

DOCUMENT 00 01 01



DESIGN-BUILD PROJECT MANUAL

FOR THE

**CAÑADA COLLEGE and COLLEGE OF SAN MATEO ROADWAY AND
PARKING LOT FIXTURE LED RETROFIT PROJECT**

RFP Number 86662

San Mateo County Community College District
3401 CSM Drive
San Mateo, CA 94402

March 11, 2014

DOCUMENT 00 01 10

**CAÑADA COLLEGE and COLLEGE OF SAN MATEO ROADWAY AND PARKING LOT FIXTURE LED
RETROFIT PROJECT**

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NOTICE TO DESIGN-BUILD ENTITIES

NOTICE IS HEREBY GIVEN that the San Mateo County Community College District (“District”) of San Mateo, California, acting through its Governing Board, hereinafter referred to as the District, will accept proposals for the award of an energy services contract per Government Code 4217.10-.18 for the following work:

RFP NUMBER 86662
CAÑADA COLLEGE and COLLEGE OF SAN MATEO ROADWAY AND PARKING LOT FIXTURE LED
RETROFIT PROJECT
CAÑADA COLLEGE, REDWOOD CITY, CALIFORNIA
COLLEGE OF SAN MATEO, SAN MATEO, CALIFORNIA

Each proposal must conform to and be responsive to the contract documents and be submitted on a form furnished by the District. Proposals can only be submitted by those Design-Build Entities who have been invited to submit proposals for this Project. The following firms are hereby invited to submit proposals:

- Atlas Pellizzari Electric Inc., Redwood City, CA
- Cocconi Electric Co., San Carlos, CA
- Contra Costa Electric, Martinez, CA
- Cupertino Electric, Inc., San Jose, CA
- Decker Electric, San Francisco, CA
- Del Monte Electric Co., Inc., Dublin, CA
- Inter-Mountain Electric, San Carlos, CA
- Redwood Electric Group, Inc., Santa Clara, CA
- Rosendin Electric, San Jose, CA
- Smith & Sons Electrical Contractors, Inc., Fremont, CA
- Sprig Electric, San Jose, CA

DESCRIPTION OF THE WORK: The Work generally consists of the engineering, procurement, and construction services to retrofit and/or replace existing parking lot and roadway light fixtures and related infrastructure with LED fixtures. Bidding documents contain the full description of the Work.

PROPOSALS DUE: Proposals will be received by the Facilities Department of the San Mateo County Community College District at their office located at 3401 CSM Drive, San Mateo, CA 94402 **no later than 3:00 p.m. Thursday, April 10, 2014.** The main contact for this project is Anne E. Daley, Swinerton Management and Consulting, email: daleya@smccd.edu.

DETERMINATION OF BEST VALUE: The District will review proposals and based on upon that review select up to five (5) firms to participate in an interview process. If the Contract is to be awarded, District will award the Contract to the responsive Design-Build Entity whose proposal is determined to provide the Best Value to the District. District shall provide Document 00 51 00 Notice of Award within sixty (60) calendar days of Proposal submission. District’s written decision shall support the award of the Contract by stating the basis of the award.

CRITICAL PROPOSAL DATES: The schedule of critical proposal dates is as follows:

Proposal Milestone	Target Date
RFP Documents Available	March 18, 2014
Mandatory Pre-Proposal Conference	March 26, 2014 @ 10:00am
Questions Due	April 1, 2014 @ 3:00pm
Proposals Due	April 10, 2014 @ 3:00pm
Board of Trustees Ratify Award	May 14, 2014

THIS IS A LABOR AGREEMENT PROJECT: This project is subject to the terms of the Program Stabilization Agreement (PLA) Executed between the San Mateo County Community College District and the San Mateo County Buildings and Trades Council. Copies of the PLA are available on the Web at:
http://www.smccd.edu/accounts/smccd/departments/facilities/PLASMCCCD_01.pdf

PREVAILING WAGE: The successful proposer shall be required to pay its workers on this project a sum not less than the general prevailing wage rate of per diem wages and not less than the general prevailing rate for holiday and overtime work for work of a similar character in the locality in which the project is performed as provided under California Labor Code section 1770 et sec. The District has determined the prevailing rate of per diem wages and the general prevailing rate for holidays and overtime work in the locality in which this project is to be performed for each craft, classification or type of work needed to execute the work.

Design-Build Entity shall be required to post, at each job site, a copy of such prevailing rate of per diem wages as determined by the Director of the California Department of Industrial Relations.

SUBSTITUTION OF SECURITIES: District will permit successful Proposer to substitute securities for retention monies withheld to ensure performance of Contract, as set forth in Document 00 43 45 (Escrow Agreement for Security Deposits in Lieu of Retention), in accordance with California Public Contract Code, Section 22300. By this reference, Document 00 43 45 (Escrow Agreement for Security Deposits in Lieu of Retention) is incorporated in full in this Document 00 11 13.

RESTRICTIONS ON SUBSTITUTIONS AND SOLE SOURCE ITEMS: As a limitation on Proposer's privilege to substitute "or equal" items, District has found that certain items are designated as District standards and certain items are designated to match existing items in use on a particular public improvement either completed or in the course of completion or are available from one source. As to such items, District will not permit substitution. Such items are described in the Bidding Documents.

PROCUREMENT OF REQUEST FOR PROPOSAL DOCUMENTS: Starting on March 18, 2014, Design-Build Entity may access the Request For Proposal documents through the District's project web site at the following web address:

<http://www.smccd.edu/accounts/smccd/departments/facilities/CANBusOps.shtml> and click on the [Cañada College and College of San Mateo Roadway and Parking Lot Fixture LED Retrofit](#) header.

A MANDATORY PRE-PROPOSAL CONFERENCE WILL BE HELD at 10:00 a.m. on Wednesday, March 26, 2014 at Cañada College, Facilities Maintenance Center Building 7, Conference Room, 4200 Farm Hill Blvd., Redwood City, CA 94061. Proposals will not be accepted by a Design-Build Entity who fails to attend this mandatory Conference. Firms are advised to arrive early in order to park and obtain a parking pass from District staff located just inside the front entry of Building 7. Doors will be locked 15 minutes after the start time of the conference.

The San Mateo County Community College District is an equal opportunity employer.

**Board of Trustees
San Mateo County Community College District
Patricia Miljanich, Vice President-Clerk**

Published: March 11, 2014

END OF DOCUMENT



San Mateo County Community College District

00 11 19 REQUEST FOR PROPOSALS

DESIGN-BUILD SERVICES FOR

**CAÑADA COLLEGE and COLLEGE OF SAN MATEO ROADWAY AND PARKING
LOT LED FIXTURE RETROFIT PROJECT**

District RFP Number 86662

San Mateo County Community College District
3401 CSM Drive
San Mateo, CA 94402

March 11, 2014

DOCUMENT 00 11 19

Cañada College and College of San Mateo Roadway and Parking Lot Fixture LED Retrofit Project

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1. Project Background

1.1 SAN MATEO COUNTY COMMUNITY COLLEGE DISTRICT DESCRIPTION

The San Mateo County Community College District (District) is one of the 72 community college districts in California. The District operates 3 community colleges within the California Community College System: Cañada College, College of San Mateo & Skyline College.

The three colleges serve more than 26,000 students and offer the first two years of instruction in a wide variety of transfer programs as well as more than 90 vocational-technical programs. Students can earn either Associate in Arts or Science degrees or receive Certificates of Proficiency in their chosen fields. The University Center at Cañada College partners with other colleges and universities to offer baccalaureate and masters degrees.

Cañada College, opened in 1968, is located in the western part of Redwood City and services the southern portion of San Mateo County - Redwood City, San Carlos, Menlo Park, Atherton, East Palo Alto, La Honda, Portola Valley and Woodside. Students residing anywhere within or outside of San Mateo County may enroll at Cañada.

The 131-acre main campus overlooks Silicon Valley at the southern end of San Mateo County, and is easily accessible from Interstate 280. Its beautiful views of the western hills and warm climate provide a friendly and casual atmosphere for teaching and learning.

Cañada College awards the Associate in Arts and Associate in Science Degrees and Occupational Certificates through traditional semester courses, accelerated and intensive formats, distance education, or a combination of all three.

1.2 Purpose of the Request for Proposal (RFP)

The District intends to award a contract under California Government Code Sections 4217.10-18 and this RFP is the means by which it will select a Design-Builder. The District seeks respondents that can provide EPC (engineering, procurement, and construction) services to retrofit and/or replace existing parking lot and roadway light fixtures and related infrastructure with LED fixtures. The District will evaluate proposed systems and determine the most beneficial option.

The District intends to use Proposition 39 funds for this project.

The goals of this project are to provide highly efficient, safe, low maintenance lighting systems Cañada College and College of San Mateo Campuses

The District has identified the following factors as critical to the success of this Project:

- Respondent's' proven ability to apply their experience and technical expertise to complete this project in an efficient and skilled manner, in full compliance with District and any applicable Division of State Architect (DSA) requirements;
- Respondent's use of quality components that will ensure energy savings, safety and effective lighting performance over time with limited operational maintenance.
- The proper minimization of lifecycle system costs while maximizing return on investment over the life of the project.

1.3 Procurement Timetable

The milestones below represent the District's best estimate of the schedule for the procurement process.

Procurement Milestones

Milestone	Date
RFP Issued	March 18, 2014
Mandatory Pre-Bid Conference	March 26, 2014 at 10:00am
Deadline for Written Questions	April 1, 2014 at 3:00pm
Proposal Submittal Deadline	April 10, 2014 at 3:00pm
Contract Award	May 2014

Instructions for packaging and submitting proposals, including details such as the submittal address and deadline for District receipt, can be found in Section 0 of this RFP.

1.4 Contact Person

Firms interested in submitting a Proposal are directed not to make personal contact with the Board of Trustees, District staff, or members of the evaluation committee. Any contact shall constitute grounds for disqualification from consideration.

Questions regarding the RFP should be directed via e-mail to:

Anne E. Daley, Swinerton Management and Consulting, District's Construction Project Manager
daleya@smccd.edu

1.5 Project Overview

The District intends to hire a Design-Build Entity to retrofit and/or replace existing parking lot and roadway light fixtures with more energy efficient LED fixtures. For the purposes of this RFP, the term "replacement" refers to upgrading the entire fixture head, whereas the term "retrofit" refers to infrastructural improvements including but not limited to the installation of a pole, arm, and other hardware necessary to support the new fixture. The new LED fixtures will be communicating thru a mesh network with the Network control systems and the BMS system. The fixtures embedded controls in combination with the Network Lighting Control system will to achieve the desired lighting scenarios.

Respondent shall perform all appropriate assessments of existing Project sites, buildings, and systems in order to understand local conditions and their implications in terms of system design, construction, and operation. If additional due diligence identifies deficiencies with a potential location, Respondent must address this issue in their Proposal and present potential solutions to the District. It is the responsibility of Respondent to perform sufficient due diligence to determine what will be required for proper implementation at each location.

Geotechnical reports and As-Built drawings for the Cañada and College of San Mateo Campuses are available for reference. Refer to Document 00 31 19 "Geotechnical and Existing Conditions" to access this information.

2.0 Proposal Submittal, Evaluation and Award

2.1 Responding to this Request for Proposals

The District has developed Procurement Milestones (see Section 1.3) with dates showing the key events in this solicitation process. This RFP and schedule are subject to change, and the District will notify Respondents of any changes via email to the contact designated by each Respondent. Respondents must take the following actions according to the specified timelines in order to participate in this process.

2.1.1 Mandatory Pre-bid Conference and Pre-bid Clarifications

Respondents shall participate in a Mandatory Pre-Bid Conference which will begin at 10:00am on Wednesday March 26, 2014 at:

Cañada College
Building 7 conference room
4200 Farm Hill Blvd.
Redwood City, CA 94061

The date for a subsequent, non-mandatory District-hosted site walk for each campus will be set within 24 hours following the Mandatory Pre-Bid Conference.

Respondents wishing to submit Requests for Clarification or Requests for Substitution prior to submission of a Proposal must send their requests via e-mail, which must include the following in the e-mail subject line: "LED DB: Request for Clarification [or Request For Substitution] + (the name of your organization)". **Requests for Clarification and Requests for Substitution are due no later than 3:00 p.m. (California Standard Time) on Tuesday, April 1, 2014 and should be addressed to Anne E. Daley, daleya@smccd.edu.**

2.1.2 Preparing and Packaging Your Proposal

Proposals should provide straightforward, concise information that satisfies the requirements noted in this RFP. Expensive binding, color displays, and the like are discouraged. Emphasis should be placed on brevity, conformity to the District's instructions, selection criteria of this RFP, and completeness and clarity of content. Each Respondent's proposal should clearly and accurately demonstrate specialized knowledge and experience required for consideration.

In a sealed box or envelope (clearly marked "Proposal – (firm name) Design-Build Services for LED Fixtures), submit the following:

- One (1) compact disk or flash memory stick containing the complete proposal;
- One (1) original and four (4) copies in paper form of the proposal, which consists of a Proposal Letter and responses to the proposal requirements listed in Section 2.3

Proposals must be received at the following address by 3:00 p.m. (California Standard Time) on Thursday, April 10, 2014.

SMCCD Facilities Dept.
3401 CSM Drive

San Mateo, CA 94402

2.2 Proposal Evaluation

2.2.1 Overview

The evaluation of Proposals received in response to this RFP will be conducted comprehensively, fairly, and impartially. Structural, quantitative scoring techniques will be utilized to maximize the objectivity of the evaluation. An Agreement may be awarded on the basis of initial Proposals received, without discussion. Therefore, each initial offer should contain Respondent's best terms from a technical and cost/price standpoint. The District reserves the right to reject any or all Proposals, to undertake discussions with any or all Respondents, and to accept the Proposal or a modified Proposal which, in its judgment, will be most advantageous to the District, cost and price and other evaluating factors considered. The District reserves the right to waive any defects in any Proposal.

The District has appointed a Proposal Review Committee (hereafter "PRC") that will manage the RFP process, review and evaluate the Proposals, and make recommendations to the Board of Trustees for the District regarding the selection of a Respondent for the Project. The PRC shall be comprised of individuals with the experience, knowledge, and program responsibility for the products and services of this Project.

2.2.2 Evaluation Phases

The PRC will review and evaluate all Proposals submitted by the Proposal Due Date as specified in this RFP.

The evaluation will be conducted in five (5) phases:

1. Evaluation of Proposal Completeness (Pass/No Pass)
2. Discussion and/or Clarification (Optional)
3. Submission of Best and Final Offers (Optional)
4. Final Evaluation of Proposal
5. Recommendation for Award

2.2.2.1 Evaluation of Proposal Completeness (Pass/No Pass)

The evaluation of proposal completeness shall be on a "pass/no pass" basis and no points shall be assigned for this evaluation. The purpose of this phase is to determine whether a proposal is sufficiently responsive to the RFP to permit a complete evaluation. Each proposal will be reviewed for responsiveness. Failure to submit a complete proposal will be grounds for deeming the proposal non-responsive to the RFP and rejecting the proposal. The District reserves the right to seek clarification from Respondents for obvious clerical errors or omissions. A summary of submittal requirements is provided in Section 1.2.

2.2.2.2 Discussion and/or Clarification (Optional)

"Discussions" may be conducted with Respondents, or a subset of Respondents, who pass Phase 1 and with whom it is determined to be in the best interests of the District to conduct additional Discussion and/or Clarification. The District reserves the right to have the PRC request a discussion with a Respondent with no less than 72 hours notice for purposes of determining the acceptability of the Proposal. The PRC may also contact any references, including those provided by Respondent in

the Proposal. If the PRC needs clarification during the evaluation of the Proposal, the District shall submit clarification requests in writing to Respondent. A response date will be given in the letter asking for clarification. If the PRC does not receive a response from Respondent by the suspense date, the PRC will determine how to interpret the Proposal to the best interest of the District. For the purpose of clarity, the following definitions are provided which apply to this RFP solicitation: "Clarification" means communication with a Respondent for the sole purpose of eliminating minor irregularities, informalities, or apparent clerical mistakes in the Proposal. It is achieved by explanation or substantiation, either in response to inquiry or as initiated by Respondent. Unlike discussion, clarification does not give Respondent an opportunity to revise or modify its Proposal, except to the extent that correction or apparent clerical mistakes results in a revision. "Discussion" means any oral or written communication between the District and a Respondent (other than communications conducted for the purpose of minor clarification), whether or not initiated by the District, that (a) involves information essential for determining the acceptability of a Proposal, or (b) provides Respondent an opportunity to revise or modify its Proposal.

2.2.2.3 Submission of Best and Final Offer (BAFO) – Optional

Following discussions between the PRC and the acceptable Respondents, each Respondent may be asked to provide their Best and Final Offer (BAFO). A Respondent, in its BAFO, will be permitted to respond to any RFP addendums issued subsequent to the Proposal Due Date for the submission of Proposals. After BAFOs are received, the PRC will conduct final evaluations. The PRC shall evaluate and determine which Proposal meets the requirements of this RFP and will be most advantageous to the District.

As determined by the District, a date and time may be set for Respondents to submit their Best and Final offer. If a BAFO is identical to the initial Proposal, Respondent need only send a notification stating this fact and the previous submittal will be used as the BAFO. The BAFO shall be in the form of a standard business letter on official business letterhead, shall indicate Respondent’s exact legal name, contractor’s license number and classification and shall be signed by an individual or individuals authorized to legally bind Respondent. Respondent is requested to use the exact legal name, as registered with the State of California. The required contents and format of the Best and Final offer are identical to the Proposal as specified in Section 1.2, Proposal Contents and Format.” Respondent shall highlight all items that vary from the original offer.

2.2.2.4 Final Evaluation of Proposals

During this phase, the PRC shall conduct final evaluations on all remaining Proposals using the evaluation criteria as prescribed below.

Evaluation Criterion	Scoring (Points)
Company Information	5
Experience	10
Price	25
Fixture and Photometrics	20
Energy, Maintenance and Life Cycle Cost	20
Controls and Network	20
Total Possible Points	100

The Project Agreement shall be awarded to Respondent who (a) the District deems qualified, responsive, and responsible and (b) submits the Proposal meeting the requirements of the RFP

deemed by the District to be most advantageous to the District (determined by the Proposal receiving the highest point total after final evaluation).

Respondents acknowledge that the action to award the Agreement is vested solely in the Board of Trustees of the District and that the District may waive minor irregularities in the RFP process or the District may reject all Proposals.

2.3 Proposal Contents and Format

Proposals shall adhere to the following requirements for contents and format, should be as concise as possible and should not include promotional or marketing materials.

Proposal Section	Format
1. Cover Letter	PDF
2. Table of Contents	PDF
3. Executive Summary	PDF
4. Proposed Project Team and Organization Chart	PDF
5. Relevant Background, Experience, and References	PDF, MS Excel (From template in Document 00 41 99)
6. Project Approach	PDF
7. Technical Proposal	PDF
8. Structural (if applicable)	PDF
9. Exceptions or Alternates	PDF
10. Proposal Pricing Form	MS Excel (From template in Document 00 41 98)
Appendices	
A. Project Schedule	Microsoft Project or Primavera P6
B. Component Warranties	PDF
C. Project Team Resumes	PDF
D. Project Team Resumes	PDF

2.3.1 Cover letter

The Proposal shall include a Cover Letter on Respondent's official business letterhead, which shall be signed by an individual authorized to legally bind Respondent. The Cover Letter shall also identify the name and telephone number of a person who may be contacted during the Proposal evaluation process.

2.3.2 Table of Contents

Provide a Table of Contents that outlines in sequential order the major sections and sub-sections of the Proposal. All pages in the Proposal shall be clearly and consecutively numbered and correspond to the Table of Contents.

2.3.3 Executive Summary

The Proposal shall include an Executive Summary that briefly describes the Proposal, the Project team, and the Project approach to meet District goals. The Executive Summary shall describe the

technology proposed, schedule, and other critical Project factors important to the understanding of the Proposal.

2.3.4 Proposed Project Team and Organization Chart

The Proposal shall include a description of the proposed Project Team, including but not limited to:

- Project Manager / Contact person
- Back-up to Project Manager
- Construction Manager
- Design Team
- Subcontractors
- Professional licensing or certifications of key team members

2.3.5 Relevant Background, Experience, and References

For the purpose of making awards pursuant to this RFP, the District will differentiate Respondents and their Proposals from each other based on the amounts and kinds of experience, both in general, and with respect to specific types and sizes of similar installations.

Respondents are to completely and accurately complete Document 00 41 99, "Experience and References," a table describing Respondent's role and providing Project details for recently completed installations.

In addition to completing Document 00 41 99, Respondent is encouraged to provide additional information describing their relevant experience and why it makes them the most qualified Design-Build Entity to perform the work.

2.3.6 Project Approach

The Proposal shall include a description of the approach Respondent will use to design, procure long-lead time equipment, construct, and commission the systems to meet the goals of the District as described in Section 1.2 of this RFP. The Proposal shall describe how Respondent will comply with the requirements of the District, obtain timely DSA approval if required, and accommodate ongoing parking needs and campus operations during construction, including how Respondent intends to meet the District's schedule. The Proposal shall also describe quality assurance procedures and safety plans. The Proposal shall contain a description of Respondent's strategy for communicating with the District and assisting them in their efforts to achieve the overall objective(s) of the Project as described herein.

This section shall also contain an implementation narrative. The implementation narrative shall include procurement strategy for equipment and materials, steel fabrication plan, staging, construction, equipment installation, and commitment from suppliers and/or manufacturers substantiating the availability of major long lead time equipment or to meet the proposed schedule.

2.3.7 Technical Proposal

The Technical Proposal shall describe the equipment, materials, and methods to be employed by Respondent to meet the goals of the District for the Project and the requirements set forth in this RFP. Respondent shall provide a narrative that describes the equipment and systems proposed and

demonstrates how they meet the requirement of the RFP. The Technical Proposal shall include the following:

- Proposed System Overview: Technical narrative that describes the proposed layout of the lighting system as well as details of the system including but not limited to: Illuminance calculations, mounting requirements, as well as controls and controls integration.
- Proposed Equipment List: fixture make, model and performance characteristics, general considerations, mounting details, controls equipment, and infrastructural elements (poles, arms, etc)
- Fixture Energy and Maintenance Performance: Energy Savings calculation,
- Commissioning, testing and acceptance: Provide a narrative for commissioning and testing procedures to be completed post installation.

2.3.8 Proposal Pricing Form

Respondent shall indicate Proposal pricing by completing the Proposal Pricing Form – Document 00 41 98. Respondent shall populate all fields provided on the Proposal pricing Form.

1.1.1

2.3.9 Exceptions or Alternates

Proposals shall comply with all requirements in the RFP. If Respondent wishes to propose a system or solution that deviates from RFP requirements, this should be clearly stated in this section of the Proposal along with rationale for the proposed change and the corresponding price reduction to the District. The District will make the final determination on the acceptability of any proposed exceptions or modifications.

2.3.10 Appendices

The following materials shall be included in Appendices to the Proposal.

A. Project Schedule

The Proposal shall contain a comprehensive critical path methodology (CPM) schedule describing the major activities of the Project. Project schedules shall be submitted electronically in Microsoft MS Project or Primavera P6 format.

B. Component Warranties

Respondent shall submit a summary of warranties for each system component, demonstrating compliance with RFP requirements as well as full warranty agreements with terms and conditions.

C. Respondent's Financial Information

i. Business Establishment and Structure

Identify the date that Respondent was established. Describe the business structure and organization of Respondent, including disclosing whether Respondent is a subsidiary or affiliate of another company or entity or whether Respondent or any subsidiary, parent, affiliate, or related entity is directly or indirectly owned or controlled (in whole or in part) by any general contractor, or any other contractor or consultant related to or performing work in connection with the Project. (For background information only)

ii. Prior and Pending Transactions

Describe any prior (within the last 12 months), pending or proposed transactions or agreements to merge, sell, expand, down-size, consolidate, streamline, or modernize Respondent's entity or company, and the potential impact on the stability of the entity or company.

iii. Litigation Involving Construction Projects

Describe any litigation or formal complaint(s), including mechanics liens filed against or by Respondent resulting from or attributable to its current or past involvement with any major construction projects (having an estimated construction cost exceeding \$4 million). Describe any current or past disciplinary action(s) taken by the California Contractors State License Board. Failure to properly make this disclosure may result in the rejection of all or any part of Respondent's proposal or termination of any contract or agreement entered into pursuant to this RFP process.

iv. Bankruptcy Actions

Provide information relating to the filing of: (a) bankruptcy actions, (b) debtor proceedings, (c) case or proceeding, voluntary or involuntary, by or against Respondent, as debtor, under any provision of the federal bankruptcy code, (d) any case or proceeding, voluntary or involuntary, by or against Respondent, under any state statute governing any debtor or creditor rights, seeking to have an order or decree rendered against Respondent directing any readjustment, arrangement, composition, or reduction of Respondent's debts, liabilities, or obligations, or making any assignment for the benefit of creditors, or any similar actions (collectively the "Bankruptcy Actions"). For purposes of this subparagraph, the "Respondent" shall mean and include Respondent and any subsidiary, parent, or affiliate of Respondent, and any member of Respondent's management team that will be assigned to the Project.

v. Financial Capability

Describe the financial capability and capital and operating resources available to Respondent in providing the design-build services described in this RFP. Provide Respondent's bonding capacity.

Provide a description of the sustainability, reliability and continuity of the Respondent, including the Respondent's last three audited financial statements, which will be held in confidence and returned to the Respondent at the completion of the proposal process.

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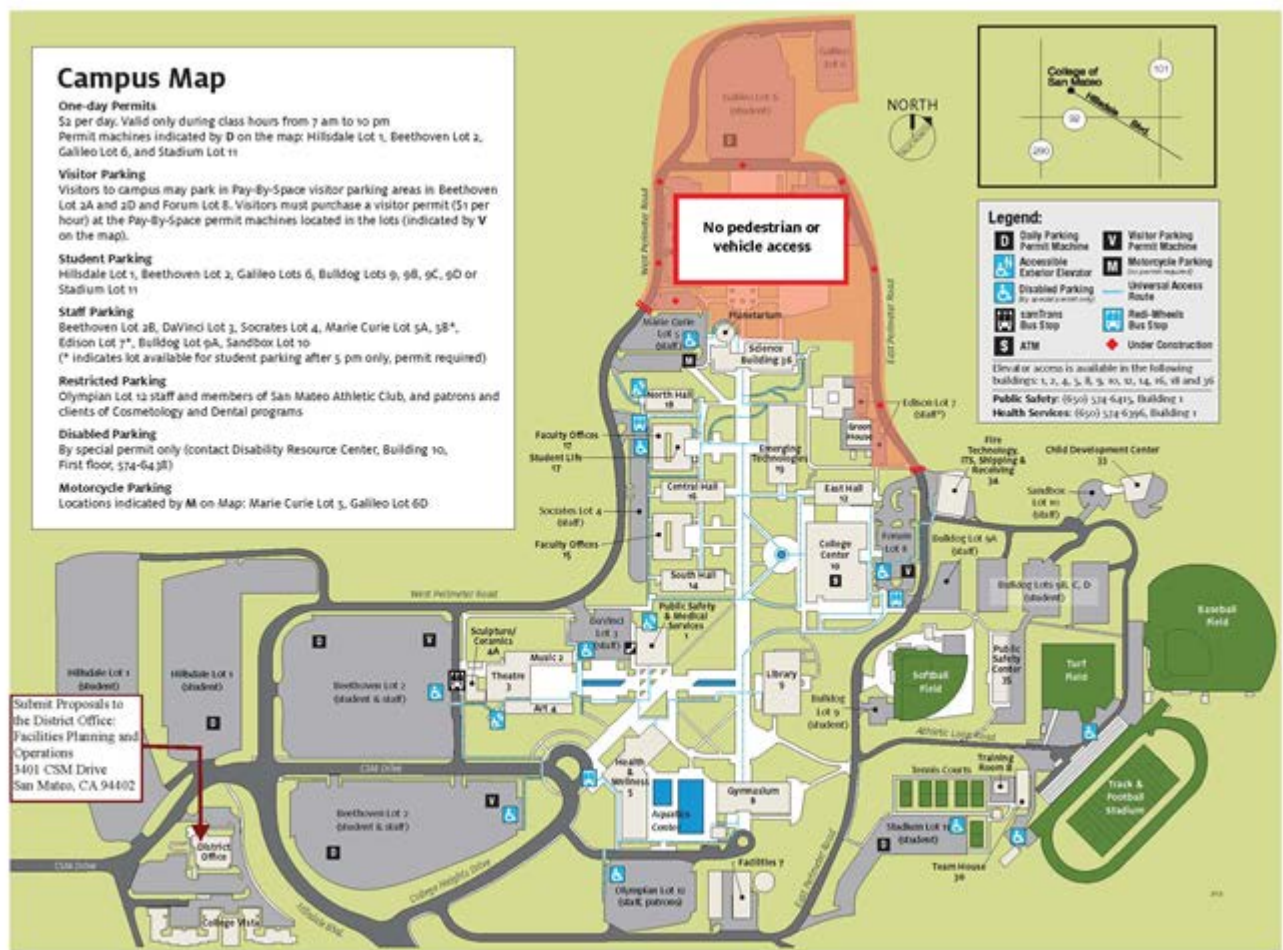
DOCUMENT 00 21 14

BID SUBMITTAL MAP

1. SUMMARY

This Document 00 21 14 displays in graphic detail the location where Proposal documents are to be submitted. Proposals shall be submitted in accordance with the location, date and time as described in Document 00 11 19.

Submit Proposals to the District Office:
Facilities Planning and Operations
3401 CSM Drive
San Mateo, CA 94402



END OF DOCUMENT

CAÑADA COLLEGE CAMPUS MAP

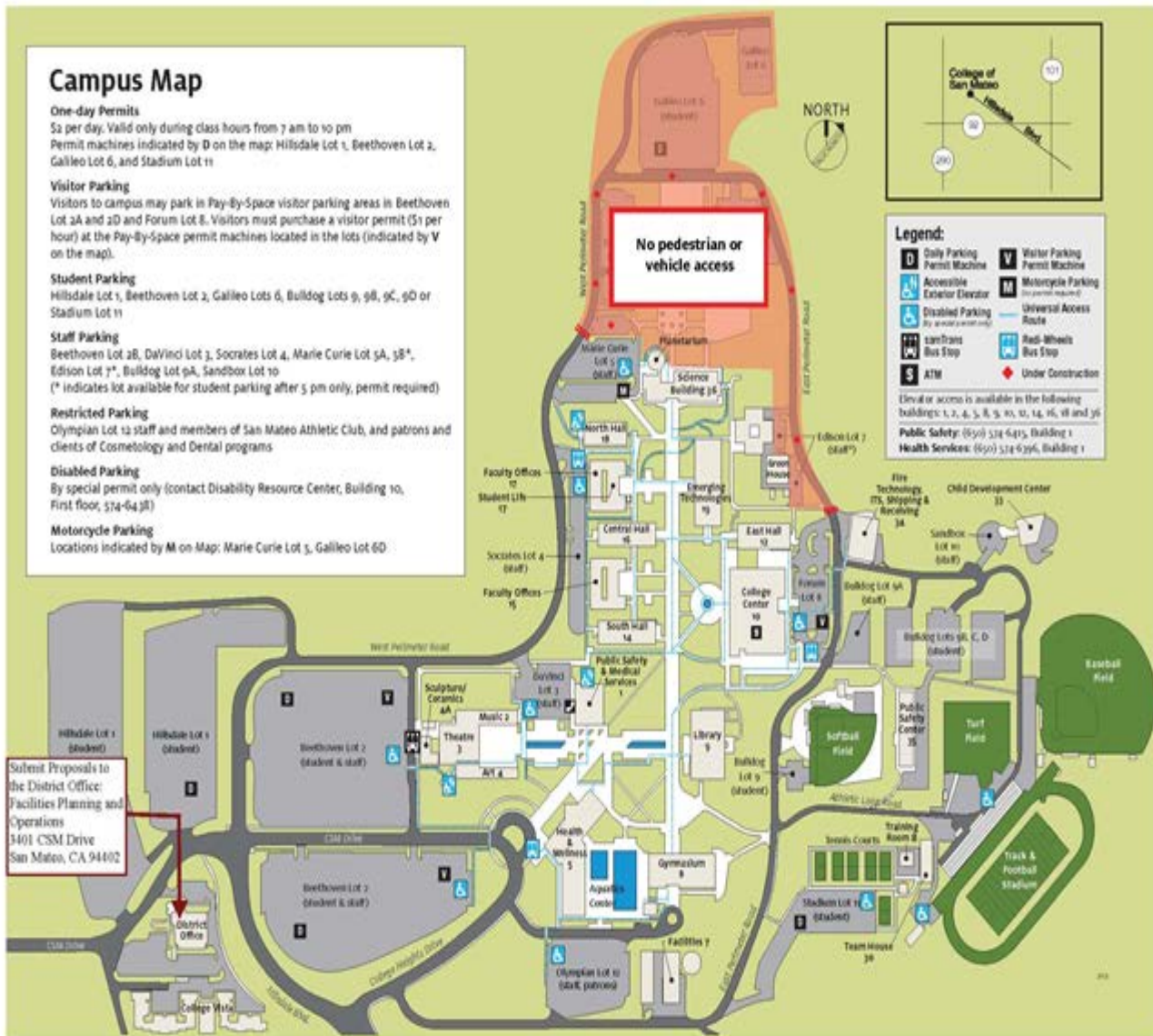
1. This Document 00 21 15 is a map, graphically representing the Cañada College campus, and generally showing the campus site.



END OF DOCUMENT

COLLEGE OF SAN MATEO CAMPUS MAP

1. This Document 00 21 15 is a map, graphically representing the College of San Mateo campus, and generally showing the campus site.



END OF DOCUMENT

DOCUMENT 00 31 19

GEOTECHNICAL DATA AND EXISTING CONDITIONS**1. REPORT AND INFORMATION**

- 1.1 **Existence of Reports and utility surveys:** San Mateo County Community College District, its consultants, and prior contractors may have collected documents providing a general description of the Site and conditions of the Work. These documents may consist of geotechnical reports for and around the Site, contracts, contract specifications, tenant improvement contracts, as-built drawings, utility drawings, and information regarding Underground Facilities. These reports, documents and other information are not part of the Contract Documents and do not show new work to be constructed, rather, show existing conditions that Contractor will have to address as part of its construction planning and operations.
- 1.2 **Inspection of Reports:** Design-Build Entities may inspect geotechnical reports and information regarding existing conditions at the Site. Upon request, specific documents can be made available for review at: <http://www.smccd.edu/accounts/smccd/departments/facilities/CANBusOps.shtml>. These reports, documents and other information are not part of the Contract Documents. Nevertheless, by submitting a Proposal, Design-Build Entity accepts full responsibility for reviewing, knowing and understanding the contents of all of these materials.
- 1.3 **Inclusion in Project Manual:** Geotechnical reports may be included in the Project Manual and information regarding existing conditions may also be included in the Project Manual, but neither shall be considered part of the Contract Documents, but rather “for information only.”
- 1.4 **Available Documentation:** Specific as-built documentation can be made available upon request during the proposal period. Any requested documentation will be posted to the Sharepoint site.

2. USE OF INFORMATION ON EXISTING CONDITIONS AND REQUIRED PRE-PROPOSAL INVESTIGATIONS

- 2.1 Design-Build Entity’s attention is directed to Document 00 71 00 (General Conditions) including but not limited to, its Article 2 “Proposal Period Investigations and Subcontractors” and Article 14 “Modifications of Contract Documents” [Paragraph G “Differing Site Conditions” and Paragraph H “Change Orders Related to Underground Conditions”].

3. ACCESS TO SITE FOR INVESTIGATIONS

- 3.1 During the Pre-Proposal Site Visit, District will provide each Design-Build Entity access to the Site to conduct such examinations, investigations, explorations, tests, and studies, as each Design-Build Entity deems necessary for submission of a Proposal. Design-Build Entities must fill all holes and clean up and restore the Site to its former conditions upon completion of such explorations, investigations, tests, and studies. Such investigations may be performed only under the provisions of Document 00 11 99 (Request for Proposals) and Document 00 71 00 (General Conditions) including, but not limited to, proof of insurance and obligation to indemnify against claims arising from such investigation work. Each Design-Build Entity shall supply all equipment required to perform any investigations as each Design-Build Entity deems necessary. District has the right to limit the number of pieces of machinery operating at one time due to safety concerns.

END OF DOCUMENT

DOCUMENT 00 41 98

**PROPOSAL PRICING FORM
TO BE EXECUTED BY ALL RESPONDENTS AND SUBMITTED WITH PROPOSAL**

To be submitted as part of Proposal by the time and date specified in Section 00 11 19 (Request for Proposals).

TO THE HONORABLE BOARD OF TRUSTEES OF THE SAN MATEO COUNTY COMMUNITY COLLEGE DISTRICT

THIS PROPOSAL PRICING FORM IS SUBMITTED BY:

(Firm/Company Name)

RE: RFP NUMBER 86662, THE Cañada College and College of San Mateo Roadway and Parking Lot Fixture LED Retrofit Project

1. The undersigned Respondent proposes and agrees, if this Proposal is accepted, to enter into an agreement with the San Mateo County Community College District (“District”) in the form included in the Contract Documents, Section 00 52 00 (Agreement), to perform and furnish all Work as specified or indicated in the Contract Documents for the Contract Sum and within the Contract Time indicated in this Proposal and in accordance with all other terms and conditions of the Contract Documents.
2. Respondent accepts all of the terms and conditions of the Contract Documents, and Section 00 11 19 (Request for Proposals), including, without limitation, those dealing with the disposition of Bid Security. This Proposal will remain subject to acceptance for sixty (60) Days after the day of Proposal opening.
3. In submitting this Proposal, Respondent represents:
 - (a) Respondent has examined all of the Contract Documents and the following Addenda (receipt of all of which is hereby acknowledged).

Addendum No.	Addendum Date	Signature of Respondent

- (b) Respondent has visited the Site and performed tasks, reviews, examinations, and analysis and given notices, regarding the Project and the Site, as set forth in Section 00 52 00 (Agreement), Article 5.
- (c) Respondent has received and examined copies of the following technical specifications on District-provided, Contractor-installed equipment.
 - N/a
- (d) Respondent has given District prompt written notice of all conflicts, errors, ambiguities, or discrepancies that it has discovered in or among the Contract Documents and as-built drawings and actual conditions and the written resolution thereof through Addenda issued by District is acceptable to Contractor.

4. Based on the foregoing, Respondent proposes and agrees to fully perform the Work within the time stated and in strict accordance with the Contract Documents for the following sums of money listed in the following Schedule of Proposal Prices:

SCHEDULE OF PROPOSAL PRICES

All Proposal items must be filled in completely. Section 01 10 00 (Summary of Work) describes the scope of work to be performed under this contract. Quote in figures only, unless words are specifically requested.

BID ITEM	DESCRIPTION	UNIT	TOTAL
1.	All Work of Contract Documents	Lump Sum	\$
2.	Owner’s Allowance (Ten Percent of Bid Item 1)	Lump Sum	\$
3.	TOTAL PROPOSAL AMOUNT (Sum of Items 1 – 2)	Lump sum	\$

Total Proposal Price (in words): _____

5. Subcontractors for work included in all Proposal items are listed on the attached Document 00 43 36 (Subcontractors List).
7. The undersigned Respondent understands that District reserves the right to reject this Proposal.
8. If written notice of the acceptance of this Proposal, hereinafter referred to as Notice of Award, is mailed or delivered to the undersigned Respondent within the time described in paragraph 2 of this Section 00 41 98 or at any other time thereafter before it is withdrawn, the undersigned Respondent will execute and deliver the documents required by Section 00 11 19 (Request for Proposals) within the times specified therein. These documents include, but are not limited to, Section 00 52 00 (Agreement), Section 00 61 00 (Construction Performance Bond), and Section 00 62 00 (Construction Labor and Material Payment Bond).
9. Notice of Award or request for additional information may be addressed to the undersigned Respondent at the address set forth below.
10. The undersigned Respondent herewith encloses cash, a cashier’s check, or certified check of or on a responsible bank in the United States, or a corporate surety bond furnished by a surety authorized to do a surety business in the State of California, in form specified in Section 00 11 19 (Request for Proposals), in the amount of ten percent (10%) of the Total Proposal amount and made payable to “San Mateo County Community College District”.
11. The undersigned Respondent agrees to commence Work under the Contract Documents on the date established in Section 00 71 00 (General Conditions) and to complete all work within the time specified in Section 00 52 00 (Agreement). The undersigned Respondent acknowledges that District has reserved the right to delay or modify the commencement date. The undersigned Respondent further acknowledges District has reserved the right to perform independent work at the Site, the extent of such work may not be determined until after the opening of the Proposals, and that the undersigned Respondent will be required to cooperate with such other work in accordance with the requirements of the Contract Documents.

12. The undersigned Respondent agrees that, in accordance with Section 00 71 00 (General Conditions), liquidated damages for failure to complete all Work in the Contract within the time specified shall be as set forth in Section 00 52 00 (Agreement).

13. The names of all persons interested in the foregoing Proposal as principals are:

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

NAME OF RESPONDENT _____

licensed in accordance with the act for the registration of Contractors, and with

License Number: _____ Expiration: _____

Where incorporated, if applicable

Principals

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

Signature of Respondent

NOTE: If Respondent is a corporation, set forth the legal name of the corporation together with the signature of the officer or officers authorized to sign contracts on behalf of the corporation. If Respondent is a partnership, set forth the name of the firm together with the signature of the partner or partners authorized to sign contracts on behalf of the partnership.

Business Address: _____

Officers authorized to sign contracts: _____

Telephone Number(s): _____

Fax Number(s): _____

E-Mail address: _____

Federal ID Number: _____

Date of Proposal: _____

END OF DOCUMENT

Document 00 41 99 - Experience and References Form

Cañada College and College of San Mateo Roadway and Parking Lot Fixture LED Retrofit Project

Instructions	
Please Complete the following 3 sections. Sections 1 and 2 should be completed here whereas section 3 should be included in the body of your proposal as described below. Blue Cells indicate input cells.	

Section 1: Company Information

Company Name	
--------------	--

	In California	In USA
Number of years in Business under Present Company Name		
Number of Years offering Proposed services		
Current Number of employees		
2012 Revenue		
2011 Revenue		
2010 Revenue		

Section 2: Sector Specific LED Experience

Number of LED Projects Implemented in The Government and Institutional Sectors	
Number of LED Projects Implemented on Occupied Campuses	
Number of exterior LED projects completed in the last 2 years	
Number of Projects Including installations in Parking Lots and on Streets	
Number of LED Projects including Building Management System Control Programming and Integration	

Section 3: Detailed Example Projects with References

In the written proposal, please include a description of **no fewer than three (3) and up to five (5) example projects** in which your firm acted in a lead role on a similar project. Please highlight project details and include customer references. These projects are recommended to represent the work you have done in the government sector and specifically, where applicable, in occupied community campus settings within the state of California. The project descriptions should include the following information at minimum:

- Customer/Owner Name
- Contact Phone and Email
- Location (City and State)
- Installation Date
- Commissioning Steps/Details
- Current Operating Status
- Specific Challenges that were overcome
- Fixture Make/Model
- Controls Make/Model
- Controls Strategy
- Verified Energy Savings Accomplished
- Incentive Dollars Accessed
- Economic Benefit to the customer/owner
- Photos of the Completed Project

DOCUMENT 00 43 13

BOND ACCOMPANYING PROPOSAL

KNOW ALL BY THESE PRESENTS:

That the undersigned [_____] as Principal and the undersigned as Surety are held and firmly bound unto SAN MATEO COUNTY COMMUNITY COLLEGE DISTRICT, a public entity (“**District**”) as obligee, in the penal sum of [_____] Dollars (\$ _____) lawful money of the United States of America, being at least ten percent (10%) of the aggregate amount of said Principal’s [total Fixed Price Proposal plus Owner’s Alternates] [revise if Document –410 changed], for the payment of which, well and truly to be made, we bind ourselves, our successors, executors, administrators, and assigns, jointly and severally, firmly by these presents.

WHEREAS, the said Principal [_____] is submitting a Proposal for District Bid No. **XXXXXX**, [name of project]

THE CONDITION OF THIS OBLIGATION IS SUCH that if the proposal submitted by the said Principal [_____] be accepted and the contract be awarded to said Principal [_____] and said Principal [_____] shall within a period of twenty (20) calendar days after such award enter into the contract so awarded, execute Document 00 52 00 Agreement and provide the required Performance Bond, Labor and Material Payment Bond, insurance certificates and all other endorsements, forms and documents required under Document 00 11 19 Request for Proposal, then this obligation shall be void, otherwise to remain in full force and effect.

IN WITNESS WHEREOF, the above bounden parties have executed this instrument

this _____ day of _____, 2007.

(Corporate Seal)

By

Principal

Surety

(Corporate Seal)

By

Attorney in Fact

END OF DOCUMENT

DOCUMENT 00 43 36

SUBCONTRACTORS LIST FORM

1. **REQUIRED SUBCONTRACTORS LIST FORM.** A subcontractor listing is not required at the time of the submittal of Proposals, but will be required prior to the issuance of a Notice to Proceed for each increment of construction. The successful Design-Build Entity, prior to the issuance of the Notice to Proceed with Construction must submit the names of all subcontractors, and identify the work to be performed by each subcontractor on the Subcontractors List Form located on the following page. This information is required for all subcontractors who will perform any portion of the Work in excess of one-half of one percent (0.5%) of the total Proposal amount, including without limitation labor, design, rendering of services (to include consulting services), or special fabrication or installation of any element relating to the Work or improvement in accordance with the detailed drawings contained in the plans and specifications.

DOCUMENT 00 43 36

SUBCONTRACTORS AND SUBCONSULTANTS LIST FORM

Design-Build Entity shall submit this form listing subcontractors no later than thirty (30) days prior to scheduled construction start and prior to Notice to Proceed with Construction, pursuant to Public Contract Code section 4107.

Use this sheet for Subcontractors on Base Proposal Work required to be listed by law (Repeat page as needed).

Name, address, and telephone number of office of Subcontractor	Type of Work to be Done	License Number
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		

END OF DOCUMENT

DOCUMENT 00 43 45
EDUC. CODE § 81704(c)(5); P.C.C. § 22300

**ESCROW AGREEMENT FOR
SECURITY DEPOSITS IN LIEU OF RETENTION**

This Escrow Agreement (“Escrow Agreement”) is made and entered into this _____ day of _____, _____, by and between SAN MATEO COUNTY COMMUNITY COLLEGE DISTRICT, a public entity, hereinafter called (“**District**”), and _____ whose place of business is _____ hereinafter called (“**Design-Build Entity**”), and [insert either] District, as escrow agent [or] [**Name of Bank**], a state or federally chartered bank in the state of California, whose place of business is located at _____ (“**Escrow Agent**”). This Escrow Agreement is intended to incorporate the requirements of PCC § 22300.

For the consideration hereinafter set forth, District, Design-Build Entity and Escrow Agent agree as follows:

1. Pursuant to California Education Code, Section 81704(c)(5) and Public Contract Code, Section 22300, Design-Build Entity has the option to deposit securities with Escrow Agent as a substitute for retention earnings required to be withheld by District pursuant to the Contract for Bid No. 86680 entered into between District and Design-Build Entity for the Cañada College and College of San Mateo Roadway and Parking Lot LED Light Fixture Retrofit Project in the amount of [**Contract Sum**] dated [**Date of Contract**] (the “**Contract**”). Alternatively, on written request of Design-Build Entity, District shall make payments of the retention earnings directly to Escrow Agent. When Design-Build Entity deposits the securities as a substitute for Contract earnings, Escrow Agent shall notify District within ten (10) calendar days of the deposit. The market value of the securities at the time of substitution shall be at least equal to the cash amount then required to be withheld as retention under terms of Contract between District and Design-Build Entity. Securities shall be held in name of _____, and shall designate Design-Build Entity as beneficial owner.
2. District shall make progress payments to Design-Build Entity for those funds which otherwise would be withheld from progress payments pursuant to Contract provisions, provided that Escrow Agent holds securities in form and amount specified above.
3. When District makes payment of retention earned directly to Escrow Agent, Escrow Agent shall hold them for the benefit of Design-Build Entity until the time that the escrow created under this Escrow Agreement is terminated. Design-Build Entity may direct the investment of the payments into securities. All terms and conditions of this Escrow Agreement and the rights and responsibilities of the Parties shall be equally applicable and binding when District pays Escrow Agent directly.
4. Design-Build Entity shall be responsible for paying all fees for the expenses incurred by Escrow Agent in administering the Escrow Account, and all expenses of District. Such expenses and payment terms shall be determined by District, Design-Build Entity and Escrow Agent.
5. Interest earned on securities or money market accounts held in escrow and all interest earned on that interest shall be for sole account of Design-Build Entity and shall be subject to withdrawal by Design-Build Entity at any time and from time to time without notice to District.

- 6. Design-Build Entity shall have the right to withdraw all or any part of the principal in the Escrow Account only by written notice to Escrow Agent accompanied by written authorization from District to Escrow Agent that District consents to withdrawal of amount sought to be withdrawn by Design-Build Entity.
- 7. District shall have the right to draw upon the securities in event of default by Design-Build Entity. Upon seven (7) days' written notice to Escrow Agent from District of the default, Escrow Agent shall immediately convert the securities to cash and shall distribute the cash as instructed by District.
- 8. Upon receipt of written notification from District certifying that the Contract is final and complete, and that Design-Build Entity has complied with all requirements and procedures applicable to the Contract, Escrow Agent shall release to Design-Build Entity all securities and interest on deposit less escrow fees and charges of the Escrow Account. The escrow shall be closed immediately upon disbursement of all monies and securities on deposit and payments of fees and charges.
- 9. Escrow Agent shall rely on written notifications from District and Design-Build Entity pursuant to Paragraphs 5 through 8, inclusive, of this Escrow Agreement and District and Design-Build Entity shall hold Escrow Agent harmless from Escrow Agent's release and disbursement of securities and interest as set forth above.
- 10. Names of persons who are authorized to give written notice or to receive written notice on behalf of District and on behalf of Design-Build Entity in connection with the foregoing, and exemplars of their respective signatures are as follows:

On behalf of District:

James W. Keller
Deputy Chancellor

Signature

or

Kathy Blackwood
Chief Financial Officer

Signature

3401 CSM Drive
San Mateo, CA 94402

On behalf of Design-Build Entity:

Name
Title

Signature

Address
City, State Zip

On behalf of Escrow Agent:

Title

Name

Signature

Address

At the time the Escrow Account is opened, District and Design-Build Entity shall deliver to Escrow Agent a fully executed counterpart of this Agreement.

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

District:

James W. Keller
Executive Vice Chancellor

Signature

or

Kathy Blackwood
Chief Financial Officer

Signature

3401 CSM Drive
San Mateo, CA 94402

Design-Build Entity:

Name
Title

Signature

Address
City/State/Zip

Escrow Agent:

Title

Name

Signature

Address

City/State/Zip

END OF DOCUMENT

DOCUMENT 00 45 00

**DESIGN-BUILD ENTITY CERTIFICATIONS
TO BE EXECUTED BY ALL DESIGN-BUILD ENTITIES AND SUBMITTED WITH PROPOSALS**

1. CERTIFICATION REGARDING TEAM

The undersigned Design-Build Entity certifies and affirms to SAN MATEO COUNTY COMMUNITY COLLEGE DISTRICT, a public entity (“**District**”), that if awarded this contract, the Design-Build Entity intends to prosecute the work with the Team identified in its Pre-qualification submittal and presented at its Pre-qualification interview and acknowledges that if there are any substitutions to said Team that are not approved by the District prior to submission of Proposal, they may result in the District’s determination that this Proposal is non-responsive.

2. CERTIFICATION OF ADEQUACY OF CONTRACT AMOUNT

By my signature hereunder, as the Design-Build Entity, pursuant to Labor Code Section 2810(a), I certify that, if awarded the Contract based on the undersigned’s Bid, the Contract will include funds sufficient to allow the Design-Build Entity to comply with all applicable local, state, and federal laws or regulations governing the labor or services to be provided. I understand that the District will be relying on this certification if it awards the Contract to the undersigned.

3. CERTIFICATION OF SKILLED LABOR FORCE AVAILABILITY

By my signature hereunder, as the Design-Build Entity, I certify that the Proposer is a party to an agreement with a registered apprenticeship program, approved by the California Apprenticeship Council, which has graduated apprentices in each of the preceding five years (provided that this graduation requirement shall not apply to programs providing apprenticeship training for any craft that has been deemed by the Department of Labor and the Department of Industrial Relations to be an apprenticeable craft in the five years prior to enactment of Public Contract Code Section 20133), and that attached hereto is a copy of that agreement, which is true and correct and in full force and effect.

4. CERTIFICATION OF ACCEPTABLE SAFETY RECORD

[Please check and/or complete one of the following]

_____ By my signature hereunder, as the Design-Build Entity, I certify that the Proposer’s experience modification rate for the most recent three-year period is an average of 1.00 or less, and its average Total Recordable Injury/Illness rate and average lost work rate for the most recent three-year period does not exceed the applicable statistical standards for its business category or the Proposer is a party to an alternative dispute resolution system as provided for in Section 3201.5 of the Labor Code.

_____ By my signature hereunder, as the Design-Build Entity, except as provided in Appendix 1 – Acceptable Safety Record, consisting of _____ pages, attached hereto, I certify that the Proposer’s experience modification rate for the most recent three-year period is an average of 1.00 or less, and its average Total Recordable Injury/Illness rate and average lost work rate for the most recent three-year period does not exceed the applicable statistical standards for its business category or the Proposer is a party to an alternative dispute resolution system as provided for in Section 3201.5 of the Labor Code . **Proposer must attach an Appendix 1 - Acceptable Safety Record, identifying and explaining all exceptions to this certification, if this item is checked.**

5. CERTIFICATION REGARDING MATERIAL CHANGES

[Please check and/or complete one of the following]

_____ The undersigned certifies that all information it submitted to the District in connection with the Pre-Qualification process, including without limitation its Pre-Qualification Document, and any modifications, amendments or supplements thereto (“Pre-Qualification Information”) remains true and correct in all material respects as of the date of submitting its Proposal.

