revision suffix (.R1, .R2, .R3 etc.) until the issue is resolved.

H. Unless otherwise directed by the Project Manager, the Contractor shall submit each RFI on the form required by the District.
   1. The Contractor shall fill in all required information. Include additional information, data, sketches and the like on separate sheets as necessary; limit sheet size to 8-1/2 by 11 inches if possible. RFIs without all required information may be returned without action to the Contractor for resubmittal. Resubmittal in accordance with the specified requirements shall be the Contractors’ responsibility.
   2. The Contractors own proposed form may be used, if in the Project Manager’s judgment, it is equal to the form required by the District and it contains all pertinent information.

I. In each request, include the following information, type or printed legibly in block letters with black ink:
   1. Project name as it appears on the Contract Documents
   2. Contractor’s RFI identification number
   3. Title of issue.
   5. Description of issue.
   6. Contractor’s proposed written and graphic solution, Architect will determine if the proposal is in compliance with the Contract Documents and design intent of Project. Contractor’s failure to make reasonable effort to propose realistic solutions may result in the Request for Information being returned with no action.
   7. Date of submission to Architect.
   8. Date that response is needed to avoid impact to Construction schedule and cost. Time for response shall be reasonable to allow for processing and review, research, and written response by the appropriate party.
   9. Urgency (normal or high).
   10. Justification for high urgency.
   11. Contractors’ name and the printed name and signature of Contractors’ representative responsible for issuance of request.
   12. Name (individual and company) of responsible for originating RFI and his or her relationship to the Contractor.
   13. Photographic image of condition. Furnish digital image if possible.
   14. Photocopy of Contract Documents or sketch of condition (with dimensions) that pertains to this issue.
J. Limit each RFI to a single subject or issue. RFIs with multiple subject or issues may be returned to the Contractor without response. Resubmittal in accordance with the specified requirements shall be the Contractor’s responsibility.

K. Transmit each RFI to the District Project Manager as necessary to expedite the Project and to allow adequate time for review without delay to the Work. Do not transmit RFIs directly to the Architect, Architect’s Consultants, or others.

L. RFIs that do not meet the requirements of this Section will be returned to the Contractor with an explanation for its return.

M. Inappropriate RFIs, as described hereinafter, will be returned to the Contractor with an explanation for its return but without further action:
   1. RFIs that are received by the Architect from an entity other than the Contractor (such as a Subcontractor, Sub-subcontractor, supplier or others.)
   2. RFIs that transmit or contain a request for a substitution.
   3. RFIs that transmit or constitute a submittal.
   4. RFIs that are submitted without the Contractors’ thorough review of the Contract Documents or in a manner that suggests that specific portions of the Contract Documents are assumed to be excluded or taken as an isolated portion of the Contract Documents in part rather than whole.
   5. RFIs that are submitted in an untimely manner without adequate coordination or scheduling of the Work or related trades.
   6. RFIs that are submitted as a proposed or requested Change Order or other Contract Modification.
   7. RFIs that do not constitute a good faith request for required information.

N. Contractor shall be responsible for resubmittal of information contained in inappropriate RFIs in accordance with the requirements of the appropriate portion of the Contract Documents.

O. If information requested by the Contractor in an RFI is apparent from field observations, is contained in the Contract Documents, or can be reasonably inferred from them, the Contractor shall be responsible to the District for all reasonable fees charged by the Architect for additional services required to furnish such information. The amount of such additional services will be deducted from the Contractor's next payment application by the District and those funds will be forwarded to the Architect as compensation.

P. The quantity of RFIs submittal by the Contractor shall not be the basis for any claim by the Contractor.

Q. Should the Contractor proceed with Work affect by an RFI issue before receipt of a written response from the Architect within the time described hereinbefore, that portion of the Work not performed in accordance with the requirements of the response shall be subject to the removal and replacement by the Contractor at no increase in Contract Sum or Contract Time.

R. Maintain a current and accurate Request for Information Log as follows:
   1. For each RFI, include the RFI number, subject matter, date submitted, date returned. Maintain current status of each RFI at all times.
   2. Submit log weekly and as requested by Project Manager or Architect.
3. Accurately maintain log for the duration of the Contract.

1.6 REQUEST FOR PROPOSAL ("RFP")

A. Definition: An RFP is a written request prepared by the Architect requesting the Contractor to submit to the District and the Architect an estimate of the effect of a proposed change on the Contract Price and the Contract Time.

B. Scope: An RFP shall contain adequate information, including any necessary drawings and specifications, to enable Contractor to provide the cost breakdowns required by this Specification Section. The Contractor shall not be entitled to any Additional Compensation for preparing a response to an RFP, whether ultimately accepted or not.

C. District Requested RFP: the Contractor shall furnish a proposal within 21 Calendar Days of the District’s RFP. Upon approval of RFP, the District will issue a PCO directing the Contractor to proceed with the extra Work. If the parties do not agree on the price for an RFP, the District may issue a CCD. Upon receipt of CCD, the Contractor shall promptly proceed with the change of Work involved and concurrently respond to the District’s CCD within 10 Calendar Days. The Contractor shall perform the changed Work notwithstanding any claims or disagreements of any nature.

1.7 PROPOSED CHANGE ORDER (PCO) REQUEST

A. Definition: A PCO is a written request prepared by the Contractor requesting that the District and the Architect issue a CO based upon a proposed change called for in an RFP or a claim pursuant to the General Conditions.

B. Changes in Price: A PCO shall include breakdowns per this specification section to validate any change in Contract Price due to proposed change or claim.

C. Changes in Time: A PCO shall also include any additional time required to complete the Project. Any additional time requested shall not be the number of days to make the proposed change, but must be based upon the impact to the Project Schedule as defined in the Construction Scheduling Specifications of these Contract Documents. Any changes in time will be granted only if there is an impact to the critical path. If contractor fails to request a time extension in a PCO, then the Contractor is thereafter precluded from requesting or claiming a delay.

D. The Contractor may propose changes by submitting a Proposed Change Order (PCO form, see section 01340) to the District’s Representative, describing the proposed change and its full effect on the Work. The Contractor shall include a statement describing the reason for the change and the effect on the Contract Sum and Contract Time with full documentation including detailed cost and schedule breakout, and a statement describing the effect on Work by separate or other the Contractors. Document any requested substitutions in accordance with the Contract Documents. Cost for Work in approved PCOs shall not be applied for by the Contractor or paid by the District until the PCOs are included in a Change Order (CO form, see section 01340)
E. Cost Proposal and Procedures: Whenever the Contractor is required in this Section to prepare a Proposed Change Order form (PCO), and whenever the Contractor is entitled to submit a cost proposal and elects to do so, the Contractor shall prepare and submit to the District and the Architect for consideration a proposal using the PCO form found in the Contract Documents, or other similarly prepared form previously approved by the District. All cost proposals must contain detailed line-item backup with a complete breakdown of costs for credits, deducts and extras, which itemizes materials, labor, equipment, taxes, overhead and profit. All Subcontractor Work shall be so indicated. Subcontractor quotes for any subcontractor tier submitted as lump sum or without the required line-item breakdown will be rejected. After receipt of a proposal with a detailed breakdown, the District and the Architect will act promptly thereon.

1. If the District and the Architect approves a proposal, the PCO will be routed for Contractor signatures, the District Representative signatures, and the District signature.

2. If a proposal is not acceptable to the District or the Architect because it does not agree with costs and/or time included in the proposal, the District or the Architect will submit in a response what it believes to be a reasonable cost and/or adjustment, if any. Except, as otherwise provided in this Section, the Contractor shall have seven (7) Calendar Days in which to respond to the District with a revised proposal.

3. When necessity to proceed with a change does not allow the District sufficient time to conduct a proper cost and schedule analysis of a proposal (or revised proposal), the District may direct the Contractor to proceed on a basis to be determined at earliest practical date. In this event, the value of the Change, with corresponding equitable adjustment to Contract, shall not be more than the increase or less than the decrease initially proposed.

1.8 CHANGE ORDERS (“CO”)

A Change Order is a written instrument prepared by the Architect and signed by the District (as authorized by the District’s Governing Board), the Contractor, the Architect, and the DSA (if necessary), stating their agreement upon all of the following:

A. A description of a change in the Work;
B. The amount of the adjustment in the Contract Sum, if any; and
C. The extent of the adjustment in the Contract Time, if any.
D. Change Order Forms: Whether or not noted on the executed form of Change Order, all Change Orders approved by the District are deemed to include and incorporate the following provision: “The adjustment of the Contract Price and the Contract Time for the changes noted in a Change Order (the “Changes”) represents the full and complete adjustment of the Contract Price and the Contract Time due the Contractor for providing and completing such Changes, including without limitation: (i) all costs (whether direct or indirect) for labor, equipment, materials, tools, supplies and/or services; (ii) all general and administrative costs (including without limitation, home office, field office and Site General Conditions costs) and profit; and (iii) all impacts, delays, disruptions, interferences or hindrances in providing and completing the Changes. The Contractor waives all rights, including without limitation, those arising under Civil Code Section 1542, for any other adjustment of the
Contract Price or the Contract Time on account of a Change Order or the performance and completion of the Changes.”

E. Correlation of Other Items
1. Contractor shall promptly revise Schedule of Values and Application for Payment forms to record each authorized Change Order as a separate line item and adjust the Contract Sum as shown on the Change Order prior to the last day of the next monthly pay period.
2. Within 15 days, Contractor shall promptly revise Progress schedules, look ahead schedules, and the Contractors Master Schedule to reflect any Change in Contract Time, revise sub schedules to adjust times for other items of work affected by the change and resubmit to the District for review and approval. The Contractors shall not make changes to tasks in any schedule not impacted by the Change.
3. Contractor is responsible to promptly enter Changes in Project Record Documents.

F. All Changes:
1. Documentation of Change in Contract Sum and Contract Time:
   a. Contractor shall maintain detailed records of all Work performed on a time-and-material basis.
   b. Contractor shall document each proposal for a change in cost or time with sufficient data to allow detailed line item evaluation and analysis of the proposal.
   c. Contractor shall, on request, provide additional data to support computations for:
      i) Quantities of products, materials, labor and equipment.
      ii) Taxes, insurance, and bonds.
      iii) Overhead and profit.
      iv) Justification for any change in Contract Time and new Progress Schedule showing revision due, if any. Justification for change shall comply with Construction Scheduling Section 01310.
      v) Credit for deletions from Contract, similarly documented.
   d. Contractor shall support each claim for additional costs and for Work performed under Force Account with additional information including:
      i) Credit for deletions from Contract, similarly documented.
      ii) Origin and date of claim.
      iii) Dates and times Work was performed and by whom.
      iv) Time records and wage rates paid.
      v) Invoices and receipts for products, materials, equipment and subcontracts, similarly documented.

G. COST OF CHANGE ORDERS
1. It is the responsibility of the Contractor to notify the District within seven (7) Calendar Days if there is a cost change related to a change in the Work. Notification beyond this time limit may result in future claims being time barred.
2. Within 14 Calendar days after a request is made for a change that impacts the Contract Sum, the critical path, or the Contract Time, the Contractor shall provide the District and the Architect, with a written estimate of the effect of the proposed CO upon the Contract Sum and the actual cost of construction, which shall include a complete itemized cost breakdown of all labor and material showing actual quantities, hours, unit prices, and wage rates required for the change, and the effect upon the Contract Time of such CO. Changes may be made by District by an appropriate written CO, or, at the District’s option, such changes shall be implemented immediately upon the Contractor’s receipt of an appropriate written Construction Change Directive.

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

4. The amount of the increase or decrease in the Contract Price from a CO, if any, shall be determined in one or more of the following ways as applicable to a specific situation:
   a. Mutual acceptance of a lump sum properly itemized and supported by sufficient substantiating data to permit evaluation. If an agreement cannot be reached within fifteen (15) days after submission and negotiation of Contractor’s proposal, Contractor may submit a properly formatted claim per the General Conditions and this Specification Section. Submission of sums which have no basis in fact are at the sole risk of Contractor and may be a violation of the False Claims Act set forth under Government Code Section 12650 et. seq.;
   b. By unit prices contained in Contractor’s original bid and incorporated in the Project documents or fixed by subsequent agreement between District and Contractor;
   c. Cost to be determined in a manner agreed upon by the parties and a mutually acceptable fixed or percentage fee. However, in the case of disagreement, Contractor must utilize the procedure under this Specification Section; or
   d. By cost of material and labor and percentage of overhead and profit. (Force Account)

H. COST DETERMINATION

1. Total cost of extra Work or of Work omitted shall be the sum of construction labor costs, material costs, equipment rental costs, as defined herein plus overhead and profit as allowed herein and by the General Conditions. This limit applies in all cases of claims for extra Work, whether calculating cost proposals, Change Orders or CCDs, or calculating claims of all types, and applies even in the event of fault, negligence, strict liability, or tort claims of all kinds, including strict liability or negligence. The Contractor may recover no other costs arising out of or connected with the performance of extra Work, of any nature. No special, incidental or consequential damages may be claimed.
or recovered against the District, its representatives or agents, whether arising from breach of contract, negligence or strict liability, unless specifically authorized in the Contract Documents.

2. Application of Overhead and Profit: (Overhead shall be as defined in this Specification Section.)
   a. Total overhead and profit on labor for extra Work shall not exceed 20 percent.
   b. Total overhead and profit on materials for extra Work shall not exceed 20 percent.
   c. Total overhead and profit on equipment rental for extra Work shall not exceed 10 percent.
   d. When extra Work is performed by a first tier Subcontractor the Contractor shall receive a 5 percent markup on Subcontractors’ total costs of extra Work. First tier Subcontractor’s markup on its Work shall not exceed 15 percent.
   e. When extra Work is performed by a lower tier Subcontractor, the Contractor shall receive a total of 5 percent markup on all lower tier Subcontractors’ total costs of extra Work. First tier Subcontractors and lower tier Subcontractors shall divide the 15 percent markup as mutually agreed.
   f. Notwithstanding the foregoing, in no case shall the total markup on any extra Work exceed 20 percent of the direct cost, notwithstanding the actual number of contract tiers.
   g. On proposals covering both increases and decreases in Contract Sum, overhead and profit shall be allowed on the net increase only. When the net difference is a deduction, no percentage for overhead and profit shall be allowed, but rather the deduction shall apply.
   h. No markup will be allowed on permits, fees, insurance, and bonds.

I. Taxes: All State sales and use taxes, Contra Costa County and applicable City sales taxes, shall be included. Federal and Excise tax shall not be included.

J. Accord and Satisfaction: Every Change Order and accepted CCD shall constitute a full accord and satisfaction, and release, of all the Contractor (and if applicable, Subcontractor) claims for additional time, money or other relief arising from or relating to the subject matter of the change including, without limitation, impacts of all types, cumulative impacts, inefficiency, overtime, delay and any other type of claim. The Contractor may elect to reserve its rights to disputed claims arising from or relating to the changed Work at the time it signs a Change Order or approves a CCD, but must do so expressly in a writing delivered concurrently with the executed Change Order or approved CCD, and must also submit a Claim for the reserved disputed items pursuant to the General Conditions no later than 30 Calendar Days of the Contractor’s first written notice of its intent to reserve rights.

K. COST BREAKDOWN
   1. Labor: the Contractor will be paid cost of labor for workers (not including the project superintendent, or forepersons unless forepersons work greater than 50% of the time and then only when authorized by the District), used in actual and direct performance of extra Work. Labor rate, whether employer is the Contractor, Subcontractor or other forces, will be sum of following:
Actual Wages: Actual wages paid shall include any employer payments to or on behalf of workers for health and welfare, pension, vacation, and similar purposes.

Labor surcharge: Payments imposed by local, county, state, and federal laws and ordinances, and other payments made to, or on behalf of, workers, other than actual wages such as taxes and worker’s compensation insurance. Such labor surcharge shall not exceed that set forth in federal and state tax regulations and in the Prevailing Wage schedule which is in effect on date upon which extra Work is accomplished and which schedule is incorporated herein by reference as though fully set forth herein.

Material: Only materials furnished and installed in the Work by the Contractor and necessarily used in performance of extra Work will be paid for. The Contractor and any and all subcontractors will submit proof of material cost satisfactory to the District when requested. Cost of such materials will be cost, including sales tax, to purchaser (Contractor, Subcontractor or other forces) from supplier thereof, except as the following are applicable:

a. If cash or trade discount by actual supplier is offered or available to purchaser, it shall be credited to the District notwithstanding fact that such discount may not have been taken.

b. For materials salvaged upon completion of extra Work, salvage value of materials shall be deducted from cost, less discounts, of materials.

c. If cost of a material is, in opinion of the District, excessive, then cost of material shall be deemed to be lowest current wholesale price at which material is available in quantities concerned delivered to Site, less any discounts as provided in this Specification Section.

Equipment Rental: For the Contractor- or Subcontractor-owned equipment, payment will be made at rental rates listed for equipment in California Department of Transportation official equipment rental rate schedule which is in effect on date upon which extra Work is accomplished and which schedule is incorporated herein by reference as though fully set forth herein.

a. If there is no applicable rate for an item of equipment, then payment shall be made for the Contractor- or Subcontractor-owned equipment at rental rate listed in the most recent edition of the Association of Equipment Distributors (AED) book.

b. For rented equipment, payment will be made based on actual rental invoices. Equipment used on extra Work shall be of proper size and type. If, however, equipment of unwarranted size or type and cost is used, cost of use of equipment shall be calculated at rental rate for equipment of proper size and type, as determined by the District.

c. Rental rates paid shall be deemed to cover cost of fuel, oil, lubrication, supplies, small tools, necessary attachments, repairs and maintenance of any kind, depreciation, storage, insurance, and all incidentals. Unless otherwise specified, manufacturer’s ratings, and manufacturer-approved modifications, shall be used to classify equipment for determination of applicable rental rates.
d. Individual pieces of equipment or tools not listed in said publication and having a replacement value of $250 or less, whether or not consumed by use, shall be considered to be small tools and no payment will be made therefore as payment is included in payment for labor.

e. Rental time will not be allowed while equipment is inoperative due to breakdowns.

f. For equipment on Site, rental time to be paid for equipment shall be time equipment is in operation on extra Work being performed or on standby as approved by the District. The following shall be used in computing rental time of equipment:

i) When hourly rates are listed, less than 30 minutes of operation shall be considered to be ½ hour of operation.

ii) When daily rates are listed, less than four hours of operation shall be considered to be ½ Day of operation.

g. For equipment that must be brought to Site to be used exclusively on extra Work, cost of transporting equipment to Site and its return to its original location shall be determined as follows:

i) District will pay for costs of loading and unloading equipment.

ii) Cost of transporting equipment in low bed trailers shall not exceed hourly rates charged by established haulers.

iii) Cost of transporting equipment shall not exceed applicable minimum established rates of California Public Utilities Commission.

iv) District will not make any payment for transporting and loading and unloading equipment if equipment is used on Work in any other way than upon extra Work.

h. Rental period may begin at time equipment is unloaded at Site of extra Work and terminate at end of the performance of the extra Work or Day on which the District directs the Contractor to discontinue use of equipment, whichever first occurs. Excluding Saturdays, Sundays, and the District’s legal holidays, unless equipment is used to perform extra Work on such Days, rental time to be paid per Day shall be four hours for zero to four hours of operation, six hours for four to six hours of operation and eight hours for six to eight hours of operation. Hours to be paid for equipment that is operated less than eight hours due to breakdowns, shall not exceed eight hours less the number of hours equipment is inoperative due to breakdowns.

4. Work Performed by Special Forces or Other Special Services: When the District, the Architect and the Contractor by agreement, determine that special service or item of extra Work cannot be performed by forces of the Contractor or those of any Subcontractors, service or extra Work item may be performed by specialists. Invoices for service or item of extra Work on basis of current market price thereof may be accepted without complete itemization of labor, material, and equipment rental costs when it is impracticable and not in accordance with established practice of the special service industry to provide complete itemization. In those instances wherein the Contractor is required to perform extra Work necessitating a fabrication or machining
process in a fabrication or machine shop facility away from Site, charges for that portion of extra Work performed in such facility may, by agreement, be accepted as a specialist billing. The District must be notified in advance of all off-Site Work. In lieu of overhead and profit provided in this Section, 15 percent will be added to specialist invoice price, after deduction of any cash or trade discount offered or available, whether or not such discount may have been taken.

L. FORCE-ACCOUNT WORK

1. If it is impracticable because of nature of Work, or for any other reason, to fix an increase or decrease in price definitely in advance, the Contractor may be directed to proceed at a not-to-exceed (NTE) maximum price which shall not under any circumstances be exceeded. Subject to such limitation, such extra Work shall be paid for at actual necessary cost for Force-Account Work or at the negotiated cost, as determined by the District. The cost for Force-Account Work shall be determined pursuant to this Specification Section.

2. Force-Account Work shall be used when it is not either possible or practical to price the changed Work prior to the start of that Work. In these cases, Force-Account Work will be utilized during the pricing and negotiation phase of the change. Once negotiations have been concluded and a bilateral agreement has been reached, the tracking of the Work under Force-Account is no longer necessary. Force-Account Work shall also be used when negotiations between the District and the Contractor have broken apart and a bilateral agreement on the value of the changed Work cannot be reached. The District may approve other uses of Force-Account Work.

3. Whenever any Force-Account Work is in progress, definite price for which has not been agreed on in advance, the Contractor shall report to the District each Business Day in writing in detail amount and cost of labor, equipment, and material used, and any other expense incurred in Force-Account Work on the preceding day, by using a preapproved cost proposal form. No claim for compensation for Force-Account Work will be allowed unless report shall have been made and acknowledged by the District.

4. Whenever Force-Account Work is in progress, definite price for which has not been agreed on in advance, the Contractor shall report to the District when 75 percent of the NTE amount has been expended.

5. RECORDS AND CERTIFICATION

a. Force-Account (cost reimbursement) charges shall be recorded daily and summarized in preapproved cost proposal form. The Contractor or authorized representative shall complete and sign form each Day and submit to the District Representative for review and approval. The Contractor shall also provide with the form: the names and classifications of workers and hours worked by each; an itemization of all materials used; a list by size type and identification number of equipment and hours operated; and an indication of all Work performed by specialists.

b. No payment for Force-Account Work shall be made until the Contractor submits original invoices substantiating materials and equipment charges.
c. District shall have the right to audit all records in possession of the Contractor relating to activities covered by the Contractor’s claims for modification of Contract, including Force-Account Work and CCD Work.

d. Further, the District will have right to audit, inspect, or copy all records maintained in connection with this Contract, including financial records, in possession of the Contractor relating to any transaction or activity occurring or arising out of, or by virtue of, the Contract. If the Contractor is a joint venture, right of the District shall apply collaterally to same extent to records of joint venture sponsor, and of each individual joint venture member. This right shall be specifically enforceable, and any failure of the Contractor to voluntarily comply shall be deemed an irrevocable waiver and release of all claims then pending that were or could have been subject to the General Condition of Contract.

6. Force-Account Work shall be paid as extra Work under this Section. Methods of determining payment for Work and materials provided in this paragraph shall not apply to performance of Work or furnishings of material that, in judgment of the District, may properly be classified under items for which prices are otherwise established in Contract Documents.

a. Basis for Establishing Costs:

i) Labor will be the actual cost for wages prevailing locally for each craft or type of workers at the time the extra Work is done, plus employer payments of payroll taxes and insurance, health and welfare, pension, vacation, apprenticeship funds, and other direct costs resulting from Federal, State, or local laws, as well as assessments or benefits required by lawful collective bargaining agreements. The use of a labor classification which would increase the extra Work cost will not be permitted unless the Contractor establishes the necessity for such additional costs. Labor costs for equipment operators and helpers shall be reported only when such costs are not included in the invoice for equipment rental.

ii) Materials shall be at invoice or lowest current price at which such materials are locally available and delivered to the Site in the quantities involved, plus sales tax, freight, and delivery. The District reserves the right to approve materials and sources of supply or to supply materials to the Contractor if necessary for the progress of the Work. No markup shall be applied to any material provided by the District.

iii) Tool and Equipment Rental: No payment will be made for the use of tools which have a replacement value of $250 or less.

b. Other Items: The District may authorize other items which may be required on the extra work. Such items include labor, services, material, and equipment which are different in their nature from those required by the Work, and which are of a type not ordinarily available from the Contractor or any of the Subcontractors. Invoices covering all such items in detail shall be submitted with the request for payment.

c. Invoices: Vendors’ invoices for material, equipment rental, and other expenditures shall be submitted with the PCO. If the request for payment is not substantiated by invoices or other documentation, the District may establish the
cost of the item involved at the lowest price which was current at the time of the Daily Report.

d. Overhead and Profit: Overhead and profit is defined and shall be applied as in this Specification Section.

M. DISTRICT-FURNISHED MATERIALS

1. District reserves right to furnish materials, as it deems advisable, and the Contractor shall have no claims for costs and overhead and profit on such materials.

N. OVERHEAD DEFINED

1. The following includes, but is not limited to, costs that are deemed included in overhead for all Contract Modifications, including COs, Force-Account Work or CCD Work, whether incurred by the Contractor, Subcontractors, or suppliers, and the Contractor shall not invoice or receive payment for these costs separately:
   a. Drawings: field drawings, Shop Drawings, etc., including submissions of drawings.
   b. Routine field inspection of Work proposed.
   c. General Superintendence, including Site Superintendent, Project Engineers, Project Management or Construction Management services provided by the Contractor.
   d. General administration and preparation of cost proposals, schedule analysis, change orders and other supporting documentation as necessary.
   e. Computer services.
   f. Reproduction services.
   g. Salaries of, superintendent, foremen, timekeeper, storekeeper and secretaries
   h. Janitorial services
   i. Temporary on Site facilities, including for any extended periods of Contract Time:
      i) Offices
      ii) Telephones
      iii) Plumbing
      iv) Electrical: Power, lighting, etc.
      v) Platforms
      vi) Fencing, barricades, signage, etc.
      vii) Water

2. Home office expenses

3. Insurance and Bond premiums

4. Procurement and use of vehicles and fuel used coincidentally in Work otherwise included in the Contract Documents

5. Surveying

6. Estimating

7. Protection of Work
8. Handling and disposal fees
9. Final cleanup
10. Small tools
11. Warranty
12. All Contract General Conditions
13. Other incidental Work

O. Deductive Change Orders: All deductive Change Order(s) shall be prepared in the same manner as additive change orders using the same forms and formulas, with negative numbers. Overhead and profit will be neither added nor deducted when calculating deductive changes.

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

Q. Accounting Records: With respect to portions of the Work performed by COs and Construction Change Directives on a time-and-materials, unit-cost, or similar basis, the Contractor shall keep and maintain cost-accounting records satisfactory to the District, which shall be available to the District on the same terms as any other books and records the Contractor is required to maintain under the Contract Documents.

R. Notice Required: If the Contractor desires to make a claim for an increase in the Contract Price, or any extension in the Contract Time for completion, it shall notify the District pursuant to the General Conditions of these Contract Documents. Contractor shall proceed to execute the Work even though the adjustment may not have been agreed upon. Any change in the Contract Price or extension of the Contract Time resulting from such claim shall be authorized by a CO.

S. Applicability to Subcontractors: Any requirements under this Section shall be equally applicable to COs or Construction Change Directives issued to Subcontractors by the Contractor to the same extent required by the Contractor.

T. Alteration to Change Order Language: Contractor shall not alter or reserve time in Change Orders or Construction Change Directives. Contractor shall execute finalized Change Orders and proceed with the Work. If Contractor intends to reserve time, without an approved CPM schedule prepared pursuant to the Construction Scheduling Specification, the Contractor may be prosecuted pursuant to the False Claim Act.

1.9 CONSTRUCTION CHANGE DIRECTIVE

A. Definition: A Construction Change Directive is a written order prepared by the Architect and signed by the District and the Architect, directing a change in the Work and stating a proposed basis for adjustment, if any, in the Contract Sum or Contract Time, or both. The District may, by Construction Change Directive and without invalidating the Contract, order changes in the Work within the general scope of the Contract consisting of additions, deletions, or other revisions within. If applicable, the Contract Sum and Contract Time will be adjusted
accordingly. In the case of a Construction Change Directive being issued, Contractor must commence Work immediately or delays from failure to perform Construction Change Directive shall be the responsibility of Contractor. Any dispute as to the sum of Construction Change Directive or timing of payment, shall be resolved pursuant to the Disputes paragraphs of these Contract Documents. A Construction Change Directive shall be used in the absence of agreement on the terms of a CO.

B. Construction Change Directives: If at any time the Architect or the District believes in good faith that a timely Change Order will not be agreed upon using the foregoing procedures, the Architect or the District may issue a CCD with a recommended cost and/or time adjustment.

1. Upon receipt of CCD, the Contractor shall promptly proceed with the change of Work involved and concurrently respond to the District’s CCD within 10 Calendar Days.
   a. Contractor’s response must be any one of following:
      i) Return CCD signed, thereby accepting the District’s response, time, and cost.
      ii) Submit a (revised if applicable) proposal with supporting documentation (if applicable, reference original proposal number followed by letter R1, R2, etc. for each revision.
      iii) Give notice of intent to submit a Claim as described in the General Conditions, and submit its Claim with 30 Calendar Days.
   b. If the CCD provides for an adjustment to the Contract Sum, the adjustment shall be based on one of the following methods:
      i) Mutual acceptance of a lump sum properly itemized and supported by sufficient substantiating data to permit evaluation.
      ii) Unit prices stated in the Contract Documents or subsequently agreed upon.
      iii) Force account.
      iv) Cost to be determined in a manner agreed.

C. A CCD signed by the Contractor indicates the agreement of the Contractor therewith, including adjustment in Contract Sum and Contract Time or the method for determining them. Such agreement shall be effective immediately and shall be recorded as a PCO.

D. If the Contractor does not respond promptly, or disagrees with the method for adjustment in the Contract Sum, the method and the adjustment shall be determined by the District on the basis of published estimating guides, District or Architect estimating consultant analysis, or reasonable and historical expenditures and savings of those performing similar Work including, in case of an increase in the Contract Sum, a reasonable allowance for overhead and profit. If the parties still do not agree on the price for a CCD, the Contractor may file a Claim per General Conditions. The Contractor shall keep and present, in such form as the District may prescribe, an itemized accounting together with appropriate supporting data.

E. The amount of credit to be allowed by the Contractor for a deletion or change which results in a net decrease in the Contract Sum shall be actual net cost as confirmed by the Architect and the District. When both additions and credits covering related Work or substitutions are involved in a change, the allowance for overhead and profit shall be figured on the basis of net increase, if any, with respect to that change.
1.10 Responses: For all responses for which the Contract Documents, including without limitation this Section, do not provide a specific time period, recipients shall respond within a reasonable time.

1.11 Disputes: For all disputes arising from the procedures herein, the Contractor shall follow this Section and the Contract General Conditions.

PART 2 – PRODUCTS
Not Used.

PART 3 – EXECUTION
Not Used.

END OF SECTION 01250
PART 1 - GENERAL

1.1 RELATED DOCUMENTS
   A. All Contract Documents shall be reviewed for applicable provisions related to the provisions in this document, and provisions in the General Conditions and other Division 1 Specification Sections shall apply to this Section without limitation.

1.2 RELATED REQUIREMENTS SPECIFIED IN OTHER SECTIONS
   A. Section 01010 – “Summary of Work”
   B. Section 01015 – “Project Phasing”
   C. Section 01210 – “Allowances”
   D. Section 01250 – “Contract Modification Procedures”
   E. Section 01300 – “Labor Compliance Program”
   F. Section 01312 – “Project Meetings”
   G. Section 01330 – “Submittal Procedures”
   H. Section 01770 – “Contract Closeout Procedures”
   I. Section 01780 – “Project Record Documents”

1.3 SUMMARY
   A. This Section includes descriptions of requirements and procedures for determining the quantity of Work performed during each pay period in project and the procedures for obtaining payment for Work performed.

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

1.5 SCHEDULE OF VALUES
   A. On hardcopy and in digital format using Microsoft Project 2010 version, the Contractor shall, within ten (10) days of the award of the Contract, provide a detailed breakdown of the Contract Price, hereinafter referred to as the Schedule of Values (SOV), for the Project and broken out by each phase of the Project.

   B. The SOV shall include Contractor’s overhead, profit, insurance, cost of bonds (except to the extent expressly identified in a Proposal Item) and/or other financing, as well as general conditions costs, (e.g., Site cleanup and maintenance, temporary roads, access, signage off-Site access roads, temporary power and lighting, security, and the like). These costs shall be
prorated through all activities and all Phases of the Project so that the sum of all Schedule of Values line items equals the total Contract Sum.

C. District, Campus, and Project Manager shall review the breakdown in conjunction with the Master Construction Schedule to ensure that the amounts listed in the Schedule of Values are, in fact, fair market cost allocations for the Work items listed. Upon favorable review by the District, District will accept this Schedule of Values for use. District shall be the sole judge of fair market cost allocations.

D. District will reject any attempt to increase the cost of early activities, i.e., “front loading,” resulting in a complete reallocation of moneys until such “front loading” is corrected. Repeated attempts at “front loading” may result in suspension or termination of the Work for default, or refusal to process progress payments until such time as the Schedule of Values is acceptable to District.

E. The Schedule of Values shall list line item costs for Project Closeout, Operations and Maintenance Manuals, Warranties, final test reports, and like items as required by this and other sections of the Contract Documents.

F. Format and Content: Use the Project Manual Table of Contents as a guide to establish line items for the Schedule of Values. Provide at least one line item for each Specification Section.

1. Identification: Include the following Project Identification on the Schedule of Values:
   a. Project name and Campus;
   b. District’s project number;
   c. Contractor’s name and address;
   d. Date of submittal.

2. Arrange the Schedule of Values in tabular form with separate columns to indicate the following for each item listed:
   a. Related Specification Section or Division;
   b. Description of the Work;
   c. Name of subcontractor;
   d. Name of manufacturer or fabricator;
   e. Name of supplier;
   f. Change Orders (numbers) that affect value;
   g. Dollar value:
      i) Percentage of the Contract Sum to nearest one-hundredth percent, adjusted to total 100 percent.

Provide a breakdown of the Contract Sum in enough detail to facilitate continued evaluation of Applications for Payment and progress reports. Coordinate with the Project Manual Table of Contents, individual Specification Sections, and the Construction Schedule. Provide several line items for principal subcontract amounts, where appropriate. Include separate line items under required principal subcontracts. A line item for Bonds must be supported by the evidence of the Bond cost at the time of application for payment. Provide individual line items for operation and maintenance manuals, punch
list activities, Project Record Documents, Title 24 closeout, and demonstration and training. If the values for administrative close-out items are not realistic and supportable, the Schedule of Values will not be accepted.

3. Round amounts to nearest whole dollar; total shall equal the Contract Sum.

4. Provide a separate line item in the Schedule of Values for each part of the Work where Applications for Payment may include materials or equipment purchased or fabricated and stored, but not yet installed.
   a. Differentiate between items stored on-site and items stored off-site. If specified, include evidence of insurance or bonded warehousing.

5. Provide separate line items in the Schedule of Values for initial cost of materials, for each subsequent stage of completion, and for total installed value of that part of the Work.

6. Provide separate line item in the Schedule of Values for maintenance and updating of Project Record Documents as specified in Section 01780 (Project Record Documents).

9. Each item in the Schedule of Values and Applications for Payment shall be complete. Include total cost and proportionate share of general overhead and profit for each item.

10. Schedule Updating: When Change Orders result in a change in the Contract Sum, include each Change Order as a new line item, with additional line items for detail if the change involves multiple subcontractors or significant Work in more than one Specification Section.

1.6 SCHEDULE OF ESTIMATED MONTHLY PAYMENT REQUESTS

   A. Within ten (10) days of the award of the Contract, the Contractor shall provide a schedule of estimated monthly payment requests due the Contractor showing the values and construction time of the various portions of the Work to be performed, and containing such supporting evidence as the District may require.

1.7 SUBCONTRACTOR LISTING

   A. Within ten (10) days of the award of the Contract, provide the name, address, telephone number, fax number, California State Contractors Board License number, classification, and monetary value of all Subcontracts for parties furnishing labor, material, or equipment for the Project.

1.8 DISTRICT APPROVAL

   A. The District / Campus shall review all submittals required above in a timely manner. All submittals must be approved by the District before becoming the supporting basis for any Contractor payment request.

1.9 PROGRESS PAYMENTS

   A. Within thirty (30) days after approval of the Request for Payment, Contractor shall be paid a sum equal to ninety percent (90%) of the value of the Work performed (as certified by Architect and Inspector and verified by Contractor) up to the last day of the previous month, less the aggregate of previous payments. The value of the Work completed shall be Contractor’s best estimate. No inaccuracy or error in said estimate shall operate to release the Contractor, or any surety upon any bond, from damages arising from such Work, or from the
District’s enforcement of each and every provision of this Contract, and the District shall have the right subsequently to correct any error made in any estimate for payment.

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

C. Notwithstanding anything to the contrary stated above, the Contractor may include in its Request for Payment the value of any custom-made materials prepared specifically for the Project and unique to the Project so long as all of the following requirements are satisfied:

1. The aggregate cost of materials stored off-site shall not exceed Twenty-Five Thousand Dollars ($25,000) at any time without the prior written approval of the District, to be given or withheld in the District’s sole discretion;

2. Title to such materials shall be vested in the District as evidenced by documentation satisfactory in form and substance to the District, including, but not limited to, recorded financing statements, UCC filings and UCC searches;

3. With each Contractor Request for Payment, the Contractor shall submit to the District a written list identifying each location where materials are stored off-site (which must be a bonded warehouse) and the value of the materials at each location. The Contractor shall procure insurance satisfactory to the District (in its reasonable discretion) for materials stored off-site in an amount not less than the total value thereof;

4. The consent of any Surety shall be obtained to the extent required prior to payment for any materials stored off-site;

5. Representatives of the District shall have the right to make inspections of the storage areas at any time; and

6. Such materials shall be (1) protected from diversion, destruction, theft and damage to the reasonable satisfaction of the District; (2) specifically marked for use on the Project; and (3) segregated from other materials at the storage facility.

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

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

1.10 APPLICATIONS FOR PROGRESS PAYMENTS

A. The Campus shall, within seven (7) days after receipt of the Contractor’s Application for Payment, either approve such payment or notify the Contractor in writing of the Architect’s reasons for withholding approval in whole or in part as provided herein. The review of the Contractor’s Application for Payment by the Architect is based on the Architect’s observations at the Site and the data comprising the Application for Payment that the Work has progressed to the point indicated and that, to the best of the Architect’s knowledge, information, and belief, the quality of the Work is in accordance with the Contract Documents.
B. The foregoing representations are subject to:
   1. An evaluation of the Work for conformance with the Contract Documents;
   2. Results of subsequent tests and inspections;
   3. Minor deviations from the Contract Documents correctable prior to completion, and
   4. Specific qualifications expressed by the Architect. The issuance of a Certificate for Payment will further constitute a representation that the Contractor is entitled to payment in the amount certified.

C. Progress Payment Procedures include the following:
   1. Pre-application Meeting: On or before the 5th Day of each calendar month during the progress of the Work, Contractor shall attend a pre-Application meeting with District’s Representatives, including the Architect, Project Manager and Project Inspector. Contractor shall provide a complete draft of the proposed Application for Payment for review. The Contractor shall revise and resubmit the draft Application for Payment, if required by District.
   2. Application for Progress Payment: On or before the tenth (10th) day of each calendar month during the progress of the Work, Contractor shall submit to the Architect an itemized Application for Progress Payment for operations completed in accordance with the Schedule of Values. Such application shall be notarized, if required, and supported by the following and as required by the specifications.
   3. The Contractor shall submit Applications for Payment in a form pre-approved by the District, either on or following the format of AIA G702/G703. Information shall include:
      a. The amount paid to the date of the Application to the Contractor, to all its Subcontractors, and all others furnishing labor, material, or equipment for its Contract;
      b. The amount being requested under the Application for Payment by the Contractor on its own behalf and separately stating the amount requested on behalf of each of the Subcontractors and all others furnishing labor, material, and equipment under the Contract;
      c. The balance that will be due to each of such entities after said payment is made;
      d. A certification that the Record Drawings and Annotated Specifications are current;
      e. Itemized breakdown of work done for the purpose of requesting partial payment;
      f. Where the Work is separated into Phases, provide Applications for Payment showing values correlated with each Phase separately.
      g. An updated Construction Schedule in conformance with the requirements of Section 01310, Construction scheduling.
      h. All additions to and subtractions from the Contract Price and Contract Time;
      i. A summary of the retentions held;
      j. Material invoices, evidence of equipment purchases, rentals, and other support and details of cost as the District may require;
      k. An updated Schedule of values showing percentage of completion of the Contractor’s Work by line item
D. Prerequisites for Progress Payments include the following:

   1. The following items must be submitted and approved before the first payment request will be accepted for processing:
      a. Cost curve based on the Construction Schedule and the Schedule of Values;
      b. List of all subcontractors;
      c. List of Contractor’s staff assignments;
      d. Installation of the Project signs and other required temporary facilities and controls, including field office(s) required by Section 01500;
      e. Complete Schedule of Values;
      f. Initial Construction Schedule, due within 10 days after Notice to Proceed;
      g. Submittal Schedule;
      h. Copies of any required permits;
      i. Copies of authorizations and licenses from governing authorities, if required;
      j. Initial progress report;
      k. Surveyor qualifications;
      l. All bonds and insurance endorsements;
      m. Resumes of Contractor’s Project Manager, Record Documents Recorder, and job site Superintendent.
      n. Other early submittals required by the Contract Documents.

E. No payment requests will be processed unless Contractor has:

   1. Submitted copies of the Certified Payroll records for the Payment Request Work period.
   2. Provided an updated Construction Schedule.
   3. Provided an updated Schedule of Values.
   4. Provided all other payment request related items required by the Contract Documents.

F. Payment requests that are not in compliance with the Contract Documents will be returned with no action taken.

G. If Contractor is late submitting an Application for Payment, that Application may be processed at any time during the one-month period, but may result in processing of the Contractor’s Application for Payment being delayed for more than a day-for-day basis. The District and its representative shall not be responsible for any such Payment being delayed due to late, incomplete, or inaccurate submission by the Contractor.

H. Any payments made to Contractor where criteria set forth in the Contract Documents have not been met shall not constitute a waiver of said criteria by District. Instead, such payment shall be construed as a good faith effort by District to resolve differences so Contractor may pay its Subcontractors and suppliers and that Contractor agrees that failure to submit such items may constitute a breach of contract by Contractor and may subject Contractor to termination or other penalty.
1.11 WARRANTY OF TITLE

A. The Contractor warrants title to all work. The Contractor further warrants that all work is free and clear of liens, claims, security interests, or encumbrances in favor of the Contractor, Subcontractors, material and equipment suppliers, or other persons or entities making a claim by reason of having provided labor, materials, and equipment relating to the Work.

B. Failure to keep work free of liens, claims, security interests or encumbrances is grounds to make a claim against Contractor’s payment and performance bond to immediately remedy and defend.

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

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

1.12 DECISIONS TO WITHHOLD PAYMENT

A. The District may withhold payment in whole, or in part, to the extent reasonably necessary to protect the District if, in the District’s opinion, the representations to the District required by Paragraph 1.10 cannot be made. The District may withhold payment, in whole, or in part, to such extent as may be necessary to protect the District from loss because of, but not limited to:

1. Defective Work not remedied;
2. Stop Notices served upon the District;
3. Liquidated damages assessed against the Contractor;
4. The cost of completion of the Contract if there exists reasonable doubt that the Work can be completed for the unpaid balance of any Contract Price or by the completion date;
5. Damage to the District or other contractor;
6. Unsatisfactory prosecution of the Work by the Contractor;
7. Failure to store and properly secure materials;
8. Failure of the Contractor to submit on a timely basis, proper and sufficient documentation required by the Contract Documents, including, without limitation, acceptable monthly progress schedules, shop drawings, submittal schedules, schedule of values, product data and samples, proposed product lists, executed Change Order, Construction Change Directives, and verified reports;
9. Failure of the Contractor to maintain record drawings;
10. Erroneous estimates by the Contractor of the value of the Work performed, or other false statements in an Application for Payment;
11. Unauthorized deviations from the Contract Documents;
12. Failure of the Contractor to prosecute the Work in a timely manner in compliance with established progress schedules and completion dates.
13. Failure to properly pay prevailing wages as defined in Labor Code section 1720, et seq.;
14. Failure to properly maintain or clean up the Site;
15. Payments to indemnify, defend, or hold harmless the District;
16. Any payments due to the District including but not limited to payments for failed tests, or utilities changes or permits;
17. Failure to submit an acceptable schedule in accordance with Section 01310;
18. Failure to pay Subcontractor or suppliers as required herein;
19. Failure to provide release from material suppliers or subcontractors when requested to do so.

1.13 RE-ALLOCATED OF WITHHELD AMOUNTS

A. District may, in its discretion, apply any withheld amount to payment of outstanding claims or obligations as defined herein. In so doing, District shall make such payments on behalf of Contractor.

B. If any payment is so made by District, then such amount shall be considered as a payment made under Contract by District to Contractor and District shall not be liable to Contractor for such payments made in good faith. Such payments may be made without prior judicial determination of claim or obligation. District will render Contractor an accounting of such funds disbursed on behalf of Contractor.

C. If Contractor defaults or neglects to carry out the Work in accordance with the contract documents or fails to perform any provision thereof, District may, after ten (10) calendar days written notice to the Contractor and without prejudice to any other remedy make good such deficiencies.

D. The District shall adjust the total Contract price by reducing the amount thereof by the cost of making good such deficiencies. If District deems it inexpedient to correct Work which is damaged, defective, or not done in accordance with Contract provisions, an equitable reduction in the Contract price (of at least 150% of the estimated reasonable value of the nonconforming work) shall be made therefore.

1.14 PAYMENT AFTER CURE

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

1.15 NONCONFORMING WORK

A. Contractor shall promptly remove from premises all Work identified by District as failing to conform to the Contract whether incorporated or not. Contractor shall promptly replace and re-execute its own Work to comply with the Contract without additional expense to District
and shall bear the expense of making good all work of other contractors destroyed or damaged by such removal or replacement.

B. If Contractor does not remove such Work which has been identified by District as failing to conform to the Contract Documents within a reasonable time, fixed by written notice, District may remove it and may store the material at Contractor’s expense. If Contractor does not pay expenses of such removal within ten (10) calendar days’ time thereafter, District may, upon ten (10) calendar days’ written notice, sell such materials at auction or at private sale and shall account for net proceeds thereof, after deducting all costs and expenses that should have been borne by Contractor.

1.16 SUBCONTRACTOR PAYMENTS

A. No later than ten (10) days after receipt, or pursuant to Business and Professions Code Section 7108.5 and Public Contract Code section 7107, the Contractor shall pay to each Subcontractor, out of the amount paid to the Contractor on account of such Subcontractor’s portion of the Work, the amount to which said Subcontractor is entitled. The Contractor shall, by appropriate agreement with each Subcontractor, require each Subcontractor to make payments to Subcontractors in a similar manner.

1.17 NO OBLIGATION OF DISTRICT FOR SUBCONTRACTOR PAYMENT

A. The District shall have no obligation to pay, or to see to the payment of, money to a Subcontractor except as may otherwise be required by law.

1.18 PAYMENT NOT CONSTITUTING APPROVAL OR ACCEPTANCE

A. An approved Request for Payment, a progress payment, or partial or entire use or occupancy of the Project by the District shall not constitute acceptance of Work not in accordance with the Contract Documents.

1.19 JOINT CHECKS

A. District shall have the right, if necessary for the protection of the District, to issue joint checks made payable to the Contractor and Subcontractors and material or equipment suppliers. The joint check payees shall be responsible for the allocation and disbursement of funds included as part of any such joint payment. In no event shall any joint check payment be construed to create any contract between the District and a Subcontractor of any tier, any obligation from the District to such Subcontractor, or rights in such Subcontractor against the District.

1.20 NO WAIVER

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

1.21 FINAL PAYMENT

A. Contractor shall comply with requirements of Section 01770 Contract Closeout Procedures.

B. Contractor shall maintain the presence of Project Superintendent and Project Manager until the Work is complete.
C. Under no circumstances shall Contractor demobilize its forces prior to completion of the Final Punchlist. Upon receipt of Contractor’s written notice that all of the Final Punchlist items have been fully completed and the Work is ready for final inspection and acceptance, Architect shall inspect the Work and shall submit to Contractor and District a final inspection report noting which work, if any, is required to be completed in accordance with the Contract Documents. Absent unusual circumstances, this report shall consist of the Punchlist items not yet satisfactorily completed.

D. Upon completion of the Work contained in the Final Inspection report, the Contractor shall notify the District and Architect, who shall again inspect such Work. If the Architect and the District finds the Work contained in such Final Inspection report acceptable under the Contract Documents and, therefore, the Work fully completed, it shall notify Contractor, who may then submit to the Architect its final Application for Payment.

E. Upon receipt and approval of such final Application for Payment, the Architect shall issue a final Certificate of Payment stating that to the best of its knowledge, information, and belief, and on the basis of its observations, inspections, and all other data accumulated or received by the Architect in connection with the Work, such Work has been completed in accordance with the Contract Documents. The District shall thereupon inspect such Work and either accept the Work as complete or notify the Architect and the Contractor in writing of reasons why the Work is not complete. Upon acceptance of the Work of the Contractor as fully complete (which, absent unusual circumstances, will occur when the Punch List items have been satisfactorily completed), the District shall record a Notice of Completion with the County Recorder, and the Contractor shall, upon receipt of payment from the District, pay the amounts due Subcontractors.

F. The following conditions must be fulfilled prior to Final Payment:

1. A full and final waiver or release of all Stop Notices in connection with the Work shall be submitted by Contractor, including a release of Stop Notice in recordable form, together with (to the extent permitted by law) a copy of the full and final release of all Stop Notice rights.

2. The Contractor shall have made all corrections to the Work required to remedy any defects therein, to obtain compliance with the Contract Documents or any requirements of applicable codes and ordinances, or to fulfill any of the orders or directions of District.

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

4. Contractor must have completed all requirements set forth in Section 01770 Contract Closeout Procedures.

5. Architect shall have reviewed and approved a Final Application for Payment.

6. The Contractor shall have completed final clean up as required by Section 01710 Cleaning Requirements.

1.22 RETAINAGE

A. The retainage, less any amounts disputed by the District or which the District has the right to withhold, shall be paid:
1. After approval by District and Architect of the Contractor’s final Application for Payment;
2. After satisfaction of all terms and conditions set forth in the Contract Documents, and
3. After thirty-five (35) days after the acceptance of the Work by the District Governing Board and recording of the Notice of Completion by District.

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

1.23 SUBSTITUTION OF SECURITIES
A. The District will permit the substitution of securities in accordance with the provisions of Public Contract Code section 22300.

1.24 ALLOWANCES
A. Not Used

PART 2 – PRODUCTS
Not Used.

PART 3 – EXECUTION
Not Used.

END OF SECTION 01290
SECTION 01305
DELAY AND EXTENSIONS TO THE WORK

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

A. All Contract Documents shall be reviewed for applicable provisions related to the provisions in this document, and provisions in the General Conditions and other Division 1 Specification Sections shall apply to this Section without limitation.

1.2 RELATED REQUIREMENTS SPECIFIED IN OTHER SECTIONS

A. Section 01010 – “Summary of Work”
C. Section 01310 – “Construction Scheduling”
D. Section 01311 – “Project Management and Coordination”

1.3 SUMMARY

A. This Section includes administrative and procedural requirements for evaluation of excusable delays including delays due to abnormal or adverse weather conditions.

1.4 DELAYS AND EXTENSIONS TO THE WORK

A. Contractor must complete all Work within the time specified in these Contract Documents. The Contractor will be granted an extension of time and will not be assessed liquidated damages or the cost of engineering and inspection for any delay in substantially completing the Work (or parts thereof) beyond the time set elsewhere in the Contract Documents, provided that such delay was caused by unforeseeable causes beyond the control and without the fault or negligence of the Contractor. Examples of such causes include fire, floods, abnormal weather (as described below), and earthquakes, embargoes, changes made pursuant to the provisions of “Changes in work” elsewhere in the Contract Documents or acts or neglect of the District not contemplated by the Contract Documents. In all cases, any extension of time is conditioned on the following:

1. That the cause is not due to the fault or negligence of the Contractor, and the Contractor has taken reasonable precautions to prevent the delays and minimize the effects thereof; and

2. That the Contractor notifies the District, Architect, Project Manager, and project Inspector in writing within five (5) days from the beginning of such delay, specifying the nature of the delay and the measures that have been or will be taken to prevent or minimize the delay. Failure to submit written notice within this time period shall constitute an absolute waiver of any claim for a time extension.
B. No extension of time will be granted for a delay caused by a shortage of materials, unless the Contractor furnishes to the District documentary proof that he has diligently made every effort to obtain such materials from all known sources within reasonable distance of the work and further proof, in the form of schedule data as required in Section 01310 that the inability to obtain such materials as originally planned did in fact cause a delay in final completion of the Work which could not be compensated for by revising the sequence of the Contractor’s operations. Only the physical shortage of material will be considered as a cause for extension of time, and no consideration will be given to any claim that material could not be obtained at a reasonable, practical or economical cost or price, unless it is shown to satisfaction of the District that such material could have been obtained only at exorbitant prices, taking into account the quantities involved and the usual practices in obtaining such quantities.

C. The term “shortage of materials,” as used in this section, shall apply only to materials, articles, parts or equipment which are standard items and shall not apply to materials, parts, articles or equipment which are processed, made, constructed, fabricated or manufactured to meet the specific requirements of the Contract Documents.

D. No extensions of time will be granted for delay that have no measurable impact on the completion of the Work (or parts thereof) under the Contract Documents. When extensions of time are granted, they will be limited to the period equivalent to the actual number of days lost on the critical path or controlling operations of the current approved Construction Schedule, taking into account the extent to which that delay could be decreased by reasonable mitigation measures by the Contractor. All requests for extensions of time must be supported with a critical path analysis showing the critical path and impacts to it. Contractor’s failure to submit this analysis will be sufficient cause for denial of any request for a time extension.

E. Within a reasonable period of time after the Contractor submits the notice of delay along with any other information required by this section, the District will determine whether an extension of time is justified and, if so, the number of days for the extension.

1.5 ABNORMAL OR ADVERSE WEATHER CONDITIONS

A. Time extensions caused by abnormal weather will be allowed only if there is rain in excess of 0.5 inch in a 24 hours period, as measured at the Concord, CA, Airport weather station maintained by the National Weather Service, for a number of days that exceeds the number of average rain days.

B. In addition, before a time extension may be granted for abnormal weather, Contractor must establish to District satisfaction that the rain either significantly impacted at least 75% of the planned work of the critical path operations for a particular day or prohibited at least five (5) hours of work on the critical path operations planned for that day.

C. In the event that the project experiences favorable weather for a particular month (e.g. a number of actual rain days less than that allocated for allowable rain days per month), the cumulative float resulting from such favorable weather shall accrue to the project.

D. Rain delay shall be only for the actual period of time established pursuant to full compliance with the above requirements.

E. Contractor shall take reasonable steps to mitigate potential weather delays, such as dewatering the Site, providing access roads that are stable under abnormal or adverse weather conditions, and covering work and material that could be affected adversely by weather. Failure to do so shall be cause for the District to not grant a time extension due to abnormal or adverse weather, where Contractor could have avoided or mitigated the potential delay by exercising reasonable care.
F. Abnormal weather may be a valid basis for a time extension under the Contract. The term “abnormal weather” is defined as the occurrence of rain conditions that exceed the criteria set forth that cause impact to Contractor’s operations.

G. Contractor shall employ reasonable methods to mitigate the impact of abnormal weather (i.e. dewatering, protection of site, etc.) The occurrence of rain during non-work hours or having minimal impact to work on the controlling operation shall not constitute a day of abnormal weather.

1.6 ENTITLEMENT TO CLAIM FOR DELAY AND EXTENSIONS TO THE WORK

A. Any Contractor claim for damages or additional compensation based on delay shall be limited to only those circumstances where the Contractor has fulfilled all of the following three (3) requirements:

1. Contractor has established its entitlement to a time extension pursuant to the provisions described above regarding delay and extensions to the Work.

2. The delay was caused solely by the District by District’s issuance of changes made pursuant to the provisions of “Changes in Work” elsewhere in these Contract Documents, or by or acts of neglect of the district.

3. The delay was unreasonable under the circumstances and not within the contemplation of the parties and/or the Contract Documents.

B. It is expressly understood and agreed that delays caused by the District will be non-compensable when there are concurrent delays caused by the Contractor. Also, Contractor shall have no entitlement to additional compensation for any delay where there have been concurrent delays caused by non-compensable delays, including, but not limited to, fire, floods, tidal waves, earthquakes, epidemics, quarantine restrictions, strikes, labor disputes and freight embargoes weather days.

C. In the event that the Contractor submits a claim for additional costs associated with overhead, the Contractor shall, within 60 calendar days of the District’s written request, submit to the District an audit examination and report performed by an independent Certified Public Accountant certifying the Contractor’s actual unanticipated overhead costs. The independent Certified Public Accountant’s audit examination shall be performed in conformance with the requirements of the American Institute of Certified Public Accountants Attestation Standards. The audit examination and report shall depict the Contractor’s project and company-wide financial records and shall specify the actual overall average daily rates for both field and home office overhead for the entire duration of the project, and whether the costs have been properly allocated. The rates of field and home office overhead shall exclude all unallowable costs as determined in the Federal Acquisition Regulations, 48 CFR, Chapter 1, Part 31. The audit examination shall determine if the rates of field and home office overhead;

1. Are allowable in conformance with the requirements of the Federal Acquisition Regulations, 48 CFR, Chapter 1, Part 31;

2. Are adequately supported by reliable documentation; and

3. Related solely to the project under examination.

D. Upon the District’s written request, the Contractor shall make its financial records available for audit by the District for the purpose of verifying the actual rate of overhead specified in the audit submitted by the Contractor. The overhead specified in the audit, submitted by the Contractor, will be subject to review and approval by the District.
PART 2 – PRODUCT
Not Used.

PART 3 – EXECUTION
Not Used.

END OF SECTION 01305
SECTION 01310
CONSTRUCTION SCHEDULING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS
A. All Contract Documents shall be reviewed for applicable provisions related to the provisions in this document, and provisions in the General Conditions and other Division 1 Specification Sections shall apply to this Section without limitation.

1.2 RELATED REQUIREMENTS SPECIFIED IN OTHER SECTIONS
A. Section 01010 – “Summary of Work”
B. Section 01290 – “Payment Procedure”
C. Section 01312 – “Project Meetings”
D. Section 01330 – “Submittal Procedures”
E. Section 01600 – “Project Requirements”
F. Section 01770 – “Contract Closeout Procedures”

1.3 SUMMARY
A. This Section describes the requirements for Project construction schedules and reports.
B. Development of schedules, cost loading of the schedule, and schedule updates, monthly payment requests, and project status reporting requirements of the Contract shall employ computerized Critical Path Method (CPM) scheduling.
C. All CPM schedules shall be cost loaded based on Schedule of Values as approved by District and Architect.

1.4 FAILURE TO MEET SCHEDULING REQUIREMENTS
A. Failure of the Contractor to provide proper schedules as required by this Section is a material breach of the contract and grounds for termination pursuant to the General Conditions. The District, at its sole discretion, may choose, instead, to withhold, in whole or in part, any progress payments or retention amounts otherwise payable to the Contractor.

1.5 SCHEDULER’S QUALIFICATIONS
A. Contractor shall utilize experienced scheduling personnel qualified to use Microsoft Office Project 2010 CPM scheduling software. Experience level required is set forth below. Contractor may employ such personnel directly or may employ a consultant for this purpose.
B. Within five (5) days after bid opening, the apparent successful low bidder shall provide to District and Architect a written verification either that Contractor has the required personnel
under its employ or that Contractor will employ a CPM scheduling consultant. This written verification shall include:

1. **Name of the individual who will perform all required CPM scheduling tasks during the entire Project.**

2. **Resume of the individual, to include description of similar, recent construction projects on which the individual has successfully created and updated computerized CPM schedules. Experience must include at least two projects of similar nature, scope and value not less than three-fourths the Contract Sum of this Project.**

3. **Contact persons for all referenced projects with current telephone and address information.**

C. **District or Architect reserves right to accept or reject Contractor's scheduler, and right to reject them at any time.**

D. **District or Architect also reserves right to refuse replacement of Contractor's scheduler if it believes such replacement will negatively affect the Project.**

### 1.6 CONSTRUCTION SCHEDULES, GENERAL

A. **Upon Notice to Proceed, Contractor shall immediately commence development of Initial and Master CPM Schedules.**

B. **All construction schedules shall be based on and incorporate all milestones and completion dates specified in the Contract Documents. See also Sections 01010, Summary of Work and 01015, Project Phasing. Show in the schedule the sequence in which the Contractor proposes to perform the Work and dates on which the Contractor contemplates starting and completing all schedule activities. The scheduling of the entire project is required. Contractor management personnel shall actively participate in its development. Subcontractors and suppliers working on the Project shall also contribute in developing and maintaining an accurate Project Schedule. Provide a schedule that is a forward planning as well as a project monitoring tool.**

C. **Use the approved Project Schedule to measure the progress of the Work and to aid in evaluating time extensions.**

D. **Make the schedule cost loaded and activity coded.**

E. **The schedule will provide the basis for all progress payments. If the Contractor fails to submit any schedule within the time prescribed, the District may withhold approval of progress payments until the Contractor submits the required schedule.**

F. **Provide a Schedule Status Report on at least a monthly basis. If, in the opinion of the District, the Contractor falls behind the approved schedule, the Contractor shall take all steps necessary to improve its progress including those that may be required by the Architect or Project Manager, without additional cost to the District. In this circumstance, the District may require the Contractor to increase the number of shifts, overtime operations, days of work, and/or the amount of construction plant, and to submit for approval any supplementary schedule or schedules as the District deems necessary to demonstrate how the approved rate of progress will be regained.**

G. **Failure of the Contractor to comply with the requirements of the District shall be grounds for a determination that the Contractor is not prosecuting the Work with sufficient diligence to ensure completion within the time specified in the Contract Documents. Upon making this**
determination, the District may terminate the Contractor’s right to proceed with the Work, or any separable part of it, in accordance with the default terms of the Contract.

H. Use the schedule as the basis for determining Contract earnings during each update period and therefore the amount of each progress payment. Lack of an approved schedule update, or qualified scheduling personnel, will result in the inability of the Architect to evaluate contract earned value for the purposes of payment. Failure of the Contractor to provide all required information will result in the disapproval of the Initial, Master and subsequent schedule Updates. In the event schedule revisions are directed by the District and those revisions have not been included in subsequent revisions or Updates, the District may hold retainage up to the maximum allowed by Contract, each payment period, until such revisions to the Master Schedule have been made.

I. No construction schedule shall exceed time limits set forth in the Contract Documents. Failure to submit a schedule or submittal of a schedule which shows completion of the Work beyond the specified completion date shall be deemed a material breach by the Contractor.

J. All schedules must indicate the beginning and completion of all Phases of Work and shall use the “critical path method” for the value reporting, planning, and scheduling of all Work required under the Contract Documents.

K. Overall time of completion and time of completion for each Phase of Work shown on any construction schedule shall adhere to completion times as stated in the Agreement, unless an earlier (advanced) time of completion is requested by Contractor and agreed to by District. Any such agreement shall be formalized by a Change Order.

1. District is not required to accept an advanced schedule, i.e., one that shows early completion dates for the Work or any Phase of the Work.

2. In the event agreement is reached between Contractor and District on an advanced schedule, Contractor shall not be entitled to extra compensation if Contractor completes its Work, for whatever reason (excepting approved changes with added time components) beyond completion date(s) shown in any approved advanced schedule but within the originally specified completion dates.

3. Contractor shall not submit a schedule showing early completion without indicating float time through the date set for Project completion by District.

4. Contractor’s schedule shall account for all days past early completion as float which belongs to the Project. Usage of float shall not entitle Contractor to any delay claim for damages due to delay.

L. Float Ownership: Neither the District nor the Contractor owns float. The Project owns the float. As such, liability for delay of the Substantial Completion Date(s) rests with the party whose actions, last in time, actually cause delay to the Substantial Completion Date(s).

1. For example, if Party A uses some, but not all of the float and Party B later uses remainder of the float as well as additional time beyond the float, Party B shall be liable for the time that represents a delay to the Substantial Completion Date.

2. Party A would not be responsible for the time since it did not consume the entire float and additional float remained; therefore, the Substantial Completion Date was unaffected.
M. The architect may disapprove of any construction schedule or require modification to it if, in
the opinion of the Architect or District, adherence to the construction schedule will not cause
the Work to be completed in accordance with the Agreement.

N. Use MS Office Project 2010, compatible with Windows operating system for creation and
updates of all required construction schedules. Contractor shall provide digital schedule files to
District on CD at times requested by District.

O. Transmit construction schedule files under form approved by District.

1.7 CPM SCHEDULE FORMAT AND LEVEL OF DETAIL

A. All Work activity durations shall be in Workdays.

B. Each Schedule (Initial, Master, and Updates) shall be the basis for evaluating job progress,
payment requests, and time extension requests associated with the changes.

C. Responsibility for developing all CPM Schedules and monitoring actual progress rests with
Contractor. CPM Schedules shall comply with following requirements:

1. All Contractor, Subcontractor and assigned Contractor work shall be shown in a logical
work sequence that demonstrates a coordinated plan of work for all contractors. The
intent is to provide a common basis of acceptance, understanding and communication,
as well as interface with other contractors.

2. Activities related to the delivery of Contractor and District-furnished equipment to be
Contractor installed per Contract shall be shown.

   a. District-furnished District Installed materials and equipment, if any, shall be
      identified as separate activities.

3. Show District and other agency activities that could impact progress. These activities
include, but are not limited to: approvals, submittal reviews, environmental permit
approvals by State regulators, inspections, utility tie-in, Owner Furnished Equipment
(OFE) and Notice to Proceed (NTP) for Phasing requirements.

4. All activities shall be identified through codes or other identification to indicate the Phase
of Work and Contractor/Subcontractor responsibility to which they pertain.

5. Organize the schedule to clearly identify each Phase of Work for the Project. See also
Section 01015 Project Phasing.

6. Show the critical path in red. For each activity, show early start, late start, early finish,
late finish, durations measured in days, float, predecessor and successor activities,
planned workday/week for the activity, and scheduled/actual progress payments.

7. Reasonable activity durations are those that allow the progress of ongoing activities to be
accurately determined between update periods. Less than 2 percent of all non-
procurement activities shall have durations greater than 20 work days or 30 calendar
days unless otherwise approved by District and Architect. Procurement activities are
defined herein.

   a. Procurement Activities

      i) The schedule must include activities associated with the submittal, approval,
procurement, fabrication and delivery of long lead materials, equipment,
fabricated assemblies and supplies. Long lead procurement activities are
those with an anticipated procurement sequence of over 90 calendar days. A
typical procurement sequence includes the string of activities: submit,
approve, procure, fabricate, and deliver. Procurement of all contract
required material and equipment shall be identified as a separate activity.

b. Include time for fabrication and delivery of manufactured products for the Work.
c. Show dependencies between procurement and related construction activity.

8. Activity durations shall be total number of actual work days required to perform that
activity.

9. Provide activity coding to enable sorting by responsibility, location, Phase of Work, and
CSI division. Assign activity codes to any activity or sequence of activities added to the
schedule as a result of a Change Orders, when approved by the District with a Change
Order code. Integrate the code values to the Contractor’s numbering system. An activity
shall not have more than one Change Order code.

10. The start and completion dates of all items of Work, Work Phases, their major
components, and milestone completion dates shall be included.

11. Mandatory Tasks. The following tasks must be included and properly scheduled:

a. Submission, review and acceptance of design packages.
b. Submission of mechanical/electrical/information systems layout drawings.
c. Submission and approval of O & M manuals.
d. Submission and approval of as-built drawings.
e. Submission and approval of installed equipment lists.
f. Submission and approval of testing and air balance (TAB).
g. Submission of TAB specialist design review report.
h. Submission and approval of fire protection specialist.
i. Submission and approval of testing and balancing of HVAC plus commissioning
plans and data.
j. Air and water balancing.
k. HVAC commissioning.
l. Controls testing plan submission.
m. Controls testing.
n. Performance Verification testing.
o. Other systems testing, if required.
p. Contractor’s pre-final inspection.
q. Correction of punch list from Contractor’s pre-final inspection.
r. District’s pre-final inspection.
s. Correction of punch list from District’s pre-final inspection.
t. Final inspection.

12. Dependencies (or relationships) between activities shall be shown.
13. Contractor’s Shop Drawing and Samples Submittal Schedule: As part of the Master CPM submittal, the Contractor shall prepare a separate schedule for review and approval by the Architect and the District, detailing the processing and approval of submittals and shop drawings for all Contract-required material and equipment. This schedule shall be extracted from the Master CPM Schedule. Activities that are dependent on submittal acceptance or material delivery shall not be scheduled to start earlier than expected acceptance or delivery dates.
   a. Include time for submittals, resubmittals, and reviews by District and DSA. Coordinate with accepted schedule for submission of shop drawings, samples and other submittals.
   b. Contractor shall be responsible for all impacts resulting from resubmittal of either shop drawings or any other required submittal.

14. Complete all activity descriptions, including what Work is to be accomplished, where, and when.

15. The costs associated with each Work activity shall be the total of labor, material, equipment, including overhead and profit of Contractor. The sum of the costs for all activities shall equal the total Contract value.

16. Include an identify code for each activity corresponding to either the Contractor or Subcontractor responsible for performing the Work.

17. Identify the Work activities that constitute the critical path. No more than twenty-five (25%) of the activities shall be critical or near critical. Near critical is defined as float in the range of one (1) to (10) days.

18. Include at least twenty (20) workdays for developing punch list(s), completion of punch list items and final clean-up for the Work or any designated portion thereof. No other activities shall be scheduled during this period.

19. Show detailed Subcontractor Work activities. In addition, furnish copies of Subcontractor schedules upon which CPM was built.
   a. Also furnish for each Subcontractor, as determined by District, submitted on Subcontractor letterhead a statement certifying that Subcontractor concurs with Contractor's Master CPM Schedule, and that Subcontractor's related schedules have been incorporated.
   b. Subcontractor schedules shall be independently derived and not a copy or subset of the Contractor's Master Schedule.
   c. Furnish schedule for Contractor/Subcontractor CPM schedule meetings which shall be held prior to submission of Master CPM schedule to District. District shall be permitted to attend scheduled meetings as an observer.

20. Submit a list of anticipated non-Work days, such as weekends, holidays, and/or other observances.

D. Seasonal weather conditions (which do not constitute a delay as defined herein) shall be considered in the planning and scheduling of all work influenced by high or low ambient temperatures or presence of high moisture for the completion of the Work within the allotted Contract Time. See Section 01305 (Delay and Extensions to the Work.)
E. Failure by Contractor to include any element of Work required for performance of the Work on any Project schedule shall not excuse Contractor from completing all Work required within the Contract Time.

F. Contractor shall schedule all deferred approval items and shop drawings in its various CPM schedules. If Contractor fails to include deferred approval items and shop drawings in its schedule which results in a critical path delay, then Contractor shall be subject to the assessment of liquidated damages.

G. CPM Logic Requirements

1. The schedule interval shall extend from NTP date to the required contract completion date. The contract completion activity (End Project) shall finish based on the required contract duration in the Contract Documents, as adjusted for any approved contract time extensions. The first scheduled work period shall be the day after NTP is acknowledged by the Contractor. Schedule activities on a calendar to which the activity logically belongs. Activities may be assigned to a 7 day calendar when the contract assigns calendar day durations for the activity such as a District acceptance activity if the Contract Documents specify Calendar Days. If the Contractor intends to perform physical work less than seven days per week, schedule the associated activities on a calendar with non-work periods identified including weekends and holidays. Assign the Category of Work Code – Weather Sensitive Installation to those activities that are weather sensitive. Original durations must account for anticipated normal adverse weather. The District will interpret all work periods not identified as non-work periods on each calendar as meaning the Contractor intends to perform work during those periods.

2. The schedule shall start no earlier than the date on which the NTP was acknowledged. Include as the first activity in the project schedule an activity called "Start Project" (or NTP). The "Start Project" activity shall have an "ES" constraint date equal to the date that the NTP was acknowledged, and a zero day duration.

3. Schedule Constraints and Open Ended Logic completion of the last activity in the schedule by the contract completion date. Schedule calculations shall result in a negative float when the calculated early finish date of the last activity is later than the contract completion date. Include as the last activity in the project schedule an activity called "End Project". The "End Project" activity shall have an "LF" constraint date equal to the contract completion date for the project, and with a zero day duration or by using the "project must finish by" date in the scheduling software. The schedule shall have no constrained dates other than those specified in the contract. The use of artificial float constraints such as "zero fee float" or "zero total float" are typically prohibited. There shall only be 2 open ended activities: Start Project (or NTP) with no predecessor logic and End Project with no successor logic.

4. In the event the Preliminary or Initial project schedule calculates an early completion date of the last activity prior to the contract completion date, the Contractor shall identify those activities that it intends to accelerate and/or those activities that are scheduled in parallel to support the Contractor's "early" completion. The last activity shall have a late finish constraint equal to the contract completion date and the schedule will calculate positive float. The District will not approve an early completion schedule with zero float on the longest path. The District is under no obligation to accelerate activities for which it is responsible to support a proposed early contract completion.
5. **Interim Completion Dates.** Constrain contractually specified interim completion dates to show negative float when the calculated early finish date of the last activity in that phase is later than the specified interim completion date.

6. **Start Phase.** Include as the first activity for a project phase an activity called "Start Phase X" where "X" refers to the phase of work. The "Start Phase X" activity shall have an "ES" constraint date equal to the date on which the NTP was acknowledged, and a zero day duration.

7. **End Phase.** Include as the last activity for a project phase an activity called "End Phase X" where "X" refers to the phase of work. The "End Phase X" activity shall have an "LF" constraint date equal to the specified completion date for that phase and a zero day duration.

8. **Phase "X" Hammock.** Include a hammock type activity for each project phase called "Phase X" where "X" refers to the phase of work. The "Phase X" hammock activity shall be logically tied to the earliest and latest activities in the phase.

9. **Default Progress Data Disallowed.** Do not automatically update Actual Start and Finish dates with default mechanisms that may be included in the scheduling software. Activity Actual Start (AS) and Actual Finish (AF) dates assigned during the updating process shall match those dates provided from Daily Reports. Failure of the Contractor to document the AS and AF dates on the Daily Report for every in-progress or completed activity, and failure to ensure that the data contained on the Daily Reports is the sole basis for schedule updating shall result in the disapproval of the Contractor's updated schedule and the inability of the Architect or District to evaluate Contractor progress for payment purposes. Updating of the percent complete and the remaining duration of any activity shall be independent functions. Disable program features which calculate one of these parameters from the other.

10. **Other Logic Requirements:**
   a. Activities that have progressed before all preceding logic has been satisfied (Out-of-Sequence Progress) will be allowed only on a case-by-case basis subject to approval by the District. Propose logic corrections to eliminate all out of sequence progress or justify not changing the sequencing for approval prior to submitting an updated project schedule. Correct out of sequence progress that continues for more than two update cycles by logic revision, as approved by the Architect and District.
   b. Lag durations contained in the project schedule shall not have a negative value. Do not use Start to Finish (SF) relationships.
   c. 3.3.8 Schedule calculations shall retain the logic between predecessors and successors even when the successor activity starts and the predecessor activity has not finished. Software features that in effect sever the tie between predecessor and successor activities when the successor has started and the predecessor logic is not satisfied ("progress override") will not be allowed.

11. **Milestones.** The schedule must include milestone activities for each significant project event including but not limited to: All Phases, foundation/substructure construction complete; superstructure construction complete; building dry-in or enclosure complete to allow the initiation of finish activities; permanent power complete; and building systems commissioning complete (for each applicable Phase of Work).
1.8 INITIAL CRITICAL PATH METHOD (CPM) SCHEDULE

A. Within ten (10) calendar days following Notice to Proceed, Contractor shall submit an Initial CPM Schedule for District’s approval.

B. Within twenty (20) calendar days following Notice to Proceed, Contractor shall submit a cost curve based on the Initial Construction Schedule and the Schedule of Values, showing the cumulative estimated payments for all of the Work for the entire period of performance;

C. District, Architect, Project Manager and Contractor shall meet to review and discuss the Initial CPM Schedule within five (5) working days after it has been submitted to District.
   1. District’s review and comment on the Initial CPM schedule shall be limited to conformance with the Contract Documents (with Work Phasing, sequencing, coordination, milestone requirements, and specified formatting and information requirements) and accepted CPM principals.
   2. Contractor shall make corrections to the Initial CPM Schedule as necessary to comply with Contract requirements and shall adjust the schedule to incorporate any missing information as requested by District. Contractor shall resubmit the Initial CPM Schedule if requested by District.

D. Initial CPM Schedule must indicate detailed plan for the Work to be completed during the first sixty (60) days of the Contract, including details of planned mobilization of plant and equipment, the sequence of early operations, and the procurement of materials and equipment. Show Work beyond sixty (60) calendar days in summary form.

E. Initial CPM Schedule shall be time-scaled.

F. The Initial CPM Schedule shall be cost loaded based on the Schedule of Values as approved by District and Architect.

G. The accepted Initial Schedule will be used as basis for monthly progress payments until acceptance of the Master CPM Schedule by District. Use of the Initial CPM Schedule for progress payments shall not exceed sixty (60) calendar days.

H. If, during the first thirty (30) days after Notice-to-Proceed, the Contractor is of the opinion that any of the Work included on its Initial CPM Schedule has been impacted, the Contractor shall submit to District a written Time Impact Evaluation (TIE) in accordance with the requirements of this Section. The TIE shall be based on the most current Update of the Initial CPM Schedule.

1.9 MASTER CPM SCHEDULE

A. Within 20 calendar days from the Notice to Proceed, Contractor shall submit a detailed Master CPM Schedule presenting an orderly and realistic plan for completion of the Work, in conformance with requirements specified herein.

B. Failure of the Master CPM Schedule to include any element of the Work or any inaccuracy in the Master Progress Schedule will not relieve Contractor from responsibility for accomplishing the Work in accordance with the Contract.

C. District’s acceptance of the Master CPM Schedule shall be for its use in monitoring and evaluating job progress, payment requests, and time extension requests, and shall not, in any manner, impose a duty of care upon District, or act to relieve Contractor of its responsibility for means and methods of construction.
D. Contractor shall, within thirty (30) days from the Notice to Proceed date, meet with District Project Manager and Architect to review the Master CPM Schedule submittal.

1. Contractor shall have its Construction Manager, Project Superintendent, Project Scheduler, and key Subcontractor representatives, as required by District and Architect, in attendance. The meeting will take place over a continuous one-day period.

2. Architect’s review will be limited to submittal’s conformance to Contract requirements. Review may also include:
   a. Critical path method principles and tenets utilized
   b. Clarifications of Contract Requirements
   c. Directions to include activities and information missing from the submittal
   d. Requests to Contractor to clarify its schedule

3. Within five (5) days of the Schedule Review Meeting, Contractor shall respond in writing to all questions and comments expressed by District, Project Manager and Architect at the Meeting.

1.10 ADJUSTMENTS TO THE MASTER CPM SCHEDULE

A. Contractor shall revise the Master CPM Schedule submittal to address all review comments from the review meeting described above, and resubmit the Master Schedule for District review and approval.

1. District, within ten (10) days from date that Contractor submitted the revised schedule, will either:
   a. Accept the Master Schedule as submitted, or
   b. Advise Contractor in writing to review any part or parts of schedule which either do not meet Contract requirements, or are unsatisfactory for District to purposes of monitoring Project progress, resources, and status, or to evaluate monthly payment request by Contractor.

2. District may accept the Master Schedule with conditions that the first monthly CPM schedule Update be revised to correct identified deficiencies.

3. When the Master Schedule is accepted, it shall be considered the Master CPM Schedule which will then be immediately updated to reflect the current status of the work.

4. District reserves right to require Contractor to adjust, add to, or clarify any portion of schedule which may later be discovered to be insufficient for monitoring the Work or approving payment requests. No additional compensation will be due to the Contractor for any such adjustments, additions, or clarifications.

B. Acceptance of Contractor's Master Schedule by District will be based upon schedule's compliance with Contract requirements and accepted CPM principles.

1. In assigning activity durations and proposing Work sequences, Contractor agrees to utilize sufficient and necessary management and other resources to perform work in accordance with the approved Master Schedule.

2. Upon submittal and District approval of any Master Schedule Update, such updated schedule shall then be considered the "current" Master CPM Schedule.
3. Submission of Contractor's master Schedule to District shall not relieve Contractor of total responsibility for scheduling, sequencing, and executing the Work to comply with requirements of Contract Documents, including recovery from adverse effects such as delays resulting from ill-timed work.

C. Submittal of the Master CPM Schedule, and subsequent Updates shall be understood to be the Contractor's representation that the Master Schedule meets all requirements of Contract Documents, and that the Work shall be executed in the sequence and within the time indicated on the schedule.

D. Contractor shall distribute the Master CPM Schedule to Subcontractors for review and written acceptance, which shall be noted on Subcontractors' letterhead to Contractor and transmitted to District for the Project record.

1.11 MASTER CPM SCHEDULE MONTHLY UPDATES

A. Following acceptance of Contractor's Master CPM Schedule, Contractor shall monitor the progress of Work and adjust the Master Schedule each month to reflect actual progress and to illustrate any anticipated changes to planned activities.

1. Each Master Schedule Update submitted by Contractor shall be complete, including all information requested for the original Master Schedule submittal.

2. Each Update submitted by Contractor shall continue to show all work activities including those already completed. Any completed activities shall accurately reflect "as built" information by indicating when Work activities were actually started and completed. Contractor shall warrant the accuracy of as-built information shown on each schedule Update.

B. A meeting will be held on approximately the sixteenth (16th) of each month with District Project Manager, Architect and Inspector to review the Master Schedule Update submittal and progress payment application. Conduct periodic schedule update meetings for the purposes of reviewing the Contractor's proposed out of sequence corrections, determining causes for delay, correcting logic, maintaining schedule accuracy and determining earned value. Provide a computer with the scheduling software loaded and a projector during the meeting which allows all meeting participants to view the proposed schedule update during the meeting. The meeting and resultant approvable schedule update shall be a condition precedent to a formal submission of the Update and to the submission of an invoice for payment. The meeting will be a working interactive exchange which will allow the District and the Contractor the opportunity to review the Updated schedule on a real time and interactive basis. The Contractor's authorized scheduling representative will organize, sort, filter and schedule the update as requested by the District and the Architect. A rough draft of the proposed activity logic corrections and narrative report shall be provided to the Architect and the District Project Manager 48 hours in advance of the meeting.

1. At this monthly meeting, a minimum requirement for review shall be included, but not limited to the following items:
   a. Percent complete of each Work activity
   b. Time impact evaluations for Change Orders and Time Extension Requests, if any
   c. Actual and anticipated Work activity sequence changes
d. Anticipated Work activity duration changes

e. Actual and anticipated Contractor delays

2. These meetings are a critical component of overall monthly schedule update submittal and Contractor shall ensure appropriate personnel attend. At a minimum, Contractor’s Project Engineer, General Superintendent, and Scheduler shall attend these meetings.

3. Status of Activities. Update information, including Actual Start Dates (AS), Actual Finish Dates (AF), Remaining Durations (RD), and Percent Complete shall be subject to the approval of the District at the meeting. As a minimum, address the following items on an activity by activity basis during each progress meeting.

   a. 3.6.2.1 Start and Finish Dates. Accurately show the status of the AS and/or AF dates for each activity currently in-progress or completed since the last update. The District may allow an AF date to be assigned with the percent complete less than 100% to account for the value of work remaining but not restraining successor activities. Only assign AS dates when actual progress occurs on an activity.

   b. 3.6.2.2 Remaining Duration. Update the estimated RD for all incomplete activities independent of Percent Complete. Remaining Durations may exceed the activity original duration (OD) or may exceed the activity's prior update RD if the Government considers the current OD or RD to be understated based on current progress, insufficient work crews actually manning the job, unrealistic OD or deficiencies that must be corrected that restrain successor activities.

   c. Percent Complete. Update the percent complete for each activity started, based on the realistic assessment of earned value. Activities which are complete but for remaining minor punch list work and which do not restrain the initiation of successor activities may be declared 100 percent complete. To allow for proper schedule management, cost load the correction of punch list from District pre-final inspection activity(ies) for each Phase not less than 1 percent of the total value of that Phase, which activity(ies) may be declared 100 percent complete upon completion and correction of all punch list work identified during District’s pre-final inspection(s).

   d. Logic Changes. Specifically identify and discuss all logic changes pertaining to NTP on change orders, change orders to be incorporated into the schedule, Contractor proposed changes in work sequence, corrections to schedule logic for out-of-sequence progress, and other changes that have been made pursuant to contract provisions. The District will only approve logic revisions for the purpose of keeping the schedule valid in terms of its usefulness in calculating a realistic completion date, correcting erroneous logic ties, and accurately sequencing the work.

   e. Other Changes. Other changes required due to delays in completion of any activity or group of activities include: 1) delays beyond the Contractor’s control, such as strikes and unusual weather. 2) delays encountered due to submittals, District activities, deliveries or work stoppages which make re-planning the work necessary. 3) Changes required to correct a schedule that does not represent the actual or planned prosecution and progress of the work.

C. Within five (5) working days after monthly schedule update meeting, Contractor shall submit the updated Master CPM Schedule Update.
D. Within five (5) work days of receipt of above noted revised submittals, District or Architect will either accept or reject monthly Master CPM Schedule Update submittal.

1. If accepted, percent complete shown in monthly update will be basis for Application for Payment by the Contractor. The schedule update shall be submitted as part of the Contractor's Application for Payment.

2. If rejected, update shall be corrected and resubmitted by Contractor before the Application for Payment is submitted.

3. District and Architect will not review Contractor’s application for payment if the updated monthly schedule not provided and approved by District.

E. Neither updating, changing or revising of any report, curve, schedule or narrative submitted by Contractor under this Contract, nor District's review or acceptance of any such report, curve, schedule or narrative, shall have the effect of amending or modifying in any way the Contract Final Completion date or any Phase completion dates, or of modifying or limiting in any way Contractor's obligations under this Contract.

F. Updating the Master CPM Schedule to reflect actual progress shall not be considered revisions to the Schedule.

G. To clarify any revisions to the schedule, the Contractor shall provide District with a written narrative explaining the reasons for each Work activity revision. For revisions affecting the sequence of work, the Contractor shall provide a schedule diagram which compares the original sequence to the revised sequence of work. The Contractor shall provide the written narrative and schedule diagram for revisions two (2) working days in advance of the monthly schedule update meeting.

H. Schedule revisions shall not be incorporated into any Master Schedule Update until the revisions have been reviewed and approved by District. District may request further information and justification for Master Schedule revisions. Contractor shall, within three (3) days of any such District request, provide District with a complete written narrative response.

I. If the Contractor’s revision is still not accepted by District, and the Contractor disagrees with District's position, the Contractor has three (3) work days from receipt of District's letter rejecting the revision to provide a written narrative providing full justification and explanation for the revision. The Contractor’s failure to respond within three (3) work days of District’s written rejection of a schedule revision shall be contractually interpreted as acceptance of District's position, and the Contractor waives its rights to subsequently dispute or file a claim regarding District's position.

J. At District's discretion, the Contractor may be required to provide subcontractor(s) certifications of Work activity performance regarding any proposed Master Schedule revisions affecting said subcontractor(s).

1.12 WEEKLY LOOK AHEAD SCHEDULE

A. At each Weekly Progress Meeting, the Contractor shall provide and present a time scaled three (3) week schedule: one (1) week behind and two (2) week look ahead schedule that is based on and correlated by activity number in the current Master CPM Schedule Update. Provide a two week look ahead schedule in bar chart format, showing daily activities for that period.
1.13 OTHER SCHEDULE RELATED REPORTS

A. Submit four (4) hard copies of the following reports with the Initial CPM Schedule, the Master CPM Schedule, and with each monthly Update:

1. Two (2) activity-listing reports: one report sorted by activity number and one report by total float. These reports shall also include each activity’s early/late and actual start and finish dates, original and remaining duration, float, responsibility code and the logic relationship of activities.

2. Cost report sorted by activity number including each activity’s associated cost, percentage of Work accomplished, earned value to-date, previous payments and amount earned for current update period.

3. Schedule plots presenting time scaled network diagram showing activities and their relationships with the controlling operations or critical path clearly highlighted.

4. Cash flow report calculated by early start, late start and indicating actual progress. Provide an exhibit depicting this information in graphic form.

5. Monthly status report, to include:
   a. Status of major Project components (percent complete, amount of time ahead or behind schedule) and an explanation of how Project will be brought back on schedule if delays have occurred.
   b. Progress made on critical activities indicated on CPM schedule.
   c. Explanations for any lack of work on critical path activities planned to be performed during last month.
   d. Explanations for any schedule changes, including changes to logic or to activity durations.
   e. List of critical activities scheduled to be performed next month.
   f. Status of major material, and equipment procurement.
   g. Any delays encountered during reporting period.
   h. Contractor may include any other information pertinent to status of Project. Contractor shall include additional status information requested by District at no additional cost.
   i. Status reports, and the information contained therein, shall not be construed by the Contractor as claims, notice of claims, notice of delay, or requests for changes or compensation.

B. Furnish DISTRICT with digital files of all reports and CPM Updates on labeled CD ROM.

1.14 RECOVERY SCHEDULE

A. If any Master CPM Schedule Update shows a Phase of Work substantial completion date five (5) calendar days beyond any approved Phase of Work substantial completion date the Contractor shall submit to District proposed schedule revisions to recover the lost time within seven (7) calendar days. As part of this Recovery Schedule submittal the Contractor shall provide a written narrative for each schedule revision made to recapture the lost time. If the revisions include sequence changes, the Contractor shall provide a schedule diagram comparing the original sequence to the revised sequence of work.
B. Recovery Schedule revisions shall not be incorporated into any Master Schedule Update until the revisions have been reviewed and approved by the District.

C. If the Contractor’s Recovery Schedule revisions are not accepted by District, District and the Contractor shall follow the procedures in paragraph 1.10 H through J, above.

D. If requested by the Architect or District, Contractor shall provide revised schedules within ten (10) days if, at any time, the Architect or District consider the completion date to be in jeopardy because of activities that are behind schedule. The additional schedule shall include a new arrow or precedence diagram and schedule reports conforming to the requirements herein, designed to show how the Contractor intends to accomplish the Work to meet the completion date.

E. The Contractor shall modify any portions of the schedule that become infeasible because of “activities behind schedule” or for any other valid reason. An activity that cannot be completed by its original latest completion date shall be deemed to be behind schedule.

1.15 TIME IMPACTS EVALUATION (TIE) FOR CHANGE ORDERS AND OTHER POTENTIAL DELAYS

A. When Contractor is directed to proceed with changed Work which the Contractor considers to have a time impact, the Contractor shall prepare and submit, within seven (7) calendar days from the direction to proceed, a Time Impact Evaluation (TIE) which includes both a written narrative and a schedule diagram depicting how the changed work affects other schedule activities. The schedule diagram shall show how the Contractor proposes to incorporate the changed Work in the schedule, and how it impacts the current Master CPM Schedule and critical path. The Contractor is responsible for requesting time extensions based on the TIEs impact on the critical path. The diagram must correspond to the main sequences of Work activities in the current Master CPM Schedule, to enable District to evaluate time impact of changed work to the scheduled critical path.

B. Contractor shall be required to comply with the above requirements for all types of delays such as, but not limited to, Contractor/Subcontractor delays, adverse weather delays, strikes, procurement delays, fabrication delays, etc.

C. Contractor shall be responsible for all costs associated with the preparation of Time Impact Evaluations, and the process of incorporating them into the current schedule update. The Contractor shall provide District with 3 copies of each TIE.

D. Once agreement between District and Contractor has been reached on a TIE, the Contract time will be adjusted accordingly. If agreement is not reached on a TIE, the Contract time may be extended in an amount District allows, and the Contractor may submit a claim for additional time.

E. If the Contractor does not submit a TIE within the required seven (7) calendar days for any issue, it is mutually agreed that the Contractor does not require a time extension for said issue.

1.16 TIME EXTENSIONS

A. The Contractor is responsible for requesting time extensions for time impacts that, in the opinion of the Contractor, impact the critical path of the current Master CPM Schedule.
B. Contractor shall not be granted an extension of time for failure to obtain necessary approvals for deferral approvals due to failure to comply with laws, building codes, and other regulations (including Title 24 of the California Code of Regulations).

C. Where an event for which District is responsible impacts the projected Substantial Completion date of the Work, or any Phase of the Work, the Contractor shall provide a written mitigation plan, including a schedule diagram, which explains how (e.g., increase crew size, overtime, etc.) the impact can be mitigated. The Contractor shall also include a detailed cost breakdown of the labor, equipment, and material the Contractor would expend to mitigate District caused time impact. The Contractor shall submit its mitigation plan to District within seven (7) calendar days from the date of discovery of said impact. The Contractor is responsible for the cost to prepare the mitigation plan.

D. Contractor’s failure to a request time extension, provide a TIE, or provide the required mitigation plan will result in Contractor waiving its right to both a time extension and to recovering any costs to mitigate the delay.

E. No time extensions will be granted under this Contract for the cumulative effect of changes in the Work.

F. District will not be obligated to consider any time extension request unless requirements of Contract Documents have been met.

G. Failure of the Contractor to perform in accordance with the current Master CPM Schedule Update shall not be excused because of submittal of a time extension request.

PART 2 - PRODUCTS
Not applicable to this section.

PART 3 - EXECUTION
Not applicable to this section.

END OF SECTION 01310
SECTION 01311
PROJECT MANAGEMENT AND COORDINATION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS
A. All Contract Documents shall be reviewed for applicable provisions related to the provisions in this document, and provisions in the General Conditions and other Division 1 Specification Sections shall apply to this Section without limitation.

1.2 RELATED REQUIREMENTS SPECIFIED IN OTHER SECTIONS
A. Section 01010 - “Summary of Work”
B. Section 01312 - “Project Meetings”
C. Section 01330 - “Submittal Procedures”
D. Section 01416 – “Special Procedures”
E. Section 01505 – “Construction Waste Management”
F. Section 01540 – “Site Security and Safety”
G. Section 01770 – “Contract Closeout Procedures”
H. Section 01820 – “Demonstration & Training”

1.3 SUMMARY
A. This Section specifies the administrative requirements and includes descriptions of required Project Coordination for the work and all Phases of Project including, but not limited to, the following:
   1. Coordination
   2. Pre-construction Conference
   3. Project Meetings
   4. Pre-installation Conferences-Coordination
   5. Underground and Utilities Coordination
   6. Electrical and Mechanical Coordination
   7. Coordination with Work by District / Campus
   8. Special Meetings-Coordination
   9. Coordination of Contract Closeout

1.4 COORDINATION
A. Coordinate scheduling, submittals, and Work of the various Sections of Specifications to assure efficient and orderly sequence of Work, with provisions for accommodating items to be installed later and for accommodating items to be installed by other District Contractors.
B. Resolve differences or disputes concerning coordination, interference, or extent of Work of the various Sections of the Specifications. Contractor’s decisions if consistent with requirements of the Contract Documents shall be final.

C. Coordinate completion and clean-up of Work of separate Sections in preparation for substantial Completion.

D. Coordinate requests for substitutions to assure compatibility of space, of operating elements, and effect on work of other sections.

E. Coordinate sequence of Work to accommodate District occupancy as specified by the Contract Documents for Project Phasing as specified in Section 01015. Cooperate with District and District suppliers and/or contractors during move-in and occupancy of the completed Work at each Phase.

F. Contractor shall coordinate construction operations and means and method of construction included in different Sections of the Specifications to ensure efficient and orderly installation of each part of the Work. Coordinate construction operations, included in different Sections that depend on each other for proper installation, connection, and operation.

1. Coordinate structural, mechanical, and electrical elements prior to installation. All penetrations of structural elements must first receive approval of Architect and District. Rerouting of ductwork, piping, or conduit and resulting changes to other work caused by failure to coordinate beforehand is the responsibility of the Contractor and shall not be considered justification for either additional cost or time.

2. Schedule construction operations in sequence required to obtain the best constructed results where installation of one part of the Work depends on installation of other components, before or after its own installation.

3. Coordinate installation of different components with other contractors or other trades to ensure maximum and appropriate accessibility for required maintenance, service, and repair. Where availability of space is limited, coordinate installation of different components to ensure maximum and appropriate performance and accessibility for required maintenance, service, operations, and repair of all components, and building systems.

4. Make adequate provisions to accommodate items scheduled for later installation.

5. The manner in which the Specifications are divided into Divisions and Sections is not intended to indicate division of work between trades nor indicate trade union or jurisdictional agreements.

   a. Assign and subcontract construction activities, and employ workers in a manner that will not risk jurisdictional disputes that could result in conflicts, delays, claims, or losses.

1.5 PRECONSTRUCTION CONFERENCE

A. The District Project Manager will schedule a conference after Notice to Proceed and prior to the start of Work.

B. Attendance Required: District representatives, Architect and consultants, DSA Project Inspector, District Project Manager, Contractor, certain Subcontractors as requested by the District and others as appropriate.
1.6 **ADMINISTRATIVE COORDINATION**

A. Coordinate scheduling and timing of required administrative procedures with other construction activities and activities of other contractors to avoid conflicts and to ensure orderly progress of the Work. Such administrative coordination activities include, but are not limited to, the following:

1. Preparation of and coordination of Contractor’s Construction Schedule and Phasing Schedule
2. Preparation of the Schedule of Values and Original Construction Schedule
3. Coordinate installation and removal of temporary facilities and controls
4. Coordinate and delivery and processing of submittals, and samples
5. Coordinate progress meetings, testing, and inspection
6. Pre-installation conferences
7. Mockups
8. Startup and adjustment of systems
9. Project closeout activities

B. Project Documents Management and Exchange

1. To the maximum extent feasible, document exchange between and among the Contractor, District, IOR, and Architect shall occur electronically. Such documents include, but are not limited to:
   a. Product data and other submittals
   b. ASI’s, Field Directives, similar documents
   c. RFI’s
   d. Payment applications
   e. Change Orders
   f. Schedules
   g. Correspondence
   h. Other documents and deliverables as required by the Contract Documents

1.7 **PRE-INSTALLATION CONFERENCES AND COORDINATION**

A. Contractor shall be responsible to convene pre-installation conferences as required by individual Section of the Specifications. Include all affected parties. Also refer to Section 01312 for additional Project Meetings and Coordination requirements.

1.8 **COORDINATION OF THE WORK**

A. Coordinate use of project space and sequence of installation of mechanical, electrical, structural, and other Work which is indicated diagrammatically on Drawings. Follow routings shown for pipes, ducts, and conduits as closely as practicable, with due allowance for available physical space; make runs parallel with lines of building. Utilize space efficiently for maximum and appropriate accessibility for other installations, for maintenance, service, operations, and for repairs.
B. Contractor shall use large scale drawings, if their preparation is required as part of Work of these specifications, together with shop drawings and layout drawings of other affected sections of these specifications to check, to coordinate, and to integrate the Work of various sections to prevent interferences.

C. Perform and complete checking and coordination before commencing construction in the affected areas.

D. In finished areas, except as otherwise shown, conceal pipes, ducts, and wiring in the construction. Coordinate locations of plumbing, fixtures, electrical fixtures, and fixtures and outlets with finish elements.

1.9 CONSERVATION
A. Contractor shall coordinate construction activities to ensure that operations are carried out with consideration given to conservation of energy, water, and materials.

1. Salvage materials and equipment involved in performance of, but not actually incorporated into, the Work. Refer to other Sections for disposition of salvaged materials that are designated as District’s property.

1.10 MEANS AND METHODS
A. Contractor is solely responsible for construction means, methods, techniques, sequences, and procedures for performing all Work.

1.11 COORDINATION KEY PERSONNEL NAMES
A. Contractor prior to starting construction operations shall submit a list of key personnel assignments, including Contractor’s Project Manager, Superintendent, Assistant Superintendent and other personnel in attendance at Project site. Identify individuals and their duties and responsibilities; list addresses and telephone numbers, including office and cell telephone numbers. Provide names, addresses, and telephone numbers of individuals assigned as standbys in the absence of individuals assigned to Project.

1. Contractor shall submit (10) copies of key personnel list to the Architect, and District.

2. Post copies of list in Project meeting room, in temporary field office, and by each temporary telephone. Keep list current at all times, and provide current list to the District and Architect.

1.12 ADMINISTRATIVE AND SUPERVISORY PERSONNEL
A. Contractor shall provide other administrative and supervisory personnel as required for proper performance of the Work.

1. Include specific or dedicated personnel required for coordination of operations with other contractors.

1.13 COORDINATION WITH WORK BY DISTRICT
A. Coordinate service connections for District furnished and District installed equipment. Verify that service connections are correct sizes and in required locations.
B. Coordinate support and anchorage for equipment furnished and installed by the District. Provide blocking and backing as shown or directed to facilitate installation of equipment by others.

1.14 DAILY CONSTRUCTION REPORTS

A. On a daily basis, Contractor shall submit a daily activity report to DISTRICT for each workday, including weekends and holidays, when worked. Contractor shall develop the daily construction reports on a computer generated data-base capable of sorting daily Work, manpower and man-hours by Contractor, Subcontractor, area, sub area, and change order work. Upon request of DISTRICT, furnish computer disk of this database. Obtain DISTRICT’s written approval of daily construction report database format prior to implementation. Include in report:

1. Project name and Project number
2. Contractor's name and address
3. Weather, temperature and any unusual site conditions
4. Brief description and location of the day's scheduled activities and any special problems and accidents, including Work of Subcontractors. Descriptions shall be referenced to CPM scheduled activities.
5. Worker quantities for its own Work force and for Subcontractors of any tier.
6. Equipment, other than hand tools, utilized by Contractor and Subcontractors.

1.15 PERIODIC VERIFIED REPORTS

A. The Contractor shall complete and submit the Final Verified Report required by DSA In addition to other conditions precedent to Final Payment, the Contractor's completion and submission of the Final Verified Report is an express condition precedent to the District's obligation to make the Final Payment. In addition to completion and submission of the Final Verified Report, as a material obligation under the Contract Documents, the Contractor shall comply all DSA requests for reports or other data relating to the Work, the status thereof or conformity of the Work to the Contract Documents.

PART 2 - PRODUCTS
Not Used.

PART 3 - EXECUTION
Not Used.

END OF SECTION 01311
SECTION 01312
PROJECT MEETINGS

PART 1 – GENERAL

1.1 RELATED DOCUMENTS
A. All Contract Documents shall be reviewed for applicable provisions related to the provisions in this document, and provisions in the General Conditions and Division 1 Specification Sections shall apply to this Section without limitation.

1.2 RELATED REQUIREMENTS SPECIFIED IN OTHER SECTIONS
A. Section 01010 – “Summary of Work”
B. Section 01400 – “Quality Control Requirements”
C. Section 01500 – “Temporary Facilities and Control”
D. Section 01770 – “Contract Closeout Procedures”

1.3 SUMMARY
A. This Section specifies administrative requirements and provides descriptions of the required project meetings for the Work and all Phases of the project. These meetings include, but not limited to, the following:
1. Preconstruction Meeting
2. Schedule Review Meetings
3. Weekly Project Progress Meetings
4. Progress Schedule and Application for Payment Meetings
5. Special Meetings

1.4 PRECONSTRUCTION CONFERENCE
A. District will schedule and conduct the Preconstruction Conference at a time and place to be determined.
B. Contractor and all major subcontractors shall attend the Preconstruction Conference. This includes, but is not limited to, the following:
1. Demolition Subcontractor
2. Structural Steel Subcontractor
3. Mechanical Subcontractor
4. Electrical Subcontractor
5. Plumbing Subcontractor
6. Hazardous Material Abatement Subcontractor
C. Meeting agenda will include, but is not limited to, discussion of the following items:
1. Schedules
2. Personnel and vehicle permit procedures
3. Use of premises
4. Location of Contractor’s on-Site facilities
5. Security
6. Housekeeping
7. Submittal and RFI procedures
8. Inspection and testing procedures, on-Site and off-Site
9. Utility shutdown procedures
10. Control and reference point survey procedures
11. Injury and Illness Prevention Program
12. Initial Schedule
13. Schedule of Values
14. Schedule of Submittals
15. Project Directory
16. Emergency Contact List

1.5 SCHEDULE OF VALUES AND INITIAL SCHEDULE MEETING
A. Contractor shall meet with District and Architect within 10 days of submittal of the draft Schedule of Values and Initial Schedule to review and evaluate the Schedule of Values and the Initial Schedule.

1.6 SHOP DRAWINGS & SUBMITTALS SCHEDULE MEETING
A. Contractor shall meet with District and Architect within 10 days of submittal of the draft Shop Drawings and Submittals Schedule to review and evaluate the Shop Drawings and Submittals Schedule.

1.7 WEEKLY PROGRESS MEETINGS
A. Weekly Progress Meetings will be scheduled throughout duration of Work and all phases of the project at a time acceptable to the District. Progress meetings will be held weekly unless otherwise directed by District.

1. Meetings shall be held at Project Manager’s on-site office unless otherwise directed by the District.

2. The Project Manager will prepare an agenda and distribute it 2 working Days in advance of meeting to Contractor.

3. The Architect will record meeting notes of the Weekly Progress Meeting. Within 3 working Days after the meeting, the Architect will distribute minutes to District via e-mail, and to those affected by decisions made at the meeting. Attendees can either submit comments or additions to the minutes within 3 working days. The minutes will constitute a final documentation of the results of meeting.
B. Progress meetings shall be attended by the Contractor’s project manager, project engineer, and job superintendent, District Project Manager, Architect and Engineers, the Inspector of Record, and others as appropriate to agenda topics for each meeting.

C. Agenda will contain the following items, as appropriate:
   1. Review, revise as necessary, and approve previous meeting minutes
   2. Review of Work progress since last meeting
   3. Status of Construction Work Schedule, delivery schedules, adjustments
   4. Submittal, RFI, and Change Order status
   5. Review of the Contractor’s safety program activities and results, including report on any serious injury and/or damage accidents
   6. Review of non-conforming Work (if any)
   7. Other items relating to or affecting progress of Work

1.7 BILLING MEETINGS
   A. See Section 01290, Payment Procedures

1.8 SPECIAL MEETINGS
   A. Contractor or District may call special meetings by notifying the desired participants. Notify District no less than 5 work days in advance, and provide the reason for the meeting. Special meetings may be held without advance notice in emergency situations.

   B. At any time during the progress of Work, District shall have authority to require Contractor to attend a meeting with any or all of the Subcontractors engaged in the Work or in other work, and notice of such meeting shall be duly observed and complied with by Contractor.

   C. Contractor shall schedule and conduct his own periodic coordination meetings as necessary to discharge coordination responsibilities.

   D. Contractor shall give District 5 work days written notice of his coordination meetings. Contractors shall maintain and distribute minutes of coordination meetings to District. Attendees shall have 3 work Days to submit comments or additions to minutes. Minutes will constitute final documentation of results of coordination meetings.

1.9 GUARANTEES/WARRANTIES, BONDS, AND SERVICE & MAINTENANCE CONTRACTS REVIEW MEETING
   A. Ten Months following date of final acceptance, Contractor to hold a meeting to review guarantees/warranties, bonds, and service maintenance contracts for materials and equipment. Implement repair or replacement of defective items, and extend service and maintenance contracts, as desired by District.

   B. Attending shall be:
      1. District Project Representatives
      2. Architect and Architect’s consultants, as appropriate
      3. DVC-Buildings & Ground Representatives
4. Contractor
5. Subcontractors, as appropriate
6. Others, as appropriate

PART 2 – PRODUCTS
Not Used

PART 3 – EXECUTION
Not Used

END OF SECTION 01312
PART 1 - GENERAL

1.1 RELATED DOCUMENTS
A. All Contract Documents shall be reviewed for applicable provisions related to the provisions in
this document, and provisions in the General Conditions and other Division 1 Specification
Sections shall apply to this Section without limitation.

1.2 RELATED DOCUMENTS SPECIFIED IN OTHER SECTIONS
A. Section 01010 – “Summary of Work”
B. Section 01290 – “Payment Procedures”
C. Section 01310 – “Construction Scheduling”
D. Section 01400 – “Quality Control Requirements”
E. Section 01770 – “Project Closeout Procedures”
F. Section 01780 – “Project Record Documents”
G. Section 01820 – “Demonstration and Training”

1.3 SUMMARY
A. This Section includes administrative and procedural requirements for submitting Shop
Drawings, Product Data, Samples, and other Submittals.

1.4 DEFINITIONS
A. Action Submittals, as used herein are written and/or graphic information that requires
Architect and/or District responsive action. Submittals may be rejected for not complying with
requirements. Prepare and submit Action Submittals as required by individual Specification
Sections.
B. Informational Submittals, as used herein are written and/or graphic information that does not
require Architect responsive action. Submittals may be rejected for not complying with
requirements. Prepare and submit Informational Submittals as required by individual
Specification Sections.
C. Manufactured, as used herein applies to standard units usually mass-produced, and
“fabricated” means items specifically assembled or made out of selected materials to meet
individual design requirements.
D. Submittal Descriptions: Submittals requirements are specified in the technical sections.
Submittals are identified by description as follows:
   1. Preconstruction Submittals, as used herein are submittals which are required following a
      Notice to Proceed and prior to commencing Work or any Phase of the Work on site.
      Examples include, but are not limited to:
      a. Certificates of insurance
b. Surety bonds
c. List of proposed products
d. Construction Schedule
e. Submittal Log (listing submittal schedule, including shop drawings and samples)
f. Schedule of prices
g. Safety plan
h. Waste Management Plan
i. Quality Control Plan
j. Others as required by the Contract Documents

2. Shop Drawings, as used herein are drawings, diagrams, schedules, and other data, which are prepared by Contractor, Subcontractors, manufacturers, fabricators, suppliers, or distributors illustrating some portion of the Work, and include: illustrations; fabrication, erection, layout and setting drawings; manufacturer’s standard drawings; schedules; descriptive literature, instructions, catalogs, and brochures; performance and test data including charts; wiring and control diagrams; and all other drawings and descriptive data pertaining to materials, equipment, piping, duct and conduit systems, and methods of construction as may be required to show that the materials, equipment, or systems and their position conform to the requirements of the Contract Documents.
   a. Shop drawings shall establish the actual detail of all manufactured or fabricated items, indicate proper relation to adjoining work, amplify design details of mechanical and electrical systems and equipment in proper relation to physical spaces in the structure, and incorporate minor changes of design or construction to suit actual conditions.

3. Product data, as used herein are catalog cuts, illustrations, standard schedules, performance charts, instructions, brochures, diagrams, and other information furnished by the Contractor to illustrate a material, product, or system for some portion of the Work. This includes samples of warranty language when the contract requires extended product warranties.

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

5. Design Data, as used herein are design calculations, mix designs, analyses or other data pertaining to a part of Work.

6. Test Reports, as used herein, include:
   a. Reports signed by authorized official of testing laboratory that a material, product or system identical to the material, product or system to be provided has been tested in accord with specified requirements. (Testing must have been within three years of date of contract award for the project.)
b. Reports which include findings of a test required to be performed by the Contractor on an actual portion of the work or prototype prepared for the project before shipment to job site.

c. Reports which include findings of a test made at the job site or on sample taken from the job site, on portion of work during or after installation.

d. Investigation reports.

e. Daily performance logs.

f. Manufacturer or Installer checklists.

g. Manufacturer's Factory or Field Reports, including documentation of the testing and verification actions taken by manufacturer at the factory or manufacturer's representative at the job site, in the vicinity of the job site, or on a sample taken from the job site, on a portion of the work, during or after installation, to confirm compliance with manufacturer's standards or instructions. The documentation must be signed by an authorized official of a testing laboratory or agency and must state the test results; and indicate whether the material, product, or system has passed or failed the test.

h. Final acceptance test and operational test procedure.

7. Manufacturer’s Instructions. Preprinted material describing installation of a product, system or material, including special notices, checklists, and Material Safety Data sheets concerning impedances, hazards and safety precautions.

8. Operation and Maintenance Data. Data that is furnished by the manufacturer or the system provider to the equipment operating and maintenance personnel, including manufacturer's help and product line documentation necessary to maintain and install equipment. This data is needed by District operating and maintenance personnel for the safe and efficient operation, maintenance and repair of the item. This data is intended to be incorporated in the Operations and Maintenance manual submittals.

9. Closeout Submittals. Documentation to record compliance with technical or administrative requirements in order to meet all requirements necessary to properly close out the Construction Contract. Also, submittal requirements necessary to properly close out a major phase of construction on a multi-phase contract. These include, but are not limited to:

   a. Record Drawings
   b. As-built drawings
   c. Others as required by the Contract Documents. See Section 01770 Contract Closeout Procedures.

1.5 PREPARATION AND FORMAT

A. Transmit each submittal, except sample installations and sample panels to the District Project Manager.

B. Transmit submittals with transmittal form prescribed by District and standard for the Project.
1. On the transmittal form identify Contractor, indicate date of submittal, and include information prescribed by transmittal form and required in paragraph entitled "Identifying Submittals." Process transmittal forms to record actions regarding sample[s].

C. Identifying Submittals: When submittals are provided by a Subcontractor, the Contractor shall prepare, review and stamp with Contractor’s approval stamp all specified submittals prior to submitting for District approval. Identify submittals, except sample installations and sample panels, with the following information permanently adhered to or noted on each separate component of each submittal and noted on transmittal form. Mark each copy of each submittal identically, with the following:

1. District Project Number and title.
2. Construction contract number.
3. Date of the drawings and revisions.
4. Product identification and location in project.
5. Name, address, and telephone number of subcontractor, supplier, manufacturer and any other second tier Contractor associated with submittal.
6. Section number of the specification section which requires the submittal.
7. When a resubmission, add numeric revision suffix on submittal description, for example, submittal 18 would become 18R1, to indicate resubmission.

D. Format for Shop Drawings

1. Shop drawings are not to be less than 8 1/2 by 11 inches nor more than 30 by 42 inches, except for full size patterns or templates. Prepare drawings to accurate size, with scale indicated, unless other form is required.
2. Drawings are to be suitable for reproduction and be of a quality to produce clear, distinct lines and letters with dark lines on a white background.
3. Present 8 1/2 by 11 inches sized shop drawings as part of the bound volume for submittals required by section. Present larger drawings in sets.
4. Include on each drawing the drawing title, number, date, and revision numbers and dates, in addition to information required in paragraph entitled "Identifying Submittals."
5. Number drawings in a logical sequence. Each drawing is to bear the number of the submittal in a uniform location adjacent to the title block. Place the District Project number and number in the margin, immediately below the title block, for each drawing.
6. Reserve a blank space on the right hand side of each sheet for the Architect’s disposition stamp.
7. Dimension drawings, except diagrams and schematic drawings and prepare drawings demonstrating interface with other trades to scale. Use the same unit of measure for shop drawings as indicated on the contract drawings. Identify materials and products for work shown.
8. Include the nameplate data, size and capacity on drawings. Also include applicable federal, military, industry and technical society publication references.

E. Format of Product Data and Manufacturer’s Instructions
1. Present product data submittals for each section as a complete, bound volume. Include table of contents, listing page and catalog item numbers for product data.

2. Indicate by prominent notation each product which is being submitted; indicate specification section number and paragraph number to which it pertains.

3. Supplement product data with material prepared for Project to satisfy submittal requirements for which product data does not exist. Identify this material as developed specifically for project, with information and format as required for submission of Certificates.

4. Include the manufacturer's name, trade name, place of manufacture, and catalog model or number on all product data. Also include applicable industry and technical society publication references. Should manufacturer's data require supplemental information for clarification, include such information in the submittal.

5. Where equipment or materials are specified to conform to industry and technical society reference standards of the organizations such as American National Standards Institute (ANSI), ASTM International (ASTM), National Electrical Manufacturer's Association (NEMA), Underwriters Laboratories (UL), and Association of Edison Illuminating Companies (AEIC), submit proof of such compliance. The label or listing by the specified organization will be acceptable evidence of compliance.

   a. In lieu of the label or listing, submit a certificate from an independent testing organization, competent to perform testing, and approved by the District Project Manager. State on the certificate that the item has been tested in accordance with the specified organization's test methods and that the item complies with the specified organization's reference standard.

6. Collect required data submittals for each specific material, product, unit of work, or system into a single submittal and marked for choices, options, and portions applicable to the submittal. Mark each copy of the product data identically. Partial submittals will not be accepted for expedition of construction effort.

7. Submit manufacturer's instructions prior to installation.

F. Format of Samples

1. Furnish samples in sizes below, unless otherwise specified or unless the manufacturer has prepackaged samples of approximately same size as specified:
   a. Sample of Equipment or Device: Full size.
   b. Sample of Materials Less Than 2 by 3 inches: Built up to 8 1/2 by 11 inches.
   c. Sample of Materials Exceeding 8 1/2 by 11 inches: Cut down to 8 1/2 by 11 inches and adequate to indicate color, texture, and material variations.
   d. Sample of Linear Devices or Materials: 10 inch length or length to be supplied, if less than 10 inches. Examples of linear devices or materials are conduit and handrails.
   e. Sample of Non-Solid Materials: Pint. Examples of non-solid materials are sand and paint.
   f. Color Selection Samples: 2 by 4 inches. Where samples are specified for selection of color, finish, pattern, or texture, submit the full set of available choices for the
material or product specified. Sizes and quantities of samples are to represent their respective standard unit.

g. Sample Panel: 4 by 4 feet.
h. Sample Installation: 100 square feet.

2. Samples Showing Range of Variation: Where variations in color, finish, pattern, or texture are unavoidable due to nature of the materials, submit sets of samples of not less than three units showing extremes and middle of range. Mark each unit to describe its relation to the range of the variation.

3. Reusable Samples: Incorporate returned samples into work only if so specified, indicated, or approved by Architect and District. Incorporated samples are to be in undamaged condition at time of use.

4. Recording of Sample Installation: Note and preserve the notation of area constituting sample installation but remove notation at final clean-up of project.

G. Format of Design Data and Certificates. Provide design data and certificates on 8 1/2 by 11 inches paper. Provide a bound volume for submittals containing numerous pages.

H. Format of Test Reports and Manufacturer's Field Reports
   1. Provide reports on 8 1/2 by 11 inches paper in a complete bound volume.
   2. Indicate by prominent notation, each report in the submittal. Indicate specification number and paragraph number to which it pertains.

I. Format of Operation and Maintenance Data shall comply with the requirements specified in Section 01785 Operation and Maintenance data for O&M Data format.

J. Format of Preconstruction Submittals and Closeout Submittals.
   1. When submittal includes a document which is to be used in Project or become part of Project Record, other than as a submittal, do not apply Contractor's approval stamp to document, but to a separate sheet accompanying document.
   2. Provide all dimensions in English units only.

1.6 QUANTITY OF SUBMITTALS

A. Number of Copies of Shop Drawings. Submit six (6) requiring review and approval by Architect or District.

B. Number of Copies of Product Data and Manufacturer's Instructions. Submit in compliance with quantity requirements specified for shop drawings.

C. Number of Samples.
   1. Submit two (2) samples, or three (3) sets of samples showing range of variation, of each required item. One approved sample or set of samples will be retained by District and one will be returned to Contractor.
   2. Submit one sample panel or provide one sample installation where directed. Include components listed in technical section or as directed.
   3. When required by Contract Documents, provide one sample installation where directed by Architect or District.
4. Submit one sample of non-solid materials.

D. Number of Copies Design Data and Certificates. Submit in compliance with quantity requirements specified for shop drawings.