_____ Except as provided on Appendix 2 – Design-Build Entity Material Changes List, consisting of _____ pages, attached hereto, the undersigned certifies that all information it submitted to the District in connection with the Pre-Qualification process, including without limitation its Pre-Qualification Document, and any modifications, amendments or supplements thereto (“Statement of Qualification”) remains true and correct in all material respects as of the date of submitting its Proposal. **Proposer must include Appendix 2 – Design-Build Entity Material Changes List with its Proposal if this item is checked.**

Design-Build Entity: _____
[Name of Design-Build Entity]

By: _____
[Signature]

Name: _____
[Printed Name]

Its: _____
[Title]

Dated: _____

END OF DOCUMENT

DOCUMENT 00 45 19

NON-COLLUSION AFFIDAVIT

Public Contract Code § 7106

NON-COLLUSION AFFIDAVIT TO BE EXECUTED BY THE DESIGN-BUILD ENTITY AND SUBMITTED WITH THE PROPOSAL

STATE OF CALIFORNIA)
)ss.
COUNTY OF SAN MATEO)

Principal(s) _____, being first duly sworn, deposes and says that he or she is **Office of Affiant** _____ of **Name of DBE** _____

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 SAN MATEO COUNTY COMMUNITY COLLEGE DISTRICT, a public entity, or anyone interested in the proposed contract; that all statements contained in the bid are true; and further, that Bidder has not, directly or indirectly, submitted its bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid.

Executed under penalty of perjury under the laws of the State of California.

(Name of Bidder)

(Signature of Principal)

Subscribed and sworn before me this _____ day of _____, 20__.

Notary Public of the State of _____ (Seal)
In and for the County of _____
My Commission expires _____

(If Bidder [including any partner or venturer of a partnership or joint venture Bidder] is a corporation, this affidavit must be signed by the Chairman, President or Vice President and by the Secretary, Assistant Secretary, Chief Financial Officer or Assistant Treasurer.)

(If Bidder's affidavit on this form is made outside the State of California, the official position of the person taking such affidavit shall be certified according to law.)

END OF DOCUMENT

DOCUMENT 00 50 00

NOTICE TO PROCEED WITH DESIGN

Dated: _____

TO: **[name of Design-Build Entity]**
(Design-Build Entity)

ADDRESS: **[address]**

PROJECT: **Cañada College and San Mateo Roadway and Parking Lot Fixture LED Retrofit Project**

Increment: _____

You are notified that the Contract Time under the above Contract will commence to run on _____, 2007, for the [PM: insert name of project]. By that date, you are to start performing your design obligations under the Contract Documents. In accordance with Paragraph 3.1 of Document 00 52 00 Agreement, the date of Substantial Completion of [description of project increment] is _____, **2014**, the date of Final Completion is _____, **2014**.

Before you may start any Work at the site, you must:

SAN MATEO COUNTY COMMUNITY COLLEGE
DISTRICT

By: _____
[Name of Project Manager]
Project Manager

END OF DOCUMENT

DOCUMENT 00 50 01

NOTICE TO PROCEED WITH CONSTRUCTION

Dated: _____

TO: **[name of Design-Build Entity]**
(Design-Build Entity)

ADDRESS: **[address]**

PROJECT: **Cañada College and College of San Mateo Roadway and Parking Lot Fixture LED Retrofit Project**

You are hereby authorized to start performing your construction obligations under the Contract Documents. In accordance with Paragraph 3.1 of Document 00 52 00 Agreement, the date of Substantial Completion of [description of project increment] is _____, **2014**, the date of Final Completion is _____, **2014**.

Before you may start any Work at the site, you must:

SAN MATEO COUNTY COMMUNITY COLLEGE DISTRICT

By: _____
[Name of Project Manager]
Project Manager

END OF DOCUMENT

DOCUMENT 00 51 00

NOTICE OF AWARD

Dated _____

TO: _____

ADDRESS: _____

CONTRACT FOR:

RFP No 86662

Cañada College and College of San Mateo Roadway and Parking Lot Fixture LED Retrofit Project

The Contract Sum of your contract is _____ Dollars (\$_____).

1. Two copies of each of the proposed Contract Documents (except Specifications and Drawings) accompany this Notice of Award. Two sets of Specifications and Drawings will be delivered separately or otherwise made available to you immediately.
2. You must comply with the following conditions by 4:00 p.m. on [__day____], [__date____].
 - a. Deliver to District two fully executed counterparts of Section 00 52 00 (Agreement).
 - b. Deliver to District one original Section 00 61 00 (Construction Performance Bond), executed by you and your surety.
 - c. Deliver to District one original Section 00 62 00 (Construction Labor and Material Payment Bond), executed by you and your surety.
 - d. Deliver to District one original set of the insurance certificates with endorsements required under Section 00 71 00 (General Conditions) and Section 00 73 17 (Insurance), along with one original copy of the OCIP Contractor Enrollment Form.
 - e. Deliver to District two original copies of Section 00 65 36 (Guaranty), each executed by you.
 - f. Project Stabilization Agreement Letter of Assent as set forth in Section 01 35 27 (Project Labor Agreement). Submit one original.
3. Failure to comply with these conditions within the time specified will entitle District to consider your Bid abandoned, to annul this Notice of Award, and to declare your Bid security forfeited.
4. Within ten (10) Days after you comply with the conditions in paragraph 2 of this Section 00 51 00, District will return to you one fully signed counterpart of Section 00 52 00 (Agreement) with the Contract Documents.
5. Upon commencement of the Work, you and each of your Subcontractors shall certify and make available for inspection payroll records on forms provided by the Division of Labor Standards Enforcement, in accordance with Section 1776 of the California Labor Code.
6. Send all of the required above listed items to [insert address], to the attention of [insert point of contact].

SAN MATEO COUNTY COMMUNITY COLLEGE
DISTRICT ("District")

BY: _____
Project Manager Name

END OF DOCUMENT

DOCUMENT 00 51 01

NOTICE OF INTENT TO AWARD DESIGN-BUILD CONTRACT

DATE POSTED: [insert date]

RFP NUMBER: 86662

PROJECT TITLE: **Cañada College and College of San Mateo Roadway and Parking Lot Fixture LED Retrofit Project**

[Insert Name of Chancellor], the **Chancellor** of the San Mateo County Community College District, intends to recommend to the Board of Trustees of the San Mateo County Community College District on [Month Day, Year] the award of the above-referenced Project to **[Name of Design-build Entity]**.

If approved, a formal Notice of Award will be issued.

SIGNATURE _____ DATE _____

[_____] ,

[Name]

[_____]

[Title]

END OF DOCUMENT

DOCUMENT 00 52 00

**AGREEMENT
FOR DESIGN-BUILD SERVICES**

THIS AGREEMENT, made this _____ day of _____, 2014, by and between **INSERT NAME OF CONTRACTOR** whose place of business is at **INSERT CONTRACTOR ADDRESS**, hereinafter called "Design-Build Entity", and SAN MATEO COUNTY COMMUNITY COLLEGE DISTRICT, hereinafter called "District".

In consideration of the mutual covenants hereinafter set forth, Design-Build Entity and District agree as follows:

Article I. Work

- 1.1 Design-Build Entity shall provide, furnish, and perform all necessary planning, architectural, engineering, and all other design services of any type, procurement, permitting and support services, construction, landscaping, clean-up, and all other construction services of any type, provide and furnish all necessary supplies, materials and equipment (except those to be provided by District, if any) and all necessary supervision, labor, and services required for the complete engineering, design, procurement, quality assurance, construction and all necessary installation, start-up and testing (except that testing to be provided by the District) required for a complete, operational, and fully functional Project, as further described in Section 99 00 01 Technical Specifications and Requirements hereinafter, the all-inclusive obligations of the Design-Build Entity set forth in this sentence shall be referred to as the "Work"; and the term "Project" will be used to describe generally the entirety of the Work to be performed by Design-Build Entity, including all construction activities as described variously throughout this Design-Build Contract). Except with regard to any material to be provided and/or installed by District, Design-Build Entity shall fully commission and turn over a complete, operational, and fully functional Project to District. Without limiting the generality of this Document 00 52 00, Design-Build Entity shall provide the following work and Services:
- 1.2 Design-Build Entity shall prepare complete designs, engineering, working drawings, shop drawings and generate drawings and/or engineering analysis setting forth in detail the specifications and requirements for the purchasing and procurement of the services, materials and equipment and for the construction of the complete, operational, and fully functional Project and shall furnish the services of all necessary supervisors, engineers, designers, draftsmen, and other personnel necessary for the preparation of those drawings and specifications required for the Work, including the pertinent information for electrical work, and any other utilities, as required.
- 1.3 Design-Build Entity shall provide, install and complete as specified, and pay for all labor, materials and equipment, tools, supplies, construction equipment and machinery, construction, start-up and testing (except that testing to be provided by the District), utilities, transportation, and other facilities and services (including any temporary materials, equipment, supplies and facilities) necessary for the proper execution and completion of the complete, operational, and fully functional Project, including required permanent interconnection for electricity, and any other utilities, and demonstration of fully satisfactory operation of all systems and equipment.
- 1.4 Design-Build Entity shall supervise and direct the Work, and shall furnish the services of all supervisors, forepersons, skilled and unskilled labor, and all other personnel necessary to design and construct the complete, operational, and fully functional Project. Design-Build Entity shall provide, manage and organize such personnel as necessary to complete the Work in accordance with all requirements of the Contract Documents.

- 1.5 Design-Build Entity shall obtain, at Design-Build Entity's expense, all governmental and private approvals, licenses, and permits required to complete the Work; provided, however, District will be responsible for paying the cost of all District-imposed fees. Design-Build Entity shall design and construct complete, operational, and fully functional Project in full compliance with all applicable laws, codes and standards (both public and private), including but not limited to, the standards included and warranties expressed in the Contract Documents and manufacturer's recommendations pertaining to individual items of equipment or systems.
- 1.6 Design-Build Entity shall provide a warranty of the length identified in the Contract for this Project.
- 1.7 No construction or alteration of any District facility under the Contract Documents shall commence prior to the receipt of the written approval of the plans and specifications therefore, as to the safety of design and construction, from the District, and as required, from the Division of the State Architect.

Article II. District's Project Manager and Representatives

- 2.1 District may assign all or part of its rights, responsibilities and duties to a District Project Manager or other representative. District shall inform Design-Build Entity in writing of such assignment and the extent of its representative's authority.
- 2.2 All notices or demands to District under the Contract Documents shall be to District's Representative at:

San Mateo County Community College District
Josè D. Nuñez
Vice Chancellor of Facilities Planning, Maintenance & Operations
3401 CSM Drive, San Mateo, CA 94402
Telephone: 650- 358-6836
nunezj@smccd.edu

or to such other person(s) and address(es) as District shall provide to Design-Build Entity.

Article III. Contract Time and Liquidated Damages

- 3.1 Design-Build Entity shall complete the Work within the Milestone Schedule in Appendix A, hereby made part of this Agreement.
- 3.2 Liquidated Damages.
District and Design-Build Entity recognize that time is of the essence with regard to this Agreement and that District will suffer financial loss in the form of lost revenues, contract administration expenses (including project management and consultants' expenses), delay and loss of public use, if the Work is not completed within the time specified in paragraph 3.1 above plus any extensions thereof allowed in accordance with the Contract Documents. Consistent with Paragraph 1.15 of Document 00 71 00 General Conditions, Design-Build Entity and District agree that because of the complexity of the Project, it would be impractical or extremely difficult to fix the amount of actual damages incurred by District caused by a delay in completion of the Work.

Accordingly, District and Design-Build Entity agree that Design-Build Entity shall pay the District liquidated damages in the event that Design-Build Entity fails to meet any agreed upon deadline in the manner described below:

- 3.2.1 If Design-Build Entity shall fail to achieve Substantial Completion of its Work by the date (or

dates) specified in Appendix A regarding the achievement of identified Construction Milestones, Design-Build Entity shall pay District liquidated damages, at the daily rate of One Thousand Dollars (\$1,000) per day for each day Design-Build Entity exceeds the Substantial Completion Date; said amount accruing daily and continuing to accrue until Design-Build Entity achieves Substantial Completion of the portion of the Work subject to the agreed upon Milestone.

- 3.2.2 If Design-Build Entity shall fail to achieve Final Completion of the Work by the date so specified in these Contract Documents, Design-Build Entity shall pay District liquidated damages, at the daily rate of Five Hundred Dollars (\$500) per day for each day Design-Build Entity exceeds the Final Completion Date; said amount accruing daily and continuing to accrue until Design-Build Entity achieves Final Completion of the Work in accordance with these Contract Documents.

These measures of liquidated damages shall apply cumulatively, if applicable, and shall be presumed to be, except as provided in Document 00 71 00 (General Conditions), paragraph 15.E the damages suffered by District resulting from delay in completion of the Project.

Article IV. Contract Sum

- 4.1 District shall pay the Design-Build Entity the Contract Sum of [insert contract amount in words] dollars (\$[insert contract amount in numerals]) for completion of Work in accordance with the Contract Documents.
- 4.2 The Contract Sum is all inclusive and includes all Work; all federal, state, and local taxes on materials and equipment, and labor furnished by Design-Build Entity, its subcontractors, subconsultants, architects, engineers, and vendors or otherwise arising out of Design-Build Entity's performance of the Work, including any increases in any such taxes during the term of this Agreement; and any duties, fees, and royalties imposed with respect to any materials and equipment, labor or services. The taxes covered hereby include (but are not limited to) occupational, sales, use, excise, unemployment, FICA, and income taxes, customs, duties, and any and all other taxes on any item or service that is part of the Work, whether such taxes are normally included in the price of such item or service or are normally stated separately. Notwithstanding the foregoing, each party shall bear such state or local inventory, real property, personal property or fixtures taxes as may be properly assessed against it by applicable taxing authorities.

Article V. Design-Build Entity's Representations and Warranties

As inducement for District to enter into this Agreement, Design-Build Entity makes the following representations and warranties:

- 5.1 Design-Build Entity has visited the Site and has observed the nature and extent of the Work, Site, locality, actual conditions, as-built conditions, and all local conditions; and has reviewed all federal, state and local laws and regulations that in any manner may affect cost, progress, performance or furnishing of Work or which relate to any aspect of the design and the means, methods, techniques, sequences or procedures of construction to be employed by Design-Build Entity and safety precautions and programs incident thereto.
- 5.2 Design-Build Entity has performed due diligence to fully understand the Scope of Work and the conditions associated with the Work. Design-Build Entity has made all reasonable efforts to locate all reports, surveys or other documents reflecting exploration and testing of subsurface conditions; and has reviewed all known as-built drawings, drawings or reports showing physical conditions, including Underground Facilities, which are identified in the Request for Proposal; and has examined all Geotechnical Data and Existing Conditions, including those that may be apparent at the Site. The District has obtained and provided to the Design-Build Entity a Geotechnical Investigation of the proposed Project Site. The Design-Build Entity may utilize and rely upon information on subsurface conditions furnished by the District, unless specifically excluded in the Request for Proposal.
- 5.3 Design-Build Entity has obtained and reviewed all such examinations, investigations, explorations, tests,

reports and studies referred to in Paragraph 5.2 of this Document 00 52 00 that pertain to the subsurface conditions, as-built conditions, Underground Facilities and all other physical conditions at or contiguous to the Site or that otherwise may affect the cost, progress, performance or furnishing of Work, within the Contract Time and in accordance with the other terms and conditions of the Contract Documents, including specifically the provisions of Document 00 71 00 General Conditions.

- 5.4 Design-Build Entity has correlated its knowledge and the results of all such observations, examinations, investigations, explorations, tests, reports and studies with the terms and conditions of the Contract Documents.
- 5.5 Design-Build Entity has given District prompt written notice of all conflicts, errors, ambiguities, or discrepancies that it has discovered in or among the Contract Documents and as-built drawings and actual conditions and the written resolution thereof through Addenda issued by District is acceptable to Design-Build Entity.
- 5.6 Design-Build Entity is duly organized, existing and in good standing under applicable state law, and is duly qualified and licensed (for every business, trade or profession) to conduct business in the State of California.
- 5.7 Design-Build Entity has duly authorized the execution, delivery and performance of this Agreement, the Contract Documents, and the Work to be performed herein. The Contract Documents do not violate or create a default under any instrument, agreement, order or decree binding on Design-Build Entity.
- 5.8 Prior to the District's Issuance of a Notice to Proceed with Construction, the Design-Build Entity will list all Subcontractors performing Work pursuant to the Subcontractor Listing requirements of California Public Contracting Code Section 4104 on Document 00 43 36 Subcontractors List Form and provide a copy thereof to District.

Article VI. Contract Documents

- 6.1 The Contract Documents consist of the following documents, including all changes, addenda and modifications thereto, which comprise the entire agreement between District and Design-Build Entity concerning the Work:

Design-Build Entity's Proposal, Dated DATE
 Document 00 41 98 Proposal Form, Dated DATE
 Document 00 43 45 Escrow Agreement for Security Deposit in Lieu of Retention
 Document 00 51 00 Notice of Award
 Document 00 52 00 Agreement
 Document 00 50 00 Notice(s) to Proceed with Design
 Document 00 50 01 Notice(s) to Proceed with Construction
 Document 00 61 00 Construction Performance Bond
 Document 00 62 00 Construction Labor and Material Payment Bond
 Document 00 65 36 Guaranty
 Document 00 71 00 General Conditions
 Document 00 73 00 Supplementary Conditions
 Document 00 73 17 Contractor-Provided Insurance
 Document 00 73 37 Apprenticeship Program
 Document 00 91 00 Addenda
 Division One – General Requirements of the Contract
 Section 99 00 01 Technical Specifications and Requirements
 Section 99 00 02 Commissioning of Lighting Controls and BMS Systems
 Appendices

- 6.2 The documents submitted in the Proposal may include proposed revisions to the Scope of Work, in the form of Exceptions to the RFP, Owner Requested Alternates, Voluntary Alternates, or Clarifications. The District retains its right to accept Alternates subsequent to executing the Agreement in accordance with the terms set forth in the Request for Proposal.
- 6.3 There are no Contract Documents except those expressly listed in this Document 00 52 00, Article VI. Document 00 31 19 (Geotechnical Data and Existing Conditions), and the information supplied through these documents, are not Contract Documents. Contract Documents may only be amended, modified or supplemented as provided in Document 00 71 00 General Conditions.

Article VII. Miscellaneous

- 7.1 Except where clearly defined in this Document 00 52 00, the terms used in this Agreement are defined in Document 00 71 00 General Conditions and Section 01 42 00 References and Definitions, and will have the meaning indicated therein.
- 7.2 It is understood and agreed that in no instance shall any individual person, signing this Agreement for or on behalf of District, or acting as an employee or representative of District, be deemed individually liable in any way under this Contract, or upon any warranty of authority, or otherwise, and it is further understood and agreed that liability of District is limited and confined to such liability as authorized or imposed by the Contract Documents or applicable law.
- 7.3 Design-Build Entity shall not assign any portion of the Contract Documents, and may subcontract portions of the Contract Documents only in compliance with the Subcontractor Listing requirements of California Public Contracting Code Section 4107.
- 7.4 The Contract Sum includes all allowances (if any).
- 7.5 In entering into a public contract or a subcontract to supply goods, services or materials pursuant to a public contract, the Design-Build Entity or subcontractor irrevocably offers and agrees to assign to the awarding body all rights, title and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. § 15) or under the Cartwright Act, (Chapter 2 (commencing with Section 16700) of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, services or materials pursuant to the public works contract or the subcontract. This assignment shall be made and become effective at the time District tenders final payment to the Design-Build Entity, without further acknowledgment by the parties.
- 7.6 Copies of the general prevailing rates of per diem wages for each craft, classification, or type of worker needed to execute the Contract, as determined by Director of the State of California Department of Industrial Relations. This information is of public record and can be reviewed at the website of the California Department of Industrial Relations (www.dir.ca.gov/). Pursuant to Section 1861 of the Labor Code, Design-Build Entity represents that it is aware of the provisions of Section 3700 of the Labor Code which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that Code, and Design-Build Entity shall comply with such provisions before commencing the performance of the Work of the Contract Documents.
- 7.7 Should any part, term or provision of this Agreement or any of the Contract Documents, or any document required herein or therein to be executed or delivered, be declared invalid, void or unenforceable, all remaining parts, terms and provisions shall remain in full force and effect and shall in no way be invalidated, impaired or affected thereby. If the provisions of any law causing such invalidity, illegality or unenforceability may be waived, they are hereby waived to the end that this Agreement and the Contract Documents may be deemed valid and binding agreements, enforceable in accordance with their terms to the

greatest extent permitted by applicable law. In the event any provision not otherwise included in the Contract Documents is required to be included by any applicable law, that provision is deemed included herein by this reference (or, if such provision is required to be included in any particular portion of the Contract Documents, that provision is deemed included in that portion).

- 7.8 This Agreement and the Contract Documents shall be deemed to have been entered into in the City of San Mateo, County of San Mateo, State of California, and shall be governed in all respects by California law (excluding choice of law rules). The exclusive venue for all disputes or litigation hereunder shall be in the Superior Court of the State of California for the County of San Mateo. Contractor accepts the claims procedure in Document 00 71 00, Article 12, as established under the California Government Code, Title 1, Division 3.6, Part 3, Chapter 5.
- 7.9 District shall have the right to review all phases of Design-Build Entity's design including, but not limited to, drawings, specifications, shop drawings, samples and submittals, as specified in the Contract Documents. Such review, approval and other action shall not relieve Design-Build Entity of its responsibility for a complete design complying with the requirements of the Contract Documents; but rather, such review shall be in furtherance of District's interests in monitoring and accepting the design as developed and issued by the Design-Build Entity, to the extent consistent with these Contract Documents. Design-Build Entity's responsibility to design and construct the Project in conformance with the Contract Documents shall be absolute.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the date noted below.

“District”

SAN MATEO COUNTY COMMUNITY COLLEGE DISTRICT, a public entity

By: _____
James W. Keller,
Deputy Chancellor

Date

“Design-Build Entity”

Name of Design-Build Entity

By: _____

Title

Date

DOCUMENT 00 61 00

CONSTRUCTION PERFORMANCE BOND

This Construction Performance Bond ("**Bond**") is dated _____, is in the penal sum of _____, and is entered into by and between the parties listed below to ensure the faithful performance of the Contract listed below. This Bond consists of this page and the Bond Terms and Conditions, Paragraphs 1 through 12, attached to this page. Any singular reference to _____ ("**Design-Build Entity**"), _____ ("**Surety**"), SAN MATEO COUNTY COMMUNITY COLLEGE DISTRICT ("**District**") or other party shall be considered plural where applicable.

DESIGN-BUILD ENTITY:

SURETY:

Name

Name

Address

Principal Place of Business

DISTRICT:

**SAN MATEO COUNTY COMMUNITY COLLEGE DISTRICT
3401 CSM Drive
San Mateo, CA 94402**

RFP No. 86662

Cañada College and College of San Mateo Roadway and Parking Lot Fixture LED Retrofit Project

At [city], California

DATED _____, 2014 in

the amount of \$ [_____]

DESIGN-BUILD ENTITY AS PRINCIPAL
Company: (Corp. Seal)

SURETY
Company: (Corp. Seal)

Signature: _____

Signature: _____

Name and Title:

Name and Title:

BOND TERMS AND CONDITIONS

1. The Design-Build Entity and the Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to District for the complete and proper performance of the Contract, which is incorporated herein by reference.
2. If the Design-Build Entity completely and properly performs all of its obligations under the Contract, the Surety and the Design-Build Entity shall have no obligation under this Bond.
3. If there is no District Default, the Surety's obligation under this Bond shall arise after:
 - 3.1 District has declared a Design-Build Entity Default under the Contract pursuant to the terms of the Contract; and
 - 3.2 District has agreed to pay the Balance of the Contract Sum to:
 - 3.2.1 The Surety in accordance with the terms of this Bond and the Contract; or
 - 3.2.2 To a Design-Build Entity selected to perform the Contract in accordance with the terms of this Bond and the Contract.
4. When District has satisfied the conditions of Paragraph 3, the Surety shall promptly (within thirty (30) days) and at the Surety's expense elect to take one of the following actions:
 - 4.1 Arrange for the Design-Build Entity, with consent of District, to perform and complete the Contract (but District may withhold consent, in which case the Surety must elect an option described in paragraphs 4.2, 4.3 or 4.4, below); or
 - 4.2 Undertake to perform and complete the Contract itself, through its agents or through independent contractors; provided, that Surety may not select Design-Build Entity or any of its members as its agent or independent contractor without District's consent; or
 - 4.3 Obtain bids from qualified Design-Build Entities acceptable to District for a contract for performance and completion of the Contract, and, upon determination by District of the lowest responsible bidder, arrange for a contract to be prepared for execution by District and the Design-Build Entity selected with District's concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Contract; and, if the Surety's obligations defined in Paragraph 6, below, exceed the Balance of the Contract Sum, then the Surety shall pay to District the amount of such excess; or
 - 4.4 Waive its right to perform and complete, arrange for completion, or obtain a new Design-Build Entity and with reasonable promptness under the circumstances, and, after investigation and consultation with District, determine in good faith the amount for which it may then be liable to District under Paragraph 6, below, for the performance and completion of the Contract and, as soon as practicable after the amount is determined, tender payment therefor to District with full explanation of the payment's calculation. If District accepts the Surety's tender under this paragraph 4.4, District may still hold Surety liable for future damages then unknown or unliquidated resulting from the Design-Build Entity Default. If District disputes the amount of Surety's tender under this paragraph 4.4, District may exercise all remedies available to it at law to enforce the Surety's liability under paragraph 6, below.
5. If the Surety does not proceed as provided in Paragraph 4, above, then the Surety shall be deemed to be in default on this Bond ten (10) days after receipt of an additional written notice from District to the Surety demanding that the Surety perform its obligations under this Bond. At all times District shall be entitled to enforce any remedy available to District at law or under the Contract including, without

limitation, and by way of example only, rights to perform work, protect work, mitigate damages, or coordinate work with other consultants or Design-Build Entities.

6. The Surety's monetary obligation under this Bond is limited by the amount of this Bond. Subject to these limits, the Surety's obligations under this Bond are commensurate with the obligations of the Design-Build Entity under the Contract. The Surety's obligations shall include, but are not limited to:
 - 6.1 The responsibilities of the Design-Build Entity under the Contract for completion of the Contract and correction of defective work;
 - 6.2 The responsibilities of the Design-Build Entity under the Contract to pay liquidated damages, and for damages for which no liquidated damages are specified in the Contract, actual damages caused by non-performance of the Contract, including but not limited to, all valid and proper back-charges, offsets, payments, indemnities, or other damages;
 - 6.3 Additional legal, design professional and delay costs resulting from the Design-Build Entity Default or resulting from the actions or failure to act of the Surety under Paragraph 4, above.
7. No right of action shall accrue on this Bond to any person or entity other than District or its heirs, executors, administrators, or successors.
8. The Surety hereby waives notice of any change, alteration or addition to the Contract or to related subcontracts, purchase orders and other obligations, including changes of time. The Surety consents to all terms of the Contract, including provisions on changes to the Contract. No extension of time, change, alteration, modification, deletion, or addition to the Contract Documents, or of the work required thereunder, shall release or exonerate Surety on this Bond or in any way affect the obligations of Surety on this Bond.
9. Any proceeding, legal or equitable, under this Bond shall be instituted in any court of competent jurisdiction where a proceeding is pending between District and the Design-Build Entity regarding the Contract, or in the courts of the County of San Mateo, or in a court of competent jurisdiction in the location in which the work is located.
10. Notice to the Surety, District or the Design-Build Entity shall be mailed or delivered to the address shown on the signature page.
11. Any provision in this Bond conflicting with any statutory or regulatory requirement shall be deemed deleted herefrom and provisions conforming to such statutory requirement shall be deemed incorporated herein.
12. Definitions.
 - 12.1 Balance of the Contract Sum: The total amount payable by District to the Design-Build Entity pursuant to the terms of the Contract after all proper adjustments have been made under the Contract, for example, deductions for progress payments made, and increases/decreases for approved modifications to the Contract.
 - 12.2 Contract: The agreement between District and the Design-Build Entity identified on the signature page, including all Contract Documents and changes thereto.
 - 12.3 Design-Build Entity Default: Material failure of the Design-Build Entity, which has neither been remedied nor waived, to perform or otherwise to comply with the terms of the Contract, including but not limited to, the provisions of Paragraph 1.13.G of Document 00700 General Conditions.

- 12.4 District Default: Material failure of District, which has neither been remedied nor waived, to pay the Design-Build Entity progress payments due under the Contract or to perform other material terms of the Contract, if such failure is the cause of the asserted Design-Build Entity Default and is sufficient to justify Design-Build Entity termination of the Contract.

END OF DOCUMENT

DOCUMENT 00 62 00

CONSTRUCTION LABOR AND MATERIAL PAYMENT BOND

This Construction Labor and Material Payment Bond ("**Bond**") is dated _____, is in the penal sum of _____, and is entered into by and between the parties listed below to ensure the payment of claimants under the Contract listed below. This Bond consists of this page and the Bond Terms and Conditions, Paragraphs 1 through 13, attached to this page. Any singular reference to _____ ("**Design-Build Entity**"), ("**Surety**"), SAN MATEO COUNTY COMMUNITY COLLEGE DISTRICT ("**District**") or other party shall be considered plural where applicable.

DESIGN-BUILD ENTITY:

SURETY:

Name

Name

Address

Principal Place of Business

DISTRICT:

**SAN MATEO COUNTY COMMUNITY COLLEGE DISTRICT
3401 CSM Drive
San Mateo, CA 94402**

**Cañada College and College of San Mateo Roadway and Parking Lot Fixture LED Retrofit Project
RFP No. 86662**

At [city], California

DATED _____, 2014 in the amount of \$ [_____]

DESIGN-BUILD ENTITY AS PRINCIPAL
Company: (Corp. Seal)

SURETY
Company: (Corp. Seal)

Signature: _____

Signature: _____

Name and Title:

Name and Title:

BOND TERMS AND CONDITIONS

1. Design-Build Entity and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to District and to Claimants, to pay for labor, materials and equipment furnished for use in the performance of the Contract, which is incorporated herein by reference.
2. With respect to District, this obligation shall be null and void if Design-Build Entity:
 - 2.1 Promptly makes payment, directly or indirectly, for all sums due Claimants, and
 - 2.2 Defends, indemnifies and holds harmless District from all claims, demands, liens or suits by any person or entity who furnished labor, materials or equipment for use in the performance of the Construction Contract, provided District has promptly notified Design-Build Entity and Surety (at the address described in Paragraph 10) of any claims, demands, liens or suits and tendered defense of such claims, demands, liens or suits to Design-Build Entity and Surety, and provided there is no District Default.
3. With respect to Claimants, this obligation shall be null and void if Design-Build Entity promptly makes payment, directly or indirectly through its subcontractors, for all sums due Claimants. However, if Design-Build Entity or its subcontractors fail to pay any of the persons named in Section 3181 of the California Civil Code, or amounts due under the Unemployment Insurance Code with respect to work or labor performed under the Contract, or for any amounts required to be deducted, withheld, and paid over to the Employment Development Department from the wages of employees of Design-Build Entity or subcontractors pursuant to Section 13020 of the Unemployment Insurance Code, with respect to such work and labor, then Surety will pay for the same, and also, in case suit is brought upon this bond, a reasonable attorney's fee, to be fixed by the court.
4. Consistent with the California Mechanic's Lien Law, Civil Code §3082, et seq., Surety shall have no obligation to Claimants under this Bond unless the Claimant has satisfied all applicable notice requirements.
5. Surety's total obligation shall not exceed the amount of this Bond, and the amount of this Bond shall be credited for any payments made in good faith by Surety under this Bond.
6. Amounts due Design-Build Entity under the Contract shall be applied first to satisfy claims, if any, under any Construction Performance Bond and second, to satisfy obligations of Design-Build Entity and Surety under this Bond.
7. District shall not be liable for payment of any costs, expenses, or attorney's fees of any Claimant under this bond, and shall have under this Bond no obligations to make payments to, give notices on behalf of, or otherwise have obligations to Claimants under this Bond.
8. Surety hereby waives notice of any change, including changes of time, to the Contract or to related subcontracts, purchase orders and other obligations.
9. Suit against Surety on this Payment Bond may be brought by any Claimant, or its assigns, at any time after the Claimant has furnished the last of the labor or materials, or both, but, per Civil Code §3249, must be commenced before the expiration of six months after the period in which stop notices may be filed as provided in Civil Code §3184.
10. Notice to Surety, District or Design-Build Entity shall be mailed or delivered to the address shown on the signature page. Actual receipt of notice by Surety, District or Design-Build Entity, however accomplished, shall be sufficient compliance as of the date received at the address shown on the signature page.

11. This Bond has been furnished to comply with the California Mechanic's Lien Law, including, but not limited to, Civil Code §§3247, 3248, et seq. Any provision in this Bond conflicting with said statutory requirements shall be deemed deleted and provisions conforming to such statutory or other legal requirements shall be deemed incorporated herein. The intent is, that this Bond shall be construed as a statutory bond and not as a common law bond.
12. Upon request by any person or entity appearing to be a potential beneficiary of this Bond, Design-Build Entity shall promptly furnish a copy of this Bond or shall permit a copy to be made.
13. DEFINITIONS
 - 13.1 Claimant: An individual or entity having a direct contract with this Design-Build Entity or with a subcontractor of Design-Build Entity to furnish labor, materials or equipment for use in the performance of the Contract, as further defined in California Civil Code §3181. The intent of this Bond shall be to include without limitation in the terms "labor, materials or equipment" that part of water, gas, power, light, heat, oil, gasoline, telephone service or rental equipment used in the Contract, architectural and engineering services required for performance of the work of Design-Build Entity and Design-Build Entity's subcontractors, and all other items for which a stop notice might be asserted. The term Claimant shall also include the Unemployment Development Department as referred to in Civil Code §3248(b).
 - 13.2 Contract: The agreement between District and Design-Build Entity identified on the signature page, including all Contract Documents and changes thereto.
 - 13.3 District Default: Material failure of District, which has neither been remedied nor waived, to pay Design-Build Entity as required by the Contract, provided that failure is the cause of the failure of Design-Build Entity to pay the Claimants and is sufficient to justify termination of the Contract.

END OF DOCUMENT

DOCUMENT 00 65 36

GUARANTY

TO THE SAN MATEO COUNTY COMMUNITY COLLEGE DISTRICT for construction of

THE CAÑADA COLLEGE AND COLLEGE OF SAN MATEO ROADWAY AND PARKING LOT FIXTURE LED RETROFIT PROJECT

SAN MATEO, CALIFORNIA.

The undersigned guarantees all construction performed on this Project and also guarantees all material and equipment incorporated therein.

Contractor hereby grants to District for a period of one year following the date of Notice of Completion, or such longer period specified in the Contract Documents, its unconditional warranty of the quality and adequacy of all of the Work including, without limitation, all labor, materials and equipment provided by Contractor and its Subcontractors of all tiers in connection with the Work.

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 this Guaranty or relieve Contractor of liability in respect to any express warranties or responsibilities for faulty materials or workmanship. Contractor shall remedy any defects in the Work and pay for any damage resulting therefrom, which shall appear within one year, or longer if specified, from the date of Final Completion.

If within one year after the date of Final Completion, or such longer period of time as may be prescribed by laws or regulations, or by the terms of Contract Documents, any Work is found to be defective, Contractor shall promptly, without cost to District and in accordance with District’s written instructions, correct such defective Work. Contractor shall remove any defective Work rejected by District and replace it with Work that is not defective, and satisfactorily correct or remove and replace any damage to other Work or the work of others resulting therefrom. 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 claims, costs, losses and damages caused by or resulting from such removal and replacement. Where Contractor fails to correct defective Work, or defects are discovered outside the correction period, District shall have all rights and remedies granted by law.

Inspection of the Work shall not relieve Contractor 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 estimated for payment, 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.

All abbreviations and definitions of terms used in this Agreement shall have the meanings set forth in the Contract Documents, including, without means of limitation, Section 01 42 00 (References and Definitions). The foregoing Guaranty is in addition to any other warranties of Contractor contained in the Contract Documents, and not in lieu of, any and all other liability imposed on Contractor under the Contract Documents and at law with respect to Contractor’s duties, obligations, and performance under the Contract Documents. In the event of any conflict or inconsistency between the terms of this Guaranty and any warranty or obligation of the Contractor under the Contract Documents or at law, such inconsistency or conflict shall be resolved in favor of the higher level of obligation of the Contractor.

Firm/Company

Address

Signature

City/State/Zip

DOCUMENT 00 65 73

AGREEMENT AND PARTIAL RELEASE OF ANY AND ALL CLAIMS

This Agreement and Partial Release of Claims (“**Agreement and Release**”), made and entered into this _____ day of _____, 200__ by and between SAN MATEO COUNTY COMMUNITY COLLEGE DISTRICT, a public entity (“**District**”), and _____, whose place of business is at _____ hereinafter called “**Design-Build Entity**”.

RECITALS

- 1. District and Design-Build Entity entered into a Contract for RFP No. 86662 in the County of San Mateo, State of California.
- 2. The Work associated with Phase ____ as set forth in the Contract has been completed.

Now, therefore, it is mutually agreed between District and Design-Build Entity as follows:

AGREEMENT

- 3. Design-Build Entity will not be assessed Liquidated Damages with regard to Phase ____ except as detailed below:

Original Contract Sum for Phase __ \$ _____

Modified Contract Sum for Phase __ \$ _____

Payment to Date for Phase __ \$ _____

Liquidated Damages for Phase __ \$ _____

Payment Due Design-Build Entity for Phase __ \$ _____

- 4. Subject to the provisions of this Agreement and Release, District shall forthwith pay to Design-Build Entity the sum of [_____] Dollars and [_____] Cents (\$[_____]) under the Contract, less any amounts withheld under the Contract or represented by any Notice to Withhold Funds on file with District as of the date of such payment.
- 5. Design-Build Entity acknowledges and hereby agrees that there are no unresolved or outstanding claims in dispute against District arising from the performance of Work for Phase __ under the Contract, except for the claims described in Paragraph 6, and continuing obligations described in Paragraph 8, below. It is the intention of the parties in executing this Agreement and Release that this Agreement and Release shall be effective as a full, final and general release of all claims, demands, actions, causes of action, obligations, costs, expenses, damages, losses and liabilities of Design-Build Entity against District and all of its agents, employees, inspectors, assignees and transferees with regard to the Work performed under the Contract for Phase __, except for the Disputed Claims set forth in Paragraph 6, and continuing obligations described in Paragraph 8, below.
- 6. The following claims submitted under Document 00 71 00, Article 1.12 are disputed (hereinafter, the “Disputed Claims”) and are specifically excluded from the operation of this Agreement and Release:

<u>Claim No.</u>	<u>Date Submitted</u>	<u>Description of Claim</u>	<u>Amount of Claim</u>
------------------	-----------------------	-----------------------------	------------------------

[Insert information, including attachment if necessary]

- 7. Consistent with California Public Contract Code, Section 7100, Design-Build Entity hereby agrees that, in consideration of the payment set forth in Paragraph 4, above, Design-Build Entity hereby releases and forever discharges District and all of its agents, employees, inspectors, assignees and transferees from any and all liability, claims, demands, actions or causes of action of whatever kind or nature arising out of or in any way concerned with regard to the Work performed under the Contract for Phase ___.
- 8. Guarantees and warranties for the Work for Phase ___, and any other continuing obligation of Design-Build Entity, shall remain in full force and effect as specified in the Contract Documents.
- 9. Design-Build Entity shall immediately defend, indemnify and hold harmless District and all of its agents, employees, inspectors, assignees and transferees from any and all claims, demands, actions, causes of action, obligations, costs, expenses, damages, losses and liabilities that may be asserted against them by any of Design-Build Entity’s suppliers and/or subcontractors of any tier and/or any suppliers to them for any and all labor, materials, supplies and equipment used, or contemplated to be used in the performance of the Contract, with regard to the Work performed under the Contract for Phase ___, except for the Disputed Claims set forth in Paragraph 6, above.
- 10. Design-Build Entity hereby waives the provisions of California Civil Code, Section 1542 which provides as follows:

A general release does not extend to claims which the creditor does not know or suspect to exist in his favor at the time of executing the release, which if known by him, must have materially affected his settlement with the debtor.
- 11. The provisions of this Agreement and Release are contractual in nature and not mere recitals and shall be considered independent and severable, and if any such provision or any part thereof shall be at any time held invalid in whole or in part under any federal, state, county, municipal or other law, ruling or regulations, then such provision, or part thereof shall remain in force and effect only to the extent permitted by law, and the remaining provisions of this Agreement and Release shall also remain in full force and effect, and shall be enforceable.
- 12. All rights of District shall survive completion of the Work or termination of Contract, and execution of this Release.

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

SAN MATEO COUNTY COMMUNITY COLLEGE
DISTRICT

DESIGN-BUILD ENTITY

BY: _____

BY: _____

Its: _____

Its: _____

END OF DOCUMENT

DOCUMENT 00 65 74
AGREEMENT AND RELEASE OF ANY AND ALL CLAIMS

This Agreement and Partial Release of Claims ("Agreement and Release"), made and entered into this _____ day of _____, 2014 by and between SAN MATEO COUNTY COMMUNITY COLLEGE DISTRICT, a public entity ("District"), and _____, whose place of business is at _____ hereinafter called "Design-Build Entity".

RECITALS

- 1. District and Design-Build Entity entered into a Contract for RFP No. 86662 in the County of San Mateo, State of California.
2. The Work as set forth in the Contract has been completed.

Now, therefore, it is mutually agreed between District and Design-Build Entity as follows:

AGREEMENT

- 3. Design-Build Entity will not be assessed Liquidated Damages except as detailed below:

Table with 2 columns: Description and Amount. Rows include Original Contract Sum, Modified Contract Sum, Payment to Date, Liquidated Damages, and Payment Due Design-Build Entity.

- 4. Subject to the provisions of this Agreement and Release, District shall forthwith pay to Design-Build Entity the sum of [] Dollars and [] Cents (\$[]) under the Contract, less any amounts withheld under the Contract or represented by any Notice to Withhold Funds on file with District as of the date of such payment.

- 5. Design-Build Entity acknowledges and hereby agrees that there are no unresolved or outstanding claims in dispute against District arising from the performance of Work under the Contract, except for the claims described in Paragraph 6, and continuing obligations described in Paragraph 8, below.

- 6. The following claims submitted under Document 00 71 00, Article 1.12 are disputed (hereinafter, the "Disputed Claims") and are specifically excluded from the operation of this Agreement and Release:

Table with 4 columns: Claim No., Date Submitted, Description of Claim, Amount of Claim

[Insert information, including attachment if necessary]

- 7. Consistent with California Public Contract Code, Section 7100, Design-Build Entity hereby agrees that, in consideration of the payment set forth in Paragraph 4, above, Design-Build Entity hereby releases and forever discharges District and all of its agents, employees, inspectors, assignees and transferees from any and all liability, claims, demands, actions or causes of action of whatever kind or nature arising out of or in any way concerned with the Work under the Contract.
- 8. Guarantees and warranties for the Work, and any other continuing obligation of Design-Build Entity, shall remain in full force and effect as specified in the Contract Documents.
- 9. Design-Build Entity shall immediately defend, indemnify and hold harmless District and all of its agents, employees, inspectors, assignees and transferees from any and all claims, demands, actions, causes of action, obligations, costs, expenses, damages, losses and liabilities that may be asserted against them by any of Design-Build Entity's suppliers and/or subcontractors of any tier and/or any suppliers to them for any and all labor, materials, supplies and equipment used, or contemplated to be used in the performance of the Contract, except for the Disputed Claims set forth in Paragraph 6, above.
- 10. Design-Build Entity hereby waives the provisions of California Civil Code, Section 1542 which provides as follows:

A general release does not extend to claims which the creditor does not know or suspect to exist in his favor at the time of executing the release, which if known by him, must have materially affected his settlement with the debtor.
- 11. The provisions of this Agreement and Release are contractual in nature and not mere recitals and shall be considered independent and severable, and if any such provision or any part thereof shall be at any time held invalid in whole or in part under any federal, state, county, municipal or other law, ruling or regulations, then such provision, or part thereof shall remain in force and effect only to the extent permitted by law, and the remaining provisions of this Agreement and Release shall also remain in full force and effect, and shall be enforceable.
- 12. All rights of District shall survive completion of the Work or termination of Contract, and execution of this Release.

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

SAN MATEO COUNTY COMMUNITY COLLEGE
DISTRICT

DESIGN-BUILD ENTITY

BY: _____

BY: _____

Its: _____

Its: _____

END OF DOCUMENT

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GENERAL CONDITIONS**1. GENERAL****A. Documents**

Contract Documents are complementary; what is called for by one is as binding as if called for by all. Contract Documents shall not be construed to create a contractual relationship of any kind between (1) Architect/Engineer or any District Representative and Design-Build Entity; (2) District and/or its representatives and (except as provided in Article 13 below) a Subcontractor, sub-Subcontractor, or supplier of any Project labor, materials, or equipment; or (3) between any persons or entities other than District and Design-Build Entity.

B. Exercise of Contract Responsibilities

In exercising its responsibilities and authorities under the Contract Documents, District does not assume any duties or responsibilities to any Subcontractor or supplier and does not assume any duty of care to Design-Build Entity, Design-Build Entity's Subcontractors or suppliers. Except as expressly set forth in the Contract Documents, in exercising their respective responsibilities and authorities under the Contract Documents, neither Architect/Engineer nor any District Representative assume any duties or responsibilities to any Subcontractor, sub-Subcontractor or supplier nor assume any duty of care to Design-Build Entity or any Subcontractor, sub-Subcontractor or supplier.

C. Defined Terms

Administration of design and construction shall include the following delineations of responsibilities pursuant to Part 1, Title 24, California Code of Regulations. Design-Build Entity shall perform as required under Section 4-343, including, but not limited to submitting verified reports per sections 4-336 and 4-343. All abbreviations and definitions of terms used and not otherwise defined in this Document 00 71 00 are set forth in Section 01 42 00 (References and Definitions). This Document 00 71 00 subdivides at first level into Articles, then into paragraphs, and then into subparagraphs.

D. Description Of Work

1. Design-Build Entity shall provide a complete, operable and maintainable Project in accordance with the Contract Documents, including providing, furnishing, and performing all Services and providing and furnishing all necessary supplies, housing, materials and equipment, and all necessary supervision, labor, and services required for the engineering, design, procurement, quality assurance and inspection, construction, installation, startup, checkout, testing, site cleanup and for the training of District's personnel, all in conformity with the requirements, legal requirements, criteria, performance guarantees, and warranties set forth in the Contract Documents, for a complete and fully operable Project in full conformance with Contract requirements. The signature and seal of a licensed engineer(s) or architect(s) shall be obtained as necessary for compliance with the legal requirements.

E. All-Inclusive Design Build Obligation

1. Without limiting the generality of paragraph 1.D hereof, Design-Build Entity shall provide, at a minimum, the following Services and materials and equipment as further specified and described in Section 01 10 00 (Summary of Work) and Section 01 10 01 (Summary of Work - Design Services) provided, however, that these sections shall not be construed in any way to limit Design-Build Entity's obligations hereunder to design, engineer, furnish, construct, checkout, startup, and (except as otherwise provided in the Contract Documents) test a complete, operable and maintainable Project in accordance with the provisions of the Contract Documents.
2. Design-Build Entity shall provide all engineering services and design, which will set forth in detail with specifications, drawings and requirements for the procurement of the materials and equipment and for the construction of the entire Project. Design-Build Entity shall furnish the services of all personnel, including supervisors, engineers, designers and draftsmen necessary for the preparation of all Drawings and Specifications required for the Work. The design shall include all architectural, civil, structural, mechanical, electrical, instrumentation and control work.

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3. Design-Build Entity shall provide all equipment and materials and furnish the services of all supervision, buyers, inspectors, expeditors, and other personnel necessary to procure all materials and equipment for the construction of the Project. Design-Build Entity shall provide, install, complete and pay for all labor, materials and equipment, tools, supplies, construction equipment and machinery, construction utilities (including all water, power and sanitary facilities), transportation (including road or other infrastructure and improvements on and off the Site), customs clearance, quality assurance, and other facilities and services (including any temporary or consumable materials, water, fuels, and electricity necessary for the proper execution and completion of the Work, including any of the utilities, as required). Design-Build Entity shall maintain all materials and equipment in accordance with manufacturer's requirements while such materials and equipment are in transit or care and custody of the Design-Build Entity. Without limiting the generality of the foregoing, Design-Build Entity shall provide any and all construction required for the temporary upgrading of any public or private road which is inadequate for the performance of the Work, temporarily relocate any interference in public or private roadways necessary for the transportation of equipment and materials, and repair all excessive damage to, or deterioration (other than fair wear and tear) of, any public or private road which arises out of the performance of the Work.
4. Design-Build Entity shall supervise and direct the Work, and shall furnish the services of all supervisors, foremen, skilled and unskilled labor, and all other personnel in sufficient quantities and with sufficient skills necessary to perform the Services in accordance with the Contract Documents. At District's request, Design-Build Entity shall replace, at Design-Build Entity's expense, any individual if it is determined by District and Design-Build Entity that such individual's continued presence would jeopardize the quality or timely completion of the Work. Whenever required by applicable laws or the Contract Documents, Design-Build Entity shall employ licensed personnel as necessary to perform engineering, design, architectural, or other professional services in the performance of the Work.
5. All such professional services shall be performed with the degree of care, skill, and responsibility customary among such licensed personnel that specialize in work similar to the Work of this Contract. Design-Build Entity shall be responsible for all labor relations matters relative to the Work on the Site and shall at all times use all reasonable efforts to maintain harmony among all workers employed in connection with the Work on the Site. Design-Build Entity shall adopt and implement reasonable policies and practices designed to avoid work stoppage, slow downs, disputes and strikes.
6. Design-Build Entity shall be solely responsible for all construction means, methods, techniques, sequences, and procedures and for coordinating all portions of the Work under the Contract Documents, and District shall not be responsible for or exercise any control over the actions or omissions of Design-Build Entity, any supplier, or any of their employees or agents performing any of the Work or Design-Build Entity's warranty obligations. Design-Build Entity shall prosecute the Work continuously and diligently and complete the Work in accordance with all requirements of the Contract Documents.
7. Design-Build Entity shall coordinate ingress and egress to and from the Site so as to minimize disruption to the Work and to traffic in the vicinity of the Site.
8. Design-Build Entity shall be responsible for the layout of the Work and shall perform all necessary surveying during the construction of the Projects. The accuracy of all grades, elevations, alignments, and plumbing of any structures and the location of all facilities described in the final plans and specifications shall be the responsibility of the Design-Build Entity. Design-Build Entity shall preserve all permanent survey construction monuments and benchmarks. Prior to the final completion date, Design-Build Entity shall accurately correct all Project documents to as-built conditions and deliver to District these as-built documents in accordance with the Contract Documents. Such documents shall show the location of the Project and shall show all related easements, improvement, utilities and rights of way above and below ground, on and off the Site, as of the date of delivery of such documents. Such documents shall also show the dimensions and the distances to the nearest benchmarks.
9. Design-Build Entity shall provide appropriate installation and startup representatives from suppliers of major equipment and control systems, all necessary supervising personnel, all equipment, tools, construction and temporary material, and all labor for checkout, startup and testing. Design-Build Entity shall be responsible for checkout, startup and testing of the Project and shall carry out those activities in accordance with all applicable codes and legal requirements, startup and checkout requirements and procedures as set forth in the Contract Documents.

DOCUMENT 00 71 00

10. Except for safety and warning signs, Design-Build Entity shall not install any signs on the Site without the express written consent of District.
11. Design-Build Entity shall be responsible for Site security until Final Completion, or termination of the Work. Such security shall include, to the extent reasonably necessary, barriers, lighting, controlled access, and other measures required to prevent vandalism, theft, and danger to personnel, the Project, materials and equipment.
12. Design-Build Entity shall prepare or cause to be prepared and shall furnish to District all drawing logs, drawings, manufacturer's drawings and data, supplier manuals and operating manuals in accordance with the Contract Documents.
13. Design-Build Entity shall ensure that District and its representatives shall, at all times, have access to the Project for all purposes. In order to allow District and its representatives to be present, Design-Build Entity shall give District at least three (3) days advance notice of any system or equipment checkout or testing. If District desires access to any places where work is being performed or from which materials and equipment are being obtained, Design-Build Entity shall provide or arrange reasonable access thereto and shall provide District reasonable advanced notice of any factory tests or other off site tests. Design-Build Entity shall maintain the Site in a safe condition to permit District and any person authorized in writing by District to inspect and review all field work during working hours, including materials and equipment, installation, calibration, startup and testing.
14. As part of the procurement of equipment, Design-Build Entity shall provide to District a list of recommended operating spare parts, which list shall include all relevant costs and ordering lead time information with terms and conditions. If requested, Design-Build Entity shall procure such operating spare parts from Suppliers, as requested by District, on behalf of District. The cost of such operating spare parts shall be covered by change order.
15. When any equipment or portion of the Work is damaged, Design-Build Entity shall inform District as soon as possible and provide District a damage report detailing such occurrence, any required repairs, and the estimated duration of such repairs.
16. Design-Build Entity shall provide to District all tests and measurements, laboratory analyses, and reports made or prepared in connection with the Work.
17. Design-Build Entity shall communicate and coordinate with DSA regarding Project-related matters, including without limitation Drawings, Specifications, inspections and Change Orders, sufficiently and at such necessary times to permit DSA to respond in a timely manner, taking into account DSA's customary response times. Design-Build Entity shall be solely responsible for any delays or increased costs due to late DSA action resulting from Design-Build Entity's insufficient or untimely communication.

2. PROPOSAL PERIOD INVESTIGATIONS AND SUBCONTRACTORS

A. Investigation Prior To Proposing

1. Prior to submitting its Proposal, Design-Build Entity must investigate fully the Work of the Contract. Design-Build Entity must visit the Site, examine thoroughly and understand fully the nature and extent of the Contract Documents, Work, Site, locality, actual conditions and as-built conditions, and all other information made available for preparing Proposals. Design-Build Entity's investigation shall include, but is not limited to, a thorough examination of all reports of exploration and tests of subsurface conditions, as-built drawings, drawings, product specification(s) or reports, available for Bidding purposes, of physical conditions, including Underground Facilities and information identified in Document 00 31 19 (Geotechnical Data and Existing Conditions) and/or Document 00 21 26 (Hazardous Materials Surveys) (if used), or which may appear in the Contract Documents, and all local conditions, and federal, state and local laws and regulations that in any manner may affect cost, progress, performance or furnishing of Work or which relate to any aspect of the means, methods, techniques, sequences or procedures of construction to be employed by Design-Build Entity and safety precautions and programs incident thereto. Design-Build Entity shall completely and thoroughly correlate all such information and consider such information fully, prior to and as a condition of submitting its Proposal. Design-Build Entity shall make inquiry as required in Document 00 31 19 (Geotechnical Data and Existing Conditions.).

DOCUMENT 00 71 00

2. Prior to submitting its Proposal, Design-Build Entity shall take care to note the existence and potential existence of Underground Facilities, in particular, above and below grade structures, drainage lines, storm drains, sewers, water, gas, electrical, chemical, hot water, and other similar items and utilities. Design-Build Entity shall carefully consider all supplied information, request additional information Design-Build Entity may deem necessary, and visually inspect the Site for above ground indications of Underground Facilities (such as, for example not by way of limitation, the existence of existing service laterals, appurtenances or other types of utilities, indicated by the presence of an underground transmission main or other visible facilities, such as buildings, new asphalt, meters and junction boxes, on or adjacent to the Site.)
3. 3. Prior to submitting its Proposal, Design-Build Entity must correlate its experience, knowledge and the results of its required investigation with the terms and conditions of the Contract Documents, and must give District prompt written notice of all conflicts, errors, ambiguities, or discrepancies of any type, that it may discover in or among the Contract Documents, as-built drawings (if any) and/or actual conditions. Design-Build Entity shall give this notice during the Proposal period and submission of a Proposal indicates Design-Build Entity's agreement that District responded to the notice through Addenda issued by District which is acceptable to Design-Build Entity.
4. Prior to submitting its Proposal, Design-Build Entity must consider fully the fact that information supplied regarding existing Underground Facilities at or contiguous to the Site is in many cases based on information furnished to District by others (e.g., the builders of such Underground Facilities or others), and that due to their age or their chain of custody since preparation, may not meet current industry standards for accuracy. Design-Build Entity must also consider local underground conditions and typical practices for Underground Facilities, either through its own direct knowledge or through its subcontractors, and fully consider this knowledge in assessing the existing information and the reasonableness of its reliance.
5. Prior to submitting its Proposal, Design-Build Entity shall conduct (or request that District have conducted) any such additional or supplementary examinations, investigations, explorations, tests, studies and data concerning conditions (surface, subsurface, and Underground Facilities) at or contiguous to the Site or otherwise, which may affect cost, progress, performance or furnishing of Work or which relate to any aspect of the means, methods, techniques, sequences or procedures of construction to be employed by Design-Build Entity and safety precautions and programs incident thereto or which Design-Build Entity deems necessary to determine its Proposal for performing and furnishing the Work in accordance with the time, price and other terms and conditions of Contract Documents.
6. Prior to submitting its Proposal, Design-Build Entity may rely on District supplied information regarding existing conditions only where such conditions are underground and not subject to reasonable verification. If existing information supplied by District indicates a discrepancy or a substantial risk of inaccuracy or omission, then Design-Build Entity must request specific additional information. Design-Build Entity shall advise District in writing during the Proposal period of any questions, suppositions, inferences or deductions Design-Build Entity may have, for District's review and response by Addenda, and may not assert any such matters later that were not brought forth during the Proposal period.
7. During performance of the Contract, Design-Build Entity will be charged with knowledge of all information that it should have learned in performing this required pre-Proposal investigation, and shall not be entitled to change orders (time or compensation) due to information or conditions that Design-Build Entity should have known as a part of this pre-Proposal investigation.

B. Supplied Information on Underground Existing Conditions

1. Regarding Underground Facilities shown in the Contract Documents or supplied through Document 00 31 19 (Geotechnical Data and Existing Conditions), District has compiled this information in good faith, relying on its records and third party records. Because of the nature and location of District and the Project, the existence of Underground Facilities is deemed inherent in the Work of the Contract, as is the fact that Underground Facilities are not always accurately shown or completely shown on as-built records, both as to their depth and location. In Article 14 of this Document 00 71 00, this Contract establishes a heightened standard for claims involving Underground Facilities.

DOCUMENT 00 71 00

Design-Build Entity shall consider this fact in its Proposal and in its planning and execution of the Work involving Underground Facilities.

2. Regarding subsurface conditions other than Underground Facilities, shown on the Contract Documents or supplied in Document 00 31 19 (Geotechnical Data and Existing Conditions), Design-Build Entity may rely only upon the general accuracy of actual reported depths, actual reported character of materials, actual reported soil types, actual reported water conditions, or actual obstructions shown or indicated in the Contract Documents. District is not responsible for the completeness of any subsurface condition information for preparing its Proposal, design or construction, Design-Build Entity's conclusions or opinions drawn from any subsurface condition information, or subsurface conditions that are not specifically shown. (For example, District is not responsible for soil conditions in areas contiguous to areas where a subsurface condition is shown.)

C. Supplied Information on Above Ground Existing Conditions

1. Regarding aboveground and as-built conditions shown on the Contract Documents or supplied through Document 00 31 19 (Geotechnical Data and Existing Conditions), such information has been compiled in good faith, however, Design-Build Entity must independently verify such information. District does not expressly or impliedly warrant or represent that information as to aboveground conditions or as-built conditions indicated in the Contract Documents or Document 00 31 19, is correctly shown or indicated, or otherwise complete for construction purposes.
2. As a condition to submitting its Proposal, Design-Build Entity shall verify by independent investigation all such aboveground and as-built conditions, and bring any discrepancies to District's attention through written question. In submitting its Proposal, Design-Build Entity shall rely on the results of its own independent investigation and shall not rely on District-supplied information regarding aboveground conditions and as-built conditions, and Design-Build Entity shall accept full responsibility for its verification work sufficient to complete the Work as intended.

D. Subcontractors

1. All subcontracts that were not listed by the Design-Build Entity in its Proposal shall be awarded by the Design-Build Entity in accordance with the Contract Documents.
2. Design-Build Entity shall, at a minimum, do all of the following:
 - a. Provide public notice of the availability of work to be subcontracted.
 - b. Provide a fixed date and time on which the subcontracted work will be awarded.
3. In a contract between Design-Build Entity and a Subcontractor, and in a contract between a Subcontractor and any subcontractor thereunder, the percentage of the retention proceeds withheld may not exceed the percentage specified in the Contract Documents. If Design-Build Entity provides written notice to any Subcontractor who is not a member of Design-Build Entity, prior to or at the time the Subcontractor's bid is requested, that a bond may be required and the Subcontractor subsequently is unable or refuses to furnish a bond to Design-Build Entity, then Design-Build Entity may withhold retention proceeds in excess of the percentage specified in the Contract Documents from any payment made by Design-Build Entity to the Subcontractor.
4. All Subcontractors bidding on subcontracts shall be afforded the protections contained in Chapter 4 (commencing with Section 4100) of Part 1 of Division 2 of the Public Contract Code. Additionally, without limiting the forgoing, without District's written approval, Design-Build Entity shall not substitute any other person or firm in place of any Subcontractor (whether to perform Work at the Site, Services, or otherwise) listed in the Proposal, or substitute any key personnel identified in Design-Build Entity's Statement of Qualifications. Subcontractors shall not assign or transfer their subcontracts or permit them to be performed by any other person or entity without District's written approval. At District's request, Design-Build Entity shall provide District with a complete copy of all executed subcontracts or final commercial agreements with Subcontractors and/or suppliers.
5. Subcontract agreements shall preserve and protect the rights of District under the Contract Documents so that subcontracting will not prejudice such rights. To the extent of the Work to be performed by a Subcontractor, Design-Build Entity shall require the Subcontractor's written agreement (1) to be bound to the terms of Contract Documents and (2) to assume vis-à-vis Design-Build Entity all the obligations and responsibilities that Design-Build Entity assumes toward District under the Contract Documents. (These agreements include for example, and not by way of

DOCUMENT 00 71 00

limitation, all warranties, claims procedures and rules governing submittals of all types to which Design-Build Entity is subject under the Contract Documents.)

6. Design-Build Entity shall provide for the assignment to District of all rights any Subcontractor may have against any manufacturer, supplier, or distributor for breach of warranties and guaranties relating to the Work performed by the Subcontractor under the Contract Documents.
7. District shall be deemed to be an intended third-party beneficiary of all Subcontracts (of any tier) for the provision of labor, services, supplies or material to the Project, and each such agreement shall so provide.

3. CONTRACT AWARD AND COMMENCEMENT OF THE WORK

A. Time Allowances For Performance Of Contract Documents

1. When Design-Build Entity and District have signed the Contract Documents, District will serve a Notice to Proceed upon Design-Build Entity to that effect, either by depositing notice in a post office or post office box regularly maintained by United States Postal Service in a pre-paid wrapper directed to Design-Build Entity at legal address or (at District's option) by delivery by other means authorized for notices under the Contract Documents at legal address.
2. The start date for Contract Time shall be on the date indicated in the applicable Notice to Proceed. If no date is indicated, the start date for Contract Time shall be the fifth Day from the date that Design-Build Entity receives, by hand or overnight delivery or facsimile transmission, District's written Notice to Proceed, unless the Notice to Proceed is served by mail only, in which case the start date for Contract Time shall be the fifth Day following the mailing date.
3. The total number of Days for completion of the Work under the Contract Documents shall be as provided in Document 00 52 00 (Agreement).

B. Commencement Of Work

1. The Contract Time will commence to run on the 30th Day after the issuance of the Notice of Award or, if a Notice to Proceed is given, on the date indicated in the Notice to Proceed. District may give a Notice to Proceed at any time within 30 Days after the Notice of Award. Design-Build Entity shall not do any Work at the Site prior to the date on which the Contract Time commences to run or prior to receiving a Notice to Proceed with Construction..

4. BONDS AND INSURANCE

A. Bonds

1. When notified by the District that Design-Build Entity has been awarded the contract, Design-Build Entity shall, within ten (10) days, file with the District the following bonds:
 - a. Corporate surety bond, in the form of Document 00 61 00 (Construction Performance Bond), in the penal sum of 100% of the Design-Build Entity's Proposal as accepted, to guaranty faithful performance of the Work; and
 - b. Corporate surety bond, in the form of Document 00 62 00 (Construction Labor and Material Payment Bond), in the penal sum of 100% of the Design-Build Entity's Proposal as accepted, to guaranty payment of wages for services engaged and of bills contracted for materials, supplies, and equipment used in performance of Contract Documents.
2. Sureties shall be satisfactory to District. Corporate sureties on these bonds and on bonds accompanying Proposals shall be duly licensed to do business in the State of California and shall have an A.M. Best Company financial rating of A-IX or better.

B. Insurance

See Documents 00 73 17 (Owner Controlled Insurance Program), incorporated herein by this reference.

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5. TECHNICAL SPECIFICATIONS AND REQUIREMENTS**A. Intent**

1. Technical Specifications and Requirements are intended to describe a functionally complete and operable Project (and all parts thereof) to be designed and constructed in accordance with the requirements of Contract Documents. Design-Build Entity shall perform any work, provide services and furnish any materials or equipment that may reasonably be inferred from the requirements of Contract Documents or from prevailing custom or trade usage as being required to produce this intended result. Design-Build Entity shall interpret words or phrases used to describe work (including services), materials or equipment, that have well-known technical or construction industry or trade meaning in accordance with that meaning. Drawings' intent specifically includes the intent to depict construction that complies with all applicable laws, codes and standards, including without limitation Title 24 of the California Code of Regulations. The Sections of the Technical Specifications and Requirements and the identification on any Document Drawings shall not control the Design-Build Entity in dividing the Work among Subcontractors or suppliers or delineating the Work to be performed by any specific trade.
2. As part of the "Work," Design-Build Entity shall provide all design services by licensed professionals, labor, materials, equipment, machinery, tools, facilities, services, employee training and testing, hoisting facilities, shop drawings, storage, testing, security, transportation, disposal, the securing of all necessary or required field dimensions, the cutting or patching of existing materials, notices, permits, documents, reports, agreements and any other items required or necessary to timely and fully complete Work described and the results intended by Contract Documents and, in particular, Technical Specifications and Requirements. Specification Sections and the identification on any Drawings shall not control Design-Build Entity in dividing Work among Subcontractors or suppliers or delineating the Work to be performed by any specific trade.
3. Design-Build Entity shall perform reasonably implied parts of Work as "incidental work" although absent from the Technical Specifications and Requirements. Incidental work includes any work not shown on Drawings or described in Specifications that is necessary or normally or customarily required as a part of the Work shown on Drawings or described in Specifications. Incidental work includes any Work necessary or required to make each installation satisfactory, legally operable, functional, and consistent with the intent of Technical Specifications and Requirements or the requirements of Contract Documents including required tasks to be performed under the Specifications. Design-Build Entity shall perform incidental work without extra cost to District. Incidental work shall be treated as if fully described in Specifications and shown on Drawings, and the expense of incidental work shall be included in price Proposal and Contract Sum.

B. Drawing Details and Specification Descriptions

1. The Technical Specifications and Requirements are issued by District with the Request for Proposal to Design-Build Entities. Technical Specifications and Requirements were prepared by District to establish the design intent and the minimum requirements for the quality, functionality, and performance to be delivered by the project. Technical Specifications and Requirements and any addenda will be used to confirm that Design-Build Entity-prepared Schematic Design Phase documents, Design Development Documents and Construction Documents are in conformance with the design intent and the minimum requirements for the quality and type of materials to be used in the Project.
2. Design-Build Entity has full "turnkey" responsibility to deliver the fully functional, operational Project described in Technical Specifications and Requirements as referenced in the Contract Documents.

C. Interpretation of Technical Specifications and Requirements

Should any discrepancy appear or any misunderstanding arise as to the import of anything contained in Technical Specifications and Requirements, or should Design-Build Entity have any questions or requests relating to Technical Specifications and Requirements, Design-Build Entity shall refer the matter to District, in writing. District will issue with reasonable promptness written responses, clarifications or interpretations as District may determine necessary, which shall be consistent with the intent of and be reasonably inferable from

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Contract Documents. Such written clarifications or interpretations shall be binding upon Design-Build Entity. If Design-Build Entity believes that a written response, clarification or interpretation justifies an adjustment in the Contract Sum or Contract Time, Design-Build Entity shall give District prompt written notice as provided in Section 01 26 00 (Modification Procedures). If the parties are unable to agree to the amount or extent of the adjustment, if any, then Design-Build Entity shall perform the Work in conformance with District's response, clarification, or interpretation and may make a written claim for the adjustment as provided in Article 12 of this Document 00 71 00.

D. Checking of Drawings

Before undertaking each part of Work, Design-Build Entity shall carefully study and compare Contract Documents and check and verify pertinent figures shown in the Contract Documents and all applicable field measurements. Design-Build Entity shall be responsible for any errors that might have been avoided by such comparison. Figures shown on Drawings shall be followed; Design-Build Entity shall not scale measurements. Design-Build Entity shall promptly report to District, with copies to the Inspector, in writing, any conflict, error, ambiguity or discrepancy that Design-Build Entity may discover. Design-Build Entity shall obtain a written interpretation or clarification from District before proceeding with any Work affected thereby. Design-Build Entity shall provide District and Inspector with a follow-up correspondence every ten days until it receives a satisfactory interpretation or clarification.

E. Standards to Apply Where Specifications are not Furnished

1. As set forth in Part 1, Title 24, California Code of Regulations, no modification or deviation from the Contract Documents will be permitted. Design-Build Entity must perform design and construction Work in strict accordance with Contract Documents. Design-Build Entity shall review drawings and specifications developed by its subconsultants and design-build subcontractors under this Contract for compliance with the Contract Documents prior to submission to and approval by DSA. No order for any alteration, modification or extra which shall increase or decrease the cost of Work shall be valid unless the resulting increase or decrease in price shall have been agreed upon in writing, and the order signed by the Design-Build Entity, and certified by the authorized officer representing District. As appropriate, Change Orders changing the approved drawings and technical specifications are subject to approval by the DSA under the procedures prescribed in Section 4-338, Part 1, Title 24, California Code of Regulations.
2. District may order that locations, lines and grades for Work vary from those shown on Drawings. Changes may be made in location, lines or grades for Work under any item of Contract. No extra payment in addition to unit price fixed in Contract for Work under respective items will be allowed on account of variations from Drawings in unit price items. In lump sum contracts, or where there are no unit price items covering Work affected by variations of locations, lines or grades, all changes in the Contract Documents will be made in accordance with Article 14 of this Document 00 71 00.

F. Deviation from Specifications and Drawings

1. Design-Build Entity shall perform Work in accordance with the Technical Specifications and Requirements, and approved Drawings and Specifications. Design-Build Entity may deviate from Drawings or the dimensions given in the Drawings, and may deviate from the Specifications, only upon District's advance written approval of the proposed deviation.
2. District may order that locations, lines and grades for Work vary from those shown on Drawings. Changes may be made in locations, lines or grades for Work under any item of Contract Documents. No payment in addition to unit price fixed in the Contract Documents for Work under respective items will be allowed on account of variations from Drawings in unit price items. In lump sum contracts, or where there are no unit price items covering Work affected by variations of locations, lines or grades, all changes in the Contract Documents will be made as set forth in Article 14 of this Document 00 71 00.

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G. Precedence Of Documents

1. In the case of discrepancy or ambiguity in the Contract Documents, the following order of precedence shall prevail:
 - a. Modifications in inverse chronological order (i.e., most recent first), and in the same order as specific portions they are modifying;
 - b. Document 00 52 00 (Agreement), and terms and conditions referenced therein;
 - c. Document 00 73 00 (Supplementary Conditions) and any other Supplementary Conditions;
 - d. Document 00 71 00 (General Conditions);
 - e. Document 99 00 01 Technical Specifications and Requirements;
 - g. Drawings;
 - h. Written numbers over figures, unless obviously incorrect;
 - i. Figured dimensions over scaled dimensions;
 - j. Large-scale Drawings over small-scale Drawings.
2. Any conflict between Drawings and Technical Specifications and Requirements will be resolved in favor of the document of the latest date (i.e., the most recent document), and if the dates are the same or not determinable, then in favor of Specifications.
3. Any conflict between a bill or list of materials shown in the Contract Documents and the actual quantities required to complete Work required by Contract Documents, will be resolved in favor of the actual quantities.
4. In the event the Specifications include divisions above Division 60 (e.g., Division 60 and above), then such divisions shall be included within the Contract Documents unless identified otherwise.
5. Any conflict between echnical Specifications and Requirements and Construction Documents will be resolved in favor of whichever provides the greatest quality, performance and protection to District.

H. Ownership And Use Of Drawings, Specifications And Contract Documents

1. Drawings and Specifications prepared under this Contract were prepared for use for Work of Contract Documents only. No part of the Design-Build Entity's drawings and specifications or of any other Contract Documents shall be used for any other construction or for any other purpose except with the written consent of District.
2. Any unauthorized use of said documents is prohibited. Consistent with Education Code Section 17316, any interest (including copyright interests) of Design-Build Entity or its contractors or sub-consultants (together, "Sub-consultants"), in studies, reports, memoranda, computational sheets, drawings, plans or any other documents (including electronic media) prepared by Design-Build Entity or its Sub-consultants in connection with the Services, shall become the property of District. To the extent permitted by Title 17 of the United States Code, work product produced under the Contract Documents shall be deemed works for hire and all copyrights in such works shall be the property of District. In the event that it is ever determined that any works created by Design-Build Entity or its Sub-consultants under this Agreement are not works for hire under U.S. law, Design-Build Entity hereby assigns to District all copyrights to such works. With District's prior written approval, Design-Build Entity may retain and use copies of such works for reference and as documentation of experience and capabilities. Design-Build Entity shall, however, retain the copyright in its standard details, and grants District an unlimited license to use such details for the purposes stated in the Contract Documents. Should District desire to reuse any of the items specified above and not use the services of Design-Build Entity, then the District agrees to assume any and all obligations for their reuse and, if applicable, process the same through the DSA, and District releases Design-Build Entity and its Sub-consultants from liability associated with the reuse.

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6. CONSTRUCTION BY DISTRICT OR BY SEPARATE CONTRACTORS**A. District's Right To Perform Construction And To Award Separate Contracts**

District may perform with its own forces, construction or operations related to the Project. District may also award separate contracts in connection with other portions of the Project or other construction or operations, on the Site or areas contiguous to the Site, under conditions similar to these Contract Documents, or may have utility owners perform other work. When separate contracts are awarded for different portions of the Project or other construction or operations on the Site, the term "Design-Build Entity" in these Contract Documents shall mean the Design-Build Entity herein.

B. Mutual Responsibility

1. Design-Build Entity shall afford all other contractors, utility owners and District (if District is performing work with its own forces), proper and safe access to the Site, and reasonable opportunity for the installation and storage of their materials. Design-Build Entity shall ensure that the execution of its Work properly connects and coordinates with others' work, and shall cooperate with them to facilitate the progress of the Work.
2. Design-Build Entity shall coordinate its Work with the work of other separate contractors, District, and utility owners. Design-Build Entity shall hold coordination meetings with other contractors, District and its representatives, and utility owners as required by Section 01 31 19 (Project Meetings).
3. Unless otherwise provided in the Contract Documents, Design-Build Entity shall do all cutting, fitting and patching of the Work that may be required to make its several parts come together properly and integrate with such other work. Design-Build Entity shall not endanger any work of other separate contractors, District or utility owners by cutting, excavating or otherwise altering their work and will only cut or alter their work with the written consent of District and the others whose work will be affected.
4. Design-Build Entity's duties and responsibilities under Article 6 of this Document 00 71 00 are for the benefit of District and also for the benefit of such other contractors and utility owners working at the Site to the extent that there are comparable provisions for the benefit of Design-Build Entity in the direct contracts between District and such other contractors and utility owners.
5. To the extent that any part of Design-Build Entity's Work is to interface with work performed or installed by other contractors or utility owners, Design-Build Entity shall inspect and measure the in-place work. Design-Build Entity shall promptly report to District in writing any defect in in-place work that will impede or increase the cost of Design-Build Entity's interface unless corrected. District will require the contractor responsible for the Defective Work to make corrections so as to conform to its contract requirements, or, if the defect is the result of an error or omission in the Contract Documents, issue a Change Order. If Design-Build Entity fails to measure, inspect and/or report to District in writing defects that are reasonably discoverable, Design-Build Entity shall bear all costs of accomplishing the interface acceptable to District. This provision shall be included in any and all other contracts or subcontracts for Work to be performed where such a conflict could exist.

C. District Authority Over Coordination

1. District will have authority over coordination of the activities of multiple contractors in cases where District performs work with its own forces or contracts with others for the performance of other work on the Project, or utilities work on the Site. District may at any time and in its sole discretion, designate a person or entity other than District to have authority over the coordination of the activities among the various contractors. District's authority with respect to coordination of the activities of multiple contractors and utility owners shall not relieve Design-Build Entity of its obligation to other contractors and utility owners to coordinate its Work with other contractors and utility owners as specified in paragraph 6.B of this Document 00 71 00. Design-Build Entity shall promptly notify District in writing when another Design-Build Entity on the Project fails to coordinate its work with the Work of Contract Documents.
2. Design-Build Entity shall suspend any part of the Work or carry on the same in such manner as directed by District when such suspension or prosecution is necessary to facilitate the work of other

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contractors or workers. No damages or claims by Design-Build Entity will be allowed if the suspension or Work change is due in whole or in part to Design-Build Entity's failure to perform its obligation to coordinate its Work with other contractors and utility owners. Damages or claims will be allowed only to the extent of fault by District if the suspension or Work change is due in whole or in part to another Design-Build Entity's failure to coordinate its work with Design-Build Entity, other contractors, and utility owners. District reserves the right to back charge Design-Build Entity for any damages or claims incurred by other contractors as a result of Design-Build Entity's failure to perform its obligations to coordinate with other contractors and utility owners. District may deposit the funds retained with a Court of competent jurisdiction pursuant to applicable interpleader procedures and Design-Build Entity releases District of further liability regarding such funds.

7. DISTRICT AND PAYMENT**A. District Representative(s)**

District Representative(s) will have limited authority to act on behalf of District as set forth in the Contract Documents. Except as otherwise provided in these Contract Documents or subsequently identified in writing by District, District will issue all communications to Design-Build Entity through District Representative, and Design-Build Entity shall issue all communications to District through District Representative in a written document delivered to District. Should any direct communications between Design-Build Entity and District's consultants, architects or Architect/Engineers not identified in Article 2 of Document 00 52 00 (Agreement) occur during field visits or by telephone, Design-Build Entity shall immediately confirm them in a written document copied to District.

B. Means and Methods of Construction

Subject to those rights specifically reserved in the Contract Documents, District will not supervise, or direct, or have control over, or be responsible for, Design-Build Entity's means, methods, techniques, sequences or procedures of construction, or the safety precautions and programs incident thereto, or Design-Build Entity's failure to comply with laws and regulations applicable to the furnishing or performance of Work. District will not be responsible for Design-Build Entity's failure to perform or furnish the Work in accordance with Contract Documents.

C. Receipt and Processing of Applications for Payment

As required by Section 01 29 00 (Payments and Completion), Design-Build Entity shall prepare the schedules, submit Applications for Payment and warrant title to all Work covered by each Application for Payment. District will review Design-Build Entity's Applications for Payment and District will and make payment thereon, and Design-Build Entity shall make payments to Subcontractors, suppliers and others, as required by Section 01 29 00.

8. CONTROL OF THE WORK**A. Subcontractors**

Design-Build Entity is fully responsible for Design-Build Entity's own acts and omissions. Design-Build Entity is responsible for all acts and omissions of its Subcontractors, suppliers, and other persons and organizations performing or furnishing any of the Work, labor, materials, or equipment under a direct or indirect contract with Design-Build Entity.

B. Supervision of Work by Design-Build Entity

1. During construction, reconstruction, repair, alteration of or addition to any school building, the DSA, as provided by the Field Act, sections 39140 -39159 and sections 81130 - 81147 of the Education Code, shall make such inspection as in its judgment is necessary or proper for enforcement of the Act, and the protection of the safety of pupils, teachers and the public. If at any time as the Work progresses, prior to the issuance of the certificate of compliance, it shall be found that modifications or changes are necessary to secure safety or to comply with code requirements, District or DSA may provide notice of the necessity for such modifications or changes, and Design-Build Entity shall perform all necessary modifications and changes. Additionally, if District or DSA finds that any

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construction work is being performed in a manner contrary to the provisions of Title 24, California Code of Regulations that would compromise the structural integrity of any building, and issues a stop work order, Design-Build Entity shall comply with the stop work order as required by law. Refer to sections 4-334 and 4-334.1, Part 1, Title 24, California Code of Regulations.

2. Design-Build Entity shall supervise, inspect, and direct Work competently and efficiently, devoting the attention and applying such personal skills and expertise as may be required and necessary to perform Work in accordance with Contract Documents. Design-Build Entity shall be solely responsible for and have control and charge of construction means, methods, techniques, sequences and procedures, safety precautions and programs in connection with the Work. Design-Build Entity shall be responsible to see that the completed Work complies accurately with Contract Documents.
3. Design-Build Entity shall designate and keep on the Site at all times during Work progress a competent resident Superintendent or Project Manager, who, once designated, shall not be replaced without District's express written consent. The Superintendent or Project Manager shall be Design-Build Entity's representative at the Site and shall have complete authority to act on behalf of Design-Build Entity. All communications to and from the Superintendent or Project Manager shall be as binding as if given to or by Design-Build Entity.

C. Observation of Work by District

1. Work shall be performed under District's general observation and administration. Design-Build Entity shall comply with District's directions and instructions in accordance with the terms of Contract Documents, but nothing contained in these General Conditions shall be taken to relieve Design-Build Entity of any obligations or liabilities under the Contract Documents. District's failure to review or, upon review, failure to object to any aspect of Work reviewed, shall not be deemed a waiver or approval of any non-conforming aspect of Work.
2. District may engage an independent consultant or Architect/Engineer (collectively for purposes of this paragraph 8.C, "Consultant") to assist in administering the Work. If so engaged, Consultant will advise and consult with District, but will have authority to act on behalf of District only to extent provided in the Contract Documents or as set forth in writing by District. Consultant will not be responsible for and will not have control or charge of construction means, methods, techniques, sequences or procedures, or for safety precautions and programs in connection with Work. Consultant will not be responsible for or have control over the acts or omissions of Design-Build Entity, Subcontractors or their agents or employees, or any other persons performing Work.
3. Consultant may review Design-Build Entity's submittals, such as Design Development Documents, Construction Documents, Shop Drawings, Product Data, and Samples, but only for conformance with design concept of Work, Technical Specifications and Requirements, and with information given in the Contract Documents.
4. Consultant may conduct inspections to recommend to District the dates that Design-Build Entity has achieved Substantial Completion and Final Acceptance, and will receive and forward to District for review written warranties and related documents required by Contract Documents.

D. Access To Work

1. During performance of Work, District and its agents, officers, consultants, and employees may at any time enter upon Work, shops or studios where any part of the Work may be in preparation, or factories where any materials for use in Work are being or are to be manufactured, and Design-Build Entity shall provide proper and safe facilities for this purpose, and shall make arrangements with manufacturers to facilitate inspection of their processes and products to such extent as District's interests may require. Other contractors performing work for District may also enter upon Work for all purposes required by their respective contracts. Subject to the rights reserved in the Contract Documents, Design-Build Entity shall have sole care, custody, and control of the Site and its Work areas.
2. District may, at any time, and from time to time, during the performance of the Work, enter the Work Site for the for the purpose of installing any necessary work by District labor or other contracts, and for any other purpose in connection with the installation of facilities. In doing so, District shall endeavor not to interfere with Design-Build Entity and Design-Build Entity shall not interfere with other work being done by or on behalf of District.

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3. If, prior to completion and final acceptance of all the Work, District takes possession of any structure or facility (whether completed or otherwise) comprising a portion of the Work with the intent to retain possession thereof (as distinguished from temporary possession contemplating return to Design-Build Entity), then, while District is in possession of the same, Design-Build Entity shall be relieved of liability for loss or damage to such structure other than that resulting from the Design-Build Entity's fault or negligence. Such taking of possession by District shall not relieve the Design-Build Entity from any provisions of the Contract respecting such structure, other than to the extent specified in the preceding sentence, nor constitute a final acceptance of such structure or facility. See also Section 01 10 00 (Summary).
4. If, following installation of any equipment or facilities furnished by Design-Build Entity, defects requiring correction by Design-Build Entity are found, District shall have the right to operate such unsatisfactory equipment or facilities and make reasonable use thereof until the equipment or facilities can be shut down for correction of defects without injury to District.

9. DESIGN-BUILD ENTITY'S WARRANTY, GUARANTY, AND INSPECTION OF WORK**A. Warranty And Guaranty**

1. **General Representations and Warranties:** Design-Build Entity represents and warrants that it is and will be at all times fully qualified and capable of performing every Phase of the Work and to complete Work in accordance with section 4-341, 4-343 and 4-344 of Part 1, Title 24, California Code of Regulations and terms of Contract Documents. Design-Build Entity warrants that all design and construction services shall be performed in accordance with generally accepted professional standards of good and sound design and construction practices and all requirements of Contract Documents. Design-Build Entity warrants that Work, including but not limited to each item of materials and equipment incorporated therein, shall be new, of suitable grade of its respective kind for its intended use, and free from defects in design, architecture and/or engineering, materials, construction and workmanship. Design-Build Entity warrants that Work shall conform in all respects with all applicable requirements of federal, state and local laws, applicable construction codes and standards, licenses, and permits, Technical Specifications and Requirements and all descriptions set forth therein, and all other requirements of Contract Documents. Design-Build Entity shall not be responsible, however, for the negligence of others in the specification of specific equipment, materials, design parameters and means or methods of construction where that is specifically shown and expressly required by Contract Documents.
2. **Extended Guaranties:** Any guaranty exceeding one year provided by the supplier or manufacturer of any equipment or materials used in the Project shall be extended for such term. Design-Build Entity expressly agrees to act as co-guarantor of such equipment and materials and shall supply District with all warranty and guaranty documents relative to equipment and materials incorporated in the Project and guaranteed by their suppliers or manufacturers.
3. **Environmental and Toxics Warranty:** The covenants, warranties and representations contained in this subparagraph are effective continuously during Design-Build Entity's Work on the Project and following cessation of labor for any reason including, but not limited to, Project completion. Design-Build Entity covenants, warrants and represents to District that:
 - a. To Design-Build Entity's knowledge after due inquiry, no lead or asbestos-containing materials were installed or discovered in the Project at any time during Design-Build Entity's construction thereof. If any lead or asbestos-containing materials were discovered, Design-Build Entity made immediate written disclosure to District.
 - b. To Design-Build Entity's knowledge after due inquiry, no electrical transformers, light fixtures with ballasts or other equipment containing PCBs are or were located on the Project at any time during Design-Build Entity's construction thereof.
 - c. To Design-Build Entity's knowledge after due inquiry, no storage tanks for gasoline or any other toxic substance are or were located on the Project at any time during Design-Build Entity's construction thereof. If any such materials were discovered, Design-Build Entity made immediate written disclosure to District.
 - d. Design-Build Entity's operations concerning the Project are and were not in violation of any applicable environmental federal, state, or local statute, law or regulation dealing with hazardous materials substances or toxic substances and no notice from any governmental body has been

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served upon Design-Build Entity claiming any violation of any such law, ordinance, code or regulation, or requiring or calling attention to the need for any work, repairs, construction, alteration, or installation on or in connection with the Project in order to comply with any such laws, ordinances, codes, or regulations, with which Design-Build Entity has not complied. If there are any such notices with which Design-Build Entity has complied, Design-Build Entity shall provide District with copies thereof.

B. Inspection Of Work

1. Design-Build Entity acknowledges DSA inspection requirements, frequency, protocols and practices, applicable to this Project, and shall schedule, coordinate, plan and execute the Work consistent with all such practices.
2. All materials, equipment, and workmanship used in Work shall be subject to inspection and testing at all times during construction and/or manufacture in accordance with the terms of Contract Documents. Work and materials, and manufacture and preparation of materials, from beginning of construction until final completion and acceptance of Work, shall be subject to inspection and rejection by District, its agents, representatives or independent contractors retained by District to perform inspection services, or governmental agencies with jurisdictional interests. Design-Build Entity shall provide them proper and safe conditions for such access and advise them of Design-Build Entity's Site safety procedures and program so that they may comply therewith as applicable. Upon request or where specified, District shall be afforded access for inspection at the source of supply, manufacture or assembly of any item of material or equipment, with reasonable accommodations supplied for making such inspections.
3. Design-Build Entity shall give District a minimum of two business days notice of readiness of Work for all required inspections, tests or approvals, and shall cooperate with inspection and testing personnel to facilitate required inspections or tests.
4. District will hire through separate contract, a DSA-certified Inspector of Record for this Project, and a Special Inspection and Materials Testing Laboratory. Upon advance notice per subparagraph 9.B.2 above, District will endeavor to schedule required inspections, but if resources are not available, Design-Build Entity may need to reschedule the Work at no additional cost to the District.
5. In the event that a scheduled inspection is canceled in less than 24 hours notice by Design-Build Entity and the District incurs costs associated with the cancellation, Design-Build Entity will reimburse District for the actual costs of the canceled inspections. The amount will be deducted from payment owed Design-Build Entity.
6. If applicable laws or regulations of any public body (other than DSA) having jurisdiction require any Work (or part thereof) specifically to be inspected, tested or approved by an employee or other representative of such public body, Design-Build Entity shall assume full responsibility for arranging and obtaining such inspections, tests or approvals, and furnish District with the required certificates of inspection, or approval. District will pay the cost of initial testing and Design-Build Entity shall pay all costs in connection with any follow-up or additional testing. Design-Build Entity shall also be responsible for arranging and obtaining and shall pay all costs in connection with any inspections, tests or approvals required for the acceptance of materials or equipment to be incorporated in the Work, or of materials, mix designs, or equipment submitted for approval prior to Design-Build Entity's purchase thereof for incorporation in the Work.
7. If Design-Build Entity covers any Work, or the work of others, prior to any required inspection, test or approval without written approval of District, Design-Build Entity shall uncover the Work at District's request. Design-Build Entity shall bear the expense of uncovering Work and replacing Work.
8. In any case where Design-Build Entity covers Work contrary to District's request, Design-Build Entity shall uncover Work for District's observation or inspection at District's request. Design-Build Entity shall bear the cost of uncovering Work.
9. Whenever required by District, Design-Build Entity shall furnish tools, labor and materials necessary to make examination of Work that may be completed or in progress, even to extent of uncovering or taking down portions of finished Work. Should Work be found unsatisfactory, cost of making examination and of reconstruction shall be borne by Design-Build Entity. If Work is found to be

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satisfactory, District, in manner herein prescribed for paying for alterations, modifications, and extra Work, except as otherwise herein specified, will pay for examination.

10. District shall select testing agencies approved by DSA to conduct required tests and inspections for the Project. A list of required structural tests and inspections prepared by Design-Build Entity's and approved by the DSA shall be provided to the designated testing agency, District's representative and Inspector prior to the start of construction. Refer to section 4-335(a), Part 1, Title 24, California Code of Regulations, provided that notwithstanding section 4-335(a) Design-Build Entity may not waive any tests without District consent.
11. The testing agency shall forward the test results to DSA, Design-Build Entity, District and the Project Inspector within 14 days of the date of the test. The testing agency shall forward to the Division of the State Architect a verified report covering all the tests required to be made by that agency during the progress of the Project.
12. Inspection of the Work by or on behalf of District, or District's failure to do so, shall not under any circumstances be deemed a waiver or approval of any non-conforming aspect of the Work. Design-Build Entity shall have an absolute duty, in the absence of a written Change Order signed by District, to perform Work in conformance with the Contract Documents.
13. Any inspection, evaluation, or test performed by or on behalf of District relating to the Work is solely for the benefit of District, and shall not be relied upon by Design-Build Entity. Design-Build Entity shall not be relieved of the obligation to perform Work in accordance with the Contract Documents, nor relieved of any guaranty, warranty, or other obligation, as a result of any inspections, evaluations, or tests performed by District, whether or not such inspections, evaluations, or tests are permitted or required under the Contract Documents. Design-Build Entity shall be solely responsible for testing and inspecting Work already performed to determine whether such Work is in proper condition to receive later Work.

C. Correction Of Defective Work

1. Design-Build Entity shall correct Defective Work promptly upon knowledge of it. If Design-Build Entity fails to supply sufficient skilled workers, suitable materials or equipment, or to furnish or perform the Work in such a way that the completed Work will conform to Contract Documents, District may order Design-Build Entity to replace any Defective Work, or stop any portion of Work to permit District (at Design-Build Entity's expense) to replace such Defective Work. These District rights are entirely discretionary on the part of District, and shall not give rise to any duty on the part of District to exercise the rights for the benefit of Design-Build Entity or any other party.
2. District may direct Design-Build Entity to correct any Defective Work or remove it from the Site and replace it with Work that is not defective and satisfactorily correct or remove and replace any damage to other Work or the work of others resulting from the correction or removal. Design-Build Entity shall be responsible for any and all claims, costs, losses and damages caused by or resulting from such correction or removal. A Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work and the Contract Sum. If the parties are unable to agree to the amount of an appropriate decrease in the Contract Sum, District may decide the proper amount or, in its discretion may elect to leave the Contract Sum unchanged and deduct from moneys due Design-Build Entity, all such claims, costs, losses and damages caused by or resulting from the correction or removal. If Design-Build Entity disagrees with District's calculations, it may make a claim as provided in Article 12 of this Document 00 71 00. (District's exercise of its rights under this paragraph 9.C shall be entirely discretionary and, like all other District rights and remedies under the Contract Documents, in addition to any other rights and remedies it may have under the Contract Documents or by law.
3. Correction period:
 - a. With respect to equipment and machinery supplied by Design-Build Entity and incorporated into the Work, if within one year after the date of Final Completion of the portion of the Work incorporating the equipment and/or machinery (or, to the extent expressed by Change Order or Certificate of Final Completion, one year after District's written acceptance of such equipment), or such longer period as may be prescribed by laws or regulations, or by the terms of the Contract Documents, any equipment or machinery is found to be defective,

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- Design-Build Entity shall promptly, without cost to District and in accordance with District's written instructions, correct such Defective Work.
- b. With respect to structures within the scope of Work, if within one year after the date of Final Acceptance of the Work, or the portion or Phase of the Work as provided in these Contract Documents, or such longer period of time as may be prescribed by laws or regulations, or by the terms of Contract Documents, any Work is found to be defective, Design-Build Entity shall promptly, without cost to District and in accordance with District's written instructions, correct such Defective Work.
 - c. Design-Build Entity shall remove any Defective Work rejected by District and replace it with Work that is not defective, and satisfactorily correct or remove and replace any damage to other Work or the work of others resulting therefrom. If Design-Build Entity 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.
 - d. Design-Build Entity shall pay for all claims, costs, losses and damages caused by or resulting from such removal and replacement. Where Design-Build Entity fails to correct Defective Work, or defects are discovered outside the correction period, District shall have all rights and remedies granted by law.
4. Additionally, in special circumstances where a part of the Work is occupied or a particular item of equipment is placed in continuous service before Final Acceptance of all the Work, the correction period for that part of Work or that item may start to run from an earlier date if so provided by Change Order or as provided by elsewhere in these Contract Documents.
 5. Where Defective Work or rejected Work (and damage to other Work resulting therefrom) has been removed and replaced under this provision after the commencement of the correction period, the correction period hereunder with respect to such Work shall be extended for an additional period of one year after such removal and replacement has been satisfactorily completed.
 6. If following installation of any equipment, machinery, or facilities furnished by Design-Build Entity, defects requiring correction by Design-Build Entity are found, District shall have the right to operate such defective equipment or facilities and make reasonable use thereof until the equipment, machinery, or facilities can be shut down for correction of defects without causing injury to District.

D. Acceptance And Correction Of Defective Work By District

1. District may accept Defective Work. Design-Build Entity shall pay all claims, costs, losses and damages attributable to District's evaluation of and determination to accept such Defective Work. If District accepts any Defective Work prior to final payment, a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work and the Contract Sum. If the parties are unable to agree to the amount of an appropriate decrease in the Contract Sum, District may deduct from moneys due Design-Build Entity, all claims, costs, losses, damages, expenses and liabilities attributable to the Defective Work. If Design-Build Entity disagrees with District's calculations, Design-Build Entity may make a claim as provided in Article 12 of this Document 00 71 00. If District accepts any Defective Work after final payment, Design-Build Entity shall pay to District, an appropriate amount as determined by District.
2. District may correct and remedy deficiency if, after fifteen Days' written notice to Design-Build Entity (or lesser notice if the deficiency poses a direct danger to persons or property at or about the Site or if required to comply with any DSA requirement), Design-Build Entity fails to correct Defective Work or to remove and replace rejected Work in accordance with paragraph 9.C of this Document 00 71 00; or provide a plan for correction of Defective Work acceptable to District; or perform Work in accordance with Contract Documents. In connection with such corrective and remedial action, District may, to the extent reasonably necessary: exclude Design-Build Entity from, and take possession of, all or part of the Site and Work and suspend Design-Build Entity's Work related thereto; take possession of all or part of Design-Build Entity's tools, appliances, construction equipment and machinery at the Site; and incorporate in Work any materials and equipment stored at the Site or for which District has paid Design-Build Entity but which are stored elsewhere. Design-Build Entity shall allow District, its representatives, agents, employees, and other contractors and District's consultants access to the Site to enable District to exercise the rights and remedies under

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this paragraph. Design-Build Entity shall be responsible for all claims, costs, losses, damages, expenses and liabilities incurred or sustained by District in exercising such rights and remedies. A Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to Work and the Contract Sum. If the parties are unable to agree to the amount of an appropriate decrease in the Contract Sum, District may deduct from moneys due Design-Build Entity, all claims, costs, losses and damages caused by or resulting from the correction or removal. If Design-Build Entity disagrees with District's calculations, Design-Build Entity may make a claim as provided in Article 12 of this Document 00 71 00.

3. District's decisions to accept Defective Work or correct Defective Work are subject to approval of DSA, and all other requirements of Title 24, California Code of Regulations.

E. Rights Upon Inspection Or Correction

1. Design-Build Entity shall not be allowed an extension of Contract Time because of any delay in the performance of Work attributable to the exercise by District of its rights and remedies under this Article 9. Where District exercises its rights under this Article 9, it retains all other rights it has by law or under the Contract Documents including, but not limited to, the right to terminate Design-Build Entity's right to proceed with the Work under the Contract Documents and/or make a claim or back charge where a Change Order cannot be agreed upon.
2. Inspection by District shall not relieve Design-Build Entity of its obligation to have furnished material and workmanship in accordance with Contract Documents. Payment for Work completed through periodic progress payments or otherwise shall not operate to waive District's right to require full compliance with Contract Documents and shall in no way be deemed as acceptance of the Work paid therefor. Design-Build Entity's obligation to complete the Work in accordance with Contract Documents shall be absolute, unless District agrees otherwise in writing.

F. Samples And Tests Of Materials And Work

1. Design-Build Entity shall furnish, in such quantities and sizes as may be required for proper examination and tests, samples or test specimens of all materials to be used or offered for use in connection with Work. Design-Build Entity shall prepare samples or test specimens at its expense and furnish them to District. Design-Build Entity shall submit all samples in ample time to enable District to make any necessary tests, examinations, or analyses before the time it is desired to incorporate the material into the Work.
2. Test samples or specimens of material for testing shall be taken by the Architect/Engineer, his or her representative, Project Inspector or representative of the testing agency. In no case shall Design-Build Entity or vendor select the sample. Refer to section 4-335, Part 1, Title 24, California Code of Regulations.

G. Proof Of Compliance Of Contract Provisions

In order that District may determine whether Design-Build Entity has complied or is complying with requirements of Contract Documents not readily enforceable through inspection and tests of Work and materials, Design-Build Entity shall at any time, when requested, submit to District properly authenticated documents or other satisfactory proofs of compliance with all applicable requirements.

H. Acceptance

Inspection by District or its authorized agents or representatives, any order or certificate for the payment of money, any payment, acceptance of the whole or any part of Work by District, any extension of time, any verbal statements on behalf of District or its authorized agents or representatives shall not operate as a waiver or modification of any provision of the Contract Documents, or of any power reserved to District herein or therein or any right to damages provided in the Contract Documents. Any waiver of any breach of the Contract Documents shall not be held to be a waiver of any other subsequent breach.

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10. DESIGN-BUILD ENTITY'S ORGANIZATION AND EQUIPMENT**A. Design-Build Entity's Legal Address**

Address and facsimile number given in Design-Build Entity's Proposal are hereby designated as Design-Build Entity's legal address and facsimile number. Design-Build Entity may change its legal address and facsimile number by notice in writing, delivered to District, which in conspicuous language advises District of a change in legal address or facsimile number, and which District accepts in writing. Delivery to Design-Build Entity's legal address or depositing in any post office or post office box regularly maintained by the United States Postal Service, in a wrapper with postage affixed, directed to Design-Build Entity at legal address, or of any drawings, notice, letter or other communication, shall be deemed legal and sufficient service thereof upon Design-Build Entity. Facsimile to Design-Build Entity's designated facsimile number of any letter, memorandum, or other communication on standard or legal sized paper, with proof of facsimile transmission, shall be deemed legal and sufficient service thereof upon Design-Build Entity.

B. Design-Build Entity's Office At The Work Site

Design-Build Entity shall maintain an office at the Site, which office shall be headquarters of a Design-Build Entity representative authorized to transmit to and receive from District, communications, instructions or Drawings. Communications, instructions, or Drawings given to Design-Build Entity's representative or delivered at the Site office in representative's absence shall be deemed to have been given to Design-Build Entity.

C. Design-Build Entity's Superintendents Or Forepersons

Design-Build Entity shall at all times be represented on Site by one or more superintendents, project managers or forepersons authorized and competent to receive and carry out any instructions that District may give, and shall be liable for faithful observance of instructions delivered to Design-Build Entity or to authorized representative or representatives on Site.

D. Proficiency In English

Supervisors, security guards, safety personnel and employees who have unescorted access to the Site shall possess proficiency in the English language in order to understand, receive and carry out oral and written communications or instructions relating to their job functions, including safety and security requirements.

E. Site Decorum: Design-Build Entity's And Subcontractors' Employees

1. Design-Build Entity shall employ, and shall permit its Subcontractors to employ, only competent and skillful personnel to do Work. If District notifies Design-Build Entity that any of its employees, or any of its Subcontractors' employees on Work is incompetent, unfaithful, disorderly, disruptive or profane, or fails to observe customary standards of conduct or refuses to carry out any provision of the Contract Documents, or uses threatening or abusive language to any person on Work representing District, or violates sanitary rules, or is otherwise unsatisfactory, and if District requests that such person be discharged from Work, then Design-Build Entity or its Subcontractor shall immediately discharge such person from Work and the discharged person shall not be re-employed on the Work except with consent of District.
2. Design-Build Entity shall control the conduct of its employees and subcontractors so as to prevent unwarranted interaction initiated by Design-Build Entity's employees or subcontractors with individuals, (except those associated with the Project) at the college campus. Without limitation, unwarranted interaction includes whistling at or initiating conversation with passers-by. In the event that any employee or subcontractor of the Design-Build Entity initiates any unwarranted interaction, Design-Build Entity shall, either upon request of District's Representative or on its own initiative, replace said employee or subcontractor employee with another of equivalent technical skill at no cost to the District.
3. There shall be no smoking outside of the construction site or within any of the District's buildings, including those buildings under construction by Design-Build Entity.
4. The playing of radios, televisions and other portable audio or video players on the Site is prohibited at all times.

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F. Design-Build Entity To List Trades Working

Design-Build Entity shall list the trades working on the Site and their scheduled activities on a daily basis, and provide a copy of that list to District

G. Design-Build Entity's Use Of The Site

Design-Build Entity shall not make any arrangements with any person to permit occupancy or use of any land, structure or building within the limits of the Work, for any purpose whatsoever, either with or without compensation, in conflict with any agreement between District and any owner, former owner or tenant of such land, structure or buildings. Design-Build Entity may not occupy District-owned property outside the limit of the Work as indicated on the Drawings unless it obtains prior written approval from District.

11. PROSECUTION AND PROGRESS OF THE WORK**A. Design-Build Entity to Submit Required Schedules**

1. Design-Build Entity shall submit schedules and reports, Shop Drawings and Submittals in the appropriate quantity and within the required time, arrange conferences and meetings and proceed with the Work in accordance with Contract Documents, including Sections 01 31 19 (Project Meetings), 01 32 16 (Progress Schedules and Reports), and 01 32 19 (Submittal Procedures).
2. Design-Build Entity shall submit to District for review and discussion at the Preconstruction Conference documentation described in Section 01 31 19 (Project Meetings):
 - a. Progress schedules and reports as required by Sections 01 32 16 (Progress Schedules and Reports), and 01 32 19 (Submittal Procedures). Design-Build Entity shall utilize Progress Schedule in planning, scheduling, coordinating, performing and controlling Work (including all activities of Subcontractors, assigned contractors, equipment vendors and suppliers). Design-Build Entity shall update Progress Schedule on a monthly basis to depict accurately the actual progress of Work and for evaluating and preparing Design-Build Entity's monthly progress payments. Design-Build Entity's failure to submit and maintain an acceptable progress schedule may, in District's discretion, and without limiting the materiality of Design-Build Entity's other obligations under the Contract Documents, constitute grounds to declare Design-Build Entity in material breach of the Contract Documents
 - b. Prior to receiving a Notice to Proceed with Construction, a preliminary Schedule of Submittals that shall list each required submittal and the times for submitting, reviewing and processing such submittal, as required by Section 01 32 19 (Submittal Procedures). If no such schedule is agreed upon, then all Shop Drawings, Samples and product data submittals shall be completed and submitted within 30 Days after receipt of Notice to Proceed with Construction from District.
 - c. Within 60 Days after issuance of Notice of Award, a preliminary Schedule of Values for all the Work, including detailed breakdown of all design phases to serve as the basis for progress payments during design. At least 30 Days before commencing construction, Design-Build Entity shall submit an updated Schedule of Values including additional detail regarding construction activities, as provided in Section 01 29 00 (Payments and Completion), paragraph 1.7. The updated Schedule of Values shall include quantities and prices of items aggregating the Contract Sum and shall subdivide into component activities in sufficient detail to serve as the basis for progress payments during construction. Each Schedule of Values shall include an appropriate amount of overhead and profit applicable to each item of Work, a line item for Project Record Documents, and a line item for Project scheduling, and shall conform to Section 01 29 00.
3. Unless otherwise provided in the Contract Documents, at least 15 Days before submission of the first application for payment, a conference attended by Design-Build Entity, District, and others as appropriate, will be held to review for acceptability the schedules submitted in accordance with subparagraph 11.A.2 of this Document 00 71 00 and first reviewed at the Preconstruction Conference. Design-Build Entity shall have an additional seven Days to make corrections and adjustments and to complete and resubmit the schedules. Schedules shall be updated and completed as required by Sections 01 29 00 (Payments and Completion), 01 32 16 (Progress Schedules and Reports) and 01 32 19 (Submittal Procedures). No progress payment shall be due or owing to Design-Build Entity until the schedules are submitted to and acceptable to District and/or

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Architect/Engineer as meeting the requirements of the Contract Documents, including Sections 01 29 00 (Payments and Completion), 01 32 16 (Progress Schedules and Reports) and 01 32 19 (Submittal Procedures). District's acceptance of Design-Build Entity's schedules will not create any duty of care or impose on District any responsibility for the sequencing, scheduling or progress of Work nor will it interfere with or relieve Design-Build Entity from Design-Build Entity's full responsibility therefor.