E. Number of Copies Test Reports and Manufacturer’s Field Reports. Submit in compliance with quantity and quality requirements specified for shop drawings.

F. Number of Copies of Operation and Maintenance Data. Submit three (3) copies of O&M Data to the District Project Manager for review and approval.

G. Number of Copies of Preconstruction Submittals and Closeout Submittals. Unless otherwise specified, submit three (3) sets of administrative submittals.

1.7 SUBMITTALS, GENERAL

A. Contractor shall obtain and shall submit all required shop drawings, samples, technical data, and other submittals as required by the Contract Documents with such promptness as to cause no delay in its own Work or in that of any other contractor or subcontractor.

1. As required by the Contract Documents, the Contractor shall obtain and submit with shop drawings all seismic and other calculations, and all product data from equipment manufacturers.

B. Prepare a complete Submittal Log and maintain it as the Work progresses. Submit the initial Submittal Log for approval by District at the same time as the Initial Schedule (See Section 01310 Construction Scheduling). Include the Contractor’s anticipated submission dates and the approval needed dates (if approval is required).

1. Re-submit submittal log and annotate monthly by the Contractor with actual submission and approval dates. When all items on the log have been fully approved, no further re-submittal is required.

2. Carefully control procurement operations to ensure that each individual submittal is made on or before the Contractor scheduled submittal date shown on the approved "Submittal Log."

3. Except as specified otherwise, allow review period of at least fifteen (15) working days for submittals requiring Architect or District approval. Period of review for submittals requiring approval begins when District receives submittal from Contractor.

4. For submittals requiring review by fire protection engineer and/or DSA, allow review period, beginning when District receives submittal thirty (30) calendar days for return of submittal to the Contractor.

5. Period of review for each resubmittal is the same as for initial submittal.

C. The District may request submittals in addition to those specified when deemed necessary to adequately describe the work covered in the respective sections.

D. Units of weights and measures used on all submittals are to be the same as those used in the contract drawings.

E. Each submittal is to be complete and in sufficient detail to allow ready determination of compliance with contract requirements.
F. No extensions of time will be granted to Contractor or any Subcontractor because of its failure to have shop drawings, samples, product data and/or other required submittals submitted in accordance with the approved Submittal Log and Master Construction Schedule.

G. Each Subcontractor shall submit all shop drawings, samples, product data and other required submittals for the review by the District and the Architect through the Contractor.

H. By submitting shop drawings, samples, product data and other required submittals, the Contractor represents that it has determined and verified all materials, field measurements, catalog numbers, related field construction criteria, and other relevant data in connection with each such submission, and that it has checked, verified, and coordinated the information contained within such submittals with the requirements of the Work and of the Contract Documents, including the construction schedule.

I. Quality Control Certification. Stamp each sheet of each submittal with a quality control certifying statement, except that data submitted in bound volume or on one sheet printed on two sides may be stamped on the front of the first sheet only. When approving authority is Architect or District, Contractor shall certify submittals with the following certifying statement:

"I hereby certify that the (equipment) (material) (article) shown and marked in this submittal is that proposed to be incorporated with contract Number [_______], is in compliance with the Contract Documents, does not constitute an unapproved substitution, deviation, or variation, can be installed in the allocated spaces, and is submitted for District approval.

I further certify that I have reviewed and approved the field dimensions and the construction criteria, and have also made written notation regarding any information in the shop drawings that does not fully conform to the Contract Documents. This submittal has been coordinated with all other submittals received to date, and this duty of coordination has not been delegated to subcontractors, material suppliers, the Architect, or the Engineers on this project.

For the Contractor:

Certified by Submittal Reviewer _____________________, Date _______
(Signature)

Certified by QC Manager _____________________________, Date ______
(Signature)

J. Partial submittals are not acceptable, will be considered non-responsive, and will be returned without review by either District or Architect.

K. Mark each copy of each submittal to show which products and options are applicable.

L. The submission of the shop drawings, samples, product data and other required submittals, shall not deviate from the requirements of the Contract Documents including detailing and design intent which is specifically outlined in Contract Documents except as specifically authorized by the Architect or through an accepted substitution, per the requirements of the Contract Documents.

M. Deviations from the Contract Documents
1. Any deviations from the Contract Documents shall be fully described in a transmittal accompanying the shop drawings, samples, product data and other required submittals. However, such submittals shall not be used as a means of requesting a substitution, the procedure for which is defined elsewhere in the Contract Documents.

2. Architect and District approval is required for any proposed deviation from the accepted design which still complies with the Contract Documents before the Contractor is authorized to proceed with material acquisition or installation. If necessary to facilitate the project schedule, the Contractor and the Architect may discuss a submittal proposing a deviation with the District Project Manager prior to officially submitting it to the District. However, the District reserves the right to review the submittal before providing an opinion, if deemed necessary. In any case, the District will not formally agree to or provide a preliminary opinion on any deviation without either the Architect’s approval or recommended approval.

3. The District reserves the right to reject any deviation which may impact furniture, furnishings, equipment selections, and/or operations decisions that were made previously and based on the District reviewed and approved Project design.

4. Contractor is responsible for the dimensions and design of connection details and construction of work. Failure to point out deviations may result in the District requiring rejection and removal of such work at the Contractor’s expense.

5. After submittals have been accepted by the Architect, no resubmittal for the purpose of substituting materials or equipment will be considered unless accompanied by an explanation of why a substitution is necessary.

N. Review by District and Architect shall not relieve the Contractor or any Subcontractor from its responsibility in preparing and submitting proper submittals in accordance with the Contract Documents.

O. Any submission, which in Architect’s opinion is incomplete, contains errors, or been superficially checked will be returned by the Architect without review for resubmission by the Contractor.

P. Electronic copies of the stamped and signed Contract Documents will not be provided by District or Architect for Contractor’s use unless:
   1. Contractor shall first request and obtain written approval from Architect prior to use of any Architect’s CAD files, drawings, or other documents for submittal purposes.
   2. Contractor shall be responsible for all reproduction, printing, and delivery cost associated with the use of any requested drawings and/or CAD files.
   3. Contractor provides disclaimer letters to the Architect and District (15) working days in advance of any proposed use of Architect’s documents and/or digital files. Such disclaimer letter shall be in a form acceptable to Architect and District.
   4. Contractor shall not reuse any Architect’s documents and/or electronic files for submittal purposes without prior written approval.

Q. Coordinate preparation and processing of submittals with performance of construction activities.
1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.

2. Coordinate transmittal of different types of submittals for related parts of the Work so processing will not be delayed because of need to review submittals concurrently for coordination.
   a. Architect and Project Manager reserve the right to withhold action on, or return without review, a submittal requiring coordination with other submittals until all such related submittals are received. No extension of the Contract Time will be authorized.
   b. Architect and Project Manager will return incomplete submittals to the Contractor without review. No extension of Contract Time will be authorized due to incomplete Contractor submittals.

R. Submittals Schedule: Comply with requirements in Section 01310 (Construction Scheduling) in planning for required submittals and relating them to scheduled construction activities.
   1. Initial Review: Allow (15) working days for initial review of each submittal. Allow additional time if coordination with subsequent submittals is required. Architect will, through the Project Manager, advise Contractor when a submittal review must be delayed for coordination reasons.
   2. Intermediate Review: If intermediate submittal review is necessary, process it in the same manner as an initial submittal.
   3. Re-submittal Review: Allow (10) working days for review of each re-submittal.
   4. Sequential Review: Where sequential review of submittals by Architect’s consultants, District, or other parties is indicated, allow (15) working days for initial review of each submittal.

S. Re-submittals: Make re-submittals in same form and number of copies as initial submittal.
   1. Note date and content of previous submittal.
   2. Note date and content of revision in label or title block and clearly indicate extent of revision(s).
   3. Resubmit submittals until they are marked “No Exceptions Taken” or “Make Corrections Noted” by the Architect.

T. After submittals have been accepted by the Architect, no resubmittal for the purpose of substituting materials or equipment will be considered unless accompanied by an explanation of why a substitution is necessary.

1.8 ARCHITECT’S REVIEW

A. Architect’s review is for general conformance with design concept only, and does not relieve Contractor in any way from compliance with Contract Documents, nor does it in any way constitute grounds for a Change Order. Contractor remains solely responsible for details and accuracy of all quantities and dimensions, and selection of fabrication and/or installation processes.

B. The Architect’s review shall neither be construed as a complete check which relieves the Contractor, Subcontractor, manufacturer, fabricator, or supplier from responsibility for any
deficiency that may exist or from any departures or deviations from the requirements of the
Contract Documents unless the Contractor has, in writing, called the Architect’s attention to
the deviations at the time of submission.

C. The Architect’s review shall not relieve the Contractor or Subcontractors from responsibility for
errors of any sort in any required submittals, for proper fitting of the Work, coordination of the
differing subcontractor trades, and Work which is not indicated on any submittal at the time of
submission.

D. In reviewing shop drawings, samples, product data and other required submittals, the Architect
will not verify dimensions and field conditions.

E. The Architect will review and approve shop drawings, samples, product data and other
required submittals for aesthetics and for conformance with the design concept of the Work
and the Contract Documents.

F. Architect will review each submittal, make marks to indicate corrections or modifications
required, and return it.

G. Contractor and Subcontractors shall be solely responsible for any quantities which may be
shown on either the submittals or the Contract Documents.

H. Architect will not review submittals that do not bear Contractor’s approval stamp and will
return them to the Contractor without review.

I. Architect will stamp each submittal appropriately to indicate action to be taken, as follows:
1. No Exceptions Taken: Work covered by submittal may proceed provided it complies with
   the requirements of the Contract Documents. Compliance with Contract Documents is a
   condition of acceptance of the Work.
2. Make Corrections Noted: Work covered by the submittal may proceed provided it
   complies with Architect and or Engineer notations and/or corrections. Contractor shall
   make all noted corrections. Compliance with Contract Documents is a condition of
   acceptance of the Work.
3. Revise and Resubmit: Do not proceed with any Work covered by the submittal, including
   purchasing, fabrication, delivery, or other activity. Revise the submittal in accordance
   with Architect and/or Engineer notations and resubmit without delay. Repeat if
   necessary.
4. Rejected. See Remarks: Do not proceed with Work covered by the submittal, including
   purchasing, fabrication, delivery, or other activity. Prepare a new submittal in accordance
   with Architect/Engineer’s notations and resubmit without delay.

J. Use of Submittals for Construction: Use only final submittals with Architect’s mark indicating
“No Exceptions Taken” or “Make Corrections Noted.”

K. Informational Submittals: Architect will review each submittal but will not return it, or will
return it if it does not comply with requirements. Architect will forward each submittal to
appropriate party.

1.9 REJECTED SUBMITTALS

A. Contractor shall make corrections required by the Architect and resubmit.
B. If the Contractor considers any correction or notation on the returned submittals to constitute a change to the contract drawings or specifications, he shall provide notice to the Architect and District.

C. If changes are necessary to submittals, the Contractor shall make such revisions and submission of the submittals in accordance with the procedures above. No item of work requiring a submittal change is to be accomplished until the changed submittals are approved.

1.10 NO EXCEPTIONS TAKEN OR MAKE CORRECTIONS NOTED SUBMITTALS

A. Acceptance will not relieve the Contractor of the responsibility for any error which may exist, as the Contractor is responsible for the satisfactory construction of all work.

1.11 NO EXCEPTIONS TAKEN OR MAKE CORRECTIONS NOTED SAMPLES

A. Acceptance of a sample is only for the characteristics or use named in such acceptance and is not be construed to change or modify any contract requirements. Before submitting samples, the Contractor to assure that the materials or equipment will be available in quantities required in the project. No change or substitution will be permitted after a sample has been accepted.

B. Match the accepted samples for Materials and equipment incorporated in the work. If requested, accepted samples, including those which may be damaged in testing, will be returned to the Contractor, at his expense, upon completion of the contract. Samples not accepted will also be returned to the Contractor at its expense, if so requested. Failure of any materials to pass the specified tests will be sufficient cause for refusal to consider, under this contract, any further samples of the same brand or make of that material. District reserves the right to disapprove any material or equipment which previously has proved unsatisfactory in service.

C. Samples of various materials or equipment delivered on the site or in place may be taken by the District Project Manager for testing. Samples failing to meet contract requirements will automatically void previous acceptance, and Contractor shall replace such materials or equipment at Contractor expense to meet contract requirements.

D. Acceptance of the Contractor's samples by the AOR or District does not relieve the Contractor of his responsibilities under the contract.

1.12 WITHHOLDING OF PAYMENT

A. Payment for materials incorporated in the work will not be made if required approvals have not been obtained.

B. No payment for materials incorporated in the work will be made if all required Designer of Record or required District approvals have not been obtained.

C. No payment will be made for any materials incorporated into the work for any conformance review submittals or information only submittals found to contain errors or deviations from the Solicitation or Accepted Proposal.

1.13 SUBMITTAL REQUIREMENTS

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

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

3. **Corrections.** The Contractor shall make all corrections required by Architect and shall resubmit, as required by Architect, corrected copies and digital files of shop drawings or new samples until approved. Contractor shall direct specific attention in writing or on resubmitted shop drawings to revisions other than the corrections required by the Architect on previous submissions. Professional services required for more than one (1) re-review of required submittals of shop drawings, product data, or samples are subject to charge to the Contractor by the District.

4. **Approval Prior to Commencement of Work.** No portion of the Work requiring a shop drawing or sample submission or other submittal shall be commenced until the submission has been reviewed by Contractor and Architect and approved by Architect unless specifically directed in writing by the Architect. All such portions of the Work shall be in accordance with approved shop drawings and samples.

5. **Do not base Shop Drawings on reproductions of the Contract Documents or standard printed detail.**

6. **Fully illustrate requirements of the Contract Documents.** Include the following information, as applicable:
   a. Dimensions
   b. Weights and measures
   c. Identification of products
   d. Fabrication and installation drawings
   e. Roughing-in and setting diagrams
   f. Wiring diagrams showing field-installed wiring, including power, signal, and control wiring
   g. Electrical power requirements
   h. Shopwork manufacturing instructions
i. Templates and patterns
j. Schedules
k. Design calculations
l. Compliance with specified standards
m. Notation of coordination requirements
n. Notation of dimensions established by field measurement
o. Relationship to adjoining construction clearly indicated
p. Seal and signature of California professional engineer or other engineer if specified
q. Wiring Diagrams: Differentiate between manufacturer-installed and field-installed wiring
r. Other information as necessary or required by the Contract Documents

B. Samples

1. Samples Required. In case a considerable range of color, graining, texture, or other characteristics are anticipated in finished products, a sufficient number of samples of the specified materials shall be furnished by the Contractor to indicate the full range of characteristics which will be present in the finished products; and products delivered or erected without submittal and approval of a full range of samples shall be subject to rejection by the District.
   a. Except for range samples, and unless otherwise called for in the various sections of the Specifications, samples shall be submitted in duplicate.
   b. All samples shall be marked, tagged, or otherwise properly identified with the name of the submitting party, the name of the Project, the purpose for which the samples are submitted and the date, and shall be accompanied by a letter of transmittal containing similar information, together with the Specification section number. Each tag or sticker shall have clear space for the review stamps of Contractor and Architect.

2. Labels and Instructions. All samples of materials shall be supplied with the manufacturer’s descriptive labels and application instructions.

3. Architect’s Review. The Architect will review and, if appropriate, approve submissions and will return them to the Contractor with the Architect’s stamp and signature applied thereto, indicating the timing for review and appropriate action in compliance with the Contract Documents.

4. Identification: Attach label on unexposed side of Samples that includes the following information:
   a. Generic description of Sample
   b. Product name and name of manufacturer
   c. Sample source
   d. Number and title of appropriate Specification Section
   e. District Project name and number
   f. Contractor’s name
g. Date of submittal

5. Disposition: Maintain sets of all approved Samples at Project site, available for quality-control comparisons throughout the course of the Project. Sample sets may be used to determine final acceptance of construction associated with each sample or sample set.
   a. Samples that may be incorporated into the Work are indicated in individual Specification Sections. Such Samples must be in an undamaged condition at time of use.
   b. Samples not incorporated into the Work, if any, or otherwise designated as District’s property, are the property of Contractor.

6. Samples for Initial Selection: Submit manufacturer’s color charts consisting of units or sections of units showing the full range of colors, textures, and patterns available.
   a. Number of Samples: Submit 6 full sets of available choices where color, pattern, texture, or similar characteristics are required to be selected from manufacturer’s product line.

7. Samples for Verification: Where required by the Contract Documents, submit full-size units of Samples, prepared from the same material to be used for the Work, cured and finished in manner specified, and physically identical with material or product proposed for use, and that show full range of color and texture variations expected. Samples include, but are not limited to, the following: partial sections of manufactured or fabricated components; small cuts or containers of materials; complete units of repetitively used materials; swatches showing color, texture, and pattern; color range sets; and components used for independent testing and inspection.
   a. Number of Samples: Unless indicated otherwise, submit six sets of Samples. Architect will retain two Sample sets; remaining four sets will be returned.
      i) Submit a single Sample where assembly details, workmanship, fabrication techniques, connections, operation, and other similar characteristics are to be demonstrated.
      ii) If variation in color, pattern, texture, or other characteristic is inherent in material or product represented by Sample, submit at least four sets of paired units that show approximate limits of variations.

8. District’s Property. All shop drawings, computer disks, annotated specifications, samples, and other submittals shall become the District’s property upon receipt by the District or Architect.

C. Other Submittals

1. General: Prepare and submit Submittals required by other Specification Sections.
   a. Test and Inspection Reports: Comply with requirements specified in Section 01400 Quality Control Requirements.
   b. Coordination Drawings: Comply with requirements specified in Section 01311 Project Management and Coordination.
      i) Coordination Drawings are required where limited space availability necessitates maximum utilization of space for efficient installation of different
components or if coordination is required for installation of products and materials fabricated by separate entities.

2. **Product Data:** Submit manufacturer’s printed literature in original form as required in the Contract Documents. Submittal shall include specifications, physical dimensions, and ratings of all equipment. Furnish performance curves for all fans and pumps. Where printed literature describes items in addition to that item being submitted, submitted item shall be clearly marked on submittal and superfluous information shall be crossed out in the same manner on all copies. Equipment submittals shall be complete and include space requirements, weight, electrical and mechanical requirements, performance data, and any supplemental information that may be available or requested.

3. **Qualification Data:** Prepare written information that demonstrates capabilities and experience of firm or person. Include lists of completed projects with project names and addresses, names and addresses of architects and owners, and other information specified.

4. **Welding Certificates:** Prepare written certification that welding procedures and personnel comply with requirements in the Contract Documents. Submit record of Welding Procedure Specification (WPS) and Procedure Qualification Report (PQR) on AWS forms. Include names of firms and personnel certified.

5. **Installer Certificates:** Prepare written statements on manufacturer’s letterhead certifying that Installer complies with requirements in the Contract Documents and, where required, is authorized by manufacturer for this specific Project.

6. **Manufacturer Certificates:** Prepare written statements on manufacturer’s letterhead certifying that product complies with requirements in the Contract Documents.

7. **Material Certificates:** Prepare written statements on manufacturer’s letterhead certifying that material complies with requirements in the Contract Documents.

8. **Material Test Reports:** Prepare reports written by a qualified testing agency, on testing agency’s standard form, indicating and interpreting test results of material for compliance with requirements in the Contract Documents.

9. **Product Test Reports:** Prepare written reports indicating current product produced by manufacturer complies with requirements in the Contract Documents. Base reports on evaluation of tests performed by manufacturer and witnessed by a qualified testing agency, or on comprehensive tests performed by a qualified testing agency.

10. **Research/Evaluation Reports:** Prepare written evidence, from a model code organization acceptable to authorities having jurisdiction, that product complies with building code in effect for Project. Include the following information:
    a. Name of evaluation organization
    b. Date of evaluation
    c. Time period when report is in effect
    d. Product and manufacturer’s names
    e. Description of product
    f. Test procedures and results
    g. Limitations of use
11. Schedule of Tests and Inspections: Comply with requirements specified in Section 01400 Quality Control Requirements.

12. Preconstruction Test Reports: Prepare test reports written by a qualified testing agency, on testing agency’s standard form, indicating and interpreting results of tests performed before installation of product, for compliance with performance requirements in the Contract Documents.

13. Compatibility Test Reports: Prepare test reports written by a qualified testing agency, on testing agency’s standard form, indicating and interpreting results of compatibility tests performed before installation of product. Include written recommendations for primers and substrate preparation needed for adhesion.

14. Field Test Reports: Prepare reports written by a qualified testing agency, on testing agency’s standard form, indicating and interpreting results of field tests performed either during installation of product or after product is installed in its final location, for compliance with requirements in the Contract Documents.

15. Maintenance Data: Prepare written and graphic instructions and procedures for operation and normal maintenance of products and equipment. Comply with requirements specified in Section 01785 (Operation and Maintenance Data.)

16. Manufacturer’s Installation and Operations Instructions: Prepare written or published information that documents manufacturer’s recommendations, guidelines, and procedures for installing or operating a product or equipment. Manufacturer’s Instructions shall be available for review on site at all times. Include name of product and name, address, and telephone number of manufacturer. Include the following, as applicable:
   a. Preparation of substrates
   b. Required substrate tolerances
   c. Sequence of installation or erection
   d. Required installation tolerances
   e. Required adjustments
   f. Recommendations for cleaning and protection

17. Manufacturer’s Field Reports: Prepare written information documenting factory-authorized service representative’s tests and inspections. Include the following, as applicable:
   a. Name, address, and telephone number of factory-authorized service representative making report.
   b. Statement on condition of substrates and their acceptability for installation of product.
   c. Statement that products at Project site comply with requirements.
   d. Summary of installation procedures being followed, whether they comply with requirements and, if not, what corrective action was taken.
   e. Results of operational and other tests and a statement of whether observed performance complies with requirements.
f. Statement whether conditions, products, and installation will affect warranty.
g. Other required items indicated in individual Specification Sections.

PART 2 - PRODUCTS: Not Used

PART 3 - EXECUTION: Not used

END OF SECTION 01330
SECTION 01340
ADMINISTRATIVE FORMS & LOGS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. All Contract Documents shall be reviewed for applicable provisions related to the provisions in this document, and provisions in the General Conditions and other Division 1 Specification Sections shall apply to this Section without limitation.

1.2 RELATED REQUIREMENTS SPECIFIED IN OTHER SECTIONS

A. Section 01140 – “Work Restrictions”
B. Section 01290 – “Payment Procedures”
C. Section 01310 – “Construction Scheduling”
D. Section 01311 – “Project Management and Coordination”
E. Section 01330 – “Submittal Procedures”
F. Section 01625 - “Product Options and Substitutions”
G. Section 01780 – “Project Record Documents”

1.3 SUMMARY

A. This section specifies the information and format requirements for administrative forms and logs.

1.4 ADMINISTRATIVE FORMS & LOGS

A. Administrative forms and logs include, but are not limited to, the following:
   1. Transmittal Form
   2. Submittal Transmittal Form
   3. Request for Information Form
   4. Substitution Request Form
   5. 3-Week Projected Construction Schedule Form
   6. 3-Week Testing & Inspection Schedule Form
   7. Proposed Change Order Form*
   8. Change Order Form*
   9. Request for Information Log Form
   10. Submittal Log Form
   11. Proposed Change Order Log Form
   12. Change Order Log Form
13. Contractor’s Proposal for Contract Modification Form* (includes sample numbers to demonstrate calculations only)
14. Contractor Production Report
15. Construction Directive*

B. Forms generated by project management software may be substituted if substitution forms contain essentially the same information as shown in these Contract Documents. Allowance for the use of substitute forms is at the sole discretion of the District, and shall be requested and approved before use of the substitute form. Forms marked with an asterisk (*) may NOT be substituted under any condition.

C. Microsoft Excel files of these forms are available for Contractor use from the District.

1.5 FORMS INCORPORATED BY REFERENCE

A. Not Used

1.6 CONTRACTOR RESPONSIBILITIES

A. Nothing in this Section 01340 including, but not limited to the above forms and log forms shall be construed to limit, relieve, or release Contractor from liability to District for any damages sustained as a result of inaccurate or incorrect information supplied by the Contractor.

PART 2 - PRODUCTS
Not Used.

PART 3 - EXECUTION
Not Used.

END OF SECTION 01340
SECTION 01400
QUALITY CONTROL REQUIREMENTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS
A. All Contract Documents shall be reviewed for applicable provisions related to the provisions in this document, and provisions in the General Conditions and other Division 1 Specification Sections shall apply to this Section without limitation.

1.2 RELATED REQUIREMENTS SPECIFIED IN OTHER SECTIONS
A. Section 01010 – “Summary of Work”
B. Section 01311 – “Project Management and Coordination”
C. Section 01330 – “Submittal Procedures”
D. Section 01410 – “Regulatory Requirements”
E. Section 01412 – “Regulatory Requirements – Hazardous Material”

1.3 SUMMARY
A. This Section includes Administrative and Procedural Requirements for Quality Control and Quality Assurance Services includes, but not limited to, the followings:
   1. Quality assurance and control of installation
   2. References
   3. Mock-ups
   4. Inspection and testing laboratory services
   5. Manufacturers’ field services and reports
   6. Field sample
   7. Conflicts

1.4 QUALITY ASSURANCE/CONTROL OF INSTALLATION
A. Monitor quality control over suppliers, manufacturers, products, services, site conditions and workmanship, to produce Work of specified quality.
B. Comply fully with manufacturer’s written instructions, including each step in sequence.
C. When manufacturers' instructions conflict with Contract Documents, request clarification from District's Representative before proceeding.

D. Comply with specified standards as a minimum quality for the Work except when more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.

E. All Work shall be performed by persons qualified to produce workmanship of specified quality.

F. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion or disfigurement.

G. Contractor's Line of Authority: Contractor shall provide one person who shall be both knowledgeable and responsible for all work to be performed on the Project at all times during normal work hours. In Contractor’s absence, Contractor’s appointed representative shall be responsible for all directions given him and said directions shall be binding as if given to the Contractor. Contractor’s representative shall be responsible to coordinate all Work to be performed on the Project.

H. Shop and field work shall be performed only by mechanics skilled and experienced in the fabrication and installation of the work involved. All work on this Project shall be done in accordance with the best practices of the various trades involved and in accordance with the Contract Documents, approved shop drawings and these specifications.

I. All work shall be erected and installed plumb, level, square and true and in proper alignment and relationship to the work of other trades. All finished work shall be free from defects. The District’s Representatives reserve the right to reject any materials and workmanship that are not considered to be of the highest standards of the trades involved. Any such inferior material or workmanship shall be removed and replaced at no additional cost or time impact to the District.

J. The specifications and recommendations of the manufacturer whose materials are used shall be strictly adhered to during the application or installation of materials. Manufacturer’s specifications, installation instructions, and testing and startup directions shall be available for inspection on Site.

K. Any additional work beyond that specified or illustrated in the Contract Documents, or any modification thereto, that is necessary to obtain the guarantees specified in the Contract Documents shall be provided by the Contractor without any additional cost or time impact to the District.

1.5 REFERENCES

A. Conform to reference standards in force on the most recent date of issue of the approved Contract Documents.

B. When specified reference standards conflict with Contract Documents, request clarification from District’s Representative before proceeding.

C. The contractual relationship of the parties to the Contract shall not be altered from the Contract Documents by mention or inference otherwise in any reference document.

D. The Contractor shall be responsible for being current and knowledgeable for all building codes involved for all trades under his direction.
E. Provide all work and materials in full in accordance with the latest applicable Rules and Regulations of the California Code of Regulations Title 24 Building Code Standards, the State Fire Marshal, Safety Orders of the Division of Industrial Safety, and any other applicable laws or regulations. Nothing in these plans or specifications is to be construed to permit Work not conforming to these Codes.

F. American Society for Testing and Materials (ASTM):

   1. 29 CFR 1910, Subpart A, Section 1910.7: Definitions and Requirements for a National Recognized Testing Laboratory.

H. NIST: National Institute of Standards and Technology.

I. Furnish all material and labor required to comply with these Rules and Regulations without any additional cost to District.

1.6 MOCK-UPS

A. Assemble and erect specified items with specified attachment and anchorage devices, flashings, seals and finishes.

B. Where mock-up is specified in individual Sections to be removed, clear area after mock-up has been accepted by District’s Representative.

C. Mock-ups: Full-size, physical assemblies that are constructed on site. Mockups are used to verify selections made under sample submittals, to demonstrate aesthetic effects and, where indicated, qualities of materials and execution, and to review construction, coordination, testing, or operation; they are not Samples. Approved mockups establish the standard by which the Work will be judged.

D. Laboratory Mockups: Full-size, physical assemblies that are constructed at testing facility to verify performance characteristics.

E. Before installing portions of the Work requiring mockups, build mockups for each form of construction and finish required to comply with the following requirements, using materials indicated for the completed Work.
   1. Contractor shall build mockups in location and of size indicated, or if not indicated, as directed by Architect.
   2. Notify District and Architect five (5) working days in advance of dates and times when mockups will be constructed.
   3. Contractor shall demonstrate the complete range of aesthetic effects, details, and workmanship for the Work they represent.

1.7 INSPECTION AND TESTING LABORATORY SERVICES

A. See Section 01411 Testing Laboratory Services
1.8 MANUFACTURERS’ FIELD SERVICES AND REPORTS

A. Submit qualifications of observer to District and Architect 30 days in advance of required observations.

B. When specified in individual Specification Sections, require material or product suppliers or manufacturers to provide qualified staff personnel to observe site conditions, conditions of surfaces and installation, quality of workmanship, start-up of equipment, testing, adjusting, and balancing of equipment as applicable, and to provide instructions when necessary.

C. Manufacturer’s Field Representatives shall report to the Contractor and the District, any observations, site decisions, or instructions given to applicators or installers that are supplemental or contrary to manufacturers' written instructions.

D. Provide five (5) sets of Manufacturer’s Field Representative report to District and Architect for review within 10 days of field observation.

E. Manufacturer’s Field Service: Where indicated, engage a factory-authorized service representative to inspect field-assembled components and equipment installation, including service connections. Report results in writing as specified in Section 01330 (Submittal Procedures.)

1.9 FIELD SAMPLES

A. Install field samples at the site for District and Architect review as required by individual Specifications Sections.

B. Samples accepted by the Architect in writing represent the quality level required for the Work.

C. Where a field sample is specified in individual sections to be removed, clear area after field sample has been accepted by Architect.

1.10 PROJECT INSPECTOR

A. District will employ a Project Inspector in accordance with the regulations of the DSA and subject to the provision of Part 1, Title 24, CCR.

B. Project Inspector’s authority, rights and duties shall be as set forth in Section 4-342, Part 1, Title, 24, CCR.

C. The Project Inspector shall make semi-monthly reports in writing to the Architect with copies forwarded to District, Project Manager, and the DSA in accordance with Section 4-337, Part 1, Title 24, CCR.

D. The Project Inspector shall notify the Division of the State Architect:
   1. When work is started on project.
   2. Minimum (2) working days in advance of time when foundation trenches will be complete and ready for footing forms.
   3. Minimum (2) working days in advance for first placing of concrete.
   4. When work is suspended for period of more than two weeks.

E. The Project Inspector shall keep records of certain phases of construction that shall be maintained on the project site until completion. Upon completion, these records shall be
copied, with the original delivered to the District for the permanent school records and the copy forwarded to the Architect. The record shall include, but is not limited, to the following:

1. The time and placing of concrete and the time and date of removal of forms in each portion of the structure.
2. Weighmasters tickets delivered with each load of concrete delivered to site.
3. Identification marks of welders, lists of defective welds, and manner of correction of defects.
4. Certification of grounding of electrical system.

F. The Project Inspector shall monitor the work of Special Inspectors and testing laboratories to ensure testing program is satisfactorily completed.

G. The Project Inspector shall notify the Contractor in writing of deviations from Contract Documents. Copies of such notice shall be forwarded immediately to the Architect, Project Manager, District and the Division of the State Architect (DSA).

H. The Project Inspector shall make and submit Verified Reports in accordance with Section 4-336, Part 1, Title 24, CCR. Verified Reports shall be submitted directly to the Division of the State Architect with a copy forwarded to the Architect.

I. The Project Inspector shall prepare detailed statements of fact regarding materials, operations and other related issues when requested by the Construction Manager. Such statements shall be submitted directly to the Construction Manager with a copy forwarded to the Architect.

J. The District may employ roofing and waterproofing specialist, in addition to the Project Inspector to inspect and monitor application of roofing, waterproofing, and related flashings.

K. Contractor shall cooperate with all Project inspectors. Provide access to the work at all times whether it is in preparation or progress. Provide proper facilities for access and inspection.

L. Perform work with the knowledge of the Inspectors. Cover no work prior to inspection.

M. Notify Inspectors in writing at least (2) working days prior to expected time for operations requiring inspection.

N. If work is performed on Saturdays, Sundays, Holidays or beyond normal working hours, the Inspectors will be paid at overtime rates by the District. The cost of the Inspectors’ premium time will be deducted by the District from the Contract Sum by Change Order.

O. The Contractor shall pay the cost of the Inspector’s salary for the time the Inspector is required on the project beyond the allotted Contract Time. The cost of the Inspector’s salary shall be in addition to liquidated damages outlined in Supplementary Conditions and will be deducted by the District from the Contract Sum by Change Order.

1.11 INSPECTION BY THE DIVISION OF THE STATE ARCHITECT

A. Not Used
1.12 CONFLICTS

A. Contractor shall comply with rules of documents interpretation as indicated in Contract General Conditions including, but not limited to the following items:

1. Contract Documents take precedence over statutory requirements or standard when requiring materials of higher quality or performance, or larger sizes or capacity, or greater protection, safety or quantity than required by said codes or standards.

2. This shall not operate to allow deviations from code requirements, prior approvals and other provisions as specified.

3. Modifications to published statutory requirements currently adopted or enforced by regulating agencies having jurisdiction shall take precedence over said published requirements.

B. Conflicts within Contract Documents and/or between Project Manual (including specifications) Drawings, Addenda: The more stringent requirement shall govern.

C. Subcontractor, supplier, and installer work may be called for in any section of the Contract Documents; Project Manual Specifications, Drawings and Addenda. Work by any one discipline is not limited to any specification section of the Project Manual, Drawings, Addenda, and Contract Documents shall be bid in total and not in parts.

D. If compliance with two or more standards is specified and the standards establish different or conflicting requirements for minimum quantities or quality levels, comply with the most stringent requirement. Refer uncertainties and requirements that are different, but apparently equal, to Architect for a decision before proceeding. Contractor shall, within (15) working days, notify the Architect in writing for the context of requirements.

E. Minimum Quantity or Quality Levels: The quantity or quality level shown or specified shall be the minimum provided or performed. The actual installation may comply exactly with the minimum quantity or quality specified, or it may exceed the minimum within reasonable limits. To comply with these requirements, indicated numeric values are minimum or maximum, as appropriate, for the context of requirements. Contractor shall, within (15) working days, notify any uncertainties to the Architect and District for a decision before proceeding.

1.13 QUALITY ASSURANCE

A. General: Qualifications requirements in this Article establish the minimum qualification levels required; individual Specification Sections specify additional requirements.

B. Installer Qualifications: A firm or individual with experience in installing, erecting, or assembling work similar in material, design, and extent to that indicated for this Project, whose work has resulted in construction with a record of successful in-service performance.

1. Minimum Experience: 5 years or 5 similar projects, unless indicated otherwise.

C. Manufacturer Qualifications: A firm experienced in manufacturing products or systems similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.
D. Fabricator Qualifications: A firm experienced in producing products similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.

E. Professional Engineer Qualifications: A professional engineer who is legally qualified to practice in jurisdiction where Project is located and who is experienced in providing engineering services of the kind indicated. Engineering services are defined as those performed for installations of the system, assembly, or product that is similar to those indicated for this Project in material, design, and extent.

F. Testing Agency Qualifications: An NRTL, an NVLAP, or an independent agency with the experience and capability to conduct testing and inspecting indicated, as documented according to ASTM E 548; and with additional qualifications specified in individual Sections; and acceptable to authorities having jurisdiction.

1. NRTL: A nationally recognized testing laboratory according to 29 CFR 1910.7.
2. NVLAP: A testing agency accredited according to NIST’s National Voluntary Laboratory Accreditation Program.

G. Factory-Authorized Service Representative Qualifications: An authorized representative who is trained and approved by manufacturer to inspect installation of manufacturer’s products that are similar in material, design, and extent to those indicated for this Project.

H. Preconstruction Testing: Where testing agency is indicated to perform preconstruction testing for compliance with specified requirements for performance and test methods, comply with the following:

1. Contractor responsibilities include:
   a. Provide test specimens representative of proposed products and construction.
   b. Submit specimens in a timely manner with sufficient time for testing and analyzing results to prevent delaying the Work.
   c. Provide sizes and configurations of test assemblies, mockups, and laboratory mockups, to adequately demonstrate capability of products to comply with performance requirements.
   d. Build site-assembled test assemblies and mockups using installers who will perform same tasks for Project.
   e. Build laboratory mockups at testing facility using personnel, products, and methods of construction indicated for the completed Work.
   f. When testing is complete, remove test specimens, assemblies, mockups, and laboratory mockups; do not reuse products on Project.

2. Testing Agency Responsibilities: Submit a certified written report of each test, inspection, and similar quality-assurance service to Architect with copy to Contractor. Interpret tests and inspections and state in each report whether tested and inspected work complies with or deviates from the Contract Documents.

I. Pre-work Meetings: The Contractor shall hold and document Pre-work Meetings for Subcontractors at least 3 work days prior to Subcontractors beginning work at the site for the first time. A copy of the completed New Subcontractor Preparatory Phase Checklist for each Pre-work Meeting shall be provided as an attachment to the Daily Report for that day, with a
sign-in sheet for all persons that were present at the meeting. The Checklist is provided at the end of this section.

1. The Pre-work Meeting shall be conducted in order to review and confirm the requirements of the Work per the Contract Documents, coordinate the Work, identify required tests and inspections, and establish a goal to obtain quality construction by planning ahead and identifying potential problems.

2. Notify the Construction Manager and the District Project Manager at least three (3) work days in advance of each Pre-work Meeting. Conduct the Pre-work Meeting with the superintendent and the foreman responsible for the work and any District representatives that wish to attend.

3. Go over the following at the Pre-work Meeting prior to allowing a Subcontractor to begin work on site:
   a. Review the General Conditions and other Contract Specifications governing work at the Project location. Review rules governing use of workspace, parking, laydown areas, conduct of employees, and access to and from the worksite.
   b. Review the Project Preconstruction Meeting Minutes and review pertinent portions with the new Subcontractor.
   c. Review each paragraph of the applicable technical specification sections;
   d. Review the contract drawings;
   e. Verify that appropriate shop drawings and submittals for materials and equipment have been submitted and approved. Verify receipt of approved factory test results, when required;
   f. Review the testing plan and ensure that provisions have been made to provide the required testing;
   g. Examine the work area to ensure that the required preliminary work has been completed;
   h. Examine the required materials, equipment and sample work to ensure that they are on hand and conform to the approved shop drawings and submitted data;
   i. Review the Contractor’s approved Site Safety Plan and appropriate Activity Hazard review to ensure that applicable safety requirements are met, and that required Material Safety Data Sheets (MSDS) are submitted;
   j. Establish the quality of workmanship required;
   k. Discuss specific controls used and the construction methods and the approach that will be used to provide quality construction by planning ahead and identifying potential problems for each definable feature of work.

1.14 QUALITY CONTROL, GENERAL

A. District will provide inspections, tests, and similar quality control services specified to be performed by independent agencies, except where indicated as Contractor’s responsibility. Costs for District-provided inspections and tests are not included in Contract Sum.
1. District will furnish Contractor with names, addresses, and telephone numbers of testing agencies engaged and description of types of testing and inspecting they are engaged to perform.

2. Costs for retesting and re-inspecting construction that replaces or is necessitated by work that failed to comply with the Contract Documents will be charged to Contractor, and the Contract Sum will be adjusted by Change Order.

B. Where tests and inspections are indicated as Contractor’s cost and/or responsibility, provide quality-control services specified and those required by authorities having jurisdiction. Perform quality-control services required of Contractor by authorities having jurisdiction, whether specified or not.

1. Where services are indicated as Contractor’s responsibility, engage a qualified testing agency to perform these quality-control services.
   a. Contractor shall not employ same entity engaged by District, unless agreed to in writing by District.

2. Testing of equipment, systems, components, assemblies, and other non-structural elements of the Work that require testing shall be performed in accordance with the Contract Documents and Manufacturer’s recommended testing protocols. The Contractor shall submit Manufacturer’s Installation Instructions and Manufacturer’s recommended tests in accordance with Section 01330, Submittal Procedures, prior to installation and testing of equipment, systems, components, assemblies, and other non-structural elements of the Work. Test results shall be recorded and submitted original Manufacturer’s documents.

3. Notify Project Inspector and testing agencies, at least (5) working days or as indicated otherwise in advance of time when Work that requires testing or inspecting will be performed.

4. Where quality-control services are indicated as Contractor’s responsibility, submit a certified written report, in duplicate, of each quality-control service.

5. Testing and inspecting requested by Contractor and not required by the Contract Documents are Contractor’s responsibility.

6. Submit additional copies of each written report directly to authorities having jurisdiction, when they so direct.

C. Retesting/Re-inspecting:

1. Where quality-control services are Contractor’s responsibility, provide quality-control services, including retesting and re-inspecting, for construction that replaces or is necessitated by Work that failed to comply with the Contract Documents.

2. Where quality-control services are District’s responsibility, costs for retesting and re-inspecting construction that replaces or is necessitated by Work that failed to comply with the Contract Documents will be charged to Contractor, by way of a deductive Change Order.

D. Associated Services: Cooperate with agencies performing required tests, inspections, and similar quality-control services, and provide reasonable auxiliary services as requested. Notify agency sufficiently in advance of operations to permit assignment of personnel. Provide the following:
1. Access to the Work
2. Incidental labor and facilities necessary to facilitate tests and inspections
3. Adequate quantities of representative samples of materials that require testing and inspecting. Assist agency in obtaining samples.
4. Facilities for storage and field curing of test samples.
5. Preliminary design mix proposed for use for material mixes that require control by testing agency.
6. Security and protection for samples and for testing and inspecting equipment at Project site.

E. Coordination: Coordinate sequence of activities to accommodate required quality-assurance and -control services with a minimum of delay and to avoid necessity of removing and replacing construction to accommodate testing and inspecting.
   1. Schedule times for tests, inspections, obtaining samples, and similar activities. Provide timely notice of the Work’s readiness for all required tests and inspections.

F. Testing and Inspection Log: The Contractor shall provide a detailed list of all Tests and Inspections required by the Contract Documents for each of the Project Phases. Submit the Test and Inspection Log with the submittal of the Master CPM Schedule.
   1. Distribution: Distribute schedule to District, Architect, Project Manager, testing agencies, and each party involved in performance of portions of the Work where tests and inspections are required.

1.15 QUALITY CONTROL PROGRAM

A. Information for the District: Prior to commencing Work, the Contractor may obtain a single copy set of the current report forms from the District. The report forms will consist of the Contractor Production Report, Contractor Production Report (Continuation Sheet), Contractor Quality Control (CQC) Report, CQC Report (Continuation Sheet), Preparatory Phase Checklist, Rework Items List, and Testing Plan and Log. Deliver the following to the District during Construction:
   1. CQC Report: Mail or hand-carry the original (wet signatures) and 2 copies by 10:00 AM the next working day after each day that work is performed and for every seven consecutive calendar days of no-work.
   2. Contractor Production Report: Mail or hand-carry the original (wet signatures) and 2 copies by 10:00 AM the next working day after each day that work is performed and for every seven consecutive calendar days of no-work, attached to the CQC Report.
   3. Preparatory Phase Checklist: Original attached to the original CQC Report and one copy attached to each QC Report copy.
   4. Field Test Reports: Mail or hand-carry the original within two working days after the test is performed, attached to the original CQC Report and one copy attached to each QC Report copy.
   6. Testing Plan and Log: Submit the report at the end of each month.
7. Rework Items List: Submit lists containing new entries daily, in the same manner as the CQC Report.

8. CQC Meeting Minutes: Mail or hand-carry the original within two working days after the meeting is held, attached to the original CQC Report and one copy attached to each CQC Report copy.

9. QC Certifications: As required herein.

B. QUALITY CONTROL PROGRAM REQUIREMENTS

1. Contractor shall establish and maintain a QC program as described in this section. This QC program is a key element in meeting the objectives of Quality Control and LEED Certification and systems commissioning. The QC program consists of the Contractor Organization, QC Plan, a Coordination and Mutual Understanding Meeting, QC meetings, submittal review and certification, testing, and QC certifications and documentation necessary to provide materials, equipment, workmanship, fabrication, construction and operations which comply with the requirements of this Contract.

   a. The QC program must cover on-site and off-site work and be keyed to the work sequence.

   b. No construction work or testing may be performed unless the QC Manager is on the work site.

   c. The QC Manager must report to an officer of the firm and not be subordinate to the Project Superintendent.

   d. The QC Manager, Project Superintendent and other Contractor and Subcontractor personnel must work together effectively. Although the QC Manager is the primary individual responsible for quality control, all individuals will be held responsible for the quality of work on the job.

2. Acceptance of the QC Plan is required prior to the start of construction. The District reserves the right to require changes in the QC Plan and operations as necessary, including removal of personnel, to ensure the specified quality of work.

3. The District reserves the right to interview any member of the Contractor’s organization at any time in order to verify the submitted qualifications.

4. The District may require the removal of any individual for non-compliance with quality requirements specified in the Contract.

C. Preliminary Construction Work Authorized Prior to Acceptance. The only construction work that is authorized to proceed prior to the acceptance of the QC Plan is mobilization of storage and office trailers, temporary utilities, and surveying.

D. Notification of Changes: Notify the District, in writing, of any proposed changes in the QC Plan or changes to the Contractor organization personnel, a minimum of 10 work days prior to a proposed change. Proposed changes are subject to acceptance by the District.

E. QC Manager and Duties: Provide a QC Manager at the Work site to implement and manage the QC program.

   1. The QC Manager may serve as the Contractor Project Manager or Contractor Project Engineer provided they are able to adequately manage and implement the QC program on this Contract.
2. The QC Manager is required to attend the weekly meetings, conduct new subcontractor Pre-Work Preparatory Phase meetings, perform submittal review and certification, ensure testing is performed and provide QC certifications and documentation required in this Contract.

3. The QC Manager is responsible for managing and coordinating the documentation performed by Contractor testing laboratory personnel and any other inspection and testing personnel required by this Contract not coordinated, overseen, and paid by the District.

4. Qualifications: A graduate of a four year accredited college or university program in one of the following disciplines: Engineering, Architecture, Construction Management, Engineering Technology, Building Construction, or Building Science, with a minimum of 10 years experience as a Project Superintendent, QC Manager, Project Manager, Project Engineer or Construction Manager on similar size and type construction contracts which included the major trades that are part of this Contract.
   a. The individual must be familiar with the requirements of DSA, OSHA and Cal OSHA, and have experience in the areas of hazard identification, safety compliance, and sustainability.

5. Alternate QC Manager Duties and Qualifications: Designate an alternate for the QC Manager at the work site to serve in the event of the designated QC Manager's absence.
   a. The period of absence may not exceed two weeks at one time, and not more than 30 workdays during a calendar year.
   b. The qualification requirements for the Alternate QC Manager must be the same as for the QC Manager.

1.16 QUALITY CONTROL (QC) PLAN

A. QC Plan Requirements: Provide, for acceptance by the District, a Construction QC Plan submitted in a three-ring binder that includes a table of contents, with major sections identified with tabs, with pages numbered sequentially, and that documents the proposed methods and responsibilities for accomplishing quality control, LEED Certification, and system commissioning activities during the construction of the Project and include:
   1. A chart showing the Contractor management organizational structure.
   2. Names and qualifications, in resume format, for each person in the Contractor management organization.
   3. Duties, responsibilities, and authorities of each person in the Contractor management organization, including home office personnel responsible for this Project.
   4. A listing of outside organizations, such as architectural and consulting engineering firms, that will be employed by the Contractor and a description of the services these firms will provide.
   5. Letters signed by an officer of the firm appointing the QC Manager and Alternate QC Manager and stating that they are responsible for implementing and managing the QC program as described in this Contract. Include in this letter their authority to stop work which is not in compliance with the Contract. Include copies of the letters in the QC Plan.
7. Provide the name(s) of the person(s) in the QC organization authorized to review and certify submittals prior to submission to the Architect or District. Provide the initial submittal of the Submittal Log as specified in Section 01330 SUBMITTAL PROCEDURES.

8. Testing laboratory information required herein.

9. A Testing Plan and Log that includes the tests required, referenced by the specification paragraph number requiring the test, the frequency, and the person responsible for each test. Use District forms to log and track tests.

10. Procedures to identify, record, track, and complete rework items. Use District forms to record and track rework items.

11. Procedures for coordinating, tracking and documenting all required certifications for subcontractors, testing laboratories, suppliers, personnel, etc.

B. QC Manager shall ensure that certifications are current, appropriate for the work being performed, and will not lapse during any period of the contract that the work is being performed.

C. Coordination and Mutual Understanding Meeting. After submission of the QC Plan, and prior to the start of construction, the QC Manager will meet with the District to present the QC program required by this Contract. When a new QC Manager is appointed, the coordination and mutual understanding meeting shall be repeated.

1. Purpose: The purpose of this meeting is to develop a mutual understanding of the QC details, including documentation, administration for on-site and off-site work, coordination of activities to be performed, and the coordination of the Contractor’s management, production, and QC personnel. At the meeting, the Contractor will be required to explain in detail each management plan or requirement as listed below:
   b. Stormwater Pollution Prevention Plan
   c. Environmental regulatory requirements, including requirements related to Demolition.
   d. Noise Plan
   e. Commissioning Plan.
   f. Other plans required by the Contract Documents

D. Coordination of Activities: Coordinate activities included in various sections to assure efficient and orderly installation of each component. Coordinate operations included under different sections that are dependent on each other for proper installation and operation. Coordinate prefunctional tests and startup testing with Cx.

E. Attendees: As a minimum, the Contractor's personnel required to attend include an officer of the firm, the Project Manager, Project Superintendent, QC Manager, Alternate QC Manager, A/E, and subcontractor representatives. Minutes of the meeting will be prepared by the QC Manager and signed by the Contractor and the District. Provide a copy of the signed minutes to all parties.
F. Agenda Items Include:

1. Review of the Contract documents to verify that requirements related to LEED Certification and systems commissioning are adequately specified, and that each commissioned system is likely to meet the design intent relative to functionality, energy performance, water performance, maintainability, sustainability, system cost, indoor environmental quality, and local environmental impacts.

2. Procedures for submission, review and approval of submittals are also described in Section 01330 SUBMITTAL PROCEDURES.

3. Review of sampling and testing procedures required under this Contract.

1.17 QUALITY CONTROL: LABORATORY, TESTS, AND REPORTING REQUIREMENTS

A. Construction materials testing laboratories must be accredited by a laboratory accreditation authority and will be required to submit a copy of the Certificate of Accreditation and Scope of Accreditation.

1. The laboratory's scope of accreditation must include the appropriate ASTM standards (E 329, C 1077, D 3666, D 3740, A 880, E 543) listed in the technical sections of the specifications.

B. Laboratories engaged in Hazardous Materials Testing shall meet the requirements of OSHA and EPA. The policy applies to the specific laboratory performing the actual testing, not just the Corporate Office.

C. Laboratory Accreditation Authorities: Laboratory Accreditation Authorities include the National Voluntary Laboratory Accreditation Program (NVLAP) administered by the National Institute of Standards and Technology at: http://ts.nist.gov/ts/htdocs/210/214/214.htm the American Association of State Highway and Transportation Officials (AASHTO) program at http://www.transportation.org/aashto/home.nsf/frontpage, International Accreditation Services, Inc. (IAS) at http://www.iasonline.org, the American Association for Laboratory Accreditation (A2LA) program at http://www.a2la.org/.

D. Capability Check: The District retains the right to check laboratory equipment in the proposed laboratory and the laboratory technician’s testing procedures, techniques, and other items pertinent to testing, for compliance with the standards set forth in this Contract.

E. Test Results: Cite applicable Contract requirements, tests or analytical procedures used. Provide actual results and include a statement that the item test or analyzed conforms or fails to conform to specified requirements.

1. If the item fails to conform, notify the District immediately. Conspicuously stamp the cover sheet for each report in large red letters "CONFORMS" or "DOES NOT CONFORM" to the specification requirements, whichever is applicable.

2. Test results must be signed by a testing laboratory representative authorized to sign certified test reports.

3. Furnish the signed reports, certifications, and other documentation to the District via the QC Manager.

4. Furnish the signed reports, certifications, and a summary report of field tests at the end of each month to the District. Attach a copy of the summary report to the last daily Contractor Quality Control Report of each month.
1.18 QC CERTIFICATIONS AND DOCUMENTATION

A. CQC Report Certification. Contain the following statement within the CQC Report:

"On behalf of the Contractor, I certify that this report is complete and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge, except as noted in this report."

B. Invoice Certification. Furnish a certificate to the District with each payment request, signed by the QC Manager, attesting that as-built drawings are current and, coordinated, and attesting that the work for which payment is requested, including stored material, is in compliance with Contract requirements.

C. Documentation: Maintain current and complete records of on-site and off-site QC program operations and activities.

D. Construction Documentation: Reports are required for each day that work is performed and must be attached to the Contractor Quality Control Report prepared for the same day.
   1. Maintain current and complete records of on-site and off-site QC program operations and activities on the required forms.
   2. Reports are required for each day work is performed.
   3. Account for each calendar day throughout the life of the Contract.
   4. Every space on the forms must be filled in. Use N/A if nothing can be reported in one of the spaces.
   5. The Project Superintendent and the QC Manager must prepare and sign the Contractor Production and CQC Reports, respectively.
   6. The reporting of work must be identified by terminology consistent with the construction schedule.
   7. In the "remarks" sections of the reports, enter pertinent information including directions received, problems encountered during construction, Work progress and delays, conflicts or errors in the drawings or specifications, field changes, safety hazards encountered, instructions given and corrective actions taken, delays encountered and a record of visitors to the work site, quality control problem areas, deviations from the QC Plan, construction deficiencies encountered, meetings held.
   8. For each entry in the report(s), identify the Schedule Activity No. that is associated with the entered remark.

E. Quality Control Validation. Establish and maintain the following in a series of three ring binders. Binders shall be divided and tabbed as shown below. These binders must be readily available to the District during all business hours.
   1. All completed Preparatory Phase Checklists, arranged by specification section.
   2. All milestone inspections, arranged by Activity Number.
   3. An up-to-date copy of the Testing Plan and Log with supporting field test reports, arranged by specification section.
   4. Copies of all contract modifications, arranged in numerical order. Also include documentation that modified work was accomplished.
5. An up-to-date copy of the Rework Items List.
6. Maintain up-to-date copies of all punch lists issued by the QC staff to the Contractor and Sub-Contractors and all punch lists issued by the District.
7. Commissioning documentation including Cx checklists, schedules, tests, and reports.

F. Testing Plan and Log:
1. As tests are performed, the QC Manager will record on the "Testing Plan and Log" the date the test was performed and the date the test results were forwarded to the District.
2. Attach a copy of the updated "Testing Plan and Log" to the last daily CQC Report of each month.

G. Rework Items List: The QC Manager must maintain a list of work that does not comply with the Contract, identifying what items need to be reworked, the date the item was originally discovered, the date the item will be corrected by, and the date the item was corrected. There is no requirement to report a rework item that is corrected the same day it is discovered.
1. The Contractor is responsible for including rework items identified by the District or its representative.

H. As-Built Drawings: The QC Manager is required to ensure the as-built drawings, required by Section 01780 CLOSEOUT SUBMITTALS are kept current on a daily basis and marked to show deviations which have been made from the Contract Drawings. Ensure each deviation has been identified with the appropriate modifying documentation (e.g. PCO No., CO No., Request for Information No., etc.). The QC Manager must initial each revision.
1. Upon completion of work, the QC Manager will furnish a certificate attesting to the accuracy of the as-built drawings prior to submission to the District.

1.19 NOTIFICATION ON NON-COMPLIANCE

A. The District will notify the Contractor of any detected non-compliance with the Contract. Take immediate corrective action after receipt of such notice. Such notice, when delivered to the Contractor at the work site, shall be deemed sufficient for the purpose of notification. If the Contractor fails or refuses to comply promptly, the District may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No part of the time lost due to such stop orders will be made the subject of claim for extension of time for excess costs or damages by the Contractor.

PART 2 - PRODUCTS
Not Used.

PART 3 - EXECUTION

3.1 EXAMINATION
A. Verify existing site conditions and substrate surfaces are acceptable for subsequent Work. Beginning new Work constitutes acceptance of existing conditions by the Contractor.
B. Verify existing substrate is capable of structural support or attachment of new Work being applied or attached.
C. Examine and verify specific conditions described in individual specification sections.
D. Verify utility services are available, of correct characteristics, and in correct locations.

3.2 TEST AND INSPECTION LOG

A. Prepare a record of tests and inspections. Include the following:
   1. Date test or inspection was conducted.
   2. Description of the Work tested or inspected.
   3. Date test or inspection results were transmitted to Architect.
   4. Identification of testing agency or special Inspector conducting test or inspection.

B. Maintain test and inspection log at project site. Post changes and modifications as they occur. Provide access to test and inspection log for Architect and Project Manager’s reference during normal working hours.

3.3 PREPARATION

A. Clean substrate surfaces prior to applying next material or substance.

B. Seal cracks or openings of substrate prior to applying next material or substance.

C. Apply manufacturer required or recommended substrate primer, sealer, or conditioner prior to applying new material or substance in contact or bond.

3.4 PREPARATION AND PROTECTION

A. General: On completion of testing, inspecting, sample taking, and similar services, repair damaged construction and restore substrates and finishes. See also Section 01730, Cutting and Patching.

B. Protect construction exposed by or for quality-control service activities.

C. Repair and protection are Contractor’s responsibility, regardless of the assignment of responsibility for quality-control services.
<table>
<thead>
<tr>
<th>NEW SUBCONTRACTOR</th>
<th>PREPARATORY PHASE CHECKLIST</th>
<th>SPEC SECTION(S)</th>
<th>DATE</th>
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<thead>
<tr>
<th>PROJECT NO.</th>
<th>SUBCONTRACTOR</th>
<th>SCHEDULE ACTIVITY NO.</th>
<th>CONTRACT NO.</th>
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<tr>
<th>PERSONNEL PRESENT</th>
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<tr>
<th>DISTRICT REP NOTIFIED</th>
<th>HOURS IN ADVANCE:</th>
<th>YES</th>
<th>NO</th>
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<tbody>
<tr>
<td>NAME</td>
<td>POSITION</td>
<td>COMPANY/DISTRICT</td>
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<tr>
<th>SUBMITTALS</th>
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<tr>
<th>REVIEW SUBMITTALS AND/OR SUBMITTAL REGISTER</th>
<th>HAVE ALL SUBMITTALS BEEN APPROVED?</th>
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<tbody>
<tr>
<td>YES</td>
<td>NO</td>
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IF NO, WHAT ITEMS HAVE NOT BEEN SUBMITTED?

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<tr>
<th>ARE ALL MATERIALS ON HAND?</th>
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| YES | NO | |

IF NO, WHAT ITEMS ARE MISSING?

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<tr>
<th>CHECK APPROVED SUBMITTALS AGAINST DELIVERED MATERIAL. THIS SHOULD BE DONE AS MATERIAL ARRIVES.</th>
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<th>COMMENTS:</th>
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<tr>
<th>MATERIAL STORAGE</th>
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<th>ARE MATERIALS STORED PROPERLY?</th>
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| YES | NO | |

IF NO, WHAT ACTION IS TAKEN?