4. Before commencing any phase of Work, Design-Build Entity shall inform District in writing as to time and place at which Design-Build Entity wishes to commence Work, and nature of Work to be done, in order that proper adjustments to College operations and notices to occupants may be made, proper provision for inspection of Work may occur, and to assure measurements necessary for record and payment. Information shall be given to District a reasonable time in advance of time at which Design-Build Entity proposes to begin Work, so that District may complete necessary preliminary work without inconvenience or delay to Design-Build Entity.

B. Design-Build Entity to Submit Submittals and Shop Drawings

1. Design-Build Entity shall submit submittals and shop drawings to District (or Architect/Engineer if District so designates) for review in strict accordance with Section 01 32 19 (Submittal Procedures). Submission of a Shop Drawing shall constitute Design-Build Entity's representation that all requirements of Section 01 32 19 (Submittal Procedures) have been complied with. All submittals will be identified as District may require and in the number of copies specified in Section 01 32 19 (Submittal Procedures).
2. Design-Build Entity shall not perform Work that requires submission of a Shop Drawing or Sample or other submittal prior to submission and favorable review of the Shop Drawing or Sample or submittal. Where a Shop Drawing or Sample or other submittal is required by Contract Documents or the final Schedule of Submittals accepted by District, any related Work performed prior to District's approval of the pertinent submittal shall be at the sole expense, responsibility and risk of Design-Build Entity.
3. District's review of shop drawings, samples and submittals shall not relieve Design-Build Entity of its responsibility for a complete design complying with the requirements of the Contract Documents; but rather, such review shall be in furtherance of District's monitoring and accepting the design as developed and issued by the Design-Build Entity, consistent with these Contract Documents.

C. Cost Data

1. Design-Build Entity shall maintain full and correct information as to the number of workers employed in connection with each subdivision of Work, the classification and rate of pay of each worker in form of certified payrolls, the cost to Design-Build Entity of each class of materials, tools and appliances used by Design-Build Entity in Work, and the amount of each class of materials used in each subdivision of Work. Design-Build Entity shall provide District with monthly summaries of this information. If Design-Build Entity maintains or is capable of generating summaries or reports comparing actual Project costs with Proposal estimates or budgets, and if the actual cost comparisons become necessary (in District's sole judgment) in connection with claims or Contract Modifications, Design-Build Entity shall provide District with a copy of such report upon District's request.
2. Design-Build Entity shall maintain daily job reports recording all significant activity on the job, including the number of workers on Site, Work activities, problems encountered and delays. Design-Build Entity shall provide District with copies for each Day Design-Build Entity works on the Project, to be delivered to District either the same Day or the following morning before starting work at the Site. Design-Build Entity shall take monthly progress photographs of all areas of the Work. Design-Build Entity shall maintain copies of all correspondence with Subcontractors and records of meetings with Subcontractors.
3. District shall have the right to audit and copy Design-Build Entity's books and records of any type, nature or description relating to the Project (including but not limited to financial records reflecting in any way costs claimed on the Project), and to inspect the Site, including Design-Build Entity's trailer, or other job Site office, and this requirement shall be contained in the subcontracts of Subcontractors working on Site. By way of example, District shall have the right to inspect and

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obtain copies of all Contract Documents, planning and design documents, Proposal and negotiation documents records and job cost variance reports, design modification proposals, value engineering or other cost reduction proposals, revisions made to the original design, job progress reports, photographs, and as-built drawings maintained by Design-Build Entity. District and any other applicable governmental entity shall have the right to inspect all information and documents maintained under this paragraph 11.C at any time during the Project and for a period of five years following Final Completion. This right of inspection shall not relieve Design-Build Entity of its duties and obligations under the Contract Documents. This right of inspection shall be specifically enforceable in a court of law, either independently or in conjunction with enforcement of any other rights in the Contract Documents.

4. Design-Build Entity shall maintain in a safe place at the Site one record copy of all Drawings, Specifications, Addenda, Contract Modifications, Change Orders, Work Directives, Force Account orders, and written interpretations and clarifications in good order and annotated to show all changes made during construction. These Project Record Documents, together with all approved Samples and a counterpart of all approved Shop Drawings, shall be maintained and available to District for reference. Upon completion of the Work, Design-Build Entity shall deliver to District, the Project Record Documents, Samples and Shop Drawings and as-built drawings.

D. Design-Build Entity To Supply Sufficient Workers And Materials

1. Unless otherwise required by District under the terms of Contract Documents, Design-Build Entity shall at all times keep on the Site materials and employ qualified workers sufficient to prosecute Work at a rate and in a sequence and manner necessary to complete Work within the Contract Time. This obligation shall remain in full force and effect notwithstanding disputes or claims of any type.
2. At any time during progress of Work should Design-Build Entity directly or indirectly (through Subcontractors) refuse, neglect, or be unable to supply sufficient materials or employ qualified workers to prosecute the Work as required, then District may require Design-Build Entity to accelerate the Work and/or furnish additional qualified workers or materials as District may consider necessary, at no cost to District. If Design-Build Entity does not comply with the notice within three Business Days of date of service thereof, District shall have the right (but not a duty) to provide materials and qualified workers to finish the Work or any affected portion of Work, as District may elect. District may, at its discretion, exclude Design-Build Entity from the Site, or portions of the Site or separate work elements during the time period that District exercises this right. District will deduct from moneys due or which may thereafter become due under the Contract Documents, the sums necessary to meet expenses thereby incurred and paid to persons supplying materials and doing Work. District will deduct from funds or appropriations set aside for purposes of Contract Documents the amount of such payments and charge them to Design-Build Entity as if paid to Design-Build Entity. Design-Build Entity shall remain liable for resulting delay, including liquidated damages and indemnification of District from claims of others.
3. Exercise by District of the rights conferred upon District in this subparagraph is entirely discretionary on the part of District. District shall have no duty or obligation to exercise the rights referred to in this subparagraph and its failure to exercise such rights shall not be deemed an approval of existing Work progress or a waiver or limitation of District's right to exercise such rights in other concurrent or future similar circumstances. (The rights conferred upon District under this subparagraph are, like all other such rights, cumulative to District's other rights under any provision of the Contract Documents.)

E. Design-Build Entity to Locate Underground Facilities.

1. During construction, Design-Build Entity shall comply with Government Code Sections 4216 to 4216.9, and in particular Section 4216.2 which provides, in part: "Except in an emergency, every person planning to conduct any excavation shall contact the appropriate regional notification center at least two *working* days, but no more than 14 *calendar* days, prior to commencing that excavation, if the excavation will be conducted in an area which is known, or reasonably should be known, to contain subsurface installations other than the underground facilities owned or operated by the excavator, and, if practical, the excavator shall delineate with white paint or other suitable markings the area to be excavated. The regional notification center shall provide an inquiry identification

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number to the person who contacts the center and shall notify any member, if known, who has a subsurface installation in the area of the proposed excavation.”

2. Design-Build Entity shall contact USA, and schedule the Work to allow ample time for the center to notify its members and, if necessary, for any member to field locate and mark its facilities. Design-Build Entity is charged with knowledge of all subsurface conditions reflected in USA records. Prior to commencing excavation or trenching work, Design-Build Entity shall provide District with copies of all USA records secured by Design-Build Entity. Design-Build Entity shall advise District of any conflict between information provided in Document 00 31 19 (Geotechnical Data and Existing Conditions), the Technical Specifications and Requirements, Drawings and that provided by USA records. Design-Build Entity’s excavation shall be subject to and comply with the Contract Documents, including without limitation Articles 2 and 8 of this Document 00 71 00.
3. Design-Build Entity shall also investigate the existence of existing service laterals, appurtenances or other types of utilities, indicated by the presence of an underground transmission main or other visible facilities, such as buildings, new asphalt, meters and junction boxes, on or adjacent to the Site, even if not shown or indicated in Document 00 31 19 (Geotechnical Data and Existing Conditions), the Technical Specifications and Requirements, Drawings or that provided by USA records. Design-Build Entity shall immediately secure all such available information and notify District and the utility owner, in writing, of its discovery.

F. Design-Build Entity to Protect Underground Facilities.

1. At all times during construction, all operating Underground Facilities shall remain in operation, unless the Contract Documents expressly indicate otherwise. Design-Build Entity shall maintain such Underground Facilities in service where appropriate; shall repair any damage to them caused by the Work; and shall incorporate them into the Work, including reasonable adjustments to the design location (including minor relocations) of the existing or new installations. Design-Build Entity shall take immediate action to restore any in service installations damaged by Design-Build Entity’s operations.
2. Prior to performing Work at the Site, Design-Build Entity shall lay out the locations of Underground Facilities that are to remain in service and other significant known underground installations indicated by the Underground Facilities Data. Design-Build Entity shall further locate, by carefully excavating with small equipment, potholing and principally by hand, all such utilities or installations that are to remain and that are subject to damage. If additional utilities whose locations are unknown are discovered, Design-Build Entity shall immediately report to District for disposition of the same. Additional compensation or extension of time on account of utilities not shown or otherwise brought to Design-Build Entity’s attention, including reasonable action taken to protect or repair damage, shall be determined as provided in this Document 00 71 00.
3. The cost of all of the following will be included in the Contract Sum and Design-Build Entity shall have full responsibility for (a) reviewing and checking all available information and data including, but not limited to, Document 00 31 19 (Geotechnical Data and Existing Conditions) and information on file at USA; (b) locating all Underground Facilities shown or indicated in the Contract Documents, available information, or indicated by visual observation including, but not limited to, and by way of example only, engaging qualified locating services and all necessary backhoeing and potholing; (c) coordination of the Work with the owners of such Underground Facilities during construction; and (d) the safety and protection of all such Underground Facilities and repairing any damage thereto resulting from the Work.

G. Design-Build Entity to Not Disrupt District Operation.

1. Design-Build Entity shall schedule and execute all Work in a manner that does not interfere with or disrupt District operations, including but not limited to, parking, utilities (electricity, gas, water), noise, access by students, faculty, other employees and administration, access by vendors and any other person or entity using District facilities or doing business with District. Design-Build Entity shall produce and supply coordination plans and requests to District, following District procedures, for all necessary interference of construction with District, which District will reasonably cooperate with.

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2. Academic Calendar/Events: Without limiting the foregoing, the academic dates/events are furnished for Design-Build Entity's information. Construction activities which may be disrupted due to these events are to be accounted for in all applicable Schedules, and Contract Time shall not be extended thereby. Design-Build Entity is advised to consult District's website for any updates to the academic calendar. Refer to Section 01 10 00 Summary of Work for additional information.

12. CLAIMS BY DESIGN-BUILD ENTITY/NON-JUDICIAL SETTLEMENT PROCEDURE**A. Scope**

1. The claim notice and documentation procedure described in this Article 12 applies to all claims and disputes arising under the Contract Documents, including without limitation any claim or dispute by any Subcontractor or material supplier, and any claims arising under tort law as well as contract law. All Subcontractor and supplier claims of any type shall be brought only through Design-Build Entity as provided in this Article 12. Under no circumstances shall any Subcontractor or supplier make any direct claim against District.
2. "Claim" means a written demand or written assertion by Design-Build Entity seeking, as a matter of right, the payment of money, the adjustment or interpretation of Contract Documents terms, or other relief arising under or relating to Contract Documents. In order to qualify as a "claim," the written demand must state that it is a claim submitted under this Article 12. A voucher, invoice, proposed change, Application for Payment, cost proposal, RFI, change order request, or other routine or authorized form of request for payment is not a claim under the Contract Documents. If such request is disputed as to liability or amount, then the disputed portion of the submission may be converted to a claim under the Contract Documents by submitting a separate notice and claim in compliance with claim submission requirements herein.
3. The provisions of this Article 12 constitute a non-judicial claim settlement procedure, and also step one of a two step claim presentment procedure by agreement under Section 930.2 of the California Government Code. Specifically, step one is compliance with this contract claims procedure and filing/administering timely contract claims in accordance with the Contract Documents. Step two is filing a timely Government Code Section 910 claim in accordance with the California Government Code. Any Government Code Section 910 claims shall be presented in accordance with the Government Code and shall affirmatively indicate Design-Build Entity's prior compliance with the claims procedure herein and previous dispositions under this Article.
4. The provisions of this Article 12 shall survive termination, breach or completion of the Contract Documents. Design-Build Entity shall bear all costs incurred in the preparation and submission of a claim.

B. Procedure

1. Disputed Work. Should any clarification, determination, action or inaction by District or Architect/Engineer, Work, third party, or any other event whatsoever, in the opinion of Design-Build Entity, exceed the requirements of or not comply with Contract Documents in any way, or otherwise result in Design-Build Entity seeking additional compensation in time or money or damages for any reason (collectively "Disputed Work"), then Design-Build Entity shall so notify District. Design-Build Entity and District shall make good faith attempts to resolve informally any and all such issues, claims and/or disputes.
2. Duty to Work During Disputes. Notwithstanding any dispute or Disputed Work, Design-Build Entity shall continue to prosecute the Work and the Disputed Work in accordance with the determinations of District. Design-Build Entity's sole remedy for Disputed Work is to pursue the remedies in this Article 12 and follow the determinations of District.
3. Timely Notice of Disputed Work Required. Before commencing any Disputed Work, or within ten (10) Days after Design-Build Entity's first knowledge of the Disputed Work, whichever is earlier, Design-Build Entity shall file a written notice and preliminary cost proposal for the Disputed Work with District stating clearly and in detail its objection and reasons for contending the Disputed Work is outside or in breach of the requirements of Contract Documents. The written notice must identify the subcontractors, vendors, suppliers effected, if any, sufficient for District to visit the site to inspect the work and/or conduct a telephonic interview of the persons involved, and/or to photograph the

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work in question; and Design-Build Entity is encouraged to supply digital photographs by email if possible. The preliminary cost proposal must provide a good faith preliminary estimate of the labor (workers, crews), equipment and/or materials involved, and a corresponding good faith preliminary estimate of cost. If a written notice and preliminary cost proposal for Disputed Work is not issued within this time period, or if Design-Build Entity proceeds with the Disputed Work without first having given the notice of the Disputed Work, Design-Build Entity shall waive its rights to further claim on the specific issue.

4. **Timely Notice of Potential Claims Required.** District will review Design-Build Entity's timely notice and preliminary cost proposal for Disputed Work and provide a decision. If, after receiving the decision, Design-Build Entity disagrees with it or still considers the Work required of it to be outside of the requirements of Contract Documents, then Design-Build Entity shall so notify District, in writing, within ten (10) Days after receiving the decision, by submitting a notice of potential claim, stating that a formal claim will be issued. (If District should fail to provide a decision on a notice and preliminary cost proposal within thirty (30) days, then Design-Build Entity shall submit a notice of potential claim within ten days following the thirtieth (30th) day, i.e., or by the 40th day following the notice and preliminary cost proposal.) Design-Build Entity shall continue to prosecute the Disputed Work to completion.
5. **Quarterly Claims Required.** At the end of each calendar year quarter (March 31, June 30, September 30 and December 31) of each year, for each and every notice of potential claim that Design-Build Entity may have submitted in that quarter, Design-Build Entity shall submit a formal claim in the form specified herein. Design-Build Entity may file a single consolidated claim each quarter, or may file separate claims each quarter, as Design-Build Entity sees fit, provided Design-Build Entity complies with the requirements below. (Design-Build Entity may defer until the next reporting period the filing of a formal claim for any notices of potential claim timely issued within the last 15 days of the prior quarter.) The formal claim(s) shall include all arguments, justification, cost or estimates, schedule analysis, and detailed documentation supporting the Design-Build Entity's position, for each notice of potential claim that Design-Build Entity intends to pursue as a formal claim (further described below).
6. **Claim Updates Required.** If Disputed Work persists longer than a single calendar quarter, then Design-Build Entity shall, every quarter until the Disputed Work ceases, submit to District a document titled "Claim Update" that shall update and quantify all elements of the claim as completely as possible. Design-Build Entity's failure to submit a Claim Update or to quantify costs every quarter shall result in waiver of the claim for that period. Claims or Claim Updates stating that damages, total damages (direct and indirect), schedule impact and/or any time extension will be determined at a later date shall not comply with this subparagraph and shall result in Design-Build Entity waiving its claim(s). Design-Build Entity shall also maintain a continuing "claims log" that shall list all outstanding claims and their value, and provide such log to District quarterly.
7. **Claim Negotiations Required.** Upon receipt of Design-Build Entity's formal claim(s) including all arguments, justifications, cost or estimates, schedule analysis, and documentation supporting its position as required herein, District or its designee will review the issue and render a final determination. Design-Build Entity and District may mutually agree upon a claims resolution protocol, a neutral facilitator or mediator, or other alternative dispute resolution procedures, as appropriate. District may in its discretion conduct an administrative hearing on Design-Build Entity's claim, in which case Design-Build Entity shall appear, participate, answer questions and inquiries, and present any further document, schedules or analysis requested by District to evaluate and decide Design-Build Entity's claim.

C. Claim Format

1. Design-Build Entity shall submit the formal claim(s) with a cover letter and certification of the accuracy of the formal claim.
2. The formal claim(s) shall list separately each notice of potential claim that Design-Build Entity intends to pursue as a formal claim(s), and for each such item separately, Design-Build Entity shall provide the following:
 - a. Summary of the claim, including underlying facts, entitlement, schedule analysis, quantum calculations, contract provisions supporting relief;

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- b. List of documents relating to claim including Technical Specifications and Requirements, Specifications, Drawings, clarifications/requests for information, schedules, notices of delay, and any others;
 - c. Chronology of events and correspondence;
 - d. Analysis of claim merit;
 - e. Analysis of claim cost; and
 - f. Attach supporting cost and schedule documents as required in this Article and elsewhere in the Contract Documents (e.g., Section 01 32 16).
3. For each notice of potential claim that Design-Build Entity intends to pursue as a formal claim, Design-Build Entity shall establish in the formal claim a direct causal link between the separate item of cost/time requested, the separate notices of potential claim timely issued, and the specific changed Work asserted. Total cost claims shall not be allowed.
 4. Claims shall be calculated in the same manner as Change Orders per Section 01 26 00 (Modification Procedures). EXCEPT WHERE PROVIDED BY LAW, OR ELSEWHERE IN THESE CONTRACT DOCUMENTS (IF APPLICABLE), DISTRICT SHALL NOT BE LIABLE FOR SPECIAL OR CONSEQUENTIAL DAMAGES, AND DESIGN-BUILD ENTITY SHALL NOT INCLUDE THEM IN ITS CLAIMS. DESIGN-BUILD ENTITY SHALL BE LIMITED IN ITS RECOVERY ON CLAIMS TO THE CHANGE ORDER CALCULATIONS SET FORTH IN SECTION 01 26 00 (MODIFICATION PROCEDURES).

D. Mediation

1. If Design-Build Entity's claims submitted in accordance with this Article 12 at Project completion total less than \$375,000, then claims resolution shall first proceed in the manner prescribed by Article 1.5, Chapter 1, Part 3 of Division 2 of the California Public Contract Code, found in Section 01410 (Regulatory Requirements).
2. If Design-Build Entity's claims submitted in accordance with this Article 12 at Project completion exceed \$375,000, then, as a condition precedent to litigation (or if otherwise permitted by the Contract Documents, arbitration) thereon, such claims must first be mediated. Mediation shall be non-binding and utilize the services of a mediator mutually acceptable to the parties and, if the parties cannot agree, a mediator selected by the American Arbitration Association from its panel of approved mediators trained in construction industry mediation, having a minimum of twenty (20) years experience in the construction industry. All statutes of limitation shall be tolled from the date of the demand for mediation until a date two weeks following the mediation's conclusion. All unresolved Design-Build Entity claims shall be submitted to the same mediator. The cost of mediation shall be equally shared.

E. Subcontractor Claims

1. Design-Build Entity shall present as its claims all Subcontractor, sub-Subcontractor and supplier claims of any type, and prove them under the terms of the Contract Documents. District shall not be directly liable to any Subcontractor, any supplier, or any other person or organization, or to any surety for or employee or agent of any of them, for damages or extra costs of any type arising out of or resulting from the Project.

F. Waiver.

1. If Design-Build Entity fails to comply with this Article 12 as to any claim, then Design-Build Entity shall waive its rights to such claim.
2. All claim(s), Disputed Work items or issue(s) not raised in a timely notice, timely notice of potential claim and then timely claim submitted under this Article 12, may not be asserted in any subsequent Government Code section 910 claim, litigation or legal action.
3. Design-Build Entity may request an extension of time to comply with the claims procedure herein, but must do so in advance of time periods expiring and District must give its approval in writing (which approval may be withheld in District discretion.) As to any other feature of the claim procedure herein (and its claims waiver feature), it may not be waived or altered absent a written change order signed by both parties and approved as to form by their legal counsel.

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4. District shall not be deemed to waive or alter any provision under this Article 12, if at District's sole discretion, a claim is administered in a manner not in accord with this Article 12.

13. LEGAL AND MISCELLANEOUS**A. Laws And Regulations**

1. Design-Build Entity shall keep fully informed of and shall comply with all laws, ordinances, regulations and orders of any properly constituted authority affecting the Contract Documents, Work and persons connected with Work, and shall, to the greatest extent permitted by law, protect and indemnify District and its officers, employees, consultants and agents against any claim or liability, including attorney's fees, arising from or based on violation of law, ordinance, regulation or order, whether by Design-Build Entity or by Subcontractors, employees or agents. Authorized persons may at any time enter upon any part of Work to ascertain compliance of all applicable laws, ordinances, regulations and orders.
2. Whenever Technical Specifications and Requirements or other Contract Documents require larger sizes or higher standards than are required by any applicable law, ordinance, regulation or order, Technical Specifications and Requirements or other Contract Documents shall govern. Whenever Technical Specifications and Requirements or other Contract Documents require something that will violate such laws, ordinances, regulations or orders, then such laws, ordinances, regulations or orders shall govern.
3. Design-Build Entity shall comply with applicable portions of Title 19 and Title 24, California Code of Regulations (Uniform Building Code) (most recent edition), and Public Contract Code. Whenever Contract Documents require larger sizes or higher standards than are required by any applicable law, ordinance, regulation or order, Contract Documents shall govern. Whenever Contract Documents require something that will violate such laws, ordinances, regulations or orders, then such laws, ordinances, regulations or orders shall govern.
4. Design-Build Entity shall maintain in the Project Office a current copy of Title 19 and 24 of the California Code of Regulations at all times during construction.

B. Permits And Taxes

Design-Build Entity shall procure all permits and licenses applicable to the Work (including environmental matters to the extent applicable), pay all charges and fees, including fees for street opening permits, comply with, implement and acknowledge effectiveness of all permits, initiate and cooperate in securing all required notifications or approvals therefore, and give all notices necessary and incident to due and lawful prosecution of Work, unless otherwise provided herein. District will pay applicable building permits, school, sanitation and water fees, except as otherwise provided in the Contract Documents. If, under federal excise tax law, any transaction hereunder constitutes a sale on which a federal excise tax is imposed, and the sale is exempt from such excise tax because it is a sale to a state or local government for its exclusive use, the District, upon request, will execute a certificate of exemption which will certify (1) that the District is a political subdivision of the state for the purpose of such exemption, and (2) that the sale is for the exclusive use of the District. No excise tax for such materials shall be included in any Proposal price. Design-Build Entity shall pay all sales and/or use taxes levied on materials, supplies, or equipment purchased and used on or incorporated into Work, and all other taxes properly assessed against equipment or other property used in connection with Work, without any increase in the Contract Sum. Design-Build Entity shall make necessary arrangements with proper authorities having jurisdiction over roads, streets, pipelines, navigable waterways, railroads, and other works in advance of operations, even where District may have already obtained permits for the Work.

C. Responsibility Of Design-Build Entity And Indemnification

1. Except to the extent caused by their sole negligence, willful misconduct or active negligence, District and each of its officers, employees, consultants and agents including, but not limited to the Board, Engineering Consultant, and each District Representative, shall not be liable or accountable in any manner for loss or damage that may happen to any part of the Work; loss or damage to materials or other things used or employed in performing the Work; injury, sickness, disease, or death of any person; or damage to property resulting from any cause whatsoever, attributable to performance or

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character of the Work, and Design-Build Entity releases all of the foregoing persons and entities from any and all such claims.

2. To the furthest extent permitted by law (including without limitation California Civil Code Section 2782 and, if and to the extent applicable, California Civil Code Section 2782.8, Design-Build Entity shall assume defense of (with counsel approved by District), and indemnify and hold harmless, District and each of its officers, employees, consultants and agents, including but not limited to the Board, Engineering Consultant, and each District representative, from claims, suits, actions, and liability of every kind, nature and description, including but not limited to claims and fines of regulatory agencies and attorney's fees and consultant's fees, directly or indirectly arising out of, connected with or resulting from performance of the Work, failure to perform the Work, or condition of the Work which is caused in whole or part by any act or omission of Design-Build Entity, Subcontractors, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, regardless of whether it is caused in part by the negligence of District or by any person or entity required to be indemnified hereunder.
3. With respect to third-party claims against Design-Build Entity, Design-Build Entity waives any and all rights to any type of express or implied indemnity against District and each of its officers, employees, consultants and agents including, but not limited to District, the Board, Engineering Consultant and each District representative.
4. Approval or purchase of any insurance contracts or policies shall in no way relieve from liability nor limit the liability of Design-Build Entity, its Subcontractors of any tier, or the officers or agents of any of them.
5. To the furthest extent permitted by law (including, without limitation, Civil Code Section 2782 and, if and to the extent applicable, Civil Code Section 2782.8, the indemnification provisions, releases of liability and limitations of liability, claims procedures, and limitations of remedy expressed throughout Contract Documents shall apply even in the event of breach of contract, negligence (active or passive), fault or strict liability of the party(is) indemnified, released, or limited in liability, and shall survive the termination, rescission, breach, abandonment, or completion of the Work or the terms of the Contract Documents. If Design-Build Entity fails to perform any of these defense or indemnity obligations, District may in its discretion back charge Design-Build Entity for District's costs and damages resulting therefrom and withhold such sums from progress payments or other contract moneys which may become due.
6. The indemnification provisions of this Contract as reflected in the Contract Documents shall not apply to any indemnified party to the extent of its sole negligence or willful misconduct; nor shall they apply to District or other indemnified party to the extent of its active negligence.

D. Suspension Of Work

1. District may, without cause, order Design-Build Entity in writing to suspend, delay or interrupt Work in whole or in part for such period of time as District may determine. An adjustment shall be made for increases in cost of performance of Work of the Contract Documents caused by any such suspension, delay or interruption, calculated using the measures set forth in Section 01 26 00 (Modification Procedures). No adjustment shall be made to extent that:
 - a. Performance is, was or would have been so suspended, delayed or interrupted by another cause for which Design-Build Entity is responsible; or
 - b. An equitable adjustment is made or denied under any other provision of Contract Documents; or
 - c. The suspension of Work was the direct or indirect result of Design-Build Entity's failure to perform any of its obligations hereunder. Adjustments made in cost of performance may have a mutually agreed fixed or percentage fee; if the parties cannot agree, Design-Build Entity may file a claim under Article 12 of this Document 00 71 00.
2. In addition to the foregoing, if applicable, Design-Build Entity shall receive a time extension for the actual period of time Design-Build Entity proves it was delayed by District's order to suspend, delay or interrupt Work. For example, and not by way of limitation, if precipitation exceeding the specified parameters does not in fact delay Design-Build Entity's progress on the critical path, then no time extension shall be recognized; and conversely, if Design-Build Entity proves to District's satisfaction that precipitation exceeding the specified parameters causes delay to Design-Build Entity for a period longer than the number of precipitation days incurred (e.g., if it rains or snows during

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grading work), then Design-Build Entity shall be entitled to a time extension equal to the actual period of such delay.

E. Termination Of Contract For Cause

1. District may declare Design-Build Entity in default of Contract Documents and District may terminate Design-Build Entity's right to proceed under the Contract Documents for cause:
 - a. Should Design-Build Entity make an assignment for the benefit of creditors; admit in writing its inability to pay its debts as they become due; file a voluntary petition in bankruptcy; be adjudged a bankrupt or insolvent; be the subject of an involuntary petition in bankruptcy which is not dismissed within 60 Days; file a petition or answer seeking for itself any reorganization, arrangement, composition, readjustment, liquidation, dissolution, or similar relief under any present or future statute, law, or regulation; file any answer admitting or not contesting the material allegations of a petition filed against Design-Build Entity in any such proceeding; or seek, consent to, or acquiesce in, the appointment of any trustee, receiver, custodian or liquidator of Design-Build Entity or of all or any substantial part of its properties or if Design-Build Entity, its directors or shareholders, take action to dissolve or liquidate Design-Build Entity; or
 - b. Should Design-Build Entity commit a material breach of the Contract Documents. If District declares Design-Build Entity in default due to material breach, however, District must allow Design-Build Entity an opportunity to cure such breach within ten Days of the date of notice from District to Design-Build Entity providing notice of the default; or, if such breach is curable but not curable within such ten-Day period, within such period of time as is reasonably necessary to accomplish such cure. (In order for Design-Build Entity to avail itself of a time period in excess of ten Days, Design-Build Entity must provide District within the ten-Day period with a written plan ("cure plan") acceptable to District to cure said breach which includes, for example, evidence of necessary resources, actual Subcontractor commitments, actual labor commitments, schedules and recovery schedules meeting Contract Document requirements and showing a realistic and achievable plan to cure the breach. Design-Build Entity must then diligently commence and continue such cure according to the written cure plan); or
 - c. Should Design-Build Entity violate or allow (by a Subcontractor or other person or entity for which Design-Build Entity is responsible) a violation of any valid law, statute, regulation, rule, ordinance, permit, license or order of any governmental agency applicable to the Project or Work and does not cure (or cause to be cured) such violation within ten Days of the date of the notice from District to Design-Build Entity demanding such cure; or, if such violation is curable but not curable within such ten-Day period, within such period of time as is reasonably necessary to accomplish such cure. (In order for Design-Build Entity to avail itself of a time period in excess of ten Days, Design-Build Entity shall provide District within the ten-Day period with a written plan to cure said violation acceptable to District, and then diligently commence and continue performance of such cure according to the written plan.)
2. If District at any time reasonably believes that Design-Build Entity is or may be in default under the Contract Documents as provided above, then District may in its sole discretion notify Design-Build Entity of this fact and request written assurances from Design-Build Entity of performance of Contract Documents and a written plan from Design-Build Entity to remedy any default under the terms of Contract Documents which District may advise Design-Build Entity of in writing. Design-Build Entity shall, within 10 Days of District's request, deliver a written cure plan which meets the requirements of the written cure plan as defined above. Failure of Design-Build Entity to provide such written assurances of performance and the required written cure plan within ten Days of request will constitute a material breach of Contract Documents sufficient to justify termination for cause.
3. In event of termination for cause, District will immediately serve written notice thereof upon Surety and Design-Build Entity. Surety shall have the rights and obligations set forth in Document 00 61 00 (Construction Performance Bond). Subject to the Surety's rights under the Performance Bond (which rights are waived upon a default thereunder), District may take over the Work and prosecute it to completion by contract or by any other methods it may deem advisable.
4. In the event of termination by District for cause:
 - a. District will compensate Design-Build Entity for the value of the Work delivered to District upon termination as determined in accordance with the Contract Documents, subject to all rights of offset and back charges, and provided that Design-Build Entity provides District with updated

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- as-builts and Project Record Documents showing the Work performed up to the date of termination. However, District will not compensate Design-Build Entity for its costs in terminating the Work or any cancellation charges owed to third parties.
- b. Design-Build Entity shall deliver to District possession of the Work in its then condition including, but not limited to, all designs, architectural and engineering, Project records, Project Record Documents, cost data of all types, Technical Specifications and Requirements and contracts with vendors and Subcontractors, all other documentation associated with the Project, and all construction supplies and aids dedicated solely to performing the Work which, in the normal course of construction, would be consumed or only have salvage value at the end of the construction period. Design-Build Entity shall remain fully liable for the failure of any Work completed and materials and equipment provided through the date of such termination to comply with the provisions of the Contract Documents. The provisions of this subparagraph shall not be interpreted to diminish any right which District may have to claim and recover damages for any breach of Contract Documents or otherwise, but rather, Design-Build Entity shall compensate District for all loss, cost, damage, expense, and/or liability suffered by District as a result of such termination and failure to comply with Contract Documents.
 - c. District's rights under this subparagraph shall be specifically enforceable to the greatest extent permitted by law. District shall, to the extent applicable, have all other rights and remedies set forth in any Proposing Document.
5. District may terminate portions or parts of the Work for cause, provided these portions or parts (1) have separate geographic areas from parts or portions of the Work not terminated or (2) are limited to the work of one or more specific trades or Subcontractors. In such case, Design-Build Entity shall cooperate with a completing Design-Build Entity as required under Article 6 of this Document 00 71 00.
 6. In the event a termination for cause is later determined to have been made wrongfully or without cause, then Design-Build Entity shall have no greater rights than if a termination for convenience had been effected (to include, as appropriate, the recovery rights specified therefore. Any Design-Build Entity claim arising out of a termination for cause, however, shall be made in accordance with Article 12 of this Document 00 71 00. No other loss cost, damage, expense or liability may be claimed, requested or recovered by Design-Build Entity.

F. Termination Of Contract For Convenience

1. District may terminate for convenience performance of the Work under the Contract Documents in accordance with this clause in whole, or from time to time in part, whenever District shall determine that termination is in District's best interest. Termination for convenience may only be effected by District delivering to Design-Build Entity written "Notice of Termination for Convenience" specifying the extent to which performance of the Work under the Contract Documents is terminated and the effective date of the termination.
2. After receiving a notice of termination for convenience under this subparagraph, and except as otherwise directed by District, Design-Build Entity shall:
 - a. Stop Work under the Contract Documents on date and to extent specified in notice of termination for convenience;
 - b. Place no further orders or subcontracts for materials, services, or facilities except as necessary to complete portion of Work under the Contract Documents which is not terminated;
 - c. Terminate all orders and subcontracts to extent that they relate to performance of Work terminated by the notice of termination;
 - d. Assign to District in manner, at times, and to extent directed by District, all right, title, and interest of Design-Build Entity under orders and subcontracts so terminated. District shall have the right, in its sole discretion, to settle or pay any or all claims arising out of termination of orders and subcontracts;
 - e. Settle all outstanding liabilities and all claims arising out of such termination of orders and subcontracts, with approval or ratification of District to extent District may require. District's approval or ratification shall be final for purposes of this subparagraph;
 - f. Transfer title to District, and deliver in the manner, at the times, and to the extent, if any, directed by District, all fabricated or unfabricated parts, Work in process, completed Work, supplies, and all other material produced as part of, or acquired in connection with performance

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- of, Work terminated by the notice of termination, and completed or partially completed drawings, drawings, specifications, information, and other property which, if the Project had been completed, would have been required to be furnished to District;
- g. Use its best efforts to sell, in manner, at times, to extent, and at price or prices that District directs or authorizes, any property of types referred to in subparagraph, but Design-Build Entity shall not be required to extend credit to any purchaser, and may acquire any such property under conditions prescribed and at price or prices approved by District. Proceeds of transfer or disposition shall be applied to reduce payments to be made by District to Design-Build Entity under the Contract Documents or shall otherwise be credited to the price or cost of Work covered by Contract Documents or paid in such other manner as District may direct;
 - h. Complete performance of the part of the Work which was not terminated by the notice of termination; and
 - i. Take such action as may be necessary, or as District may direct, to protect and preserve all property related to Contract Documents which is in Design-Build Entity's possession and in which District has or may acquire interest.
3. After receipt of a notice of termination for convenience, Design-Build Entity shall submit to District its termination for convenience claim, in form and with all certifications required by Article 12 of this Document 00 71 00. Design-Build Entity's termination claim shall be submitted promptly, but in no event later than 6 months from effective date of the termination. Design-Build Entity and District may agree upon the whole or part of the amount or amounts to be paid to Design-Build Entity because of a total or partial termination of Work for convenience. If Design-Build Entity and District fail to agree on the whole amount to be paid to Design-Build Entity because of the termination of the Work under this subparagraph, District's total liability to Design-Build Entity by reason of the termination shall not exceed the total (without duplication of any items) of:
- a. The reasonable cost to Design-Build Entity, without profit, for all Work performed prior to the effective date of the termination, including Work done to secure the Project for termination. Reasonable cost may not exceed the applicable percentage completion values derived from the progress schedule and the schedule of values. Deductions shall be made for cost of materials to be retained by Design-Build Entity, cost of Work defectively performed, amounts realized by sale of materials, and for other appropriate credits against cost of Work. Reasonable cost will include reasonable allowance for Project overhead and general administrative overhead not to exceed a total of ten percent of direct costs of such Work. When, in District's opinion, the cost of any item of Work is excessively high due to costs incurred to remedy or replace defective or rejected Work, reasonable cost to be allowed will be the estimated reasonable cost of performing the Work in compliance with requirements of Contract Documents and excessive actual cost shall be disallowed.
 - b. A reasonable allowance for profit on actual and allowable cost of Work performed as determined under this subparagraph, provided that Design-Build Entity establishes to District's satisfaction that Design-Build Entity would have made a profit had the Project been completed, and provided further that the profit allowed shall not exceed 5 percent of cost.
 - c. Reasonable costs to Design-Build Entity of handling material returned to vendors, delivered to District or otherwise disposed of as directed by District.
 - d. A reasonable allowance for Design-Build Entity's internal administrative costs in preparing termination claim.
 - e. Except as provided in this subparagraph, District shall not be liable for costs incurred by Design-Build Entity or Subcontractors after receipt of a notice of termination. Such non-recoverable costs include, but are not limited to, anticipated profits on Work not performed as of the date of termination, post-termination employee salaries, post-termination general administrative expenses, post-termination overhead or unabsorbed overhead, costs of preparing and submitting Design-Build Entity's Proposal, attorney's fees of any type, and all costs relating to prosecution of claim or lawsuit.
 - f. District shall have no obligation to pay Design-Build Entity under this subparagraph unless and until Design-Build Entity provides District with updated and acceptable as-builts and Project Record Documents for Work completed prior to termination.
4. In arriving at the amount due Design-Build Entity under this clause, there shall be deducted in whole (or in the appropriate part[s] if the termination is partial):

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- a. All unliquidated advances or other payments on account previously made to Design-Build Entity, including without limitation all payments applicable to the terminated portion of Contract Documents;
- b. Any claim which District may have against Design-Build Entity in connection with Contract Documents; and
- c. The agreed price for, or proceeds of sale of, any materials, supplies, or other things kept by Design-Build Entity or sold under provisions of this subparagraph, and not otherwise recovered by or credited to District.

G. Contingent Assignment Of Subcontracts

1. Design-Build Entity hereby assigns to District each Subcontract for a portion of the Work (including Services), provided that:
 - a. The assignment is effective only after District's termination of Design-Build Entity's right to proceed under the Contract Documents (or portion thereof relating to that Subcontract) pursuant to the termination for cause subparagraphs herein.
 - b. The Assignment is effective only for the Subcontracts which District expressly accepts by notifying the Subcontractor in writing;
 - c. The assignment is subject to the prior rights, if any, of the Surety, obligated by Document 00 61 00 (Construction Performance Bond) provided under the Contract Documents, where the Surety exercises its rights to complete the Contract;
 - d. After the effectiveness of an assignment, Design-Build Entity shall, at its sole cost and expense, sign all instruments and take all actions reasonably requested by District to evidence and confirm the effectiveness of the assignment in District; and
 - e. Nothing in this subparagraph shall modify or limit any of Design-Build Entity's obligations to District arising from acts or omissions occurring before the effectiveness of any Subcontract assignment, including but not limited to all defense, indemnity and hold-harmless obligations arising from or related to the assigned Subcontract.

H. Remedies and Contract Integration

1. Subject to Contract Documents provisions regarding Design-Build Entity claims, claim review, and claim resolution, and subject to the limitations therein, the exclusive jurisdiction and venue for resolving all claims, counter-claims, disputes and other matters in question between District and Design-Build Entity arising out of or relating to Contract Documents, any breach thereof or the Project shall be the applicable court of competent jurisdiction located in the County of San Mateo. All District remedies provided in the Contract Documents shall be taken and construed as cumulative and not exclusive; that is, in addition to each and every other remedy herein provided; and in all instances District shall have any and all other equitable and legal rights and remedies which it would have according to law.
2. The Contract Documents, any Contract Modifications and Change Orders shall represent the entire and integrated agreement between District and Design-Build Entity regarding the subject matters hereof and thereof and shall constitute the exclusive statement of the terms of the parties' agreement. The Contract Documents, and any Contract Modifications and Change Orders, shall supersede any and all prior negotiations, representations or agreements, written or oral, express or implied, that relate in any way to the subject matter of the Contract Documents or written modifications. District and Design-Build Entity represent and agree that, except as otherwise expressly provided in the Contract Documents, they are entering into the Contract Documents and any subsequent written modification in sole reliance upon the information set forth or referenced in the Contract Documents or Contract Modifications and the parties are not and will not rely on any other information.
3. In any proceeding to enforce the Contract Documents, Design-Build Entity and District agree that the finder of fact shall receive detailed instructions on the meaning and operation of the Contract Documents, including their conditions, limitations of liability, claims and time extension procedures and any other provisions impacting major defenses and theories of liability of the parties. Detailed findings of fact shall be requested, to verify Contract enforcement.
4. Either party's waiver of any breach or failure to enforce any of the terms, covenants, conditions or other provisions of the Contract Documents at any time shall not in any way affect, limit, modify or waive that party's right thereafter to enforce or compel strict compliance with every term, covenant,

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condition or other provision hereof, any course of dealing or custom of the trade or oral representations notwithstanding.

I. Patents

Fees or claims for any patented invention, article or arrangement that may be used upon or in any manner connected with performance of the Work or any part thereof shall be included in the Proposal price for doing the Work. To the greatest extent permitted by law, Design-Build Entity shall defend, indemnify and hold harmless District and each of its officers, employees, consultants and agents, including, but not limited to, the Board, Architect/Engineer and each District representative, from all damages, claims for damages, costs or expenses in law or equity, including attorney's fees, arising from or relating to any claim that any article supplied or to be supplied under the Contract Documents infringes on the patent rights, copyright, royalties, trade name, trademark, service mark, trade secret or other intellectual property right of any person or persons or that the person or entity supplying the article does not have a lawful right to sell the same. Such costs or expenses for which Design-Build Entity agrees to indemnify and hold harmless the above indemnities include but are not limited to any and all license fees, whether such fees are agreed by any indemnitee or ordered by a court or administrative body of any competent jurisdiction.

J. Substitution For Patented And Specified Articles

1. Except as noted specifically in Technical Specifications and Requirements, whenever in Technical Specifications and Requirements, material or process is designated by patent or proprietary name or by name of manufacturer, such designation shall be deemed to be used for purpose of facilitating description of material and process desired, and shall be deemed to be followed by the words "or equal." Design-Build Entity may offer any substitute material or process that Design-Build Entity considers equal in every respect to that so designated and if material or process offered by Design-Build Entity is, in opinion of District, equal in every respect to that so designated, its use will be approved. However, Design-Build Entity may utilize this right only by timely submitting Document 00 43 25 (Substitution Request Form) as provided in Document 00 11 19 (Request for Proposal). A substitution will be approved only if it is a true "equal" item in every aspect of its design and quality, including but not limited to its dimensions, weights, service requirements, durability, functioning, impact on contiguous construction elements, overall schedule and design.
2. The foregoing limited right to an "or equal" substitution shall not apply to any material or process which is designated in the approved Drawings and Specifications by patent or proprietary name or by name of manufacturer. Any such substitution is a deviation subject to District's advance written approval as provided in subparagraph 5.F.1 above.
3. Additionally, any substitution under this paragraph may require DSA approval.

K. Interest Of Public Officers

No representative, officer, or employee of District, no member of the governing body of the locality in which the Project is situated, no member of the locality in which District was activated, and no other public official of such locality or localities who exercises any functions or responsibilities with respect to the Project, during the tenure of the official or for one year thereafter, shall, as principal, agent, attorney or otherwise, be directly or indirectly interested, in the Contract Documents or the proceeds thereof.

L. Limit Of Liability

DISTRICT, AND EACH OF ITS OFFICERS, BOARD MEMBERS, EMPLOYEES, CONSULTANTS AND AGENTS INCLUDING, BUT NOT LIMITED TO, ARCHITECT/ENGINEER AND EACH OTHER DISTRICT REPRESENTATIVE, SHALL HAVE NO LIABILITY TO DESIGN-BUILD ENTITY FOR SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES, EXCEPT TO THE LIMITED EXTENT THAT THESE CONTRACT DOCUMENTS OR APPLICABLE PUBLIC CONTRACTING STATUTES MAY SPECIFY THEIR RECOVERY.

M. Severability

Any provisions or portions thereof of Contract Documents that are prohibited by, unlawful, or unenforceable under any applicable law of any jurisdiction shall as to such jurisdiction be ineffective without affecting other provisions or portions thereof in the Contract Documents.

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N. Ownership Of Results/Works For Hire

1. The architectural and/or engineering analysis, Technical Specifications and Requirements for the Project, including without limitation Technical Specifications and Requirements, Design Development Documents and Construction Documents, that are prepared pursuant to the Contract Documents are and shall remain the property of District. Design-Build Entity hereby does and shall cause all Subcontractors and others who prepared such design documents for the Project to transfer, convey, and assign to District all rights throughout the world in the nature of copyright and trademark in and to all versions of such design documents, including but not limited to the Contract Documents, but only to the extent such materials apply to District and/or to the Project. District shall have the right to distribute, copy or to cause the distribution and copying of such STechnical Specifications and Requirements to third parties as may reasonably be necessary in connection with the Project.
2. Any and all artwork, copy, posters, billboards, photographs, videotapes, audiotapes, systems designs, software, reports, diagrams, surveys, source codes or any original works of authorship created by Design-Build Entity or its Subcontractors or designers in connection with services performed under this Contract shall be works for hire as defined under Title 17 of the United States Code, and all copyrights in such works are the property of District. In the event that it is ever determined that any works created by Design-Build Entity or its Subcontractors or designers under this Contract are not works for hire under U.S. law, Design-Build Entity hereby assigns all copyrights to such works to District. With the prior written approval of District, Design-Build Entity may retain and use copies of such works for reference and as documentation of its experience and capabilities.

14. MODIFICATIONS OF CONTRACT DOCUMENTS**A. Alterations, Modifications And Force Account Work**

1. As provided in the latest edition of Part 1 of Title 24, California Code of Regulations, no modification or deviation from the DSA approved Drawings and Specifications will be permitted except by written addenda, written Change Order or written Supplemental Instruction. As appropriate, Change Orders are subject to approval by the Division of State Architect. Refer to section 4-338, Part 1, Title 24, California Code of Regulations. Design-Build Entity shall aggressively plan and schedule its work, and coordinate with District and DSA, schedule RFI's and work inspections and progress, to avoid any delays or disruptions to the Work resulting from DSA requirements.
2. District may, without notice to the sureties, make alterations, deviations, additions to, or deletions from Contract Documents; increase or decrease the quantity of any item or portion of the Work; expand, contract or otherwise change the Contract Time; delete any item or portion of the Work; and require extra Work. Design-Build Entity shall perform such Work under applicable provisions of the Contract Documents, unless specifically provided otherwise at the time the change is ordered. As appropriate, such Change Orders are subject to approval by DSA. Refer to Section 4-338, Part 1, Title 24, California Code of Regulations. In the case of any ordered extra Work, District reserves the right to furnish all or portions of associated labor, material, and equipment, which Design-Build Entity shall accept and use without payment for costs, markup, profit, or otherwise for such District-furnished labor, materials, and equipment.
3. District may make changes to the Work during the course of construction to bring the Work into compliance with environmental requirements or standards established by state and federal statutes and regulations enacted after the Contract has been awarded. Design-Build Entity shall be compensated for changes affecting the Contract Time or Contract Sum of the Work as set forth in this Article 14 and in Section 01 26 00 (Modification Procedures).
4. Changes affecting the Contract Time or Contract Sum of the Work shall be set forth in a written Change Order that shall specify:
 - a. The Work performed in connection with the change to be made;
 - b. The amount of the adjustment of the Contract Sum, if any, and the basis for compensation for the Work ordered; and
 - c. The extent of the adjustment in the Contract Time, if any.

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5. A Change Order will become effective when signed by District. If District exercises its right to decide disputed issues pertaining to changed Work as set forth in Articles 12 and 14 of this Document 00 71 00, then the resulting Change Order shall be effective when signed by District, notwithstanding that Design-Build Entity has not signed it.
6. Changes not affecting the Contract Time or Contract Sum of the Work, in District's discretion, may be set forth in a written RFI-Reply executed by District. Execution of such an RFI-Reply constitutes Design-Build Entity's agreement to make the specified change without change to the Contract Sum or the Contract Time.
7. Changes or deviations from Contract Documents affecting the Contract Time or Contract Sum of the Work shall not be made without the authority of an effective Change Order or Construction Change Directive as provided in Section 01 26 00 (Modification Procedures), except in cases of emergency discussed in this Document 00 71 00.
8. If changes ordered in design, workmanship or materials are of such a nature as to increase or decrease the cost of any part of the Work, the price fixed in the Contract Documents shall be increased or decreased by the amount that Design-Build Entity and District may agree upon as a reasonable and proper allowance for the cost increase or decrease. If an agreement cannot be reached, then District will reach a determination, which shall be final, subject to Design-Build Entity's rights under Article 12 of this Document 00 71 00. In all cases Design-Build Entity shall perform the changed Work as directed by District subject to Design-Build Entity's rights under Article 12 of this Document 00 71 00.
9. Design-Build Entity shall, upon District's request, permit inspection of the original unaltered Proposal estimate, subcontract agreements, purchase orders relating to the change, and documents substantiating all costs associated with its cost proposal or claims arising from changes in the Work.
10. Changes in the Work made pursuant to this Article 14 and extensions of Contract Time necessary by reason thereof shall not in any way release the guaranties and warranties given by Design-Build Entity pursuant to provisions of the Contract Documents, nor shall such changes in the Work relieve or release the Sureties of bonds executed pursuant to said provisions. The Sureties, in executing such bonds, shall be deemed to have expressly agreed to any such change in the Work and to any extension of time made by reason thereof.
11. Procedures for Modifications of Contract Documents and for calculating the cost of extra Work are given in Section 01 26 00 (Modification Procedures). Regarding delay and impact costs of any nature, Design-Build Entity may not seek delay compensation for on-Site or off-Site costs based on formulas, e.g., "Eichlay" or other formula. Rather, Design-Build Entity shall prove actual costs resulting from such delays. If Design-Build Entity requests compensation for delay to the construction, then Design-Build Entity shall prove and document actual costs plus markup per the cost categories and procedures in Section 01 26 00 (Modification Procedures) in order to request, claim or prove compensation for delay.
12. A performance bond rider covering changed Work must be executed before proceeding with the changed Work.

B. Entitlement to Change Of Contract Time

1. Contract Time may only be changed by Change Order or by Contract Modification, and all time limits stated in the Contract Documents are of the essence of Contract Documents.
2. Contract Time will be adjusted in an amount equal to the time lost due to:
 - a. Changes in the Work ordered by District;
 - b. Acts or neglect by District, Architect/Engineer, any District representative, utility owners or other contractors performing other work, provided that Design-Build Entity has fully and completely performed its responsibilities under the Contract Documents;
 - c. District ordered suspension, delay or interruption of Work which is otherwise compensable as provided in paragraph 13.D above; or

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- d. Fires, floods, epidemics, abnormal weather conditions beyond the parameters otherwise set forth in this subparagraph, earthquakes, civil or labor disturbances, strikes or acts of God, provided damages resulting therefrom are not the result of Design-Build Entity's failure to protect the Work as required by Contract Documents.
3. Contract Time shall not be extended for any cause identified immediately above, however, unless:
 - a. Design-Build Entity actually has been prevented from completing any part of the Work within the Contract Time due to delay that is beyond Design-Build Entity's control and due to reasons for which Design-Build Entity is not responsible (delays attributable to and within the control of a Subcontractor, or its subcontractors, or supplier shall be deemed to be delays within the control of Design-Build Entity);
 - b. A claim for delay is made as provided herein; and
 - c. Design-Build Entity submits a Time Impact Evaluation as required under Section 01 32 16 (Progress Schedules and Reports) that demonstrates actual delay to critical Work activities that actually delay the progress of the Work in the amount of time requested.

C. Notice Of Delay

Within seven Days of the beginning of any delay, Design-Build Entity shall notify District in writing, by submitting a notice of delay, describing all anticipated delays resulting from the delay event in question. Any request for extension of time include a written schedule document that demonstrates delay to the critical path using a Time Impact Evaluation as specified in Section 01 32 16 (Progress Schedules and Reports). District will determine all claims and adjustments in the Contract Time. No claim for an adjustment in the Contract Time will be valid and such claim will be waived if not submitted in accordance with the requirements of this subparagraph.

D. Non-Compensable Time Extensions; Adverse Weather Parameters

1. Where Design-Build Entity is prevented from completing any part of the Work within the Contract Time due to delay beyond the control of both District and Design-Build Entity (including, but not limited to, adverse weather conditions exceeding Contract Documents parameters, earthquakes, Acts of God, epidemics, and acts of other contractors or utilities) an extension of Contract Time, in an amount equal to the time lost due to such delay (without compensation) shall be Design-Build Entity's sole and exclusive remedy for such delays.
2. Delays due to abnormal or adverse weather conditions will not be allowed for weather conditions that fall within the parameters listed or referenced in this subparagraph. Adverse weather delays may be allowed only if the number of workdays of adverse weather exceeds these parameters first on a monthly basis and second on a cumulative annual basis, and Design-Build Entity proves that the adverse weather actually caused delays to work on the critical path. Design-Build Entity shall give written notice of intent to claim an adverse weather day within one Day of the adverse weather day occurring. Rain parameters are identified in Document 00 73 00 (Supplemental General Conditions), pro-rated in the individual month Design-Build Entity starts and finishes Work.
3. In order to qualify as an adverse weather delay with respect to the foregoing parameters, daily rainfall must exceed .1 of an inch or more at the station identified in Document 00 73 00, as measured by the National Oceanic & Atmospheric Administration, and Design-Build Entity shall prove that the rain actually caused delay to the Work, following the procedures in this subparagraph and the Contract Documents. Notwithstanding the foregoing allowances, Design-Build Entity shall at all times employ all available mitigation measures to enable Work to continue. Delays due to abnormal or adverse weather conditions will not be allowed for weather conditions that fall within the parameters listed above.
4. Design-Build Entity shall include the foregoing precipitation parameters as a monthly activity in its progress schedule. As Work on the critical path is affected by precipitation, Design-Build Entity shall notify District and request that the days be moved to the affected activities. Any adverse weather days remaining shall be considered Project float.
5. Adverse weather delay for precipitation shall be recognized for the actual period of time Design-Build Entity proves it was delayed by precipitation exceeding the specified parameters. For example, and not by way of limitation, if precipitation exceeding the specified parameters does not in fact delay Design-Build Entity's progress on the critical path, then no time extension shall be recognized;

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and conversely, if Design-Build Entity proves to District's satisfaction that precipitation exceeding the specified parameters causes delay to Design-Build Entity for a period longer than the number of precipitation days incurred (e.g., if it rains or snows during grading work), then Design-Build Entity shall be entitled to a time extension equal to the actual period of such delay.

6. Design-Build Entity shall take reasonable steps to mitigate potential weather delays, such as dewatering the Site, and covering Work and material that could be affected adversely by weather. Failure to do so shall be cause for District to not grant a time extension due to adverse weather, where Design-Build Entity could have avoided or mitigated the potential delay by exercising reasonable care.

E. Compensable Time Extensions

1. Design-Build Entity may receive a time extension and be compensated for delays caused directly and solely by District or, except as provided in subparagraph 3.b below, DSA. Provided Design-Build Entity provides proper notice and documentation under Section 01 32 16, such compensation may include extended field or home office overhead, field supervision, escalation charges, acceleration costs and extended subcontractor costs.
2. Design-Build Entity shall not be entitled to any time extension or compensation, however, for any delays caused in whole or in part by Design-Build Entity's failure to perform its obligations under the Contract Documents, or during periods of delay concurrently caused by Design-Build Entity and either District or others.
3. Design-Build Entity shall not be entitled to damages for delay to the Work caused by the following reasons:
 - a. District's right to sequence the Work in a manner which would avoid disruption to District's tenants and their contractors or other prime contractors and their respective subcontractors, exercised as a result of Design-Build Entity's failure to perform its cooperation and coordination responsibilities required by Contract Documents; District's enforcement of any government act or regulation; or the provisions of the Contract Documents;
 - b. Any DSA delay resulting from Design-Build Entity's failure to communicate with DSA as required by paragraph 1.F. above; and
 - c. Extensive requests for clarifications to Contract Documents or Contract Modifications thereto, provided such clarifications or Contract Modifications are processed by District or its consultants in a reasonable time commensurate with Contract Documents requirements.

F. Liquidated Damages

1. Time is of the essence. Execution of Contract Documents by Design-Build Entity shall constitute acknowledgement by Design-Build Entity that Design-Build Entity understands, has ascertained and agrees that District will actually sustain damages in the amount fixed in the Contract Documents for each and every Day during which completion of Work required is delayed beyond expiration of time fixed for completion or extensions of time allowed pursuant to provisions hereof. Design-Build Entity and District agree that specified measures of liquidated damages shall be presumed to be the damages actually sustained by District as defined below, and that because of the nature of the Project, it would be impracticable or extremely difficult to fix the actual damages.
2. Liquidated damages shall be considered not as a penalty but as agreed monetary damage sustained by District for increased Project administration expenses, including extra inspection, construction management and architectural and engineering expenses related to the Project and Contract Documents because Design-Build Entity failed to perform and complete Work within time fixed for completion or extensions of time allowed pursuant to provisions hereof. Except as otherwise provided in Document 00 73 00 (Supplemental General Conditions), liquidated damages shall also include lost revenues, interest expenses and cost of substitute facilities. However, liquidated damages shall not be deemed to include within their scope additional damages or administrative costs arising from Defective Work, cost of completion of the Work, , claims and fines of regulatory agencies, damages suffered by others or other forms of liability claimed against District as a result of delay (e.g., delay or delay related claims of other contractors, subcontractors or tenants), and defense

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costs thereof. Design-Build Entity shall be fully responsible for the actual amount of any such damages it causes, in addition to the liquidated damages otherwise due District.

3. District may deduct from any money due or to become due to Design-Build Entity subsequent to time for completion of entire Work and extensions of time allowed pursuant to provisions hereof, a sum representing then-accrued liquidated damages. Should Design-Build Entity fall behind the approved Progress Schedule in circumstances where it is substantially likely that District will be entitled to assess liquidated damages, District may deduct liquidated damages based on its estimated period of late completion. District need not wait until Final Completion to withhold liquidated damages from Design-Build Entity's progress payments. Should money due or to become due to Design-Build Entity be insufficient to cover aggregate liquidated damages due, then Design-Build Entity forthwith shall pay the remainder of the assessed liquidated damages to District.

G. Differing Site Conditions

1. In the event that Design-Build Entity encounters underground conditions that exceed the scope of the Work, then Design-Build Entity shall promptly give District written notice of the condition, and shall give such notice before the conditions are disturbed, to include: (1) material that the Design-Build Entity believes may be 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 provisions of existing law, and is not within the scope of Work; (2) subsurface or latent physical conditions at the Site differing from those indicated by information about the Site made available to Design-Build Entities prior to the deadline for submitting Proposals, that Design-Build Entity did not and could not have known about by performing its required pre-Proposal investigations; or (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 the contract, that Design-Build Entity did not and could not have known about by performing its required pre-Proposal investigations.
 - a. District shall promptly investigate the conditions, and if it finds that (i.) the conditions do materially so differ in a manner Design-Build Entity did not anticipate and could not have anticipated, or do involve hazardous waste outside the scope of the Work, and (ii.) cause a decrease or increase in the Design-Build Entity's cost of, or the time required for, performance of any part of the Work, then (iii.) District shall initiate a change order under the procedures described in the Contract, including but not limited to, issuing either a Request for Proposal or a Construction Change Directive under the procedures described in the Contract Documents, including without limitation Section 01 26 00 (Modification Procedures).
 - b. If District determines that physical conditions at the Site are not Latent or are not materially different from those indicated in Contract Documents or do not involve hazardous waste, or that Design-Build Entity should have anticipated the same through its required pre-Proposal investigations, or for any other reason that that no change in terms of the Contract Documents is justified, District will so notify Design-Build Entity in writing, stating reasons.
 - c. In the event that a dispute arises between District the Design-Build Entity whether the conditions do materially so differ, or involve hazardous waste, and cause a decrease or increase in the Design-Build Entity's cost of, or the time required for, performance of any part of the Work, the Design-Build Entity 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 Design-Build Entity shall retain any and all rights provided either by Contract or by law which pertain to the resolution of disputes and protests between contracting parties.
2. Design-Build Entity shall not be entitled to any adjustment in the Contract Sum or Contract Time regarding claimed hazardous waste or materials, claimed Latent or materially different Site conditions (whether above or below grade) if:
 - a. Design-Build Entity knew of the existence of such conditions at the time Design-Build Entity submitted its Proposal; provided, that this requirement shall not apply if the condition results from the District's failure to timely address a known condition which is expressly outside the scope of Design-Build Entity's Work;
 - b. Design-Build Entity should have known of the existence of such conditions at the time Design-Build Entity submitted its Proposal, or should have learned of such conditions and mitigated their impact, as a result of having complied with the requirements of Contract Documents,

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- including without limitation, the investigation requirements herein at Articles 2 and 10 of Document 00 71 00;
- c. The information or conditions claimed by Design-Build Entity to be Latent or materially different consist of information, conclusions, opinions or deductions made from underground conditions reports, of the kind that this Document 00 71 00 precludes reliance upon; or,
 - d. Design-Build Entity was required to give written notice and failed to do so within the time required.
3. If, because of a differing site condition as defined herein, Design-Build Entity does not agree to continue with the Work based on a reasonable belief that it is unsafe, or does not agree to resume Work under special conditions, District may order the disputed portion of Work deleted from the Work, or performed by others, or District may invoke its right to terminate Design-Build Entity's right to proceed under the Contract Documents in whole or in part, for convenience or for cause as the facts may warrant. If Design-Build Entity does not agree with District's determination of any adjustment in the Contract Sum or Contract Time as a result, Design-Build Entity may make a claim as provided in Article 12 of this Document 00 71 00.

H. Change Orders Related to Underground Facilities.

1. If an Underground Facility is uncovered or revealed at or contiguous to the Site which was not shown or indicated in the materials supplied by District or in information on file at USA or is not otherwise reasonably known to Design-Build Entity by performing its obligations in Articles 2 and 10 of this Document 00 71 00, then Design-Build Entity shall, promptly after becoming aware thereof and before further disturbing conditions affected thereby (and in no event later than seven Days), and prior to performing any Work in connection therewith (except in an emergency as required by Article 15 of this Document 00 71 00), identify the owner of such Underground Facility and give written notice to that owner and to District. During such time, Design-Build Entity shall be responsible for the safety and protection of such Underground Facility.
2. Design-Build Entity shall be allowed an increase in the Contract Sum or an extension of the Contract Time, or both, for Underground Facilities either not shown or inaccurately shown in the Contract Documents, the information supplied pursuant to Document 00 31 19 (Geotechnical Data and Existing Conditions) or in information on file at USA, only where the inaccuracy was (i.) material and outside of the normal experience on projects of this nature, (ii.) was not reasonably inferable from existing information, and (iii.) directly results in a material, justifiable and actual increase in the cost of Design-Build Entity's work. For example, if surface conditions such as pavement repairs, valve covers, or other markings, indicate the presence of an Underground Facility, or if the Underground Facility could be determined or its cost impact mitigated by performing the obligations in Articles 2 and/or 10 of this Document 00 71 00, then an increase in the Contract Price or an extension of the Contract Time will not be due, even if the Underground Facility was not indicated or was shown at a different place or a different elevation in the Contract Documents, in the information supplied to Design-Build Entity pursuant to Document 00 31 19 (Geotechnical Data and Existing Conditions), or in information on file at USA.
3. Main Line and Trunk Line Utilities (Government Code Section 4215). Consistent with Government Code Section 4215, as between District and Design-Build Entity, District will be responsible for the timely removal, relocation, or protection of existing main or trunk line utility facilities located on the Site only if such utilities are not identified in the Contract Documents or Document 00 31 19 (Geotechnical Data and Existing Conditions). District will compensate for the cost of locating and repairing damage not due to Design-Build Entity's failure to exercise reasonable care, removing and relocating such main or trunk line utility facilities not indicated in the Contract Documents or Document 00 31 19 (Geotechnical Data and Existing Conditions) with reasonable accuracy, and equipment on the Project necessarily idled during such work.

15. WORKING CONDITIONS AND PREVAILING WAGES**A. Use Of Site/Sanitary Rules**

1. All portions of the Work shall be maintained at all times in neat, clean and sanitary condition. Design-Build Entity shall furnish toilets for use of Design-Build Entity's and Subcontractors' employees on the Site where needed, and their use shall be strictly enforced. All toilets shall be

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properly secluded from public observation, and shall be located, constructed and maintained subject to District's approval.

2. Design-Build Entity shall confine construction equipment, the storage of materials and equipment and the operations of workers to the Site and land areas identified in and permitted by Contract Documents and other land and areas permitted by applicable laws and regulations, rights of way, permits and easements or as designated by District, and shall not unreasonably encumber the premises with construction equipment or other materials or equipment. Design-Build Entity shall assume full responsibility for any damage to any such land or area, any improvement located thereon, or to the owner or occupant thereof resulting from the performance of Work.
3. During the progress of the Work, Design-Build Entity shall keep the Site and the Project free from accumulations of waste materials, rubbish and other debris resulting from the Work. At the completion of the Work, Design-Build Entity shall remove all waste materials, rubbish and debris from and about the Site as well as all tools, appliances, construction equipment and machinery and surplus materials. Design-Build Entity shall leave the premises clean and ready for occupancy by District at Substantial Completion of Work. Design-Build Entity shall restore to original condition all property not designated for alteration by Contract Documents.
4. Design-Build Entity shall not load nor permit any part of any structure or pavement to be loaded in any manner that will endanger the structure or pavement, nor shall Design-Build Entity subject any part of Work or adjacent property to stresses or pressures that will endanger it. Design-Build Entity shall conduct all necessary existing conditions investigation regarding structural, mechanical, electrical or any other system existing, shall perform Work consistent with such existing conditions, and shall have full responsibility for insufficiencies or damage resulting from insufficiencies of existing systems, equipment or structures to accommodate performing the Work.

B. Protection Of Work, Persons, Property And Operations

1. Design-Build Entity shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with Work. Design-Build Entity shall comply with all safety requirements specified in any safety program established by District, or required by state, federal or local laws and ordinances. Design-Build Entity shall be responsible for all damage to Work, property or structures, all injuries to persons, and all damage and interruptions to District's operations, arising from the performance of Work of the Contract Documents. Except as otherwise expressly approved by District in writing, Design-Build Entity shall at all times perform all Work in a manner which does not interrupt, damage or otherwise adversely impact any facilities, operations, or real or personal property of District, its officers, employees, agents, invitees, licensees, lessees or contractors.
2. Design-Build Entity shall comply with all applicable laws and regulations of any public body having jurisdiction for safety of persons or property or to protect them from damage, injury or loss; and shall erect and maintain all necessary safeguards for such safety and protection. Design-Build Entity shall notify owners of adjacent property and of Underground Facilities and utility owners when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation and replacement of their property.
3. Design-Build Entity shall remedy all damage, injury, loss or interruption to any property or operations of District or contiguous property owners, caused, directly or indirectly, in whole or in part, by Design-Build Entity, any Subcontractor, supplier, or any other person or organization directly or indirectly employed by any of them to perform or furnish any Work or anyone for whose acts any of them may be liable. Design-Build Entity's duties and responsibility for safety and for protection of Work shall continue until such time as all the Work is completed and Final Acceptance of the Work. District and its agents do not assume any responsibility for collecting any indemnity from any person or persons causing damage to Design-Build Entity's Work. Design-Build Entity shall give all notices required by potentially responsible insurance carriers and require that its Subcontractors and suppliers do the same.
4. Design-Build Entity shall designate a qualified and experienced safety representative at the Site whose duties and responsibilities shall be the prevention of accidents and the maintaining and supervising of safety precautions and programs.

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5. District may, at its option, retain such moneys due under the Contract Documents as District deems necessary until District receives satisfactory evidence that any and all suits or claims against Design-Build Entity for injury to persons, property or operations are either settled, or adequately provided for (such as by insurance or otherwise).

C. Responsibility For Safety And Health

1. Design-Build Entity shall ensure that its and each tier of Subcontractors' employees, agents and invitees comply with applicable health and safety laws while at the Site. These laws include the Occupational Safety and Health Act of 1970 and rules and regulations issued pursuant thereto, and District's safety regulations as amended from time to time. Design-Build Entity shall comply with all District directions regarding protective clothing and gear.
2. Design-Build Entity shall be fully responsible for the safety of its and its Subcontractors' employees, agents and invitees on the Site. Design-Build Entity shall notify District, in writing, of the existence of hazardous conditions, property or equipment at the Site that are not under Design-Build Entity's control. Design-Build Entity shall be responsible for taking all the necessary precautions against injury to persons or damage to the property of Design-Build Entity, Subcontractors or persons from recognized hazards until the responsible party corrects the hazard. Design-Build Entity shall provide protective clothing and gear to all visitors to the Site.
3. Design-Build Entity shall confine all persons acting on its or its Subcontractors' behalf to that portion of the Site where Work under the Contract Documents is to be performed: District designated routes for ingress and egress thereto and any other District designated area. Except those routes for ingress and egress over which Design-Build Entity has no right of control, within such areas, Design-Build Entity shall provide safe means of access to all places at which persons may at any time have occasion to be present.

D. Emergencies

In emergencies affecting the safety or protection of persons or Work or property at the Site or adjacent thereto, Design-Build Entity, without special instruction or authorization from District, is obligated to act to prevent threat and damage, injury or loss, until directed otherwise by District. Design-Build Entity shall give District prompt written notice if Design-Build Entity believes that any significant changes in Work or variations from Contract Documents have been caused thereby. If District determines that a change in the Contract Documents is required because of the action taken by Design-Build Entity in response to such an emergency, a Change Order or Construction Change Directive will be issued to document the consequences of such action. Emergency contact names & phone numbers, where Design-Build Entity's Superintendent and Project Manager can be reached at any time, are to be provided to the District, within 10 days after issuance of a Notice to Proceed with Construction.

E. Use Of Roadways And Walkways

Design-Build Entity shall not unnecessarily interfere with use of any roadway, walkway or other facility for vehicular or pedestrian traffic. Before beginning any interference and only with District's prior concurrence, Design-Build Entity may provide detour or temporary bridge for traffic to pass around or over the interference, which Design-Build Entity shall maintain in satisfactory condition as long as interference continues. Unless otherwise provided in the Contract Documents, Design-Build Entity shall bear the cost of these temporary facilities.

F. Nondiscrimination

No person or entity shall discriminate in the employment of persons upon public works because of race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, marital status, sexual preference, or gender of such persons, except as provided in Section 12940 of the Government Code. Every Design-Build Entity for public works violating the provisions of Section 1735 of the Labor Code is subject to all the penalties imposed for a violation of Chapter 1, Part 7, Division 2 of the Labor Code.

G. Prevailing Wages

1. Design-Build Entity shall pay to persons performing labor in and about Work provided for in the Contract Documents an amount equal to or more than the general prevailing rate of per diem wages

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- for (1) work of a similar character in the locality in which the Work is performed and (2) legal holiday and overtime work in said locality. The per diem wages shall be an amount equal to or more than the stipulated rates contained in a schedule that has been ascertained and determined by the Director of the State Department of Industrial Relations and District to be the general prevailing rate of per diem wages for each craft or type of workman or mechanic needed to execute this Contract. Design-Build Entity shall also cause a copy of this determination of the prevailing rate of per diem wages to be posted at each Site.
2. Design-Build Entity shall forfeit, as a penalty to District, Fifty Dollars (\$50.00) for each laborer, workman, or mechanic employed in performing labor in and about the Work provided for in the Contract Documents for each Day, or portion thereof, that such laborer, workman or mechanic is paid less than the said stipulated rates for any work done under the Contract Documents by him or her or by any Subcontractor under him or her, in violation of Articles 1 and 2 of Chapter 1 of Part 7 of Division II of the California Labor Code. The sums and amounts which shall be forfeited pursuant to this subparagraph and the terms of the Labor Code shall be withheld and retained from payments due to Design-Build Entity under the Contract Documents, pursuant to this Document 00 71 00 and the Labor Code, but no sum shall be so withheld, retained or forfeited except from the final payment without a full investigation by either the State Department of Industrial Relations or by District. The Labor Commissioner pursuant to Labor Code Section 1775 shall determine the final amount of forfeiture.
 3. Design-Build Entity shall insert in every subcontract or other arrangement which Design-Build Entity may make for performance of work or labor on Work provided for in the Contract, provision that Subcontractor shall pay persons performing labor or rendering service under subcontract or other arrangement not less than the general prevailing rate of per diem wages for work of a similar character in the locality in which the Work is performed, and not less than the general prevailing rate of per diem wages for holiday and overtime work fixed in the Labor Code.
 4. Design-Build Entity stipulates that it shall comply with all applicable wage and hour laws, including without limitation Labor Code Section 1813. Failure to so comply, including without limitation Labor Code Section 1776, shall constitute a default under this Contract.
 5. Design-Build Entity and its Subcontractors shall be responsible for compliance with Labor Code Section 1776.
 - a. Design-Build Entity and Subcontractors must keep accurate payroll records, showing the name, address, social security number, Work classification, straight time and overtime hours worked each Day and week, and the actual per diem wages paid to each journeyman, apprentice, worker, or other employee employed by him or her in connection with the Work of the Contract documents. Each payroll record shall contain or be verified by a written declaration as required by Labor Code Section 1776.
 - b. The payroll records enumerated above must be certified and shall be available for inspection at all reasonable hours at the principal office of Design-Build Entity as required by Labor Code Section 1776.
 - (X) Design-Build Entity shall inform District of the location of records enumerated above, including the street address, city and county, and shall, within five working Days, provide a notice of a change of location and address.
 - (Y) Design-Build Entity or Subcontractor has 10 Days in which to comply subsequent to receipt of a written notice requesting the records enumerated above. In the event that Design-Build Entity or Subcontractor fails to comply with the ten-Day period, he or she shall, as a penalty to District on whose behalf the contract is made or awarded, forfeit \$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. Design-Build Entity is not subject to a penalty assessment pursuant to this subparagraph due to the failure of a Subcontractor to comply with this subparagraph.
 - c. Design-Build Entity shall also deliver certified payrolls to District with each Application for Payment as described in Section 01 29 00 (Payments and Completion).

DOCUMENT 00 71 00

H. Environmental Controls

1. Design-Build Entity shall comply with all rules, regulations, ordinances, and statutes that apply to any work performed under the Contract Documents including, without limitation, any toxic, water and soil pollution controls and air pollution controls specified in Government Code, Section 11017 and as required by Bay Area Air Quality Management District, water quality Best Management Practices. Design-Build Entity shall be responsible for insuring that Design-Build Entity's employees, Subcontractors and the public are protected from exposure to airborne hazards or contaminated water, soil or other toxic materials used during or generated by activities on the Site or associated with the Project.

I. Shoring Safety Plan

1. At least five Days in advance of excavating any trench five feet or more in depth, Design-Build Entity shall submit to District a detailed plan showing the shoring, bracing and sloping design and other provisions to be made for worker protection from the hazard of caving ground during the excavation, as required by Labor Code Section 6705. A civil or structural engineer registered in California shall prepare and sign any plan that varies from the shoring system standards established by the State Construction Safety Orders.
2. During the course of Work, Design-Build Entity shall be responsible for determining where sloping, shoring, and/or bracing is necessary and the adequacy of the design, installation, and maintenance of all shoring and bracing for all excavation, including any excavation less than five feet in depth. Design-Build Entity will be solely responsible for any damage or injuries that may result from excavating or trenching. District's acceptance of any drawings showing the shoring or bracing design or work schedule shall not relieve Design-Build Entity of its responsibilities under this subparagraph.
3. DSA must review and approve shoring of structures prior to commencement of shoring operations. Design-Build Entity shall submit shoring design sufficiently in advance of the Work as necessary to avoid delay.
4. Cal/OSHA Permit. Design-Build Entity shall comply with Labor Code 6500 and shall obtain, as applicable, a permit as required by Cal/OSHA for each of the following:
 - a. Construction of trenches or excavations that are five feet or more in depth and into which a person is required to descend.
 - b. Construction or demolition of any building, structure, or scaffolding for falsework more than three stories high, or the equivalent height (36 feet).
 - c. Erection or dismantling of vertical shoring systems more than three stories high, or the equivalent height (36 feet).
 - d. The underground use of diesel engines in mines or tunnels.

END OF DOCUMENT

DOCUMENT 00 73 00

SUPPLEMENTAL GENERAL CONDITIONS**1. SUMMARY**

This document includes requirements that supplement the paragraphs of Document 00 71 00 (General Conditions).

2. SUPPLEMENT TO PARAGRAPH 7.1 GENERAL CONDITIONS, SECTION 00 71 00

For the purposes of this contract, José D. Nuñez is the District's Representative.

3. SUPPLEMENT TO 11.E Design-Build Entity to Locate Underground Facilities

Before commencing work of digging trenches or excavation, Design-Build Entity shall meet with the College's Chief Facilities Engineer and Information Technology staff to ascertain if the maintenance staff have knowledge of underground utilities in the vicinity of the trench or excavation, which are not shown on drawings or indicated by USA.

4. SUPPLEMENT TO 11.A.4 Prosecution & Progress of the Work

All work shall be coordinated with District Representative by the Contractor so as to mitigate and minimize impact to campus operations. For example (but not limited to), noisy disruptive work shall not be scheduled to occur during final examinations, commencement exercises, etc. Work likely to disrupt campus utility services, including but not limited to utility shut-downs and / or cut-overs shall be scheduled between semesters, over holiday periods or at other times that will insure continuous utility service to support college operational activities.

The College activities and events applicable to this work include at least the following:

- Traffic non-disruption required during first three weeks of the semester (August 18 through September 5, 2014) . Due to very heavy traffic on campus, contractor may not disable lanes or parking stalls during this period. Weekend work is permitted without these restrictions and with the necessary coordination with the District.
- Final Exams – Last week of every semester
- Commencement ceremonies
- Jazz on the Hill – College of San Mateo
- Olive Festival – Canada College

The Contractor is advised to consult the College's websites, for any updates to the College activities and events.

5. SUPPLEMENT TO 14.D Non-Compensable Time Extensions; Adverse Weather Parameters

Rain parameters are as follows, pro-rated in the individual month Contractor starts and finishes Work: January, [8]; February, [5]; March, [6]; April, [3]; May, [1]; June, [0]; July, [0]; August, [0]; September, [0]; October, [2]; November, [5]; and December, [6].

In order to qualify as an adverse weather delay with respect to the foregoing parameters, daily rainfall must exceed .1 of an inch or more at **the Redwood City**, California station, as measured by the National Oceanic & Atmospheric Administration.

6. Supplement to Paragraph 1.4.A SITE SECURITY AND SAFETY, SECTION 01 56 00

For this project the Contractor's employee parking area is:

- a. Cañada College – Lot
- b. College of San Mateo - Lot
- c. Refer to Section 00 21 15 Project Site Campus Map (PM, be sure to indicate parking area on Project Site Campus Map)

END OF DOCUMENT

SECTION 00 73 17

CONTRACTOR-PROVIDED INSURANCE

- A. At or before the date specified in Section 00 11 19 (Instructions to Bidders), Contractor shall furnish to District satisfactory proof that Contractor has taken out for the entire period covered by the Contract the following classes of insurance in the form and with limits and deductibles specified below:
1. Workers' Compensation Insurance for all persons whom the Contractor may employ in carrying out Work contemplated under Contract Documents, in accordance with the Act of Legislature of State of California, known as "Workers' Compensation Insurance and Safety Act," approved May 26, 1913, and all acts amendatory or supplemental thereto, in the statutory amount. Employers Liability Limit shall be not less than \$1,000,000.
 2. Comprehensive General Liability Insurance covering claims for personal injury, bodily injury and property damage arising out of the Work and in a form providing coverage not less than that of a standard Commercial General Liability Insurance policy ("Occurrence Form"). Such insurance shall provide for all operations and include independent contractors, products liability, completed operations for one year after Final Completion of the last Phase to be completed and acceptance of the final payment for the Work, contractual liability, and coverage for explosion, collapse and underground hazards. The limits of such insurance shall be not less than [\$2,000,000] each occurrence, [\$4,000,000] general aggregate limit, and [\$4,000,000] aggregate for products and completed operations. The policies shall be endorsed to provide Broad Form Property Damage Coverage.
 3. All-Risk Builders' Risk aka 'Course of Construction' Insurance for physical loss or damage to the Work, temporary buildings, false work, and materials and equipment in transit, and shall insure against at least the following perils or causes of loss: fire, lightning, extended coverage, theft, vandalism and malicious mischief, damage to adjacent buildings, partial or total collapse of structure(s), debris removal, demolition occasioned by enforcement of Laws, water damage, damage caused by frost and freezing in the amount of 100 percent of the completed value of the Work to be performed under this Contract. Each loss shall be borne by Contractor.
 4. Comprehensive Automobile Liability Insurance covering all owned, non-owned, and hired vehicles. Such insurance shall provide coverage not less than the standard Comprehensive Automobile Liability policy with limits not less than [\$1,000,000] each person Bodily Injury, [\$1,000,000] each occurrence Bodily Injury, and [\$1,000,000] each occurrence Property Damage.
- B. All policies of insurance shall be placed with insurers acceptable to District. The insurance underwriter(s) must have an A. M. Best Company rating of [A-IX] or better. Required minimum amounts of insurance may be increased should conditions of Work, in opinion of District, warrant such increase. Contractor shall increase required insurance amounts upon direction by District.

Required Endorsements:

1. Name San Mateo County Community College District, its Board of Trustees, and their employees, representatives, consultants, agents and Architect/Engineer as additional insured ATIMA (As Their Interest May Appear) on the Commercial General Liability Policy and Automobile Policy but only with respect to liability arising out of the activities of the Named Insured..
2. Commercial General Liability additional insured endorsement shall be ISO version CG 20 10 (11/85 edition) or its equivalent.
3. Each such policy shall apply separately to each insured against which claim is made or suit is brought, except with respect to the limit of the insurance company's liability required under paragraphs A.1, A3 & A6 of this Section 00 73 17.
4. Insurance shall be primary and no other insurance or self-insured retention carried or held by District shall be called upon to contribute to a loss covered by insurance for the named insured.
5. Insurance shall contain a provision requiring the insurance carriers to waive their rights of subrogation against District and all additional insured, as well as other insurance carriers for the Work.

6. Insurance certificates shall be addressed to: San Mateo County Community College District, 3401 CSM Drive, San Mateo, 94402, Attention Facilities Planning and Operations Department.
- C. Certificates of insurance and endorsements shall have clearly typed thereon District Bid Number and title of Contract Documents. Written notice of cancellation, non-renewal, or reduction in coverage of any policy shall be mailed to District (Attention: Contract Administration/Inspection) at the address listed in Section 00 52 00 (Agreement), sixty (60) Days in advance of the effective date of the cancellation, non-renewal, or reduction in coverage. Contractor shall maintain insurance in full force and effect during entire period of performance of Contract Documents. Contractor shall keep insurance in force during warranty and guarantee periods, except that Contractor may discontinue All-Risk Course of Construction Insurance after Final Payment. At time of making application for extension of time, and during all periods exceeding the Contract Time resulting from any cause, Contractor shall submit evidence that insurance policies will be in effect during requested additional period of time. Upon District's request, Contractor shall submit to District, within thirty (30) Days, copies of the actual insurance policies or renewals or replacements.
- D. Contractor shall pay all insurance premiums, including any charges for required waivers of subrogation or the endorsement of additional insured. If Contractor fails to maintain insurance, District may take out comparable insurance, and deduct and retain amount of premium from any sums due Contractor under Contract Documents.
- E. If injury occurs to any employee of Contractor, Subcontractor or sub-subcontractor for which the employee, or the employee's dependents in the event of employee's death, is entitled to compensation from District under provisions of the Workers' Compensation Insurance and Safety Act, as amended, or for which compensation is claimed from District, District may retain out of sums due Contractor under Contract Documents, amount sufficient to cover such compensation, as fixed by the Act, as amended, until such compensation is paid, or until it is determined that no compensation is due. If District is compelled to pay compensation, District may, in its discretion, either deduct and retain from the Contract Sum the amount so paid, or require Contractor to reimburse District.
- F. Nothing in this Section 00 73 17 shall be construed as limiting in any way the extent to which Contractor or any Subcontractor may be held responsible for payment of damages resulting from their operations.
- G. Except that Subcontractors need obtain only **[\$1,000,000]** of Comprehensive General Liability insurance, all Subcontractors shall maintain the same insurance required to be maintained by Contractor with respect to their portions of the Work, and Contractor shall cause the Subcontractors to furnish proof thereof to District within ten (10) Days of District's request.
- H. The following provisions apply to any licensed professional engaged by Contractor to perform portions of the Work ("Professional").
1. Each Professional shall maintain the following insurance at its sole cost and expense:
 - a. Provided such insurance is customarily required by District when professionals engaged in the profession practiced by Professional directly contract with District, Professional Liability Insurance, insuring against professional errors and omissions arising from Professional's work on the Project, with a limit of not less than **[\$1,000,000]** for each claim. If Professional cannot provide an occurrence policy, Professional shall provide insurance covering claims made as a result of performance of Work on this Project and shall maintain such insurance in effect for not less than two years following Final Completion of the Project.
 - b. All insurance required by paragraphs A.1, A.2 and A.6 of this Section 00 73 17. Professional shall satisfy all other provisions of paragraphs A, B, C, D, E and F of this Section 00 73 17 relating to that insurance, including without limitation providing required insurance certificates (containing the required endorsements) before commencing its Work on the Project.

END OF SECTION

DOCUMENT 00 73 37

APPRENTICESHIP PROGRAM

Design-Build Entity and subcontractors shall comply with the requirements of California Labor Code Sections 1776, 1777.5 and 1777.6 concerning the employment of apprentices by Design-Build Entity or subcontractors. Willful failure to comply may result in penalties, including loss of the right to bid on or receive public works contracts.

Section 1777.5, as amended, requires a contractor or subcontractor employing tradespersons in any apprenticeable occupation to apply to the joint apprenticeship committee nearest the site of a public works project and which administers the apprenticeship program in that trade for a certification of approval. The certificate will also fix the ratio of apprentices to journeypersons that will be used in performance of the Contract. The ratio of apprentices to journeypersons in such cases shall not be less than one to five except:

- A. When unemployment in the area of coverage by the joint apprenticeship committee has exceeded an average of 15 percent in the 3 months days prior to the request for a certificate, or
- B. When the number of apprentices in training in the area exceeds a ratio of one to five, or
- C. When a trade can show that it is replacing at least 1/30 of its membership through apprenticeship training on an annual basis state-wide or locally, or
- D. Assignment of an apprentice to any work performed under a public works contract would create a condition which would jeopardize his or her life or the life, safety, or property of fellow employees or the public at large or the specific task to which the apprentice is to be assigned is of a nature that training cannot be provided by a journeyperson.

Design-Build Entity is required to make contributions to funds established for administration of apprenticeship programs if Design-Build Entity employs registered apprentices or journeypersons in any apprenticeable trade on such contracts and if other contractors on the public works site are making such contributions.

Information relative to apprenticeship standards, wage schedules, and other requirements may be obtained from the Director of the California Department of Industrial Relations, or from the Division of Apprenticeship Standards and its branch offices.

END OF DOCUMENT

DOCUMENT 00 91 00

ADDENDA

PART 1 - ADDENDUM NO. 1

1.1 SECTION INCLUDES

- A.
- B.

1.2

- A.
- B.

1.3

- A.
- B.

PART 2 - ADDENDUM NO. 2

2.1 SECTION INCLUDES

- A.
- B.

2.2

- A.
- B.

2.3

- A.

PART 3 - SUMMARY

The following Addenda were issued, modifying the Project Manual:

Addendum No. 1, issued on **[date]**
Addendum No. 2, issued on **[date]**
[continue as appropriate]

(Addenda have been incorporated into the conformed Project Manual.)

END OF DOCUMENT

SECTION 01 10 00

SUMMARY OF WORK**PART 1 GENERAL****1.1 SUMMARY**

A. Section includes summary of Work including:

1. Work Covered By Contract Documents
2. Bid Items, Allowances, and Alternates
3. Work Under Other Contracts
4. Future Work (N/A)
5. Work Sequence
6. Business Days and Hours
7. Cooperation of Contractor and Coordination with Other Work
8. Maintenance, Product Handling, and Protection
9. Partial Occupancy/Utilization Requirements
10. Contractor Use of Premises
11. Lines and Grades
12. Protection of Existing Structures and Utilities
13. Damage to Existing Property
14. Dust Control
15. Parking
16. Laydown/Staging Area
17. Permits
18. Punch List Verification
19. Actual Damages for Violations
20. Unfavorable Construction Conditions
21. Construction Site Access
22. Specification Data Sheets and Schedules
23. Site Administration
24. Products Ordered In Advance
25. District-Furnished Products
26. CEQA Mitigations
27. Storm Water Pollution Program- *See Section 01 35 00*

1.2 WORK COVERED BY CONTRACT DOCUMENTS

- A. Work comprises the Cañada College and College of San Mateo Roadway and Parking Lot Fixture LED Retrofit Project located at San Mateo and Redwood City, California. Upgrades are proposed to roadway and parking lot exterior light fixtures.
- B. Furnish all labor, materials, equipment, services, permits, temporary controls and construction facilities, and all general conditions, seismic requirements, general requirements and incidentals required to complete the Work in its entirety as described in the Contract Documents. The Work includes, but is not necessarily limited to the following:
1. Furnishing and installation of LED Light Fixtures including related infrastructure and controls scope.
 2. Coordination with other contractors working at the site and its Subcontractors, coordination with local utility owners and the District, obtaining necessary permits and complying with permit and environmental conditions, project startup and testing, site restoration and cleanup.
- C. The Work of this Contract comprises construction of all the Work indicated, described in the Specifications, or otherwise required by the Contract Documents.

- D. Unless provided otherwise in the Contract Documents, all risk of loss to Work covered by Contract Documents shall rest with Contractor until Final Acceptance of the Work.
- E. Contractor's use of the premises for Work and storage is limited to the area indicated.
- F. Contractor shall be solely responsible for all utilities (including without limitation electricity, water, gas, etc.) at the Site.
- G. Contractor shall carefully remove, in a manner to prevent damage, all materials and equipment specified or indicated to be salvaged and reused or to remain the property of District. Contractor shall store and protect salvaged items specified or indicated to be reused in the Work.
 - a. Contractor may furnish and install new items instead of those specified or indicated to be salvaged and reused, in which case such removed items will become Contractor's property.
- H. Existing materials and equipment removed by Contractor shall not be reused in the Work, except where so specified or indicated.
- I. Salvaged items not to be reused in the Work, but to remain District's property, shall be delivered by Contractor in good condition to District at the Facilities Maintenance Center, 4200 Farm Hill Blvd., Redwood City or 1700 West Hillsdale Blvd, San Mateo.
 - a. Any items specified or indicated to be salvaged which are damaged in removal, storage, or handling through carelessness or improper procedures shall be replaced by Contractor in kind or with new items.

1.3 BID ITEMS, ALLOWANCES, AND ALTERNATES

- A. Any Bid Item may be deleted from the Work and Contract Sum, in total or in part, prior to or after award of Contract without compensation in any form or adjustment of other Bid Items or prices therefore.
- B. Payment of all items is subject to provisions of Contract Documents, including without limitation Section 01 29 00 (Measurement and Payment).
- C. For all Bid Items, furnish and install all work indicated and described in Specifications and all other Contract Documents, including connections to existing systems. Work and requirements applicable to each individual Bid Item, or unit of Work, shall be deemed incorporated into the description of each Bid Item.
- D. Descriptions of Lump Sum Items (listed by Bid Item Numbers). Bid items are not intended to be exclusive descriptions of work categories and Bidder shall determine and include in its pricing all materials, labor, and equipment necessary to complete each Bid Item as shown and specified:
 - 1. Bonds and Insurance. The lump sum price paid under this item shall be full payment for all Bonds and Insurance required by Document 00 71 00 (General Conditions).
 - 2. Safety Plan and Programs. The lump sum price paid under this item shall be full payment for providing the Safety Plan and programs as required by Section 01 56 00 (Site Security and Safety) and 00 71 00 (General Conditions).
 - 3. Mobilization/Demobilization. The lump sum price paid under this item shall be full payment for initial mobilization at Project commencement (50% to be paid then), and cleanup and demobilization at Final Completion of Work to be completed (50% to be paid then).
 - 4. Electrical Upgrades. The lump sum price paid under this item shall be full payment for site preparation, excavation and foundation preparation, offsite disposal of excavated materials, sheeting, shoring and bracing, structural concrete and reinforcement, furnishing and installation of exterior LED Fixtures, training of District personnel, submittals, and all other general conditions, general requirements, and seismic requirements.
 - 5. Installation, Operation, and Maintenance Manuals, Record Drawings-. The lump sum price paid under this item shall be full payment for preparation of installation, operation, and maintenance manuals.
 - 6. All Work of Contract Documents other than Work separately provided for under other Bid Items. The lump sum price paid under this item shall be full payment for all Work of Contract Documents other than Work separately provided for under other Bid Items, including cleaning, startup, and testing, submittals, and all other general conditions, general requirements, and seismic requirements.
- E. Allowances:

1. Allowance work shall be done as Change Orders and as specified in Section 01 26 00 (Modification Procedures). Identify Allowance Items (See Document 00 41 98 Proposal Pricing Form) work on the Progress Schedules and on Applications for Payment.
2. If the cost of work done under any Allowance Item is less than the amount given on the Proposal Pricing Form under that Allowance Item, the Contract Sum shall be reduced by the difference between the amount given in the Bid Form and the cost of work actually done.
3. Scope of Allowances:
 - a. Lump sum general Owner's Allowance (Ten percent of Bid Item No. 1 on Document 00 41 98 Proposal Pricing Form).
 4. Alternates:
 - 1) N/a

1.4 WORK UNDER OTHER CONTRACTS

Work at the site performed by others includes the following:

- 1) N/a

1.5 FUTURE WORK

- 1) N/a

1.6 WORK SEQUENCE

- A. Construct Work in stages and at times to accommodate District operation requirements during the construction period; coordinate construction schedule and operations with District.
- B. Contractor acknowledges that shoring may be required to maintain a safe excavation and protect facilities, including both existing and recently constructed under this Contract. All expenses for shoring of excavations shall be included in the appropriate bid items.

1.7 BUSINESS DAYS AND HOURS

- A. The District's Regular Business Days and hours for construction personnel, such as facilities managers, architects, inspectors, and maintenance personnel, are Monday-Friday inclusive, 7:30 a.m. - 4:30 p.m. local time.
- B. Contractor is advised that District, students and faculty are on campuses Monday – Friday, 8:00 a.m. - 10:00 p.m., with generally less activity between 1:00 p.m. and 6:00 p.m., and Saturday 8:00 a.m. – 1:00 p.m.
- C. Contractor may work at the Site on weekends or holidays if it notifies District in writing at least 48 hours in advance. In the case of Work by Contractor after normal working hours or on weekends or holidays, Contractor shall be responsible for any additional inspection costs incurred by the District. Such costs may be withheld from any succeeding monthly progress payment.
- D. See Section 00 73 00 Supplementary Conditions for College Activities and Events which may also result in Contractor's inability to work.
- E. Contractor shall protect facilities against deleterious substances and damage.

1.8 COOPERATION OF CONTRACTOR AND COORDINATION WITH OTHER WORK

- A. Coordinate with District and any District forces, or other contractors and forces, as required by Document 00 71 00 (General Conditions), paragraph 6.
- B. Contractor shall coordinate the construction schedule with the regular daily operations schedule of the District and Campus for minimal interruption during utility service installations/modifications. All shut-downs required to perform the work and temporary facilities/utilities to affected District constituencies or other projects shall be coordinated by the Contractor and included in the base scope/cost of the project for normal power service installation.
- C. Noise: Construction activities are to comply with applicable local noise ordinance and applicable Cal-OSHA regulations.
- D. Connections to Existing Facilities. Unless otherwise specified or indicated, Contractor shall make all necessary connections to existing facilities, including structures, drain lines, and utilities such as water, sewer,

gas, telephone, and electric. In each case, Contractor shall receive permission from District or the owning utility prior to undertaking connections.

1.9 MAINTENANCE, PRODUCT HANDLING, AND PROTECTION

- A. Transport, deliver, handle, and store materials and equipment at the Site in such a manner as to prevent the breakage, damage or intrusions of foreign matter or moisture, and otherwise to prevent damage.
- B. Hazardous substance compliance: Provide District with copies of the OSHA Material Safety Data Sheets (MSDS) for all products containing a hazardous substance, examples: Adhesives, paints, sealants, and the like.
- C. Packaging: Provide packaged material in manufacturer's original containers with seals unbroken and labels intact until incorporated into the Work.
- D. Remove all damaged or otherwise unsuitable material and equipment promptly from the Site.
- E. Protection: Protect all finished surfaces.
- F. Asbestos Removal: If, during the progress of the Work, suspected asbestos-containing products are identified, Contractor shall stop work in the affected area and immediately notify the Owner. Owner shall either directly engage an asbestos removal contractor to verify the materials and, if necessary, encapsulate, enclose, or remove and dispose of all asbestos in accordance with current regulations of the Environmental Protection Agency and the U. S. Department of Labor – Occupational Safety and Health Administration, the state asbestos regulating agency, and any local government agency; or Owner shall direct Contractor to do the same as a Change Order to the contract. 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.
 - 1. Asbestos Removal Subcontractor's Qualifications. The Subcontractor for asbestos removal shall be regularly engaged in this type of activity and shall be familiar with the regulations that govern this work. The Subcontractor shall demonstrate to the satisfaction of District that it has successfully completed at least three asbestos removal projects that it has the necessary staff and equipment to perform the work, and that it has an approved site for disposal of the asbestos. Liability insurance covering the asbestos abatement work shall be provided as specified in the Supplementary Conditions.
 - 2. Asbestos Removal Methods. The asbestos removal Subcontractor shall submit a work plan of its proposed removal procedure to District before beginning work and shall certify that the methods are in full compliance with the governing regulations. The work plan shall cover all aspects of the removal, including health and safety of employees and building occupants, hygiene facilities, employee certification, clearance criteria, transportation and disposal, enclosure techniques, and other techniques appropriate for the proposed work.
- G. Cost of maintenance of systems and equipment prior to either Substantial Completion or filing of a Notice of Completion will be considered as included in prices bid and no direct or additional payment will be made therefore.
- H. Contractor is to complete, and if necessary develop, maintenance logs for each piece of major equipment installed and/or stored until project close out. This equipment includes:
 - 1) LED fixtures
- I. Maintenance logs and all related contract close-out documentation will be submitted to the District's Representative no more than thirty (30) days after the date of Substantial Completion. A Notice of Completion will not be filed until all contract close-out documents are submitted and approved.

1.10 PARTIAL OCCUPANCY/UTILIZATION REQUIREMENTS

- A. Allow District to take possession of and use any completed or partially completed portion of the Work during the progress of the Work as soon as is possible without interference to the Work.
- B. Possession, use of Work, and placement and installation of equipment by District shall not in any way evidence the completion of the Work or any part of it.
- C. Contractor shall not be held responsible for damage to the occupied part of the Work resulting from District occupancy.

- D. Make available, in areas occupied, on a 24-hour per day and 7-day per week basis if required, any utility services, heating, and cooling in condition to be put in operation at the time of occupancy.
 - 1. Responsibility for operation and maintenance of said equipment shall remain with Contractor.
 - 2. Make, and District shall certify, an itemized list of each piece of equipment so operated with the date operation commences.
 - 3. Itemized list noted above shall be basis for commencement of warranty period for equipment.
 - 4. District shall pay for utility cost arising out of occupancy by District during construction.
- E. Use and occupancy by District prior to acceptance of Work does not relieve Contractor of its responsibility to maintain insurance and bonds required under the Contract until entire Work is completed and accepted by District.
- F. Prior to date of Final Acceptance of the Work by District, all necessary repairs or renewals in Work or part thereof so used, not due to ordinary wear and tear, but due to defective materials or workmanship or to operations of Contractor, shall be made at expense of Contractor, as required in Document 00 71 00 (General Conditions).
- G. Use by District of Work or part thereof as contemplated by this Section 01 10 00 shall in no case be construed as constituting acceptance of Work or any part thereof. Such use shall neither relieve Contractor of any responsibilities under Contract, nor act as waiver by District of any of the conditions thereof.
- H. District may specify in the Contract Documents that portions of the Work, including electrical and mechanical systems or separate structures, shall be substantially completed on dates described in paragraph 1.6 of this Section 01 10 00, if any, prior to substantial completion of all of the Work. Contractor shall notify District's Representative and Architect/Engineer in writing when Contractor considers any such part of the Work ready for its intended use and substantially complete and request District to issue a Certificate of Substantial Completion for that part of the Work.

1.11 CONTRACTOR USE OF PREMISES

- A. Confine operations at Site to areas permitted by Contract Documents, permits, ordinances, and laws.
- B. Do not unreasonably encumber Project Site with materials or equipment.
- C. Assume full responsibility for protection and safekeeping of products stored on premises.
- D. Move any stored products that interfere with operations of District or other contractor.
- E. Parking, storage, staging, and work areas shall be coordinated with the District, and comply with all other Contract documents requirements.

1.12 LINES AND GRADES

- A. All Work shall be done to the lines, grades, and elevations indicated on the Drawings.
- B. District shall provide basic horizontal and vertical control points to be used as datums for the Work. All additional survey, layout, and measurement work shall be performed by Contractor as a part of the Work.
- C. Contractor shall provide at its cost an experienced instrument person, competent assistants, and such instruments, tools, stakes and other materials required to complete the survey, layout, and measurement work. In addition, Contractor shall furnish at its cost competent persons and such tools, stakes, and other materials as District (and/or any Architect/Engineer) may require in establishing or designating control points, or in checking survey, layout, and measurement work performed by Contractor.
- D. Contractor shall keep District informed, a reasonable time in advance, of the times and places at which it wishes to do survey/layout work, so that any checking deemed necessary by District may be done with minimum inconvenience to District and minimum delay to Contractor.
- E. Contractor shall remove and reconstruct Work which is improperly located.

1.13 PROTECTION OF EXISTING STRUCTURES AND UTILITIES

- A. The Drawings may indicate existing above- and below-grade structures, drainage lines, storm drains, sewers, water, gas, electrical, hot water, and other similar items and utilities that are known to District.
- B. Contractor shall locate these known existing installations before proceeding with trenching or other operations which may cause damage, shall maintain them in service where appropriate, and shall repair any damage to them caused by the Work, at no increase in Contract Sum.
- C. Additional utilities whose locations are unknown to District are suspected to exist. Contractor must be alert to their existence. If additional utilities are encountered, Contractor must immediately report to District for disposition.

- D. In addition to reporting, if a utility is damaged, Contractor must take appropriate action as provided in Document 00 71 00 (General Conditions).
- E. Additional compensation or extension of time on account of utilities not indicated or otherwise brought to Contractor's attention including reasonable action taken to protect or repair damage shall be determined as provided in Document 00 71 00 (General Conditions).

1.14 DAMAGE TO EXISTING PROPERTY

- A. Contractor will be responsible for any damage to existing structures, Work, materials, or equipment because of its operations and shall repair or replace any damaged structures, Work, materials, or equipment to the satisfaction of, and at no additional cost to, District.
- B. Contractor shall protect all existing structures and property from damage and shall provide bracing, shoring, or other work necessary for such protection.
- C. Contractor shall be responsible for all damage to streets, roads, curbs, sidewalks, highways, shoulders, ditches, embankments, culverts, bridges, or other public or private property, which may be caused by transporting equipment, materials, or workers to or from the Work. Contractor shall make satisfactory and acceptable arrangements with the agency having jurisdiction over the damaged property concerning its repair or replacement.

1.15 DUST CONTROL

- A. Contractor shall take reasonable measures to prevent unnecessary dust. The following items shall be specifically implemented to control dust:
 - 1. All construction locations with active excavation shall be watered at least twice daily.
 - 2. Cover all trucks hauling soil, sand, and other loose materials; or require all trucks to maintain at least two feet of freeboard.
 - 3. Pave, apply water daily, or apply non-toxic soil stabilizers on all un-paved access roads, parking areas, and staging areas at construction site.
 - 4. Sweep daily with water sweepers all paved access roads, parking areas, and staging areas at construction sites during earthwork activities.
 - 5. Enclose, cover, water twice daily, or apply non-toxic soil binders to exposed stockpiles (dirt, sand, etc.)
 - 6. Limit the speed of all construction vehicles to 5 miles per hour while on un-paved roads at the Site.
- B. Buildings or operating facilities which may be affected adversely by dust shall be adequately protected from dust. Existing and new machinery, motors, instrument panels, or similar equipment shall be protected by suitable dust screens. Proper ventilation shall be included with dust screens.
- C. Building Interiors: provide dust barriers, walk-off pads, etc. to minimize dust infiltration in buildings. If required, the Contractor will clean interior common areas (e.g., corridors, lobbies) as needed during each work day.

1.16 PARKING

Parking will be provided in designated areas at no cost to the Contractor.

1.17 LAYDOWN/STAGING AREA

Contractor shall utilize the area indicated on the Drawings for storage of all construction materials. This area shall be fenced and locked by Contractor for security purposes.

1.18 PUNCH LIST VERIFICATION

A punch list examination will be performed upon Substantial Completion of Work. One follow-up review of punch list items for each discipline will be provided. If further Site visits are required to review punch list items due to incompleteness of the Work by Contractor, at District's discretion, Contractor shall reimburse District for these visits.