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<tr>
<th>SPECIFICATIONS</th>
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<tr>
<th>REVIEW EACH PARAGRAPH OF SPECIFICATIONS.</th>
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<th>DISCUSS PROCEDURE FOR ACCOMPLISHING THE WORK.</th>
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<th>CLARIFY ANY DIFFERENCES.</th>
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Contra Costa Community College District
Diablo Valley College
DVC Exterior Painting Project
## Preliminary Work & Permits

Ensure preliminary work is correct and permits are on file. If not, what action is taken?

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## Testing

Identify test to be performed, frequency, and by whom.

When required?

Where required?

Review testing plan.

Have test facilities been approved?

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## Safety

Activity hazard review conducted? YES ☐ NO ☐

Review applicable portion of safety plan.

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## District Comments during Meeting

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## Meeting Comments

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## Other Items or Remarks

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Site Superintendent | Date
END OF SECTION 01400
SECTION 01410
REGULATORY REQUIREMENTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS
   A. All Contract Documents shall be reviewed for applicable provisions related to the provisions in this document, and provisions in the General Conditions and other Division 1 Specification Sections shall apply to this Section without limitation.

1.2 RELATED REQUIREMENTS SPECIFIED IN OTHER SECTIONS
   A. Section 01010 – “Summary of Work”
   B. Section 01311 – “Project Management and Coordination”
   C. Section 01312 – “Project Meetings”
   D. Section 01420 – “References”
   E. Section 01572 – “Storm Water Pollution Prevention Plan” (SWPPP)

1.3 SUMMARY
   A. This Section includes: regulatory requirements applicable to the Contract Documents and the Project and Work.
   B. Specific reference in the Specifications to codes and regulations or requirements of regulatory agencies shall mean the latest printed edition of each adopted by the regulatory agency in effect at the time of the opening of Proposals, except as may be otherwise specifically stated in the Contract Documents.
   C. No change order shall be considered for any change in any applicable federal, state or local code or regulation if similar language existed in an alternate applicable regulation in force at the time of opening of Bids.
   D. Contractor shall not allow design or construction of any conditions wherein the finished Work will not comply with current applicable codes. No change order shall be considered by District for the Work correction of any Work not complying with code.
   E. This section shall cover the general requirements for regulatory requirements pertaining to the Work and is supplementary to all other regulatory requirements mentioned or referenced elsewhere in the Contract Documents.

1.4 REFERENCES TO REGULATORY REQUIREMENTS
   A. Code, laws, ordinances, rules and regulations referred to shall have full force and effect as though printed in full in these Specifications. Code, laws, ordinances, rules and regulations are not furnished to Contractor because Contractor is assumed to be and shall be familiar with these requirements, including readily available access to these requirements. The listing of applicable codes, laws, and regulations for hazardous waste abatement Work in the Contract Documents is supplied to Contractor as a courtesy and shall not limit
Contractor’s responsibility for complying with all applicable laws, regulations or ordinances having application to the Work. Where conflict among the requirements or with these Specifications occurs, the most stringent requirements shall be used with no change in Contract Sum or Contract Time.

B. Contractor shall conform to all applicable federal, state, and local codes, laws, ordinances, rules and regulations, whether or not referenced in the Contract Documents.

C. Precedence:
   1. Where specified requirements differ from the requirements of applicable codes, ordinances and standards, the more stringent requirements shall take precedence.
   2. Where Contract Documents require or describe products or execution of better quality, higher standard or greater size than required by applicable codes, ordinances and standards, Contract Documents shall take precedence so long as such increase is legal.
   3. Where no requirements are identified on Contract Documents, comply with all requirements of applicable codes, ordinances and standards of governing authorities have jurisdiction.

1.5 REGULATORY REQUIREMENTS

A. All statutes, ordinances, laws, rules, codes, regulations, standards, and lawful orders of all public authorities have jurisdiction of the Work, are hereby incorporated into these Contract Documents as if repeated in full herein and are intended to be included in any reference to Code or Building Code, unless otherwise specified, including, without limitation, the references in the list below. Contractor shall make available at the Site, copies of all the listed documents applicable to the Work as the District and/or Architect may request, including, without limitation, applicable portions of the California Code of Regulations (“CCR”).

B. This Project shall be governed by applicable regulations, including, without limitation, the State of California’s Code Section Group 1, Chapter 4, Part 1, Title 24, CCR, and the most current version on the date the bids are opened and as it pertains to school construction including, without limitation:
   1. Test and testing laboratory per Section 4-335 (District shall pay for the testing laboratory.)
   2. All special inspections per Section 4-333(c).
   3. Contractor shall submit verified reports per Section 4-365 & 4-343(c).
   4. Administration
      a. Duties of the Architect & Engineers shall be per Section 4-333(a) & 4-341.
      b. Duties of the Contractor shall be per Section 4-343.
      c. Verified Reports per Section 4-336.
   5. Contractor shall keep and make available a copy of Part I and II of the most current version of Title 24 at the Site during construction.
   6. Contractor shall notify the Division of State Architect (“DSA”) upon the start of construction per Section 4-334.
   7. Addenda and Change Orders per Section 4-338.
1.6 CODES

A. Codes that apply to Contract Documents include, but are not limited to, the following:

2. California Electrical Code, Part 3, Title 24 (National Electrical Code and California Amendments)
3. California Mechanical Code, Part 4, Title 24 (National Mechanical Code and California Amendments)
5. California Elevator Safety Construction Code, Part 7, Title 24 C.C.R.
7. Public Safety, Title 19, California Code of Regulations, State Fire Marshal Regulations
11. NFPA 72 Chapter 7, Testing Procedures Current Edition
13. California Code of Regulations (CCR):
   a. Title 8, Industrial Relations (Cal/OSHA Standards).
   b. Title 24, State Access Compliance.
14. California Air Resources Board (CARB), and in particular Rule 1113.
16. State Water Resources Control Board Waste Discharge Requirements
17. County ordinances and regulations
18. Other codes as specified

1.7 LAWS, ORDINANCES, RULES, AND REGULATIONS [edit]

A. During prosecution of Work to be done under Contract Documents, comply with applicable laws, ordinances, rules and regulations, including, but not limited to, the following:

1. Federal:
   a. Americans with Disabilities Act, and applicable amendments.
   b. 29 CFR, Section 1910.1001, Asbestos
   c. 40 CFR, Subpart M, National Emission Standards for Asbestos
   d. Executive Order 11246
   e. Federal endangered Species Act
f. Clean Water Act

2. State of California:
   a. California Code of Regulations, Titles 5, 8, 19, 21, 22, 24 and 25
   b. California Public Contract Code
   c. California Health and Safety Code
   d. California Government Code
   e. California Labor Code
   f. California Civil code
   g. California Code of Civil Procedure
   h. CPUC General Order 95, Rules for Overhead Electric Line Construction
   i. CPUC General Order 128, Rules for Construction of Underground electric Supply and Communications systems
   j. Cal/OSHA
   k. OSHA: Hazard Communications Standards
   l. California Endangered Species Act
   m. Water Code

3. State of California Agencies:
   a. State and Consumer Services Agency
   b. Office of the State Fire Marshall
   c. Bay Area Air Quality Management District
   d. San Francisco Bay Regional Water Quality Control Board
   e. Division of the State Architect

4. Local Agencies:
   a. City of [edit], California
   b. Contra Costa County Fire Department

5. Other Requirements:
   b. References on Drawings on in specifications to “code” or “building code” not otherwise identified shall mean the codes specified in this Section 1410 together with all additions, amendments, changes, and interpretations adopted by code authorities of the jurisdiction.

B. References to Codes, Laws, Ordinances, Rules and Regulations shall be deemed to apply to the version applicable at the time of the bid.

C. Contractor shall have immediate access to all of the foregoing.

D. Other Applicable Laws, Ordinances and Regulations:
   1. Work shall be accomplished in conformance with all applicable laws, ordinances, rules and regulations of federal, state, and local governmental agencies and jurisdictions having authority over the Project.
2. Work shall be accomplished in conformance with all rules and regulations of public utilities and utility districts.

3. Where such laws, ordinances, rules and regulations require more care or greater time to accomplish Work, or require better quality, higher standards or greater size of products, Work shall be accomplished in conformance to such requirements with no change to the Contract Time and Contract Sum, except where changes in laws, ordinances, rules and regulations occur subsequent to the time of opening of the Proposals.

E. Under California Government Code Section 930.2 et. Seq. and Public Contract Code Section 7105(d)(2), neither the Contract Claims Procedure nor the Change Order Procedure may be modified, waived, or otherwise not complied with, absent a written change order that explicitly and expressly makes such modifications.

1.8 CONFLICTS
A. Between reference regulatory requirements: Comply with the one establishing the more stringent requirement.
B. Between referenced regulatory requirements and Contract Documents: Comply with the one establishing the more stringent requirement.

1.9 COMPLIANCE WITH AMERICANS WITH DISABILITIES ACT
A. Contractor acknowledges that, pursuant to the Americans with Disabilities Act (ADA), programs, services and other activities provided by a public entity to the public, whether directly or through a contractor, must be accessible to people with disabilities. Contractor shall provide the services specified in the Contract Documents in a manner that complies with the ADA and any and all other applicable federal, state and local disability rights legislation. Contractor agrees not to discriminate against people with disabilities in the provision of services, benefits, or activities provided and further agrees that any violation of this prohibition on the part of Contractor, its employees, agents or assigns shall constitute a material breach of the Contract Documents.

PART 2 - PRODUCTS
Not Used.

PART 3 - EXECUTION
Not Used.

END OF SECTION 01410
SECTION 01412

REGULATORY REQUIREMENTS - HAZARDOUS MATERIALS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. All Contract documents shall be reviewed for applicable provisions related to the provisions in this document, and provision in the General Conditions and other Division 1 Specification Sections shall apply to this Section without limitation.

1.2 RELATED REQUIREMENTS SPECIFIED IN OTHER SECTIONS

A. Section 01010 – “Summary of Work”
B. Section 01311 – “Project Management and Coordination”
C. Section 01312 – “Project Meetings”
D. Section 01420 – “References”
E. Section 01572 – “Storm Water Pollution Prevention Plan ‘SWPPP’”

1.3 SUMMARY

A. This Section describes Project requirements applicable to Work in connection with hazardous materials, hazardous waste, abatement and disposal including, but not limited to, asbestos and asbestos-containing materials, lead-based paint, polychlorinated biphenyls, petroleum-contaminated soils and materials, construction and demolition debris and any other hazardous substance or hazardous waste. This Section supplements the requirements elsewhere in the Contract Documents.

1.4 DISCOVERY OF HAZARDOUS MATERIALS

A. In the event the Contractor encounters or suspects the presence on the job site of material reasonably believed to be asbestos, polychlorinated biphenyl (PCB), or any other material defined as being hazardous by § 25249.5 of the California Health and Safety Code, which has not been rendered harmless, the Contractor shall immediately stop Work in the area affected and report the condition to the District and the Architect in writing, whether or not such material was generated by the Contractor or the District. The Work in the affected area shall not thereafter be resumed, except by written agreement of the District and the Contractor, if in fact the material is asbestos, polychlorinated biphenyl (PCB), or other hazardous material, and has not been rendered harmless. The Work in the affected area shall be resumed only in the absence of asbestos, polychlorinated biphenyl (PCB), or other hazardous material, or when it has been rendered harmless by written agreement of the District and the Contractor.

B. If hazardous materials are encountered, they shall be handled in accordance with applicable local, state and federal regulation which may include: (1) CCR Title 8, Division 4, Chapter 4, Sections 5163 through 5167 and 5192 (Hazardous Waste Operations and Emergency Response); (2) CCR Title 22, Division 4.5, Chapters 10 through 13 and 18 (Environmental Control Code).
Health Standards for Management of Hazardous Waste); and (3) CCR Title 23, Division 3, Chapter 15 (Discharges of Hazardous Waste to Land).

C. Should the discovery of contaminants cause delay to Contractor’s operation, extension of Contract Time will be granted by District in accordance with Section 00700 (General Conditions) and Section 01310 (Construction Scheduling.) Contractor may not be entitled to damages or additional payment due to such delays. District may, if it believes appropriate in its sole discretion, grant an extension of Contract Time.

D. The Contractor shall take all measures to avoid and/or mitigate delays due to Hazardous Materials/Waste finds such as; avoiding the area of the find and proceeding with other work on the project; developing “work around” plans; and documenting his best efforts to avoid and/or mitigate delays. See Section 01310 (Construction Scheduling) regarding requirement to demonstrate Time Impacts.

1.5 SUBSURFACE HAZARDOUS MATERIALS

A. If Contractor encounters surface contamination, the following provisions and precautionary measures shall be implemented during construction.

1. Contractor’s personnel shall be alert for and immediately report to District’s Representative any detectable chemical odors, unusual debris, or discolored soil.

2. Disposal requirements: Soils containing hazardous materials shall be disposed by Contractor at permitted treatment, recycling, or disposal facilities in accordance with CCR Title 23, Division 3, Chapter 15 (Discharge of Waste to Land). Determine to which permitted treatment, recycling, or disposal facilities the soil will be delivered.

3. Dewatering: Construct, operate and maintain as required by applicable laws, codes and standards and to complete the Work all necessary cofferdams, channels, pipes, flumes, drains, sumps, well points and protective works; and furnish, install, operate and maintain all necessary pumping and other equipment for dewatering the areas of Work suspected of containing hazardous materials; and control all surface flow and groundwater as may be encountered while performing the Work. Remove all water that may accumulate in the excavation while the Work progresses so that all Work can be performed in dry conditions. All contaminated water shall be removed from the excavation before it is backfilled. The excavation shall be kept free from water until backfilling has progressed to a height above the water source.

4. Water sampling and chemical analysis: Water samples shall be collected from the holding tanks and submitted to a State-Certified chemical analysis laboratory. Chemical analyses required for the samples shall at a minimum include: TPHg following EPA Test Methods 5030/8015 (modified); benzene, toluene, ethylbenzene and total xylenes (BTEX) following EPA Test Method 8020; and chlorinated solvents following EPA Test Method 8010. Perform additional chemical analyses that may be required for disposal or recycling of the water.

5. Laboratory chemical analysis reports associated with the water samples shall be provided to District’s Representative.

6. Removal of dewatering equipment: After having served their purpose, all protective works and dewatering pumps, shall be decontaminated and removed from the Site.
Contractor is responsible for permanent disposal of all equipment that cannot be decontaminated or recycled in accordance with all applicable laws and regulations.

7. Fees: Pay for any fees associated with the treatment, recycling, or disposal of these soils. Any additional soil sampling and chemical analyses required for acceptance of the soil at facilities other than those described above may be deemed to be the responsibility of the Contractor.

8. Transport: Transport the soils to the selected facilities under approved manifests and submit copies of these manifests and the facility weight tickets to District’s Representative.

1.6 HAZARDOUS MATERIAL WORK LIMITATIONS

A. In the event that the presence of hazardous materials is suspected or discovered on the Site (except in cases where asbestos and other hazardous material work is the Contractor’s responsibility), the District shall retain an independent testing laboratory to determine the nature of the material encountered and whether corrective measures or remedial action is required. The Contractor shall not be required pursuant to Specification Section 01250 to perform without consent any Work in the affected area of the Site relating to asbestos, polychlorinated biphenyl (PCB), or other hazardous material, until any known or suspected hazardous material has been removed, or rendered harmless, or determined to be harmless by District, as certified by an independent testing laboratory and approved by the appropriate government agency.

B. To protect construction workers and members of the public from known or undiscovered hazardous building materials, including asbestos and lead, undertake all demolition activities in accordance with Cal-OSHA standards, contained in Title 8 of the California Code of Regulations (CCR). See Hazardous Materials Removal Specifications (02080, 02081, 02082 and 02085) and Reports for additional requirements.

C. During demolition activities, all building materials containing lead paint shall be removed in accordance with Cal-OSHA Lead in Construction Standard, title 8 and California Code of Regulations 1532.1.

D. All potentially friable asbestos-containing materials (ACMs) shall be removed in accordance with National Emissions Standards for Hazardous Air Pollutants (NESHAP) guidelines prior to building demolition or renovation that may disturb the materials. Applicable standards include the following:

1. The facility shall be inspected before any renovation occurs in which 160 square feet or more of building materials or 260 linear feet or more of pipe insulation will be disturbed at a regulated facility or any demolition occurs at a regulated facility.

2. An asbestos notification form shall be submitted to the Bay Area Air Quality Management District (BAAQMD) for any regulated asbestos abatement project or regulated demolition 10 working days before the activity begins.

3. If ACMs are discovered during a renovation or demolition, they must be removed before the project may proceed. Also, the Cal-OSHA and California Environmental Protection Agency (Cal-EPA) hazardous waste regulation apply in most cases.
E. No Work will be accepted until asbestos contamination is reduced to levels deemed acceptable by the District’s asbestos consultant.

F. Interface of Work under this Contract with work containing asbestos shall be executed by the Contractor at his risk and at his discretion, with full knowledge of the currently accepted standards, hazards, risks, and liabilities associated with asbestos work and asbestos-containing products. By execution of this Contract, the Contractor acknowledges the above and agrees to hold harmless District and its assigns for all asbestos liability which may be associated with this work and agrees to instruct his employees with respect to the above-mentioned standards, hazards, risks, and liabilities.

1.7 INDEMNIFICATION BY CONTRACTOR FOR HAZARDOUS MATERIAL CAUSED BY CONTRACTOR

A. In the event the hazardous materials on the Project Site is caused by the Contractor, the Contractor shall pay for all costs of testing and remediation, if any, and shall compensate the District for any additional costs incurred as a result of Contractor’s generation of hazardous material on the Project Site. In addition, the Contractor shall defend, indemnify and hold harmless District and its agents, officers, and employees from and against any and all claims, damages, losses, costs and expenses incurred in connection with, arising out of, or relating to, the presence of hazardous material on the Project Site.

1.8 TERMS OF HAZARDOUS MATERIAL PROVISION

A. The terms of this Hazardous Material provision shall survive the completion of the Work and/or any termination of this Contract.

1.9 NON-UTILIZATION OF ASBESTOS MATERIAL

A. NO ASBESTOS OR ASBESTOS-CONTAINING PRODUCTS SHALL BE USED IN THIS CONSTRUCTION OR IN ANY TOOLS, DEVICES, CLOTHING, OR EQUIPMENT USED TO EFFECT THIS CONSTRUCTION.

B. Asbestos and/or asbestos-containing products shall be defined as all items containing, but not limited to, chrysotile, amosite, anthophyllite, tremolite, and actinolite.

C. Any or all material containing greater than one-tenth of one percent (>.1%) asbestos shall be defined as asbestos-containing material.

1.10 REMOVAL OF CONTRACTOR INSTALLED ASBESTOS MATERIALS

A. All Work or materials found to contain asbestos or Work or material installed with asbestos-containing equipment will be immediately rejected and this Work will be removed at no additional cost to the District.

1. Decontamination and removal of Work found to contain asbestos or Work installed with asbestos-containing equipment shall be done only under supervision of a qualified consultant, knowledgeable in the field of asbestos abatement and accredited by the Environmental Protection Agency.

2. The asbestos removal contractor shall be appropriately licensed and registered, qualified in the removal of asbestos and shall be approved by the asbestos consultant, who shall have sole discretion and final determination in this matter.
3. The asbestos consultant shall be approved by the District, who shall have sole discretion and final determination in this matter.

1.11 NATURALLY OCCURRING ASBESTOS

A. To protect construction workers and members of the public from exposure to known areas of naturally-occurring asbestos (NOA), all ground disturbing activities will be undertaken in accordance with all applicable Cal-OSHA standards, contained in Title 8 of the California Code of Regulations (CCR). In addition, any ground-disturbing activity in an area that meets one or more of the applicability criteria for the Asbestos Airborne Toxic Control Measure (ATCM) for Construction, Grading, Quarrying and Surface Mining Operations, as adopted by the California Air Resources Board (CARB), is subject to the requirements therein. Per Section 93105 (b) of the ATCM, these criteria are as follows:

1. The area to be disturbed is located in a geographic ultramafic rock unit; or
2. The area to be disturbed has naturally-occurring asbestos, serpentine, or ultramafic rock as determined by the owner/operator, or the Air Pollution Control Officer (APCO); or
3. Naturally-occurring asbestos, serpentine, or ultramafic rock is discovered by the District, a registered geologist, or the APCO in the area to be disturbed after the start of any construction, grading, quarrying, or surface mining operation.

1.12 REFERENCES TO REGULATORY REQUIREMENTS

A. Codes, laws, ordinances, rules and regulations applicable to the Work shall have full force and effect as though printed in full in the Contract Documents. Codes, laws, ordinances, rules and regulations are not furnished to Contractor, because Contractor is assumed to be familiar with their requirements. The listing herein of applicable codes, laws, and regulations for hazardous waste abatement work is supplied to Contractor as a courtesy and shall not limit Contractor’s responsibility for complying with all applicable laws, regulations or ordinances having application to the Work. Where conflict among the requirements or with these Contract Documents exists, the most stringent requirements shall be used.

B. Conform to all applicable codes, laws, ordinances, rules and regulations that are in effect on date of contracting.

1.13 LAWS, ORDINANCES, RULES, AND REGULATIONS

A. During prosecution of Work under Contract Documents, Contractor shall comply with applicable laws, ordinances, rules and regulations including, but not limited to, those listed below.

B. Federal:

1. Statutory Requirements:
f. Safe Drinking Water Act, 42 U.S.C., Sections 3001 et seq.
g. Clean Air Act, Section 112, 42 U.S.C., Section 7412
i. Underground Storage Tank Law, 42 U.S.C., Sections 6991 et seq.
j. The Emergency Planning and Community Right to Know Act of 1986, 42 U.S.C., Sections 11011 et seq.

2. Environmental Protection Agency (EPA):
a. 40 C.F.R. Parts 260, 264, 265, 268, 270
b. 40 C.F.R. Parts 258 et seq.
c. 40 C.F.R. Part 761
d. 40 C.F.R. Parts 122-124

3. Occupational Safety and Health Administration (OSHA):
b. OSHA, 29 C.F.R. Part 1926.1101, Construction Standards for Asbestos
c. OSHA, Lead Exposure in Construction: Interim Final Rule, 29 C.F.R. 1926.62
e. Asbestos Hazardous Emergency Response Act, Title 40 C.F.R. 763

4. Department of Transportation:
a. Title 49 C.F.R. 173.1090
b. Title 49 C.F.R. 172
c. Title 49 C.F.R. 173
d. DOT, HM 181 and MH126f

C. State of California Requirements:

1. Statutory Law:
a. The Carpenter-Presley-Tanner Hazardous Substance Account Act, Health & Safety Code, Sections 25300 et seq.
b. Health and Safety Code, Section 25359.4
d. Porter-Cologne Water Quality Control Act, Water Code, Sections 13000 et seq.
e. Health and Safety Code, Sections 25915-25924
f. California Labor Code Chapter 6, including, without limitation, Sections 6382, 6501.5-6501.9, 6503.5, 9021.5, 9080
g. Business and Professions Code, including without limitation, Sections 7058.5, 7065.01, 7118.5
h. Underground Storage of Hazardous Substance Act, Health and Safety Code, Sections 25280 et seq.

i. Petroleum Underground Storage Tank Cleanup, Health and Safety Code, Sections 25299.10 et seq.


k. Above Ground Petroleum Storage Act, Health and Safety Code, Sections 25270 et seq.


2. Administrative Code and Regulations:
   a. Title 22 CCR Division 4.5, Environmental Health Standards for the Management of Hazardous Waste, Sections 6600 et seq.
   b. Title 8 CCR, Section 1529, Asbestos
   c. Title 8 CCR, Section 1532.1, Lead in Construction
   d. Title 23 CCR, Sections 2610 et seq.

3. Local Agency Requirements:
   a. Bay Area Air Quality Management District, Fugitive Dust Rules
   b. Bay Area Air Quality Management District Regulation 11, Rule 2
   c. State Water Resource Control Board, General Construction and Land Disturbance Activities (Order 2009-009 DWQ)

4. Local Agency Requirements:
   a. Pleasant Hill Fire Department

PART 2 - PRODUCTS
Not Used.

PART 3 - EXECUTION
Not Used.

END OF SECTION 01412
SECTION 01414

GUIDELINES FOR OPERATIONS DURING A PROTEST

PART 1 – GENERAL

1.1 RELATED DOCUMENTS
    A. All Contract Documents shall be reviewed for applicable provisions related to the provisions in this
document, and provisions in the General Conditions and other Division 1 Specification Sections
shall apply to this Section without limitation.

1.2 RELATED REQUIREMENTS SPECIFIED IN OTHER SECTIONS
    A. Section 01010 – “Summary of Work”

1.3 SUMMARY
    A. Project Security

1.4 PROCEDURES DURING A PROTEST
    A. Known Protests (Most Common):
        1. In most cases, protests will be anticipated. Information is provided in advance to the Campus
           Police Department (CPD), or the assemblage can be seen from the project site.
        2. Under these conditions, CPD will dispatch officers to the site. CPD will notify the Project
           Manager who will contact the Project Inspector. Once on site, the supervising CPD officer will
           introduce himself to the Contractor’s Superintendent, the Project Inspector and a review of
           the situation will be made.
        3. The supervising CPD officer will determine if the Contractor should cease work in certain
           areas, relocate his work forces, or vacate the premises.
        4. The Project Inspector, Project Manager and Supervisor will document the action in their daily
           report(s), and consideration shall be given to the Contractor for an extension of contract time
           only. Any extension of contract time will be by an executed Change Order and shall be
           reviewed and approved by District.

    B. Unknown Event:
        1. In the event that protest activities occur without prior notification and consultation with CPD,
           the Contractor is to cease all work activities that may directly or indirectly cause harm to a
           worker or protestor.
        2. The Contractor should leave the affected area, and if possible, remove tools, equipment and
           construction materials. The Contractor’s Superintendent will notify the Project Inspector of
           the event.
3. The Project Inspector and Project Manager will record this activity in daily report(s) and consideration may be given by District to the Contractor for an extension of contract time.

C. If the Contractor is prevented from vacating the affected area by protestors, CPD will attempt to provide safe egress for the Contractor.

D. Under no circumstances is the Contractor to confront protestors, incite activity, or physically impede their intended activity.

E. The Contractor shall be aware of the work area and cognizant of any unusual visitors to the project site.

F. Jurisdiction is as follows:

   On-Campus Events:
   DVC Campus Police Department

   Off-Campus Events:
   City of Pleasant Hill Police Department (Non-Emergency)

   Emergency:
   911

END OF SECTION 01414
PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. All Contract Documents shall be reviewed for applicable provisions related to the provisions in this document, and provisions in the General Conditions and other Division 1 Specification Sections shall apply to this Section without limitation.

1.2 RELATED REQUIREMENTS SPECIFIED IN OTHER SECTIONS

A. Section 01010 – “Summary of Work”
B. Section 01290 – “Payment Procedures”
C. Section 01310 – “Construction Scheduling”
D. Section 01312 – “Project Meetings”
E. Section 01400 – “Quality Control Requirements”
F. Section 01412 – “Regulatory Requirements”
G. Section 01505 – “Construction Waste Management”
H. Section 01572 – “Storm Water Pollution Prevention Plan”

1.3 SUMMARY

A. This Mitigation Monitoring and Reporting Program (MMRP) was formulated based on the findings of the Initial Study/Mitigated Negative Declaration (IS/MND) prepared for the College Improvement Implementation Project. This MMRP is in compliance with Section 1509 of the CEQA Guidelines, which requires that the Lead Agency “adopt a program for monitoring or reporting of the revisions which it has required in the project and the measures it has imposed to mitigate or avoid significant environmental effects.” The MMRP lists mitigation measures recommended in the IS/MND and identifies mitigation monitoring requirements.

B. The District has attempted to insert these MMRP requirements into the various other Specification Sections that are related to the nature of each mitigation measure. This Section is included to provide a consolidated location for all of the CEQA requirements. Where measures are found in any of the Contract Documents that conflict with these measures, the more stringent measure shall apply.

1. Table 1 presents the mitigation measures identified for the Project. Each mitigation measure is numbered according to the topical section to which it pertains in the IS/MND. As an example, Mitigation measure AIR-1 is the first mitigation measure identified in the IS/MND for the Project.
   a. The first column of Table 1 identifies the mitigation measure from the IS/MND.
   b. The second column, entitled “Action and Implementation Timing,” describes each mitigation measure.
c. The third column, “Party Responsible for Monitoring,” names the party ultimately responsible for ensuring that the mitigation measures are implemented.

d. The fourth column “Action by Monitor,” outlines the steps for monitoring the action identified in the mitigation measure.

e. The fifth column entitled “Monitoring Timing,” states the time the monitor must ensure that the mitigation measure has been implemented.

f. The last column will be used by the District to ensure that individual mitigation measures have been monitored.
PART 2 - PRODUCTS
Not Used.

PART 3 - EXECUTION
Not Used.

END OF SECTION 01415
PART 1 - GENERAL

1.1 RELATED DOCUMENTS
   A. All Contract Documents shall be reviewed for applicable provisions related to the provisions in
      this document, and provisions in the General Conditions and other Division 1 Specification
      Sections shall apply to this Section without limitation.

1.2 RELATED REQUIREMENTS SPECIFIED IN OTHER SECTIONS
   A. Section 01010 – “Summary of Work”
   B. Section 01290 – “Payment Procedures”
   C. Section 01330 – “Submittal Procedures”
   D. Section 01740 – “Warranties and Guaranties”
   E. Section 01780 – “Project Record Documents”
   F. Section 01820 – “Demonstration and Training”

1.3 SUMMARY
   A. In Compliance with CEQA requirements, the District conducted an Initial Study to ascertain if
      the project may have an effect on the environment. The Initial Study identified potential
      impacts on the environment. However, all potential impacts of the proposed Project can be
      avoided or reduced to a less-than-significant level by implementation of the following
      mitigation measures. Contractor shall conform with the following mitigation measures, including but not limited to, the following:
      1. Noise Control Plan
      2. Dust Control Plan
      3. Traffic Control Plan
      4. Spill Prevention, Control and Countermeasure Program
      5. Tree Protection Plan
      6. Migratory Bird Protection Plan
      7. Cultural Resources Protection Plan
   B. In no case shall the restrictions identified in this Section limit the Contractor's responsibility for
      compliance with all Federal, state, and local safety ordinances and regulations.

1.4 NOISE CONTROL
   A. Definitions
   1. Noise is any audible sound which has the potential to annoy or disturb humans, or to
      cause an adverse psychological or physiological effect on humans.
2. **Daytime** refers to the period from 7 AM to 7 PM local time daily, except Sundays and Federal holidays.
3. **Evening** refers to the period from 7 PM to 10 PM local time daily, except Sundays and Federal holidays.
4. **Nighttime** refers to the period from 10 PM to 7 AM local time daily, as well as all day Sunday and Federal holidays.
5. **Nuisance Noise** refers to sound levels that annoy or disturb a reasonable person of normal sensitivities, but do not exceed the noise limits specified herein.
6. **Lot-line** refers to the line separating the campus from another parcel or from the street.
7. **Background Noise** shall be defined as the measured ambient noise level associated with all existing environmental, transportation, and community noise sources in the absence of any audible construction activity.
8. **dBA** shall be defined as the sound level (in decibels referenced to 20 micro-pascals) as measured using the A-weighting network on a sound level meter, in accordance with ANSI S1.4 Standards.
9. **Lmax** shall be defined as the maximum measured sound level at any instant in time.
10. **Leq** shall be defined as the equivalent sound level, or the continuous sound level that represents the same sound energy as the varying sound levels, over a specified monitoring period.
11. **L10** shall be defined as the sound level exceeded 10 percent of the time for a specified monitoring period.
12. **Slow** specifies a time constant or 1 second for the root-mean-square (RMS) detector used by a sound level meter, in accordance with ANSI S1.4 Standards.
13. **Impact noise** is noise produced from impact or devices with discernible separation in sound pressure maxima. Examples for impact equipment include, but are not limited to; blasting, clam shovel or chisel drops, pavement breakers, jackhammers, hoe rams, mounted impact hammers, and impact pile drivers (but not vibratory pile drivers).

B. The intent of this Section is to minimize construction noise within construction areas, lay-down areas, and communities adjacent to the construction site. To this end, the Contractor and all subcontractors, suppliers, and vendors, are required to comply with all applicable noise regulations, specification requirements, and the noise level limits specified herein.

C. The Contractor shall use equipment with efficient noise-suppression devices and employ other noise abatement measures such as enclosures and barriers necessary for the protection of the public, as necessary.

D. The Contractor shall schedule and conduct operations in a manner that will minimize, to the greatest extent feasible, the disturbance to the public in areas adjacent to the Work and to occupants of buildings in the vicinity of the Work.

E. After the Preconstruction Meeting and prior to the commencement of the Work, Contractor shall submit a Noise Control and Monitoring Plan for review and acceptance by the District. Rather than creating a single plan for the duration of the project, a separate Noise Control and Monitoring Plan may be submitted 60 days in advance of each Phase of the Work with the details appropriate to each Phase. Submit the Plan in duplicate.
1. The Noise Control and Monitoring Plan shall describe the noise monitoring and reporting procedure to be used during construction, the procedures for predicting construction noise levels prior to performing construction activities, and describe the noise reduction measures required to meet the noise level limitations and minimize nuisance noise conditions. Noise generating equipment shall not be operated prior to acceptance of the Noise Control and Monitoring Plan.

2. The Noise Control and Monitoring Plan shall identify and describe the following in detail:
   a. The receptor locations where noise monitoring will be performed during each Phase of the Work. Include a site plan showing all locations.
   b. The type of noise level measurement device that will be used.
   c. The noise monitoring methods and procedures that will be used.
   d. The data reporting method that will be used.
   e. The response procedure and actions to be taken by the Contractor for any lot-line, educational facility, or equipment noise level that exceeds the noise limits specified in this Section. The response procedure may include, but not be limited to, use of additional noise reduction materials and equipment.
   f. The noise complaint response and resolution procedures.
   g. A description of the anticipated significant noise generating construction activities.
   h. An inventory of construction equipment to be utilized and the associated noise levels for each.

F. Submit a current laboratory calibration conformance certificate for the noise monitoring equipment to be used prior to performing any noise level monitoring. Submit updated certificates following subsequent yearly calibrations, or upon completion of repairs to the instrument, for the duration of this Contract.

G. Noise Control Measures: Contractor shall implement the following noise-control measures to reduce and control noise generated from construction, demolition, and construction related activities:
   1. Restrict noise-producing construction activities to between 7:00 a.m. and 7:00 p.m. on weekdays. If construction is scheduled for Saturdays or Sundays to avoid disrupting college operations, restrict noise-producing construction activities to between 9:00 a.m. and 5:00 p.m. Construction on Sundays shall be avoided, if possible, and there will be no construction on public holidays without prior written request submitted to and written approval returned by the District, at its sole discretion. A decision by the District to deny Sunday or holiday work shall not be deemed to cause a delay in the Contract Time. When activities must occur outside the hours specified above, conform with notification requirements of this Section and utilize local barriers around equipment and other noise attenuating devices if necessary to limit noise to acceptable levels.
   2. Comply with all City of Pleasant Hill requirements regarding both allowable hours of Work and noise level limitations.
   3. Contractor shall comply with applicable regulatory requirements for the operation of powered construction equipment during all Phases of construction.
4. All construction equipment shall have appropriate mufflers, intake silencers, and other required noise-control features, shall be properly maintained and in compliance with State standards.

5. Vehicles and other gas or diesel powered equipment shall be prohibited from unnecessary warming up, idling, and engine revving.

6. Impact tools shall utilize “quiet technology” to minimize noise.

7. Contractor shall provide and post signs at the construction site giving the name and telephone number or e-mail address of the District and/or designated College Representative whom the public should contact regarding any noise complaints. If necessary due to complaints, Contractor shall provide additional noise-attenuating measures such as additional mufflers or engine shrouding.

H. Secure written permission from Project Manager at least three (3) working days prior to using noisy and vibratory equipment, such as jackhammers, concrete saws, impact tools, and high frequency electrical equipment. Cooperate with District if the use of noisy equipment becomes objectionable to college employees and/or students.

I. The work must be conducted so that nearby residents and college operations in surrounding facilities and classrooms will not be disturbed at any time during any Phase of the Work including, but not limited to, the following requirements:

1. The Contractor MUST perform all work within the permissible noise levels, day of week, or weekend and hour of day limitations, and within the guidelines established by applicable federal, state, and municipal codes, regulations, laws, and standards.

2. During the Work, the contractor shall ensure that all noise generated from construction-related equipment and construction activity complies with applicable Contra Costa County and City of Pleasant Hill noise standards and thresholds where technically feasible. Noise standards and thresholds of Contra Costa County and City of Pleasant Hill are therefore included, by reference, in the Contractor’s contract.

3. In the event of complaints from nearby residents or the campus community, the Contractor shall measure noise levels at both adjacent residential lot lines and nearby educational buildings. In the event that construction noise exceeds the specified limits, the responsible construction activity shall cease until appropriate noise control measures are implemented. In the event that the measured noise level exceeds allowable limits as specified in this Section, or is resulting in nuisance conditions, the Contractor shall immediately alter operations or use noise reduction materials and methods to reduce noise levels or to alleviate the nuisance conditions.

4. Do not use loud vocal or mechanical signals. Use of outside speakers, loud radios and similar devices are prohibited.

5. Exterior noise levels shall not exceed the Noise Level and Duration Standards specified herein.

6. Work shall be performed in a manner to prevent nuisance conditions such as noise which exhibits a specific audible frequency or tone (e.g., backup alarms, poorly maintained equipment, brake squeal, etc.) or impact noise (e.g., jackhammers, hoe rams). The District will make any final interpretation concerning whether or not nuisance noise conditions exist. Only the District representatives and specifically designated College
representatives have the authority to stop the Work until nuisance noise conditions are resolved, without additional Contract Time or compensation for the Contractor.

1.5 NOISE MONITORING EQUIPMENT

A. All noise measurements shall be performed with an instrument that is in compliance with the criteria for a Type 1 (Precision) or Type 2 (General Purpose) Sound Level Meter as defined in the current revision of ANSI Standard S1.4.

B. The sound level meter shall be capable of measuring dBA noise levels and operating on the "slow" response setting.

C. Sound level meters shall be capable of measuring and displaying Lmax and L10 over 20 minute intervals in the field without the need for post-processing of data.

D. All sound level meters, microphones, and calibrators shall undergo certified laboratory calibration conformance testing at least once a year. The calibration certificate shall be submitted to the District.

E. The sound level meter shall be on-site and readily accessible at all times.

1.6 NOISE LEVELS AND DURATION STANDARD

A. Contractor shall comply with the following noise level standards:

1. Only the transport of construction equipment on the project site may occur outside of regular construction hours. Construction equipment shall be properly outfitted and maintained to ensure that noise reduction is maximized.

2. The Tables below defines the permissible for Noise Level and Duration Standards for this Project:

| TABLE 1: PERMISSIBLE NOISE LEVELS AT CAMPUS PROPERTY LINES |
|---------------------------------|--|-----------------|
| Max. Cumulative Duration of Noise Event in Any One-hour Period | Exterior Noise Level Standards, dB(A), Leq 7AM to 10PM | Exterior Noise Level Standards, dB(A), Leq 10 PM to 7 AM |
| 30 minutes | 50 | 45 |
| 15 minutes | 55 | 50 |
| 5 minutes | 60 | 55 |
| 1 minute | 65 | 60 |
| 0 minutes | 70 | 65 |

<p>| TABLE 2: PERMISSIBLE NOISE LEVELS AT BUILDINGS ADJACENT TO PROJECT SITE |
|---------------------------------|-----------------|</p>
<table>
<thead>
<tr>
<th>Max. Cumulative Duration</th>
<th>Exterior Noise Level</th>
<th>Exterior Noise Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contra Costa Community College District</td>
<td>Diablo Valley College</td>
<td>DVC Exterior Painting Project</td>
</tr>
<tr>
<td>of Noise Event in Any One-hour Period</td>
<td>Standards, dB(A), Leq 7AM to 10PM</td>
<td>Standards, dB(A), Leq 10 PM to 7 AM</td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>-----------------------------------</td>
<td>-----------------------------------</td>
</tr>
<tr>
<td>30 minutes</td>
<td>70</td>
<td>See Table 1</td>
</tr>
<tr>
<td>15 minutes</td>
<td>75</td>
<td>See Table 1</td>
</tr>
<tr>
<td>5 minutes</td>
<td>80</td>
<td>See Table 1</td>
</tr>
<tr>
<td>1 minute</td>
<td>85</td>
<td>See Table 1</td>
</tr>
<tr>
<td>0 minutes</td>
<td>90</td>
<td>See Table 1</td>
</tr>
</tbody>
</table>

B. Equipment and associated equipment operating under full load shall not exceed the Lmax noise limits specified in Table 3, below. The 50-foot noise emission limits specified in Table 3 shall apply to the entire operation in which the equipment is engaged. Table 3 also provides distinction as to which equipment is considered to emit impact or continuous noise.
<table>
<thead>
<tr>
<th>Equipment Category</th>
<th>Lmax Noise Limit at 50 ft, dBA, slow</th>
<th>Is Equipment an Impact Device? (c)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All other equipment &gt; 5 HP</td>
<td>85</td>
<td>No</td>
</tr>
<tr>
<td>Auger Drill Rig</td>
<td>85</td>
<td>No</td>
</tr>
<tr>
<td>Backhoe</td>
<td>80</td>
<td>No</td>
</tr>
<tr>
<td>Bar Bender</td>
<td>80</td>
<td>No</td>
</tr>
<tr>
<td>Boring Jack Power Unit</td>
<td>80</td>
<td>No</td>
</tr>
<tr>
<td>Chain Saw</td>
<td>85</td>
<td>No</td>
</tr>
<tr>
<td>Clam Shovel</td>
<td>93</td>
<td>Yes</td>
</tr>
<tr>
<td>Compactor (ground)</td>
<td>80</td>
<td>No</td>
</tr>
<tr>
<td>Compressor (air)</td>
<td>80</td>
<td>No</td>
</tr>
<tr>
<td>Concrete Mixer Truck</td>
<td>85</td>
<td>No</td>
</tr>
<tr>
<td>Concrete Pump</td>
<td>82</td>
<td>No</td>
</tr>
<tr>
<td>Concrete Saw</td>
<td>90</td>
<td>No</td>
</tr>
<tr>
<td>Crane (mobile or stationary)</td>
<td>85</td>
<td>No</td>
</tr>
<tr>
<td>Dozer</td>
<td>85</td>
<td>No</td>
</tr>
<tr>
<td>Dump Truck</td>
<td>84</td>
<td>No</td>
</tr>
<tr>
<td>Excavator</td>
<td>85</td>
<td>No</td>
</tr>
<tr>
<td>Flat Bed Truck</td>
<td>84</td>
<td>No</td>
</tr>
<tr>
<td>Front End Loader</td>
<td>80</td>
<td>No</td>
</tr>
<tr>
<td>Generator (25 KVA or less)</td>
<td>70</td>
<td>No</td>
</tr>
<tr>
<td>Generator (more than 25 KVA)</td>
<td>82</td>
<td>No</td>
</tr>
<tr>
<td>Gradall</td>
<td>85</td>
<td>No</td>
</tr>
<tr>
<td>Grader</td>
<td>85</td>
<td>No</td>
</tr>
<tr>
<td>Horizontal Boring Hydraulic Jack</td>
<td>80</td>
<td>No</td>
</tr>
<tr>
<td>Hydra Break Ram</td>
<td>90</td>
<td>Yes</td>
</tr>
<tr>
<td>Insitu Soil Sampling Rig</td>
<td>84</td>
<td>No</td>
</tr>
<tr>
<td>Jackhammer</td>
<td>85</td>
<td>Yes</td>
</tr>
<tr>
<td>Mounted Impact Hammer (hoe ram)</td>
<td>90</td>
<td>Yes</td>
</tr>
<tr>
<td>Paver</td>
<td>85</td>
<td>No</td>
</tr>
<tr>
<td>Pickup Truck</td>
<td>55</td>
<td>No</td>
</tr>
<tr>
<td>Pneumatic Tools</td>
<td>85</td>
<td>No</td>
</tr>
<tr>
<td>Pumps</td>
<td>77</td>
<td>No</td>
</tr>
<tr>
<td>Rock Drill</td>
<td>85</td>
<td>No</td>
</tr>
<tr>
<td>Scraper</td>
<td>85</td>
<td>No</td>
</tr>
<tr>
<td>Tractor</td>
<td>84</td>
<td>No</td>
</tr>
<tr>
<td>Vacuum Excavator (vac-truck)</td>
<td>85</td>
<td>No</td>
</tr>
<tr>
<td>Vacuum Street Sweeper</td>
<td>80</td>
<td>No</td>
</tr>
<tr>
<td>Vibratory Concrete Mixer</td>
<td>80</td>
<td>No</td>
</tr>
<tr>
<td>Welder</td>
<td>73</td>
<td>No</td>
</tr>
</tbody>
</table>
C. See Section 01010 Summary of Work for required non-work days and quiet times.

1.7 DUST CONTROL PLAN

A. Contractor shall implement dust control measures to protect air quality during construction to control dust emissions generated during construction, implement the following Bay Area Air Quality Management District (BAAQMD) measures for construction emissions of particulate matter over 10 microns in size (PM10):

1. Water all active construction areas at least twice daily.
2. Cover all trucks hauling soil, sand and other loose materials, or require all trucks to maintain at least 2 feet of freeboard.
3. Apply water three times daily or apply (nontoxic) soil stabilizers on all unpaved access roads, parking areas and staging areas at construction sites.
4. Sweep driveways and adjacent public streets daily (with water sweepers) if visible soil materials have been carried onto adjacent public streets.
5. Suspend excavation and grading activity when winds (instantaneous gusts) exceed 25 miles per hour.
6. Limit speed of vehicles to 10 miles per hour or less on the Site.
7. If campus or neighborhood complaints regarding objectionable dust are received by the College, the Contractor shall take immediately action to abate such conditions.

1.8 TRAFFIC CONTROL PLAN

A. Contractor shall develop and implement a traffic control plan for each Phase of the Work to minimize the effects of construction traffic on the campus and surrounding residential areas, as appropriate. Submit the plan in duplicate to the District for review and approval.

B. The Construction traffic control plan will include, at a minimum, the following requirements:

1. Provide clearly marked pedestrian detours if any sidewalk or pedestrian walkway closures are necessary. Provide clear directional signage as required.
2. Provide clearly marked bicycle detours if bicycle routes must be closed, or if bicyclist safety would be otherwise compromised. Provide clear signage as required.
3. Provide crossing guards and/or flag persons as needed to avoid traffic conflicts and ensure both pedestrian and bicyclist safety at all times.
4. Use nonskid traffic plates over open trenches to minimize hazard.
5. Locate all stationary equipment as far away as possible from areas used heavily by vehicles, bicyclists and pedestrians.
6. Notify and consult with emergency service providers, including the Campus Police Department, and maintain clear, unobstructed access by whatever means necessary to expedite and facilitate the passage of emergency vehicles.
7. Obtain City of Pleasant Hill approval for preferred construction traffic routing over public streets, location of temporary curb cuts, if any, and/or other construction traffic access and egress from public streets to the Project site. Consult with District concerning preferred construction traffic routing prior to requesting City approval. Contractor shall be responsible for obtaining any required permits and for all associated costs.
8. Avoid routing construction traffic through residential areas to the extent feasible. Prohibit mobilization and demobilization of heavy construction equipment during AM and PM peak traffic hours, and pursuant to City of Pleasant Hill requirements.

9. Provide access for drive ways and private roads outside the immediate construction zone by using steel plates or temporary backfill as necessary.

10. Prohibit construction worker parking in student parking lots and in residential areas.

C. Contractor shall notify the District, Architect, Project Manager, Project Inspector, Campus Police Department, city and county agencies, as applicable, a minimum of five (5) working days in advance of performing work which necessitates closing or interfering with traffic on public thoroughfares, parking areas, driveways and walks. Obtain written permission prior to effecting such closures and interruptions.

D. The District will designate an entrance to the Project site for the Contractor's use for each Phase of the Work. See Phasing Plans.

1.9 SPILL PREVENTION, CONTROL AND COUNTERMEASURE PROGRAM

A. Contractor shall prepare and implement a Spill Prevention, Control and Countermeasure Program (SPCCP) to minimize the potential for and effects from spills of hazardous, toxic or petroleum substances during construction and demolition activities. Obtain approval of the SPCCP before any construction or demolition activities begin.

B. Contractor shall routinely inspect the construction area to verify that the measures specified in the SPCCP are properly implemented and maintained. Inform the District immediately if there is a noncompliance issue and take immediate measures to restore compliance.

C. The federal reportable spill quantity for petroleum products, as defined in 40 CFR 110, is any oil spill that includes any of the following:

1. Violates applicable water quality standards.
2. Causes a film or sheen on or discoloration of the water surface or adjoining shoreline.
3. Causes a sludge or emulsion to be deposited beneath the surface of the water or adjoining shorelines.

D. If a spill is reportable, notify the District’s Representative and take action to contact appropriate safety and clean-up crews to ensure that the SPCCP is followed.

1. A written description of reportable releases must be submitted to the District’s Representative and to the San Francisco Bay Regional Water Quality Control Board (RWQCB). This submittal must contain a description of the spill, including the type of material and an estimate of the amount spilled, the date of the release, an explanation of why the spill occurred and a description of the steps taken to prevent and control future releases. Document the releases on a spill report form.

2. If a reportable spill has occurred and results determine that project activities have adversely affected surface water or groundwater quality, the District will engage a registered environmental assessor at Contractor’s expense for a detailed analysis to identify the likely cause of contamination. This analysis will conform to American Society for Testing and Materials (ASTM) standards and will include recommendations for reducing or eliminating the source or mechanisms of contamination.
3. Based on this analysis, the Contractor shall select and implement measures to control contamination, with a performance standard that groundwater quality must be returned to baseline conditions. These measures will be subject to approval by the District.

1.10 TREE PROTECTION PLAN

A. Definitions:

1. Dripline: If applicable, the area on the ground from the trunk of any tree to the point directly below the outermost tips of the foliage of that tree.

2. Root Protection Zone (“RPZ”): If applicable, the areas enclosed with tree protection fencing as designated on the drawing(s).

3. Tree damage: If applicable, tree damage shall include, but not limited to, the following: Significant injury to the root system or other parts of a tree including burning, application of toxic substances, damaging through contact with equipment or machinery, changing the natural grade within the Dripline or RPZ, compacting the soil within the Dripline or RPZ, interfering with the normal water requirements of the tree, unauthorized trenching or excavating within the Dripline or RPZ, or unauthorized removal of more than 1/3 of the live wood, foliage or roots.

B. Root Protection: No storage of materials or equipment will be allowed within the Dripline. Whenever possible, excavation shall be on a radial line, diverging from the tree trunk. For items of Work delayed materially beyond Date of Substantial Completion, provide update submittal within 14 Days after acceptance, listing date of acceptance as start of warranty period.

C. Exposure to harmful substances: No storage or dumping of any substances that may be harmful to trees shall occur at any location on the Site.

D. Where construction is to be performed in the vicinity of trees and shrubbery, the Work shall be carried on in a manner that will cause minimum damage. District will designate trees that are to be removed. Under no circumstances are additional trees to be removed without written permission from District. Trees and shrubbery that are not to be removed shall be protected from injury or damage resulting from Contractor’s operations.

E. Any tree that is removed without District’s permission or is irreparably damaged, in the opinion of District, shall cost Contractor in damages [$100.00] per square inch of cross section, measured at 4 ½ feet above ground, but not less than [$250.00], such cost to be deducted from monies due or to become due under the Contract. If tree protection is not performed or is not performed adequately and District determines that a tree has been irreparably damaged, Contractor shall pay the same amount of damages as for unauthorized removal of a tree. Contractor shall immediately report all tree damage to District, so that District may determine applicable damages.

1.11 MIGRATORY BIRD PROTECTION

A. If applicable, conduct tree removal and building demolition outside of the migratory bird nesting season. The typical nesting season for migratory birds in this part of California is April 15 through July 31.

B. If tree removal or building demolition must take place during the nesting season, these activities shall be preceded by a survey for nesting migratory birds. If bird nests are discovered in the trees or on the buildings, they shall not be removed while the nest(s) are active.
1.12 CULTURAL RESOURCES PROTECTION PLAN

A. If buried cultural resources, such as chipped or ground stone, historic debris, building foundations or human bones or paleontological resources are discovered inadvertently during ground-disturbing activities, Contractor shall avoid any further disturbance of the materials and immediately discontinue earthwork within 100 feet of the find. Contractor shall notify District’s Representative immediately upon encountering cultural resources. Contractor shall be prepared to move on to another location or phase of work, allowing sufficient time for District’s Representative to evaluate the nature and significance of the find and implement appropriate management procedures.

B. In the event that prehistoric human remains are encountered, further excavation or disturbance of the site shall cease immediately, pursuant to Health and Safety Code 7050.5. Contractor shall notify District’s Representative immediately upon encountering human remains. Contractor shall move on to another location or phase of Work to allow proper assessment of the situation.

C. If human remains of Native American origin are discovered during project construction, it will be necessary to comply with State laws relating to the disposition of Native American burials, which fall under the jurisdiction of the NAHC (Public Resources Code (PRC) Section 5097. Consequently, if any human remains are discovered or recognized in any location other than a dedicated cemetery, there will be no further excavation or disturbance of the site or any nearby areas reasonably suspected to overlie adjacent human remains:

1. Until the Contra Costa County Coroner has been informed and has determined that no investigation of the cause of death is required;

2. If the remains are of Native American origin;
   a. The descendents of the deceased Native American(s) have made a recommendation to the landowner or the person responsible for the excavation work regarding means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in PRC Section 5097.98 or
   b. The NAHC has been unable to identify a descendent or the descendent failed to make a recommendation within 24 hours after being notified by the NAHC.

PART 2 - PRODUCTS
Not Used.

PART 3 - EXECUTION
Not Used.

END OF SECTION 01416
PART 1 - GENERAL

1.1 RELATED DOCUMENTS
   A. All Contract Documents shall be reviewed for applicable provisions related to the provisions in this document, and provisions in the General Conditions and other Division 1 Specification Sections shall apply to this Section without limitation.

1.2 RELATED REQUIREMENTS SPECIFIED IN OTHER SECTIONS
   A. Section 01010 – “Summary of Work”
   B. Section 01312 – “Project Meetings”
   C. Section 01410 – “Regulatory Requirements”
   D. Section 01425 – “Abbreviations”
   E. Section 01770 – “Contract Closeout Procedures”

1.3 INDUSTRY STANDARDS
   A. Applicability of Standards: Unless the Contract Documents specify more stringent requirements, applicable construction industry standards have the same force and effect as if bound or copied directly into the Contract Documents to the extent referenced. Such standards are made a part of the Contract Documents by reference.

   B. Publication Dates: Comply with standards in effect as of date of the Contract Documents, unless otherwise indicated.

   C. Conflicting Requirements: If compliance with two or more standards is specified and the standards establish different or conflicting requirements for minimum quantities or quality levels, comply with the most stringent requirement. Refer uncertainties and requirements that are different, but apparently equal, to Architect for a decision before proceeding.

      1. Minimum Quantity or Quality Levels: The quantity or quality level shown or specified shall be the minimum provided or performed. The actual installation may comply exactly with the minimum quantity or quality specified, or it may exceed the minimum within reasonable limits. To comply with these requirements, indicated numeric values are minimum or maximum, as appropriate, for the context of requirements. Refer uncertainties to Architect for a decision before proceeding.

   D. Copies of Standards: Each entity engaged in construction on Project must be familiar with industry standards applicable to its construction activity. Copies of applicable standards are not contained within the Contract Documents.

      1. Where copies of standards are needed to perform a required construction activity, obtain copies directly from publication source and make them available on request.

   E. Abbreviations and Acronyms for Industry Organizations: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name
of the entities indicated in Gale Research's "Encyclopedia of Associations" or in Columbia Books' "National Trade & Professional Associations of the U.S."

F. Abbreviations and Acronyms for Industry Organizations: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list. Names, telephone numbers, and Web site addresses are subject to change and are believed to be accurate and up-to-date as of the date of the Contract Documents.