1.19 UNFAVORABLE CONSTRUCTION CONDITIONS

During unfavorable weather, wet ground, or other unsuitable construction conditions, Contractor shall confine its operations to Work which will not be affected adversely by such conditions. No portion of the Work shall be constructed under conditions which would affect adversely the quality or efficiency thereof, unless special means or

precautions are taken by Contractor to perform the Work in a proper and satisfactory manner. The Contractor will employ BEST practices to manage the construction site during inclement weather.

1.20 CONSTRUCTION SITE ACCESS

Contractor shall at all times limit access to the Site to necessary personnel only. All personnel associated with construction of the Project shall enter the site through Contractor's access gate, at the location indicated on the Drawings. Access for construction personnel shall be limited to regular work hours, unless prior approval is obtained from the District. All mail and deliveries (Federal Express, equipment, etc.) shall be sent to a separate address (at Contractor's gate), specifically arranged by Contractor for the Project. Contractor is responsible for providing adequate signage (subject to District approval) to alert delivery persons to the project site. The District will not receive or forward Contractor mail or deliveries.

1.21 SPECIFICATION DATA SHEETS AND SCHEDULES

Specifications may have data sheets and schedules as part of specific specification sections. Locations for data entries on the data sheets and schedules may be left blank intentionally. Each line where data may be entered on the data sheet has a selection box in the column "Chk". When the box for a line is checked and no data is entered in the respective line, this indicates that no data is required for that line of the data sheet.

Other standard codes which apply to the Work are designated in the Specifications.

1.22 SITE ADMINISTRATION

Contractor shall be responsible for all areas of the Site used by it and by all Subcontractors in the performance of the Work. Contractor shall exert full control over the actions of all employees and other persons with respect to the use and preservation of property and existing facilities, except such controls as may be specifically reserved to District or others. Contractor shall have the right to exclude from the Site all persons who have no purpose related to the Work or its inspection, and may require all persons on the Site to observe the same regulations as Contractor requires of its employees.

1.23 EROSION CONTROL

A. SCOPE OF WORK

1. General: Provide all materials, equipment and labor necessary to furnish and install straw wattles, silt fence barriers, hydroseed, or other Best Management Practices (BMP's) at locations shown on the Contractors Storm Water Pollution Prevention Plan. See Section 01 35 00 for further detail.
2. Storm Water Pollution Prevention Plan: Prepare and implement a Storm Water Pollution Prevention Plan (SWPPP) tailored to the Contractor's operations, methods and equipment. Comply with State Water Resources Control Board requirements. The SWPPP shall be reviewed and approved by the authority having jurisdiction prior to the start of work. The SWPPP shall be tailored to the contractor's approach to the work in this contract. The Contractor shall as a minimum address:
 - a. Cut and fill operations
 - b. Temporary stockpiles
 - c. Vehicle and equipment storage, maintenance and fueling operations
 - d. Concrete, plaster, mortar and paint disposal
 - e. Dust control
 - f. Tracking of dirt and mud, on and off of site, and adjacent streets.
 - g. Pipe flushing and protection of drainage facilities both new and existing, on and off site as required by State Water Resources Control Board.

1.01 QUALITY ASSURANCE

. General: Comply with governing codes and regulations of the State Water Resources Control Board.

1.03 SUBMITTALS

- A. Notice Of Intent (NOI): The Contractor shall submit a NOI to the State Water Resources Control Board in the name of San Mateo County Community College District prior to beginning work on site if required.

PART 2 PRODUCTS

2.1 PRODUCTS ORDERED IN ADVANCE (if applicable)

N/a

2.2 RESPONSIBILITIES FOR DISTRICT-FURNISHED PRODUCTS

A. District's Responsibilities:

- 1. Arrange for and deliver District-reviewed Shop Drawings, Product Data, and Samples, to Contractor.
- 2. Arrange and pay for delivery to site.
- 3. On delivery, inspect products jointly with Contractor.
- 4. Submit claims for transportation damage and replace damaged, defective, or deficient items.
- 5. Arrange for manufacturers' warranties, inspections, and service.

B. Contractor's Responsibilities:

- 1. Review District-reviewed Shop Drawings, Product Data, and Samples.
- 2. Receive and unload products at site; inspect for completeness or damage jointly with District.
- 3. Handle, store, install, and finish products.
- 4. Repair or replace items damaged after receipt.
- 5. Install into Project per Contract Documents.

PART 3 EXECUTION – NOT USED

END OF SECTION

SECTION 01 21 00

ALLOWANCE

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Non-specified work.

1.2 RELATED SECTIONS

- A. Section 01 29 00—Payments and Completion
- B. Section 01 32 19—Submittal Procedures

1.3 NON-SPECIFIED WORK ALLOWANCES

- A. Include in the Contract, a lump sum/price equivalent to Ten Percent of Bid Item No. 1 on the Document 00 41 98 – Proposal Pricing Form for non-specified items, Owner’s Allowance.
- B. Design-Build Entity’s costs for products, delivery, installation, labor, insurance, payroll, taxes, bonding and equipment rental will be included in Change Orders authorizing expenditure of funds from this Allowance.
- C. Funds will be drawn from Allowance only with District approval evidenced by a Change Order.
- D. At Contract closeout, funds remaining in Allowance will be credited to District by Change Order.

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

Not used.

END OF SECTION

SECTION 01 26 00

MODIFICATION PROCEDURES**PART 1 GENERAL****1.1 SUMMARY**

- A. Section includes:
 - 1. Description of general procedural requirements for alterations, modifications, and extras.
- B. Reference
 - 1. Public Contract Code Section 7105(d)(2).

1.2 GENERAL

- 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 of the Contract Documents.
- B. Only Design-Build Entity or District may initiate changes in scope of Work or deviation from Contract Documents.
 - 1. Design-Build Entity may initiate changes by submitting RFIs, 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 District seeking clarification to any errors or omissions on behalf of the Design-Build Entity's preparation of the Construction Documents or any other Contract Documents prepared by Design-Build Entity.
 - b. Notices of Concealed or Unknown Conditions shall be submitted in accordance with Document 00 71 00 (General Conditions).
 - c. Notices of Hazardous Waste Conditions shall be submitted in accordance with Document 00 71 00 (General Conditions).
 - 2. Design-Build Entity shall be responsible for its costs to implement and administer RFIs throughout the Contract duration. Regardless of the number of RFIs submitted, Design-Build Entity shall not be entitled to additional compensation. Design-Build Entity shall be responsible for both District and its consultant's administrative costs for answering RFIs where the answer could reasonably be found by reviewing the Contract Documents, as determined by District; at District's discretion, such costs may be deducted from progress payments or final payment.
 - 3. District may initiate changes by issuing a Supplemental Instruction, which may revise, add to or subtract from the Work.
 - 4. District may initiate changes in the Work or Contract Time by issuing RFPs to Design-Build Entity. Such RFPs will detail all proposed changes in the Work and request a quotation of changes in Contract Sum and Contract Time from Design-Build Entity.
 - 5. District may also, by Construction Change Directive ("CCD"), order changes in the Work within the general scope of the Contract consisting of additions, deletions, or other revisions, the Contract Sum and Contract Time being adjusted accordingly. A CCD shall be used in the absence of total agreement on the terms of a Change Order and may, upon notice, consist of a Change Order executed by District only.
 - 6. District and Design-Build Entity may notify the other party, in writing, of a proposed equitable adjustment to the Contract Sum, in accordance with Document 00 71 07 (Supplemental General Conditions – Equitable Price Adjustment).
 - 7. It is the responsibility of the Design-Build Entity to notify the District within 14 days if there is a cost change. Notifications beyond this time limit may result in future claims being time barred.

1.3 PROCEDURES

- A. **Cost Proposal and Procedures:** Whenever Design-Build Entity is required in this Section 01 26 00 to prepare a Cost Proposal, and whenever Design-Build Entity is entitled to submit a Cost Proposal and elects to do so, Design-Build Entity shall prepare and submit to District for consideration a Cost Proposal using the form attached to this Section 01 26 00, or other similarly prepared form previously approved by the District. All Cost Proposals must contain a complete breakdown of costs of credits, deducts and extras; itemizing materials, labor, taxes, overhead and profit. All Subcontractor Work shall be so indicated. Individual entries on the Cost Proposal form shall be determined as provided in paragraphs 1.4 and 1.5 of this Section 01 26 00. After receipt of a Cost Proposal with a detailed breakdown, District will act promptly thereon.
1. If District accepts a Cost Proposal, District will prepare Change Order for District and Design-Build Entity signatures.
 2. If Cost Proposal is not acceptable to District because it does not agree with cost and/or time included in Cost Proposal, District 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 01 26 00, Design-Build Entity shall have seven Days in which to respond to District with a revised Cost Proposal.
 3. When necessity to proceed with a change does not allow the District sufficient time to conduct a proper check of a Cost Proposal (or revised Cost Proposal), District may order Design-Build Entity to proceed on basis to be determined at earliest practical date. In this event, value of change, with corresponding equitable adjustment to Contract, shall not be more than increase or less than decrease proposed.
- B. **Request for Information:** Whenever Design-Build Entity requires information regarding the Project or Contract Documents or receives a request for information from a Subcontractor, Design-Build Entity may (except as provided in paragraph 1.2.B.1.a above), prepare and deliver an RFI to District. Design-Build Entity shall not submit an RFI to the District if it pertains to a Subcontractor's request for clarification of the Construction Documents or any other Contract Documents prepared by Design-Build Entity. Design-Build Entity shall use RFI format provided by District. Design-Build Entity must submit time critical RFIs at least 30 days before scheduled start date of the affected Work activity. Design-Build Entity shall reference each RFI to an activity of Progress Schedule and shall note time criticality of the RFI, indicating time within which a response is required. Design-Build Entity's failure to reference RFI to an activity on the Progress Schedule and note time criticality on the RFI shall constitute Design-Build Entity's waiver of any claim for time delay or interruption to the Work resulting from any delay in responding to the RFI.
1. District will endeavor to respond within seven Days from receipt of RFI with a written response to Design-Build Entity, provided that the RFI complies with paragraph B. above and is time critical. Additionally, District may return RFI requesting additional information should original RFI be inadequate in describing condition. Design-Build Entity shall distribute response to all appropriate Subcontractors.
 2. If Design-Build Entity is satisfied with the response and does not request change in Contract Sum or Contract Time, then the response shall be executed without a change.
 3. If Design-Build Entity believes the response is incomplete, Design-Build Entity shall issue another RFI (with the same RFI number with the letter "A" indicating if it is a follow-up RFI) to District clarifying original RFI.
 4. If Design-Build Entity believes that the response results in change in Contract Sum or Contract Time, Design-Build Entity shall notify District in writing within seven Days after receiving the response. If District disagrees with Design-Build Entity, then Design-Build Entity may give notice of intent to submit a Claim as described in Article 12 of Document 00 71 00 (General Conditions), and submit its Claim within 30 days of District's response. If District agrees with Design-Build Entity, then Design-Build Entity must submit a Cost Proposal within 21 Days of District's response to the RFI. Design-Build Entity's failure to deliver either the foregoing notice of Claim or Cost Proposal by the respective deadlines stated in the foregoing sentences shall result in waiver of the right to file a Cost Proposal or Claim.
- C. **Supplemental Instruction:** District may issue Supplemental Instruction to Design-Build Entity.

1. If Design-Build Entity is satisfied with Supplemental Instruction and does not request change in Contract Sum or Contract Time, then Supplemental Instruction shall be executed without a Change Order.
 2. If Design-Build Entity believes that Supplemental Instruction results in change in Contract Sum or Contract Time, then Design-Build Entity shall notify District in writing within seven Days after receiving the response. If District disagrees with Design-Build Entity, then Design-Build Entity may give notice of intent to submit a Claim as described in Article 12 of Document 00 71 00 (General Conditions), and submit its Claim within 30 days of District's response. If District agrees with Design-Build Entity, then Design-Build Entity must submit a Cost Proposal within 21 Days of District's response to the RFI. Design-Build Entity's failure to deliver either the foregoing notice of Claim or Cost Proposal by the respective deadlines stated in the foregoing sentences shall result in waiver of the right to file a Cost Proposal or Claim.
- D. Construction Change Directives: If at any time District believes in good faith that a timely Change Order will not be agreed upon using the foregoing procedures, District may issue a CCD with its recommended cost and/or time adjustment. Upon receipt of CCD, Design-Build Entity shall promptly proceed with the change of Work involved and concurrently respond to District's CCD within 10 Days.
1. Design-Build Entity's response must be any one of following:
 - a. Return CCD signed, thereby accepting District's response, time and cost.
 - b. Submit a (revised if applicable) Cost Proposal with supporting documentation (if applicable, reference original Cost Proposal number followed by letter A, B, etc. for each revision), if District so requests.
 - c. Give notice of intent to submit a Claim as described in Article 12 of Document 00 71 00 (General Conditions), and submit its Claim with 30 days.
 2. If the CCD provides for an adjustment to the Contract Sum, the adjustment shall be based on one of the following methods:
 - a. Mutual acceptance of a lump sum properly itemized and supported by sufficient substantiating data to permit evaluation.
 - b. Unit prices stated in the Contract Documents or subsequently agreed upon.
 - c. Force account.
 - d. Cost to be determined in a manner agreed.
 3. CCD signed by Design-Build Entity indicates the agreement of Design-Build Entity 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 Change Order.
 4. If Design-Build Entity does not respond promptly or disagrees with the method for adjustment in the Contract Sum, the method and the adjustment shall be determined by District on the basis of reasonable expenditures and savings of those performing the Work attributable to the change 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, Design-Build Entity may file a Claim per Article 12 of Document 00 71 00 (General Conditions). Design-Build Entity shall keep and present, in such form as District may prescribe, an itemized accounting together with appropriate supporting data. Unless otherwise provided in the Contract Documents, costs for the purposes of this paragraph shall be limited to those provided in paragraphs 1.4 and 1.5 of this Section 01 26 00.
 5. Pending final determination of cost to District, amounts not in dispute may be included in Applications for Payment. The amount of credit to be allowed by Design-Build Entity to District for a deletion or change which results in a net decrease in the Contract Sum shall be actual net cost as confirmed by 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.
- E. District Requested RFP: Design-Build Entity shall furnish a Cost Proposal within 21 Days of District's RFP. Upon approval of RFP, District will issue a Change Order directing Design-Build Entity to proceed with extra Work. If the parties do not agree on the price for an RFP, District may either issue a CCD or decide the issue per Article 12 of Document 00 71 00 (General Conditions). Design-Build Entity shall perform the changed Work notwithstanding any claims or disagreements of any nature.

- F. Differing Site Conditions: Design-Build Entity shall submit Notices of Differing Site Conditions to resolve problems regarding differing underground Site conditions encountered in the execution of the Work pursuant to paragraph 13.4 of Document 00 71 00 (General Conditions), which shall govern. If District determines that a change in Contract Sum or Contract Time is justified, District will issue RFP or CCD.
- G. Hazardous Waste Conditions: Design-Build Entity shall submit Notices of Hazardous Waste Conditions to resolve problems regarding hazardous materials encountered in the execution of the Work pursuant to paragraph 13.5 of Document 00 71 00 (General Conditions), which shall govern. If District determines that a change in Contract Sum or Contract Time is justified, District will issue RFP or CCD.
- H. All Changes:
 - 1. Documentation of Change in Contract Sum and Contract Time:
 - a. Design-Build Entity shall maintain detailed records of Work performed on a time-and-material basis.
 - b. Design-Build Entity shall document each proposal for a change in cost or time with sufficient data to allow evaluation of the proposal.
 - c. Design-Build Entity shall, on request, provide additional data to support computations for:
 - 1) Quantities of products, materials, labor and equipment.
 - 2) Taxes, insurance, and bonds.
 - 3) Overhead and profit.
 - 4) Justification for any change in Contract Time and new Progress Schedule showing revision due, if any.
 - 5) Credit for deletions from Contract, similarly documented.
 - d. Design-Build Entity shall support each claim for additional costs, and for Work performed on a cost-and-percentage basis, with additional information including:
 - 1) Credit for deletions from Contract, similarly documented.
 - 2) Origin and date of claim.
 - 3) Dates and times Work was performed and by whom.
 - 4) Time records and wage rates paid.
 - 5) Invoices and receipts for products, materials, equipment and subcontracts, similarly documented.
 - I. Correlation of Other Items:
 - 1. Design-Build Entity shall revise Schedule of Values and Application for Payment forms to record each authorized Change Order or CCD as a separate line item and adjust the Contract Sum as shown thereon prior to the next monthly pay period.
 - 2. Design-Build Entity shall revise the Progress Schedules prior to the next monthly pay period.
 - 3. Design-Build Entity shall enter changes in Project Record Documents prior to the next monthly pay period.
 - J. Responses: For all responses for which the Contract Documents, including without limitation this Section 01 26 00, do not provide a specific time period, recipients shall respond within a reasonable time.
 - K. Disputes: For all disputes arising from the procedures herein, Design-Build Entity shall follow Article 12 of Document 00 71 00.

1.4 COST DETERMINATION

- A. Total cost of extra Work or of Work omitted shall be the sum of construction labor costs, material costs, equipment rental costs, design professional costs and specialist costs as defined herein plus overhead and profit as allowed herein. 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. Design-Build Entity 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 District, its representatives or agents, whether arising from breach of contract, negligence or strict liability, unless specifically authorized in the Contract Documents.

Design Professional costs shall be calculated by multiplying the number of hours per design professional by the hourly rate established in the bid form.

- B. Overhead and Profit: (Overhead shall be as defined in paragraph 1.8 of this Section 01 26 00)
 - 1. Overhead and profit on labor for extra Work shall not exceed 15 percent.
 - 2. Overhead and profit on materials for extra Work shall not exceed 15 percent.
 - 3. Overhead and profit on equipment rental for extra Work shall not exceed 10 percent.
 - 4. When extra Work is performed by a first tier Subcontractor or a Design Professional, Design-Build Entity shall receive a 5 percent markup on Subcontractors' or Design Professional's total costs of extra Work. First tier Subcontractor's markup on its Work shall not exceed 15 percent.
 - 5. When extra Work is performed by a lower tier Subcontractor, Design-Build Entity shall receive a total of 5 percent markup on the lower tier Subcontractors' total costs of extra Work. First tier Subcontractors and lower tier Subcontractors shall divide the 20 percent markup as mutually agreed.
 - 6. Notwithstanding the foregoing, in no case shall the total markup on any extra Work exceed 25 percent of the direct cost, notwithstanding the actual number of contract tiers.
 - 7. On proposals covering both increases and decreases in Contract Sum, overhead, profit, and commission shall be allowed on the net increase only as determined in paragraph 1.4 above. When the net difference is a deduction, no percentage for overhead, profit and commission shall be allowed, but rather a deduction shall apply.
 - 8. The markup shall include profit and overhead. No markup will be allowed on permits, fees, taxes, insurance, and bonds.
- C. Taxes:
 - 1. All State sales and use taxes, San Mateo County and applicable City sales taxes, shall be included.
 - 2. Federal and Excise tax shall not be included.
- D. Accord and Satisfaction: Every Change Order and accepted CCD shall constitute a full accord and satisfaction, and release, of all Design-Build Entity (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. Design-Build Entity 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 Article 12 of Document 00 71 00 no later than 30 days of Design-Build Entity's first written notice of its intent to reserve rights.

1.5 COST BREAKDOWN

- A. Labor: Design-Build Entity will be paid cost of labor for workers (including forepersons when authorized by District) used in actual and direct performance of extra Work. Labor rate, whether employer is Design-Build Entity, Subcontractor or other forces, will be sum of following:
 - 1. 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.
 - 2. 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 as defined in paragraph 1.5A.1 of this Section 01 26 00, such as taxes and worker's compensation insurance. Such labor surcharge shall not exceed that set forth in California Department of Transportation official labor surcharges 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.
- B. Material: Only materials furnished by Design-Build Entity and necessarily used in performance of extra Work will be paid for. Cost of such materials will be cost, including sales tax, to purchaser (Design-Build Entity, Subcontractor or other forces) from supplier thereof, except as the following are applicable:
 - 1. If cash or trade discount by actual supplier is offered or available to purchaser, it shall be credited to District notwithstanding fact that such discount may not have been taken.
 - 2. For materials salvaged upon completion of extra Work, salvage value of materials shall be deducted from cost, less discounts, of materials.

3. If cost of a material is, in opinion of 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 paragraph 1.5B.1 of this Section 01 26 00.
- C. Equipment Rental: For Design-Build Entity- 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. If there is no applicable rate for an item of equipment, then payment shall be made for Design-Build Entity- or Subcontractor-owned equipment at rental rate listed in the most recent edition of the Association of Equipment Distributors (AED) book. 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 District. 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. Individual pieces of equipment or tools not listed in said publication and having a replacement value of \$100 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. Rental time will not be allowed while equipment is inoperative due to breakdowns.
1. 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 District. The following shall be used in computing rental time of equipment:
 - a. When hourly rates are listed, less than 30 minutes of operation shall be considered to be ½ hour of operation.
 - b. When daily rates are listed, less than four hours of operation shall be considered to be ½ Day of operation.
 2. 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:
 - a. District will pay for costs of loading and unloading equipment.
 - b. Cost of transporting equipment in low bed trailers shall not exceed hourly rates charged by established haulers.
 - c. Cost of transporting equipment shall not exceed applicable minimum established rates of California Public Utilities Commission.
 - d. 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.
 3. 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 District directs Design-Build Entity to discontinue use of equipment, whichever first occurs. Excluding Saturdays, Sundays, and 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 hours of operation, six hours for four hours of operation and eight hours for eight hours of operation, time being prorated between these parameters. Hours to be paid for equipment that is operated less than eight hours due to breakdowns, shall not exceed eight less number of hours equipment is inoperative due to breakdowns.
- D. Work Performed by Special Forces or Other Special Services: When District and Design-Build Entity, by agreement, determine that special service or item of extra Work cannot be performed by forces of Design-Build Entity or those of any Subcontractors, service or extra Work item may be performed by specialist. 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 special service industry to provide complete itemization. In those instances wherein Design-Build Entity 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. District must be notified in advance of all off-Site Work. In lieu of

overhead and profit provided in paragraph 1.4B of this Section 01 26 00, 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.

1.6 FORCE-ACCOUNT WORK

- A. 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 Design-Build Entity 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 District. The cost for Force-Account Work shall be determined pursuant to paragraphs 1.4 and 1.5 of this Section 01 26 00.
- B. Force-Account Work shall be used when it is not possible or practical to price out 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 District and Design-Build Entity have broken apart and a bilateral agreement on the value of the changed Work cannot be reached. District may approve other uses of Force-Account Work.
- C. Whenever any Force-Account Work is in progress, definite price for which has not been agreed on in advance, Design-Build Entity shall report to District each Business Day in writing in detail amount and cost of labor and material used, and any other expense incurred in Force-Account Work on preceding Day, by using the Cost Proposal form attached hereto. No claim for compensation for Force-Account Work will be allowed unless report shall have been made and acknowledged by District.
- D. Whenever Force-Account Work is in progress, definite price for which has not been agreed on in advance, Design-Build Entity shall report to District when 75 percent of the NTE amount has been expended.
- E. Force-Account Work shall be paid as extra Work under this Section 01 26 00. Methods of determining payment for Work and materials provided in this paragraph 1.6 shall not apply to performance of Work or furnishings of material that, in judgment of District, may properly be classified under items for which prices are otherwise established in Contract Documents.

1.7 DISTRICT-FURNISHED MATERIALS

- A. District reserves right to furnish materials as it deems advisable, and Design-Build Entity shall have no claims for costs and overhead and profit on such materials.

1.8 OVERHEAD DEFINED

- A. The following constitutes charges that are deemed included in overhead for all Contract Modifications, including Force-Account Work or CCD Work, whether incurred by Design-Build Entity, Subcontractors, or suppliers, and Design-Build Entity shall not invoice or receive payment for these costs separately:
 - 1. Drawings: field drawings, Shop Drawings, etc., including submissions of drawings
 - 2. Routine field inspection of Work proposed
 - 3. General Superintendence, including Project Management or Construction Management services provided by Design-Build Entity
 - 4. General administration and preparation of cost proposals, schedule analysis, change orders and other supporting documentation as necessary
 - 5. Computer services
 - 6. Reproduction services
 - 7. Salaries of, superintendent, timekeeper, storekeeper and secretaries
 - 8. Janitorial services
 - 9. Temporary on-Site facilities, including for any extended periods of Contract Time:
 - a. Offices
 - b. Telephones
 - c. Plumbing
 - d. Electrical: Power, lighting
 - e. Platforms

- f. Fencing, etc.
- g. Water
- 10. Home office expenses
- 11. Insurance and Bond premiums
- 12. Procurement and use of vehicles and fuel used coincidentally in Work otherwise included in the Contract Documents
- 13. Surveying
- 14. Estimating
- 15. Protection of Work
- 16. Handling and disposal fees
- 17. Final cleanup
- 18. Small tools
- 19. Warranty
- 20. Other incidental Work

1.9 RECORDS AND CERTIFICATION

- A. Force-Account (cost reimbursement) charges shall be recorded daily and summarized in Cost Proposal form attached hereto. Design-Build Entity or authorized representative shall complete and sign form each Day. Design-Build Entity 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 Design-Build Entity submits original invoices substantiating materials and specialists charges.
- C. District shall have the right to audit all records in possession of Design-Build Entity relating to activities covered by Design-Build Entity's claims for modification of Contract, including Force-Account Work and CCD Work.
- D. Further, District will have right to audit, inspect, or copy all records maintained in connection with this Contract, including financial records, in possession of Design-Build Entity relating to any transaction or activity occurring or arising out of, or by virtue of, the Contract. If Design-Build Entity is a joint venture, right of 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 Design-Build Entity 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 Article 12 of Document 00 71 00.

PART 2 PRODUCTS – NOT USED

PART 3 EXECUTION – NOT USED

SAMPLE OF COST PROPOSAL FORM FOLLOWS ON NEXT PAGE

COST PROPOSAL (CP)

[] PROJECT/Contract Number []

CP Number: _____
 Date: _____
 In Response To: (RFP#, etc.) _____

To: The San Mateo County Community College District
 Attention: _____
 3401 CSM Drive
 San Mateo, CA 94402

Telephone: (650) 378-_____
 email: _____@smccd.edu

From: _____ REQUESTED CHANGE IN CONTRACT TIME (DAYS) _____

Brief description of change(s): _____

	D-B Entity	First-Tier Subcontractors			Lower-Tier Subs		Totals
		Sub A	Sub B	Sub C	Sub A1	Sub B1	
LABOR							
Cost	\$ -	\$ 5,000	\$ 10,000	\$ 20,000	\$ 1,000	\$ 3,000	\$ 39,000
Mark-up							
%	15%	15%	15%	15%	15%	15%	
\$\$	\$ -	\$ 750	\$ 1,500	\$ 3,000	\$ 150	\$ 450	\$ 5,850
Taxes	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Labor Total Including Taxes							\$ 44,850
MATERIALS							
Cost	\$ -	\$ 2,000	\$ 4,000	\$ 10,000	\$ 500	\$ 1,500	\$ 18,000
Mark-up							
%	15%	15%	15%	15%	15%	15%	
\$\$	\$ -	\$ 300	\$ 600	\$ 1,500	\$ 75	\$ 225	\$ 2,700
Taxes	\$ -	\$ 165	\$ 330	\$ 825	\$ 41	\$ 124	\$ 1,485
Materials Total Including Taxes							\$ 22,185
RENTALS							
Cost	\$ -	\$ -	\$ -	\$ 2,500	\$ -	\$ -	\$ 2,500
Mark-up							
%	10%	10%	10%	10%	10%	10%	
\$\$	\$ -	\$ -	\$ -	\$ 250	\$ -	\$ -	\$ 250
Taxes	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Rentals Total Including Taxes							\$ 2,750
DESIGN SERVICES							
Cost	\$ 5,000	\$ -	\$ -	\$ -			\$ 5,000
Mark-up							
%	15%	15%	15%	15%			
\$\$	\$ 750	\$ -	\$ -	\$ -			\$ 750
Design Services Total							\$ 5,750
SPECIALTY WORK							
Cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Discount	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Mark-up							
%	15%	15%	15%	15%	15%	15%	
\$\$	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Taxes	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Specialty Work Total							\$ -
Total All Costs n.i.c. Sales Tax	\$ 5,000	\$ 7,000	\$ 14,000	\$ 32,500	\$ 1,500	\$ 4,500	\$ 64,500
D-B Entity Mark-up on Sub Costs		\$ 350	\$ 700	\$ 1,625	\$ 75	\$ 225	\$ 2,975
1st Tier Subcontractor Mark-up on Lower-tier Subs					\$ 75	\$ 225	\$ 300
Total All Contractor Mark-ups							\$ 12,825
Total Mark-up as a % of Costs							19.88%
Total Sales Tax							\$ 1,485
GRAND TOTAL							\$ 78,810

Print Name & Title: _____ Signature: _____ Date: _____

- Notes:**
1. D-B Entity figures are to include only self-performed work. Do not include the value of work performed by first or lower-tier subs.
 2. First-tier subcontractor figures are to include only self-performed work. Do not include the value of work performed by lower-tier contractors.

SECTION 01 29 00

PAYMENTS AND COMPLETION**PART 1 GENERAL****1.1 SUMMARY**

Section includes description of requirements and procedures for determining amount of Work performed and for obtaining payment for Work performed.

1.2 REFERENCES

- A. California Public Contract Code
- B. Code of Civil Procedures
- C. Government Code

1.3 SCOPE OF WORK

Work under Contract Documents, or under any Proposal Item, allowance, or alternate, shall include all labor, materials, taxes, transport, handling, storage, supervision, administration, and all other items necessary for the satisfactory completion of Work, whether or not expressly specified or indicated.

1.4 DETERMINATION OF QUANTITIES

Quantity of work to be paid for under any item for which a unit price is fixed in Contract Documents shall be number, as determined by District, of units of work satisfactorily completed in accordance with Contract Documents or as directed by District. Unless otherwise provided, determination of number of units of work so completed will be based, so far as practicable, on actual measurement or count within prescribed or ordered limits, and no payment will be made for work done outside of limits. Measurements and computations will be made by methods set forth in Contract Documents, including without limitation this Section 01 29 00. If methods are not so set forth, measurements shall be made in any manner which District considers appropriate for class of Work measured (e.g., pre-assigned values, percentage completion, units completed or incremental milestones). Design-Build Entity must immediately inform District of any disputes regarding quantity measurements and shall immediately supply District with any documentation supporting the disputed measurements.

1.5 SCOPE OF PAYMENT

- A. Payment to Design-Build Entity at the unit price or other price fixed in Contract Documents for performing Work required under any item, or (if the Contract is on a single lump sum price basis) at the lump sum price fixed in the Contract Documents for performing all Work required under Contract Documents, and as either may be adjusted pursuant to any approved Change Order or Construction Change Directive, shall be full compensation for completing, in accordance with Contract Documents, all Work required under the item or under Contract Documents, and for all expense incurred by Design-Build Entity for any purpose in connection with the performance and completion of said Work, including all incidental work necessary for completion of the Work.
- B. The Contract Sum, whether lump sum, unit price or otherwise, shall be deemed to include all costs necessary to complete required Work, including all Design-Build Entity overhead and profit, all costs (if any) for loss or damage arising from nature of Work or prosecution of the Work, and from action of elements. Unless Contract Documents expressly provide otherwise, the Contract Sum shall be deemed to include:
 - 1. Any and all costs arising from any unforeseen difficulties which may be encountered during, and all risks of any description connected with, prosecution of Work or prosecution of Proposal Item (whether lump sum or unit price) until acceptance by District;

2. All expenses incurred due to suspension, or discontinuance of Work or discontinuance of Proposal Item (whether lump sum or unit price) as provided in Contract Documents;
 3. Escalation to allow for cost increases between time of Contract Award and completion of Work or completion of Proposal Item (whether lump sum or unit price).
- C. Whenever it is specified herein that Design-Build Entity is to do work or furnish materials of any class for which no price is fixed in Contract Documents, it shall be understood that Design-Build Entity is to do such work or furnish such materials without extra charge or allowance or direct payment of any sort, and that cost of doing work or furnishing materials is to be included in price Proposal, unless it is expressly specified herein, in particular cases, that work or material is to be paid for as extra work.
- D. Unit Prices shall apply to work covered by unit prices so long as actual quantities performed on the Project are not less than 75 percent or greater than 125 percent of the estimated quantities contained in Document 00 41 00 (Proposal Form) or otherwise referenced in Section 01 10 00 (Summary of Work). If actual quantities exceed these parameters, then the unit price shall be adjusted by an amount to reflect the Design-Build Entity's incremental cost differential resulting from increased or decreased economies of scale.
- E. No payment shall be made for materials or equipment not yet incorporated into the Work.
- F. The District may, in its discretion, where Design-Build Entity requests payment on the basis of materials and equipment not incorporated in the Work, Design-Build Entity must satisfy the following conditions:
1. The materials and/or equipment shall be delivered and suitably stored at the Site or at another local location agreed to in writing, for example, a mutually acceptable warehouse;
 2. Full title to the materials and/or equipment shall vest in District at the time of delivery to the Site, warehouse or other storage location;
 3. Obtain a negotiable warehouse receipt, endorsed over to District for materials and/or equipment stored in an off-site warehouse. No payment will be made until such endorsed receipts are delivered to District;
 4. Stockpiled materials and/or equipment shall be available for District inspection, but District shall have no obligation to inspect them and its inspection or failure to inspect shall not relieve Design-Build Entity of any obligations under the Contract Documents. Materials and/or equipment shall be segregated and labeled or tagged to identify these specific Contract Documents;
 5. After delivery of materials and/or equipment, if any inherent or acquired defects are discovered, defective materials and/or equipment shall be removed and replaced with suitable materials and/or equipment at Design-Build Entity's expense;
 6. At Design-Build Entity's expense, insure the materials and/or equipment against theft, fire, flood, vandalism, and malicious mischief, as well as any other coverages required under the Contract Documents;
 7. Design-Build Entity's Application for Payment shall be accompanied by a bill of sale, invoice or other documentation warranting that District has received the materials and equipment free and clear of all liens and evidence that the materials and equipment are covered by appropriate property insurance and other arrangements to protect District's interest therein, all of which must be satisfactory to District. This documentation shall include, but not be limited to, conditional releases of mechanics' liens and stop notices from all those providing materials and equipment as to which the Application for Payment relates, as well as unconditional releases of the same from the same as to the previous Application for Payment for which they have not already been provided.
- G. Amounts previously paid for materials and equipment prior to incorporation into the Work shall be deducted from amounts otherwise due Design-Build Entity as they are incorporated.

1.6 BASIS OF PAYMENT

- A. Unit Price Quantities: When estimated quantity for specific portions of Work is listed in Proposal Form, quantity of Work to be paid for shall be actual number of units satisfactorily completed, as determined by District and certified by Design-Build Entity, in accordance with Contract Documents.
- B. Lump Sum: When estimated quantity for specific portion of Work is not indicated and unit is designated as lump sum, payment will be on a lump sum basis for Work satisfactorily completed in accordance with Contract Documents.

- C. Allowances: Allowance items (if any – refer to Section 01 21 00 (Allowance)) will be paid for as provided in Section 01 21 00 (Allowance). Funds authorized for Allowance work will not be released for Contract payments unless District has authorized Allowance work in writing.
- D. District does not expressly, or by implication, agree, warrant, or represent in any manner, that actual amount of Work will correspond with amount shown or estimated and reserves right to increase or decrease amount of any class or portion of Work, to leave out entire Proposal Item or Items, or to add work not originally included in Proposal or Contract Documents, when in its judgment such change is in best interest of District. No change in Work shall be considered a waiver of any other condition of Contract Documents. No claim shall be made for anticipated profit, for loss of profit, for damages, or for extra payment whatever, except as otherwise expressly provided for in Contract Documents, because of any differences between amount of work actually done and estimated amount as set forth herein, or for elimination of Proposal Items.

1.7 PROGRESS PAYMENTS

- A. If requested by Design-Build Entity, progress payments will be made monthly.
- B. Schedule of Values:
 - 1. Within ten Days from issuance of Notice of Award and prior to the Design-Build Entity's first Application for Payment, submit an initial breakdown of Proposal, including detailed breakdown of all design phases. Detailed construction activities need not be included in this initial submittal. Prior to commencing construction, Design-Build Entity shall submit for review and approval a more detailed breakdown of the construction activities of its Proposal by scheduled Work items and/or activities, including coordination responsibilities and Contract Closeout responsibilities, per Section 01 77 00, Contract Closeout. Where more than one Subcontractor comprises the work of a Work item or activity, the Schedule of Values shall show a separate line item for each subcontract. Design-Build Entity shall furnish such breakdown of the total Contract Sum by assigning dollar values to each applicable Progress Schedule activity, which cumulative sum equals Contract Sum. The format and detail of the breakdown shall be as directed by District to facilitate and clarify future progress payments to Design-Build Entity for direct Work under Contract Documents. This breakdown shall be referred to as the Schedule of Values.
 - 2. Design-Build Entity'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 and access, off-Site access roads, temporary power and lighting, security, and the like), shall be prorated through all activities so that the sum of all the Schedule of Values line items equals Design-Build Entity's total Contract Sum, less any allowances designated by District.
 - 3. District will review the breakdown in conjunction with the Progress Schedule to ensure that the dollar amounts of this Schedule of Values are, in fact, fair market cost allocations for the Work items listed. Upon favorable review by District, District will accept this Schedule of Values for use. District shall be the sole judge of fair market cost allocations.
 - 4. 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.
 - 5. Funds shall be allocated in the Schedule of Values for Project Closeout.
- C. Applications for Payment: Design-Build Entity shall establish and maintain records of cost of the Work in accordance with generally accepted accounting practices. In addition:
 - 1. On or before the 16th of the month, Design-Build Entity shall meet with the District's Representative and the Inspector of Record, if directed by the District, with proposed "pencil copy" of Application for Payment indicating % complete for each value. Application for Payment shall include % complete for each value as agreed in the pre-Application meeting.
 - 2. On or before the 20th Day of each month (but after District's receipt of the updated Schedule as required by Section 01 32 16 (Progress Schedules and Reports)), Design-Build Entity shall submit to District one copy of an Application for Payment for the cost of the Work put in place during the period from the first Day of the previous month to the last Day of the current month, along with one copy of the District-approved updated Schedule. Such Applications for Payment shall be for the total value of activities completed or partially completed, including approved activity costs,

based upon Schedule of Values prices (or Proposal item prices if unit price) of all labor and materials incorporated in the Work up until midnight of the last Day of that one month period, less the aggregate of previous payments. Accumulated retainage shall be shown as separate item in payment summary. Design-Build Entity shall submit in a form acceptable to District, and following the format of AIA Form G702/G703, an itemized cost breakdown of Design-Build Entity's record of Cost of the Work together with supporting data and any certification required by District. If Design-Build Entity is late submitting its Application for Payment, that Application may be processed at any time during the succeeding one-month period, resulting in processing of Design-Build Entity's Application for Payment being delayed for more than a Day for Day basis.

3. Applications for Payment may include, but are not necessarily limited to the following:
 - a. Material, equipment, and labor incorporated into the Work, less any previous payments for the same;
 - b. Up to 75 percent of the cost of equipment identified in paragraph 1.5F of this Section 01 29 00 (if any), if purchased and delivered to the Site or stored off Site, as may be approved by District.
 - c. Up to 75 percent of the cost of materials identified in paragraph 1.5F of this Section 01 29 00 (if any), specifically fabricated for the Project that are not yet incorporated into the Work.
 4. At the time any Application for Payment is submitted, certify in writing the accuracy of the Application and that Design-Build Entity has fulfilled all scheduling requirements of Document 00700 (General Conditions) and Section 01 32 16 (Progress Schedules and Reports), including updates and revisions. A responsible officer of Design-Build Entity shall execute the certification.
 5. No progress payment will be processed prior to District receiving all requested, acceptable schedule update information. Failure to submit a schedule update complying with Section 01 32 16 justifies denying the entire Application for Payment.
 6. Each Application for Payment shall list each Change Order and Construction Change Directive ("CCD") executed prior to date of submission, including the Change Order/CCD Number, and a description of the work activities, consistent with the descriptions of original work activities. Submit a monthly Change Order/CCD status log to District.
 7. If District requires substantiating data, submit information requested by District, with cover letter identifying Project, Application for Payment number and date, and detailed list of enclosures. Submit one copy of substantiating data and cover letter for each copy of Application for Payment submitted.
 8. If Design-Build Entity fails or refuses to participate in work reconciliations or other construction progress evaluation with District, Design-Build Entity shall not receive current payment until Design-Build Entity has participated fully in providing construction progress information and schedule update information to District.
- D. Progress Payments
1. District will review Design-Build Entity's Application for Payment following receipt. If adjustments need to be made to percent of completion of each activity, District will make appropriate notations and return to Design-Build Entity. Design-Build Entity shall revise and resubmit. All parties shall update percentage of completion values in the same manner, i.e., express value of an accumulated percentage of completion to date.
 2. Each Application for Payment may be reviewed by District and/or inspectors to determine whether the Application for Payment is proper, and shall be rejected, revised, or approved by District pursuant to the Schedule of Values prepared in accordance with paragraph 1.7B of this Section 01 29 00.
 3. If it is determined that the Application for Payment is not proper and suitable for payment, District will return it to the Design-Build Entity as soon as practicable, but no later than seven Days after receipt, together with a document setting forth in writing the reasons why the Application for Payment is not proper. If District determines that portions of the Application for Payment are not proper or not due under the Contract Documents, then District may approve the other portions of the Application for Payment, and in the case of disputed items or defective Work not remedied, may withhold up to 150 percent of the disputed amount from the progress payment.
 4. Pursuant to Public Contract Code Section 20104.50, if District fails to make any progress payment within 30 Days after receipt of an undisputed and properly submitted Application for Payment from Design-Build Entity, District shall pay interest to the Design-Build Entity equivalent to the

legal rates set forth in subdivision (a) of Section 685.010 of the Code of Civil Procedure. The 30-Day period shall be reduced by the number of Days by which District exceeds the seven-Day return requirement set forth herein.

5. As soon as practicable after approval of each Application for Payment for progress payments, District will pay to Design-Build Entity in manner provided by law, an amount equal to **95** percent of the amounts otherwise due as provided in the Contract Documents, or a lesser amount if so provided in Contract Documents, provided that payments may at any time be withheld if, in judgment of District, Work is not proceeding in accordance with Contract, or Design-Build Entity is not complying with requirements of Contract, or to comply with stop notices or to offset liquidated damages accruing or expected.
6. Before any progress payment or final payment is due or made, Design-Build Entity shall submit satisfactory evidence that Design-Build Entity is not delinquent in payments to employees, Subcontractors, suppliers, or creditors for labor and materials incorporated into Work. This specifically includes, without limitation, conditional lien release forms for the current progress payment and unconditional release forms for past progress payments. If District is notified of impropriety of Design-Build Entity's payments to employees, Subcontractors, suppliers, or creditors for labor and materials incorporated into work and previously paid to Design-Build Entity, District may elect in its sole discretion to pay progress payments by joint check to Design-Build Entity and each Subcontractor having an interest in that progress payment in such amount.
7. District reserves and shall have the right to withhold payment for any equipment and/or specifically fabricated materials that, in the sole judgment of District, are not adequately and properly protected against weather and/or damage prior to or following incorporation into the Work.
8. Granting of progress payment or payments by District, or receipt thereof by Design-Build Entity, shall not be understood as constituting in any sense acceptance of Work or of any portion thereof, and shall in no way lessen liability of Design-Build Entity to replace unsatisfactory work or material, though unsatisfactory character of work or material may have been apparent or detected at time payment was made.
9. When District shall charge sum of money against Design-Build Entity under any provision of Contract Documents, amount of charge shall be deducted and retained by District from amount of next succeeding progress payment or from any other moneys due or that may become due Design-Build Entity under Contract. If, on completion or termination of Contract, such moneys due Design-Build Entity are found insufficient to cover District's charges against it, District shall have right to recover balance from Design-Build Entity or Sureties.

1.8 SUBSTITUTION OF SECURITIES IN LIEU OF RETENTION

- A. In accordance with the provisions of Public Contract Code Section 22300, substitution of securities for any moneys withheld under Contract Documents to ensure performance is permitted under following conditions:
 1. At request and expense of Design-Build Entity, securities listed in Section 16430 of the Government Code, bank or savings and loan certificates of deposit, interest bearing demand deposit accounts, standby letters of credit, or any other security mutually agreed to by Design-Build Entity and District which are equivalent to the amount withheld under retention provisions of Contract shall be deposited with Controller or with a state or federally chartered bank in California, as the escrow agent, who shall then pay such moneys to Design-Build Entity. Upon satisfactory completion of Contract, securities shall be returned to Design-Build Entity.
 2. Alternatively, Design-Build Entity may request and District shall make payment of retentions earned directly to the escrow agent at the expense of Design-Build Entity. At the expense of Design-Build Entity, Design-Build Entity may direct the investment of the payments into securities and receive the interest earned on the investments upon the same terms provided for in this Section 01 29 00 for securities deposited by Design-Build Entity. Upon satisfactory completion of Contract Documents, Design-Build Entity shall receive from escrow agent all securities, interest, and payments received by the escrow agent from District, pursuant to the terms of this Section 01 29 00. Pay to each Subcontractor, not later than 20 Days after receipt of the payment, the respective amount of interest earned, net of costs attributed to retention withheld

from each Subcontractor, on the amount of retention withheld to insure the performance of Design-Build Entity.

3. Design-Build Entity shall be beneficial owner of securities substituted for moneys withheld and shall receive any interest thereon.
4. Enter into escrow agreement with Controller according to Document 00 43 45 (Escrow Agreement for Security Deposits in Lieu of Retention), as authorized under Public Contract Code Section 22300, specifying amount of securities to be deposited, terms and conditions of conversion to cash in case of default of Design-Build Entity, and termination of escrow upon completion of Contract Documents.
5. Public Contract Code Section 22300 is hereby incorporated in full by this reference.

1.9 FINAL PAYMENT

- A. As soon as practicable after all required Work is completed in accordance with Contract Documents, including punchlist, testing, record documents and Design-Build Entity maintenance after Final Acceptance, District will pay to Design-Build Entity, in manner provided by law, unpaid balance of Contract Sum of Work (including without limitation retentions), or whole Contract Sum of Work if no progress payment has been made, determined in accordance with terms of Contract Documents, less sums as may be lawfully retained under any provisions of Contract Documents or by law.
- B. Prior progress payments shall be subject to correction in the final payment. District's determination of amount due as final payment shall be final and conclusive evidence of amount of Work performed by Design-Build Entity under Contract Documents and shall be full measure of compensation to be received by Design-Build Entity.
- C. Design-Build Entity and each assignee under an assignment in effect at time of final payment shall execute and deliver at time of final payment, and as a condition precedent to District's obligation to make final payment, Document 00 65 73 (Agreement and Release of Any and All Claims) discharging District, its officers, agents, employees, and consultants of and from liabilities, obligations, and claims arising under Contract Documents.

1.10 EFFECT OF PAYMENT

- A. Payment will be made by District, based on District's observations at the Site and the data comprising the Application for Payment. Payment will not be a representation that District has:
 1. Made exhaustive or continuous on-Site inspections to check the quality or quantity of Work;
 2. Reviewed construction means, methods, techniques, sequences, or procedures;
 3. Reviewed copies of requisitions received from Subcontractors and material suppliers and other data requested by District to substantiate Design-Build Entity's right to payment; or
 4. Made examination to ascertain how or for what purpose Design-Build Entity has used money previously paid on account of the Contract Sum.

1.11 ALLOWANCE

- A. District will authorize and direct Design-Build Entity regarding provisions in this paragraph.
- B. Allowance Amount: as listed in Document 00 52 00 (Agreement).
- C. District shall determine in its sole discretion which, if any, costs it will authorize in writing to be paid from the Allowance. Generally, the Allowance will be used only for District-initiated changes in scope of Work of Contract Documents.
- D. Cost shall be determined as for CCD work as provided in Section 01 26 00 (Modification Procedures).
- E. Prior to final payment, an appropriate Change Order will be issued to reflect actual amounts due Design-Build Entity on account of Work covered by the Allowance, and the Contract Sum will be correspondingly adjusted.

PART 2 PRODUCTS – NOT USED

PART 3 EXECUTION – NOT USED

END OF SECTION

SECTION 01 31 19

PROJECT MEETINGS**PART 1 GENERAL****1.1 SUMMARY**

A. Section Includes:

1. Descriptions of the required Project meetings for the Work. These meetings include:
 - a. Preconstruction Conference.
 - b. Schedule Review Meetings
 - c. Weekly Progress Meetings.
 - d. Progress Schedule and Billing Meetings.
 - e. Special Meetings.
 - f. Other Meetings as required by District to facilitate progress of the Project, including Design Review Meetings during Design Phases of Project.

1.2 PRECONSTRUCTION CONFERENCE

- A. District will call for and administer Preconstruction Conference at time and place to be announced (usually 2-3 weeks prior to start of Work at the Site).
- B. Design-Build Entity, all major Subcontractors, and major suppliers shall attend Preconstruction Conference.
- C. Agenda will include, but not be limited to, the following items:
 1. Schedules
 2. Personnel and vehicle permit procedures
 3. Use of premises
 4. Location of the Design-Build Entity'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. Design-Build Entity's Initial Schedule
 13. Design-Build Entity's Schedule of Values
 14. Design-Build Entity's Schedule of Submittals
 15. Project Directory
 16. Design-Build Entity's Emergency Contact List
 17. OCIP Insurance procedures
 18. Project Labor Stabilization Agreement procedures
- D. District will distribute copies of minutes to attendees. Attendees shall have 7 Days to submit comments or additions to minutes. Minutes will constitute final memorialization of results of Preconstruction Conference.

1.3 SCHEDULE REVIEW MEETINGS

- A. Meet with District within 20 days from Notice to Proceed (Design) date to review draft Schedule of Values and Initial Schedule. Meet with District within 35 days from Notice to Proceed (Design) date and conduct initial review of Design-Build Entity's draft Shop Drawing and Sample Submittal Schedule.
- B. Authorized representative in Design-Build Entity's organization, designated in writing, who will be responsible for working and coordinating with District relative to preparation and maintenance of Progress Schedule shall attend the initial schedule review meeting.

- C. Design-Build Entity shall, within 10 Days from (if not prior to) the Notice to Proceed (Construction) date, meet with District to review the Progress Schedule and construction schedule submittals.
 - 1. Design-Build Entity shall have its manager, superintendent, scheduler, and key Subcontractor representatives, as required by District, in attendance. The meeting will take place over a continuous one-Day period.
 - 2. District's review will be limited to submittal's conformance to Contract Documents requirements including, but not limited to, coordination requirements. District's review may also include:
 - a. Clarifications of Contract Requirements.
 - b. Directions to include activities and information missing from submittal.
 - c. Requests to Design-Build Entity to clarify its schedule.
 - 3. Within 14 Days of the Schedule Review Meeting, Design-Build Entity shall respond in writing to all questions and comments expressed by District at the meeting.
- D. Design-Build Entity will administer Schedule Review Meetings and shall distribute minutes of Schedule Review Meetings to attendees. Attendees shall have 10 Days to submit comments or additions to minutes. Minutes will constitute final memorialization of results of Schedule Review Meetings.

1.4 WEEKLY PROGRESS MEETINGS

- A. Weekly Progress Meetings will be scheduled throughout duration of Work at a time acceptable to the District. Progress meetings will be held weekly unless otherwise directed by District.
 - 1. Meetings shall be held at Design-Build Entity's on-Site office unless otherwise directed by District.
 - 2. The Design-Build Entity will prepare agenda and distribute it 2 Days in advance of meeting to Design-Build Entity. District reserves the right to direct Design-Build Entity to add additional matters to the meeting agenda, or to raise additional matters at the Weekly Progress Meeting.
 - 3. Design-Build Entity will record meeting notes of the Weekly Progress Meeting. Within 4 Days after the meeting, Design-Build Entity will distribute minutes to District through e-mail, and to those affected by decisions made at meeting. Attendees can either submit comments or additions to minutes prior to the next progress meeting, or may attend the next progress meeting and submit comments or additions there. Minutes will constitute final memorialization of results of meeting.
- B. Progress meetings shall be attended by Design-Build Entity's job superintendent, major Subcontractors and suppliers, District, 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 Design-Build Entity's safety program activities and results, including report on all serious injury and/or damage accidents
 - 6. Other items affecting progress of Work

1.5 PROGRESS SCHEDULE AND BILLING MEETINGS

- A. A meeting will be held on approximately the 16th of each month or as agreed to with the District (but no more than once every 30 days) to review the schedule update submittal and progress payment application.
 - 1. At this meeting, at a minimum, the following items will be reviewed:
 - a. Percent complete of each activity;
 - b. Time impact evaluations for Change Orders and Time Extension Request;
 - c. Actual and anticipated activity sequence changes;
 - d. Actual and anticipated duration changes; and
 - e. Actual and anticipated Design-Build Entity delays.
 - 2. These meetings are considered a critical component of overall monthly schedule update submittal and Design-Build Entity shall have appropriate personnel attend. At a minimum, Design-Build Entity's General Superintendent and Scheduler shall attend these meetings.
 - 3. Design-Build Entity shall plan on the meeting and set aside sufficient time to review the progress schedule and the monthly pay application.

1.6 SPECIAL MEETINGS

- A. Any party may call special meetings by notifying all desired participants and District 5 Days in advance, giving reason for 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 Design-Build Entity attend meeting of any or all of the Subcontractors engaged in Work or in other work, and notice of such meeting shall be duly observed and complied with by Design-Build Entity.
- C. Design-Build Entity shall schedule and conduct coordination meetings as necessary to discharge coordination responsibilities in Document 00 71 00 (General Conditions). Design-Build Entity shall give District 5 Days written notice of coordination meetings. Design-Build Entity shall maintain and distribute minutes of coordination meetings. Attendees shall have 7 Days to submit comments or additions to minutes. Minutes will constitute final memorialization of results of coordination meetings.

1.7 DESIGN REVIEW MEETINGS

- A. Design Review Meetings shall be held at least twice a month or in accordance with such other schedule as the Design-Build Entity and District shall mutually agree upon during the Design Phase of the Project to review the progress of the design and to facilitate the Design Work.
 1. Meetings shall be held at District Representative's on-Site office unless otherwise directed by District.
 2. Design-Build Entity shall record meeting notes of the Design Review Meeting. Within 7 Days after the meeting, Design-Build Entity shall distribute minutes to District through e-mail, and to those affected by decisions made at meeting. Attendees can either submit comments or additions to minutes prior to the next progress meeting, or may attend the next progress meeting and submit comments or additions there. Minutes will constitute final memorialization of results of meeting.
 3. The agenda for the next meeting shall be ascertained no later than at the previous meeting, to ensure that appropriate District representatives for those agenda items are prepared for the decisions to be discussed.
- B. Progress meetings shall be attended by representatives of the Design-Build Entity's Design Team and Construction Team, District, and others as appropriate to the 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 Design progress since last meeting
 3. Status of Design Schedule and adjustments
 4. Required responses from District pertaining to the design clarifications of the Contract Documents, material selections, proposed deviations from the Contract Documents, etc.
 5. DSA submittal strategies
 6. Other items affecting progress of Design.

PART 2 PRODUCTS – NOT USED**PART 3 EXECUTION – NOT USED**

END OF SECTION

SECTION 01 31 23

WEB-BASED PROJECT MANAGEMENT SYSTEM

GENERAL

1.1 SYSTEM REQUIREMENTS

- A. The General Design Build Entity shall use the specified project management control system. The Design Build Entity's requirements include:
1. Provide the hardware to operate the system in home and field offices.
 2. Provide personnel for training and operation of the system.
 3. Provide the telephone or other data line to connect the system to the Internet at the home and field offices. A Digital Subscriber Line (DSL) is the minimum recommended for optimum performance.
 4. Provide an Internet Service Provider at all locations.
 5. Use the system to generate, update and transmit the specified project management documents, including but not limited to:
 - A. Transmittals
 - B. Daily reports
 - C. Meeting minutes
 - D. Cost Proposals
 - E. Submittals
 - F. Change Order Log
 - G. Punch list
 - H. Pay Application
 - I. Request for Information
 6. Use the system to communicate with A/E, District or District's Representative and Inspector of Record.
 7. Maintain the system until final completion.

1.01 SYSTEM DESCRIPTION

- A. The system, "Impact", is a web-based construction management project controls solution developed by Parsons 3D/I. The system is designed to address the record keeping, communication and financial management requirements of the construction project. The Design Build Entity is encouraged to include the requirements of this specification in contracts with subcontractors to facilitate the flow of documentation. At a minimum, Design Build Entity shall use the following system components:
1. Document Control
 - a. Transmittals: Design Build Entity shall use this feature to properly order project documents being transmitted.
 - b. Daily Reports: Design Build Entity's Superintendent shall use this feature to record daily work activities and situations
 - c. Meeting Minutes: This feature will be utilized by the District or District's Representative with copies to be distributed to all attendees.
 - d. Cost Proposals: Design Build Entity shall use the form to submit Cost Proposals for consideration of modifications to the Contract.
 - e. Potential Issues that arise during construction shall be identified and tracked by the Design Build Entity using the PCO log and forms.
 - f. Punch List: This feature allows Design Build Entity to enter and track punch list items as identified by Architect or Owner during punch walk inspections.
 - g. Requests for Information: Submit all RFI's utilizing the system. Attach sketches and drawings to the RFI in the system.
 - h. Submittals: Submit, track and process all items being submitted by Design Build Entity and each subcontractor for approval.

- i. Pay Application: Process and track all pay applications being submitted for approval.
- j. Upload sketches and drawings: Use this feature to attach separate files to any of the above items, for ease of communication.

1.3 OWNERSHIP OF DATABASE

- A. District is the master licensee and is the Master Administrator and will program individual user rights for the Design Build Entity, subcontractors and any other users.
- B. District retains control and ownership of the database during the duration and upon completion of the project.

1.4 TRAINING

- A. Design Build Entity to include as part of Contract Sum, sufficient costs to provide training for its staff, its design professionals and its subcontractors. The initial 4-hour Impact training course in the use of Impact will be offered onsite at the District's premises by Parsons 3D/I.
- B. Design Build Entity shall ensure that its forces and its design professionals and subcontractors utilize the system, to facilitate the required flow of information and communication in support of execution of the work.

1.5 COSTS

- A. District will cover costs of licensing for Design Build Entity's users (including Design Build Entity's subcontractors).
- B. All costs of using the System, except for licensing, shall be the responsibility of the Design Build Entity; for example the labor costs of training and using the system, the costs of providing computers and internet data connections to operate the system, etc.

END OF SECTION

SECTION 01 32 16

PROGRESS SCHEDULES AND REPORTS**PART 1 GENERAL****1.1 SUMMARY**

- A. Perform scheduling of Work under this Contract in accordance with requirements of this Section 01 32 16.
 - 1. Development of schedule, cost, and resource loading of the Progress Schedule, monthly payment requests, and project status reporting requirements of the Contract Documents shall employ scheduling as required in this Section 01 32 16.
 - 2. The Schedule shall be cost-loaded based on Schedule of Values as approved by District.
 - 3. Submit schedules and reports as specified in 00 71 00 (General Conditions).
- B. Upon Award of Contract, immediately commence development of Initial Schedule to ensure compliance with schedule submittal requirements.
- C. Design-Build Entity's obligations under this Section 01 32 16 are hereby deemed material obligations justifying District's remedies for default if Design-Build Entity fails to perform. Nothing in this paragraph 1.1.C of this Section 01 32 16 or the lack of an express statement that any other Contract Documents provision is or is not material shall be considered in determining whether any such other provision is material.
- D. Employ competent scheduling personnel or a schedule consultant with experience performing scheduling required herein on two prior, similar projects.

1.2 GENERAL

- A. Progress Schedule shall be based on and incorporate milestone and completion dates specified in Contract Documents.
- B. Overall time of completion and time of completion for each milestone shown on Progress Schedule shall adhere to times in Document 00 52 00 (Agreement), unless an earlier (advanced) time of completion is requested by Design-Build Entity and agreed to by District. A Change Order shall formalize any such agreement.
 - 1. District is not required to accept an earlier (advanced) schedule, i.e., one that shows early completion date(s) for the Contract Time.
 - 2. Design-Build Entity is not entitled to extra compensation in event agreement is reached on an earlier (advanced) schedule and Design-Build Entity completes its Work, for whatever reason, beyond completion date shown in earlier (advanced) schedule but within the Contract Time.
 - 3. A schedule showing the Work completed in less than the Contract Time, which has been accepted by District, shall be considered to have Project Float. The Project Float is the time between the scheduled completion of the Work and Contract Substantial Completion. Project Float is a resource available to both District and Design-Build Entity.
 - 4. Float Ownership: Neither District nor Design-Build Entity owns float. The Project owns the float. As such, liability for delay of any Substantial Completion or Final Completion date rests with the party whose actions, last in time, actually cause delay to a Substantial Completion or Final Completion date.
 - a. For example, in the event of unexcused delay by Party A and Party B, and 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.
 - b. Under this scenario, Party A would not be responsible for the time since it did not consume all of the float and additional float remained; therefore, the Substantial Completion Date was unaffected.

- C. Progress Schedule shall be the basis for evaluating job progress, payment requests, and time extension requests. Responsibility for developing Contract schedule and monitoring actual progress as compared to Progress Schedule rests with Design-Build Entity.
- D. Failure of Progress Schedule to include any element of the Work or any inaccuracy in Progress Schedule will not relieve Design-Build Entity from responsibility for accomplishing the Work in accordance with the Contract. District's acceptance of Schedule shall be for its use in monitoring and evaluating job progress, payment requests, and time extension requests, and shall not, in any manner, impose a duty of care upon District, or act to relieve Design-Build Entity of its responsibility for means and methods of construction.
- E. Transmit each item under form approved by District or following Section 01 32 19.
 - 1. Identify Project as **Cañada College Solar Photovoltaic System Project**, and include name of Design-Build Entity.
 - 2. Provide space for Design-Build Entity's approval stamp and District's review stamps.
 - 3. Submittals received from sources other than Design-Build Entity will be returned to Design-Build Entity without District's review.

1.3 INITIAL AND ORIGINAL PROGRESS SCHEDULE

- A. Initial Schedule submitted for review shall serve as Design-Build Entity's schedule for up to 15 Days after the Notice to Proceed (Design).
- B. Initial Schedule must indicate detailed plan for the Design progress to be completed in first 15 Days of the Contract; details of any planned mobilization of plant and equipment; sequence of early operations; and procurement of materials and equipment. Show Work beyond 15 Days in summary form.
- C. Design-Build Entity shall submit its Original Schedule for review within 15 days of Notice to Proceed (Design). Original Schedule and all updates shall comply with all standards herein. Original Schedule must comply with milestone and completion dates specified in Contract Documents.
- D. All Schedules shall be time-scaled.
- E. All Schedules shall be cost and resource-loaded. Accepted cost and resource-loaded Schedule will be used as basis for monthly progress payments. Use of Initial Schedule for progress payments shall not exceed 30 Days.
- F. Except as otherwise expressly provided in this Section 01 32 16, meet with District to review and discuss each Schedule (i.e., Initial, Original and monthly updates) within seven Days after each Schedule has been submitted to District.
 - 1. District's review and comment on any Schedule shall be limited to Contract conformance (with sequencing, coordination, and milestone requirements).
 - 2. Design-Build Entity shall make corrections to Schedule necessary to comply with Contract requirements and shall adjust Schedule to incorporate any missing information requested by District. Resubmit Initial Schedule if requested by District.
- G. If Design-Build Entity is of the opinion that any of the Work included on its Schedule has been impacted, submit to District a written Time Impact Evaluation (TIE) in accordance with paragraph 1.8 of this Section 01 32 16. The TIE shall be based on the most current update of the Initial Schedule.

1.4 SCHEDULE FORMAT AND LEVEL OF DETAIL

- A. Each Schedule (Initial, Original and updates) shall indicate all separate design, approval, fabrication, procurement and field construction activities required for completion of the Work, including but not limited to the following:
 - 1. All Design-Build Entity, Subcontractor, and assigned Design-Build Entity 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 Design-Build Entity and District-furnished equipment to be Design-Build Entity-installed per Contract shall be shown.
 - 3. All activities shall be identified through codes or other identification to indicate the building (i.e. buildings, Site work) and Design-Build Entity/Subcontractor responsibility to which they pertain.
 - 4. Break up the Work schedule into activities of durations of approximately 21 Days or less each, except for non-field construction activities or as otherwise deemed acceptable by District.

5. Show the critical path in red. For each activity, show early start, late start, early finish, late finish, durations measured in Days, float, resources, predecessor and successor activities, planned workday/week for the activity, man power loading, and scheduled/actual progress payments.
- B. 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.
- C. Failure by Design-Build Entity to include any element of Work required for performance of the Work on the detailed construction schedule shall not excuse Design-Build Entity from completing all Work required within the Contract Time.
- D. A two-week "look ahead," detailed daily bar chart schedule shall be updated and issued weekly for discussion at the Weekly Progress Meetings.
- E. Utilize Primavera computer-scheduling software, or approved equivalent, for all scheduling including schedule updates.

1.5 MONTHLY SCHEDULE UPDATE SUBMITTALS

- A. Following acceptance of Design-Build Entity's Initial Schedule, monitor progress of Work and adjust Schedule each month to reflect actual progress and any anticipated changes to planned activities.
 1. Each Schedule update submitted shall be complete, including all information requested for the Initial Schedule and Original Schedule submittal.
 2. Each update shall continue to show all Work activities including those already completed. These completed activities shall accurately reflect "as built" information by indicating when activities were actually started and completed, and Design-Build Entity warrants the accuracy of as-built information as shown.
- B. A meeting will be held on approximately the 24th of each month to review the Schedule update submittal and progress payment application.
 1. At this meeting, at a minimum, the following items will be reviewed: Percent complete of each activity; TIEs for Change Orders and Time Extension Request; actual and anticipated activity sequence changes; actual and anticipated duration changes; and actual and anticipated Design-Build Entity delays.
 2. These meetings are considered a critical component of overall monthly schedule update submittal; have appropriate personnel attend. At a minimum, Design-Build Entity's General Superintendent and Scheduler shall attend these meetings.
- C. Within five Days after monthly Schedule update meeting, submit the updated Schedule.
- D. Within five Days of receipt of above-noted revised submittals, District will either accept or reject monthly schedule update submittal.
 1. If accepted, percent complete shown in monthly update will be basis for Application for Payment by Design-Build Entity. The schedule update shall be submitted as part of Design-Build Entity's Application for Payment.
 2. If rejected, update shall be corrected and resubmitted by Design-Build Entity before the Application for Payment is submitted.
- E. Updating, changing or revising of any report, curve, schedule or narrative submitted to District by Design-Build Entity under this Contract, nor District's review or acceptance of any such report, curve, schedule or narrative shall not have the effect of amending or modifying, in any way, the Contract Substantial Completion date or milestone dates or of modifying or limiting, in any way, Design-Build Entity's obligations under this Contract.

1.6 SCHEDULE REVISIONS

- A. Updating the Schedule (Initial and Original) to reflect actual progress shall not be considered revisions to the Schedule. Since scheduling is a dynamic process, however, revisions to activity durations and sequences are expected on a monthly basis.
- B. To reflect revisions to the Schedule, provide District with a written narrative with a full description and reasons for each Work activity revised. For revisions affecting the sequence of Work, provide a schedule diagram that compares the original sequence to the revised sequence of Work. Provide the written narrative and schedule diagram for revisions three Days in advance of the monthly schedule update meeting. Clearly show and discuss any changes in the critical path.

- C. Schedule revisions shall not be incorporated into any schedule update until District has reviewed the revisions. District may request further information and justification for schedule revisions and, within three Days, provide District with a complete written narrative response to District's request.
- D. If District does not accept Design-Build Entity's revision, and Design-Build Entity disagrees with District's position, Design-Build Entity has seven Days from receipt of District's letter rejecting the revision, to provide a written narrative providing full justification and explanation for the revision. Design-Build Entity's failure to respond in writing within seven Days of District's written rejection of a schedule revision shall be contractually interpreted as acceptance of District's position, and Design-Build Entity waives its rights to subsequently dispute or file a claim regarding District's position. If Design-Build Entity files a timely response as provided in this paragraph, and the parties are still unable to agree, Design-Build Entity's sole right shall be to file a claim as provided in Document 00 71 00 (General Conditions), Article 12.
- E. At District's discretion, Design-Build Entity can be required to provide Subcontractor certifications of performance regarding proposed schedule revisions affecting said Subcontractors.

1.7 RECOVERY SCHEDULE

- A. If a Schedule update shows a substantial completion date 21 Days beyond any Contract Substantial Completion date, or individual Milestone completion dates, submit to District within seven Days the proposed revisions to recover the lost time. As part of this submittal, provide a written narrative for each revision made to recapture the lost time. If the revisions include sequence changes, provide a schedule diagram comparing the original sequence to the revised sequence of Work. If District requests, show the intended critical path; secure appropriate Subcontractor and supplier consent to the recovery Schedule; submit a narrative explaining trade flow and construction flow changes, duration changes, added/deleted activities, critical path changes and identify all near critical paths and man hour loading assumptions for major Subcontractors.
- B. The revisions shall not be incorporated into any Schedule update until District has reviewed the revisions.
- C. If District does not accept Design-Build Entity's revisions, District and Design-Build Entity shall follow the procedures in paragraphs 1.6C, 1.6D, and 1.6E of this Section 01 32 16.
- D. At District's discretion, Design-Build Entity can be required to provide Subcontractor certifications for revisions affecting said Subcontractors.

1.8 TIME IMPACT EVALUATION FOR CHANGE ORDERS AND OTHER DELAYS

- A. When Design-Build Entity is directed to proceed with changed work, prepare and submit, within 14 Days from the direction to proceed, a TIE that includes both a written narrative and a schedule diagram depicting how the changed work affects other schedule activities. The schedule diagram shall show how Design-Build Entity proposes to incorporate the changed work in the schedule, and how it impacts the current Schedule update critical path or otherwise. Design-Build Entity is also responsible for requesting time extensions based on the TIE's impact on the critical path. The diagram shall be tied to the main sequence of scheduled activities to enable District to evaluate the impact of changed work to the scheduled critical path.
- B. Comply with the requirements of paragraph 1.8A of this Section 01 32 16 for all types of delays such as, but not limited to, Design-Build Entity/Subcontractor delays, adverse weather delays, strikes, procurement delays, fabrication delays, etc.
- C. Design-Build Entity is responsible for all costs associated with the preparation of TIEs, and the process of incorporating TIEs into the current schedule update. Provide District with four copies of each TIE.
- D. Once agreement has been reached on a TIE, the Contract Time will be adjusted accordingly. If agreement is not reached on a TIE, the Contract Time may be extended in an amount District allows, and Design-Build Entity may submit a claim for additional time claimed by Design-Build Entity as provided in Document 00 71 00 (General Conditions).

1.9 TIME EXTENSIONS

- A. Design-Build Entity is responsible for requesting time extensions for time impacts that, in the opinion of Design-Build Entity, impact the critical path of the current schedule update. Notice of time impacts shall be given in accordance with Document 00 71 00 (General Conditions).

- B. Where an event for which District is responsible impacts the projected Substantial Completion date, provide a written mitigation plan, including a schedule diagram, which explains how (e.g., increase crew size, overtime, etc.) the impact can be mitigated. Also include a detailed cost breakdown of the labor, equipment, and material Design-Build Entity would expend to mitigate District-caused time impact. Submit mitigation plan to District within 18 Days from the date of discovery of said impact. Design-Build Entity is responsible for the cost to prepare the mitigation plan.
- C. Failure to request time, provide TIE, or provide the required mitigation plan will result in Design-Build Entity waiving its right to a time extension and cost to mitigate the delay.
- D. No time will be granted under the Contract Documents for cumulative effect of changes.
- E. District will not be obligated to consider any time extension request unless requirements of Contract Documents are complied with.
- F. Failure of Design-Build Entity to perform in accordance with the current schedule update shall not be excused by submittal of time extension requests.
- G. Notwithstanding any other provision of this Section 01 32 16, if Design-Build Entity does not submit a TIE within the required 18 Days for any issue, Design-Build Entity hereby agrees that Design-Build Entity does not require a time extension for that issue.

1.10 PROJECT STATUS REPORTING

- A. In addition to submittal requirements for scheduling identified in this Section 01 32 16, provide a monthly project status report (i.e., written narrative report) to be submitted in conjunction with each Schedule as specified herein. Status reporting shall be in form specified in this paragraph 1.10 below.
- B. Prepare monthly written narrative reports of status of Project for submission to District. Written status reports shall include:
 - 1. Status of major Project components (percent complete, amount of time ahead or behind schedule) and an explanation of how Project will be brought back on schedule if delays have occurred.
 - 2. Progress made on critical activities indicated on each Schedule, including inspections.
 - 3. Explanations for any lack of work on critical path activities planned to be performed during last month.
 - 4. Explanations for any schedule changes, including changes to logic or to activity durations.
 - 5. List of critical activities scheduled to be performed during the next month.
 - 6. Status of major material and equipment procurement.
 - 7. Any delays encountered during reporting period.
 - 8. Provide printed report indicating actual versus planned resource loading for each trade and each activity. This report shall be provided on weekly and monthly basis.
 - a. Actual resource shall be accumulated in field by Design-Build Entity, and shall be as noted on Design-Build Entity's daily reports. These reports will be basis for information provided in monthly and weekly printed reports.
 - b. Explain all variances and mitigation measures.
 - 9. Design-Build Entity may include any other information pertinent to status of Project. Include additional status information requested by District at no additional cost.
 - 10. Status reports, and the information contained therein, shall not be construed as claims, notice of claims, notice of delay, or requests for changes or compensation.
- C. By noon of each workday provide District with report of Design-Build Entity and its Subcontractors' work activities for the previous day, including trades, equipment, work activities worked on, staff levels, any recorded accidents and equipment deliveries. Any Force Account records from previous day shall be attached.

PART 2 PRODUCTS – NOT USED

PART 3 EXECUTION – NOT USED

END OF SECTION

SECTION 01 32 19

SUBMITTAL PROCEDURES**PART 1 GENERAL****1.1 SUMMARY**

- A. Section Includes:
 - 1. Description of general requirements for Submittals for the Work:
 - a. Procedures
 - b. Schedule of Submittals
 - c. Safety Program
 - d. Progress Schedules
 - e. Design Development Drawings and Specifications
 - f. Construction Documents and Specifications
 - g. Product Data
 - h. Shop Drawings
 - i. Samples
 - j. Installation, Operations and Maintenance Manuals
 - k. Quality Assurance Control Submittals
 - l. Environmental Impact Mitigation Plan Documents
 - m. Project Record Documents
 - n. Delay of Submittals

1.2 OPTIONAL REVIEW MEETING PROCEDURES

- A. Submit at Design-Build Entity's expense, the following items ("Submittals") required by the Contract Documents:
 - 1. Schedule of Submittals
 - 2. Safety Program
 - 3. Progress Schedules
 - 4. Design Development Drawings and Specifications
 - 5. Construction Documents and Specifications
 - 6. Product Data
 - 7. Material Safety Data Sheets
 - 8. Shop Drawings
 - 9. Samples
 - 10. Installation, Operation, and Maintenance Manuals
 - 11. Quality Assurance Control Data
 - 12. Environmental Impact Mitigation Documents
 - 13. Computer Programs
 - 14. Project Record Documents
 - 15. Storm Water Pollution Prevention Plan
- B. Submit these Submittals to District for review and approval in accordance with accepted Schedule of Shop Drawings and Samples Submittals. If no such schedule is agreed upon prior to, then all Shop Drawing, Samples, and product data Submittals shall be submitted within **30 Days** after receipt of Notice to Proceed with Construction from District. In all instances, District may require Design-Build Entity to submit any or all Submittals directly to Architect/Engineer for review.
- C. Transmit each item with the appropriate Submittal transmittal form (attached to this Section 01 32 19 as Exhibits A and B). For project on which an electronic web-based Project Management System is used, per Section 01 31 23 Web Based Project Management System, Design-Build Entity shall use the system's similar

electronic forms and formats for Submittal transmissions. Identify Project, Design-Build Entity, Subcontractor, major supplier, pertinent Drawing sheet and detail number, and Specification Section number as appropriate. Where manufacturer's standard drawings or data sheets are used, they shall be marked clearly to show those portions of the data that are applicable to this Project. Inapplicable portions shall be marked out. Submittals shall be submitted based on each Specification Section. Submittals containing information about more than one Specification Section will be returned for re-submittal. Submittals shall include all information requested by each Specification Section. **(No partial Submittals.)** Incomplete Submittals will be returned and not reviewed by District.

- D. The data shown on the Submittals shall be complete with respect to quantities, dimensions, specified performance and design criteria, materials and similar data to show District the materials and equipment Design-Build Entity proposes to provide and to enable District to review the information for the limited purposes specified in this Section 01 32 19. Submittals shall be identified clearly as to material, supplier, pertinent data such as catalog numbers and the use for which it is intended and otherwise as District may require to enable District to review the Submittal. The quantity of each Submittal to be submitted will be as required by individual Specification Sections or this Section 01 32 19.
- E. At the time of each submission, give District specific written notice of all variations, if any, that the submitted Submittal may have from the requirements of the Contract Documents, and the reasons therefore. This written notice shall be in a written communication attached to the Submittal transmittal form. In addition, cause a specific notation to be made on each Submittal submitted to District for review and approval of each such variation. If District accepts deviation, District will note its acceptance on the returned Submittal transmittal form and, if necessary, issue appropriate Contract Modification.
- F. Submittal coordination and verification is responsibility of Design-Build Entity; this responsibility shall not be delegated in whole or in part to Subcontractors or suppliers. Before submitting each Submittal, review and coordinate each Submittal with other Submittals and with the requirements of the Work and the Contract Documents, and determine and verify:
 - 1. All field measurements, quantities, dimensions, specified performance criteria, installation requirements, materials, catalog numbers and similar information with respect thereto;
 - 2. All materials with respect to intended use, fabrication, shipping, handling, storage, assembly and installation pertaining to the performance of the Work; and
 - 3. All information relative to Design-Build Entity's sole responsibilities and of means, methods, techniques, sequences and procedures of construction and safety precautions and programs incident thereto.
- G. Design-Build Entity's submission to District of a Submittal shall constitute Design-Build Entity's representation that it has satisfied its obligations under the Contract Documents, and as set forth immediately above in this paragraph 1.2 of Section 01 32 19, with respect to Design-Build Entity's review and approval of that Submittal.
- H. Designation of work "by others," if shown in Submittals, shall mean that work will be responsibility of Design-Build Entity rather than Subcontractor or supplier who has prepared Submittals.
- I. After review by District or Architect/Engineer or other consultant designated by District, of each of Design-Build Entity's Submittals, one set of material will be returned to Design-Build Entity with actions defined as follows:
 - 1. NO COMMENT - Accepted subject to its compatibility with future Submittals and additional partial Submittals for portions of the Work not covered in this Submittal. Does not constitute approval or deletion of specified or required items not shown on the Submittal.
 - 2. SEE COMMENTS NOTED (NO RESUBMISSIONS REQUIRED) - Same as item 1 above, except that minor corrections as noted shall be made by Design-Build Entity.
 - 3. SEE COMMENTS, REVISE AS NOTED AND RESUBMIT - District identified major inconsistencies or errors that shall be resolved or corrected by Design-Build Entity prior to subsequent review by District.
 - 4. SUBMITTAL DOES NOT MEET CONTRACT REQUIREMENTS - RESUBMIT - Submitted material does not conform to Contract Documents in major respect, e.g.,: wrong size, model, capacity, or material.
- J. Make a complete and acceptable Submittal at least by second submission. District reserves the right to deduct monies from payments due Design-Build Entity to cover District and Architect/Engineer's additional costs of review beyond the second submission. Illegible Submittals will be rejected and returned to Design-Build Entity for resubmission. Design-Build Entity shall be in breach of the Contract if Design-Build Entity's first re-submittal, following a Submittal which District determines falls within categories 3 or 4 above, does not

fall within categories 1 or 2 above. Deductions will be calculated in accordance with Section 1.2.T of this specification 01 32 19.

- K. Favorable review will not constitute acceptance by District of any responsibility for the accuracy, coordination and completeness of the Submittals. Accuracy, coordination, and completeness of Submittals shall be sole responsibility of Design-Build Entity, including responsibility to back-check comments, corrections, and modifications from District's review before fabrication. Design-Build Entity, Subcontractors, or suppliers may prepare Submittals, but Design-Build Entity shall ascertain that Submittals meet requirements of Contract Documents, while conforming to structural space and access conditions at point of installation. District's review will be only to assess if the items covered by the Submittals will, after installation or incorporation in the Work, conform to the information given in the Contract Documents and be compatible with the design concept of the completed Project as indicated by the Contract Documents. Favorable review of Submittal, method of work, or information regarding materials and equipment Design-Build Entity proposes to furnish shall not relieve Design-Build Entity of responsibility for errors therein and shall not be regarded as assumption of risks or liability by District, or any officer or employee thereof, and Design-Build Entity shall have no claim under Contract Documents on account of failure or partial failure or inefficiency or insufficiency of any plan or method of work or material and equipment so accepted. Favorable review shall be considered to mean merely that District has no objection to Design-Build Entity using, upon Design-Build Entity's own full responsibility, plan or method of work proposed, or furnishing materials and equipment proposed.
- L. District's review will not extend the means, methods, techniques, sequences or procedures of construction or to safety precautions or programs incident thereto. The review and comment on a separate item as such will not indicate approval of the assembly in which the item functions.
- M. Submit complete initial Submittal for those items where required by individual Specification Sections. Complete Submittal shall contain sufficient data to demonstrate that items comply with Specifications, shall meet minimum requirements for submissions cited in Specification Sections, shall include motor data and seismic anchorage certifications, where required, and shall include necessary revisions required for equipment other than first named. If Design-Build Entity submits incomplete initial Submittal when complete Submittal is required, Submittal may be returned to Design-Build Entity without review.
- N. Copy, conform, and distribute reviewed Submittals in sufficient numbers for Design-Build Entity's files, Subcontractors, and vendors.
- O. After District's review of Submittal, revise as noted and resubmit as required. Identify changes made since previous Submittal.
 1. Begin no fabrication or work that requires Submittals until return of Submittals not requiring re-submittal. Do not extrapolate from Submittals covering similar work.
 2. Normally, Submittals will be processed and returned to Design-Build Entity within twenty-one (21) Days of receipt.
- P. Distribute copies of reviewed Submittals to concerned persons. Instruct recipients to promptly report any inability to comply with provisions.
- Q. All Submittals shall be **number-identified** by Design-Build Entity, prior to submission to District, in accordance with the following:
 1. Sequentially number each Submittal by Specification Section (i.e., "1-2", "2-2", "3-2", etc.) as the basis for number identification of Submittals.
 2. Affix the Submittal number under which each Submittal is made on every copy of each Shop Drawing, product data, sample, certification, etc.
 3. Number Installation, Operation, and Maintenance Manuals with original root number of the approved Submittal for the item.
 4. If the Submittal is a re-submittal (including without limitation after an initial Submittal is rejected, returned without review or marked 'Revise as Noted and Resubmit'), add the suffix designation "A" (i.e., a re-submittal of Submittal 1-2 would be numbered 1A-2). Subsequent re-submittals would be identified by the Submittal number and sequential letters (i.e., "B", "C", "D", etc.).
 5. All Submittals shall include all information requested by each Specification Section. No partial Submittals will be accepted unless previously authorized by District. In the event a partial Submittal is authorized, each subsequent different Submittal (as opposed to re-submittal) is given a new number.
- R. Submission Requirements:

1. Deliver Submittals to District giving sufficient time for more than one review, but in no case less than thirty (30) Days before dates reviewed Submittals will be needed.
2. Initial Submittal of Installation, Operation and Maintenance Manuals shall be forty-five (45) Days after the date Submittals that pertain to the applicable portion of the Installation, Operation and Maintenance Manual is satisfactorily reviewed.
3. The following table lists the number of initial Submittals required from Design-Build Entity for each type of submission, to whom Design-Build Entity shall distribute the information, and District’s distribution of reviewed submissions. If Design-Build Entity needs more copies of reviewed Submittals returned to it, then either submit additional copies or make copies from the returned transparency Submittal. Submittals requiring resubmission will require the same quantity and distribution as an initial Submittal.

Submittal	Design-Build Entity Initial Submittal		District Submittal Review Return	
	# of Electronic files	# of Hard Copies/ Prints/ Samples	# of Electronic files	# of Hard Copies/ Prints/ Samples
Schedule of Submittals	1	2	1	0
Safety Program	1	0	0	0
Progress Schedules	1	2	1	0
50% Design Development Drawings & Specifications	1	2	1	0
100% Design Development Drawings & Specifications	1	2	1	0
50% Construction Document Drawings & Specifications	1	2	1	0
90% Construction Document Drawings & Specifications	1	2	1	0
100% Construction Document Drawings & Specifications	1	2	1	0
Product Data	1	2	1	0
Materials Safety Data Sheets	1	1	1	0
Shop Drawings	1	2	1	0
Samples	0	2	0	1
Installation, Operation, and Maintenance Manuals	1	2	1	0
Quality Assurance Control Submittals				
Computer Programs	1	0	0	0
Environmental Impact Mitigation Documents	1	0	1	0
Project Record Documents	1	2	1	0
Other Documents	1	2	1	0

Accompany Submittals with Submittal transmittal form, containing:

- a. Date, revision date, and Submittal log number.
 - b. **Project name and District’s Contract number.**
 - c. Design-Build Entity’s name, address, and job number.
 - d. Specification Section number clearly identified.
 - e. The quantity of Shop Drawings, Product Data, or Samples submitted.
 - f. Notification of deviations from Contract Documents.
 - g. Materials Safety Data Sheet (MSDS) for each item complying with OSHA’s Hazard Communication Standard 29 CFR 1910.1200.
 - h. Other pertinent data.
2. Submittal shall include:

- a. Date and revision dates.
 - b. Revisions, if any, identified.
 - c. Project Name and Contract number.
 - d. The names of:
 - 1) Design-Build Entity, Subcontractor, Supplier, Manufacturer, and separate detailer, when pertinent.
 - e. Identification of product material by location within the Project.
 - f. Relation to adjacent structure or materials.
 - g. Field dimensions, clearly identified as such.
 - h. Specification Section number and applicable detail reference number on the Drawings.
 - i. Applicable reference standards, such as ASTM, ANSI, FS, NEMA, SMACNA or ACI.
 - j. A blank space, on each Drawing or data sheet, 5" x 4" for the District's stamp.
 - k. Identification of deviations from Contract Documents.
 - l. Design-Build Entity's stamp, initialed or signed, with language certifying the review of Submittals, verification of field measurements, construction criteria and technical standards in compliance with Contract Documents.
- B. Resubmission requirements:
1. Shop Drawings:
 - a. Revise initial Shop Drawings as required and resubmit as specified for initial Submittals.
 - b. Indicate on Shop Drawings any changes that have been made other than those requested by District.
 2. Product Data and Samples:
 - a. Submit new Product Data and Samples as required for initial Submittals.
 3. Installation, Operation, and Maintenance Manuals:
 - a. Revise initial Installation, Operation, and Maintenance Manual(s) as required and resubmit as specified for initial Submittals.
- C. Number of resubmissions:
1. One reexamination of Design-Build Entity's Submittals that have been returned for correction or replacement will be included in District's budget. **Any additional re-examination of Design-Build Entity's Submittals will be considered additional scope services to be paid by Design-Build Entity through District. Design-Build Entity shall pay District (or District may deduct from any progress or final payment), for design team personnel, on an hourly basis at 2.5 times direct payroll expenses, and for consultant personnel time at 1.25 times the amount billed District.**

1.2 SCHEDULE OF SHOP DRAWING AND SAMPLE SUBMITTALS

- A. Submit preliminary Schedule of Shop Drawing and Sample Submittals as required by Document 00 71 00 (General Conditions) and in quantities as required by paragraph 1.2A.1 of this Section 01 32 19.
- B. Schedule of Submittals will be used by District to schedule its activities relating to review of Submittals. Schedule of Submittals shall indicate a spreading out of Submittals and early Submittals of long-lead-time items and of items that require extensive review.
- C. Unless otherwise specified, make Submittals in groups containing all associated items to assure that information is available for checking each item when it is received. Identify on the Submittal which Submittals should be reviewed together.
- D. Schedule of Submittals will be reviewed by District and shall be revised and resubmitted until accepted by District.

1.3 SAFETY PROGRAM

- A. Submit Safety Program in quantities as required by paragraph 1.2.R.3 of this Section 01 32 19, in Adobe pdf, to District within the time set forth in Section 01 56 00 (Site Security and Safety), paragraph 1.4. to District. This submittal is for the District's information only.

1.4 PROGRESS SCHEDULE

- A. See Section 01 32 16 (Progress Schedules and Reports) for schedule and report requirements. Section 01 32 16 shall control in any conflict with Section 01 32 19.
- B. Submit in quantities as required by paragraph 1.2.R.3 of this Section 01 32 19, at each of the following times:
 1. Initial Progress Schedule as set forth in Section 01 32 16.

2. Original Schedule as set forth in Section 01 32 16.
 3. Adjustments to the Schedule as required.
 4. Schedule updates monthly, as required.
- C. Submit one electronic copy, in Adobe .pdf, of the reports listed in Section 01 32 16 (Progress Schedules and Reports) with:
1. Initial Schedule
 2. Original Schedule
 3. Each monthly Schedule update
- D. Progress Schedules and Reports shall be submitted on CD Roms or other electronic media, **using software described in paragraph 1.4.E of Section 01 32 16** (in addition to hard copies specified in this paragraph 1.2.R.3. Electronic files shall be complete copies, including all programs and electronic coding

1.5 DESIGN DEVELOPMENT DRAWINGS AND SPECIFICATIONS

- A. Submit Design Development Drawings and Specifications as required by Document 01 10 01 (Summary of Work – Design Services).
- B. Submit in quantities and format as required by paragraph 1.2.R.3 of this Section 01 32 19.

1.6 CONSTRUCTION DOCUMENTS AND SPECIFICATIONS

- A. Submit Construction Documents and Specifications as required by Document 01 10 01 (Summary of Work – Design Services).
- B. Submit in quantities and format as required by paragraph 1.2.R.3 of this Section 01 32 19.

1.7 PRODUCT DATA

- A. Submit Product Data in quantities and format as required by paragraph 1.3A.1 of this Section 01 32 19.
- B. Ten Days prior to design phase system confirmation meeting(s), submit the complete list of major products proposed for use, with name of manufacturer, telephone number, trade name, and model number of each product. Tabulate product data by Specification Section.
- C. For products specified only by reference standards, give manufacturer, trade name, model or catalog designation, and reference standards.
- D. Product or Catalog Data:
 1. Manufacturer's standard drawings shall be modified to delete non-applicable data or include applicable data.
 2. Manufacturer's catalog sheets, brochures, diagrams, schedules, charts, illustrations and other standard descriptive data:
 - a. Mark each copy to identify pertinent materials, products, or models.
 - b. Show dimensions and clearances required, performance characteristics and capacities, wiring diagrams and controls.
 - c. Include applicable MSDS.
- E. Supplemental Data:
 1. Mark each copy to identify applicable products, models, options, and other data. Supplement manufacturer's standard data to provide information unique to Project.
- F. Provide final Project Record Data as described in Section 01 78 39 (Project Record Documents).

1.8 VIBRATION CONTROL DRAWINGS AND CALCULATIONS

Not applicable.

1.9 SHOP DRAWINGS

- A. Submit Schedule of Submittals in quantities as required by paragraph 1.2.R.3 of this Section 01 32 19.
- B. Minimum Sheet Size: 8½ inches by 11 inches. All others: Multiples of 8½ inches by 11 inches, 34 inches by 44 inches maximum.
- C. Mark each copy to identify applicable products, models, options, and other data; supplement manufacturers' standard data to provide information unique to Work.
- D. Include manufacturers' installation instructions when required by Specification Section.

- E. If Design-Build Entity submits Shop Drawings for items that Shop Drawings are not specified, District will not be obliged to review them.
- F. Design-Build Entity is responsible for procuring copies of Shop Drawings for its own use as it may require for the progress of the Work.
- G. Shop Drawings shall be drawn to scale and completely dimensioned, giving plan view together with such sectional views as are necessary to clearly show construction detail and methods.

1.10 SAMPLES

- A. Submit Schedule of Submittals in quantities as required by paragraph 1.2.R.3 of this Section 01 32 19.
- B. Submit full range of manufacturers' standard colors, textures, and patterns for District's selection.
- C. Submit samples to illustrate functional and aesthetic characteristics of product, with integral parts and attachment devices. Coordinate Submittal of different categories for interfacing work.
- D. Include identification on each sample, giving full information.
- E. Sizes: Unless otherwise specified, provide the following:
 - 1. Paint Chips: Manufacturers' standard
 - 2. Flat or Sheet Products: Minimum 6 inches square, maximum 12 inches square
 - 3. Linear Products: Minimum 6 inches, maximum 12 inches long
 - 4. Bulk Products: Minimum 1 pint, maximum 1 gallon
- F. Full size samples may be used in Work upon approval by District.
- G. Field Samples and Mock-ups (if applicable):
 - 1. Erect field samples and mock-ups at Site in accordance with requirements of Specification Sections. If testing is conducted, record and certify results and full Contract compliance.
 - 2. Modify or make additional field samples and mock-ups as required to provide appearance and finishes approved by District.
 - 3. Approved field samples and mock-ups may be used in Work upon approval by District.
 - 4. Construct or prepare as many additional Samples as may be required, as directed by the District, until desired textures, finishes, and/or colors are obtained.
 - 5. Accepted Samples and mock-up shall serve as the standard of quality for the various units of work.
- H. No review of a Sample shall be taken in itself to change or modify the requirements in the Contract Documents.
- I. Finishes, materials, and workmanship in the completed Work shall match accepted Samples.

1.11 INSTALLATION, OPERATIONS AND MAINTENANCE MANUALS

- A. Submit Installation, Operations and Maintenance Manuals in quantities as required by paragraph 1.2.R.3 of this Section 01 32 19.
- B. Submit Project Record Documents as required in Section 01 78 39 Project Record Documents.
- C. Design-Build Entity shall submit initial copies of the complete IOM manuals for review by the architect/engineer and commissioning agent within 45 calendar days after review of applicable Submittal.
- D. Design-Build Entity shall submit final IOM manuals prior to substantial completion.
 - 1. Prior to final completion, the commissioning agent shall review the final IOM manuals (in addition to the initial IOM manuals), and documentation, with redline as-builts, for systems that were commissioned to verify compliance with the specifications. The commissioning agent will communicate, through District, deficiencies in the manuals to the Design-Build Entity or Architect/Engineer, as requested.
 - 2. Upon successful review of the corrections, the commissioning agent will recommend approval and acceptance of the IOM manuals to District.
 - 3. The commissioning agent will also review each equipment warranty and verify that all requirements to keep the warranty valid are clearly stated. This work does not supersede the Architect/Engineer's review of the IOM manuals according to the Architect/Engineer's contract.

1.12 QUALITY ASSURANCE CONTROL SUBMITTALS

- A. Submit Schedule of Submittals in quantities as required by paragraph 1.2.R.3 of this Section 01 32 19.
- B. Test Reports:
 - 1. Indicate that material or product conforms to or exceeds specified requirements.
 - 2. Reports may be from recent or previous tests on material or product, but shall be acceptable to District. Comply with requirements of each individual Specification Section.
- C. Certificates:

1. Indicate that material or product conforms to or exceeds specified requirements.
 2. Submit supporting reference data, affidavits, and certifications as appropriate.
 3. Certificates may be recent or from previous test results on material or product, but shall be acceptable to District.
- D. Manufacturers' Instructions:
1. Include manufacturers' printed instructions for delivery, storage, assembly, installation, startup, adjusting, and finishing.
 2. Identify conflicts between manufacturers' instructions and Contract Documents.
- E. Material Safety Data Sheets:
1. In addition to Material Safety Data Sheets (MSDS) otherwise required by the Contract Documents, submit MSDS for any paints, solvents, thinners, varnish, lacquer, glues and adhesives, mastics, or other materials needed for the Project as required by the individual Specification Sections or as otherwise specified in the Contract Documents.
 2. MSDS required for a Submittal shall be submitted with product data in order for the Submittal to be reviewed.

1.13 COMPUTER PROGRAMS

- A. Submit Computer Programs in quantities as required by paragraph 1.2.R.3 of this Section 01 32 19.
- B. Submit Computer Programs as listed in Section 01 78 39 Project Record Documents.

1.14 ENVIRONMENTAL IMPACT MITIGATION PLAN DOCUMENTS

- A. Submit Project Record Documents in quantities as required by paragraph 1.2.R.3 of this Section 01 32 19.
- B. Submit Noise Control Plan, Spill Prevention, Control and Countermeasure Program, Site Safety Plan, Hazardous Materials Program, Dust Control Plan, Erosion Control Plan, Cultural Resources Protection Plan, Traffic Control Plan, Tree Protection Plan, and Migratory Bird Protection Plan (if applicable) as listed in Section 01 35 00 Special Procedures.

1.15 PROJECT RECORD DOCUMENTS

- A. Submit Project Record Documents in quantities as required by paragraph 1.2.R.3 of this Section 01 32 19.
- B. Submit Project Record Documents listed in Section 01 78 39 Project Record Documents.

1.16 DELAY OF SUBMITTALS

- A. Delay of Submittals by Design-Build Entity is considered avoidable delay.

1.17 OPTIONAL REVIEW MEETING

- A. At the Design-Build Entity's request, in order to facilitate the timeliness of the review process, the District may schedule a meeting to review the materials submitted. If this option is exercised, the following requirements apply:
 1. Request a meeting date with the District at least ten (10) Business Days in advance.
 2. Provide the complete package of Submittal information at least five (5) Business Days in advance of the meeting.
 3. The meeting shall take place at District's office. District will provide the authorized staff to review and respond on the Submittal information during the meeting.
 4. Make available for this meeting the job superintendent and/or foreman, Design-Build Entity's safety officer, and someone knowledgeable of all the items submitted and authorized to make substitutions or changes.

PART 2 PRODUCTS – NOT USED

PART 3 EXECUTION – NOT USED

END OF SECTION

TRANSMITTAL SHEETS AND MAINTENANCE SHEET FOLLOW THIS PAGE

EXHIBIT B
INSTALLATION, OPERATION, AND MAINTENANCE MANUAL
TRANSMITTAL NO. _____

Project Name: _____			Date Received:	
San Mateo County Community College District 3401 CSM Drive San Mateo, CA 94402			Checked By:	
DBE:	To:	Log Page:		
Address:	Address:	Specification Section Number: 1 st Submittal <input type="checkbox"/> Resubmittal <input type="checkbox"/>		
Attention:	Attention:			
Date Transmitted:	Previous Transmittal Date:			
No. Copies	Description	Manufacturer	Dwg. or Data No.	Action Taken*

Remarks:

* The action designated above is in accordance with the following legend:

- | | |
|---|---|
| <p>A – No exceptions taken</p> <p>B – Make Corrections Noted (No Resubmission Required)</p> <p>C. – Make Corrections Noted and Resubmit</p> <p>D – Not Approved– this manual Submittal is deficient in the following area:</p> <ol style="list-style-type: none"> 1. Equipment record sheets 2. Functional description 3. Assembly, disassembly, installation, alignment, adjustment, and checkout instructions 4. Operating instructions | <p>D – (continued)</p> <ol style="list-style-type: none"> 5. Lubrication and maintenance instructions 6. Troubleshooting guide 7. Parts list and ordering instructions 8. Organization (indexing and tabbing) 9. Wiring diagrams and schematics specific to installation 10. Outline, cross section, and assembly diagrams 11. Test data and performance curves 12. Tag or equipment identification numbers 13. See comments |
|---|---|

Comments

	By _____	Date _____	
Distribution: Design-Build Entity <input type="checkbox"/>	File <input type="checkbox"/>	IOR <input type="checkbox"/>	District <input type="checkbox"/> CM <input type="checkbox"/> Other <input type="checkbox"/>

SECTION 01 35 00

SPECIAL PROCEDURES - CAÑADA COLLEGE**PART 1 GENERAL****1.1 Summary**

- A. In compliance with CEQA requirements, the District conducted an Initial Study to ascertain whether the project might have a significant effect on the environment. The Initial Study identified potentially significant impacts on the environment. However, all potential impacts of the proposed project can be avoided or reduced to a less-than-significant level with implementation of the following mitigation measures. Design-Build Entity shall conform with the following mitigation measures.
- B. Section Includes:
 - 1. Noise Control Plan
 - 2. Spill Prevention, Control and Countermeasure Program
 - 3. Site Safety Plan (Soil and Groundwater Management Plan)
 - 4. Hazardous Materials Program
 - 5. Dust Control Plan
 - 6. Erosion Control Plan
 - 7. Cultural Resources Protection Plan
 - 8. Traffic Control Plan
 - 9. Tree Protection Plan

1.2 Definitions**1.3 Submittals**

- A. See Section 01 32 19 (Submittal Procedures).
- B. Name and address of the selected treatment, recycling, or disposal facilities for contaminated soil disposal.
- C. Hazardous waste manifests "if applicable."
- D. Non-hazardous waste manifests "if applicable."
- E. Facility weight tickets "if applicable."
- F. Spill Prevention, Control, and Countermeasure Program.

1.4 Noise Control Plan

- A. Implement the following noise-control measures to reduce and control noise generated from construction, demolition, and renovation-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 9:00 a.m. and 5:00 p.m. Construction on Sundays will be avoided if possible, and there will be no construction on public holidays. When activities must occur outside the hours specified above, conform with notification requirements of Section 01 10 00 (Summary of Work), Paragraph 1.7.C, and utilize local barriers around equipment and other noise attenuating devices if necessary to limit noise to acceptable levels.
 - 2. Construction equipment shall have appropriate mufflers, intake silencers, and noise-control features, and shall be properly maintained and equipped with exhaust mufflers that meet State standards.
 - 3. Vehicles and other gas- or diesel-powered equipment shall be prohibited from unnecessary warming up, idling, and engine revving.
 - 4. Post a sign at the construction site giving the name and telephone number or e-mail address of the District's Representative whom the public should contact with any noise complaints. If necessary due to complaints, provide additional noise-attenuating measures such as additional mufflers or engine shrouding.

1.5 Spill Prevention, Control and Countermeasure Program

- A. 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. Design-Build Entity 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 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 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 Design-Build Entity 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.

1.6 Site Safety Plan (Soil and Groundwater Management Plan)

- A. Prior to excavation, prepare and submit a Site Safety Plan (Soil and Groundwater Management Plan) to protect people from known or previously undiscovered soil and groundwater contamination during construction activities. Obtain approval of the SPCCP before any construction or demolition activities begin.
- B. The Site Safety Plan (Soil and Groundwater Management Plan) shall, at a minimum, include the following:
 1. All construction activities involving work in proximity to potentially contaminated soils and/or groundwater shall be undertaken in accordance with California Occupational Safety and Health Administration (Cal-OSHA) standards, contained in Title 8 of the CCR.
 2. Establish soil and groundwater mitigation and control specifications for construction activities, including health and safety provisions for monitoring exposure to construction workers, procedures to be undertaken in the event that previously unreported contamination is discovered, and emergency procedures and responsible personnel.
 3. Procedures for managing soils and groundwater removed from the site to ensure that any excavated soils and/or dewatered groundwater with contaminants are stored, managed, and disposed in accordance with applicable regulations.

1.7 Hazardous Materials Program

- A. If hazardous materials are encountered, they shall be handled in accordance with applicable local, state, and federal regulations 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 Health Standards for Management of Hazardous Waste); and (3) CCR Title 23, Division 3, Chapter 15 (Discharges of Hazardous Waste to Land).
- B. Should the discovery of contaminants cause delay to Design-Build Entity's operations, extension of Contract Time will be granted by District in accordance with Section 00 71 00 (General Conditions), and Section 01 32 16 (Progress Schedules and Reports). Design-Build Entity may not be entitled to damages or additional payment due to such delay. District may, if it believes appropriate in its sole discretion, grant an extension of Contract Time. The Design-Build Entity 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 01 32 16 (Progress Schedules and Reports) regarding requirement to demonstrate Time Impacts.

C. Subsurface Hazardous Materials

1. If Design-Build Entity encounters subsurface contamination, the following provisions and precautionary measures shall be implemented during construction:
 - a. Design-Build Entity's personnel shall be alert for and immediately report to District's Representative any detectable chemical odors, unusual debris, or discolored soil.
 - b. Disposal requirements: Soils containing hazardous materials shall be disposed by Design-Build Entity at permitted treatment, recycling, or disposal facilities in accordance with CCR Title 23, Division 3, Chapter 15 (Discharges of Waste to Land). Determine to which permitted treatment, recycling, or disposal facilities the soil will be delivered.
 - c. 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.
 - d. 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. Laboratory chemical analysis reports associated with the water samples shall be provided to District's Representative.
 - e. Removal of dewatering equipment: After having served their purpose, all protective works, and dewatering pumps, shall be decontaminated and removed from the Site. Design-Build Entity is responsible for permanent disposal of all equipment that cannot be decontaminated or recycled in accordance with all applicable laws and regulations.
 - f. 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 Design-Build Entity.
 - g. 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.

D. Hazardous Building Materials

1. 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).
2. During demolition activities, all building materials containing lead-based paint shall be removed in accordance with Cal-OSHA Lead in Construction Standard, Title 8, California Code of Regulations 1532.1.
3. 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.
 - a. 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.
 - b. 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.

- c. 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 regulations apply in most cases.
- E. Naturally Occurring Asbestos
1. 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:
 - a. The area to be disturbed is located in a geographic ultramafic rock unit; or
 - b. 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
 - c. 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.
 2. For construction projects that disturb areas of 1 acre or less, implement standard dust mitigation measures before construction begins, and maintain each measure throughout the duration of the construction project. The following additional measures will be implemented in accordance with Section 93105 (e)(1) of the ATCM and will be undertaken in concurrence with the dust control measures identified in Paragraph 1.8 Dust Control Measures and Paragraph 1.9 Erosion Control Measures.
 - a. Equipment used during excavation, grading, and construction activities will be washed down before moving from the property onto a paved public road.
 - b. Any visible track-out on the paved public road will be cleaned using wet sweeping or a high-efficiency particulate air (HEPA) filter equipped vacuum device within twenty-four hours.
 3. For construction projects that disturb areas greater than 1 acre in size, submit an asbestos dust mitigation plan to the Bay Area Air Quality Management District (BAAQMD) for review and approval, in accordance with Section 93105(2)(A) of the ATCM, before the start of any construction or grading activity. The provisions of the dust mitigation plan will be implemented before construction begins, and will be maintained throughout the duration of the construction or grading activity. The asbestos dust mitigation plan will address the following:
 - a. Prevention of dust emissions offsite;
 - b. Control of dust for disturbed areas and storage piles;
 - c. Traffic control for on-site unpaved areas;
 - d. Control for earthmoving activities;
 - e. Track-out prevention;
 - f. Control for off-site transport;
 - g. Post-construction stabilization of disturbed areas;
 - h. Air monitoring for asbestos (if required by the APCO).

1.8 Dust Control Plan

- A. 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. Pave, 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 streets daily (with water sweepers) if visible soil material has 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 15 miles per hour or less at construction sites.