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Name</th>
<th>Phone</th>
<th>Website</th>
</tr>
</thead>
<tbody>
<tr>
<td>AA</td>
<td>Aluminum Association, Inc. (The)</td>
<td>(202) 862-5100</td>
<td><a href="http://www.aluminum.org">www.aluminum.org</a></td>
</tr>
<tr>
<td>AAADM</td>
<td>American Association of Automatic Door Manufacturers</td>
<td>(216) 241-7333</td>
<td><a href="http://www.taol.com/aaadm">www.taol.com/aaadm</a></td>
</tr>
<tr>
<td>AABC</td>
<td>Associated Air Balance Council</td>
<td>(202) 737-0202</td>
<td><a href="http://www.aabchq.com">www.aabchq.com</a></td>
</tr>
<tr>
<td>AAMA</td>
<td>American Architectural Manufacturers Association</td>
<td>(847) 303-5664</td>
<td><a href="http://www.aamanet.org">www.aamanet.org</a></td>
</tr>
<tr>
<td>AAN</td>
<td>American Association of Nurseries (See ANLA)</td>
<td></td>
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<tr>
<td>AASHTO</td>
<td>American Association of State Highway and Transportation Officials</td>
<td>(202) 624-5800</td>
<td><a href="http://www.aashto.org">www.aashto.org</a></td>
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<tr>
<td>AATCC</td>
<td>American Association of Textile Chemists and Colorists</td>
<td>(919) 549-8141</td>
<td><a href="http://www.aatcc.org">www.aatcc.org</a></td>
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<tr>
<td>ABMA</td>
<td>American Bearing Manufacturers Association</td>
<td>(202) 429-5155</td>
<td><a href="http://www.abma-dc.org">www.abma-dc.org</a></td>
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<tr>
<td>ACI</td>
<td>American Concrete Institute/ACI International</td>
<td>(248) 848-3700</td>
<td><a href="http://www.aci-int.org">www.aci-int.org</a></td>
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<tr>
<td>ACPA</td>
<td>American Concrete Pipe Association</td>
<td>(972) 506-7216</td>
<td><a href="http://www.concrete-pipe.org">www.concrete-pipe.org</a></td>
</tr>
<tr>
<td>ADC</td>
<td>Air Diffusion Council</td>
<td>(312) 201-0101</td>
<td></td>
</tr>
<tr>
<td>AEIC</td>
<td>Association of Edison Illuminating Companies, Inc.</td>
<td>(205) 257-2530</td>
<td><a href="http://www.aeic.org">www.aeic.org</a></td>
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<tr>
<td>AFPA</td>
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<td>AF&amp;PA</td>
<td>American Forest &amp; Paper Association</td>
<td>(800) 878-8878</td>
<td><a href="http://www.afandpa.org">www.afandpa.org</a></td>
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<tr>
<td>AGA</td>
<td>American Gas Association</td>
<td>(202) 824-7000</td>
<td>wwwagenta.org</td>
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<td>AHA</td>
<td>American Hardboard Association</td>
<td>(847) 934-8800</td>
<td><a href="http://www.ahardbd.org">www.ahardbd.org</a></td>
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<tr>
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<td>AHAM</td>
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<td>(202) 872-5955</td>
<td><a href="http://www.aham.org">www.aham.org</a></td>
</tr>
<tr>
<td>AI</td>
<td>Asphalt Institute</td>
<td>(606) 288-4960</td>
<td><a href="http://www.asphaltinstitute.org">www.asphaltinstitute.org</a></td>
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<td>AIA</td>
<td>American Institute of Architects (The)</td>
<td>(202) 626-7300</td>
<td><a href="http://www.aiaonline.org">www.aiaonline.org</a></td>
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<td>AISC</td>
<td>American Institute of Steel Construction, Inc.</td>
<td>(800) 644-2400</td>
<td><a href="http://www.aisc.org">www.aisc.org</a></td>
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<td>AISI</td>
<td>American Iron and Steel Institute</td>
<td>(202) 452-7100</td>
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<td>AITC</td>
<td>American Institute of Timber Construction</td>
<td>(303) 792-9559</td>
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<td>ALA</td>
<td>American Laminators Association (See LMA)</td>
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<td>(800) 395-2522</td>
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<td>ALSC</td>
<td>American Lumber Standard Committee</td>
<td>(301) 972-1700</td>
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<td>American Nursery &amp; Landscape Association</td>
<td>(202) 789-2900</td>
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<td>(212) 642-4900</td>
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<td>AOSA</td>
<td>Association of Official Seed Analysts</td>
<td>(402) 476-3852</td>
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<td>APA</td>
<td>APA – The Engineered Wood Association</td>
<td>(253) 565-6600</td>
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<td>APA</td>
<td>Architectural Precast Association</td>
<td>(941) 454-6989</td>
<td><a href="http://www.archprecast.org">www.archprecast.org</a></td>
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<td>API</td>
<td>American Petroleum Institute</td>
<td>(202) 682-8000</td>
<td><a href="http://www.api.org">www.api.org</a></td>
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<td>ARI</td>
<td>Air-Conditioning &amp; Refrigeration Institute</td>
<td>(703) 524-8800</td>
<td><a href="http://www.ari.org">www.ari.org</a></td>
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<td>ASCA</td>
<td>Architectural Spray Coaters Association</td>
<td>(856) 848-6120</td>
<td><a href="http://www.ascassoc.com">www.ascassoc.com</a></td>
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<td>ASCE</td>
<td>American Society of Civil Engineers</td>
<td>(800) 548-2723</td>
<td><a href="http://www.asce.org">www.asce.org</a></td>
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<td>(703) 295-6300</td>
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<td>ASHRAE</td>
<td>American Society of Heating, Refrigerating and Air-Conditioning Engineers</td>
<td>(800) 527-4723</td>
<td><a href="http://www.ashrae.org">www.ashrae.org</a></td>
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<td>ASME</td>
<td>ASME International (The American Society of Mechanical Engineers International)</td>
<td>(800) 843-2763</td>
<td><a href="http://www.asme.org">www.asme.org</a></td>
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<td>ASSE</td>
<td>American Society of Sanitary Engineering</td>
<td>(440) 835-3040</td>
<td><a href="http://www.asse-plumbing.org">www.asse-plumbing.org</a></td>
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<td>ASTM</td>
<td>American Society for Testing and Materials</td>
<td>(610) 832-9585</td>
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<td>AWCI</td>
<td>AWCI International (Association of the Wall and Ceiling Industries Int’l)</td>
<td>(703) 534-8300</td>
<td><a href="http://www.awci.org">www.awci.org</a></td>
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<td>AWCMA</td>
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<td>AWI</td>
<td>Architectural Woodwork Institute</td>
<td>(800) 449-8811</td>
<td><a href="http://www.awinet.org">www.awinet.org</a></td>
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<td>AWPA</td>
<td>American Wood-Preservers Association</td>
<td>(817) 326-6300</td>
<td><a href="http://www.awpa.com">www.awpa.com</a></td>
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<td>AWS</td>
<td>American Welding Society</td>
<td>(800) 443-9353</td>
<td><a href="http://www.aws.org">www.aws.org</a></td>
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<tr>
<td>AWWA</td>
<td>American Water Works Association</td>
<td>(800) 926-7337</td>
<td><a href="http://www.awwa.org">www.awwa.org</a></td>
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<td>BHMA</td>
<td>Builders Hardware Manufacturers Association</td>
<td>(212) 661-4261</td>
<td><a href="http://www.buildershardware.com">www.buildershardware.com</a></td>
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<tr>
<td>BIA</td>
<td>Brick Industry Association (The)</td>
<td>(703) 620-0010</td>
<td><a href="http://www.bia.org">www.bia.org</a></td>
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<tr>
<td>BIFMA</td>
<td>BIFMA International (Business and Institutional Furniture Manufacturer's Association International)</td>
<td>(616) 285-3963</td>
<td><a href="http://www.bifma.com">www.bifma.com</a></td>
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<td>CCC</td>
<td>Carpet Cushion Council</td>
<td>(203) 637-1312</td>
<td><a href="http://www.carpetcushion.org">www.carpetcushion.org</a></td>
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<td>CCFSS</td>
<td>Center for Cold-Formed Steel Structures</td>
<td>(573) 341-4471</td>
<td><a href="http://www.umr.edu/~ccfss">www.umr.edu/~ccfss</a></td>
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CDA  Copper Development Association Inc.  (800) 232-3282  
www.copper.org  (212) 251-7200  
CEA  Canadian Electricity Association (The)  (613) 230-9263  
www.canelect.ca  
CFFA  Chemical Fabrics & Film Association, Inc.  (216) 241-7333  
www.taol.com/cffa  
CGA  Compressed Gas Association  (703) 412-0900  
www.cganet.com  
CGSB  Canadian General Standards Board  (819) 956-0425  
www.pwgsc.gc.ca/cgsb  
CIMA  Cellulose Insulation Manufacturers Association  (888) 881-2462  
www.cellulose.org  (937) 222-2462  
CISCA  Ceilings & Interior Systems Construction Association  (630) 584-1919  
www.cisca.org  
CISPI  Cast Iron Soil Pipe Institute  (423) 892-0137  
www.cispi.org  
CLFMI  Chain Link Fence Manufacturers Institute  (301) 596-2584  
www.chainlinkinfo.com (under construction)  
CPA  Composite Panel Association  (301) 670-0604  
(Formerly: National Particleboard Association)  
www.pbmfd.com  
CPPA  Corrugated Polyethylene Pipe Association  (800) 510-2772  
Division of Plastics Pipe Institute  (419) 241-2221  
www.cppa-info.org  
CRI  Carpet and Rug Institute (The)  (800) 882-8846  
www.carpet-rug.com  (706) 278-3176  
CRSI  Concrete Reinforcing Steel Institute  (847) 517-1200  
www.crsi.org  
CSA  CSA International  (216) 524-4990  
(Formerly: IAS - International Approval Services)  
Division of Canadian Standards Association  www.iasapprovals.org  
CSI  Construction Specifications Institute (The)  (800) 689-2900  
www.csinet.org  (703) 684-0300  
CSSB  Cedar Shake & Shingle Bureau  (604) 462-8961  
www.cedarbureau.org
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<th>Acronym</th>
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<tr>
<td>CTI</td>
<td>Cooling Tower Institute</td>
<td>(281) 583-4087</td>
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<td>DHI</td>
<td>Door and Hardware Institute</td>
<td>(703) 222-2010</td>
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<td>EIA/TIA</td>
<td>Electronic Industries Alliance/Telecommunications Industry Association</td>
<td>(703) 907-7500</td>
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<td>EIMA</td>
<td>EIFS Industry Members Association</td>
<td>(800) 294-3462</td>
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<td>EJMA</td>
<td>Expansion Joint Manufacturers Association, Inc.</td>
<td>(914) 332-0040</td>
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<td>FCI</td>
<td>Fluid Controls Institute</td>
<td>(216) 241-7333</td>
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<td>FGMA</td>
<td>Flat Glass Marketing Association (See GANA)</td>
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<td>FM</td>
<td>Factory Mutual System (See FMG)</td>
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<td>FMG</td>
<td>FM Global (Formerly: FM - Factory Mutual System)</td>
<td>(401) 275-3000</td>
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<td>GA</td>
<td>Gypsum Association</td>
<td>(202) 289-5440</td>
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<td>GANA</td>
<td>Glass Association of North America (Formerly: FGMA - Flat Glass Marketing Association)</td>
<td>(785) 271-0208</td>
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<td>GRI</td>
<td>Geosynthetic Research Institute</td>
<td>(610) 522-8440</td>
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<td>GTA</td>
<td>Glass Tempering Division of Glass Association of North America (See GANA)</td>
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<td>HI</td>
<td>Hydraulic Institute</td>
<td>(888) 786-7744 (973) 267-9700</td>
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<td>HI</td>
<td>Hydronics Institute</td>
<td>(908) 464-8200</td>
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<td>HMMA</td>
<td>Hollow Metal Manufacturers Association Division of National Association of Architectural Metal Manufacturers (See NAAMM)</td>
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<td>HPVA</td>
<td>Hardwood Plywood &amp; Veneer Association</td>
<td>(703) 435-2900</td>
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<td>HPW</td>
<td>H. P. White Laboratory, Inc.</td>
<td>(410) 838-6550</td>
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<td>IAS</td>
<td>International Approval Services (See CSA International)</td>
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<td>ICEA</td>
<td>Insulated Cable Engineers Association, Inc.</td>
<td>(508) 394-4424</td>
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<td>ICRI</td>
<td>International Concrete Repair Institute</td>
<td>(703) 450-0116</td>
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<td>IEC</td>
<td>International Electrotechnical Commission</td>
<td>41 22 919 02 11</td>
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<td>IEEE</td>
<td>Institute of Electrical and Electronics Engineers, Inc.</td>
<td>(212) 419-7900</td>
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<td>IESNA</td>
<td>Illuminating Engineering Society of North America (The)</td>
<td>(212) 248-5000</td>
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<td>IGCC</td>
<td>Insulating Glass Certification Council</td>
<td>(315) 938-7444</td>
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<td>ILI</td>
<td>Indiana Limestone Institute of America, Inc.</td>
<td>(812) 275-4426</td>
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<td>IRI</td>
<td>HSB Industrial Risk Insurers</td>
<td>(800) 520-7300</td>
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<td>ITS</td>
<td>Intertek Testing Services</td>
<td>(800) 345-3851</td>
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<td>KCMA</td>
<td>Kitchen Cabinet Manufacturers Association</td>
<td>(703) 264-1690</td>
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<td>LGSI</td>
<td>Light Gage Structural Institute</td>
<td>(972) 625-4560</td>
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<td>LMA</td>
<td>Laminating Materials Association</td>
<td>(201) 664-2700</td>
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<td>LSGA</td>
<td>Laminated Safety Glass Association (See GANA)</td>
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<td>MBMA</td>
<td>Metal Building Manufacturers Association</td>
<td>(216) 241-7333</td>
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<td>MFMA</td>
<td>Maple Flooring Manufacturers Association</td>
<td>(847) 480-9138</td>
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<td>MFMA</td>
<td>Metal Framing Manufacturers Association</td>
<td>(312) 644-6610</td>
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<td>MHIA</td>
<td>Material Handling Industry of America</td>
<td>(800) 345-1815</td>
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MIA  Marble Institute of America  (614) 228-6194
www.marble-institute.com
ML/SFA  Metal Lath/Steel Framing Association (See SSMA)
MSS  Manufacturers Standardization Society of Valve and Fittings Industry, Inc.
www.mss-hq.com
NAAMM  National Association of Architectural Metal Manufacturers  (312) 332-0405
www.naamm.org
NAAMM  North American Association of Mirror Manufacturers (See GANA)
NACE  NACE International (National Association of Corrosion Engineers International)  (281) 228-6200
www.nace.org
NAIMA  North American Insulation Manufacturers Association  (703) 684-0084
www.naima.org
NAMI  National Accreditation and Management Institute, Inc.  (304) 258-5100
NAPM  National Association of Photographic Manufacturers (See PIMA)
NBGQA  National Building Granite Quarries Association, Inc.  (800) 557-2848
www.nbgqa.com
NCMA  National Concrete Masonry Association  (703) 713-1900
www.ncma.org
NCPI  National Clay Pipe Institute  (414) 248-9094
www.ncpi.org
NCTA  National Cable Television Association  (202) 775-3669
www.ncta.com
NEBB  National Environmental Balancing Bureau  (301) 977-3698
www.nebb.org
NECA  National Electrical Contractors Association  (301) 657-3110
www.necanet.org
NeLMA  Northeastern Lumber Manufacturers' Association  (207) 829-6901
www.nelma.org
NEMA  National Electrical Manufacturers Association  (703) 841-3200
www.nema.org
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<td>InterNational Electrical Testing Association</td>
<td>(303) 697-8441</td>
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<td>NFPA</td>
<td>National Fire Protection Association</td>
<td>(800) 344-3555</td>
<td><a href="http://www.nfpa.org">www.nfpa.org</a></td>
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<td>NFRC</td>
<td>National Fenestration Rating Council</td>
<td>(301) 589-6372</td>
<td><a href="http://www.nfrc.org">www.nfrc.org</a></td>
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<td>NGA</td>
<td>National Glass Association</td>
<td>(703) 442-4890</td>
<td><a href="http://www.glass.org">www.glass.org</a></td>
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<td>NHLA</td>
<td>National Hardwood Lumber Association</td>
<td>(901) 377-1818</td>
<td><a href="http://www.natlhardwood.org">www.natlhardwood.org</a></td>
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<td>NLGA</td>
<td>National Lumber Grades Authority</td>
<td>(604) 524-2393</td>
<td><a href="http://www.nlga.org">www.nlga.org</a></td>
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<td>NOFMA</td>
<td>National Oak Flooring Manufacturers Association</td>
<td>(901) 526-5016</td>
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<td>NRCA</td>
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<td>(800) 323-9545</td>
<td><a href="http://www.nrca.net">www.nrca.net</a></td>
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<td>NRMCA</td>
<td>National Ready Mixed Concrete Association</td>
<td>(301) 587-1400</td>
<td><a href="http://www.nrmca.org">www.nrmca.org</a></td>
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<td>NSA</td>
<td>National Stone Association</td>
<td>(800) 342-1415</td>
<td><a href="http://www.aggregates.org">www.aggregates.org</a></td>
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<td>NSF</td>
<td>NSF International (National Sanitation Foundation International)</td>
<td>(800) 673-6275</td>
<td><a href="http://www.nsf.org">www.nsf.org</a></td>
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<td>NTMA</td>
<td>National Terrazzo &amp; Mosaic Association (The)</td>
<td>(800) 323-9736</td>
<td><a href="http://www.ntma.com">www.ntma.com</a></td>
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<td>NWWDA</td>
<td>National Wood Window and Door Association (See WDMA)</td>
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<td>PCI</td>
<td>Precast/Prestressed Concrete Institute</td>
<td>(312) 786-0300</td>
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<td>PDCA</td>
<td>Painting and Decorating Contractors of America</td>
<td>(800) 332-7322</td>
<td><a href="http://www.pdca.com">www.pdca.com</a></td>
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<td>PDI</td>
<td>Plumbing &amp; Drainage Institute</td>
<td>(800) 589-8956</td>
<td><a href="http://www.pdionline.org">www.pdionline.org</a></td>
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<td>PGI</td>
<td>PVC Geomembrane Institute/Technology Program</td>
<td>(217) 333-3929</td>
<td>University of Illinois-Urbana Champaign //pgi-tp.ce.uiuc.edu</td>
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<td>PIMA</td>
<td>Photographic &amp; Imaging Manufacturers Association (Formerly: NAPM - National Association of Photographic Manufacturers)</td>
<td>(914) 698-7603</td>
<td><a href="http://www.pima.net">www.pima.net</a></td>
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<td>RCSC</td>
<td>Research Council on Structural Connections</td>
<td>(888) 225-7339 Division of the California Redwood Association (415) 382-0662</td>
<td><a href="http://www.boltcouncil.org">c/o AISC</a></td>
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<td>RFCI</td>
<td>Resilient Floor Covering Institute (Contact by mail only)</td>
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<td>RIS</td>
<td>Redwood Inspection Service</td>
<td>(888) 220-7620 Division of the California Redwood Association (415) 382-0662</td>
<td><a href="http://www.calredwood.org">www.calredwood.org</a></td>
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<td>RMA</td>
<td>Rubber Manufacturers Association</td>
<td>(800) 220-7620</td>
<td><a href="http://www.rma.org">www.rma.org</a></td>
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<td>SAE</td>
<td>SAE International</td>
<td>(724) 776-4841 Division of the California Redwood Association (724) 776-4960</td>
<td><a href="http://www.sae.org">www.sae.org</a></td>
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<td>SDI</td>
<td>Steel Deck Institute</td>
<td>(847) 462-1930</td>
<td><a href="http://www.sdi.org">www.sdi.org</a></td>
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<td>SDI</td>
<td>Steel Door Institute</td>
<td>(440) 899-0010</td>
<td><a href="http://www.steeldoor.org">www.steeldoor.org</a></td>
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<td>SEFA</td>
<td>Scientific Equipment and Furniture Association</td>
<td>(843) 689-6878</td>
<td><a href="http://www.sefalabfurn.com">www.sefalabfurn.com</a></td>
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<td>SGCC</td>
<td>Safety Glazing Certification Council</td>
<td>(315) 938-7444</td>
<td><a href="http://www.sgcc.org">www.sgcc.org</a></td>
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<td>SIGMA</td>
<td>Sealed Insulating Glass Manufacturers Association</td>
<td>(312) 644-6610</td>
<td><a href="http://www.sigmaonline.org/sigma">www.sigmaonline.org/sigma</a></td>
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<td>SJI</td>
<td>Steel Joist Institute</td>
<td>(843) 626-1995</td>
<td><a href="http://www.steeljoist.org">www.steeljoist.org</a></td>
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<td>SMA</td>
<td>Screen Manufacturers Association</td>
<td>(561) 533-0991</td>
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<td>SMACNA</td>
<td>Sheet Metal and Air Conditioning Contractors' National Association</td>
<td>(703) 803-2980</td>
<td><a href="http://www.smacna.org">www.smacna.org</a></td>
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<td>SPI</td>
<td>The Society of the Plastics Industry, Inc.</td>
<td>(202) 974-5200</td>
<td><a href="http://www.plasticsindustry.org">www.plasticsindustry.org</a></td>
</tr>
<tr>
<td>SPIB</td>
<td>Southern Pine Inspection Bureau (The)</td>
<td>(850) 434-2611</td>
<td><a href="http://www.spib.org">www.spib.org</a></td>
</tr>
<tr>
<td>SPI/SPFD</td>
<td>The Society of the Plastics Industry, Inc. Spray Polyurethane Foam Division (See SPI)</td>
<td></td>
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</tr>
<tr>
<td>Acronym</td>
<td>Description</td>
<td>Phone Number</td>
<td>Website</td>
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<tr>
<td>SPRI</td>
<td>SPRI (Single Ply Roofing Institute)</td>
<td>(781) 444-0242</td>
<td><a href="http://www.spri.org">www.spri.org</a></td>
</tr>
<tr>
<td>SSINA</td>
<td>Specialty Steel Industry of North America</td>
<td>(800) 982-0355</td>
<td><a href="http://www.ssina.com">www.ssina.com</a></td>
</tr>
<tr>
<td>SSMA</td>
<td>Steel Stud Manufacturers Association</td>
<td>(312) 456-5590</td>
<td><a href="http://www.ssma.com">www.ssma.com</a></td>
</tr>
<tr>
<td>SSPC</td>
<td>SSPC: The Society for Protective Coatings</td>
<td>(800) 837-8303</td>
<td><a href="http://www.sspc.org">www.sspc.org</a></td>
</tr>
<tr>
<td>STI</td>
<td>Steel Tank Institute</td>
<td>(847) 438-8265</td>
<td><a href="http://www.steeltank.com">www.steeltank.com</a></td>
</tr>
<tr>
<td>SWI</td>
<td>Steel Window Institute</td>
<td>(216) 241-7333</td>
<td><a href="http://www.steelwindows.com">www.steelwindows.com</a></td>
</tr>
<tr>
<td>SWRI</td>
<td>Sealant, Waterproofing &amp; Restoration Institute</td>
<td>(816) 472-7974</td>
<td><a href="http://www.swrionline.org">www.swrionline.org</a></td>
</tr>
<tr>
<td>TCA</td>
<td>Tile Council of America, Inc.</td>
<td>(864) 646-8453</td>
<td><a href="http://www.tileusa.com">www.tileusa.com</a></td>
</tr>
<tr>
<td>TPI</td>
<td>Truss Plate Institute</td>
<td>(608) 833-5900</td>
<td><a href="http://www.turfrassod.org">www.turfrassod.org</a></td>
</tr>
<tr>
<td>TPI</td>
<td>Turfgrass Producers International</td>
<td>(800) 405-8873</td>
<td><a href="http://www.turfrassod.org">www.turfrassod.org</a></td>
</tr>
<tr>
<td>UFAC</td>
<td>Upholstered Furniture Action Council</td>
<td>(336) 885-5065</td>
<td><a href="http://www.ufac.org">www.ufac.org</a></td>
</tr>
<tr>
<td>UL</td>
<td>Underwriters Laboratories Inc.</td>
<td>(800) 704-4050</td>
<td><a href="http://www.ul.com">www.ul.com</a></td>
</tr>
<tr>
<td>UNI</td>
<td>Uni-Bell PVC Pipe Association</td>
<td>(972) 243-3902</td>
<td>//members.aol.com/unibell</td>
</tr>
<tr>
<td>USG</td>
<td>United States Gypsum Company</td>
<td>(800) 874-4968</td>
<td>A Subsidiary of USG Corporation</td>
</tr>
<tr>
<td>USITT</td>
<td>United States Institute for Theatre Technology, Inc.</td>
<td>(800) 938-7488</td>
<td><a href="http://www.culturenet.ca/usitt">www.culturenet.ca/usitt</a></td>
</tr>
<tr>
<td>USP</td>
<td>U.S. Pharmacopeia</td>
<td>(800) 822-8772</td>
<td><a href="http://www.usp.org">www.usp.org</a></td>
</tr>
<tr>
<td>WASTEC</td>
<td>Waste Equipment Technology Association</td>
<td>(800) 424-2869</td>
<td><a href="http://www.wastec.org">www.wastec.org</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(202) 244-4700</td>
<td></td>
</tr>
</tbody>
</table>
G. Abbreviations and Acronyms for Code Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list. Names, telephone numbers, and Web site addresses are subject to change and are believed to be accurate and up-to-date as of the date of the Contract Documents.

CABO  Council of American Building Officials (See ICC)
IAPMO  International Association of Plumbing and Mechanical Officials (The)  (909) 595-8449  www.iapmo.org
ICBO  International Conference of Building Officials  (800) 284-4406  www.icbo.org
ICC  International Code Council  (703) 931-4533  (Formerly: CABO - Council of American Building Officials)  www.intlcode.org

H. Abbreviations and Acronyms for Federal Government Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the
recognized name of the entities in the following list. Names, telephone numbers, and Web site addresses are subject to change and are believed to be accurate and up-to-date as of the date of the Contract Documents.

CE  Army Corps of Engineers  (601) 634-2355
CRD Standards

www.access.gpo.gov/nara/cfr

CPSC  Consumer Product Safety Commission  (800) 638-2772
www.cpsc.gov  (301) 504-0990

DOC  Department of Commerce  (202) 482-2000
www.doc.gov

DOD  Department of Defense  (215) 697-6257

DOD  Specifications and Standards  //astimage.daps.dla.mil/online

EPA  Environmental Protection Agency  (202) 260-2090
www.epa.gov

FAA  Federal Aviation Administration  (202) 366-4000
Department of Transportation  www.faa.gov

FCC  Federal Communications Commission  (202) 418-0190
www.fcc.gov

FDA  Food and Drug Administration  (888) 463-6332
www.fda.gov

FED-STD  Federal Standard (See FS)

FS  Federal Specification (Available from DOD, GSA, and NIBS)

FTMS  Federal Test Method Standard (See FS)

GSA  General Services Administration  (202) 708-5082
www.gsa.gov  (Federal Specifications)  (202) 619-8925

HUD  Department of Housing and Urban Development  (202) 401-0388

LBL  Lawrence Berkeley Laboratory (See LBNL)

LBNL  Lawrence Berkeley National Laboratory  (510) 486-5605
www.lbl.gov

MILSPEC  Military Specification and Standards (See DOD)

NCHRP  National Cooperative Highway Research Program (See TRB)

NIST  National Institute of Standards and Technology  (301) 975-2000
www.nist.gov
I. Abbreviations and Acronyms for State Government Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list. Names, telephone numbers, and Web site addresses are subject to change and are believed to be accurate and up-to-date as of the date of the Contract Documents.

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Name</th>
<th>Telephone Number</th>
<th>Website</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBHF</td>
<td>State of California, Department of Consumer Affairs Bureau of Home Furnishings and Thermal Insulation</td>
<td>(916) 574-2041</td>
<td><a href="http://www.dca.ca.gov/r_r/homefurn.htm">www.dca.ca.gov/r_r/homefurn.htm</a></td>
</tr>
<tr>
<td>DSA</td>
<td>State of California, Department of General Services The Division of the State Architect (DSA)</td>
<td>(916) 445-8100</td>
<td><a href="http://www.dsa.ca.gov">www.dsa.ca.gov</a></td>
</tr>
</tbody>
</table>

PART 2 - PRODUCTS
Not Used.

PART 3 - EXECUTION
Not Used.

END OF SECTION 01420
SECTION 01505

CONSTRUCTION AND DEMOLITION WASTE MANAGEMENT

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. All Contract Documents shall be reviewed for applicable provisions related to the provisions in this document, and provisions in the General Conditions and other Division 1 Specification Sections shall apply to this Section without limitation.

1.2 RELATED REQUIREMENTS SPECIFIED IN OTHER SECTIONS

A. Section 01010 – “Summary of Work”
B. Section 01412 - “Regulatory Requirements – Hazardous Material”

1.3 SUMMARY

A. The District has established that this Project shall generate the least amount of waste possible and that processes that ensure the generation of as little waste as possible due to error, poor planning, breakage, mishandling, contamination, or other factors shall be employed.

B. Of the inevitable waste that is generated, as many of the waste materials as economically feasible shall be reused, salvaged, or recycled. Waste disposal in landfills shall be minimized.

1.4 WASTE MANAGEMENT GOALS FOR THE PROJECT

A. The District has established that this Project shall minimize the creation of construction and demolition waste, and shall divert a minimum of 75% of Project generated waste from landfills. Factors that contribute to waste such as over packaging, improper storage, ordering error, poor planning, breakage, mishandling, and contamination, shall be minimized. Of the inevitable waste that is generated, as many of the waste materials as economically feasible shall be reused, salvaged, or recycled. Waste disposal in landfills shall be minimized. Both recycled and waste need to be logged and documented by volume and weight.

B. Diversion Goals: A minimum 75% of total Project waste shall be diverted from landfill. The following waste categories, at a minimum, shall be diverted from landfill. The Waste Management Plan shall establish a program for reusing or recycling material which are recyclable. These materials include, but not limited to:

1. Landscape and land clearing debris (green wood materials)
2. Asphalt pavement
3. Gravel and aggregate products
4. Concrete
5. Masonry scrap and rubble (brick, concrete, masonry, stone)
6. Metals (ferrous and nonferrous)
7. Clean wood (dimensional lumber, sheet goods, millwork, scrap, pallets)
8. Plastics (films, containers, PVC products, polyethylene products)
9. Asphalt/Bituminous roofing
10. Insulation Materials
11. Glass (un-tempered)
12. Door and window assemblies
13. Carpet and carpet pad
14. Fibrous acoustic materials
15. Ceiling Tiles
16. Plumbing fixtures and equipment
17. Mechanical equipment
18. Lighting fixtures and electrical components
19. Cardboard packing and packaging
20. Furniture
21. Sheet Rock
22. Electronic Waste
23. Universal Waste
24. Paper

1.5 DEFINITIONS

A. Clean: Untreated and unpainted; not contaminated with oils, grease solvents, caulk, no Freon with air-conditioning units or similar products.

B. Class III Landfill: A landfill that accepts non-hazardous waste such as household, commercial, and industrial waste, including construction, remodeling, repair, and demolition operations.

C. Commingled or Off-site Separation: Collecting all material types into a single bin or mixed collection system and separating the waste materials into recyclable material types in an off-site facility.

D. Construction and Demolition Waste: Solid wastes typically including building materials, packaging, trash debris and rubble resulting from construction, remodeling repair and demolition operations. Hazardous materials are not included.

E. Debris: Including both combustible and noncombustible wastes, such as leaves and tree trimmings that result from construction or maintenance and repair work.

F. Deconstruction: The process of removing existing building materials from renovation and demolition projects for the purposes of reuse, and recycling, in a efficient and safe manner possible.

G. Divert or Diversion from Landfill: To remove, or have removed, from the site for recycling, reuse or salvage material that might otherwise be sent to a landfill. Diversion from Landfill does not include using the material as alternative daily cover at a landfill site, nor does it include burning, incinerating, transformation processing or thermally destroying waste.

H. Inert Fill: A permitted facility that accepts inert waste such as asphalt and concrete exclusively.

I. Recovery: Any process that reclaims materials, substances, energy, or other products contained within or derived from waste on-site. It includes waste-to-energy, composting, and other processes.
J. Recyclable: The ability of a product or material to be recovered at the end of its life cycle and remanufactured into a new product.

K. Recycle (recycling): To sort, separate, process, treat or reconstitute solid waste and other discarded materials for the purpose of redirecting such materials into the manufacture of useful products. The process of collecting and preparing recyclable materials in their original form, or in manufacturing processes, that do not cause the destruction/contamination of recyclable materials in a manner that precludes further use. Recycling does not include burning, incinerating, transforming or thermally destroying waste.

L. Return: To give back reusable items or unused products to vendors.

M. Reuse: Using a material or product that is recovered from construction, renovation, or demolition activities.

N. Reuse on Site: To reuse excess of discarded construction material in some manner on the Project site.

O. Rubbish: Including both combustible and noncombustible wastes, such as paper, boxes, glass, crockery, metal and lumber scrap, tin cans, and bones.

P. Salvage: to remove a waste material from the Project site for resale or reuse.

Q. Sources Separation: Sorting the recovered materials into specific material types with no or a minimum amount of contamination on site.

R. Time-Based Separation: Collecting waste during each phase of construction or deconstruction which results in primarily one major type of recovered material. The material is removed before it becomes mixed with the material from the next phase of construction.

S. Waste Materials: Large and small pieces of listed materials which are excess to contract requirements and generally include materials to be recycled and/or recovered from existing construction and items of trimmings, cuttings, and damaged goods resulting from new installations, which can be effectively used in the Work. Extra material or material that has reached the end of its useful life in its intended use.

1.6 REFERENCES AND RESOURCES

A. This information is provided for Contractor’s convenience only, and the District does not warrant its accuracy. County specific information is available on the Contra Costa County Waste Reduction and Recycling web page at http://www.co.contra-costa.ca.us/depart/cd/recycle/index.html. Additional information may also be found at the county conservation web page at http://www.cccounty.us/index.aspx?NID=285. Refer to the Contra Costa County Builder’s Guide to Reuse & Recycling and the Contra Costa County Recycling Guide. Both are available from Contra Costa County. Contact Lorna Thomson at 925-674-8823 (lorna.thomson@dcd.cccounty.us) for assistance in the management of construction & demolition debris.

B. The recyclers listed below provided for the convenience of Contractor. No preference is given to the recyclers listed below. Contractor shall contact any additional resources as required to complete the work. Some of the names and numbers may be out of date, and Contractor shall not rely on the information presented in this Section in preparing its Bid or its Waste Management Plan.

1. Cardboard:
2. Clean, untreated, dimensional wood and pallet wood:
   Contact: California Waste Solutions (510) 836-6200, Waste Management, Inc. (916) 374-2711.

3. Usable Palettes
   Contact: Return to product vendors or recycle: Industrial Pallet (510) 489-4050.

4. Beverage containers:
   Contact: California Waste Solutions (510) 836-6200.

5. Metals from banding, ductwork, piping, rebar, roofing, steel studs, other trim, steel, iron, galvanized sheet steel, stainless steel, aluminum, copper, zinc, lead, brass, and bronze:
   Contact: Alliance Metals (510) 547-2408; Aaron Metals (510) 569-6767; DC Metals (510) 836-2655; Lakeside Non-Ferrous Metals, (510) 444-5466; Waste Management, Inc., (916) 374-2711.

6. Carpet and pad:
   Contact: Return to manufacturer; donate large remnants to Habitat for Humanity (510) 251-6304 or other non-profit.

7. Paint:
   Contact, paint recycles: E-Coat, Kelly Moore (916) 921-0165.
   Contact, hazardous waste management: Alameda County Household Waste Management Program (800) 606-6606; Safety Clean (510) 832-7942.

8. Insulation:
   Check with manufacturer or installer for take-back programs.

9. Brick:
   Contact, (whole bricks): A Bygone Era; Ohmega Salvage (510) 843-7368.

10. Gypsum Board:
    Contact: Zanker Resource Management (408) 263-2383.

C. The following sources provided for references:
   1. BuildingGreen.com
   2. California Integrated Waste Management Board
   3. EPA Office of Solid Waste and Energy Response

1.7 WASTE MANAGEMENT PLAN
A. Waste Management Plan: Within 10 calendar days after receipt of Notice of Award of Bid, or prior to any waste removal, whichever occurs sooner, Contractor shall submit to the District and District’s Representative a Waste Management Plan, tailored to this project and site, for review and acceptance. The Plan shall include, but not limited to, the following:
1. The Contractor shall designate an on-site party (or parties) as the Waste Management Plan Program Manager responsible for instructing workers and overseeing and documenting results of implementation of the Waste Management Plan for the Project.

2. Indicate how the Contractor proposes to recover at least 75% of the wastes for reuse and recycling.

3. The Waste Management Plan should coordinate the recovery effort with the construction, and renovation/demolition schedule.

4. Indicate compliance with this specification’s section on Quality Assurance.

5. Description of the regular meetings to address waste management.

6. Include a list of reuse facilities, recycling facilities and processing facilities that will be receiving the recovered materials (including take back by District or on-site auctions.)

7. If some of the materials will be donated or sold on-site auctions, describe the process and identify the organizations that may receive the materials.

8. Identify materials that are not recyclable or not recovered which will be disposed of in a landfill (or other means acceptable by the State of California and local ordinance and regulations) and explain why the materials are not recovered.

9. List the permitted landfill, or other permitted disposal facilities, that will be accepting the disposed waste materials.

10. Indicate instances or situations where compliance with the requirements of this specification do not apply or do not appear to be possible.

11. Identify each type of waste material to be reused or recycled and estimate the amount, by weight.

12. Provide estimate of time requirements for demolition and for the removal of valuable reusable items and materials.

B. Revise and resubmit Plan as required by District.

C. Approval of Contractor’s Plan will not relieve Contractor of responsibility for compliance with applicable environmental regulations.

1.8 QUALITY ASSURANCE

A. Regulatory Requirements. Comply with applicable requirements of the State of California, local ordinances and regulations concerning management of construction, clearing, and inert materials.

B. Disposal Site, Recyclers and Waste Materials Processors. Use only facilities properly permitted by the State of California, and/or by local authorities where applicable.

C. Pre-Work Waste Management Meeting.

1. Prior to beginning work at the site, schedule and conduct a meeting to review the Waste Management Plan and discuss procedures, schedules, coordination and specific requirements for waste materials recycling and disposal. Discuss coordination and interface between Contractor, sub-contractors, architect, engineers, project manager, District, and other waste management activities. Identify and resolve problems of compliance with requirements. Record minutes of the meeting, identifying conclusions reached and matters requiring further resolution. Maintain waste management as an agenda item at future construction meetings.
2. Attendees: Contractor and related contractor personnel associated with work of this section, including personnel in charge of the waste management program; Waste Management Plan Program Manager; architect; engineers; material and equipment suppliers where appropriate; and such additional District personnel as District deems appropriate.

3. Plan Revision: Make revisions to Waste Management Plan agreed upon during the meeting and incorporate resolutions agreed to be made subsequent to the meeting. Submit revised plan to architect or the District personnel as District deems appropriate for approval.

1.9 RECYCLING PROGRAM

A. The recycling program could utilize one or a combination of any of the following common waste diversion strategies:
   1. Sources Separation
   2. Time-Based Separation
   3. Commingled or Off-site Separation
   4. Back haul of packaging
   5. On-site sales auctions and removal.

B. Waste Material management hierarchy can be viewed as: reuse on-site, recycle on-site, reuse off-site, and recycle off-site.

1.10 WASTE MANAGEMENT PLAN IMPLEMENTATION

A. Plan Distribution:
   1. Contractor shall provide copies of the Waste Management Plan to the Job Site Foreman, each Subcontractor, job site Superintendent, Project Inspector, Project Manager, District, Construction Manager, and Architect or Engineer.
   2. Contractor shall provide Waste Management Plan to comply with this Section 01505.

B. Instruction: Contractor shall provide on-site instruction of appropriate separation, handling, and recycling, salvage, reuse, and return methods to be used by all parties at the appropriate stages and/or phases of the Project.

C. Meetings: Contractor shall conduct Construction Waste Management meetings. Meetings shall include all subcontractors affected by the Waste Management Plan. At a minimum, waste management goals and issues shall be discussed at the following meetings:
   1. Pre-bid meetings.
   2. Pre-construction meeting; (including pre-construction meeting for each phase of Project)
   3. Regularly scheduled job-site meetings.

D. Separation Facilities: Contractor shall designate a specific area or areas to facilitate separation of materials for potential reuse, salvage, recycling, and return. Recycling and waste bin areas are to be kept neat and clean and clearly marked in order to avoid co-mingling of materials. Bins shall be protected during non-working hours from offsite contamination. Secure waste collection areas to protect from wind, access, rain, run off, ground contamination, etc.
E. **Materials Handling Procedures:** Materials to be recycled shall be protected from contamination, and shall be handled, stored and transported in a manner that meets the requirements set by the designated facilities for acceptance.

### 1.11 **PROGRESS DOCUMENTATION**

**A.** Provide the Waste Program Manager with delivery receipts for the recovered materials and waste materials sent to the permitted recycling facilities, processing facilities, or landfill with the following information on a form to be approved by the District:

1. Name of firm accepting the recovered materials or waste materials
2. Specify type of facility (e.g. retail facility, recycler, processor, Class III landfill, MRF)
3. Location of the facility
4. Type of materials
5. Net weights (or volume) of each type of material
6. Date of delivery
7. Value of the materials or tipping fee paid

**B.** Document on form shall be reviewed and approved by District and Architect.

**C.** Application for Progress Payments: Contractor shall submit with each Application for Progress Payment a Summary of the project waste generated. Failure to submit this information shall render the Application for Payment incomplete and shall delay Progress Payment. The District and its representatives shall not be responsible for delay Progress Payment. With each Application for Payment, submit required Progress Documentation, including:

1. Manifest;
2. Weight tickets;
3. Receipts; and
4. Invoices specifically identifying the project and waste material.

**D.** Record Submittals: With Record Submittals as specified in Section 01330, submit the following:

1. Summary of solid waste disposal and diversion. Submit on form preapproved by District and Architect.
2. Estimate of total Project waste to be generated; name of the landfill(s) where Project waste would normally be disposed of.
3. Estimate of amounts (weight, feet, square yards, gallons, etc.) All waste categories listed.
4. Estimate of net cost revenue or additional costs resulting from separating and recycling, (versus land filling), each material. Net means that the following have been subtracted from the cost of separating and recycling:

### PART 2 - PRODUCTS

Not Used

### PART 3 - EXECUTION

#### 3.1 **STORAGE AND HANDLING**

**A.** Site Storage
1. Remove materials for recycling and recovery from the work locations to approved containers or storage area as required. Failure to remove waste or recovered materials will be considered cause for withholding payment and termination of Contract.

2. Position containers for recyclable and recoverable waste materials at a designated location on the Project Site. If materials are sorted on site, also provide a sorting area and necessary storage containers.

3. Change-out loaded containers for empty containers, as demand requires.

4. If recovered materials are stored on-site for project duration provide adequate security from pilferage.

B. Handling

1. Deposit indicated recyclable, and recoverable materials in storage areas or containers in a clean (no mud, adhesive, solvents, petroleum contamination), debris-free condition. Do not deposit contaminated materials into the containers until such time as such materials have been cleaned.

2. Insure all recovered materials are made safe for handling and storage.

3. If the contamination chemically combines with the material so that it cannot be cleaned, do not deposit into the recycle containers. In such case, request resolution by the C&D Quality Manager for disposal of the contaminated material. Directions from the C&D Quality Manager do not relieve the Contractor of responsibility for compliance with all legal and regulatory requirements for disposal, nor shall such directions cause a request for modification of the Contract.

3.2 PROJECT CONDITIONS

A. Site Condition:

1. Signs and instructions should be clear, and easy to understand. All recycling containers should be clearly labeled and lists of acceptable and unacceptable materials will be posted throughout the site. Whenever possible, they should be in multiple-languages, especially in Spanish, and in graphic symbols.

2. The Contractor shall ensure the safety of all personnel involved in the waste management process.

3. A site management plan shall be created including: work areas, materials processing areas, materials storage and disposal areas, worker hand-washing and changing stations, first aid and medical information.

END OF SECTION 01505
SECTION 01540
SITE SECURITY AND SAFETY

PART 1 – GENERAL

1.1 RELATED DOCUMENTS
A. All Contract Documents shall be reviewed for applicable provisions related to the provisions in this document, and provisions in the General Conditions and other Division 1 Specification Sections shall apply to this Section without limitation.

1.2 RELATED REQUIREMENTS SPECIFIED IN OTHER SECTIONS
A. Section 01010 – “Summary of Work”
B. Section 01311 – “Project Management and Coordination”
C. Section 01312 – “Project Meetings”
D. Section 01410 – “Regulatory Requirements”
E. Section 01412 – “Hazardous Materials”
F. Section 01416 – “Special Procedures”
G. Section 01770 – “Contract Closeout Procedures”
H. Section 01780 – “Project Record Documents”
I. This Section specifies the requirements for Site safety and security.

1.3 CONTRACTOR RESPONSIBILITIES
A. The Contractor is constructive owner of Project site.
B. The Contractor shall be responsible for all damages to persons or property that occur as a result of its fault or negligence in connection with the prosecution of this Contract and shall take all necessary measures and be responsible for the proper care and protection of all materials delivered and work performed until completion and final acceptance by the District.
C. All work shall be solely at the Contractor’s risk, with the exception of damage to the work caused by “acts of God” as defined in Public Contract Code Section 7105(b)(2).
D. 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.
E. 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. Prior to commencement of Work at the Site, the Contractor shall provide the District with the Contractor’s proposed site specific safety plan for the Work for the District’s review.
F. Contractor shall take, and require all subcontractors to take, all necessary precautions for safety of workers on the Work and shall comply with all applicable federal, state, local and
other safety laws, standards, orders, rules, regulations, and building codes to prevent accidents or injury to persons on, about, or adjacent to premises where Work is being performed and to provide a safe and healthful place of employment.

G. In addition to meeting all requirements of OSHA, Cal-OSHA, state, and local codes, Contractor shall furnish, erect and properly maintain at all times, as directed by District or Architect or required by conditions and progress of work, all necessary safety devices, safeguards, construction canopies, signs, audible devices for protection of the blind, safety rails, belts and nets, barriers, lights, and watchmen for protection of workers and the public, and shall post danger signs warning against hazards created by such features in the course of construction.

H. The Contractor and Subcontractors shall continuously protect the Work, the District’s property, and the property of others, from damage, injury, or loss arising in connection with operations under the Contract Documents. The Contractor and Subcontractors, at their own expense, shall make good any such damage, injury, or loss, except such as may be solely due to, or caused by, agents or employees of the District.

I. Contractor shall maintain protection as necessary to protect the Work, as a whole and in part, and adjacent property and improvements from accidents, injuries or damage.

J. Contractor shall protect the Work, material, and/or equipment to be incorporated therein, whether in storage on or off the Site, and under the care, custody, or control of the Contractor or the Contractor’s Subcontractors.

K. Contractor shall correct any violations of safety laws, rules, orders, standards, or regulations. Upon the issuance of a citation or notice of violation by the Division of Occupational Safety and Health, such violation shall be corrected promptly.

L. Contractor shall require that Subcontractors participate in, and enforce, the safety and loss prevention programs established by the Contractor for the Project, which will cover all Work performed by the Contractor and its Subcontractors.

   1. Subcontractors shall enforce the District’s and the Contractor’s instructions, laws, and regulations regarding signs, advertisements, fires, smoking, the presence of liquor, and the presence of firearms by any person at the Site.

   2. Each Subcontractor shall designate a responsible member of its organization whose duties shall include loss and accident prevention, and who shall have the responsibility and full authority to enforce the program. This person shall attend meetings with the representatives of the various Subcontractors employed to ensure that all employees understand and comply with the programs.

   3. All Subcontractors and material or equipment suppliers shall cooperate fully with Contractor, the District, and all insurance carriers and loss prevention engineers.

   4. Subcontractors shall immediately report in writing to the Contractor all accidents whatsoever arising out of, or in connection with, the performance of the Work, whether on or off the Site, which caused death, personal injury, or property damage, giving full details and statements of witnesses.

1.4 CONFORMANCE WITHIN ESTABLISHED LIMITS

A. The Contractor and Subcontractors shall confine their construction equipment, the storage of materials, and the operations of workers to the limits indicated by laws, ordinances, permits,
and the limits established by the District, or the Contractor in the case of Subcontractors, and shall not unreasonably encumber the premises with construction equipment or materials.

1.5 CONTRACTOR NOTICES
A. The Contractor shall give notices and comply with applicable laws, ordinances, rules, regulations, and lawful orders of public authorities bearing on the safety of persons or property or their protection from damage, injury, or loss.

1.6 SITE SAFETY OFFICER
A. Contractor shall designate a responsible member of its organization on the Work, whose duty shall be to enforce the Contractor’s Safety program Plan, post information regarding protection and obligations of workers and other notices required under occupational safety and health laws, to comply with reporting and other occupational safety requirements, and to protect the life, safety and health of workers. The name and position of person so designated shall be reported to District in writing by Contractor within ten (10) days of award of the Contract.

B. District’s representative(s) shall be allowed access to accident/injury and illness reports, inspection reports, scheduling and construction meetings, and safety meetings.

1.7 SAFETY PROGRAM PLAN
A. Prior to commencing Work at the Site, Contractor shall submit a Safety Program Plan specifically tailored for this Project and this Site that has been reviewed and approved by an Industrial Hygienist certified by the American Board of Industrial Hygiene or a Certified Safety Professional. The Safety Program Plan shall include the name, certification number, and certification seal of the Industrial Hygienist or Certified Safety Professional. Comply with the Safety Program and all applicable federal, state, and local regulation codes, rules, law and ordinances during the course of the Work.

B. The Contractor’s Safety Program Plan 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 SS 8350 et seq.)

C. Plan shall comply with the requirements of the Occupational Safety and Health Act, and other applicable federal, state and local standards.

D. Contractor shall keep copies of all health and safety-related plans on the Project Site at all times.

E. Receipt and/or review of the Safety Program Plan by District or Architect shall not relieve Contractor of any responsibility for complying with all applicable safety regulations.

F. It is essential that Contractor and each Subcontractor implement an effective and vigorous site specific Safety Program for the Work.

G. The Contractor shall have sole responsibility for Project safety, and shall be solely responsible for providing a safe workplace

H. Safety Program Plan Components:
1. Injury and Illness Prevention Program (IIPP): Conforming to the General Industrial Safety Orders (CCR Title 8, Division 1, Chapter 4, Subchapter 7, Section 3203), and the California Labor Code (Section 6401.7).

2. Site-Specific Safety and Health Plan (SSHP): This Plan shall describe the health and safety procedures that shall be implemented during the Work in order to ensure safety of the public and those performing the Work. Follow the guidelines for a SSHP listed in CCR Title 8, Division 1, Chapter 4, Subchapter 7, Section 5192, Item (b)(4)f.

3. Permit-Required Confined Space Program: (CCR Title 8, Division 1, Chapter 4, Subchapter 7, Section 5157). Permit-required space entry is allowed only through compliance with a permit-required confined space program meeting the requirements of Section 5157 of the General Industrial Safety Orders. During entry operations, or at the conclusion of entry operations, verbally notify Engineer of the permit space program followed, and of any hazards confronted or created in permit-required spaces during entry operations.

4. A written and certified workplace hazard assessment as required by OSHA and Cal OSHA, updated on a regular basis, and maintained on site. The certified hazard assessment shall be made available immediately upon request by the District, the Architect, or the Inspector of Record.

I. Supply sufficient hard hats to properly equip all employees, workers, and visitors. Hard hats shall be mandatory as per CAL OSHA Construction Safety orders.

J. Whenever an exposure exists, appropriate personal protective equipment (PPE) shall be used by all affected personnel. Contractor shall provide PPE to all personnel under Contractor’s direction and responsibilities.

K. After review by District and Architect, the implementation and enforcement of all Safety-related plans shall become the responsibility of the Contractor and Site Safety Officer. The Contractor shall notify the District in writing of any changes to Safety-related plans.

1.8 SAFETY PRECAUTIONS

A. 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:

1. Employees on the Work and other persons who may be affected thereby
2. The Work and materials and equipment to be incorporated therein, whether in storage on or off the site, under care, custody or control of the Contractor or the Contractor’s Subcontractors or Sub-subcontractors
3. Other property or items at the site of the Work, or adjacent thereto, such as trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction. The Contractor shall take adequate precautions and measures to protect existing roads, sidewalks, curbs, pavement, utilities, adjoining property and improvements thereon (including without limitation, protection from settlement or loss of lateral support), and to avoid damage thereto. Without adjustment of the Contract Price or the Contract Time, the Contractor shall repair, replace or restore any damage or destruction of the foregoing items as a result of performance or installation of the Work.

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Section 01540
Site Security and Safety
4. The Contractor shall at all times maintain good housekeeping practices to reduce the risk of fire damage.

5. Good housekeeping practices shall be maintained continually on all areas of the Project Site and the Work. District may request that the Contractor hire additional staff or help until housekeeping in a work or storage area is improved. All scrap materials, rubbish and trash shall be removed daily from in and about the building and shall not be permitted to be scattered on adjacent property.

B. Suitable storage space shall be provided outside immediate building areas for storing flammable materials and paints. Excess flammable liquids being used inside the building shall be kept in closed metal containers and be removed from the building during unused periods.

C. A fire extinguisher shall be available at each location where cutting or welding is being performed. Where electric or gas welding or cutting work is done, interposed shields of incombustible material shall be used to protect against fire damage due to sparks and hot metal. When temporary heating devices are used, a watchman shall be present to cover periods when other workmen are not on the premises.

D. The Contractor shall provide fire extinguishers in accordance with all OSHA and Cal OSHA requirements, and the recommendations NFPA Bulletins Nos. 10 and 241.

1.9 REQUIREMENTS FOR EXISTING SITES

A. Provide substantial barricades around any shrubs or trees indicated to be preserved.

B. Deliver materials to building area over route(s) designated by Architect.

C. Take preventive measures to eliminate objectionable dust, noise, or other disturbances.

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

E. Take care to prevent disturbing or covering any survey markers, monuments, or other devices marking property boundaries or corners. If such markers are disturbed by accident, they shall be replaced by a licensed land surveyor or civil engineer, and all lawfully required maps and records shall be filed with county and local authorities at no cost to the District. All related filing and plan check fees shall be paid by Contractor.

F. Contractor shall take adequate precautions to protect existing roads, sidewalks, curbs, pavements, utilities, adjoining property and structures (including, without limitation, protection from settlement or loss of lateral support), and to avoid damage thereto, and repair any damage thereto caused by construction operations. All permits, licenses, or inspection fees required for such repair Work shall be obtained and paid for by Contractor.

G. The Contractor, at Contractor’s expense, will remove all mud, water, or other elements as may be required for the proper protection of existing improvements, and prosecution of the Work.

H. Protect all other property at the Site or adjacent thereto as required, such as trees, shrubs, lawns, walks, pavement, roadways, structures, and utilities not designated for removal, relocation, or replacement in the course of construction.
1.10 SAFETY AND EMERGENCY CONDITIONS

A. Emergency Action: In an emergency affecting the safety of persons or property, the Contractor shall take any action necessary, at the Contractor’s discretion, to prevent threatened damage, injury, or loss. Additional compensation or extension of time claimed by the Contractor on account of an emergency shall be determined as provided herein. Emergency conditions shall be any condition at the Site which has the actual or potential for significant adverse effects to persons or property, whether or not resulting from the Contractor’s operations.

B. Accident Reports: The Contractor shall promptly report in writing to the District all accidents arising out of or in connection with the Work, which caused death, personal injury, or property damage, giving full details and statements of any witnesses. In addition, if death, serious personal injuries, or serious property damages are caused, the accident shall be reported immediately by telephone or messenger to the District and Campus Police Department.

C. The District’s Representatives and Project Inspector, as appropriate, shall be notified of the existence of such a condition, but shall not be called upon to perform any emergency service. The fact that the District may not respond to the emergency condition shall not be used as an excuse by the Contractor to neglect immediate action; nor will the District or its Representatives be liable for any resulting condition. The fact that a representative of the Contractor may not be present when emergency conditions occur shall not relieve the Contractor from an immediate response to the situation which shall return the disruption to normalcy.

D. If the emergency circumstances are not the result of any fault or neglect of the Contractor, the Contract time shall be adjusted to reflect the actual direct effect of such actions to the then critical path of the Construction Progress Schedule. The foregoing notwithstanding, adjustments of the Contract Price or the Contract Time for actions taken by the Contractor in response to emergency circumstances shall be subject to the Contractor’s strict compliance with all other applicable provisions of the Contract Documents relating to notices and time for delivery of notices.

1.11 SAFETY SIGNS AND BARRICADES

A. 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, promulgating safety regulations and notifying Districts and users of adjacent sites and utilities.

B. Contractor shall properly protect the Work:
   1. With lights, guard rails, fencing, temporary covers and barricades.
   2. Enclose excavations with proper barricades.
   3. Brace and secure all parts of the Work against to protect against inclement weather and to prevent accidents.

C. Provide such additional forms of protection that may be necessary under during the course of the Work.
D. Contractor shall provide and maintain in good condition all protective measures required to adequately protect the public from hazards resulting from the Work. When regulated by Building Code, Cal OSHA, or other authority, such legal requirements for protection shall be considered as minimum requirements. Contractor shall be responsible for the protection in excess of such minimum requirements as required.

E. Contractor shall prevent unauthorized persons from the entering the Work Site(s).

1.12 CONTROL OF SITE

A. Contractor shall ensure that no alcohol, firearms, weapons, or controlled substances are present on the Project Site. Contractor shall immediately remove from the Site and terminate from this Project the employment of any employee found in violation of this provision.

1.13 SITE SECURITY

A. Contractor shall take and be fully responsible for all reasonably required measures to protect and maintain the security of persons, existing facilities, and property at the Site, including prevention of theft, loss, and/or vandalism by persons lawfully present on the Site, including non-working times. Contractor’s measures shall include, at a minimum, maintaining a log of all persons entering and leaving the Site, who they represent, what they are delivering, and to whom.

B. No claim shall be made against District by reason of any act of an employee or trespasser, and Contractor shall repair all damage to District’s property resulting from Contractor’s failure to provide adequate security measures.

C. Contractor shall maintain a lock on all Construction access gate at all times. Contractor shall appoint one person to monitor access through the gate and maintain the sign-in/out list. Alternatively, Contractor may provide a full-time security guard at the gate to control access and maintain the sign-in/out list. The sign in/out list shall be available to District at anytime upon request. If District determines that the gate has been left unlocked, Contractor shall, if requested by District, provide a full time guard at no additional expense to the District.

D. The Contractor and the Subcontractors shall use only those ingress and egress routes designated by the District, observe the boundaries of the Site designated by the District, park only in those areas designated by the District, which areas may be on or off the Site, and comply with any parking control program established by the District, such as furnishing license plate information and placing identifying stickers on vehicles.

E. Contractor shall supply all security fencing, barricades, lighting, and other security measures as required to protect and control the Site.

F. The Contractor shall be responsible for providing security services for the Site as needed for the protection of the Site and as determined in the District’s sole discretion.

1.14 OPERATORS OF MOBILE EQUIPMENT SAFETY

A. Under Federal and State Safety requirements, Contractor must certify that all operators of mobile equipment including but not limited to forklifts, cranes, man-lifts, scissor and boom lifts, and similar equipment are required to have been trained and/or certified on the proper operation of such equipment. Copies of equipment training and certification records shall be forwarded, upon request, to District, Project Manager and Architect.
1.15 SAFETY REQUIREMENTS

A. Contractor shall meet and comply with requirements of current local, State and Federal regulations.

B. Contractor shall meet and comply with the following rules:
   1. The Contractor will provide and maintain at the Site first-aid supplies that comply with the current Occupational Safety and Health Regulations.
   2. Hard hats shall be worn at all times. (This includes welders when using welding hoods)
   3. Sleeved shirts shall be worn at all times. (No tank tops)
   4. If required, Fire Retardant Clothing (FRC) shall be supplied by Contractor for all their employees.
   5. One Hundred Percent (100%) Fall Protection Policy: All subcontract employees shall comply with Fall Protection Policy. The Policy simply states “Anytime employees are working from an unprotected elevation of six (6) feet or more, fall protection must be used.” Working, as stated above, means while traveling, stationary, or anytime exposed to a fall from a surface not protected by approved handrails, cable or some other approved fall elimination device. Adherence to this policy is a requirement of your Subcontract.

C. Hazards Control:
   1. When use or storage of any hazardous materials or equipment, or unusual method is necessary for execution of the Work, the Contractor shall exercise utmost care and carry on such activities under supervision of properly qualified personnel. The Contractor shall notify the District any time that explosives or hazardous materials are expected to be stored on Site. Location of storage shall be coordinated with the District and local fire authorities.
   2. Store volatile wastes in covered metal containers and remove from premises daily.
   3. Prevent accumulation of wastes that create hazardous conditions.
   4. Provide adequate ventilation during use of volatile or noxious substances.

D. Conduct cleaning and disposal operations to comply with local ordinances and anti-pollution laws.
   1. Do not burn or bury rubbish or waste material on the Site.
   2. Do not dispose of volatile wastes such as mineral spirits, oil, or paint thinner in storm or sanitary drains.
   3. Do not dispose of wastes into streams or waterways.

E. Provide accident information on the forms provided by Contractor. This information shall be provided on the same day as the occurrence of said incident, and shall be submitted to District within a reasonable time.

1.16 ADDITIONAL SAFETY CONTROLS

A. According to industry practices, it is the responsibility of the Contractor and subcontractors of every tier to exercise reasonable care to prevent work-related injuries and property and equipment damage at the Project site, as well as minimize risk to the public and third-party property. The Contractor, all sub-contractors, suppliers, and installers shall undertake loss
control prevention practices according to the requirements set forth by federal, state and city laws, statutes, and the specific procedures developed for this Project.

B. Contractors and subcontractors participating in the project will be expected to comply with the following safety and loss control requirements:

1. All sub-contractors, suppliers, and installers shall identify their contact person(s) to the Contractor.
2. Follow District procedures regarding dealing with the media, including, but not limited to, TV, Radio, and Newspaper.
3. All construction employees will be required to be attired in workpants, shirt and appropriate boots or closed toe shoes.
4. Smoking is prohibited on the Project site.
5. Controlling access to the construction site is a very high priority, and Contractors will be required to take whatever preventative measure, such as barriers, fencing, etc., as outlined in the contract specifications.
6. Construction personnel cannot enter District property other than the construction site unless accompanied by District personnel, and they are allowed only ‘incidental’ contact with students. Violations of these requirements by any construction employee will result in a mandatory background check of that employee – including fingerprinting – as required by state law.
7. Fall protection is mandatory on all projects in accordance with CAL OSHA, OSHA and any other Local, State, and Federal appropriate code and requirements.
8. Personal radios, headsets, walkmans and CD players are not allowed on the job-site.
9. All Contractors must attend the pre-construction safety meeting.
10. No sexual reference or preference shall be permitted on any piece of clothing or the hardhat. Any employee observed disregarding this policy shall be removed from the job site until further notice from the District.
11. Contractor personnel and subcontractor personnel at all levels will refrain from interacting with campus staff or students unless required to prevent an unsafe situation. Personnel found speaking to staff or students for any reason unrelated to the Work or Safety shall be removed from the site and not be allowed to return.
12. All contractors’ employees shall park in their designated parking area. Any sticker attached to the employees’ vehicle that displays any form of sexual preference or reference shall be removed prior to parking at the site. Each employee will provide their license plate number to the Contractor. Any employee disregarding this policy shall be removed from the site until further notice from the District.
13. The Contractor shall control the break time activities of the employees to assure the cleanup of all soda cans, food wrappers, plastic bottles, or food containers from the break area. Such areas shall be cleaned immediately after the break and all waste placed in trash receptacles.
14. Theft or willful damage to any property of the District, student, or other campus or District personnel will be prosecuted fully by the District.
15. No guns, switchblades, or knives with blades greater than two inches shall be allowed on the job site. Any employee disregarding this policy shall be removed from the site until further notice from the district.
C. The Contractors and all sub-contractors, suppliers and installers participating in the Project will further be expected to comply with the following safety and loss control requirements:

1. The Emergency Response Plans (with particular emphasis on access and egress routes).
2. Any Contractors’ employee observed providing or selling cigarettes or other smoking materials to students shall be removed from the job site until further notice from the District.
3. All Contractors will agree to conduct and fund post-injury drug screening of their employees. Those employees failing the test will be removed permanently from the job site.
4. The District has the right to instruct the Contractor to correct an unsafe act or condition. If the Contractor fails to correct the unsafe act or condition within the requested time frame, the District or its representative may have the condition corrected and bill the non-compliant contractor for the costs associated with the correction.
5. The District may require a follow-up meeting or contact if there is a death, serious and willful claim, serious disabling injury, adverse loss experience, major fire, or serious third party claim.
6. Any contractor displaying, in the opinion of the Contractor or District, a repeated disregard for safety can be removed from the job-site.

D. All Contractors will advise those non-English speaking employees in their native language either in a written format or via an interpreter of these policies.

1.17 HAZARD COMMUNICATION PROGRAM SAFETY

A. Contractor shall have a copy of the Contractor’s Hazard Communication Program which shall be forwarded to the District, Project Manager and Architect, and a copy is required to be in the possession of the Contractor on the Site. Documentation of employee Hazard Communication Training must be established by the Contractor prior to commencement of work.

B. Any potential hazardous material or chemical brought onto the project is required to be accompanied by a Material Safety Data Sheet (MSDS). Copies of the MSDS shall be forwarded to the District, Architect, Project Manager and Project Inspector before the product is brought onto the project.

C. Contractor is required to have material safety data sheets available in a readily accessible place at the job site for any material requiring a material safety data sheet per the Federal “hazard communication” standard, or employees’ “right-to-know law.” The Contractor is also required to properly label any substance brought into the job site, and require that any person working with the material, or within the general area of the material, is informed of the hazards of the substance and follows proper handling and protection procedures.

D. Contractor is required to comply with the provisions of California Health and Safety Code section 25249, et seq., which requires the posting and giving of notice to persons who may be exposed to any chemical known to the State of California to cause cancer. The Contractor agrees to familiarize itself with the provisions of this section, and to comply fully with its requirements.
E. Contractor shall notify the District, Architect, Project Manager and Project Inspector before any chemical/material creating noxious or toxic fumes is used.

1.18 SHORING AND STRUCTURAL LOADING

A. The Contractor shall not impose structural loading upon any part of the Work under construction or upon existing construction on or adjacent to the Site in excess of safe limits, or loading such as to result in damage to the structural, architectural, mechanical, electrical, or other components of the Work.

B. The design of all temporary construction equipment and appliances used in construction of the Work and not a permanent part thereof, including, without limitation, hoisting equipment, cribbing, shoring, and temporary bracing of structural steel, is the sole responsibility of the Contractor. All such items shall conform with the requirements of governing codes and all laws, ordinances, rules, regulations, and orders of all authorities having jurisdiction.

C. The Contractor shall take special precautions, such as shoring of masonry walls and temporary tie bracing of structural steel work, to prevent possible wind damage during construction of the Work. The installation of such bracing or shoring shall not damage the Work in place or the Work installed by others. Any damage which does occur shall be promptly repaired by the Contractor at no cost to the District.

1.19 SAFETY AND ELECTRICAL STANDARDS

A. The Contractor shall comply with all safety and electrical standards to ensure that all its employees are protected by Ground Fault Circuit interrupters as required, throughout the course of the Contractor’s work.

B. The Contractor is responsible for installation of any and all temporary power service for the project and shall provide it with Ground Fault Interrupter Protection with no additional cost to the District.

1.20 HAZARDOUS SUBSTANCES

A. No asbestos or asbestos-containing products shall be used in this construction or in any tools, devices, clothing, or equipment used to effect this construction. See Section 01412, Hazardous Materials.

B. The Contractor shall not receive, use or store at the Site any hazardous substance unless contained in a container labeled with the original label applied by the Manufacturer of such substance. The Contractor shall maintain at the Site and forward to the District, Architect, Project Manager and Project Inspector copies of the most current material safety data sheets with respect to each hazardous substance received, used or stored at the Site by the Contractor.

C. The Contractor shall immediately forward to the District, Architect, Project Manager and Project Inspector any updated material safety data sheets.

D. The Contractor shall properly label and inform the District, Architect, Project Manager and Project Inspector of, any pipes or piping systems containing hazardous substances used or maintained at the Site by the Contractor. Prior to the receipt of such materials at the Site, the contractor shall submit a list of all materials which the Contractor intends to receive, use
or store at the Site that are classified as hazardous substances pursuant to applicable federal, state or local Employee or Community Right to Know statutes, regulations or requirements.

1.21 SAFETY SURVEYS

A. Inspector of Record may conduct periodic safety surveys of the project. Any safety discrepancy observed will be reported to the appropriate Contractor Site Safety Representative for immediate correction.

B. District, Architect, and/or Inspector of Record safety surveys do not, without any limitation, relieve the Contractor of their primary responsibility to self-inspect the Work and equipment, and to conduct the Work in a safe manner.

C. Contractor shall provide the District, Architect, and Project Inspector with Monthly Contractor Accident Statistics Reports.

PART 2 - PRODUCTS

Not Used

PART 3 - EXECUTION

Not Used

END OF SECTION 01540
[If Applicable: Check with the project civil engineer to confirm disturbance will be less than an acre. Note that the area includes all of the following, not just the construction site: Clearing of the land both for access (i.e. access roads) to the site as well as preparing the site for constructing the project, constructing access roads to the site, grading of the project site in total, equipment staging area, maintenance area, and construction easement if they occur atop a soil surface which has not been included in the calculation for area of soil disturbance, material and/or soil stockpiles if atop a soil surface (not if atop an impervious surface such as concrete or asphalt), area of asphalt or concrete pavement removal if it is removed entirely to the soil surface, area that is related to demolition and removal of existing structures if that demolition and removal is to the soil surface, concrete truck clean-out areas if atop a soil surface]

[Ensure no conflict with 00700 para 13.12]

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. All Contract Documents shall be reviewed for applicable provisions related to the provisions in this document, and provisions in the General Conditions and other Division 1 Specification Sections shall apply to this Section without limitation.

1.2 RELATED DOCUMENTS SPECIFIED IN OTHER SECTIONS

A. Section 01010 – “Summary of Work”

B. Section 01330 – “Submittal Procedures”

C. Section 01410 – “Regulatory Requirements”

1.3 SUMMARY OF WORK

A. Contractor is advised that the Work disturbs less than one acre of land and therefore is not subject to the requirements of the Statewide General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities, Order No. 2009-0009-DWQ (CGP), issued by the State Water Resources Control Board (SWRCB). However, BMPs indicated in the BMP Handbook needed to prevent or minimize storm water pollution shall be submitted to the District as a BMP Plan, and implemented at no extra cost to the District.

B. If at any time during construction the disturbed area exceeds one acre, the requirements of the SWRCB will be enforced including the development of a SWPPP.

C. Within two weeks after Award of Contract by the District, the Contractor shall submit to the District one copy of the SWPPP or BMP Plan for review. After the District’s approval, the Contractor shall provide approved copies of the SWPPP or BMP Plan as follows: one copy
each to the District’s Construction Inspector, District’s Construction Manager, District Architect, and District’s Civil Engineer.

D. See General Conditions Article 13.12, Storm Water Pollution Prevention, for other requirements when applicable.

1.4 STORM DRAIN NOTICE

A. Storm drains discharge directly to creeks and the Bay without treatment. Discharge of pollutants (any substance, material, or waste other than uncontaminated storm water) from this Project into the storm drain system is strictly prohibited by the California Regional Water Quality Control Board’s (RWQCB) Water Quality Control Plan.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Provide all materials and equipment necessary to fulfill all requirements of the Storm Water Pollution Prevention Plan or BMP Plan during execution of the Work or any Phase of the Work.

2.2 REPORTS AND LOGS

A. Provide and maintain all report, logs, and other data as required by the Storm Water Pollution Prevention Plan or BMP Plan. Make copies available to governing agencies and/or District as requested.

2.3 CONTACT INFORMATION

A. Provide the name and contact information for the individual responsible for implementing and updating, as required, the SWPPP or BMP Plan.

PART 3 - EXECUTION

3.1 COMPLIANCE

A. Comply with all requirements of the Storm Water Pollution Prevention Plan or BMP Plan during the Work or any Phase of the Work.

3.2 PERSONNEL TRAINING

A. The Contractor shall train its employees working on the Project on the requirements contained in this Section and in the SWPPP or BMP Plan. The Contractor shall document this training in writing and make copies available to the District as requested.

B. The Contractor shall inform all Subcontractors of the SWPPP or BMP Plan requirements contained in this specification and include appropriate Subcontract provisions to ensure that these requirements are met.

END OF SECTION 01572
SECTION 01610
BASIC PRODUCT REQUIREMENTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS
   A. All Contract Documents shall be reviewed for applicable provisions related to the provisions in this document, and provisions in the General Conditions and other Division 1 Specification Sections shall apply to this Section without limitation.

1.2 RELATED DOCUMENTS SPECIFIED IN OTHER SECTIONS
   A. Section 01010 – “Summary of Work”
   B. Section 01400 – “Quality Control Requirements”
   C. Section 01625 – “Product Options and Substitutions”
   D. Section 01770 – “Contract Closeout Procedures”

1.3 SUMMARY
   A. This Section describes the basic requirements for the selection, handling, and storage of products to be used in the Project.

1.4 PRODUCTS
   A. All products are to be new and not previously incorporated into or used in any other project or facility. Products salvaged or recycled from other projects are not considered new products and are not permitted.
   B. The term product, as used in the Contract Documents, includes materials, equipment, systems, and like terms of similar intent.
   C. Products include materials, machinery, components, equipment, fixtures and systems forming the Work and purchased for incorporation into the Work.
   D. Products do not include machinery and equipment used for preparation, fabrication, conveying and erection of the work. Products may also include existing materials or components required for reuse.
   E. Do not reuse materials and/or equipment removed from existing premises except as specifically permitted by the Contract Documents.
   F. Provide interchangeable components of the same manufacturer, for similar components.
   G. Named products are items identified in the Contract Documents by manufacturer’s product name, including make or model number or other designation shown or listed in manufacturer’s published product literature that is current as of date of the Contract Documents.

1.5 TRANSPORTATION AND HANDLING
   A. Transport and handle products in accordance with manufacturer’s instructions.
B. Promptly inspect shipments to assure that products comply with requirements, quantities are correct, and products are undamaged.

C. Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement, and/or other damage.

1.6 SHIPPING REQUIREMENTS

A. Preparation for Shipment: All equipment shall be suitably packaged to facilitate handling and to protect against damage during transit and storage. All equipment shall be boxed, crated, or otherwise completely enclosed and protected during shipment, handling, and storage. All equipment shall be protected from exposure to the elements and shall be kept dry at all times.

B. Painted and coated surfaces shall be protected against impact, abrasion, discoloration, and other damage. Painted and coated surfaces which are damaged prior to acceptance of equipment shall be repainted to the satisfaction of District at the expense of Contractor. Any refinished items shall carry the warranty specified in the Contract Documents for new items.

C. Grease and lubricating oil shall be applied to all bearings and similar items.

D. Identification: Before shipping, each item of equipment shall be tagged or marked as identified in the delivery schedule or on the Shop Drawings. Complete packing lists and bills of material shall be included with each shipment.

1.7 PRODUCT DELIVERY, STORAGE, AND HANDLING

A. Store products only in staging area per provisions of the Contract Documents.

B. Handle, store, and protect products in accordance with manufacturer’s instructions, with seals and labels intact and legible. Store sensitive products in weather-tight, climate-controlled enclosures.

C. For exterior storage of fabricated products, place on appropriate supports, above ground.

D. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to avoid condensation.

E. Store loose granular materials on solid flat surfaces in a well-drained area.

F. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement, or damage.

G. Arrange storage of products to permit access for inspection. Periodically inspect to assure products are undamaged and are maintained under specified conditions.

H. Deliver, store and handle products using means and methods that will prevent damage, deterioration, and loss, including theft. Comply with manufacturer’s written instructions.

I. Schedule product deliveries to minimize long-term storage at the Project site and to prevent overcrowding of construction spaces.

J. Coordinate delivery with installation time to ensure minimum holding time for items that are flammable, hazardous, easily damaged, or sensitive to deterioration, theft, and other losses.

K. Deliver products to Project site in an undamaged condition in manufacturer’s original sealed container or other packaging system, complete with intact and legible labels and instructions for handling, storing, unpacking, protecting, and installing.
L. Contractor shall comply with the following without limitation:

1. Contractor shall bear the responsibility for delivery of equipment, spare parts, special tools, and materials to the Site and shall comply with the requirements specified herein and provide required information concerning the shipment and delivery of the materials specified in the Contract Documents. These requirements also apply to any sub-suppliers making direct shipments to the Site. Acceptance of the equipment shall be made only after it is installed, tested, placed in operation and found to comply with all the specified requirements.

2. All items shall be checked against packing lists immediately on delivery to the Site for damage and for shortages. Damage and shortages shall be remedied with the minimum of delay.

3. No metalwork (including miscellaneous steel shapes and reinforcing steel) shall be stored directly on the ground. Masonry products shall be handled and stored in a manner to hold breakage, chipping, cracking, and spilling to a minimum. Cement, lime, and similar products shall be stored off the ground on pallets and shall be covered and kept completely dry at all times. Pipe fittings and valves may be stored out of doors, but must be placed on wooden blocking. PVC pipe, geo-membranes, plastic liner, and other plastic materials shall be stored off the ground on pallets and protected from direct sunlight.

4. Electrical equipment and all equipment with antifriction or sleeve bearings shall be stored in weather-tight structures maintained at a temperature above 60 degree Fahrenheit. Electrical equipment controls and insulation shall be protected against moisture and water damage. All space heaters furnished in or with equipment shall be connected and operated continuously or according to manufacturer’s requirements.

5. Equipment having moving parts such as gears, bearings, and seals, shall be stored fully lubricated with oil, grease, etc., unless otherwise instructed by the manufacturer. Manufacturer’s storage instructions shall be carefully followed.

6. When required by the equipment manufacturer, moving parts shall be rotated a minimum of twice a month to ensure proper lubrication and to avoid metal to metal “welding”. Upon installation of the equipment, Contractor shall, at the discretion of District, start the equipment at one-half load for an adequate period of time to ensure that the equipment does not deteriorate from lack of use.

7. When required by the equipment manufacturer, lubricant shall be changed upon completion of installation and as frequently as required thereafter during the period between installation and acceptance. New lubricants shall be put into the equipment by Contractor at the time of acceptance.

8. Equipment and materials shall not have any pitting, rust, decay, or other deleterious effects of storage when installed in the Work.

9. In addition to the protection specified for prolonged storage, the packing of spare units and spare parts shall be as for export packing and shall be suitable for long-term storage in a damp location. Each spare item shall be packed separately and shall be completely identified on the outside of the container.

10. Handling: Stored items shall be laid out to facilitate their retrieval for use in the Work. Care shall be taken when removing the equipment for use to ensure the precise piece of
equipment is removed and that it is handled in a manner that does not damage the equipment.

11. Store products to allow for inspection, measurement, and/or counting of units.
12. Store materials in a manner that will not endanger adjacent Work.
13. Store products that are subject to damage by the elements, under cover in a weather-tight enclosure above ground, with ventilation adequate to prevent condensation.
14. Store cementitious products and materials on elevated platforms.
15. Store foam plastic from exposure to sunlight, except to extent necessary for period of installation and concealment.
16. Comply with product manufacturer’s written instructions for temperature, humidity, ventilation, and weather-protection requirements for storage.
17. Protect stored products from damage.
18. Protect liquids from freezing.

PART 2 - PRODUCTS
Not Used

PART 3 - EXECUTION
Not Used

END OF SECTION 01610
SECTION 01625
PRODUCT OPTIONS AND SUBSTITUTIONS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS
   A. All Contract Documents shall be reviewed for applicable provisions related to the provisions in
      this document, and provisions in the General Conditions and other Division 1 specification
      Sections shall apply to this Section without limitation.

1.2 RELATED REQUIREMENTS SPECIFIED IN OTHER SECTIONS
   A. Section 01010 – “Summary of Work”
   B. Section 01311 – “Project Management and Coordination”
   C. Section 01400 – “Quality Control Requirements”
   D. Section 01610 – “Basic Product Requirements”
   E. Section 01722 – “Execution Requirements”
   F. Section 01780 – “Project Record Documents”

1.3 SUMMARY
   A. This Section includes administrative and procedural requirements concerning product options
      and substitutions.

1.4 GENERAL
   A. The term product, as used in the Contract Documents, includes materials, equipment, systems,
      and like terms of similar intent.
   B. All products are to be new and not previously incorporated into or used in any other project or
      facility. Products salvaged or recycled from other projects are not considered new products
      and are not permitted.
   C. Named products are identified in the Contract Documents by manufacturer’s product name,
      make or model number, and/or other specific designation.
      1. Do not use materials and/or equipment removed from existing premises, except as
         specifically permitted by the Contract Documents.
   D. List of Manufacturers and Products Required. The Contractor shall require all Subcontractors
      to prepare and submit to the Contractor, within thirty (30) days of execution of the
      Subcontract, 4 copies of the comprehensive lists of manufacturers and products proposed for
      the Project, including information on materials, equipment, and fixtures required by the
      Contract Documents, as may be required for the Contractor’s or Architect’s approval.
      1. Approval of such lists of products shall not be construed as a substitute for the shop
         drawings, manufacturer’s descriptive data, and samples, required by the Contract
         Documents, but rather shall be considered as a base from which more detailed
         submittals shall be developed for final review by the Contractor and the Architect.
1.5 PRODUCT SELECTION AND SUBSTITUTION REQUIREMENTS

A. Substitutions are defined as any changes in products, materials, equipment, and/or methods of construction from those required by the Contract Documents, and that are proposed by the Contractor.

B. When only one product is specified, and unless the Specifications state that no substitution is permitted, whenever the Contract Documents indicate any specific article, device, equipment, product, material, fixture, patented process, form, method, or type of construction or any specific name, make, trade name, or catalog number, with or without the words “or equal,” such specification shall be deemed to be used for the purpose of facilitating description of the material, process, or article desired and shall be deemed to be followed by the words “or equal” unless the Contract Documents specify “no substitution allowed”, “no equal”, “no equivalent”, “to match campus standard”, “single source,” or other language with similar meaning, in which case no substitutions will be allowed.

1. Pursuant to Paragraph 3.11.4 of the General Conditions, the Contractor may, unless otherwise stated below, at time of bid offer any material, process, article, etc., which shall be materially equal or better in every respect to that so indicated or specified ("Specified Item") and will completely accomplish the purpose of the Contract Documents.

C. For products specified by naming only one manufacturer and including the words “no substitutions allowed”, “no equal”, “to match campus standard”, “single source” and/or other phrase with similar meaning:

1. There is no product option due to necessity to match existing products or systems, to meet other design criteria or dependencies, or to comply with established standards. No substitution will be allowed.

2. If product becomes unavailable due to no fault of Contractor, submit Request for Substitution, including all information required herein.

D. When more than one product is specified, and in the absence of language stating “no substitutions allowed”, “no equal”, “to match campus standard”, “single source,” or other phrase with similar meaning:

1. Select products of any named manufacturer meeting all specified requirements, or submit a request for substitution at time of bid.

2. If product becomes unavailable due to no fault of Contractor, submit Request for Substitution (RFS), including all information required herein.

E. For products specified by naming one or more products followed by the words “or approved equal”:

1. Select products of any named manufacturer meeting all specified requirements, or submit a request for substitution at time of bid.

F. For products specified only by reference standard, select any product meeting or exceeding all requirements of the specified standard.
G. Compatibility of product options: If Contractor is given an option of selecting between two or more products for use on the Project; product selected shall be compatible with products previously selected, even if previously selected products were also options.

1. Contractor shall be responsible for providing products and construction means and methods that are compatible with the products and construction means and methods of other contractors.

H. Products Specified which are Commercially Unavailable. If the Contractor fails to make a request for substitutions for products, prior to the submission of its bid, and such products subsequently become commercially unavailable, the Contractor may request a substitution for such commercially unavailable item.

1. The decision to grant this request is solely at the District’s discretion. The written approval of the District, consistent with the procedure for Change Orders, shall be required for the use of a proposed substitute material.

2. The District may condition its approval of the substitution upon the delivery to District of an extended warranty or other assurances of adequate performance of the substitution as well as an equitable deduction in the contract price should the substituted item cost less than the Specified Item.

3. All risks of delay due to the approval of a requested substitution by the DSA, or any other governmental agency having jurisdiction, shall be on the requesting party. All additional costs, all procurement and construction delays, and all costs for review by the Architect or its consultants shall be the responsibility of the Contractor and will be deducted from Contractor’s pay request.

I. Substitution Request Form. All requests for substitutions of products, materials, or processes in place of a Specified Item must be submitted in writing on the District’s Substitution Request Form (“Request Form”) at the time of submitting bids to the District, except as provided for in Paragraph 3.11.4 of the General Conditions. The Request Form must be accompanied by evidence as to whether the proposed substitution meets the requirements of the Contract Documents as specified herein.

1. In completing the Request Form, the bidder must state, with respect to each requested substitution, that the bidder will agree to provide the Specified Item in the event that the District denies the bidder’s request for such requested substitution.

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

K. After the District’s receipt of such evidence by the bidder, the District will make its final decision as to whether the bidder’s request for substitution for any Specified Items will be granted. The decision as to whether a proposed request for substitution is equal to a Specified Item shall be at the sole discretion of the District.

1. Any request for substitution that is granted by the District shall be documented and processed through a Change Order.
2. The District may condition its approval of any substitution upon delivery to the District of an extended warranty or other assurances of adequate performance of the substitution.

3. Any and all risks of delay due to approval by the DSA or any other governmental agency having jurisdiction shall be on the bidder.

4. In the event that the bidder has agreed in the Request Form to provide the Specified Item and the District denies the bidder’s requested substitution for a Specified Item, the bidder shall provide the Specified Item without any additional cost or charge to the District.

L. If the Architect and District accept a proposed substitution, the Contractor agrees to pay for all engineering and design services, including, without limitation, compensation to the Architect and affected engineers for their required time to process such substitution through the Division of the State Architect, if required, and to make all changes and adjustments in materials or the work of all trades directly or indirectly affected by the substituted item or items at no cost to the District.

M. Substitutions will not be considered for acceptance (or, at the District’s sole discretion, District may make Contractor solely responsible for all resulting costs, expenses and other consequences of a substitution) when a substitution:
   1. Results in delay meeting established construction milestones and/or Phase completion dates.
   2. Is indicated or implied on submittals without formal Substitution Request from Contractor.
   3. Is requested directly by a Subcontractor or supplier.
   4. Acceptance will require substantial revision to the Contract Documents.
   5. Disrupts the Contractor’s Work progress or ability to perform efficiently.

N. Substitute products shall not be ordered without written acceptance of Architect and District.

O. Architect and/or District shall determine acceptability of proposed substitutions and reserve right to reject proposals due to insufficient information.

P. Accepted substitutions will be evidenced by a Change Order. All Contract Document requirements apply to all Work involving substitutions.

Q. Coordinate all substitute products with Contractor’s Construction and Submittal Schedules.

1.6 PRODUCTS WITH NO SUBSTITUTION ALLOWED

A. No substitutions shall be allowed for District standard products. District standard products include:
   1. Corbin-Russwin door locksets and latches
   2. Andover Building Management Control Systems
   3. Siemens Fire Alarm System
   4. Access Control: Software House
   5. Intrusion Alarm Monitoring: DSC
   6. Uninterruptable power supplies: Liebert GXT3
1.7 PRODUCT SUBSTITUTION REQUESTS: REQUIRED INFORMATION

A. Requests for substitutions of products, materials, or processes in place of a specified item must in writing on the District’s Substitution Request Form at the time of submitting bids to the District.

B. Except as provided in the Contract Documents with respect to “or equal” items, District will consider a Contractor’s substitution request only when the specified product or products become unavailable due to no fault of Contractor.

C. Requests for review of proposed substitute items will not be accepted from anyone other than Contractor.

D. A Request for Substitution shall state the extent, if any, to which the evaluation and acceptance of the proposed substitute will prejudice Contractor’s achievement of Substantial Completion of the Work or any Phase of the Work on time pursuant to the completion dates specified in the Contract Documents, and whether or not acceptance of the substitute for use in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with the District for Work on the Project.)

E. Substitution Product List: Submit a list, in tabular form, showing specified product(s) and requested substitute product(s). Include generic names of products required, and manufacturer’s proprietary name for each product. Provide all product data for each requested substitute product, variations from specified product, and other pertinent data as specified herein.

F. Submit separate submittals (four copies) for each product substitution requested, to include the following:
   1. A statement either explaining why the specified product cannot be provided or why the Contractor is proposing a substitution.
   2. Product identification, including specification section number, and title.
   3. Manufacturer’s literature, including product data and specifications.
   4. Physical samples, as applicable
   5. Color chart, as applicable.
   6. Name and address of similar projects on which product has been used, and dates of installation.
   7. Name, address, and telephone number of supplier, installer, and manufacturer’s representative.
   8. Construction methods: Include detailed description with drawings or other illustrations as required for clarity.
   9. Provide product availability information with projected delivery date.
   10. A completed Substitution Request Form (see Section 01340 “Administrative Forms and Logs”) for each product substitution requested. Submittals with an incomplete Substitution Request Form will be returned to the Contractor without review.
   11. A detailed comparison of the proposed substitution with specified product, listing all variations including all dimensional, weight, service requirements, and functional
differences, if any. If variation(s) from the specified product is not identified in the submittal, it may be rejected.

12. Indicate available maintenance, repair, and replacement services for substitute products.

13. Contractor shall state whether the substitute will require a change in any of the Contract Documents (or provisions of any other direct contract with District for work on the Project) to adapt the design for the proposed substitute, and whether or not incorporation or use of the substitute in connection with Work is subject to payment of any license fee or royalty.

14. Contractor shall provide an accurate cost comparison of the proposed substitution with the specified product and identify the net change in Contract Sum related to use of the proposed substitution.
   a. The cost comparison shall include, but not be limited to, an itemized estimate of all costs or credits that will result directly or indirectly from acceptance of such substitute, and include costs for redesign and/or claims of other contractors affected by the resulting change.
   b. Architect or District may require Contractor to furnish additional cost data concerning the proposed substitute.

15. Coordination information, including a list of changes or modifications needed to other parts of the Work and to construction performed by District and separate contractors that will be necessary to accommodate proposed substitution.

16. Material test reports from a qualified testing agency indicating and interpreting test results for compliance with requirements indicated.

17. Research/evaluation reports evidencing compliance with building code in effect for Project, from a model code organization acceptable to authorities have jurisdiction.

18. Submit complete information identifying any changes to the Contractor’s Construction Schedule required as a result of the proposed substitution.
   a. If specified product or method of construction cannot be provided within Contract Time, include letter from manufacturer, on manufacturer’s letterhead, stating lack of availability or other reason for delays in delivery.
      1) Contractor’s certification that proposed substitution complies with requirements in the Contract Documents.

19. Contractor’s waiver of rights to additional payment or time that may subsequently become necessary because of failure of proposed substitution to produce indicated results.

1.8 CONTRACTOR’S REPRESENTATION AND WARRANTY

A. Contractor’s Substitution Request constitutes a representation and warranty that Contractor complies with all of the following requirements:

1. Contractor has investigated proposed product and determined that it meets or exceeds, in all respects, the requirements for the specified product.

2. Contractor shall provide the same warranty for substitution as for specified product.
3. Contractor shall coordinate installation and make all other changes that may be required for Work to be integrated and complete in all respects.

4. Contractor waives claims for any additional costs which may subsequently become apparent.

5. Contractor shall compensate District for any Construction Document revisions and/or agency approval costs associated with any product substitution. Any such compensation shall be deducted from the Contract Sum by the District via Change Order.

6. Contractor shall be responsible for maintaining the Construction Schedule and for recovering any time lost due to a product substitution.

7. Contractor shall be responsible for any Construction Schedule delay caused by late ordering of available specified products caused by Substitution Requests that are subsequently rejected by the District.

8. Contractor shall compensate District for all costs, including extra costs for performing Work under Contract Documents, extra cost to other contractors, and any claims brought against District, caused by late Product Substitution Requests.

1.9 ARCHITECT’S ACTION

A. Architect shall respond in writing to Contractor within (10) working days of receipt of a Substitution Request. Architect’s response shall include a list of unacceptable product selections and a brief explanation of reasons for this action. Architect’s response, or lack of response, does not constitute a waiver of requirement to comply with the Contract Documents.

B. Architect shall notify Contractor in writing of decision to accept or reject Contractor’s requested substitution.

C. If necessary, Architect may request additional information or documentation for evaluation Substitution Request. Architect shall notify Contractor of acceptance or rejection of proposed substitution within (5) working days of receipt additional information of documentation.

1.10 ADMINISTRATIVE REQUIREMENTS

A. Specified products, materials, or systems for Project may include engineering or on-file standards required by the regulatory agency. Contractor’s substitution of products, materials or systems may require additional engineering, testing, reviews, approvals, assurances, or other information for compliance with regulatory agency requirements, or both. Contractor shall provide all agency approvals or other additional information required and pay additional costs for required District services made necessary by the substitution at no increase in Contract Sum or Contract time, and as a part of substitution proposal.

PART 2 – PRODUCTS
Not Used

PART 3 – EXECUTION
Not Used

END OF SECTION 01625
SECTION 01710
CLEANING REQUIREMENTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS
   A. All Contract Documents shall be reviewed for applicable provisions related to the provisions in this document, and provisions of General Conditions and other Division 1 Specification Sections shall apply to this Section without limitation

1.2 RELATED REQUIREMENTS SPECIFIED IN OTHER SECTIONS
   A. Section 01400 – “Quality Control Requirements”
   B. Section 01505 - “Construction Waste Management”
   C. Section 01572 – “Storm Water Pollution Prevention Plan”
   D. Section 01722 – “Execution Requirements”
   E. Section 01770 – “Contract Closeout Procedures”

1.3 DISPOSAL OF MATERIALS
   A. See Section 01505 (Construction Waste Management) for additional requirements.
   B. As part of the scope of Work included within the contract Sum, Contractor shall be fully responsible for disposing of all construction debris, dirt and spoils resulting from the Work.
   C. All waste materials, debris, dirt and rubbish shall be disposed of at sites to be chosen by Contractor in accordance with applicable local, state and federal regulations and requirements of the Contract Documents. See also Sections 01505 and 01412.
   D. Contractor is cautioned that both the County of Contra Costa and cities within the County have regulations governing the disposal of rubble, broken pavement, and similar materials.
   E. Contractor shall become familiar with the requirements of the agency having jurisdiction over any contemplated disposal site and shall comply with requirements.
   F. The Contractor shall estimate, log and submit regular reports to the District, an estimate of quantities (e.g. tonnage) of waste materials disposed of for compliance with Section 01505. See Section 01505 for documentation requirements regarding the nature of materials, destination, volume, and tonnage.
   G. Under no circumstances shall rubbish, debris, waste, dust, dirt or surplus materials be allowed to accumulate in the building or on the Project site, and all such shall be removed continually as the Work progresses and by the end of each day’s Work.

1. Materials: In occupied building areas, only sufficient materials and flammable or toxic substances necessary for the Work being performed that day or shift shall be brought into the building and work areas. In no case shall flammable or toxic substances be stored in the building, and these substances shall be immediately removed from the building when not needed and not later that the end of the day’s Work.

2. Splattering or spilling of material shall be promptly cleaned up at time of occurrence.
H. Contractor shall provide street sweeping whenever silt from construction site is carried over to adjacent public thoroughfares.

I. Failure to maintain a clean and orderly project site may necessitate action by the District. In the event that the Contractor fails to clean up and maintain the project in a clean and orderly manner, the District may clean the job-site and charge the Contractor for such cleaning costs. Any cleaning costs incurred by District will be deducted from the Contract Sum by Change Order.

J. All trash, debris, waste, and excess soil resulting from performance of the Work shall be disposed of at sites to be chosen by Contractor in accordance with applicable local, state, and federal regulations. If Contractor elects to dispose of soil on any private property, a permission letter shall be obtained from the property owner and presented to District prior to disposal. Contractor is advised that the property owner is required to obtain a fill permit from the applicable government agency(ies). In addition, placement of fill in wetland areas is subject to permit procedures of the US Army Corps of Engineers. At the completion of Work, a letter from each affected property owner releasing Contractor, Contra Costa County, District, and District consultants from any future liability.

1.4 FINAL CLEANING

A. District’s Representative’s Inspection: Provide District at least twenty-four (24) hours advance notice of readiness for inspection.

B. Any deficient cleaning, as determined by District’s Representative, shall be immediately corrected as directed by District at Contractor’s expense.

C. Contractor shall execute final cleaning prior to final inspection, using only properly skilled workers.

D. Remove grease, dust, dirt, stains, labels, fingerprints, and other foreign materials from exposed interior and exterior finished surfaces.

E. Repair, patch, and touch up marred surfaces to match adjacent finishes.

F. Clean interior and exterior surfaces exposed to view; remove temporary labels, stains and foreign substances, clean and/or polish all transparent and glossy surfaces,

G. Vacuum carpeted and soft surfaces.

H. Remove waste and surplus materials, rubbish, and construction facilities from Site.

I. Wash and shine mirrors.

J. Ventilating systems:
   1. Clean permanent filters and replace disposable filters of units operated during construction; in addition, clean ducts, blowers, and coils when units have been operated without filters during construction.
   2. Clean ducts, blower, and coils of units operated during construction.

K. Clean surfaces of equipment; remove excess lubrication.

L. Clean plumbing fixtures to a sanitary condition

M. Vacuum and wipe inside of electrical panels and cabinetwork.

N. Clean light fixtures and lamps.

O. Broom clean interior spaces.
P. Clean, damp mop, wax and polish resilient and hard-surfaced floors as specified.

Q. Remove waste, debris and surplus materials from site. Clean grounds; remove stains, spill, and foreign substances from paved areas and sweep clean. Rake clean other exterior surfaces.

R. Use cleaning materials which will not create hazards to health or property or cause damage to the Work. Use cleaning materials and methods recommended by the manufacturers of the products to be cleaned.

S. Contractor shall not use nor permitted to use any kind of material/cleaning chemical that are not permitted for use in the State of California, or not permitted by the Health Department

T. Schedule operations to prevent dust and other contaminants resulting from cleaning operations from adhering to wet or newly finished surfaces.

U. Clean roofs, gutters, downspouts and drainage systems.

V. Interior surfaces and areas where Work is performed shall be left in vacuum clean condition with all dust, dirt, stains, hand marks, paint spots, plaster droppings, and other blemishes and defects completely removed. To the extent of Contractor’s operations, use or materials, the following requirements apply to all areas where Work is performed:

1. Walls: Bare and painted surfaces shall be cleaned and free of dust, lint, streaks, or stains.

2. Hardware and metal surfaces shall be cleaned and polished using non-corrosive and non-abrasive materials.

3. Glass: New glass and soiled existing glass shall be washed and polished both sides and left free of dirt and spots. Labels shall be removed.

4. Ceilings shall be clean and free of stains, handmarks, and defacing.

5. Fixtures and Equipment: New mechanical and electrical fixtures and like items shall be cleaned and polished. Lighting fixtures shall be free of dust, dirt, stains, or waste material. Equipment and machinery shall be cleaned, serviced, and ready for use. Existing items shall be cleaned as required including ventilating supply and return equipment in walls and ceilings.

6. Surfaces not mentioned shall be cleaned according to the intent of this Section and as required for District’s Representative’s approval.

PART 2 – PRODUCTS
Not Used

PART 3 – EXECUTION
Not Used

END OF SECTION 01710
SECTION 01722
EXECUTION REQUIREMENTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS
A. All Contract Documents shall be reviewed for applicable provisions related to the provisions in this document, and provisions in the General Conditions and other Division 1 Specification Sections shall apply to this section without limitation.

1.2 RELATED REQUIREMENTS SPECIFIED IN OTHER SECTIONS
A. Section 01010 – “Summary of Work”
B. Section 01311 – “Project Management and Coordination”
C. Section 01710 – “Cleaning Requirements”
D. Section 01770 – “Contract Closeout Procedures”

1.3 SUMMARY
A. This Section includes Administrative and General procedural requirements governing execution of the Work including, but not limited to, the following:
   1. Construction layout
   2. General installation of products
   3. Coordination of District-installed products
   4. Starting and adjusting
   5. Protection of installed construction
   6. Correction of the Work

PART 2 - PRODUCTS
Section 09900 – Painting Specifications

PART 3 - EXECUTION

3.1 EXAMINATION
A. Acceptance of Conditions: Examine substrates, areas, and conditions, with Installer or Applicator present where indicated, for compliance with requirements for installation tolerances and other conditions affecting performance. Record all observations in writing.

   1. Written Report: Where a written report listing conditions detrimental to performance of the Work is required by other Sections, include the following:
      a. Description of the Work
      b. List of detrimental conditions, including substrates
      c. List of unacceptable installation tolerances
      d. Recommended corrections
2. Examine roughing-in for mechanical and electrical systems to verify actual locations of connections before equipment and fixture installation.

3. Examine walls, floors, and roofs for suitable conditions where products and systems are to be installed.

4. Proceed with installation only after unsatisfactory conditions have been corrected. Proceeding with the Work indicates acceptance of surfaces and conditions.

B. Existing Site and/or Building Conditions: The existence and location of site improvements, utilities, and other construction indicated as existing are not guaranteed. Before beginning Work, investigate and verify the existence and location of mechanical and electrical systems and other construction affecting the Work.

1. Before construction, verify the location and points of connection of all utility services for each Phase of the Work and the entire Project.

C. Existing Utilities: The existence and location of underground and other utilities and construction indicated in the Contract Documents as existing are not guaranteed. Prior to beginning the Work investigate and verify the existence and location of all underground utilities and/or other improvements affecting the Work.

1. Before construction, verify the location and invert all elevations at points of connection of sanitary sewer, storm sewer, and water-service piping; and all underground electrical services.

2. Furnish location data for work related to Project that must be performed by public utilities serving Project site.

3.2 PREPARATION


B. Existing Utility Information: Furnish information to the District and Architect that is necessary to adjust, move, or relocate existing utility structures, utility poles, lines, services, or other utility appurtenances located in or affected by construction. Contractor shall coordinate with authorities having jurisdiction.

C. Field Measurements: Take field measurements as required to fit the Work properly. Recheck measurements before installing each product. Where portions of the Work are indicated to fit to other construction, Contractor shall investigate and verify all dimensions of other construction by field measurements before fabrication. Contractor shall coordinate fabrication schedule with construction progress to avoid delaying the Work.

D. Space Requirements: Verify space requirements and dimensions of items shown diagrammatically on Contract Documents. Contractor shall be responsible for all coordination and measurements including means and methods of Construction.

3.3 CONSTRUCTION LAYOUT

3.4 INSTALLATION

A. General Contractor shall locate the Work and components of the Work accurately, in correct alignment and elevation, as indicated.
1. Make vertical work plumb and make horizontal work level.
2. Where space is limited, install components to maximize space available for maintenance and ease of removal for replacement.
3. Conceal pipes, ducts, and wiring in furnished areas, unless otherwise indicated.
4. Maintain minimum headroom clearance of eight feet in spaces without a suspended ceiling.

B. Contractor shall comply with manufacturer’s written instructions and recommendations for installing products in applications indicated.

C. Contractor shall install products at the time and under conditions that will ensure the best possible results. Maintain conditions required for performance until accepted by District.

D. Contractor shall conduct construction operations so no part of the Work is subjected to damage or loading in excess of that expected during normal conditions of occupancy.

E. Tools and Equipment: Do not use tools or equipment that produces harmful noise levels. Contractor shall comply with noise requirements in Section 01416, Special Procedures.

F. Templates: Obtain and distribute to the parties involved templates for work specified to be factory prepared and field installed. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing products to comply with indicated requirements.

G. Anchors and Fasteners: Provide anchors and fasteners as required to anchor each component securely in place, accurately located and aligned with other portions of the Work.

H. Mounting Heights: Where mounting heights are not indicated, mount components at heights directed by Architect.

I. Allow for building movement, including thermal expansion and contraction.

J. Coordinate installation of anchorages. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors, that are to be embedded in concrete or masonry. Deliver such items to Project site in time for installation.

K. Joints: Make joints of uniform width. Where joint locations in exposed work are not indicated, arrange joints for the best visual effect. Fit exposed connections together to form hairline joints.

L. Hazardous Materials: Use only products, cleaners, and installation materials that are not classified as or considered hazardous.

3.5 DISTRICT-INSTALLED PRODUCTS

A. Site Access: Provide access to Project site for District’s construction forces.

B. Coordination: Coordinate construction and operations of the Work with work performed by District construction forces.
1. Construction Schedule: Inform District of Contractor’s preferred construction schedule for District’s portion of the Work. Adjust construction schedule based on a mutually agreeable timetable. Notify District and Architect if changes to schedule are required due to differences in actual construction progress.

2. Pre-installation Conferences: Include District’s construction forces at pre-installation conferences covering portions of the Work that are to receive District’s work. Attend pre-installation conferences conducted by District’s construction forces if portions of the Work depend on District’s construction forces.

3.6 PROTECTION OF INSTALLED CONSTRUCTION

A. Provide final protection and maintain conditions that ensure installed Work is without damage or deterioration at time of Substantial Completion.

B. Comply with manufacturer’s written instructions for temperature and relative humidity.

3.7 CORRECTION OF THE WORK

A. Repair or remove and replace defective construction. Restore damaged substrates and finishes. Comply with requirements Section 01730, Cutting and Patching.

1. Repairing includes replacing defective parts, refinishing damaged surfaces, touching up with matching materials, and properly adjusting operating equipment.

B. Restore permanent facilities used during construction to their specified condition. See also Section 01500, Temporary Facilities and Controls.

C. Remove and replace damaged surfaces that are exposed to view if surfaces cannot be repaired without visible evidence of repair.

D. Repair components that do not operate properly. Remove and replace operating components that cannot be repaired.

E. Remove and replace chipped, scratched, and/or broken glass or reflective surfaces.

END OF SECTION 01722
SECTION 01730
CUTTING AND PATCHING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS
A. All Contract Documents shall be reviewed for applicable provisions related to the provisions in this document, and provisions in the General Conditions and other Division 1 Specification Sections shall apply to this section without limitation.
B. Individual Product Specification Sections:
   1. Cutting and patching incidental to work of the section.
   2. Advance notification to other sections of openings required in work of those sections.
   3. Limitations on cutting structural members.

1.2 RELATED REQUIREMENTS SPECIFIED IN OTHER SECTIONS
A. Section 01311 – “Project Management and Coordination”
B. Section 01710 – “Cleaning Requirements”
C. Section 01722 – “Execution Requirements”

1.3 DEFINITIONS
A. Cutting: Removal of in-place construction necessary to permit installation or performance of other Work.
B. Patching: Fitting and repair work required to restore surfaces to new or original conditions after installation of other Work.

1.4 RESPONSIBILITIES
A. Contractor shall be responsible for all cutting, fitting, and patching, including associated excavation and backfill, required to complete the Work. This includes, but is not limited to:
   1. Making parts fit together properly
   2. Removal and replacement of defective Work
   3. Removal and replacement of Work not conforming to requirements of Contract Documents
   4. Provide routine penetrations of non-structural surfaces for installation of piping and electrical conduit
   5. Attaching new materials to existing improvements
   6. Painting (or other finishes) to match adjacent or existing conditions
B. Contractor shall not cut or alter any part of the Work in such a way that endangers or compromises the integrity of the Work, the work of others, or the Project.
1.5 QUALITY ASSURANCE

A. Requirements for Cutting and Patching relating to structural elements: Do not cut and/or patch structural elements in a manner that would alter their structural design characteristics.

1. Obtain written approval of the cutting and patching proposal from the Structural Engineer of Record prior to cutting and/or patching any structural elements. Structural elements include, but are not limited to:
   a. Foundation construction
   b. Structural Concrete
   c. Structural Steel
   d. Wood Framing
   e. Bearing and retaining walls
   f. Stair systems
   g. Roofing and framing systems
   h. Glue lam beam
   i. Shear wall systems

2. Where cutting and patching Work involves adding reinforcement to structural elements, submit details and engineering calculations showing integration of reinforcement with original structure. Contractor shall be responsible for any costs associated with required Structural Engineer and/or DSA reviews and approvals.

B. Operational Limitations: Do not cut and patch operating elements or related components in a manner that would result in reducing their capacity to perform as intended. Do not cut and patch operating elements or related components in a manner that would result in increased maintenance or decreased operational life or safety.

C. Visual Requirements: Do not cut and patch exposed Work in a manner that would, in the Architect or District’s opinion, reduce the building’s aesthetic qualities. Do not cut and patch construction in a manner that would result in visual evidence of cutting and patching. Remove and replace construction cut and patched in a visually unsatisfactory manner as directed by District.

D. Contractor shall ensure that all cutting, fitting, and patching shall achieve the security, strength, weather protection, and appearance for aesthetic match, efficiency, operational life, maintainability, safety of operational elements, and the continuity of existing fire ratings as required by the Contract Documents.

E. Contractor shall ensure that cutting, fitting, and patching shall successfully duplicate undisturbed adjacent profiles, materials, textures, finishes, colors, and that materials shall match existing construction. Where there is dispute as to whether duplication is successful or has been achieved to a reasonable degree, the District’s decision shall be final.

F. Operational Elements: Do not cut and patch operating elements and/or related components in a manner that results in reducing their capacity to perform as intended, results in increased maintenance requirements, that decreases operational life, or that affects system or component safety. Operating elements include, but are not limited to the following:
1. Fire-suppression systems.
2. HVAC systems.
3. Control systems.
4. Mechanical systems piping and ducts.
5. Air smoke barriers
6. Telephone and communication systems.
7. Electrical wiring systems.
8. Primary operational systems and equipment.

G. Miscellaneous Elements: Do not cut and patch miscellaneous elements or related components in a manner that could change their load-carrying capacity, that results in reducing their capacity to perform as intended, or those results in increased maintenance or decreased operational life or safety. Miscellaneous elements include, but are not limited to the following items:
1. Exterior curtain wall construction
2. Equipment supports
3. Noise-and vibration-control elements and systems
4. Water, moisture, or vapor barriers
5. Membranes and flashings
6. Vessels, and equipment

1.6 PAYMENT FOR COSTS

A. Cost caused by ill-timed or defective cutting and patching Work or Work not conforming to Contract Documents, including costs for additional services of the District and its consultants will be borne by the Contractor and deducted from the Contract Sum via Change Order by the District.

B. Cost of Work cutting and patching Work performed upon approval from the District, other than defective or nonconforming Work, will be paid by District via written Change Order.

1.7 WARRANTY

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

PART 2 - PRODUCTS

2.1 MATERIALS

A. Contractor shall provide for replacement and restoration of any Work affected by cutting and patching operations. Contractor shall comply with the Contract Documents and with the Industry Standard(s), for the type of Work involved. If not specified, Contractor shall first recommend a product of a manufacturer or appropriate trade association for approval by the District.
B. Materials to be cut and patched include those damaged by Contractor in the performance of the Work.

C. Use materials identical to existing materials. For exposed surfaces, use materials that visually match existing adjacent surfaces to the fullest extent possible. If identical materials are unavailable or cannot be used, use materials whose installed performance will equal or exceed that of existing materials and that are visually compatible in the sole opinion of the District.

PART 3 - EXECUTION

3.1 INSPECTION

A. Contractor shall inspect existing conditions of the Site and the Work, including elements subject to movement or damage during cutting and patching, excavating and backfilling. After uncovering Work, Contractor shall inspect conditions affecting the installation of new products.

B. Contractor shall report unsatisfactory or questionable conditions in writing to District as indicated in the Contract Documents, and shall proceed with Work as directed by District.

3.2 PREPARATION

A. Contractor shall provide adequate shoring, bracing and supports as required to maintain structural integrity for all portions of the Project during cutting and patching operations.

B. Contractor shall provide devices and means and methods to protect other portions of Project from damage during cutting and patching operations.

C. Contractor shall provide all necessary protection from weather and extremes of temperature and humidity for the Project, including without limitation, any work that may be exposed by cutting and patching Work. Contractor shall keep excavations free from water.

D. Avoid interference with use of adjoining areas or interruption of free passage to adjoining areas.

E. Do not cut existing pipe, conduit, or ductwork serving existing buildings and/or other improvements that are scheduled to be removed or relocated until provisions have been made to bypass them. Maintain all active existing services at all times.

3.3 PERFORMANCE

A. With respect to performance, Contractor shall:

1. Execute cutting and patching Work to provide finished installation complying with specified tolerances and matching adjacent finishes.

2. Execute cutting and patching using means and methods that will prevent damage to other Work, and that will result in proper surfaces to receive installation of repairs and/or new Work.

3. Execute cutting, demolition, patching, excavating, and backfilling by methods that will prevent damage to other Work and damage from settlement or other movement.

4. Contractor shall employ original installer or fabricator to perform cutting and patching for:

   a. Weather-exposed surfaces and moisture-resistant elements such as roofing, sheet metal, sealants, waterproofing, and other similar Work.
5. Contractor shall fit Work airtight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces. Contractor shall conform to Contract Document requirements for penetrations. If a discrepancy exists between applicable Code requirements and the Contract Documents, the more stringent requirement shall apply.

6. Completed cutting and patching Work shall not affect the integrity of fire walls, ceilings, floors, smoke barriers, shafts, and similar components.

7. Contractor shall restore Work which has been cut or patched. Contractor shall install new products to provide completed Work in accordance with requirements of the Contract Documents and as required to match adjacent areas and surfaces.

8. Contractor shall refinish all continuous surfaces to nearest intersection as necessary to match the new finish to any existing finish.

9. Cutting: Cut in-place construction by sawing, drilling, breaking, chipping, grinding, and similar operations, including excavation, using methods least likely to damage adjacent Work to remain. If possible, review proposed procedures with original Installer and comply with his written recommendations.
   a. 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.
   b. Finished Surfaces: Cut or drill from the exposed or finished side into concealed surfaces.

10. Concrete and Masonry: cut using a cutting machine, such as an abrasive saw or a diamond-core drill.

11. Excavating and Backfilling: Comply with requirements in applicable Division 2 Sections where required by cutting and patching operations.

12. 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.

13. Proceed with patching after construction operations requiring cutting are complete.

14. 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.

15. Inspection: Where feasible, test and inspect patched areas after completion to demonstrate integrity of installation.

16. 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. Clean all materials affected by cutting and patching operations before applying finishes.
   b. Restore any damaged pipe covering to original condition.
c. Floors and Walls: Where walls or partitions that are removed extend from one finished area into another, patch and repair floor and wall surfaces in the both spaces. As required to provide an even surface of uniform finish, color, texture, and appearance. Remove in-place floor and wall coverings and replace with new materials as necessary to achieve uniform color and appearance.

d. Where patching occurs on a painted surface, apply specified primer and intermediate coats over the patch. Apply final coat over entire unbroken surface containing the patch. Provide additional coats as required until patched area blends completely with adjacent surfaces.

17. Ceilings: Patch, repair, or re-hang in-place ceilings as necessary to provide a level, planar surface of uniform appearance.

18. Exterior Building Enclosure: Patch components in a manner that restores enclosure to a weather-tight condition and results in a uniform visual appearance.

B. Cleaning: Clean areas, spaces, materials, and/or equipment where cutting and patching Work is performed. Completely remove dirt, dust, cuttings, paint, mortar, oils, putty, adhesive, and any other similar materials.

C. Alterations to Existing Work:

1. Existing work shall be cut, drilled, altered, removed, or temporarily removed and replaced as necessary for performance of work under the contract. Work that is replaced shall match similar existing work. Structural members shall not be cut or altered, except where noted on drawings, without authorization of the Structural Engineer. Work remaining in place, which is damaged or defaced during this contract, shall be restored to the condition existing at time of award of contract.

2. Discolored or unfinished surface exposed by removal of existing work and indicated to be the final exposed surfaces shall be refinished or the material shall be replaced as necessary to make contiguous work uniform and harmonious. Work out of alignment, where exposed by removal of existing work, shall be called to the Architect’s attention.

END OF SECTION 01730
SECTION 01740

WARRANTIES/GUARANTIES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. All Contract Documents shall be reviewed for applicable provisions related to the provisions in this document, and provisions in the General Conditions and other Division 1 Specification Sections shall apply to this Section without limitation.

1.2 RELATED DOCUMENTS SPECIFIED IN OTHER SECTIONS

A. Section 01010 – “Summary of Work”
B. Section 01770 – “Contract Closeout Procedures”
C. Section 01780 – “Project Record Documents”
D. Section 01820 – “Demonstration and Training”

1.3 SUMMARY OF WORK

A. Contractor hereby warrants and guaranties to District all Work performed on this Project, including all material and equipment incorporated therein, as set forth below:

B. Pursuant to the requirements of this Section and other sections of the Contract Documents, Contractor agrees to unconditionally warranty and guaranty the quality and adequacy of all of Work provided under this Contract including, without limitation, all labor, materials and equipment provided by the Contractor and Subcontractors of all tiers in connection with the Work.

C. Contractor’s Warranty and/or Guaranty shall become effective on the first day following District’s issuance of a written Notice of Substantial Completion of a specifically defined Phase of the Project, or on such other date as may be specified elsewhere in the Contract Documents, and once effective, the Warranties and/or Guaranties shall remain operative and shall bind Contractor as further described herein for a period of one (1) year, and/or more as specified in the Contract Documents.

D. District and Contractor shall in light of the anticipated duration of this Project, create a mechanism to trigger the start-date of Contractor’s Warranty and/or Guaranty so that the Warranty and/or Guaranty may become effective in Phases as the Project proceeds. All Contractor Warranties and/or Guaranties must be reviewed and accepted by District.

E. It is therefore understood and agreed that the terms of this Contract provide for division of the Work into Phases, with each specific Phase having a District approved schedule and completion date associated with it pursuant to this Section, Section 01015 Project Phasing, and Section 01310 Construction Scheduling.

F. Contractor may issue multiple Warranties and/or Guaranties, each associated with the completion of a specific Phase of the Project. Each such Warranty and/or Guaranty issued.
pursuant to the terms of this Section shall be individual and distinct from, and shall operate independently from, any other Warranty and/or Guaranty issued hereunder. All Contractor Warranties and/or Guaranties must be reviewed and accepted by District.

G. It is agreed that any such Warranty and/or Guaranty shall apply only to that Work (or Phase of Work) for which the Notice of Substantial Completion has been issued.

H. Neither final payment nor use or occupancy of the Work performed by the Contractor shall constitute an acceptance of Work not done in accordance with Contract Documents, nor relieve Contractor of liability in respect to any express warranties and/or guaranties or responsibilities for faulty materials or workmanship.

I. Contractor shall remedy any defects in the Work and repair any associated damage resulting therefrom, and pay all costs for any such Work which shall become evident within any Project Warranty and/or Guaranty period. If any Work is found to be defective within any Project Warranty and/or Guaranty period, Contractor shall, without cost to District, promptly correct such defective Work.

J. Contractor shall remove any defective Work rejected by District and replace it with Work that complies in all respects to the requirements of the Contract Documents. Remove and replace any damage to other Work or the Work of others resulting therefrom.

K. If Contractor fails to promptly comply with the terms of such instructions, or in an emergency where delay would cause serious risk of loss or damage, District may have the defective Work corrected or the rejected Work removed and replaced. Contractor shall pay for all costs, losses and damages caused by or resulting from such removal and replacement within the Warranty and/or Guaranty period.

L. Where Contractor fails to correct defective Work, or defects are discovered outside the Warranty and/or Guaranty period, District shall have all rights and remedies granted by law.

M. Inspection of the Work shall not relieve Contra Contract of any of its obligations under the Contract Documents. Even though equipment, materials, or Work required to be provided under the Contract Documents have been inspected, accepted, and paid for, Contractor shall, at its own expense, replace or repair any such equipment, material, or Work found to be defective or otherwise not to comply with the requirements of the Contract Documents up to the end of the guaranty period.

N. These Warranties and/or Guaranties are in addition to any other warranty or guaranty requirements contained in the Contract Documents, and not in lieu of any other liability imposed on Contractor under the Contract Documents and governing laws with respect to Contractor’s duties, obligations, and performance under the Contract Documents.

1.4 FORMAT

A. Contractor shall separate each warranty and/or guaranty with index tab sheets keyed to a Table of Contents listing, providing full information and using separate typed sheets as necessary. Contractor shall list each applicable and/or responsible subcontractor, supplier, and/or manufacturer, with name, address, telephone number, fax number, and e-mail of each responsible principal.
1. Bind warranties and guaranties and bonds in heavy-duty, 3-ring vinyl-covered, loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8 ½-by 11-inch paper.

2. Provide heavy paper dividers with plastic-covered tabs for each separate warranty and/or guaranty. Mark tab to identify the product or installation. Provide a typed description of the product or installation, including the name of the product and the name, address, and telephone number, fax number, and e-mail of installer.

3. Identify each binder on the front and spine with the typed or printed title “WARRANTIES”.
   a. Project name and number
   b. Architect’s name
   c. Contractor’s name

B. Contractor shall provide two (2) sets of binders for all Warranties/Guaranties and shall include:
   1. Contractor, subcontractor, and equipment supplier shall provide Warranties and Guaranties on their original company letterhead with original signature.
   2. Contractor shall provide original Warranties and Guaranties. Photo copies, fax and e-mail copies are not acceptable.

C. Contractor shall organize warranty and guaranty documents into an orderly sequence based on the table of contents of the Project Manual.

1.5 PREPARATION

A. Contractor shall obtain warranties and guaranties, executed in duplicate by each applicable and/or responsible subcontractor(s), supplier(s), and manufacturer(s), within fifteen (15) days after Notice of Substantial Completion of the applicable Work or Phase of Work. Except for items put into use with District’s permission, Contractor shall leave date of beginning of time of warranty or guaranty blank until the date of completion is determined by District.

B. Contractor shall verify that documents are in proper original form, contain full information, and are notarized, when required.

C. Contractor shall co-sign and co-execute all Warranties and Guaranties.

D. Contractor, subcontractor, and equipment supplier must provide warranties/guaranties on their original company letterhead with original authorized principal charge signature. (Fax copy and e-mail will not be acceptable.)

E. Contractor shall provide additional copies of each warranty and/or guaranty to include in operation and maintenance manual. Photocopies are acceptable for this purpose.

F. For items of work delayed beyond date of completion, Contractor shall provide updated submittal within ten (10) days after acceptance, listing the date of acceptance by District as start of the warranty and/or guaranty period.

G. Contractor must complete all warranty and guaranty submittals as required by the Contract Documents prior to District approval of Contractor’s final application for Payment.
1.6 WARRANTY AND GUARANY MANAGEMENT

A. Warranty and Guaranty Management Plan

1. Develop a warranty and guaranty management plan which contains information relevant to Specification Section 01740, Warranties/Guaranties. At least 30 days before the planned pre-warranty conference for each applicable Phase of Work, submit the warranty and guaranty management plan for District approval. Include within the warranty and guaranty management plan all required actions and documents to assure that the District receives all warranties and guaranties to which it is entitled. The plan must be in narrative form and contain sufficient detail to render it suitable for use by future maintenance and repair personnel, whether tradesmen, or of engineering background, not necessarily familiar with this contract. The term "status" as indicated below must include due date and whether item has been submitted or was accomplished. Warranty and guaranty information made available during the construction phase must be submitted to the District Project Manager for approval prior to each monthly pay estimate. Assemble approved information in a binder and submit to the District upon acceptance of the Work or Phase of Work. The construction warranty and guaranty period will begin on the date of Substantial Completion and continue for the full product warranty and guaranty period. A joint 4 month and 9 month warranty and guaranty inspection will be conducted, measured from Substantial Completion, by the Contractor, District, and the Campus Representative. Include within the warranty and guaranty management plan, but not limited to, the following:

a. Roles and responsibilities of all personnel associated with the warranty and guaranty process, including points of contact and telephone numbers within the organizations of the Contractors, subcontractors, manufacturers or suppliers involved.

b. Listing and status of delivery of all Certificates of Warranty and Guaranty for extended warranty and guaranty items, to include roofs, HVAC balancing, pumps, motors, transformers, and for all commissioned systems such as fire protection and alarm systems, sprinkler systems, lightning protection systems, etc.

c. A list for each warranted equipment, item, feature of construction or system indicating:

i) Name of item.
ii) Model and serial numbers.
iii) Location where installed.
iv) Name and phone numbers of manufacturers or suppliers.
v) Names, addresses and telephone numbers of sources of spare parts.
vi) Warranties and Guaranties and terms of warranty and/or guaranty. Include one-year overall warranty of construction. Items which have extended warranties or guaranties must be indicated with separate warranty and guaranty expiration dates.

vii) Cross-reference to warranty and guaranty certificates as applicable.

viii) Starting point and duration of warranty and guaranty period.
Summary of maintenance procedures required to continue the warranty and guaranty in force.

Cross-reference to specific pertinent Operation and Maintenance manuals.

Organization, names and phone numbers of persons to call for warranty and guaranty service.

Typical response time and repair time expected for various warranted equipment.

d. The Contractor's plans for attendance at the 4 and 9 month post-construction warranty and guaranty inspections conducted by the District.

e. Procedure and status of tagging of all equipment covered by extended warranties and guaranties.

f. Copies of instructions to be posted near selected pieces of equipment where operation is critical for warranty and guaranty and/or safety reasons.

B. Pre-Warranty Conference

1. Prior to contract completion, and at a time designated by the District, meet with the District Representatives to develop a mutual understanding with respect to the requirements of this section. Communication procedures for Contractor notification of construction warranty and guaranty defects, priorities with respect to the type of defect, reasonable time required for Contractor response, and other details deemed necessary by the District for the execution of the construction warranty and guaranty will be established/reviewed at this meeting. In connection with these requirements and at the time of the Contractor's quality control completion inspection, furnish the name, telephone number and address of a licensed and bonded company which is authorized to initiate and pursue construction warranty and guaranty work action on behalf of the Contractor. This point of contact will be located within the local service area of the warranted construction, be continuously available, and be responsive to District inquiry on warranty and guaranty work action and status.

2. This requirement does not relieve the Contractor of any of its responsibilities in connection with other portions of this provision.

C. Contractor's Response to Construction Warranty and Guaranty Service Requirements

1. Following oral or written notification by the District, respond to construction warranty and guaranty service requirements in accordance with the "Construction Warranty And Guaranty Service Priority List" and the three categories of priorities listed below. Submit a report on any warranty and guaranty item that has been repaired during the warranty and/or guaranty period. Include within the report the cause of the problem, date reported, corrective action taken, and when the repair was completed. If the Contractor does not perform the construction warranty and/or guaranty within the timeframes specified, the District will perform the work and back-charge Contractor.

   a. First Priority Code 1. Perform onsite inspection to evaluate situation, and determine course of action within 4 hours, initiate work within 6 hours and work continuously to completion or relief.
b. Second Priority Code 2. Perform onsite inspection to evaluate situation, and
determine course of action within 8 hours, initiate work within 24 hours and work
continuously to completion or relief.

c. Third Priority Code 3. All other work to be initiated within 3 work days and work
continuously to completion or relief.

d. The "Construction Warranty and Guaranty Service Priority List" is as follows:

   Code 1-Air Conditioning Systems
   (1) Recreational support.
   (2) Air conditioning leak in part of building, if causing damage.
   (3) Air conditioning system not cooling properly.

   Code 1-Doors
   (1) Overhead doors not operational, causing a security, fire, or safety problem.
   (2) Interior, exterior personnel doors or hardware, not functioning properly,
       causing a security, fire, or safety problem.

   Code 3-Doors
   (1) Overhead doors not operational.
   (2) Interior/exterior personnel doors or hardware not functioning properly.

   Code 1-Electrical
   (1) Power failure (entire area or any building operational after 1600 hours)
   (2) Security lights
   (3) Smoke detectors

   Code 2-Electrical
   (1) Power failure (no power to a room or part of building).
   (2) Receptacle and lights (in a room or part of building).

   Code 3-Electrical
   Street lights.

   Code 1-Gas
   (1) Leaks and breaks.

   Code 1-Heat
   (1) Area power failure affecting heat.
   (2) Heater in unit not working.

   Code 2-Kitchen Equipment
   (1) Dishwasher not operating properly.
   (2) All other equipment hampering preparation of a meal.

   Code 1-Plumbing
   (1) Hot water heater failure.
   (2) Leaking water supply pipes.

   Code 2-Plumbing
   (1) Flush valves not operating properly.
   (2) Fixture drain, supply line to commode, or any water pipe leaking.
   (3) Commode leaking at base.
Code 3 - Plumbing
Leaky faucets.

Code 3 - Interior
(1) Floors damaged.
(2) Paint chipping or peeling.
(3) Casework.

Code 1 - Roof Leaks
Temporary repairs will be made where major damage to property is occurring.

Code 2 - Roof Leaks
Where major damage to property is not occurring, check for location of leak during rain and complete repairs on a Code 2 basis.

Code 2 - Water (Exterior)
No water to facility.

Code 2 - Water (Hot)
No hot water in portion of building listed.

Code 3 - All other work not listed above.

D. Warranty and/or Guaranty Tags

1. At the time of installation, tag each warranted or guaranteed item with a durable, oil and water resistant tag approved by the District Project Manager. Attach each tag with a copper wire and spray with a silicone waterproof coating. The date of Substantial Completion and the Contractor Authorized signature must remain blank until the date the District makes a determination of Substantial Completion. Show the following information on the tag:

WARRANTY/GUARANTY INFORMATION – DVC EXTERIOR PAINTING PROJECT

a. Type of product/material ________________________________.
b. Model number ________________________________.
c. Serial number ________________________________.
d. Contract number ________________________________.
e. Warranty/Guaranty period _______ (months) from ______ to ____________.
f. Inspector's signature ________________________________.
g. Construction Contractor ________________________________.
   Address ________________________________.
   Telephone number ________________________________.
h. Warranty or Guaranty contact ________________________________.
   Address ________________________________.
   Telephone number ________________________________.
i. Warranty or Guaranty response time priority code ________________________________.
j. WARNING - PROJECT PERSONNEL TO PERFORM ONLY OPERATIONAL MAINTENANCE DURING THE WARRANTY PERIOD.
PART 2 - PRODUCTS
Not Used.

PART 3 - EXECUTION
Not Used.

END OF SECTION 01740
PART 1 - GENERAL

1.1 RELATED DOCUMENTS
A. All Contract Documents shall be reviewed for applicable provisions related to the provisions in this document, and provisions in the General Conditions and other Division 1 Specification Sections shall apply to this Section without limitation.

1.2 RELATED REQUIREMENTS SPECIFIED IN OTHER SECTIONS
A. Section 01010 – “Summary of Work”
B. Section 01290 – “Payment Procedures”
C. Section 01310 – “Construction Scheduling”
D. Section 01330 – “Submittal Procedures”
E. Section 01410 – “Regulatory Requirements”
F. Section 01710 – “Cleaning Requirements”
G. Section 01722 – “Execution Requirements”
H. Section 01740 – “Warranties and Guaranties”
I. Section 01780 – “Project Record Documents”

1.3 SUMMARY
A. This section specifies administrative and procedural requirements for Contract closeout.

1.4 CONTRACT CLOSEOUT SUBMITTALS
A. Color prints of full size contractor Marked-up Contract Drawings
B. Color prints of full size contractor marked-up Shop Drawings
C. Professionally Drafted As-Built Record Drawings
D. Dated marked-up copies of Conformed Specifications
E. Marked-up Project Data submittals
F. Record Samples
G. Field records for variable and concealed conditions
H. Project record documents. See Section 01780.
I. Operating and maintenance manuals and data
J. Warranties and bonds
K. Warranty Management Plan
L. Warranty Tags
M. Spare Parts Data
N. Service and maintenance contracts

1.5 **REMOVAL OF TEMPORARY CONSTRUCTION FACILITIES**
   A. Remove temporary materials, equipment, services, and construction prior to Initial Inspection.
   B. Comply with requirements of Section 01500, Temporary Facilities and Controls

1.6 **INITIAL PUNCH LIST AND INSPECTION**
   A. When Contractor considers Work, or Phase of the Work, to be Substantially Complete, submit written notice to District's Representative requesting an Initial Inspection and listing items remaining to be completed or corrected listed by room number and item number (hereinafter “Initial Punch List”). The Contractor and/or its Subcontractors shall proceed promptly to complete and correct items on the list without waiting for District review of the Initial Punch List and inspection of the Work. Failure to include an item on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents.

   B. In a separate section of the Initial Punch List, include all items which cannot be completed or verified prior to Functional Performance Testing of the entire Work in accordance with Specification Section 01810 General Commissioning and other technical Specifications.
      1. The Contractor shall provide the expertise, trades subcontractors, manufacturers' representatives, or others as required to work collaboratively with the District and District Representatives to identify all remaining items of Work, including required testing and verification, which cannot be completed or verified prior to Functional Performance Testing of the entire Work in accordance with Specification Section 01810 General Commissioning.
      2. The Initial Punch List items identified to remain for subsequent completion shall not be significant enough to prevent beneficial occupancy and full use of the Work by the District.

   C. The Contractor shall not submit a notice requesting an Initial Inspection unless the Work or Phase of Work is Substantially Complete.

   D. Should District's Representatives determine that Work is not Substantially Complete, the Architect or Project Manager will promptly notify Contractor in writing, listing Work that must be completed prior to Substantial Completion. Any inspection list that is submitted to the District that does not result in a District determination of Substantial Completion will not be considered an accepted Initial Punch List. If the Work or Phase of Work is determined to not be Substantially Complete, Contractor shall complete all Work as directed prior to requesting an additional Initial Inspection by the District to determine Substantial Completion per this Specification Section.

   E. Upon receipt of the Contractor's Initial Punch List, and not before, the Architect, Project Manager, and Inspector will make an Initial Inspection to determine whether the Work, or Phase of Work, is Substantially Complete.
      1. All fire and life safety items, manufactured units, equipment and systems that require startup must have been started, run, tested, and operational for periods prescribed by the Contract Documents before a request for Initial Inspection is accepted by the District.
2. All items not completed in accordance with the requirements of the Contract Documents whether identified by the Contractor, the Architect, the Project Manager, the Project Inspector, and/or other District Representatives as a result of the Initial Inspection shall be incorporated by the Contractor into a draft Pre-final Punch List which shall be submitted for District review and revision in accordance with Specification Section 01330, Submittal Procedures, prior to a determination by the District of Substantial Completion.

3. If additional Initial Inspections are required to review Initial Punch List items due to incompleteness of the Work by Contractor, Contractor will reimburse District for all costs associated with these inspections if additional services fees by District consultants are required. The costs of such District additional service fees will be deducted from the Contract Sum by Change Order.

F. District may enlist Consultants to assist with the above activities.

1.7 SUBSTANTIAL COMPLETION

A. When District determines that the Work or Phase of the Work is Substantially Complete, District will issue a Certificate of Substantial Completion, accompanied by a Pre-final Punch List of items to be completed or corrected as verified and/or appended by Architect and District.

B. When the Work, or Phase of Work, is Substantially Complete, the District will file a Notice of Completion.

1. Warranties required by the Contract Documents shall commence on the date of Substantial Completion of the Work, or Phase of the Work, unless otherwise provided in the Notice of Completion.

2. The Notice of Completion shall be submitted to the Contractor for their written acceptance of responsibilities assigned to them in such Notice prior to District filing the Notice of Completion for purposes of initiating the release of Retention for the Work or Phase of Work.

3. The District shall withhold from Contractor payment the value of remaining Work, Work to be corrected, incomplete Work, and an amount identified for Pre-final Punch List Work, and as otherwise identified in Public Contract Code.

C. The Contractor shall complete the items listed in the Pre-Final Punch List within ten (10) working days of the Certificate of Substantial Completion, with the exception of the items that must remain incomplete pending final commissioning. The Contractor shall execute the Work such that the District can occupy the Work within seven (7) calendar days of the date of the Certificate of Substantial Completion.

1.8 PRE-FINAL INSPECTION

A. When Contractor considers the items listed in the Pre-Final Punch List to be complete, with the exception of items which cannot be completed or verified prior to Functional Performance Testing of the entire Work in accordance with Specification Section 01810, General Commissioning, and other technical Specifications, the Contractor shall submit written notice to District’s Representative requesting a Pre-final Inspection.

B. Upon receipt of the Contractor’s request for Pre-final Inspection, and not before, the Architect, Project Manager, Campus Representatives, and Inspector will inspect the Work to determine whether the Work identified on the Pre-Final Punch List is complete, with the exception of items which cannot be completed or verified prior to Functional Performance Testing of the
C. Prior to the Pre-Final Inspection, perform final cleaning of the Work, or Phase of Work, as specified in Section 01710.

1. Inspection Requirements.
   a. Before calling for Pre-final inspection, Contractor shall determine that the following Work has been performed:
      i) The Work has been completed.
      ii) All life safety items are completed and in working order.
      iii) Mechanical and electrical Work complete, fixtures in place, connected and ready for tryout and test.
      iv) Electrical circuits scheduled in panels and disconnect switches labeled.
      v) Painting and special finishes are complete.
      vi) Doors complete with hardware, cleaned of protective film, are relieved of sticking or binding and in working order.
      vii) Tops and bottoms of doors sealed.
      viii) Floors waxed and polished as specified.
      ix) Broken glass replaced and glass cleaned.
      x) Grounds cleared of Contractor’s equipment, raked clean of debris, and trash removed from Site.
      xi) Work cleaned, free of stains, scratches, and other foreign matter, and damaged and broken material has been replaced.
      xii) Finishes and decorative work shall have marks, dirt and superfluous labels removed.
      xiii) Other requirements per the Contract Documents.
   b. Furnish a letter to District stating that a responsible representative of District [give name and position] has been instructed in working characteristics of mechanical and electrical systems and equipment. See Specification Section 01820, Demonstration and Training.

2. All items not completed in accordance with the requirements of the Contract Documents whether identified by the Contractor, the Architect, the Project Manager, the Project Inspector, and/or other District Representatives as a result of the Pre-Final Inspection shall be incorporated by the Contractor into a draft Final Punch List which shall be submitted for District review and revision in accordance with Specification Section 01330, Submittal Procedures, prior to a determination by the District that the Contract is ready for Administrative Close-out.

3. If additional Pre-final Inspections are required to review the Pre-final Punch List items due to incompleteness of the Work by Contractor, Contractor will reimburse District for all costs associated with these inspections if additional services fees by District consultants are required. The costs of such District additional service fees will be deducted from the Contract Sum by Change Order.
1.9 FINAL INSPECTION

A. When Contractor considers the items listed in the Final Punch List to be complete the Contractor shall submit written notice to District’s Representative requesting a Final Inspection.

B. Upon receipt of the Contractor’s request for Final Inspection, and not before, the Contractor, Architect, and Project Manager, shall meet to go over the Contract Documents to identify the administrative requirements for contract close-out.
   1. The Project Manager will prepare a list of requirements remaining for administrative close-out and shall provide the list to the Contractor.
   2. The Contractor shall complete all items on the administrative close-out list within thirty (30) days.

C. Subsequent to the meeting to identify administrative close-out requirements, Architect, Project Manager, Campus Representatives, and Inspector will inspect the Work to determine whether the Work identified on the Final Punch List is complete.

D. If additional Final Inspections are required to review the Final Punch List items due to incompleteness of the Work by Contractor, Contractor will reimburse District for all costs associated with these inspections if additional services fees by District consultants are required. The costs of such District additional service fees will be deducted from the Contract Sum by Change Order.

E. When the Architect determines that all final punch list items have been completed, a final Project Inspection Report will be issued. Any outstanding administrative close-out requirements will be identified and a value for withholding from Progress Payment or Final Payment will be assigned.

F. The Project Inspector (IOR), the Project Manager, and the Contractor shall, at all times, be together during all inspections. The Contractor shall give 24-hour notice to the District for such inspections.

1.10 FINAL COMPLETION

A. Final Completion occurs when all Work meets all requirements of the Contract Documents. When Contractor considers all Work complete and all close-out requirements have been performed, submitted, and accepted, submit written certification to District that:
   1. Contractor has inspected Work for compliance with Contract Documents, and all requirements for Final Acceptance have been met.
   2. Except for Contractor maintenance and Deferred or Seasonal Testing, after Final Acceptance, all Work has been completed in accordance with Contract Documents and deficiencies listed with any Certificate of Substantial Completion have been corrected. Equipment and systems have been tested in the presence of Architect, Project Inspector (IOR), Project Manager, Construction Manager, and District Representatives and are operative.

B. Should District determine that the Work is incomplete or defective or that administrative requirements have not been completed:
   1. District’s Representative promptly will so notify Contractor, in writing, listing the incomplete or defective items.
   2. Contractor shall promptly remedy all incomplete and/or defective Work and notify the District when it is ready for re-inspection. District’s Representatives will then re-inspect
the Work. If deficiencies previously noted are found not to be corrected, Contractor shall pay all District costs for the re-inspection.

3. When District determines that all Work and requirements are complete under the Contract Documents, District or Project Manager will request Contractor to make a request for Final Payment.

1.11 FINAL ADJUSTMENTS OF ACCOUNTS
A. Submit a final statement of accounting to District, showing all adjustments to the Contract Sum. See also Section 01290 Payment Procedures, Final Payment, et al.
B. If required, District shall prepare a final Change Order showing an adjustment to the Contract Sum that was not included in previous Change Orders.

1.12 FINAL CLEANING
Contractor shall comply with all applicable requirements in Section 01710 (Cleaning Requirements.)

1.13 PROJECT RECORD DOCUMENTS
Contractor shall comply with all applicable requirements in Section 01780 (Project Record Documents.)

1.14 PROJECT WARRANTY
A. Requirements for Contractor’s Warranty of completed Work are included in the General Conditions and Section 01740.
B. Recording of Final Acceptance, final certificate for payment, or partial or entire occupancy of the Work by District shall not constitute acceptance of Work not done in accordance with Contract Documents, and do not relieve the Contractor of liability in respect to express warranties, latent defects, or responsibility for faulty materials or workmanship.
C. District may make repairs to defective Work as set forth in Contract General Conditions.
D. If, after installation, operation, or use of materials or equipment to be provided under Contract proves to be unsatisfactory to District, District shall have right to operate and use materials or equipment until said materials and equipment can, without damage to District, be taken out of service for correction or replacement. Period of use of defective materials or equipment pending correction or replacement shall in no way decrease guarantee period required for acceptable corrected or replaced items of materials or equipment.
E. Nothing in this Section shall be construed to limit, relieve, or release Contractor’s, subcontractors’, and equipment suppliers’ liability to District for damages sustained as result of latent defects in equipment caused by negligence of suppliers’ agents, employees, or subcontractors. Stated in another manner, warranty contained in the Contract Documents shall not amount to, nor shall it be deemed to be, waiver by District of any rights or remedies (or time limits in which to enforce such rights or remedies) it may have for defective workmanship or defective materials under laws of this state pertaining to acts of negligence.

1.15 WARRANTIES
A. Execute Contractor’s submittals and assemble warranty documents as described in Section 01330 Submittal Procedures and Section 01740 Warranties-Guaranties.
1.16 RETURN OF DISTRICT KEYS, PARKING PERMITS AND IDENTIFICATION

Contract Documents will not be closed out and final payment will not be made until all personnel identification media, vehicle permits, and keys issued to Contractor during prosecution of Work are returned to the District Project Manager.

1.17 RELEASE OF CLAIMS

A. Contract Documents will not be closed out and final payment will not be made until Agreement and Release of Any and All Claims is completed and executed by Contractor and District.

1.18 FIRE INSPECTION COORDINATION

A. Coordinate required fire inspection(s) with governing agencies and provide sufficient notice to District Project Manager to permit convenient scheduling (if applicable.)

1.19 BUILDING INSPECTION COORDINATION

A. Coordinate with District, Architect, and Project Manager a final inspection for the purpose of obtaining any occupancy certificate (if applicable.)

1.20 MAINTENANCE OF DOCUMENTS AND SAMPLES

A. Store Project Record Documents and samples in the field office apart from Contract Documents used for construction.

B. Do not permit Project Record Documents to be used for construction purposes.

C. Maintain Project Record Documents in good order, and in a clean, dry, legible condition.

D. Make documents and samples available for weekly inspections by Architect, Construction Manager and Project Inspector.

1.21 RECORD CONSTRUCTION SCHEDULE

A. Using the latest progress schedule required by Section 01330 submittal Procedures as a reference, submit a Record Construction Schedule showing the actual dates and duration of all construction activities.

B. Sign and date the completed Record Construction Schedule and deliver to the Architect who will deliver to the District after final acceptance of the work.

1.22 PROJECT RECORD DRAWINGS

A. Comply with requirements of Section 01780 Project Record Documents.

1.23 PROJECT RECORD SPECIFICATIONS

A. Comply with requirements of Section 01780 Project Record Documents.

1.24 PRODUCT DATA

A. Comply with requirements of Section 01780 Project Record Documents.

1.25 OPERATION TESTS

A. Conduct operational tests as required to demonstrate that all systems have been completed and are in compliance with all requirements.
B. Furnish a written record of test results using recording type instruments where applicable and as directed.

1.26 OPERATION AND MAINTENANCE MANUALS
A. Comply with requirements of Section 01780 Project Record Documents.

1.27 MATERIALS, EQUIPMENT AND FINISHES MANUAL
A. Comply with requirements of Section 01780 Project Record Documents.

1.28 SERVICE AND MAINTENANCE CONTRACTS
A. Compile, review, and submit specified service and maintenance contracts as specified for warranties and bonds.

1.29 MISCELLANEOUS PROJECT RECORD SUBMITTALS
A. Refer to other Specification Sections for miscellaneous record keeping requirements and submittals. Immediately prior to Final Completion complete miscellaneous records and place them in good order, properly identified and bound or filed, ready for District use and reference. Submit to the Architect for review and approval.
   1. Miscellaneous records include, but are not limited to the following:
      a. Authorized measurements utilizing unit prices
      b. Records of plant treatment
      c. Certifications received in lieu of labels on bulk products
      d. Batch mixing and bulk delivery records
      e. Testing and qualification of tradespersons
      f. Installation firms qualification documents
      g. Load and performance testing
      h. Inspections and certifications by governing authorities
      i. Leakage and water-penetration tests
      j. Fire resistance and flame spread test results
      k. Final inspection and correction procedures

1.30 EXTRA MATERIALS
A. Where specified, provide extra materials in the quantities and manner specified.
B. Delivery and certification of extra materials shall be prerequisite to Substantial Completion.

PART 2 - PRODUCTS
Not Used.

PART 3 - EXECUTION
Not Used.

END OF SECTION 01770
PART 1 - GENERAL

1.1 RELATED DOCUMENTS
A. All Contract Documents shall be reviewed for applicable provisions related to the provisions in this document, and provisions in the General Conditions and other Division 1 Specification Sections shall apply to this Section without limitation.

1.2 RELATED REQUIREMENTS SPECIFIED IN OTHER SECTIONS
A. Section 01010 – “Summary of Work”
B. Section 01250 – “Contract Modification Procedures”
C. Section 01310 – “Construction Scheduling”
D. Section 01311 – “Project Management and Coordination”
E. Section 01330 – “Submittal Procedures”
F. Section 01740 – “Warranties and Guaranties”
G. Section 01745 – “Warrantee/Guaranty Form”
H. Section 01770 – “Contract Closeout Procedures”
I. Section 01785 – “Operation and Maintenance Data”

1.3 SUMMARY
A. This section includes administrative and procedural requirements for Project Record Documents, including but not limited to the following:
   1. Record Drawings
   2. Record Specifications
   3. Record Product Data
   4. Record MEP & Structural coordination documents
B. Project Record Documents requirements include, but are not limited to, the following:
   1. Marked-up copies of Drawings
   2. Marked-up copies of Shop Drawings
   3. Newly prepared Drawings
   4. Marked-up Product Data submittals
   5. Field records, such as photographs, for variable and concealed conditions
   6. Record information for Work that is only schematically shown
   7. Maintenance forms for equipment
C. Other Project closeout requirements are included in Section 01770, Contract Closeout Procedures.

D. Contractor shall maintain Documents and Samples as follows:
   1. Contractor shall provide and store all required Project Record Documents and Samples in the field office apart from Contract Documents used for Construction. These materials shall be available at any time upon request by the District, Architect and Project Manager.
   2. Project Record Documents shall not to be used for construction purposes.
   3. Maintain Project Record Documents in good order, and in a clean, dry, legible condition.

E. Contractor shall dedicate one complete full size set of the Contract Drawings and one complete Project Manual for use in recording as-built conditions.

F. The Contractor shall update the Record Drawings and Annotated Specifications as often as necessary to keep them current, but no less often than weekly.

G. The Record Drawings and Annotated Specifications shall be kept at the Site and available for review and inspection by the District and the Architect.

1.4 PROJECT RECORD DRAWINGS

A. Mark-up Procedure: During the construction period, maintain a complete, current set of full size blackline prints of Contract Drawings and Shop Drawings for Project Record Documents purposes. Label each document (on first sheet or format page) “Project Record” in 2-inch high printed letters. Keep all record documents current.

B. On completion of the Work and prior to Application for Final Payment, the Contractor will provide one complete set of Record Drawings in Autocad (.dwg) file format and one complete set in Adobe PDF file format.

C. A reference by number to a Change Order, CCD, RFI, RFQ, RFP, Field Order or other such document is not acceptable as sufficient record information on any record document. Do not conceal any Work until required record information has been recorded.
   1. Contractor shall mark Record Drawings to indicate the actual installation where the installation varies appreciably from the installation shown originally. Give particular attention to information on concealed elements that would be difficult to identify or measure and record later. Items required to be marked include, but are not limited to:
      a. Dimensional changes to the Contract Drawings (horizontal and/or vertical)
      b. Revisions or any modification to details shown on the Contract Drawings
      c. Depths of various elements of foundations in relation to main floor level or survey datum.
      d. Horizontal and vertical location of underground utilities and appurtenances referenced to permanent surface improvements.
      e. Location of internal utilities and appurtenances concealed in construction referenced to visible and accessible features of structure.
      f. Locations of underground work, points of connection with existing utilities, changes in direction, valves, manholes, catch basins, capped stub outs, invert elevations and similar items
      g. Final, actual numbering of each electrical circuit
h. Revisions to routing of piping and conduits
i. Revisions to electrical circuitry, including legends at electrical panels
j. Actual equipment locations
k. Duct size and routing
l. Changes made by Change Order, CCD, ASI, or any other directive
m. Details not on original Contract Drawings

2. Contractor shall mark completely and accurately Project Record Drawing prints of Contract Drawings or Shop Drawings, whichever is the most capable of showing actual physical conditions. Where Shop Drawings are marked, show cross-reference on Contract Drawings location.

3. Contractor shall mark Project Record Drawing sets with red, erasable colored pencil; use other colors to distinguish between changes for different categories of the Work at the same location.

4. Contractor shall mark important additional information that was either shown schematically or omitted from original Drawings.

5. Contractor shall note Contractor Change Directive numbers; Bid Alternate numbers, if any, Change Order numbers, and similar identification.

6. Contractor shall be responsible for Mark-up: Where feasible, the individual or entity who obtained Project Record Drawing data, whether the individual or entity is the installer, Subcontractor or similar entity, is required to prepare the mark-up on Project Record Drawings.
   a. Accurately record information in an understandable and legible drawing technique.
   b. Record data as soon as possible after it has been obtained. In the case of concealed installations, record and check the mark-up prior to concealment.
   c. The District, Architect, Project Manager and Project Inspector will review all record documents each month prior to approval of Contractor’s Application for Payment.

D. Contractor shall prepare Record Drawings: Immediately prior to inspection for Certification of Substantial Completion of the Work or any Phase of the Work, review completed marked-up Project Record Drawings with District, Project Inspector, Construction Manager, and Architect to ensure accuracy of information. Once accuracy of information is confirmed, prepare and submit a full electronic set, professionally drafted in AutoCAD format, of as-built Contract Drawings and Shop Drawings.

1. Incorporate changes and additional information previously marked on print sets. Delete, redraw, and/or add details and notations where applicable. Identify and date each Drawing; include the printed designation “PROJECT RECORD DRAWING” and the date prepared in a prominent location on each Drawing.

2. Distribution: Whether or not changes and additional information were recorded, organize and bind original marked-up set of prints that were maintained during the construction period into manageable sets. Bind the set with durable paper cover sheets, with appropriate identification, including titles, dates and other information on cover sheets and submit to District.

E. In addition to requirements of this Section, comply with supplemental requirements of other Divisions 2 through 16.
1. Section 01330, Submittal Procedures, requires the preparation of large scale, detailed layout drawings of the Work in Divisions 2 through 16. These layout drawings are not Shop Drawings as defined by Section 01330, but together with Shop Drawings or layout drawings of all other affected Sections are used to check, coordinate and integrate the work of the various Sections.

2. Contractor shall include required layout drawings as part of the Project Record Documents.

1.5 PROJECT RECORD SPECIFICATION

A. Contractor shall, during the construction period, maintain one copy of the Project Specifications, including all addenda and all other modifications issued for Project Record Documents purposes.

B. Contractor shall mark the Project Record specifications to indicate the actual installation where the installation varies substantially from that indicated in Specifications and/or modifications issued. Note related Project Record Drawing information, where applicable. Give particular attention to substitutions, selection of product options, Change Order and Construction Change Directive Work, and information on concealed installation that would be difficult to identify, measure, and record later.

   1. In each Specification Section where products, materials or units of equipment are specified or scheduled, mark the Record copy with the proprietary name and model number of the product furnished.

   2. Where a specification allows Contractor to elect one of several brands, makes, or types of material or equipment, the annotations shall show which of the allowable items the Contractor has furnished.

   3. Record the name of the manufacturer, catalog number, supplier and installer and other information necessary to provide an accurate record of selections made, and coordinate documentation with Project Record Data submittals and maintenance manuals.

   4. Note any related Project Record Product Data that was submitted in maintenance manuals instead of Product Data submittals.

   5. Upon completion of mark-up, submit Project Record Specifications to District for District’s records.

1.6 ADDITIONAL REQUIREMENTS FOR FINAL PROJECT RECORD DOCUMENTS

A. Using a distinct Auto CAD layer, clearly indicate at each affected plan, detail, schedule, or other drawing as necessary, a full description of changes made during construction along with the actual location of specified items.

B. “Cloud” all changes made using a distinct AutoCAD layer.

C. Submit duplicate electronic files of all drawings in both Auto CAD and Adobe PDF Format.

1.7 PROJECT RECORD PRODUCT DATA

A. Contractor shall, during the construction period, maintain one copy of each Project Record Product Data submittal for “Project Record Document” purposes.

   1. Mark Project Record Product Data to indicate the actual product installation where the installation varies substantially from that indicated in Project Record Product Data submitted. Include any significant changes in the product as delivered and/or installed.
including any departures from the manufacturer’s instructions and/or recommendations for installation.

2. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.

3. Note related Change Orders and mark-up of Project Record Drawings, where applicable.

4. Upon completion of mark-up, submit a complete set of Project Record Product Data to District for District’s records.

5. Where Project Record Product Data is required as part of maintenance manuals, submit marked-up Project Record Product Data as an insert in the manual, instead of submittal as Project Record Product Data.

6. Contractor is responsible for mark-up and submittal of Project Record Product Data for its own Work.

B. Material, Equipment and Finish Data:

1. General: Provide one (1) preliminary review copy and two (2) final copies each of a "Materials, Equipment and Finishes Manual" listing all finish materials, equipment (not provided under Divisions 15 and 16), and finishes installed in the Work.

2. Submit the preliminary manuals to the Architect a minimum of two (2) weeks prior to Substantial Completion. The preliminary copies must comply with all of the requirements, except the hardboard covers.

3. Obtain approval of preliminary copies prior to producing final copies.

4. Deliver final manuals to the Architect prior to final acceptance and final payment. Architect will deliver manuals to the District.

5. Format of Manual: Provide bound manuals with printed covers and spines. Title "Materials, Equipment and Finishes Manual". Organize data sequentially by Specification Section number on type written 8-1/2 by 11 inch pages. Provide each copy with a typewritten index and tabbed dividers between each separate Section. Mark each tab to indicate contents.

6. Contents of Manual: Manuals shall contain all information needed to identify, maintain, and replace/duplicate any finish materials, equipment, and finishes installed in the Work for this Project. Where materials and product information has been described and likewise indicated in the "Operation and Maintenance Manuals", cross referencing to where they can be found may be done in lieu of duplication of the information. The information provided shall include, but not be limited to, the following:
   a. Manufacturer's names and model numbers or product name; supplier's and subcontractor's name, address and phone and fax numbers; and all other pertinent information that might be required for replacement ordering or duplication at a later date.
   b. For custom fabricated products which do not have model numbers or names, reference Project shop drawing submittal number and indicate "Fabricated per shop drawing submittal Number ___."
   c. Proportions of mixes.
   d. Color formula list for each paint color used.
   e. For power operated equipment, include complete and legible wiring diagrams together with cuts of repair parts and part numbers listed and instructions relative to care, adjustment and operation of the equipment.
f. For moisture protection and weather exposed products, include complete manufacturer's data with instructions on inspection, maintenance and repair.

g. Where applicable, provide information on care and maintenance, including manufacturer's recommendations for types of cleaning agents to be used and methods of cleaning. Provide information regarding cleaning agents and methods that could prove detrimental to the product.

C. Contractor shall arrange Project Record Product Data by Specification Section number, and provide names, addresses, fax numbers, emails addresses, and telephone number of Subcontractors and suppliers. Information to be provided includes:

1. Trade Names
2. Model or type numbers
3. Assembly diagrams
4. Operating instructions
5. Cleaning instructions
6. Maintenance instructions
7. Recommended spare parts
8. Product data

1.8 MISCELLANEOUS PROJECT RECORD SUBMITTALS

A. Refer to other Specification Sections for miscellaneous record keeping requirements and submittals. Immediately prior to Substantial Completion of the Work or any Phase of the Work, complete miscellaneous records and place in good order, properly identified, ready for use and reference. Submit to the District for District’s records, in Adobe PDF format. Categories of miscellaneous records include, but are not limited to, the following:

1. Field records on excavations and foundations
2. Field records on underground construction and similar work
3. Survey showing locations and elevations of underground lines
4. Invert elevations of drainage piping
5. Surveys establishing building lines and levels
6. Authorized measurements utilizing unit prices or allowances
7. Records of plant treatment
8. Ambient and substrate condition tests
9. Certifications received in lieu of labels on bulk products
10. Batch mixing and bulk delivery records
11. Testing and qualification of tradespersons
12. Documented qualification of installation firms
13. Load and performance testing
14. Inspections and certifications by governing authorities
15. Leakage and water-penetration tests
16. Fire resistance and flame spread test results
17. Final inspection and correction procedures
18. Final As-Built Construction Schedule
19. Other

1.9 INSTALLATION, OPERATION, AND MAINTENANCE MANUALS

A. Submit Installation, Operation, and Maintenance Manuals in accordance with this Section, Section 01330, Submittal Procedures and Section 01785, Operation and Maintenance Data.

1.10 ELECTRONIC MEDIA FORMAT

A. Electronic Media Format: Electronic media format shall be Adobe PDF, with chapter markers and/or bookmarks inserted in place of the equivalent hard copy section tabs. Electronic copy shall include all Project Record Drawings, updated Specification Manuals, tables, charts, drawings, codes and all other matters reflected in hard copies. Electronic media files shall be delivered on a unique CD-ROM containing Adobe files of each completed Project Record Drawing and the complete Specifications Manual with all changes made during the Project.

1.11 DISTRICT’S RECOURSE

A. If Contractor is not able to provide Project Record Documents in specified formats, District has the right to complete the Work using other resources. Contractor agrees that any and all costs associated with District completion of this Work shall be deducted from the Contract Sum by Change Order.

PART 2 - PRODUCTS

Not Used.

PART 3 - EXECUTION

3.1 RECORDING

A. Post changes and modifications to the Contract Documents as they occur. Do not wait until the end of the Project. District may periodically review Project Record Documents to assure compliance with this requirement.

3.2 SUBMITTALS

A. At completion of Project, deliver all Project Record Documents to District, per Section 01330 (Submittal Procedures.)

B. Accompany submittal with transmittal letter containing:
   1. Date
   2. Project title and number
   3. Contractor’s name and address
   4. Number and title of each Project Record Document
   5. Certification that each document as submitted is complete and accurate and signature of Contractor or Contractor’s authorized representative.

END OF SECTION 01780
SECTION 01785
OPERATION AND MAINTENANCE DATA

PART 1 - GENERAL

1.1 RELATED DOCUMENTS
   A. All Contract Documents shall be reviewed for applicable provisions related to the provisions in this document, and provisions in the General Conditions and other Division 1 Specification Sections shall apply to this Section without limitation.

1.2 RELATED REQUIREMENTS SPECIFIED IN OTHER SECTIONS
   A. Section 01010 – “Summary of Work”
   B. Section 01310 – “Construction Scheduling”
   C. Section 01311 – “Project Management and Coordination”
   D. Section 01330 – “Submittal Procedures”
   E. Section 01740 – “Warranties and Guarantees”
   F. Section 01770 – “Contract Closeout Procedures”
   G. Section 01780 – “Project Record Documents”

1.3 SUMMARY
   A. This section includes administrative and procedural requirements for Operation and Maintenance (O&M) data and documents.

1.4 FORMAT
   A. Contractor shall compile O&M manuals for all building equipment including mechanical, plumbing and electrical equipment, commissioned or not, in the following formats:
      1. Quantity: as specified in Section 01330, Submittal Procedures.
      2. Hard Media Format:
         a. Size: 8 ½ x 11 inch, 3 ring loose-leaf binders. Use as many binders as required for each element as listed below. Do not overload binders.
         b. Binding: Bind in stiff, metal-hinged, three-ring binder(s) with standard 3 hole-punching. Binders shall be 3-inch maximum. Use white or black colored binders with integrated clear plastic covers to enable insertion of binder titles.
         c. Sheet lifters: Provide plastic sheet lifters prior to first page and following last page.
         d. Binder titles: Include the following title on front and spine of binder:

CONTRA COSTA COMMUNITY COLLEGE DISTRICT
Campus Number and Name

O&M Manual for: (insert equipment description(s) included)
3. **Drawing Size:** Provide reduced size drawings or diagrams to fit in binder. Where reduction is not practical to ensure readability, fold larger drawings separately and place in vinyl envelopes bound into the binder. Identify vinyl envelopes with drawing numbers.

4. **Dividers:** Use dividers with permanently marked tabs of card stock to separate each section and sub-section. Tab labels shall not be handwritten. Use a main tab for each specification section. Behind the section number tab there shall be the equipment ID tab sub-tab for each piece of major equipment (or group, if small or numerous). These sub-tabs shall be similar to the specification number tabs but of a different color.

B. **Submit O&M Data specifically applicable to this contract and a complete and concise depiction of the provided equipment, product, or system, stressing and enhancing the importance of system interactions, troubleshooting, and long-term preventative maintenance and operation.** The subcontractors shall compile and prepare data and deliver to the Contractor prior to the training of District personnel. The Contractor shall compile and prepare aggregate O&M data including clarifying and updating the original sequences of operation to as-built conditions. Organize and present information in sufficient detail to clearly explain O&M requirements at the system, equipment, component, and subassembly level. Include an index preceding each submittal. Submit in accordance with this section and Section 01330 SUBMITTAL PROCEDURES.

1. **Package Quality.** Documents must be fully legible. Poor quality copies and material with hole punches obliterating the text or drawings will not be accepted.

2. **Package Content.** Data package content shall be as shown in the paragraph titled "Schedule of Operation and Maintenance Data Packages." Comply with the data package requirements specified in the individual technical sections, including the content of the packages and addressing each product, component, and system designated for data package submission.

3. **Changes to Submittals.** Manufacturer-originated changes or revisions to submitted data shall be furnished by the Contractor if a component of an item is so affected subsequent to acceptance of the O&M Data. Changes, additions, or revisions required by the Architect or District Project Manager for final acceptance of submitted data, shall be submitted by the Contractor within 30 calendar days of the notification of this change requirement.

4. **Review and Approval.** The District's Commissioning Authority (CA) shall review the commissioned systems and equipment submittals for completeness and applicability. The CA shall verify that the systems and equipment provided meet the requirements of the Contract documents and design intent, particularly as they relate to functionality, energy performance, water performance, maintainability, sustainability, system cost, indoor environmental quality, and local environmental impacts. The CA shall communicate deficiencies to the Architect or District Project Manager. Upon a successful review of the corrections, the CA shall recommend approval and acceptance of these O&M manuals to the Architect or District Project Manager. This work shall be in addition to the normal review procedures for O&M data.

### 1.5 ELECTRONIC MEDIA FORMAT

A. **Electronic Media Format:** Electronic media format shall be Adobe PDF, with chapter markers and/or bookmarks inserted in place of the equivalent hard copy section tabs. Electronic copy
shall include all tables, charts, drawings, codes and all other matters reflected in hard copies. Electronic media files shall be delivered on a unique CD-ROM.

1.6 SYSTEMS COVERED

A. The Contractor shall supply the required information for all systems identified in the technical specification sections and in this section. A separate manual or chapter shall be provided for each applicable system as follows:
   1. Chillers
   2. Cooling Towers
   3. Boilers
   4. Pumps
   5. Air Handling Units (include sequence of operation, one line diagram and area served in a plastic pouch for mounting on equipment or in equipment room)
   6. Exhaust fans
   7. Supply Air Fans (excluding Air Handling Units)
   8. Plumbing and drainage Systems/Equipment
   9. Emergency Generator Systems
   10. UPS
   11. Fire Protection Systems
   12. Fire Alarm System
   13. Valves and Pipe Specialties (include valve identification chart)
   14. Variable Frequency Drives (VFD)
   15. Smoke Control Systems
   16. Water Treatment Systems
   17. Elevator Systems
   18. Lighting Systems and Controls (interior, exterior and airfield)
   19. Switchgear, Transformers, Panel boards, Motor Control Centers and Motor Starters
   20. Lighting Protection and Surge Suppression Systems
   21. Public Address, Closed Circuit TV, Communication and Telephone Systems
   22. Security System
   23. Building Management/Temperature Control System (BMS)
   24. Fuel System
   25. Doors and Hardware
   26. Power monitoring systems
   27. HVAC, Testing Adjusting and Balancing.

1.7 COMPUTER PROGRAMS

A. When any equipment requires operation by computer programs, submit copy of original program on CD, with a hard-copy and an electronic copy (Adobe PDF format) of all user
1.8 TYPES OF INFORMATION REQUIRED IN O&M DATA PACKAGES

A. Title Page, which shall be duplicate of front binder title

B. Table of Contents with section numbers

C. Equipment Sections and Sub Sections

1. The first page behind the equipment tab shall be the Contractor’s name, address and telephone number of the manufacturer and installing contractor and the 24-hour number for emergency service for all equipment in this section, identified by equipment.

2. Submittal and Product Data: This section shall include all approved submittal data, cut sheets, data base sheets and appropriate shop drawings. If submittal was not required for approval, descriptive product data shall be included.

3. O & M and installation instructions that were shipped with the unit.

4. Model number, serial number and nameplate data for each piece of equipment and any subcomponent.

5. Safety Precautions. List personnel hazards and equipment or product safety precautions for all operating conditions.

6. Operating Instructions. These shall be the written manufacturer’s data with the model and features of this installation clearly marked and edited to omit reference to products or data not applicable to this installation. This section shall include data on the following:

a. Include specific instructions, procedures, and illustrations for the following phases of operation for the installed model and features of each system:

i) Operator Prestart and Startup Procedures. Include step-by-step procedures, including a pre-start checklist if applicable, required to install, set up, prepare, and startup each system for use.

ii) Startup, Shutdown, and Post-Shutdown Procedures. Provide narrative description for Startup, Shutdown and Post-shutdown operating procedures including the control sequence for each procedure.

iii) Sequence of operations, with detailed instruction in proper sequence, for each mode of operation (i.e. day-night; staging of equipment.)

iv) Normal Operations. Provide narrative description of Normal Operating Procedures. Include Control Diagrams with data to explain operation and control of systems and specific equipment.

v) Emergency Operations. Include Emergency Procedures for equipment malfunctions to permit a short period of continued operation or to shut down the equipment to prevent further damage to systems and equipment. Include Emergency Shutdown Instructions for fire, explosion, spills, or other foreseeable contingencies. Provide guidance and procedures for emergency operation of all utility systems including required valve positions, valve locations and zones or portions of systems controlled. If some functions of the equipment can be operated while other functions are disabled, give instructions for operations under these conditions. Include here only those alternate methods of operations (from normal) which the operator can follow.
when there is a partial failure of malfunctioning of components, or other unusual condition.

vi) Shutdown procedure: Include instructions for stopping and securing the equipment after operation. If a particular sequence is required, give step-by-step instructions in that order.

vii) Refer to controls and indicators by nomenclature consistent with that used on panels and in control diagrams.

b. Operator Service Requirements. Include instructions for services to be performed by the operator such as lubrication, adjustment, inspection, and recording gage readings.

c. Environmental Conditions. Include a list of Environmental Conditions (temperature, humidity, and other relevant data) that are best suited for the operation of each product, component or system. Describe conditions under which the item equipment should not be allowed to run.

D. Preventive Maintenance. Include manufacturer's schedule for routine preventive maintenance, inspections, tests and adjustments required to ensure proper and economical operation and to minimize corrective maintenance. Provide manufacturer's projection of preventive maintenance work-hours on a daily, weekly, monthly, and annual basis including craft requirements by type of craft. For periodic calibrations, provide manufacturer's specified frequency and procedures for each separate operation. Include potential environmental and indoor air quality impacts of recommended maintenance procedures and materials.

1. Produce a schedule for preventive maintenance in a printed format and an electronic format compatible with District's system. State, preferably in tabular form, the recommended frequency of performance for each preventive maintenance task, cleaning, inspection and scheduled overhauls.

2. Cleaning: Provide instructions and schedules for all routine cleaning and inspection with recommended lubricants.

3. Inspection: If periodic inspection of equipment is required for operation, cleaning or other reasons, indicate the items to be inspected and give the inspection criteria for: motors; controls; filters and any other maintenance items.

4. Provide instructions for minor repairs or adjustments required for preventive maintenance routines. Identify test points and give values for each. Include sensor calibration requirements and methods by sensor type.

5. Corrective maintenance instructions shall be predicated upon a logical effect-to-cause troubleshooting philosophy and a rapid replacement procedure to minimize equipment downtime.

6. Troubleshooting: Troubleshooting tables, charts, or diagrams shall be used to present specified procedures. A guide to this type shall be a three-column chart. The columns shall be titled: Malfunction, Probable Cause and Recommended Action.

7. Repair and replacement: Indicate repair and replacement procedures most likely to be required in the maintenance of the equipment.

8. A list of recommended spare parts with a price list and a list of spare parts provided under this Contract.
9. Outline, cross-section, and assembly drawings; engineering data; and electrical diagrams, including elementary diagrams, labeled wiring diagrams, connection diagrams, word description of wiring diagrams and interconnection diagrams.

10. Lubrication Data. Include preventative maintenance lubrication data, in addition to instructions for lubrication provided under paragraph titled "Operator Service Requirements":
   a. A table showing recommended lubricants for specific temperature ranges and applications.
   b. Charts with a schematic diagram of the equipment showing lubrication points, recommended types and grades of lubricants, and capacities.
   c. A Lubrication Schedule showing service interval frequency.

E. Corrective Maintenance (Repair). Include manufacturer's recommended procedures and instructions for correcting problems and making repairs for the installed model and features of each system. Include potential environmental and indoor air quality impacts of recommended maintenance procedures and materials.

1. Troubleshooting Guides and Diagnostic Techniques. Include step-by-step procedures to promptly isolate the cause of typical malfunctions. Describe clearly why the checkout is performed and what conditions are to be sought. Identify tests or inspections and test equipment required to determine whether parts and equipment may be reused or require replacement.

2. Wiring Diagrams and Control Diagrams. Wiring diagrams and control diagrams shall be point-to-point drawings of wiring and control circuits including factory-field interfaces. Provide a complete and accurate depiction of the actual job specific wiring and control work. On diagrams, number electrical and electronic wiring and pneumatic control tubing and the terminals for each type, identically to actual installation configuration and numbering.

3. Maintenance and Repair Procedures. Include instructions and a list of tools required to repair or restore the product or equipment to proper condition or operating standards.

4. Removal and Replacement Instructions. Include step-by-step procedures and a list required tools and supplies for removal, replacement, disassembly, and assembly of components, assemblies, subassemblies, accessories, and attachments. Provide tolerances, dimensions, settings and adjustments required. Instructions shall include a combination of text and illustrations.

5. Spare Parts and Supply Lists. Include lists of spare parts and supplies required for maintenance and repair to ensure continued service or operation without unreasonable delays. List spare parts and supplies that have a long lead-time to obtain.

F. Appendices. Provide information required below and information not specified in the preceding paragraphs but pertinent to the maintenance or operation of the product or equipment. Include the following:


2. Product Submittal Data. Provide a copy of all SD-03 Product Data submittals required in the applicable technical sections.

3. Manufacturer’s Instructions. Provide a copy of all Manufacturer’s Instructions submittals required in the applicable technical sections.
4. O&M Submittal Data. Provide a copy of all Operation and Maintenance Data submittals required in the applicable technical sections.

5. Parts Identification. Provide identification and coverage for all parts of each component, assembly, subassembly, and accessory of the end items subject to replacement. Include special hardware requirements, such as requirement to use high-strength bolts and nuts. Identify parts by make, model, serial number, and source of supply to allow reordering without further identification. Provide clear and legible illustrations, drawings, and exploded views to enable easy identification of the items. When illustrations omit the part numbers and description, both the illustrations and separate listing shall show the index, reference, or key number that will cross-reference the illustrated part to the listed part. Parts shown in the listings shall be grouped by components, assemblies, and subassemblies in accordance with the manufacturer's standard practice. Parts data may cover more than one model or series of equipment, components, assemblies, subassemblies, attachments, or accessories, such as typically shown in a master parts catalog.

6. Warranty Information. List and explain the various warranties and clearly identify the servicing and technical precautions prescribed by the manufacturers or contract documents in order to keep warranties in force. Include warranty information for primary components such as the compressor of air conditioning system.

7. Personnel Training Requirements. Provide information available from the manufacturers that is needed for use in training designated personnel to properly operate and maintain the equipment and systems.

8. Testing Equipment and Special Tool Information. Include information on test equipment required to perform specified tests and on special tools needed for the operation, maintenance, and repair of components.


10. Contractor Information. Provide a list that includes the name, address, and telephone number of the General Contractor and each Subcontractor who installed the product or equipment, or system. For each item, also provide the name address and telephone number of the manufacturer's representative and service organization that can provide replacements most convenient to the project site. Provide the name, address, and telephone number of the product, equipment, and system manufacturers.

1.9 TYPES OF INFORMATION REQUIRED IN CONTROLS O&M DATA PACKAGES

A. Include all requirements found in the technical specifications, items in the Schedule of O&M Data Packages, and the following for control systems:

1. Narrative description on how to perform and apply all functions, features, modes, and other operations, including unoccupied operation, seasonal changeover, manual operation, and alarms. Include detailed technical manual for programming and customizing control loops and algorithms.

2. Full as-built sequence of operations

3. Copies of all checkout tests and calibrations performed by the Contractor (not Cx tests).

4. Full points list. A listing of rooms shall be provided with the following information for each room:
a. Floor
b. Room number
c. Room name
d. Air handler unit ID
e. Reference drawing number
f. Air terminal unit tag ID
g. Heating and/or cooling valve tag ID
h. Minimum cfm
i. Maximum cfm

5. Full print out of all schedules and set points after testing and acceptance of the system.
6. Full as-built print out of software program.
7. Electronic copy on disk or CD of the entire program for this facility.
8. Marking of all system sensors and thermostats on the as-built floor plan and mechanical drawings with their control system designations.

1.10 SUPPLEMENTAL DATA

A. Contractor shall prepare written text and/or special drawings to provide necessary information when manufacturer’s standard printed data is not available and/or additional information is necessary for a proper understanding and operation and maintenance of equipment or systems, or when it is necessary to supplement data included in the manual or Project documents.

1.11 SCHEDULE OF INFORMATION FOR OPERATION AND MAINTENANCE DATA PACKAGES

A. Supply all of the following, when and where applicable, for each O&M data package:
   1. Safety precautions
   2. Operator prestart
   3. Startup, shutdown, and post-shutdown procedures
   4. Normal operations
   5. Emergency operations
   6. Operator service requirements
   7. Environmental conditions
   8. Lubrication data
   9. Preventive maintenance plan and schedule

10. Cleaning recommendations
11. Troubleshooting guides and diagnostic techniques
12. Wiring diagrams and control diagrams
13. Maintenance and repair procedures
14. Removal and replacement instructions
15. Spare parts and supply list
16. Special tools required to service or maintain the equipment
17. Corrective maintenance man-hours
18. Product submittal data
19. O&M submittal data
20. Parts identification
21. Warranty information
22. Personnel training requirements
23. Testing equipment and special tool information
24. Testing and performance data
25. Installing Subcontractor information

PART 2 – PRODUCTS
Not Used.

PART 3 – EXECUTION
Not Used.

END OF SECTION 01785
SECTION 01810
GENERAL COMMISSIONING REQUIREMENTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS
A. All Contract Documents shall be reviewed for applicable provisions related to the provisions in this document, and provisions in the General Conditions and other Division 1 Specification Sections shall apply to this Section without limitation.
B. Basis of Design (BOD) documentation are included by reference for information only.

1.2 RELATED REQUIREMENTS SPECIFIED IN OTHER SECTIONS
A. Section 01010 – “Summary of Work”
B. Section 01330 – “Submittal Procedures”
C. Section 01722 – “Execution Requirements”
D. Section 01820 – “Demonstration & Training”
E. Section 16995 – “Commissioning of Electrical Systems”

1.3 SUMMARY
A. This section describes the building systems commissioning process and the general requirements and responsibilities that apply to implementation of commissioning without regard to specific systems, assemblies or components.

1.4 REFERENCES
A. USGBC:
   1. LEED – 2009 BD+C: EA Prerequisite 1 Fundamental Commissioning and Credit 3 Enhanced Commissioning.

1.5 DEFINITIONS
A. Basis of Design (BOD): The documentation of design criteria and assumptions for systems, components, and methods chosen to meet the Owner’s Project Requirements and applicable regulatory requirements, standards, and guidelines. The document includes narrative descriptions of the systems to be commissioned.
B. Commissioning Authority (CxA): An independent agent hired directly by the owner and not otherwise associated with the Design Professional(s) or the Contractor. The CxA assists the Contractor with coordinating commissioning activities and witnesses the activities on behalf of the owner.
C. Commissioning Issue (Cx Issues): A condition that affects, prevents or inhibits commissioning, and must be resolved to complete the commissioning process.
D. Commissioning Issues List (Cx Issues List): A log maintained by the CxA listing all Deficiencies and Cx Issues documented during the commissioning process. All issues require action, correction and closure.

E. Commissioning Plan (Cx Plan): A document that outlines the organization, coordination, and requirements of the commissioning process in more detail.

F. General Contractor (GC): The Contractor directly contracted to the owner with overall responsibility for the project and all commissioning activities described herein.

G. Commissioning Coordinator (CxC): Individual of the GC who plans, schedules, directs and coordinates all of the GC’s commissioning activities, and serves as the CxA’s single point of contact for all administrative, documentation and coordination functions.

H. Deferred Testing: Testing performed at a later time, due to partial occupancy, equipment, load, seasonal requirements, design or other site conditions that disallow the test from being performed.

I. Deficiency: A condition in the installation or function of a component, piece of equipment or system that is not in compliance with the Contract Documents. A Deficiency will be considered a Cx Issue and documented on the Cx Issues List.

J. Functional Performance Test (FPT): A test of the dynamic function, operation and control sequences of equipment and systems to verify system performance to the fullest extent. Systems are tested under various operating modes, such as during low cooling or heating loads, high loads, component failures, unoccupied, varying outside air temperatures, alarm, power failure, etc. The FPTs are performed using manual (direct observation) or monitoring methods.

K. Installation Verification (IV): Field verification and documentation of proper installation of system equipment, assemblies and components prior to the Startup Process. Installation Verifications are organized under the System Readiness Checklist (SRC) forms.

L. Monitoring: The recording of parameters (flow, current, status, pressure, etc) of equipment operation using data-loggers or the Trending capabilities of BAS or control systems.

M. Owner’s Project Requirements (OPR): A document describing the operational and functional requirements of a project, the expectations of how the facility will be used and operated, and the equipment and system expectations and requirements, as defined by the owner. This document provides an explanation of the ideas, concepts, goals, criteria, and supporting information for the project.

N. Percent Sampling: Witnessing the startup or testing of only a fraction of the total number of identical or near-identical pieces of equipment such as VAV boxes.

O. Pre-Functional Checks & Tests: These are various checks and tests performed on a piece of equipment or system just before, during or after the initial Startup and operation. They are performed to confirm that the equipment and individual components were installed correctly and are working properly. Examples include checking fan rotation, sensor calibration, actuator testing, and spot temperature, pressure and electrical measurements. They also include system specific tests such as pipe system pressure tests, duct leakage tests, mechanical system test and balance (TAB) and electrical equipment independent third-party testing if required. They are organized under the System Readiness Checklist (SRC) forms and must be completed as a prerequisite to Functional Performance Testing.
P. **Startup**: Initial starting or activating of equipment usually performed by the Trade Contractor or the Manufacturer’s authorized representative.

Q. **System Readiness Checklist (SRC)**: A summary checklist, typically one page per equipment, covering the necessary commissioning tasks to verify that a system is ready for FPTs or system operation if no FPTs are performed. The tasks covered in the SRC include Installation Verification, Startup and Pre-functional Checks & Tests, and the Contractor completed forms for these tasks are attached to the equipment specific SRC. The SRC must be completed prior to conducting FPTs.

R. **TAB**: Testing, Adjusting, and Balancing or Test and Balance

S. **Trade Contractor**: Typically a subcontractor to the GC who provides and installs specific building components and systems and/or provides certain services.

T. **Trending**: Monitoring using the Building Automation System (BAS) or a control system to aid in functional testing and verify system operation and performance under actual operating conditions.

### 1.6 **SYSTEMS TO BE COMMISSIONED**

A. This specification section is applicable to the following systems and equipment to be commissioned in this project:

1. All equipment and controls of the HVAC systems
2. Lighting system controls
3. Domestic hot water heating systems
4. Renewable energy systems (none in project)

### 1.7 **SUMMARY DESCRIPTION OF COMMISSIONING**

A. Commissioning is a quality assurance process for verifying and documenting that building systems are installed and perform functionally as intended according to the [OPR], [BOD], and the requirements of the contract documents.

B. Commissioning during the construction phase is intended to achieve the following specific objectives:

1. Finalize the Commissioning Plan.
2. Verify that applicable equipment and systems are installed according to the manufacturer’s recommendations and to industry-accepted minimum standards and that they receive the required operational checkout and testing by the Trade Contractors.
3. Verify and document proper performance of equipment and systems.
4. Verify that operation and maintenance documentation is provided and is complete.
5. Develop a systems manual that provides future operating staff the information necessary to optimally operate the commissioned systems.
6. Verify that the owner’s facilities and operations personnel are trained per the contract document requirements.

C. Commissioning during the post occupancy warranty phase is intended to achieve the following specific objectives:
1. Perform any seasonal or deferred testing.

2. Review the system operation and performance within 10 months of substantial completion and prior to the end of the first year of the warranty period. All unresolved construction phase commissioning issues as well as any issues identified during this post-occupancy review shall be documented and corrected prior to the end of warranty period.

D. The commissioning process does not take away from or reduce the responsibility of the GC to provide a finished and fully functioning building. The GC has overall responsible to assure that all systems are properly tested and commissioned, and that all required commissioning documents are completed and provided to the owner.

E. Project will meet the Commissioning Requirements of LEED-2009 BD+C, Energy & Atmosphere, Prerequisite 1 and Credit 3. The GC, Trade Contractors, and suppliers are responsible to ensure all requirements for commissioning are met in their respective work.

1.8 COMMISSIONING PROCESS OVERVIEW

A. Construction Submittals

1. The CxA will review contractor submittals applicable to systems being commissioned for conformance to the construction documents, BOD[ and OPR]. This review is concurrent with Design Professional’s review and submitted to the Design Professional and the Owner.

B. Cx Plan and Form Development

1. The Commissioning Authority (CxA) prepares a Preliminary Cx Plan during the project final design phase. The Cx Plan provides guidance in the execution of the commissioning process during construction.

2. Commissioning during construction begins with a kickoff meeting conducted by the CxA where the commissioning process and systems are reviewed. The Preliminary Cx Plan is presented and specific requirements and responsibilities are discussed.

3. The CxA develops System Readiness Checklist (SRC) forms which list the Installation Verification, Startup, and Pre-Functional Checks & Tests required for each system and equipment to be commissioned. The SRC forms are submitted to the GC and Trade Contractors for review and comment.

4. The GC shall submit to the CxA, for review and approval, representative blank forms for completing Installation Verification, Startup, and Pre-Functional Checks and Tests. These forms can include standard Manufacturer or Trade Contactor installation checklists, detailed startup and checkout procedures, pre-functional test forms, and other project specific forms.

5. The CxA will develop FPT procedures and forms. These test procedures are submitted to the GC and Trade Contractors for review and comment.

6. The CxA will update and finalize the Cx Plan with equipment specific documentation and SRC and FPT forms.

C. Installation, Startup, Pre-Functional & System Readiness Activities
1. Meetings will be conducted throughout construction with Commissioning Team members, as required, to plan, coordinate, and schedule commissioning activities, review documentation, and resolve Cx Issues.

2. The Trade Contractors shall perform Installation Verification, Startup and Pre-Functional Check & Test activities. The Trade Contractors and the CxC shall document completion of these activities on the SRC forms and attach their completed Installation Verification, Startup, and Pre-Functional Checks and other Tests forms to the SRC.
   I) In general, Installation Verification should be completed prior to Startup, but where appropriate, they can be completed into one activity.

3. The CxA will perform various inspections during the installation phase and back-checks of the completed Installation Verification. The CxA will also witness a percent sampling of the Startups and Pre-Functional Checks & Tests that includes Test and Balance Procedures.

D. Functional Testing
   1. Once the SRC forms are completed, the FPTs are executed by the Trade Contractors and witnessed by the CxA. The FPTs may be achieved by any combination of Manual Testing or Monitoring via the BAS or control system Trending capabilities.

E. Deficiencies and Commissioning Issues
   1. Throughout the process, the Commissioning Issues are recorded by the CxA on the Commissioning Issues List. The GC and its Trade Contractors shall correct Commissioning Issues and retest the system(s) without delay at no additional cost to the owner.

F. Training and Final Documentation
   1. The GC will compile and complete the Operations & Maintenance Manuals per the contract documents requirements. The CxA will review for content and completeness and provide comments to the owner and GC.
   2. The CxA will review and provide comment to the owner and GC on the specified training to be provided by the Trade Contractors and shall verify that it has been completed.
   3. The CxA will develop the Systems Manual document with assistance from the GC and Trade contractors.
   4. The CxA will complete the Final Construction Phase Commissioning Report and documentation for the Owner with assistance from the GC and Trade Contractors.

1.9 COMMISSIONING TEAM
   A. Owner’s Representatives
   B. Architects/Engineers (A/E).
   C. Commissioning Authority (CxA).
   D. GC
   E. GC’s Commissioning Coordinator (CxC)
   F. Trade Contractors responsible for specific types of systems being commissioned:
      1. Mechanical Contractor
      2. Electrical Contractor
3. HVAC Controls Contractor
4. Testing and Balance (TAB) Contractor
5. Plumbing Contractor

1.10 RESPONSIBILITIES

A. General:
1. The Commissioning Team and all others involved in the commissioning process shall follow the Commissioning Plan, attend commissioning kickoff meetings, and additional commissioning meetings as necessary.

B. Commissioning Authority (CxA)
1. The primary role of the CxA is to oversee, organize and lead the commissioning team and assist the GC and Trade Contractors in executing the commissioning process.
2. Prepare the Cx Plan and develop the SRC and FPT forms.
3. Work with the GC to schedule commissioning activities.
4. Leads commissioning team meetings prepare meeting agendas and distribute meeting minutes.
5. Observe and inspect system and equipment installation, start-up, checkout, and testing for compliance with the [OPR, BOD, and Contract Documents; review completion of commissioning documentation; and record any Deficiencies and Issues on the Cx Issues List.
6. The CxA will witness the execution of the FPTs by the Trade Contractors. The CxA will witness one (1) re-test of any commissioned equipment or system.
7. Is the authority on commissioning test results and other commissioning program elements completion.
8. Review and comment on O&M documentation and training plans.
10. Assemble the commissioning documents and prepare the Commissioning Report.
11. Conducts a review of the system operation and performance during the post occupancy warranty period and identifies any Warranty Period Cx Issues.
12. The CxA is not responsible for:
   I) Design concept or design criteria
   II) Review for code compliance
   III) Design and construction scheduling
   IV) Cost estimating
   V) Construction management
   VI) Providing tools and test equipment used for commissioning.
   VII) Scheduling Startup and Testing
   VIII) Coordinating the work of Trade Contractors and any special testing agents
   IX) Performing Startup and Testing
C. GC:

1. The GC is responsible for all commissioning tasks to be performed, including tasks assigned to Trade Contractors. Ensures that all Trade Contractors execute commissioning responsibilities according to the Contract Documents, Cx Plan, and schedule.

2. Include the cost for commissioning in the Bid Price.

3. Assign a CxC for the duration of the project with responsibilities outlined herein.

4. Schedule and coordinate the commissioning meetings with the CxA.

5. Plan, schedule, coordinate and facilitate the commissioning work performed by GC and Trade Contractors. Provide sufficient lead-time of at least 10 days to notify the CxA in advance of commissioning activities. Update the master construction schedule periodically with commissioning progress and activities.

6. Review, comment and accept the Cx Plan prepared by the CxA.

7. Furnish a copy of any construction related documents such as change orders, submittals, and shop drawings to the CxA. Electronic files are acceptable.

8. Using SRC and FPT forms, document and certify that all work is complete and systems are installed, operational and functionally tested.

9. Evaluate deficiencies identified on the Cx Issues List. Issues will be tracked according to the responsible entity. Collaborate with Trade Contractors and recommend corrective action. Assure all Cx Issues are resolved.

10. Prepare a training plan, submit to CxA and owner for review. Execute training of owner’s personnel per approved training plan.

11. Prepare O&M Manuals in accordance with the Contract Documents.


13. For all systems commissioned, document Warranty Period Cx Issues for the owner and assures all Cx Issues are resolved.

D. Trade Contractors:

1. Provide commissioning submittal data, including manufacturer’s installation checks and startup procedures, commissioning forms, and any other requested contract documentation for systems to be commissioned. Electronic files are acceptable.

2. Attend commissioning meetings as directed by the CxA and GC’s CxC to facilitate the commissioning process.

3. Assign personnel with expertise and authority to act on behalf of the Contractor and schedule them to participate in and perform assigned commissioning tasks.

4. Demonstrate and document proper system installation, startup and performance. Complete all Installation Verification, Startup and Pre-Functional Check & Test documentation clearly and legibly. Provide a copy of all forms to the CxC and CxA as part of completing the SRC forms.

5. Address Trade Contractor applicable Cx Issues and Deficiencies promptly. All Installation Verification, Startup and Pre-Functional issues must be resolved before FPT can proceed.
6. Assist CxA in preparing the FPT procedures, clarifying the operation and control of commissioned equipment where the specifications, control drawings or equipment documentation is not sufficient for writing detailed testing procedures.

7. Review the FPT procedures to ensure feasibility, safety and equipment protection, and provide necessary written alarm limits and overrides to be used during the tests.

8. Perform the FPTs. Execution of FPTs shall be witnessed by the CxC and CxA.

9. Assist the CxA in collecting all requested Trend data associated with FPTs.

10. Prepare a training plan, submit to CxA and owner for review. Execute training of owner’s personnel per approved training plan.

11. Prepare O&M Manuals according to the Contract Documents.


13. For all systems commissioned, resolve all Warranty Period Cx Issues.

E. Testing and Balancing (TAB) Contractor:

1. The responsibilities of the TAB Contractor, in addition to those listed above in “Trade Contractors” section are:
   I) Submit the TAB plan and approach for each system and component to the CxA and GC prior to starting TAB. This plan shall be developed after the TAB contractor is familiar with all control systems.
   II) Immediately report any Deficiencies discovered which may affect or delay the commissioning process.
   III) Provide draft (field) TAB reports to the A/E, CxA and CxC for review within 72 hours following completion of the TAB activities.

F. Equipment Suppliers:

1. Provide all requested submittal data, including detailed installation checks, startup and checkout procedures and forms, and O&M manuals.

2. Provide factory test data and documentation per the Contractor Documents.

3. Assist in equipment testing per any agreements with Trade Contractors.

4. Include all special tools and instruments specific for a piece of equipment which are only available from equipment supplier and required for testing the equipment according to Contract Documents.

5. Provide information and support requested by the CxA regarding equipment sequences of operation and testing procedures.

1.11 SUBMITTAL REQUIREMENTS FOR COMMISSIONING

A. Representative, blank commissioning forms for Installation Verification, Startup and Pre-Functional Checks & Tests.

1. The CxA reviews these GC submitted commissioning forms for completeness including any project specific requirements.

2. The CxA may request additional data, changes and/or additions to these forms to make sure they are complete prior to their use. If the GC submitted forms are not available or are not sufficient, then the CxA will provide forms based on the construction documents and
specifications, manufacturer installation manuals and procedures, and/or industry standards or guidelines.

B. Any equipment and construction submittals and shop drawings, including detailed sequences of operation, as requested by the CxA.

PART 2 - PRODUCTS

2.1 TEST EQUIPMENT

A. All standard testing equipment required to perform Startup, Pre-Functional Checks & Tests and FPT shall be furnished by the Trade Contractor responsible for the systems.

B. All testing equipment shall be of sufficient quality and accuracy to test and/or measure system performance with the tolerance specified in the Contract Documents. If not otherwise specified, the following minimum requirements apply:

1. Temperature sensors and digital thermometers shall have a certified calibration within the past year to an accuracy of 0.5 degree F and a resolution to + or – 0.1 degree F.

2. Pressure sensors shall have an accuracy of + or – 2.0 percent of the value range being measured (not full range of meter) and have been calibrated within the last year.

3. All equipment shall be calibrated according to the manufacturer’s recommended intervals and recalibrated when dropped or damaged.

4. Calibration tags shall be affixed or certificates readily available for all test equipment.

2.2 COMMISSIONING FORMS

A. Installation Verification:

1. Forms used to provide field verification and documentation of proper installation of equipment and system prior to formal Startup. Where appropriate, these forms may be combined with the Startup and Pre-functional Check & Test forms. Where appropriate, these forms can be checklists taken from the Manufacturer’s installation manual.

B. Startup and Pre-Functional Checks & Tests forms

1. These forms primarily consist of Manufacturer and Trade Contractor Startup and Pre-Functional checkout sheets, and shall be used where required and appropriate. Where applicable, these forms include checks and tests of equipment controls.

2. These also include forms for recording results from system specific tests such as pipe system pressure tests, duct leakage tests, mechanical system TAB, electrical equipment independent third-party testing, and others as required by the specifications.

C. System Readiness Checklist (SRC) forms:

1. The SRCs are checklists which summarize and track the completion of Installation Verification, Startup, and Pre-Functional Checks & Tests prior to Functional Performance Tests. Completed Installation Verification, Startup, and Pre-Functional forms and reports are attached to the SRCs.

D. Functional Performance Test (FPT) forms:

1. The CxA will develop FPT forms with procedures to verify and document proper function, operation and control of each piece of equipment and system. FPT forms contain:
I) Specific step-by-step procedures to execute the test in a clear, sequential and repeatable format, including any control system point value or setpoint overrides required to simulate a test condition or sequence mode.

II) Any definitions of control system trend data to be collected and provided to the CxA in electronic format for analysis and review.

III) The expected system response and acceptance criteria of proper performance with a Yes/No check box to allow for clearly marking whether or not proper performance of each part of the test was achieved.

IV) A section for recording actual system response, notes and comments.

PART 3 - EXECUTION

3.1 SCHEDULING AND COORDINATION

A. The CxA will provide an initial list of commissioning events to the CxC for scheduling purposes.

B. GC shall develop a detailed Start-up schedule for all systems to be commissioned and coordinate with CxA to include commissioning milestones. The GC shall integrate all commissioning activities and milestones into the master construction schedule with assistance from the CxA.

C. The CxC shall provide sufficient notice to the CxA and Owner for scheduling and coordinating commissioning activities. A minimum 10 days’ notice shall be provided to the CxA for witnessing equipment Start-ups, Pre-Functional Checks & Tests, and Functional Performance Testing.

D. The Commissioning Team shall address scheduling problems and make necessary notification in a timely manner in order to expedite the commissioning process.

3.2 MEETINGS

A. When commissioning team member attendance is required, as determined by the CxA and CxC, be punctual and attentive during the meeting.

1. The CxA will conduct a commissioning kick-off meeting, usually within 60 days of the commencement of construction. All team members involved in the commissioning process shall attend the kick-off meeting.

2. The CxA will plan other commissioning meetings as deemed necessary as construction progresses. These meetings will cover planning and coordination, and Commissioning Issues resolution.

3. The frequency of meetings will vary through construction, but generally increase during start-up and commissioning activities.

B. The CxA will write and distribute meeting minutes documenting the meeting discussion, conclusions, and actions for each team member.

3.3 SYSTEM READINESS: INSTALLATION VERIFICATION, STARTUP, PRE-FUNCTIONAL CHECKS & TESTS

A. All tests and start-up procedures shall be conducted without compromise to human or equipment safety. The GC shall be responsible for the liability and safety of conducting all tests and startup.
B. The GC shall clearly identify and list any Deficiencies resulting from the Installation Verification, Start-up and Pre-Functional Checks & Tests on the SRC forms and immediately notify the CxA. Once Deficiencies are corrected and verified or tested, update and resubmit SRC and associated forms.

3.4 FUNCTIONAL PERFORMANCE TESTING

A. Functional testing shall be performed and documented for 100% of all equipment in the scope of commissioning. At the discretion of the CxA and per the approved Cx Plan, the CxA may witness a percent (sample) of the functional tests for selected, multiple identical pieces of non-life-safety or non-critical equipment (example: VAV boxes).

B. Prior to execution, the CxA will provide draft FPT forms with test procedures, to the GC and Trade Contractor. The GC and Trade Contractor shall review and approve the tests procedures for feasibility, safety, equipment and warranty protection.

C. Trade Contractors shall execute all FPTs per the approved test procedures on the FPT forms. All testing results shall be documented on the final FPT forms; the forms shall be signed and dated by the representative performing the tests. Off hours or weekend work may be required to complete the FPTs.

D. The GC shall coordinate all FPT with the CxA, and provide a minimum of 10 day’s notice prior to conducting each system test.

E. FPT for each system must be successfully completed and signed by the CxA prior to formal approval of system commissioning.

F. FPT may be conducted using these approved test methods:
   1. Manually manipulating the equipment settings to observe performance.
   2. Overwriting control system sensor values to simulate a condition, such as overwriting the outside air temperature to be something other than it actually is.
   3. Altering setpoints to force equipment into a mode of operation to verify a sequence. For example, to see the AC compressor lockout work at an outside air temperature below 55F, when the outside air temperature is above 55F, a FPT would temporarily change the lockout setpoint to be 2F below the current outside air temperature.
   4. Using indirect indicators, such as readings from a control system screen reporting a damper is 100 percent open, for testing responses will be allowed only after the actual conditions represented by the indirect indicators have been directly verified, calibrated and documented on the SRC forms (as a pre-functional check/test).
   5. Monitoring performance by analyzing the control system Trend data. The CxA will analyze the control system Trend data.

G. Setup:
   1. The Trade Contractor executing the test shall document the pre-test normal condition on the test form.
   2. Each function and test shall be performed under conditions that simulate actual conditions as close as is practically possible.
3. The Trade Contractor executing the test shall provide all necessary materials, system modifications, etc. to produce the necessary flows, pressures, temperatures, etc. necessary to execute the test according to the specified conditions.

4. At completion of the test, the Trade Contractor shall return all affected building equipment and systems to their pre-test normal condition.

3.5 COMMISSIONING ISSUES AND RE-TESTING

A. During the Installation Verification, Startup, and Pre-Functional Checks & Tests, all Deficiencies and Issues shall be documented on the inspection and test forms in use, and will additionally be documented by the CxA on a Cx Issues List.

B. Immediate correction of minor Deficiencies identified during testing may be allowed at the discretion of the CxA. In such cases the Deficiency and identified resolution must still be documented on the commissioning form in use.

C. When Cx Issues are identified during FPT, the CxA will discuss with the executing Trade Contractor and/or CxC and determine whether testing can proceed or be suspended. The Commissioning Issue and any identified resolution will be documented on the test form in use in addition to the Commissioning Issues List.

D. The CxA will maintain and update the Commissioning Issues List, and document the issues resolution process. Copies will be distributed to the GC, Owner, and Installation Contractors as appropriate.

E. All Deficiencies and Commissioning Issues shall be corrected promptly. The responsible party shall correct the issue and inform the CxC and CxA in writing of the resolution and completion date. The CxA will record completion on the Commissioning Issues List and the CxC shall reschedule testing with the CxA and Trade Contractor. Testing shall be repeated until passing performance is achieved or the owner accepts the noted issue.

F. When there is a dispute regarding a Commissioning Issue, whether it is valid or who is responsible, additional parties may be brought into the discussion as appropriate. The CxA shall have the final interpretive authority and the owner will have the final approval authority.

G. The CxA may recommend solutions to Deficiencies and Commissioning Issues. However, the burden of responsibility to solve, correct and perform required retests is with the GC, Trade Contractors, and the Architects/Engineers.

H. Re-testing:
   1. For all Commissioning Issues identified during FPT, retesting is required to verify the resolution of the issue and to complete the FPT.
   2. The CxA will witness one (1) re-test for each equipment or system. A minimum 48 hours’ notice is requested for scheduling any re-testing, though the CxA will work to accommodate a shorter timeframe if feasible.
   3. Any required retesting shall not be considered a justified reason for a claim of delay or for a time extension.
3.6 DEFERRED & SEASONAL TESTING

A. Before or during the end of the first year Warranty Period, any Seasonal or Deferred Testing as defined in the Cx Plan, shall be completed as part of this contract. Tests shall be conducted by the Trade Contractor responsible for the equipment and systems, completed in the same manner as all other commissioning tests, and shall be witnessed by the CxA.

B. GC shall coordinate with CxA and Owner and schedule all Deferred and Seasonal Testing.

C. GC shall make final adjustments to the as-built for any modifications made during Deferred or Seasonal Testing.

3.7 TRAINING OF OWNER PERSONNEL

A. The CxC shall coordinate and schedule the training for Owner Personnel. The CxC shall ensure that training is completed per the requirements of the construction documents and specifications.

B. Trade Contractors responsible for specific equipment and system training shall submit a written training plan to the GC for all equipment and systems to be commissioned no less than (30) days prior to start of training. CxC shall submit training plan(s) to CxA and Owner for review and approval. The training plan(s) will cover the following elements:
   1. Equipment and/or systems included in training
   2. Intended audience
   3. Location of training
   4. Subjects covered (description, duration of discussion, presentation methods, etc.)
   5. Instructor’s name and qualifications

C. The CxA shall review the training plans to verify compliance with the specifications.

D. GC shall submit to CxA an ‘attendee signed’ attendance sheets for each training session conducted.

3.8 PROJECT CLOSEOUT

A. Upon completion of all commissioning activities, the CxA will prepare and submit to the Owner a Final Commissioning Report detailing all completed commissioning activities and documentation. The CxC shall support this effort by providing all GC and Trade Contractor commissioning documentation.

3.9 SYSTEMS MANUALS

A. For all systems and equipment commissioned, the CxA will provide a separate “Systems Manual,” per LEED 2009 Enhanced Commissioning requirements, with the assistance of the CMR and Trade Contractors. The Systems Manual shall provide operating staff the information needed to understand and optimally operate the commissioned systems. Per LEED-2009, the Systems Manual shall at a minimum include the following:
   1. The final version of the BOD.
   2. System single line diagrams or schematics.
   3. As-built Sequence of Operation, control drawings, points lists and original set points.
4. Operating instructions for integrated building systems.

5. Recommended schedule of maintenance requirements and frequency if not already included in the project O&M manuals. A summary of the preventative maintenance and service procedures is recommended in the Systems Manual, for the major MEP equipment, including a schedule matrix checklist (checked as weekly, monthly, quarterly, annually, etc.)

6. Recommended schedule for retesting of commissioned systems with blank test forms from the original Cx Plan.

7. Recommended schedule for calibrating sensors and actuators.

3.10 NEAR-WARRANTY-END REVIEW

A. Per the LEED NC 3.0 Enhanced Commissioning requirements, within 10 months of substantial completion and prior to the end of the first year of Warranty, the GC shall schedule and participate in a review of the commissioned systems with the owner, O&M staff, design team, appropriate Trade Contractors, and the CxA to identify any Warranty Period Commissioning Issues.

B. A list of Warranty Period Commissioning Issues will be developed by the owner and CxA. The GC shall be responsible for and ensure the cooperation of appropriate Trade Contractors to resolve Warranty Period Commissioning Issues prior to the end of the Warranty Period.

C. After correcting noted Warranty Period Commissioning Issues, the GC shall notify the CxA in writing, the CxA will back-check and verify Warranty Issue as resolved.

D. Issues identified during the Warranty Period will remain Warranty Issues until satisfactory completion by GC and back-check verification by CxA, even if the Warranty Period expires during the correction and back-check period.

END OF SECTION 01810
SECTION 01820
DEMONSTRATION AND TRAINING PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS
A. All Contract Documents shall be reviewed for applicable provisions related to the provisions in this document, and provisions in the General Conditions and other Division 1 Specification Sections shall apply to this Section without limitation.

1.2 RELATED REQUIREMENTS SPECIFIED IN OTHER SECTIONS
A. Section 01010 – “Summary of Work”
B. Section 01770 – “Contract Closeout Procedure”

1.3 SUMMARY
A. This Section includes administrative and procedural requirements for instructing District’s personnel, including the following:
   1. Demonstration of operation of systems, subsystems, and equipment
   2. Training in operation and maintenance of systems, subsystems, and equipment
   3. Demonstration and training videos

1.4 SUBMITTALS
A. Instruction Program: Contractor shall submit 5 copies of the instructional program outline for all required demonstration and training to District for approval. Outlines shall include:
   1. Schedule of proposed meeting dates and times
   2. Description of topics to be covered and learning objectives
   3. Length of instruction time
   4. Instructor’s names and qualification information for each training module
B. At completion of training, provide two complete training manuals for the District’s use.
   1. Training Manual shall comply with Section 01780 (Project Record Documents.)
C. Attendance Record: For each training module, provide list of participants and length of instruction time.
D. Demonstration and Training (DVD) Videos: Submit 2 digital copies to District within 5 days of completion of each training module.
   1. Identification: On each CD/DVD copy Contractor shall, provide an applied label with the following information:
      a. Project Name
      b. Project Number
      c. Contract Number
      d. Name of Contractor with address, and telephone number
e. Date video was recorded
f. Topic(s) covered

1.5 QUALITY ASSURANCE

A. Instructor Qualifications: A factory-authorized service representative or District approved equivalent, complying with requirements in Section 01400 (Quality Control Requirements,) and experienced in operation and maintenance procedures and training for Project specific systems and equipment.

B. Contractor shall coordinate instruction schedule and verify availability of educational materials, instructor's personnel, audiovisual equipment, and facilities needed to avoid delays.

C. For instruction that must occur outdoors, review weather forecast and provide alternatives if conditions are unfavorable.

1.6 COORDINATION

A. Contractor shall coordinate instruction schedule with District Project Manager. Adjust schedule as required to ensure proper attendance and to minimize disrupting Campus operations.

B. Coordinate instructors, including providing notification of dates, times, length of instruction time, and course content. Coordinate content of training modules with content of approved emergency, operation, and maintenance manuals. Do not submit instruction program until operation and maintenance data has been reviewed and approved by Architect.

C. Provide written notice (15) working days in advance to Project Manager, District and Architect prior to any scheduling instruction sessions. District Project Manager shall furnish Contractor with names and positions of intended participants.

D. Contractor shall provide and coordinate schedule of all required training with Project Phases. Coordinate with District Project Manager.

PART 2 - PRODUCT

2.1 INSTRUCTION PROGRAM

A. Program Structure: Contractor shall develop and provide instruction program that includes group training modules for each system and equipment not part of a system, as required by individual Specification Sections, and as follows:

1. Motorized doors including, but not limited to, the following:
   a. Overhead coiling doors
   b. Overhead coiling grilles
   c. Automatic entrance doors

2. Equipment including, but not limited to, the following:
   a. Projection screens
   b. Loading dock equipment
   c. Waste compactors
d. All Food-service equipment and appliances, including coolers and refrigerators

e. Exhaust hoods and controls

3. Fire-protection systems including, but not limited to, the following:
   a. Fire alarm
   b. Fire pumps
   c. Fire-extinguishing systems
   d. Fire sprinkler system

4. Intrusion detection systems

5. Conveying systems including, but not limited to, the following:
   a. Elevators
   b. Wheelchair lifts

6. Heat generation including, but not limited to, the following:
   a. Boilers
   b. Pumps
   c. Steam distribution piping
   d. Water distribution piping

7. Refrigeration systems including, but not limited to, the following:
   a. Chillers
   b. Cooling towers
   c. Condensers
   d. Pumps
   e. Distribution piping

8. HVAC systems including, but not limited to, the following:
   a. Air-handling equipment
   b. Air distribution systems
   c. Terminal equipment and devices
      i) Chilled beams
      ii) Radiant floor systems

9. HVAC instrumentation and controls, including BAS. See Section 15950.

10. Electrical service and distribution including, but not limited to, the following:
    a. Transformers
    b. Switchboards
    c. Panelboards
    d. Uninterruptible power supplies
    e. Motor controls

11. Lighting Fixture equipment and controls

12. Communication systems including, but not limited to the following:
a. Intercommunication
b. Surveillance
c. Voice and data equipment
d. Other as required elsewhere in the Contract Documents

B. Training Modules: Contractor shall develop a learning objective and teaching outline for each module. Include a description of specific skills and knowledge that participant is expected to master. For each module, include instruction for the following:

1. Review basis of system design
2. Operational requirements and criteria, including:
   a. System, subsystem, and equipment descriptions
   b. Operating standards
   c. Regulatory requirements
   d. Operating characteristics
   e. Limiting conditions
   f. Performance curves

3. Detailed review of documentation, including:
   a. Emergency manuals and procedures
   b. Operations manuals and procedures
   c. Maintenance manuals and procedures
   d. Identification systems
   e. Warranties and Guarantees
   f. Maintenance service agreements and similar continuing commitments
   g. Normal shutdown instructions
   h. Required sequences for electric or electronic systems
   i. Special operating instructions and procedures
   j. Troubleshooting and diagnostics
   k. Test and inspection procedures

PART 3 - EXECUTION

3.1 PREPARATION

A. Assemble educational materials necessary for instruction, including documentation and training module. Assemble training modules into a combined training manual.

B. Set up as required at instructional location.

3.2 DEMONSTRATION AND TRAINING VIDEOTAPES

A. Record each demonstration and training session separately using digital video. Include classroom instructions, demonstrations, board diagrams, and other visual aids.

B. Video Format: Provide high-quality color digital video.
C. Fix camera before starting recording, unless otherwise necessary to show area of
demonstration and training. Display continuous running time.

D. Describe scenes on video using audio narration while video is recorded.

END OF SECTION 01820
PART 1 - GENERAL

1.01 SUMMARY

A. Work Included: Furnish all labor, materials, equipment, and related work necessary to complete painting and painter's finish on existing exposed exterior surfaces work as specified herein.

1. Surface preparation of existing surfaces for painting.
   a. All work to conform to current OSHA and EPA standards for lead paint removal.
   b. Assess substrate and determine if conditions require repair or may otherwise adversely impact the success of the Exterior Paint Project.
   c. Wash all surfaces to be painted using District approved solutions.
   d. Surface crack repair.
   e. Scrape loose paint by hand.
   f. Sand surface and feather edges to provide a smooth transition between layers of paint accumulation.
   g. Apply one coat of primer using method best suited for application; finish by brush. Spot prime all nail heads with a rust inhibitor.
   h. Seal all joints or gaps 1/8-inch or less around doors, windows, or vertical joints of siding using latex sealant.
   i. Lightly sand rough or fuzzed areas by hand.

2. Paint all new Work in the Project as indicated in these Specifications and in the Drawings.
   a. Exterior: Paint previously painted exterior surfaces, unless otherwise indicated.
      i. Concrete.
      ii. Clay masonry.
      iii. Concrete masonry units (CMU).
      iv. Steel.
      v. Galvanized metal.
      vi. Aluminum (not anodized or otherwise coated).
      vii. Stainless-steel flashing.
      viii. Wood:
           a) Exposed glued-laminated beams and columns.
           b) Exposed framing.
           c) Dressed lumber (finish carpentry or woodwork).
           d) Wood-based panel products.
           e) Wood decks refinish with clear coat.
           f) Wood stairs.
           g) Wood shingles and shakes (excluding roofs).
      ix. Plastic trim fabrications.
      x. Exterior portland cement plaster (stucco).
xi. Exterior gypsum board.

xii. Paint exposed to view electrical conduits and electrical related items.

xiii. Paint exposed to view pipes and ducts and related mechanical and plumbing items.

xiv. Refinish wood decks.

b. Prepare surfaces to be painted.
   i. Patch, fill holes and prepare existing surfaces for painting.

3. General: Painting of new Work and adjacent surfaces shall NOT include:
   a. Concealed Surfaces: Painting is not required on surfaces in concealed and inaccessible areas, except where surface is visible through exposed construction.
   b. Pre-finished Material and Equipment: Unless otherwise indicated, do not include painting for manufacturer or installer-finished items. Minor accessories which were previously painted, which are not finished by manufacturer, shall be considered as work specified in this Section.
      i. Do not paint prefinished (anodized or baked enamel) aluminum such as aluminum windows and storefront.

4. Buildings/Locations:
   a. The following building shall be spot primed where needed and required and provided with one finish paint coat (except where noted):
      i. Building A (Art.)
      ii. Building C (Counseling.)
      iii. Building FO (Faculty Offices.)
      iv. Building LA (Liberal Arts.)
      v. Building SC (Science Center.)
         a) Prime coat entire non-ferrous metal dome only.
   b. The following building shall be provided with a prime coat and one finish paint coat (except where noted):
      i. Building AB (Administration Building.)
      ii. Building AR (Arena Theater.)
      iii. Building PA (Performing Arts.)
      iv. Building PAC (Performing Arts Center.)
      v. Building Pl (Planetarium.)
      vi. Building PS (Physical Science.)

1.02 QUALITY ASSURANCE

A. Published specifications, standards, tests, and recommended methods of trade or industry apply to the work of this Section where cited by the abbreviations noted below.

Contra Costa Community College District
Diablo Valley College
Exterior Paint Project

2. Federal Specifications (FS.)
4. Steel Structures Painting Council (SSPC), The Society of Protective Coatings:
   a. SSPC-6P/NACE 3 Commercial Blast Cleaning: A commercial blast cleaned surface, when viewed without magnification, shall be free of all visible oil, grease, dust, dirt, mill scale, rust, coating, oxides, corrosion products, and other foreign matter, except for staining as noted. Random staining shall be limited to no more than 33 percent of each unit area of surface as defined, and may consist of light shadows, slight streaks, or minor discolorations caused by stains of rust, stains of mill scale, or stains of previously applied coating.
   b. SSPC-Paint 36, Two-Component Weatherable Aliphatic Polyurethane Topcoat, Performance-Based: For topcoat that provides excellent color and gloss retention, not for thick section elastomeric coatings. Coatings meeting the requirements of this specification suitable for exposures in environmental zones 1A (interior, normally dry), 1B (exterior, normally dry), 2A (frequently wet by fresh water), 2B (frequently wet by salt water), 3B (chemical exposure, neutral), and 3C (chemical exposure, alkaline).

B. Field Quality Control:
   1. Request review by the Owner of first finished room, space, or item of each color scheme required for color, texture, and workmanship.
   2. Use first acceptable room, space, or item as the Project standard for each color scheme.

C. Environmental Requirements: Conform to restrictions of the following, which ever is more restrictive:
   1. District Requirement:
      a. EPA Environmentally Preferred Purchase program, Aberdeen Proving Ground’s Pilot Program.
      b. California Air Resources Board (CARB) limits on volatile organic compounds as adopted by the South Coast Air Quality Management District (SCAQMD) in Rule 1113 (Architectural Coatings.)
         i. Test Methods: United States Environmental Protection Agency (EPA) Test Method 24 Determination of Volatile
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Matter Content, Water Content, Density, Volume Solids, and Weight Solids of Surface Coatings.

2. Use low-VOC products to minimize impact on indoor air quality. Non-specialty paint products shall meet the following VOC content limits:

<table>
<thead>
<tr>
<th>Paint Type</th>
<th>Grams/Liter</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Flat Interior And Exterior Paint:</td>
<td>50</td>
</tr>
<tr>
<td>b. Non-Flat Interior and Exterior Paint:</td>
<td>150</td>
</tr>
<tr>
<td>c. Primers, sealer and Undercoats:</td>
<td>200</td>
</tr>
<tr>
<td>d. Stains:</td>
<td>250</td>
</tr>
</tbody>
</table>

3. Green Seal Standards.

D. Sustainable Design Requirements: Paints and coating under this Section and used in work of this Section are intended to reduce the quantity of indoor air contaminants that are harmful to comfort and well-being of the installers and occupants and are to be formulated to be within VOC content limits outlined in LEED NC3.0 Credit EQ4.2

E. Qualifications of Metal Refinisher: prequalified company with a minimum of five years experience in refinishing and restoring of metal finishes of comparable scope.


1.03 SUBMITTALS

A. Submit in accordance with the provisions of the General Conditions, Article 3.11.

B. Product Data: Paint materials and products shall be subject to the Owner's approval.
   1. Submit a complete list of materials proposed for use, together with manufacturer's specifications.
   2. Manufacturer's certification of product compliance with paint standards (VOC content and prohibited compounds) per Article 1.02C of this specification.
   4. Manufacturer's maintenance and cleaning instructions.
   5. Qualifications of Metal Refinisher: Submit list of five projects of similar scope. List names of projects, District and General Contractor.

C. Color Samples:
   1. Prepare custom colors on hardboard, 8-inches x 8-inches in size, using specified paint, finish and texture for each color.
   2. Submit stock colors on manufacturer's standard large size (5½-inches x 8½-inches) chips.
   3. Samples shall be resubmitted as requested until required sheen, color, and texture is achieved.
   4. Label and identify each sample as to location and application.
D. Schedule: The schedule shall contain the following information:
1. List types of paints including primers/undercoats.
2. Location (room number, room description, description of surface (wall, ceiling, etc.) and surface being painted.
3. Color and finish where each occurs.
4. Paint film thickness of each type and at each surface.

E. LEED Submittal:
1. Submit letter or product data from manufacture stating that the paints and coating used in work of this Section do not exceed VOC content limits established by the following standards:
   b. Anti-Corrosive and Anti-Rust Paints: Green Seal Standard GS-03, Re-refined Engine Oil
   c. Clear Wood Finishes and Sealers: SCAQMD Rule 1113.
2. Submit hardcopies of completed Online Documentation required for LEED EQ Credit 4.2.

1.04 DELIVERY, STORAGE, AND HANDLING

A. To the extent feasible, do not store paint products with materials that have a high capacity to adsorb VOC emissions (i.e., materials which are woven, fibrous or porous in nature, such as acoustical ceilings, carpet, textiles, etc.). Do not store paint products in occupied spaces.

B. Deliver sealed containers with labels legible and intact.

C. Storage of Materials:
1. Store only acceptable Project materials on Project site.
2. Store in a suitable location.
3. Restrict storage to paint materials and related equipment.
4. Comply with health and fire regulations.

1.05 PROJECT CONDITIONS

A. Environmental Requirements:
1. Comply with manufacturer’s recommendations as to environmental conditions under which coatings and coating systems can be stored and applied.
   a. Apply water-based paints only when the temperature of surfaces to be painted and surrounding air temperatures are between 50 degrees F and 90 degrees F.
   b. Apply solvent-thinned paints only when the temperature of surfaces to be painted and surrounding air temperatures are between 45 degrees F and 95 degrees F.
c. Do not apply paint in snow, rain, fog, or mist, when the relative humidity exceeds 85 percent, at temperatures less than 5 degrees F above the dew point, or to damp or wet surfaces.
   i. Painting may continue during inclement weather if surfaces and areas to be painted are enclosed and heated within temperature and humidity limits specified by the manufacturer during application and drying periods.

d. Do not apply finish in areas where dust is being generated.

B. Protection: Cover or otherwise protect finish work of other trades and surfaces not being painted concurrently or not to be painted.

1.06 MOCK-UP
A. Mock-Up: Provide paint mock-ups for evaluation of the colors on the surfaces that require paint.
   1. Provide one (1) mock-up per each finish surface and color.
   2. Owner will select the area to represent surfaces for each system specified in Part 3. The areas shall consist of several surfaces to determine the paint color combinations. Each surface shall be of a different color.
      a. Exterior Wall Area: Paint an area of no less than 20 square feet per mock-up. The area shall include but not limited to a portion of wall and door frame.
   3. Material shall not be purchased for the entire Project until Mock-up is approved and all colors are selected and approved.

1.07 MAINTENANCE
A. Extra Materials: Furnish extra quantities for site touch-up:
   1. One full unopened gallon of each color, each finish, and each type of paint.
   2. One gallon of each type of primer.

B. Furnish in unopened containers with manufacturer's labels intact, marked to identify locations where used.

C. Store in location directed by District.

PART 2 - PRODUCTS
2.01 MATERIALS
A. Environmentally-Preferable Product Criteria: The volatile organic compound (VOC) content of interior paints, interior primers, and anti-corrosive paints used in interior applications shall not exceed the limits defined in the Article 1.02C3. All VOC limits are defined in grams per liter, and exclude water and tinting color added at the point of sale as determined by U.S. EPA Reference Test Method 24.
1. Whenever possible, use paints that are water-based, 100 percent solids, high performance acrylics, which are low-VOC in content. Whenever possible, use stains that are water-based urethanes with low-VOC content.

2. Water-based paints shall not be formulated or manufactured with chemical listed to be hazardous including but not limited to:
   e. Halomethanes: methylene chloride.
   f. Chlorinated ethanes: 1,1,1-trichloroethane.
   g. Aromatic solvents: benzene, toluene (methylbenzene), ethylbenzene.
   h. Chlorinated ethylenes: vinyl chloride.
   i. Polynuclear aromatics: naphthalene.
   j. Chlorobenzenes: 1,2-dichlorobenzene.
   k. Phthalate esters: di (2-ethylhexyl) phthalate, butyl benzyl phthalate, di-n-butyl phthalate, di-n-octyl phthalate, diethyl phthalate, dimethyl phthalate.
   l. Miscellaneous semi-volatile organics: isophorone.
   m. Metals and their compounds: antimony, cadmium, hexavalent chromium, lead, mercury.
   n. Preservatives (antifouling agents): formaldehyde.
   o. Ketones: methyl ethyl ketone, methyl isobutyl ketone.

3. Oil-based paint should not be used unless there are no acceptable water-based (acrylic) paint alternatives. To prevent increase resistance to “yellowing”, use only high quality soy-based oil paints. Oil-based paint shall:
   a. Not contain halogenated solvents.
   b. Not be formulated or manufactured with formaldehyde, mercury, and mercury compounds.
   c. Not be pigmented with lead, cadmium, chromium, and their oxides.
   d. Not formulated or manufactured with aromatic hydrocarbons in excess of 10 percent.

4. No thinning, reducing or changing of mix is permitted unless specially indicated herein.

5. Paints are to be supplied in recycled or recyclable non-lead containing containers.

6. Biocides content shall not exceed 0.025 percent, by weight or volume. Paint shall not contain fungicides, or bactericides that are classified as mercury acetates, phenol phenates, or phenol formaldehydes.

B. Performance Requirements:

Exterior Opaque Paint: Hiding Power (Opacity). The product shall demonstrate a minimum 0.95 contrast ratio at 400 square feet per gallon as determined by ASTM D2805. Compliance will be determined by testing a white paint having a minimum 80% reflectance.
C. Paint Manufacturers: Kelly-Moore, ICI Dulux Paint, Fuller O'Brian Paints, Dunn Edwards, or; unless otherwise indicated. Paints and primers shall be of premium, professional grade intended for commercial use.

D. Materials selected for coating systems for each type surface shall be the product of a single manufacturer when possible.

E. Unsuitability of Specified Products: Claims concerning unsuitability of any material specified (or the Contractor's inability to satisfactorily produce the Work) will not be entertained, unless such claim is made in writing to the Owner before the Work is started.

2.02 PRIMERS/SEALERS

A. Exterior Primer Coating: Exterior alkyd wood primer used for priming wood under alkyd enamels.

B. Rust-Inhibiting Primer: Quick-drying, rust-inhibiting primer used for priming ferrous metal on the exterior under high-gloss enamel and on the interior under enamel.

2.03 EXTERIOR FINISH PAINT MATERIAL

A. Exterior Acrylic: Quick-drying, flat, acrylic paint used on the exterior over stucco and concrete.

B. Alkyd Enamel: Weather-resistant, air-drying, semi-gloss enamel used on the exterior over prime-coated wood.

2.04 MISCELLANEOUS WOOD FINISHING MATERIALS

A. Solvent Thinned Interior Wood Stain: Slow-penetrating solvent thinned wood stain for general use on interior wood surfaces under clear finishes.

B. Sanding Sealer: Manufacturer's recommended sanding sealer, compatible with catalyzed polyurethane finish coat.

2.05 COLORS

A. The Owner shall be the sole judge of the acceptability of colors.

B. Colors of paints will be selected by the Owner.

2.06 MIXING AND TINTING

A. Deliver paints ready mixed to job site.
B. Unless otherwise recommended by the manufacturer, paints may be thinned immediately prior to application with an approved manufacturer’s thinner and used only within recommended limits when necessary to suit conditions of surface temperature, weather and application methods. The use of thinner shall not relieve the Contractor from obtaining complete hiding, full film thickness, or required gloss. Paints of different manufacturers shall not be mixed.

C. Mix only in mixing pails placed in suitably sized nonferrous or oxide-resistant metal pans.

D. Use tinting colors recommended by manufacturer for specific type of finish.

PART 3 – EXECUTION

3.01 INSPECTION

A. Examine surfaces scheduled to receive paint and finishes for conditions that will adversely affect execution, permanence, or quality of work and which cannot be put into acceptable condition through preparatory work as included in Article 3.02, "Preparation of Surfaces".

B. Thoroughly assess substrate to determine if any carpentry repairs are necessary prior to beginning the painting project (siding, sills, thresholds, etc.).

C. Notify District if repairs are suggested and identify all locations for review. Contractor should not perform any repairs prior to consultation with District.

D. Do not proceed with surface preparation or coating application until conditions are suitable.

3.02 PREPARATION OF SURFACES

A. General Procedures: Remove hardware and hardware accessories, plates, machined surfaces, lighting fixtures, and similar items in places that are not to be painted, or provide surface-applied protection prior to surface preparation and painting. Remove these items if necessary for complete painting of the items and adjacent surfaces.

B. Surface Preparation: Clean and prepare surfaces to be painted in accordance with the manufacturer’s instructions for each particular substrate condition and as specified. Provide barrier coats over incompatible primers or remove and re-prime.

1. Notify Architect in writing when problems are anticipated in using the specified finish-coat material with substrates primed by others.

2. Surfaces, which cannot be prepared or painted as specified, shall be immediately brought to the attention of the Architect in writing.

3. Starting or work without such notification will be considered acceptance by the Contractor of surfaces involved.
4. The Contractor shall replace unsatisfactory work caused by improper or defective surfaces, as directed by the Owner, at no additional cost to the District.

5. General:
   a. Pressure wash, using cleaner as appropriate to remove dirt, mildew, chalking, efflorescence, etc.
   b. Remove loose and peeling paint.
   c. Remove loose rust with wire brush, scraper, etc.
   d. Remove deteriorated sealant and re-apply.
   e. Re-secure and spot prime loose nail heads or screw fasteners.
   f. Fill cracks and joints as necessary.

C. Cleaning: Clean surfaces before applying paint or surface treatments. Remove oil and grease prior to cleaning. Schedule cleaning and painting so that dust and other contaminants from the cleaning process will not fall on wet, newly-painted surfaces. Following completion of painting operations in each space or area, items shall be reinstalled in the same manner that they were removed.

1. Gentlest means possible should be utilized to not damage surfaces to be painted. Attempt to use water at a pressure less than 80 PSI and a natural bristle brush before moving on to a harsher means.

2. If stubborn biological staining exists, a 3:1 hot water: bleach mixture should be applied by handheld compression tank sprayer or by hand with a natural brush. Thoroughly rinse the area with clean water at a pressure of less than 80 PSI.

3. The use of tri-sodium-phosphate (TSP) or other products containing phosphates or sodium (soluble salts) is prohibited.

D. Paint Removal:
   1. Mechanical: Scrape with hand tools all surfaces exhibiting areas of loose or peeling paint, and areas of adhesion failure. Hand sanding after scraping, appropriate grit to achieve a smooth surface but not remove substrate. Sandpaper should be industrial, open-coat. Random orbital or palm sanders may be used, only following agreement by owner, so long as no or very minimal removal of existing substrate results. Any sander must have attached dust collector.
      a. Sand paper of the appropriate grit should also be used to sand rough or fuzzed areas left after priming—but should not expose substrate.

2. Heat: If areas have been specified to be stripped bare of paint, this will be accomplished by an infrared heater or steam.

3. Chemical: Chemical strippers shall be reserved for use in special situations, and shall never be used unless approved by the District. If a chemical stripper is used, preference will be given to an environmentally friendly product; no methylene chloride strippers shall be used.
E. Wood Treatment:
1. For rotted and deteriorated areas, utilize a two-part wood epoxy consolidant applied per manufactures’ directions. No styrene products should be used.
2. If an application of wood treatment is deemed necessary prior to application of paint, District will determine or approve the product to be used.
3. Wood trim, molding, siding deemed by the Owner to be beyond salvage will be repaired by the contractor on a time & material basis.

F. Ferrous Metals: Clean non-galvanized ferrous-metal surfaces that have not been shop-coated; remove oil, grease, dirt, loose mill scale, corrosion, and other foreign substances. Use solvent or mechanical cleaning methods that comply with recommendations of the Steel Structures Painting Council.
1. Treat bare and sand-blasted or pickled clean metal with a metal treatment wash coat before priming.
2. Touch up bare areas and shop-applied prime coats that have been damaged. Wire-brush, clean with solvents recommended by the paint manufacturer, and touch up with the same primer as the shop coat.

G. Galvanized Surfaces: Clean galvanized surfaces with non-petroleum-based solvents so that the surface is free of oil and surface contaminants.
1. Etch with material designed for etching of galvanized metal.
2. Remove pretreatment from galvanized sheet metal fabricated from coil stock by mechanical methods.

H. Wood Materials: Clean surfaces of dirt, oil, and other foreign substances with scrapers, mineral spirits, and sandpaper. Sand smooth surfaces exposed to view and dust off.
1. Scrape and clean small, dry, seasoned knots and apply a thin coat of white shellac or other recommended knot sealer before application of primer.
2. Prime, stain, or seal wood to be painted immediately upon delivery. Prime edges, ends, faces, undersides, and backsides of wood. After priming, fill holes and imperfections in finish surfaces with putty or plastic wood filler. Sand smooth when dried.
3. When transparent finish is required, back-prime with spar varnish.
4. Back-prime paneling on interior partitions where masonry, plaster, or other wet wall construction occurs on backside.
5. Seal tops, bottoms, and cutouts of unprimed wood doors with a heavy coat of varnish or sealer immediately upon delivery to jobsite.

I. Cementitious Materials: Prepare concrete and stucco to be painted. Remove efflorescence, chalk, dust, dirt, grease, oils, and release agents. Roughen as required to remove glaze. If hardeners or sealers have been used to improve curing, use mechanical methods of surface preparation.
1. Use abrasive blast-cleaning methods if recommended by the paint manufacturer.
2. Determine alkalinity and moisture content of surfaces by performing appropriate tests. If surfaces are sufficiently alkaline to cause blistering and burning of finish paint, correct this condition before application. Do not paint surfaces where moisture content of surface to be painted exceeds that permitted in manufacturer's printed directions.

J. Masonry Substrates: Remove efflorescence and chalk. Do not paint surfaces if moisture content or alkalinity of surfaces or mortar joints exceeds that permitted in manufacturer's written instructions.

K. Aluminum Substrates: Remove loose surface oxidation.

L. Material Preparation: Carefully mix and prepare paint materials in accordance with the manufacturer's directions.
   1. Maintain containers used in mixing and application of paint in a clean condition, free of foreign materials and residue.
   2. Stir material before application to produce a mixture of uniform density; stir as required during application. Do not stir surface film into material. Remove film and, if necessary, strain material before using.
   3. Use only thinners approved by the paint manufacturer, and only within recommended limits. Use odorless thinner with alkyd enamel.

M. Existing Surfaces:
   1. Existing glossy or semi-glossy surfaces; de-gloss surface for maximum adhesion by chemical means such as Jasco TSP No Rinse Substitute chemical de-glosser per manufacturer's instructions or mechanical means such as power sanding. Trisodium Phosphate (TSP) is not allowed.
   2. Prepare surfaces as recommended by paint manufacturer.
   3. Adhesion: Conform to ASTM D3359, Method A.

N. Exterior Exposed - Structural Steel, Steel Decking, and Metal Fabrications: Prepare surfaces to conform to SSPC-6/NACE 3, Commercial Blast Cleaning.

3.03 CRACK REPAIR

A. Surfaces shall be firm and free of dirt, oil, grease, efflorescence, mildew and loose material. Wire brush or blast unsound masonry to obtain a firm surface. Remove dirt, loose contaminants and chalk by high pressure chemical and water cleaning.

B. Cracks ranging from 1/64-inch to 1/32-inch, apply generously, appropriate brush grade elastomeric sealant over the entire area in need of renovation. If surface is chalky, apply an appropriate surface conditioner before application of sealant.

C. Rout out cracks exceeding 1/32-inch to ¼-inch wide by ¼-inch deep. When completed, flush joint out with water and check to see that the surface is
sound and free of grinding dust. Once joint is sound, use a bond breaker
tape to prevent three-point adhesion.

3.04 SEALANTS

A. Fill wood-to-wood, wood to stucco joints, and cracks with a sealant and/or
elastomeric patch to match surrounding substrate; including window trim,
fascia joints, handrail joints, and trim to stucco gaps.

B. Fill field cracks and splits with elastomeric patch with a smooth elastomeric
sealant (brushable) on stucco or elastomeric acrylic sealant on wood.

C. Refer to paint manufacturer’s elastomeric system technical Literature for
additional information.

3.03 APPLICATION

A. General:
   1. Apply paint in accordance with manufacturer’s directions. Use
      applicators and techniques best suited for substrate and type of
      material being applied. Spray applications will require prior approval
      from the District.
      a. Do not apply initial coating until moisture content of surface is
         within limitations recommended by paint manufacturer.
      b. Rate of application shall not exceed that as recommended by
         paint manufacturer for surface involved.
      c. Comply with recommendation of product manufacturer for
         drying time between succeeding coats.
      d. The number of coats and film thickness required is the same
         regardless of the application method. Do not apply succeeding
         coats until the previous coat has cured as recommended by the
         manufacturer. Sand between applications where sanding is
         required to produce an even, smooth surface in accordance
         with the manufacturer’s directions.
   2. Do not paint over dirt, rust, scale, grease, moisture, scuffed surfaces, or
      conditions detrimental to formation of a durable paint film.
   3. Provide finish coats that are compatible with primers used.
   4. Apply additional coats when undercoats, stains, or other conditions
      show through final coat of paint until paint film is of uniform finish, color,
      and appearance. Give special attention to ensure that surfaces,
      including edges, corners, crevices, welds and exposed fasteners
      receive a dry film thickness equivalent to that of flat surfaces.
   5. The term “exposed surfaces” includes areas visible when permanent or
      built-in fixtures, convector covers, covers for finned tube radiation,
      grilles, and similar components are in place. Extend coatings in these
      areas as required to maintain the system integrity and provide desired
      protection.
   6. Paint surfaces behind movable equipment and furniture same as
      similar exposed surfaces. Paint surfaces behind permanently fixed
equipment or furniture with prime coat only before final installation of equipment.

7. Paint interior surfaces of ducts, where visible through registers or grilles, with a flat, non-specular black paint.

8. Paint back sides of access panels and removable or hinged covers to match exposed surfaces.

9. Finish exterior doors on tops, bottoms, and side edges same as exterior faces.

10. Sand lightly between each succeeding enamel or varnish coat.

11. Omit primer on metal surfaces that have been shop-primed and touch up painted.

12. Finish coats shall be smooth and free from brush marks, streaks, laps or pile-up of paints, and skipped or missed areas.

13. Leave all parts of moldings and ornaments clean and true to details with no undue amount of paint in corners and depressions.

14. Make edges of paint adjoining other materials or colors clean and sharp with no overlapping.

15. Hardware, hardware accessories, plates, lighting fixtures, and similar items in place shall be removed prior to painting and replaced upon completion of each space.

16. Items adjacent to walls shall be disconnected by workmen skilled in the appropriate trades, and moved to permit surfaces to be painted. Following completion of painting, items shall be expertly replaced and reconnected.

B. Scheduling Painting: Apply first coat to surfaces that have been cleaned, pretreated, or otherwise prepared for painting as soon as practicable after preparation and before subsequent surface deterioration. Allow time between successive coats to permit proper drying per manufacturer's recommendations.

C. Mechanical Work: Use paint and color specified or other manufacturer's equivalent.

D. Prime Coats: Before application of finish coats, apply a prime coat of material as recommended by the manufacturer to material that is required to be painted or finished and has not been prime coated by others. Recoat primed and sealed surfaces where evidence of suction spots or unsealed areas in first coat appears, to assure a finish coat with no burn-through or other defects due to insufficient sealing.

E. Pigmented (Opaque) Finishes: Completely cover to provide an opaque, smooth surface of uniform finish, color, appearance, and coverage. Cloudiness, spotting, holidays, laps, brush marks, runs, sags, ropiness, or other surface imperfections are not acceptable.

F. Transparent (Clear) Finishes: Use multiple coats to produce a glass-smooth surface film of even luster. Provide a finish free of laps, cloudiness, color irregularity, runs, brush marks, orange peel, nail holes, or other surface imperfections. Provide satin finish for final coats.
G. Completed Work: Match approved samples for color, texture, and coverage. Remove, refinish, or repaint work not in compliance with specified requirements.

3.04 CLEANING

A. Cleanup: At the end of each work day, completely remove empty cans, rags, tools, rubbish, and other discarded paint materials from the project site.

B. Do not clean tools, brushes, applicators, and equipment at the project site unless specifically authorized by the District. Do not use sinks in restrooms, janitors’ closets, or in locations where food is prepared.

C. Upon completion of painting, clean glass and paint-spattered surfaces. Remove spattered paint by washing and scraping, using care not to scratch or damage adjacent finished surfaces.

D. Touch up and restore finish where damaged.

E. Remove spilled, splashed, or spattered paint from all surfaces.

F. Do not mar surface finish or item being cleaned.

G. Leave storage space clean and in condition required for equivalent spaces in Project.

3.05 PROTECTION

A. Protect work of other trades, whether to be painted or not, against damage by painting. Correct damage by cleaning, repairing or replacing, and repainting, as acceptable to the District.

B. Provide "wet paint" signs to protect newly painted finishes. Remove temporary protective wrappings provided by others for protection of their work after completion of painting operations. At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces.

3.06 PAINT SYSTEMS

A. General:
   1. Interior paint systems are specified and identified herein by letter and exterior paint systems by number.
   2. All materials in any one system shall be products of one manufacturer.
   3. Only major areas are scheduled, but miscellaneous items and areas within room or space shall be treated with suitable system.
4. These specifications shall serve as guide and is meant to establish procedure and quality; confer with the Owner to determine exact finish desired.

5. Number of coats scheduled is the minimum requirement.
   a. Additional coat shall be applied at no additional cost if necessary to completely hide base material, produce uniform color, and provide satisfactory finish results.
   b. Sealer may be omitted at previously painted surfaces except at surfaces being patched.

B. Approval of Final Colors: Final coat of paint shall not be applied until colors have been approved by the Owner.

C. Exterior Painting Systems: 1 full coat of primer to buildings as listed in Article 1.01A4b; Spot prime to building as listed in Article 1.01A4a except Science Center dome and as noted in Systems below.

1. System 1: on Concrete and Stucco (other than concrete masonry units)
   Exterior Acrylic Latex Enamel Primer
   1 coat Exterior Low Sheen Acrylic Latex Enamel

2. System 2: on Wood (Opaque)
   Exterior Alkyd Enamel Primer (Prime bare wood and prime over graffiti.)
   1 coat Exterior Low Sheen Acrylic Latex Enamel

3. System 2A: on Wood Doors (Clear Finish)
   3 coats Exterior Water-Based Spar Urethane

4. System 2B: on Wood Deck where not painted such as the underside (Clear Finish)
   1 coat Storm System, Category 1, Dual Dispersion Clear Finish Transparent No. 11540.

5. System 3: on Ferrous Metal: Spot prime rusted areas and fully coat bare metal with Rust-Inhibiting Exterior Primer
   Exterior Acrylic Latex Enamel Primer
   1 coat Exterior Low Sheen Acrylic Latex Enamel

   Exterior Acrylic Latex Enamel Primer
   1 coat Exterior Low Sheen Acrylic Latex Enamel

7. System 5: Metal Door and Door Frames: Spot prime rusted areas and fully coat bare metal with Rust-Inhibiting Exterior Primer
   Exterior Acrylic Latex Enamel Primer
   1 coat Exterior Semi-Gloss Acrylic Latex Enamel

D. Existing Surfaces:
   1 coat 3030 Bond-Prep Pigmented Bonding Primer
   or for extremely chalky surfaces or efflorescence use:
   ICI Sinclair 318 Epoprime Two-Component Waterborne Epoxy Primer
1 coat  Finish coat shall conform to the specified surface being repainted in Articles 3.06C.

3.07  ADDITIONAL REQUIREMENTS:

1)  The Contractor shall make reasonable accommodations when in conflict with Campus activities;

2)  The Contractor shall maintain Path of Travel for students and staff at all times;

3)  Work can be performed on weekends but not charged on premium time; Campus must be notified in advance;

4)  Use of and protection of scaffolding must be specified by the Contractor;

5)  Expected rain delays shall be considered and time extensions shall be reviewed and approved by the Campus as a change order.

END OF SECTION