1.9 Erosion Control Plan

- A. Implement erosion control measures to protect water quality during construction.
1. Cover or apply nontoxic soil stabilizers to inactive construction areas (previously graded areas inactive for ten days or more) that could contribute sediment to waterways.
 2. Enclose and cover exposed stockpiles of dirt or other loose, granular construction materials that could contribute sediment to waterways.
 3. Contain soil and filter runoff from disturbed areas by berms, vegetated filters, silt fencing, straw wattle, plastic sheeting, catch basins, or other means necessary to prevent the escape of sediment from the disturbed area.
 4. Prohibit the placement of earth or organic material where it may be directly carried into a stream, marsh, slough, lagoon, or body of standing water.
 5. Prohibit the following types of materials from being rinsed or washed into streets, shoulder areas, or gutters: concrete, solvents and adhesives, fuels, dirt, gasoline, asphalt, and concrete saw slurry.
 6. Conduct dewatering activities according to the provisions of the SWPPP. Prohibit placement of dewatered materials in local water bodies or in storm drains leading to such bodies without implementation of proper construction water quality control measures.
 7. There is an ephemeral drainage located at the Cañada Road entrance to the College, west of the entrance road. Avoid riparian vegetation along this ephemeral drainage. This drainage and the riparian woodland on its banks will be fenced to prevent accidental disturbance associated with construction activities. The fencing will be commercial-quality woven polypropylene, orange in color, and at least 4 feet high (Tensor Polygrid or equivalent). The fencing will be tightly strung on posts with maximum 10-foot spacing. Temporary fencing around the drainage will be installed as the first order of work. Temporary fencing will be furnished, constructed, maintained, and removed as shown on the plans, as specified in the special provisions, and as directed by the project engineer. Before construction, the construction Design-Build Entity will work with the project engineer and a resource specialist to identify the location of the ephemeral drainage and place stakes around the sensitive resource sites to indicate these locations. The drainage will be designated an “environmentally sensitive area” and clearly identified on the construction specifications. The fencing will be installed before construction activities are initiated and will be maintained throughout the construction period.
 - a. The Design-Build Entity’s attention is directed to the ephemeral drainage designated as an “environmentally sensitive area”. These areas are protected, and no entry by the Design-Build Entity will be allowed unless specifically authorized in writing by VTA. The Design-Build Entity will take measures to ensure that the Design-Build Entity’s forces, do not enter or disturb these areas, including giving written notice to employees and subcontractors.

1.10 Cultural Resources Protection Plan

- A. If buried cultural resources, such as chipped or ground stone, historic debris, building foundations, or human bone or paleontological resources are discovered inadvertently during ground-disturbing activities, Design-Build Entity shall avoid any further disturbance of the materials and immediately discontinue earthwork within 100 feet of the find. Design-Build Entity shall notify District’s Representative immediately upon encountering cultural resources. Design-Build Entity 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. Design-Build Entity shall notify District’s Representative immediately upon encountering human remains. Design-Build Entity 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 area reasonably suspected to overlie adjacent human remains:
1. until the San Mateo 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 descendants 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.
- D. Design-Build Entity may be entitled to an increase in Contract Sum and Contract Time due to conditions described in this paragraph 1.4 of this Section 01 35 00. The Design-Build Entity shall take all measures to avoid and/or mitigate delays due to Cultural Resource finds such as; avoiding the area of the find and proceeding with other work on the project; developing “work around” plans; and documenting its best efforts to avoid and/or mitigate delays. See Section 01 32 16 (Progress Schedules and Reports) regarding requirement to demonstrate Time Impacts.

1.11 Traffic Control Plan

- A. Develop and implement a traffic control plan to minimize the effects of construction traffic on the surrounding residential areas, as appropriate. Submit the plan 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.
 - 2. Provide clearly marked bicycle detours if heavily used bicycle routes must be closed, or if bicyclist safety would be otherwise compromised.
 - 3. Provide crossing guards and/or flag persons as needed to avoid traffic conflicts and ensure pedestrian and bicyclist safety.
 - 4. Use nonskid traffic plates over open trenches to minimize hazards.
 - 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 and provide emergency access by whatever means necessary to expedite and facilitate the passage of emergency vehicles.
 - 7. 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.
 - 8. Provide access for driveways and private roads outside the immediate construction zone by using steel plates or temporary backfill, as necessary.
 - 9. Prohibit construction worker parking in residential areas.

1.12 Tree Protection Plan

- A. Definitions
 - 1. Dripline: 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”): The areas enclosed with tree protection fencing as designated on the drawing(s).
 - 3. Tree damage: Tree damage shall include, but not be 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.
- 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 Design-Build Entity's operations.

- E. Any tree that is removed without District's permission or is irreparably damaged, in the opinion of District, shall cost Design-Build Entity 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, Design-Build Entity shall pay the same amount of damages as for unauthorized removal of a tree. Design-Build Entity shall immediately report all tree damage to District, so that District may determine applicable damages.

PART 2 PRODUCTS - Not Used

PART 3 EXECUTION - Not Used

END OF SECTION

SECTION 01 35 01

SPECIAL PROCEDURES (COLLEGE OF SAN MATEO)**PART 1 GENERAL****1.1 Summary**

- A. In compliance with CEQA requirements, the District conducted an Initial Study to ascertain whether the project might have a significant effect on the environment. The Initial Study identified potentially significant impacts on the environment. However, all potential impacts of the proposed project can be avoided or reduced to a less-than-significant level with implementation of the following mitigation measures. Contractor shall conform with the following mitigation measures.
- B. Section Includes:
 - 1. Noise Control Plan
 - 2. Spill Prevention, Control and Countermeasure Program
 - 3. Site Safety Plan (Soil and Groundwater Management Plan)
 - 4. Hazardous Materials Program
 - 5. Dust Control Plan
 - 6. Erosion Control Plan
 - 7. Cultural Resources Protection Plan
 - 8. Traffic Control Plan
 - 9. Tree Protection Plan
 - 10. Migratory Bird Nesting Protection Plan

1.2 Definitions**1.3 Submittals**

- A. See Section 01 32 19 (Submittal Procedures).
- B. Name and address of the selected treatment, recycling, or disposal facilities for contaminated soil disposal.
- C. Hazardous waste manifests "if applicable."
- D. Non-hazardous waste manifests "if applicable."
- E. Facility weight tickets "if applicable."
- F. Spill Prevention, Control, and Countermeasure Program.

1.4 Noise Control Plan

- A. Implement the following noise-control measures to reduce and control noise generated from construction, demolition, and renovation-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 9:00 a.m. and 5:00 p.m. Construction on Sundays will be avoided if possible, and there will be no construction on public holidays. When activities must occur outside the hours specified above, conform with notification requirements of Section 01 10 00 (Summary of Work), Paragraph 1.7.C, and utilize local barriers around equipment and other noise attenuating devices if necessary to limit noise to acceptable levels.
 - 2. Construction equipment shall have appropriate mufflers, intake silencers, and noise-control features, and shall be properly maintained and equipped with exhaust mufflers that meet State standards.
 - 3. Vehicles and other gas- or diesel-powered equipment shall be prohibited from unnecessary warming up, idling, and engine revving.
 - 4. Post a sign at the construction site giving the name and telephone number or e-mail address of the District's Representative whom the public should contact with any noise complaints. If necessary due to complaints, provide additional noise-attenuating measures such as additional mufflers or engine shrouding.

1.5 Spill Prevention, Control and Countermeasure Program

- A. 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 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 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.

1.6 Site Safety Plan (Soil and Groundwater Management Plan)

- A. Prior to excavation, prepare and submit a Site Safety Plan (Soil and Groundwater Management Plan) to protect people from known or previously undiscovered soil and groundwater contamination during construction activities. Obtain approval of the SPCCP before any construction or demolition activities begin.
- B. The Site Safety Plan (Soil and Groundwater Management Plan) shall, at a minimum, include the following:
 - 1. All construction activities involving work in proximity to potentially contaminated soils and/or groundwater shall be undertaken in accordance with California Occupational Safety and Health Administration (Cal-OSHA) standards, contained in Title 8 of the CCR.
 - 2. Establish soil and groundwater mitigation and control specifications for construction activities, including health and safety provisions for monitoring exposure to construction workers, procedures to be undertaken in the event that previously unreported contamination is discovered, and emergency procedures and responsible personnel.
 - 3. Procedures for managing soils and groundwater removed from the site to ensure that any excavated soils and/or dewatered groundwater with contaminants are stored, managed, and disposed in accordance with applicable regulations.

1.7 Hazardous Materials Program

- A. If hazardous materials are encountered, they shall be handled in accordance with applicable local, state, and federal regulations 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 Health Standards for Management of Hazardous Waste); and (3) CCR Title 23, Division 3, Chapter 15 (Discharges of Hazardous Waste to Land).
- B. Should the discovery of contaminants cause delay to Contractor's operations, extension of Contract Time will be granted by District in accordance with Section 00 71 00 (General Conditions), and Section 01 32 16 (Progress Schedules and Reports). Contractor may not be entitled to damages or additional payment due to such delay. District may, if it believes appropriate in its sole discretion, grant an extension of Contract Time. 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 01 32 16 (Progress Schedules and Reports) regarding requirement to demonstrate Time Impacts.

C. Subsurface Hazardous Materials

1. If Contractor encounters subsurface contamination, the following provisions and precautionary measures shall be implemented during construction:
 - a. Contractor's personnel shall be alert for and immediately report to District's Representative any detectable chemical odors, unusual debris, or discolored soil.
 - b. 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 (Discharges of Waste to Land). Determine to which permitted treatment, recycling, or disposal facilities the soil will be delivered.
 - c. 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.
 - d. 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. Laboratory chemical analysis reports associated with the water samples shall be provided to District's Representative.
 - e. 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.
 - f. 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 Contractor.
 - g. 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.

D. Hazardous Building Materials

1. 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).
2. During demolition activities, all building materials containing lead-based paint shall be removed in accordance with Cal-OSHA Lead in Construction Standard, Title 8, California Code of Regulations 1532.1.
3. 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.
 - a. 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.
 - b. 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.
 - c. 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 regulations apply in most cases.

- E. Naturally Occurring Asbestos
1. 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:
 - a. The area to be disturbed is located in a geographic ultramafic rock unit; or
 - b. 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
 - c. 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.
 2. For construction projects that disturb areas of 1 acre or less, implement standard dust mitigation measures before construction begins, and maintain each measure throughout the duration of the construction project. The following additional measures will be implemented in accordance with Section 93105 (e)(1) of the ATCM and will be undertaken in concurrence with the dust control measures identified in Paragraph 1.8 Dust Control Measures and Paragraph 1.9 Erosion Control Measures.
 - a. Equipment used during excavation, grading, and construction activities will be washed down before moving from the property onto a paved public road.
 - b. Any visible track-out on the paved public road will be cleaned using wet sweeping or a high-efficiency particulate air (HEPA) filter equipped vacuum device within twenty-four hours.
 3. For construction projects that disturb areas greater than 1 acre in size, submit an asbestos dust mitigation plan to the Bay Area Air Quality Management District (BAAQMD) for review and approval, in accordance with Section 93105(2)(A) of the ATCM, before the start of any construction or grading activity. The provisions of the dust mitigation plan will be implemented before construction begins, and will be maintained throughout the duration of the construction or grading activity. The asbestos dust mitigation plan will address the following:
 - a. Prevention of dust emissions offsite;
 - b. Control of dust for disturbed areas and storage piles;
 - c. Traffic control for on-site unpaved areas;
 - d. Control for earthmoving activities;
 - e. Track-out prevention;
 - f. Control for off-site transport;
 - g. Post-construction stabilization of disturbed areas;
 - h. Air monitoring for asbestos (if required by the APCO).

1.8 Dust Control Plan

- A. 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. Pave, 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 streets daily (with water sweepers) if visible soil material has 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 15 miles per hour or less at construction sites.

1.9 Erosion Control Plan

- A. Implement erosion control measures to protect water quality during construction.

1. Cover or apply nontoxic soil stabilizers to inactive construction areas (previously graded areas inactive for ten days or more) that could contribute sediment to waterways.
2. Enclose and cover exposed stockpiles of dirt or other loose, granular construction materials that could contribute sediment to waterways.
3. Contain soil and filter runoff from disturbed areas by berms, vegetated filters, silt fencing, straw wattle, plastic sheeting, catch basins, or other means necessary to prevent the escape of sediment from the disturbed area.
4. Prohibit the placement of earth or organic material where it may be directly carried into a stream, marsh, slough, lagoon, or body of standing water.
5. Prohibit the following types of materials from being rinsed or washed into streets, shoulder areas, or gutters: concrete, solvents and adhesives, fuels, dirt, gasoline, asphalt, and concrete saw slurry.
6. Conduct dewatering activities according to the provisions of the Storm Water Pollution Prevention Plan (SWPPP). Prohibit placement of dewatered materials in local water bodies or in storm drains leading to such bodies without implementation of proper construction water quality control measures.

1.10 Cultural Resources Protection Plan

- A. If buried cultural resources, such as chipped or ground stone, historic debris, building foundations, or human bone 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 area reasonably suspected to overlie adjacent human remains:
 1. until the San Mateo 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.
- D. Contractor may be entitled to an increase in Contract Sum and Contract Time due to conditions described in this paragraph 1.4 of this Section 01 35 00. The Contractor shall take all measures to avoid and/or mitigate delays due to Cultural Resource finds such as; avoiding the area of the find and proceeding with other work on the project; developing "work around" plans; and documenting its best efforts to avoid and/or mitigate delays. See Section 01 32 16 (Progress Schedules and Reports) regarding requirement to demonstrate Time Impacts.

1.11 Traffic Control Plan

- A. Develop and implement a traffic control plan to minimize the effects of construction traffic on the surrounding residential areas, as appropriate. Submit the plan 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.

2. Provide clearly marked bicycle detours if heavily used bicycle routes must be closed, or if bicyclist safety would be otherwise compromised.
3. Provide crossing guards and/or flag persons as needed to avoid traffic conflicts and ensure pedestrian and bicyclist safety.
4. Use nonskid traffic plates over open trenches to minimize hazards.
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 and provide emergency access by whatever means necessary to expedite and facilitate the passage of emergency vehicles.
7. 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.
8. Provide access for driveways and private roads outside the immediate construction zone by using steel plates or temporary backfill, as necessary.
9. Prohibit construction worker parking in residential areas.

1.12 Tree Protection Plan

- A. Definitions
 1. Dripline: 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"): The areas enclosed with tree protection fencing as designated on the drawing(s).
 3. Tree damage: Tree damage shall include, but not be 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.
- 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.

1.13 Migratory Bird Nesting Protection Plan

- a. 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.

PART 2 PRODUCTS - Not Used

PART 3 EXECUTION - Not Used

END OF SECTION

SECTION 01 35 27
PROJECT LABOR AGREEMENT

1.01 GENERAL

The San Mateo County Community College District Board of Trustees has approved a Program Stabilization Agreement for this project. The Contractor and all subcontract forces are to comply with the requirements set forth in the executed Project Stabilization Agreement. It is the responsibility of the Contractor and the subcontractors to adhere to the requirements set forth in the Agreement and to comply with its provisions. Any costs for compliance with the Project Stabilization Agreement are to be included in the Contractor's Bid price. Copies of the signed Program Stabilization Agreement are available from the District's Construction Planning Department at 650-378-6785 or on the District's website at:

http://www.smccd.edu/accounts/smccd/departments/facilities/PLASMCCCD_01.pdf

END OF SECTION

LETTER OF ASSENT FOLLOWS ON NEXT PAGE

Exhibit A
Agreed-to Letter of Assent

Date: _____

Board of Trustees
San Mateo County Community College District
3401 CSM Dr.
San Mateo, CA 94402

Re: Cañada College Solar Photovoltaic System Project
Project Stabilization Agreement – Letter of Assent

Dear Board of Trustees:

The undersigned party confirms that it agrees to be a party to and bound by the (Name of Project), Project Stabilization Agreement as such Agreement may, from time to time, be amended by the parties or interpreted pursuant to its terms.

By executing this Letter of Assent, the undersigned party subscribes to, adopts and agrees to be bound by the written terms of the legally established trust agreements specifying the detailed basis upon which contributions are to be made into, and benefits made out of, such trust funds and ratifies and accepts the trustees appointed by the parties to such trust funds.

Such obligation to be a party to and bound by this Agreement shall extend to all work covered by said Agreement undertaken by the undersigned party on the (Name of Project). The undersigned party shall require all of its subcontractors, of whatever tier, to become similarly bound for all their work within the scope of this Agreement by signing an identical Letter of Assent.

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

CONTRACTOR/SUBCONTRACTOR: _____

California State License Number: _____

Name and Signature of
Authorized Person:

(Print Name)

(Title)

(Signature)

(Telephone Number)

(Facsimile Number)

SECTION 01 41 00

REGULATORY REQUIREMENTS**PART 1 GENERAL****1.1 SUMMARY**

- A. Section includes: regulatory requirements applicable to Contract Documents.
- 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 Proposals.
- D. The Design-Build Entity shall not allow design or construction of any conditions wherein the finished Work will not comply with current codes. No change order shall be considered by District for the correction of any Work not complying with code.

1.2 REFERENCES TO REGULATORY REQUIREMENTS

- A. Codes, 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 Design-Build Entity, because Design-Build Entity is assumed to be familiar with these requirements. The listing of applicable codes, laws, and regulations for hazardous waste abatement Work in the Contract Documents is supplied to Design-Build Entity as a courtesy and shall not limit Design-Build Entity'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. Design-Build Entity 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 having jurisdiction.

1.3 CODES

- A. Codes that apply to Contract Documents include, but are not limited to, the following:
 - 1. CBC (Part 2, Title 24, CCR, including, without means of limitation, Sections 16A, 102A.23, 308, 420A, 504-506, 904.2.6, 1019 and 1604)
 - 2. CEC (Part 3, Title 24, CCR)
 - 3. CMC (Part 4, Title 24, CCR)
 - 4. CPC (Part 5, Title 24, CCR),
 - 5. State Elevator Safety Regulations (Part 7, Title 24, CCR)
 - 6. UBC
 - 7. UPC
 - 8. UMC

1.4 LAWS, ORDINANCES, RULES, AND REGULATIONS

- 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:
- B.
1. Federal
 - a. Americans With Disabilities Act of 1990
 - 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
 - n. Fish and Game Code
 3. State of California Agencies
 - a. State and Consumer Services Agency
 - b. Office of the State Fire Marshall
 - c. Office of Statewide Health Planning and Development
 - d. Department of Fish and Game
 - e. Bay Area Air Quality Management District
 - f. San Francisco Bay Regional Water Quality Control Board
 - g. Division of the State Architect
 4. Local Agencies:
 - a. City of San Mateo (College of San Mateo)
 - b. City of San Bruno (Skyline College)
 - c. Town of Woodside, City of Redwood City (Cañada College)
 - d. County of San Mateo
 - e. San Mateo Fire Department (College of San Mateo)
 - f. San Bruno Fire Department (Skyline College)
 - g. Woodside Fire Department (Cañada College)
 5. Other Requirements:
 - a. National Fire Protection Association (NFPA): Pamphlet 101, Life Safety.
 - b. References on Drawings or in Specifications to “code” or “building code” not otherwise identified shall mean the codes specified in this Section 01 41 00, together with all additions, amendments, changes, and interpretations adopted by code authorities of the jurisdiction.
- C. Have access to all of the foregoing within 24 hours.
- 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 (Document 00 71 00, Article 12) nor the Change Order Procedure (Section 01 26 00) may be modified, waived, or otherwise not complied with, absent a written change order that explicitly and expressly makes such modifications.

1.5 CONFLICTS

- A. Between referenced 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.

1.6 REQUIRED PROVISIONS ON CONTRACT CLAIM RESOLUTION

- A. The California Public Contract Code specifies required provisions on resolving contract claims less than \$375,000, which are set forth below, and constitute a part of this Contract.
 1. For the purposes of this section, "Claim" means a separate demand by Design-Build Entity of \$375,000 or less for (1) a time extension, (2) payment or money or damages arising from Work done by or on behalf of Design-Build Entity arising under the Contract Documents and payment of which is not otherwise expressly provided for or the Claimant is not otherwise entitled to, or (3) an amount the payment of which is disputed by District. In order to qualify as a Claim, the written demand must state that it is a Claim submitted under paragraph 12 of Document 00 71 00 (General Conditions) and be submitted in compliance with all requirements of Document 00 71 00 (General Conditions), paragraph 12. Separate Claims which total more than \$375,000 do not qualify as a "separate demand of \$375,000 or less," as referenced above, and are not subject to this section.
 2. A voucher, invoice, payment application, or other routine or authorized form of request for payment is not a Claim for purposes of this section. If such request is disputed as to liability or amount, then the disputed portion of the submission may be converted to a Claim under this section by submitting a separate claim in claim in compliance with Contract Documents claim submission requirements.
 3. Caution. This section does not apply to tort claims and nothing in this section is intended nor shall be construed to change the time periods for filing tort claims or actions specified by Chapter 1 and Chapter 2 of Part 3 of Division 3.6 of Title 1 of the California Government Code.
- B. Procedure:
 1. The Claim must be in writing, submitted in compliance with all requirements of 00 71 00 (General Conditions), paragraph 12, including, but not limited to, the time prescribed by and including the documents necessary to substantiate the Claim, pursuant to Document 00 71 00 (General Conditions), paragraph 12. Claims must be filed on or before the day of final payment. Nothing in this section is intended to extend the time limit or supersede notice requirements for the filing of claims as set forth in Document 00 71 00 (General Conditions), paragraph 12 or elsewhere in the Contract Documents.
 2. For Claims of fifty thousand dollars (\$50,000) or less
 - a. District shall respond in writing within 45 days of receipt of the Claim, or
 - b. District may request in writing within 30 days of receipt of the Claim, any additional documentation supporting the Claim or relating to any defenses or claims District may have against Claimant.
 - 1) If additional information is thereafter required, it shall be requested and provided in accordance with this section upon mutual agreement of District and Claimant.
 - 2) District's written response to the Claim, as further documented, shall be submitted to Claimant within 15 days after receipt of further documentation or within a period of time

no greater than taken by Claimant in producing the additional information, whichever is greater.

3. For Claims over Fifty Thousand Dollars (\$50,000) and less than or equal to \$375,000:
 - a. District shall respond in writing within 60 days of receipt of the Claim, or
 - b. District may request in writing within 30 days of receipt of the Claim, any additional documentation supporting the Claim or relating to any defenses or claims District may have against Claimant.
 - 1) If additional information is thereafter required, it shall be requested and provided in accordance with this section, upon mutual agreement of District and Claimant;
 - 2) District's written response to the Claim, as further documented, shall be submitted to Claimant within 30 days after receipt of further documentation or within a period of time no greater than taken by Claimant in producing the additional information, whichever is greater.
4. Meet and Confer:
 - a. If Claimant disputes District's written response, or District fails to respond within the time prescribed above, Claimant shall notify District, in writing, either within 15 days of receipt of District's response or within 15 days of District's failure to timely respond, and demand an informal conference to meet and confer for settlement of the issues in dispute. Upon demand District will schedule a meet and confer conference within 30 days for settlement of the dispute.
 - b. Following the meet and confer conference, if the Claim or any portion remains in dispute, Claimant may file a claim as provided in Chapter 1 (commencing with Section 900) and Chapter 2 (commencing with Section 910) of Part 3 of Division 3.6 of Title 1 of the California Government Code. For purposes of those provisions, the running of the period of time within which a claim must be filed shall be tolled from the time Claimant submits its written claim as set forth in paragraph 12 of Document 00 71 00 (General Conditions), until the time that Claim is denied as a result of the meet and confer process, including any period of time utilized by the meet and confer process.

1.7 COMPLIANCE WITH AMERICANS WITH DISABILITIES ACT

- A. Design-Build Entity 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. Design-Build Entity 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. Design-Build Entity agrees not to discriminate against people with disabilities in the provision of services, benefits or activities provided under this Agreement and further agrees that any violation of this prohibition on the part of Design-Build Entity, 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

SECTION 01 41 01

REGULATORY REQUIREMENTS - HAZARDOUS MATERIALS**PART 1 GENERAL****1.1 SUMMARY**

- A. Section Includes:
 - 1. Regulatory requirements applicable to Work in connection with 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.
- B. This Section supplements Section 01 41 00 (Regulatory Requirements) and the Work-specific listings of applicable regulatory requirements elsewhere in the Specifications.

1.2 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 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 Specifications 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.

1.3 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:
 - a. Resource Conservation and Recovery Act, 42 U.S.C. Sections 6901 *et seq.*
 - b. Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended by the Superfund Amendments and Reauthorization Act of 1986, 42 U. S.C. Sections 9601 *et seq.*
 - c. Toxic Substances Control Act of 1976, 15 U.S.C., Sections 2601 *et seq.*
 - d. Hazardous Materials Transportation Act of 1975, 49 U.S.C. Sections 1801 *et seq.*
 - e. Clean Water Act, 33 U.S.C. Sections 1251 *et seq.*
 - 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
 - h. Occupational Safety and Health Act of 1970, 29 U.S.C., Sections 651 *et seq.*
 - 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):
 - a. OSHA Worker Protection Standards, Title 29 C.F.R. Part 1926.58, Construction Standards and 29 C.F.R. 1910.1001 General Industry Standard

- 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
 - d. National Emission Standard for Hazardous Air Pollutants, Title 40 C.F.R. Part 61
 - 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
 - c. Hazardous Waste Control Law, Health & Safety Code, Sections 25100 *et seq.*
 - 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.*
 - j. Safe Drinking Water and Toxic Enforcement Act of 1986, Health & Safety Code, Sections 25249.5 *et seq.* (Proposition 65)
 - k. Above Ground Petroleum Storage Act, Health and Safety Code, Sections 25270 *et seq.*
 - l. Hazardous Materials Release Response Plans and Inventory, Health and Safety Code, Chapter 6.95
 - 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. Cal/OSHA Worker Protection Standards, Title 8 CCR, Sections 1529, 5208
 - 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 11-2-303
 - c. State Water Resource Control Board, General Construction Activity Stormwater Permit Requirements (Order 92-OS DWQ)
 - 4. Local Agency Requirements:
 - a. Woodside Fire Dept, Cañada College
 - b. San Mateo Fire Department, College of San Mateo
 - c. San Bruno Fire Dept. Skyline College

PART 2 PRODUCTS – NOT USED

PART 3 EXECUTION – NOT USED

END OF SECTION

SECTION 01 42 00

REFERENCES AND DEFINITIONS**PART 1 GENERAL****1.1 SUMMARY**

- A. Section Includes: Reference standards, abbreviations, symbols, and definitions used in Contract Documents.
- B. Full titles are given in this Section for standards cited in other Sections of Specifications.
- C. Material and workmanship specified by reference to number, symbol, or title of specific standard such as state standard, commercial standard, federal specifications, technical society, or trade association standard, or other similar standard, shall comply with requirements of standards except when more rigid requirements are specified or required by applicable codes.
- D. Standards referred to, except as modified herein, shall have full force and effect as though printed in the Contract Documents. Standards are not furnished to Design-Build Entity because manufacturers and trades involved are assumed to be familiar with their requirements.

1.2 REFERENCE TO STANDARDS AND SPECIFICATIONS OF TECHNICAL SOCIETIES; REPORTING AND RESOLVING DISCREPANCIES

- A. Reference to standards, specifications, manuals, or codes of any technical society, organization, or association, or to the laws or regulations of any governmental authority, whether such reference be specific or by implication, shall mean the latest standard, specification, manual, code, or laws or regulations in effect at the time of opening of Proposals, except as may be otherwise specifically stated in the Contract Documents.
- B. If during the performance of the Work, Design-Build Entity discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents or between the Contract Documents and any provision of any such law or regulation applicable to the performance of the Work or of any such standard, specification, manual, or code or of any instruction of any supplier, Design-Build Entity shall report it in writing at once to Inspector, with copies to District's Representative and Architect/Engineer, and Design-Build Entity shall not proceed with the Work affected thereby until consent to do so is given by District.
- C. Except as otherwise specifically stated in the Contract Documents or as may be provided by Change Order, CCD, or Supplemental Instruction, the provisions of the Contract Documents shall take precedence in resolving any conflict, error, ambiguity, or discrepancy between the provisions of the Contract Documents and:
 - 1. The provisions of any such standard, specification, manual, code, or instruction (whether or not specifically incorporated by reference in the Contract Documents); or
 - 2. The provisions of any such laws or regulations applicable to the performance of the Work (unless such an interpretation of the provisions of the Contract Documents would result in violation of such law or regulation).
- D. No provision of any such standard, specification, manual, code, or instruction shall be effective to change the duties and responsibilities of District, District's Representative or Design-Build Entity, or any of their subcontractors, consultants, agents, or employees, from those set forth in the Contract Documents, nor shall it be effective to assign to District, or any of their consultants, agents, representatives or employees any duty or authority to supervise or direct the furnishing or performance of the Work or any duty or authority to undertake responsibility inconsistent with the provisions of the Contract Documents.
- E. Comply with the applicable portions of standards and specifications published by the technical societies, institutions, associations, and governmental agencies referred to in Specifications.
 - 1. Comply with referenced standards and specifications; latest revision in effect at the time of opening of Proposals, unless otherwise identified by date.

- a. Exception: Comply with issues in effect as listed in governing legal requirements.
- F. Referenced Grades, Classes, and Types: Where an alternative or optional grade, class, or type of product or execution is included in a reference but is not identified in Drawings or in Specifications, provide the highest, best, and greatest of the alternatives or options for the intended use and prevailing conditions.
- G. Jobsite Copies:
 - 1. Obtain and maintain at the Site copies of reference standards identified on Drawings and in Specifications in order to properly execute the Work.
 - 2. At a minimum, the following shall be readily available at the Site:
 - a. Safety Codes: State of California, Division of Industrial Safety regulations.
- H. Edition Date of References:
 - 1. When an edition or effective date of a reference is not given, it shall be understood to be the current edition or latest revision published as of the date of opening Proposals.
 - 2. All amendments, changes, errata and supplements as of the effective date shall be included.
- I. ASTM and ANSI References: Specifications and Standards of the American Society for Testing and Materials (ASTM) and the American National Standards Institute (ANSI) are identified in the Drawings and Specifications by abbreviation and number only and may not be further identified by title, date, revision, or amendment. It is presumed that Design-Build Entity is familiar with and has access to these nationally- and industry-recognized specifications and standards.

1.3 ABBREVIATIONS

- A. Listed hereinafter are the various organizations or references which may appear in the Contract Documents, along with their respective acronyms and/or abbreviations:

AA	Aluminum Association
AABC	Associated Air Balance Council
AAMA	Architectural Aluminum Manufacturers Association
AAP	Affirmative Action Program
AASHTO	American Association of State Highway and Transportation Officials
ABMA	American Boiler Manufacturers Association
ABPA	American Board Products Association
ACI	American Concrete Institute
AED	Association of Equipment Distributors
AGA	American Gas Association
AISC	American Institute of Steel Construction
AISI	American Iron and Steel Institute
AITC	American Institute of Timber Construction
AMCA	Air Moving and Conditioning Association, Inc.
ANSI	American National Standards Institute (formerly American Standards Association)
APA	American Plywood Association
ARI	Air-Conditioning and Refrigeration Institute
ASHRAE	American Society of Heating, Refrigeration, and Air-Conditioning Engineers
ASME	American Society of Mechanical Engineers
ASTM	American Society for Testing and Materials
AWCI	Association of the Wall and Ceiling Industries
AWPA	American Wood- Preservers Association
AWPB	American Wood Preservers Bureau
AWS	American Welding Society
AWWA	American Water Works Association
BAAQMD	Bay Area Air Quality Management District
BIL	Basic Insulation Level
Cal/OSHA	California Occupational Safety and Health Administration
Caltrans	State of California, Department of Transportation
CBC	California Building Code
CCD	Construction Change Directive

CCR	California Code of Regulations
CEC	California Electric Code
CFR	Code of Federal Regulations
CISPI	Cast Iron Soil Pipe Institute
CLMFI	Chain Link Fence Manufacturers Institute
CMC	California Mechanical Code
CO	Change Order
CPC	California Plumbing Code
CPM	Critical Path Method
CPUC	California Public Utilities Commission
CRA	California Redwood Association
CRSI	Concrete Reinforcing Steel Institute
CS	Commercial Standards, U.S. Department of Commerce
CSA	Canadian Standards Association
CTI	Ceramic Tile Institute
DBE	Design-Build Entity
DHI	Door and Hardware Institute
DSA	Division of State Architect (formerly known as the Office of the State Architect)
EPA	Environmental Protection Agency
FGMA	Flat Glass Marketing Association
FM	Factory Mutual
FS	Federal Specifications
GA	Gypsum Association
HPMA	Hardwood Plywood Manufacturers Association
HVAC	Heating, Ventilating and Air Conditioning
I.D.	Identification
IACS	International Annealed Copper Standards
IAPMO	International Association of Plumbing and Mechanical Officials
ICBO	International Conference of Building Officials
ICEA	Insulated Cable Engineers Association
IEEE	Institute of Electrical and Electronic Engineers, Inc.
IES	Illuminating Engineering Society
ISA	Instrumentation Society of America
JATC	Joint Apprenticeship Training Committee
JV	Joint Venture
LBE	Local Business Enterprise
M.I.	Middle Initial
M/WBE	Minority and/or Woman-Owned Business Enterprise
MBE	Minority Business Enterprise
MIA	Masonry Institute of America
MIA	Marble Institute of America
MLSFA	Metal Lath/Steel Framing Association
MS	Military Specifications
MSDS	Material Safety Data Sheet
MSS	Manufacturers Standardization Society of the Valve & Fitting Industry
NAAMM	National Association of Architectural Metal Manufacturers
NACE	National Association of Corrosion Engineers
NBS	National Bureau of Standards
NEC	National Electric Code
NEMA	National Electric Manufacturers Association
NESC	National Electrical Safety Code
NFPA	National Fire Protection Association
NFPA	National Forest Products Association
NIOSH	National Institute for Occupational Safety and Health
NIST	National Institute of Science and Technology (formerly the National Bureau of Standards)
NOFMA	National Oak Flooring Manufacturers Association

NSF	National Sanitation Foundation
NTMA	National Terrazzo & Mosaic Association
NWWDA	National Wood Windows and Doors Association
OSHA	Occupational Safety and Health Administration
OSHPD	Office of Statewide Health Planning and Department
PCA	Portland Cement Association
PCI	Prestressed Concrete Institute
PDI	Plumbing and Drainage Institute
PG&E	Pacific Gas and Electric Company
PM	Preventive Maintenance
PR	Proposal Request
PS	Product Standard, U. S. Department of Commerce
RFI	Request for Information
RFP	Request for Proposals
RFS	Request for Substitution
RIS	Redwood Inspection Service
SDI	Steel Deck Institute
SFM	State of California, Office of State Fire Marshal
SIGMA	Sealed Insulating Glass Manufacturers Association
SJI	Steel Joint Institute
SMACNA	Sheet Metal and Air Conditioning Contractors National Association
SPIB	Southern Pine Inspection Bureau
SSPC	Steel Structures Painting Council
SWI	Steel Window Institute
SWPPP	Storm Water Pollution Prevention Plan
TCA	Tile Council of America
TIE	Time Impact Evaluation
UBC	Uniform Building Code
UFC	Uniform Fire Code
UL	Underwriters' Laboratories, Inc.
UMC	Uniform Mechanical Code
UPC	Uniform Plumbing Code
USA	Underground Service Alert
USC	United States Code
WCLIB	West Coast Lumber Inspection Bureau
WHI	Warnock Hersey International a testing lab
WIC	Woodwork Institute of California
WWPA	Western Wood Products Association

B. Abbreviations in Specifications:

AWG	American Wire Gauge
accord	Accordance
Co.	Company
Corp.	Corporation
cm.	centimeter (centimeters)
cu.	Cubic
Div.	Division
dia.	diameter
ft.	foot (feet)
g./gr.	gram (grams)
gal.	gallon (gallons)
gpd	gallons per day
gpm	gallons per minute
hr.	hour
kg.	kilogram (kilograms)

in.	inch (inches)
Inc.	Incorporated
km.	kilometer (kilometers)
Kw	Kilowatt
l.	liter (liters)
lbs.	pounds
m	meter (meters)
Mfg.	manufacturing
Mg.	milligram (milligrams)
ml./mls.	milliliter (milliliters)
mm.	millimeter (millimeters)
No.	number
o.c.	on centers
O.D.	outside diameter
psi	pounds per square inch
psf	pounds per square foot
sq.	square
T & G	tongue and groove
U.S.	United States
yd.	yard (yards)

C. Abbreviations on Drawings:

Additional abbreviations, used only on drawings, are indicated thereon.

1.4 SYMBOLS

A. Symbols in Specifications:

:	“shall be” or “shall” - where used within sentences or paragraphs
#1	Number
1#	Pound
&	And
%	Percent
C	Centigrade
F	Fahrenheit
°	Degree
/	per, except where used to combine words; example: power/fuel, and in that case it means and
“	inch (inches)
‘	foot (feet)
@	At

B. Symbols on Drawings:

Symbols, used only on Drawings, are indicated thereon.

1.5 DEFINITIONS

A. Wherever any of the words or phrases defined below, or a pronoun used in place thereof, is used in any part of the Contract Documents, it shall have the meaning here set forth. In the Contract Documents, the neuter gender includes the feminine and masculine, and the singular number includes the plural. While District has made an effort to identify all defined terms with initial caps, the following definitions shall apply regardless of case unless the context otherwise requires:

1. Addenda: Written or graphic instruments issued prior to the opening of Proposals, which clarify, correct, or change the bidding requirements or the Contract Documents. Addenda shall not include the minutes of the Pre-Proposal Conference and/or Site Visit.

2. Agreement (Document 00 52 00): Agreement is the basic contract document that binds the parties to design & construction Work. Agreement defines relationships and obligations between District and Design-Build Entity and by reference incorporates Conditions of Contract and contains Addenda and all Modifications subsequent to execution of Contract Documents.
3. Alternate: Work added to or deducted from the Base Proposal, if accepted by District.
4. Application for Payment: Written application for monthly or periodic progress or final payment made by Design-Build Entity complying with the Contract Documents.
5. Approved Equal: Approved in writing by District as being of equivalent quality, utility and appearance.
6. Architect/Engineer: Unless otherwise obviously intended, "Architect/Engineer" shall mean a person holding a valid California State Architect's or Engineer's license representing District in the preparation of the Construction Documents. A Consultant Architect/Engineer may also be in connection with the Project. The Consulting Architect/Engineer (if used) may be an employee of or an independent consultant to District. When a Consultant Architect/Engineer is referred to within the Contract Documents and no Consultant Architect/Engineer has in fact been designated, then the matter shall be referred to District. The term Architect/Engineer shall be construed to include employees of Architect/Engineer and/or employees that Architect/Engineer supervises. When the designated Consultant Architect/Engineer is an employee of District, his or her authorized representatives on the Project will be included under the term Consultant Architect/Engineer. If Consultant Architect/Engineer is an employee of District, then Consultant Architect/Engineer is the beneficiary of all Design-Build Entity obligations to District, including without limitation, all releases and indemnities. Refer to Section 341, Part 1, Title 24, California Code of Regulations.
7. Asbestos: Any material that contains more than one percent asbestos and is friable or is releasing asbestos fibers into the air above current action levels established by OSHA or Cal/OSHA.
8. Bid: The offer or proposal of the Bidder submitted on the prescribed form(s) setting forth the prices for the Work to be performed. Also referred to in the Contract Documents as the Proposal. The terms Bid and Proposal in the Contract Documents both refer to the Proposal.
9. Bidder: One who submits a Bid. Also referred to in the Contract Documents as a Proposer. The terms Bidder and Proposer in the Contract Documents both refer to the Proposer.
10. Bidding Documents: All documents comprising the Project Manual (including all documents and specification sections listed on Document 00 01 10 [Table of Contents]), including documents supplied for bidding purposes only and Contract Documents.
11. Board: The District's Board of Trustees.
12. Bridging Documents: Drawings, Specifications, Adjacency Diagrams, Room Data Sheets, and other materials provided by District and included or referenced in the Project Manual to define the design intent, quality level, materials and products to be used in the Project. See Section 01 10 00 (Summary of Work), paragraph 1.2.
13. Business Day: Any Day other than Saturday, Sunday, and the following days that have been designated as holidays by District. If a holiday falls on a Saturday, the preceding Friday will be the holiday. If a holiday falls on a Sunday, the following Monday will be the holiday. Refer to the District's web site for a list of District observed holidays.
14. By District: Work that will be performed by District or its agents at the District's expense.
15. By Others: Work that is outside scope of Work to be performed by Design-Build Entity under this Contract, which will be performed by District, other contractors, or other means.
16. Change Order: A written instrument prepared by District and signed by District and Design-Build Entity, stating their agreement upon all of the following:
 - a. a change in the Work;
 - b. the amount of the adjustment in the Contract Sum, if any; and
 - c. the amount of the adjustment in the Contract Time, if any.

17. Code Inspector: A local or state agency responsible for the enforcement of applicable codes and regulations.
18. Compliance Officer: Is defined in Document 00806 (Labor Compliance Program) (if used).
19. Concealed: Work not exposed to view in the finished Work, including within or behind various construction elements.
20. Construction Change Directive: A written order prepared and signed by District, directing a change in the Work and stating a proposed basis for adjustment, if any, in the Contract Sum or Contract Time, or both.
21. Construction Documents: Is defined in Section 01 10 01 (Summary of Work – Design Services).
22. Consultant: See Document 00805 (Supplemental General Conditions – Hazardous Materials) (if included).
23. Consulting Architect/Engineer: See Document 00 52 00 (Agreement) (if this term is used).
24. Construction Manager: See Document 00 52 00 (Agreement) (if this term is used).
25. Contract Conditions: Consists of two parts: General Conditions and Supplemental Conditions.
 - a. General Conditions are general clauses that are common to the District Contracts, including Document 00 71 00.
 - b. Supplemental conditions modify or supplement General Conditions to meet specific requirements for this Contract, including Document 00 73 00, Document 00 73 01 (if included) and Document 00 73 05 (if included).
26. Contract Documents and Contract: Contract Documents and Contract shall consist of the documents identified as the Contract Documents in Document 00 52 00 (Agreement), plus all changes, addenda, and modifications thereto.
27. Contract Modification: Either:
 - a. a written amendment to Contract signed by Design-Build Entity and District; or
 - b. a Change Order; or
 - c. a Construction Change Directive; or
 - d. a written directive for a minor change in the Work issued by District.
28. Contract Sum: The sum stated in the Agreement and, including authorized adjustments, the total amount payable by District to Design-Build Entity for performance of the Work and the Contract Documents. The Contract Sum is also sometimes referred to as the Contract Price or the Contract Amount.
29. Contract Time: The number or numbers of Days or the dates stated in the Agreement:
 - a. to achieve Substantial Completion of the Work or designated Milestones; and/or
 - b. to complete the Work so that it is ready for final payment and is accepted.
30. Contractor: Design-Build Entity.
31. Day: One calendar day of 24 hours measured from midnight to the next midnight, unless the word “day” is specifically modified to the contrary.
32. Design-Build Entity: The person or entity identified as such in the Agreement and referred to throughout the Contract Documents as if singular in number and neutral in gender. The term “Design-Build Entity” means the Design-Build Entity or its authorized representative.
33. Design-Build Entity’s Employees: Persons engaged in execution of Work under Contract as direct employees of Design-Build Entity, as Subcontractors, or as employees of Subcontractors.
34. Defective: An adjective which, when modifying the word “Work,” refers to Work that is unsatisfactory or unsuited for the use intended, faulty, or deficient, that does not conform to the Contract Documents, or does not meet the requirements of any inspection, reference standard, test or approval referred to in the Contract Documents (including but not limited to approval of samples and “or equal” items), or has been damaged prior to final payment (unless responsibility for the protection thereof has been assumed by District). District is the judge of whether Work is defective.

35. Design Development Documents: Is defined in Section 01 10 01 (Summary of Work – Design Services).
36. District: The San Mateo County Community College District.
37. District-Furnished, DBE-Installed: Items furnished by District at its cost for installation by Design-Build Entity at its cost under Contract Documents.
38. District's Representative(s): See Document 00 52 00 (Agreement).
39. Drawings: The graphic and pictorial portions of Contract Documents, wherever located and whenever issued, showing the design, location and dimensions of the Work, generally including plans, elevations, sections, details, schedules and diagrams.
40. Equal: Equal in opinion of District. Burden of proof of equality is responsibility of Design-Build Entity.
41. Exposed: Work exposed to view in the finished Work, including behind louvers, grilles, registers and various other construction elements.
42. Final Acceptance or Final Completion: District's acceptance of the Work as satisfactorily completed in accordance with Contract Documents. Requirements for Final Acceptance/Final Completion include, but are not limited to:
 - a. All systems having been tested and accepted as having met requirements of Contract Documents.
 - b. All required instructions and training sessions having been given by Design-Build Entity.
 - c. All Project Record Documents having been submitted by Design-Build Entity, reviewed by District and accepted by District.
 - d. All punch list work, as directed by District, having been completed by Design-Build Entity.
 - e. Generally all Work, except Design-Build Entity maintenance after Final Acceptance, having been completed to satisfaction of District.
43. Force Account: Work directed to be performed without prior agreement as to lump sum or unit price cost thereof, and which is to be billed at cost for labor, materials, equipment, taxes, and other costs, plus a specified percentage for overhead and profit.
44. Furnish: Supply only, do not install.
45. Holiday: District's recognized holidays are New Year's Day, Martin Luther King's Birthday, Lincoln's Day, President's Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day and the day following Thanksgiving, Last workday before Christmas, Christmas Day, and All workdays between Christmas Day and New Year's Day.
46. Indicated: Shown or noted on the Drawings.
47. Inspector. The person engaged by District to inspect the workmanship, materials, or manner of construction of buildings or portions of buildings, to determine if such construction complies with the Contract Documents and applicable codes. The Inspector is subject to approval by the District and, as appropriate, Division of the State Architect, and he will report to District. Refer to section 4-333 and section 4-342, Part 1, Title 24, California Code of Regulations.
48. Install: Install or apply only, do not furnish.
49. Latent: Not apparent by reasonable inspection, including but not limited to, the inspections and research required as a condition to bidding under the General Conditions.
50. Law: Unless otherwise limited, all applicable laws including without limitation all federal, state, and local laws, statutes, standards, rules, regulations, ordinances, and judicial and administrative decisions
51. Material: This word shall be construed to embrace machinery, manufactured articles, materials of construction (fabricated or otherwise), and any other classes of material to be furnished in connection with Contract, except where a more limited meaning is indicated by context.
52. Milestone: A principal event specified in Contract Documents relating to an intermediate completion date or time prior to Substantial Completion of all Work.
53. Modification: Same as Contract Modification.

54. Not in Contract: Work that is outside the scope of Work to be performed by Design-Build Entity under Contract Documents.
55. Notice of Completion: Shall have the meaning provided in California Civil Code Section 3093, and any successor statute.
56. Off Site: Outside geographical location of the Project.
57. Partial Utilization: Use by District of a substantially completed part of the Work for the purpose for which it is intended (or a related purpose) prior to Substantial Completion of all of the Work.
58. PCBs: Polychlorinated byphenyls.
59. Phase: A specified portion of the Work (if any) specifically identified as a Phase in Document 00 52 00 (Agreement) or Document 01 10 00 (Summary of Work).
60. Product Data: That information (including brochures, catalogue cuts, MSDS, etc.) supplied by the vendor describing the technical and commercial characteristics of the supplier equipment or materials, and accompanying commercial terms such as warranties, instructions and manuals.
61. Progress Report: A periodic report submitted by Design-Build Entity to District with progress payment invoices accompanying actual work accomplished to the Progress Schedule. See Section 01 32 16 (Progress Schedules and Reports) and Document 00 71 00 (General Conditions).
62. Project: Refers to totality of Work, including design and construction, performed under Contract Documents.
63. Project Float: As defined in Section 01 32 16, paragraph 1.2.B.3.
64. Project Manual: Project Manual consists of Proposal Requirements, Agreement, Bonds, Certificates, Contract Conditions, and Bridging Documents.
65. Project Record Documents: All Project deliverables required under Sections 01 78 39, including without limitation, as-built drawings, operations and maintenance manuals Installation, Operation, and Maintenance Manuals, and Machine Inventory Sheets.
66. Proposal: The offer of the Design-Build Entity submitted on the prescribed form(s) setting forth the prices for the Work to be performed
67. Provide: Furnish and install.
68. Request for Information (“RFI”): A document prepared by Design-Build Entity requesting information regarding the Project or Contract Documents as provided in Document 01 26 00 (Modification Procedures). The RFI system is also a means for District to submit Contract Document clarifications or supplements to Design-Build Entity.
69. Request for Proposals (“RFP”): A document issued by District to Design-Build Entity whereby District may initiate changes in the Work or Contract Time as provided in Contract Documents. See Document 01 26 00 (Modification Procedures).
70. Request for Substitution (“RFS”): A document prepared by Design-Build Entity requesting substitution of materials as permitted and to the extent permitted in Contract Documents. See Section 01 60 00 (Product Requirements).
71. RFI-Reply: A document consisting of supplementary details, instructions, or information issued by District that clarifies or supplements Contract Documents, and with which Design-Build Entity shall comply. RFI-Replies do not constitute changes in Contract Sum or Contract Time except as otherwise agreed in writing by District. RFI-Replies will be issued through the RFI administrative system.
72. Samples: Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and which establish the standards by which such portion of the Work will be judged.
73. Services. As defined in Section 01 10 01 (Summary of Work – Design Services).
74. Shop Drawings: All drawings, diagrams, illustrations, schedules and other data or information which are specifically prepared or assembled by or for Design-Build Entity and submitted by Design-Build Entity to illustrate some portion of the Work.
75. Shown: As indicated on Drawings.

76. Site: The particular geographical location of Work performed pursuant to Contract Documents.
 77. Specifications: The written portion of the Bridging Documents consisting of requirements for materials, equipment, construction systems, standards, and workmanship for the Work; performance of related services; and are contained in Divisions 1 through 16.
 78. Specified: As written in Specifications.
 79. Subcontractor: A person or entity that has a direct contract with Design-Build Entity either to perform a portion of the Work at the Site, or to perform some or all of the Services. The term "Subcontractor" is referred to throughout the Contract Documents as if singular in number and neutral in gender and means a Subcontractor or an authorized representative of the Subcontractor. The term "Subcontractor" does not include a separate contractor or subcontractors of a separate contractor.
 80. Substantial Completion: The Work (or a specified part thereof) has progressed to the point where, in the opinion of District as evidenced by a Certificate of Substantial Completion, the Work is sufficiently complete, in accordance with Contract Documents, so that the Work (or specified part) can be utilized for the purposes for which it is intended; or if no such certificate is issued, when the Work (or specified part) is complete and ready for final payment as evidenced by written recommendation of District for final payment. The terms "Substantially Complete" and "Substantially Completed" as applied to all or part of the Work refer to Substantial Completion thereof.
 81. Supplemental Instruction: A written directive from District to Design-Build Entity ordering alterations or modifications that do not result in change in Contract Sum or Contract Time, and do not substantially change Drawings or Specifications. See Document 01 26 00 (Modification Procedures).
 82. Technical Specifications: Specification Divisions 2 through 16 of the Contract Documents.
 83. Title 24: Title 24, California Code of Regulations.
 84. Testing and Special Inspection Agency: An independent entity engaged by District to inspect and/or test the workmanship, materials, or manner of construction of buildings or portions of buildings, to determine if such construction complies with the Contract Documents and applicable codes.
 85. Underground Facilities: All pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels or other such facilities or attachments, and any encasements containing such facilities that have been installed underground to furnish any of the following services or materials: Electricity, gases, chemicals, steam, liquid petroleum products, telephone or other communications, cable television, sewage and drainage removal, traffic or other control systems or water.
 86. Unit Price Work: Shall be the portions of the Work for which a unit price is provided in Document 00 52 00 (Agreement) or Section 01 10 00 (Summary).
 87. Verified Report: A periodic report submitted to District. Refer to Sections 4-336, 4-337 and 4-343, Part 1, Title 24, California Code of Regulations.
 88. Work: The entire completed construction, or the various separately identifiable parts thereof, required to be furnished under the Contract Documents within the Contract Time. Work includes and is the result of performing or furnishing labor and furnishing and incorporating materials and equipment into the construction, and performing or furnishing services and furnishing documents, all as required by the Contract Documents including everything shown in the Bridging Documents. Work may also include the design requirements set forth in the Contract Documents. Wherever the word "work" is used, rather than the word "Work," it shall be understood to have its ordinary and customary meaning.
- B. Wherever words "as directed," "as required," "as permitted," or words of like effect are used, it shall be understood that direction, requirements, or permission of District is intended. Words "sufficient," "necessary," "proper," and the like shall mean sufficient, necessary, or proper in judgment of District. Words "approved," "acceptable," "satisfactory," "favorably reviewed," or words of like import, shall mean approved by, or acceptable to, or satisfactory to, or favorably reviewed by District.

- C. Wherever the word “may” or “ought” is used, the action to which it refers is discretionary. Wherever the word “shall” or “will” is used, the action to which it refers is mandatory.

PART 2 PRODUCTS – NOT USED

PART 3 EXECUTION – NOT USED

END OF SECTION

SECTION 01 45 23

TESTING AND INSPECTION**PART 1 GENERAL****1.1 SECTION INCLUDES**

- A. Design-Build Entity's Quality Control
- B. Quality of the Work
- C. Inspections and Tests by Division of State Architect
- D. Inspections and Tests by Serving Utilities
- E. Inspections and Tests by Manufacturer's Representatives
- F. Inspections by Independent Testing and Inspection Agency
- G. Additional Testing and Inspection

1.2 DESIGN-BUILD ENTITY'S QUALITY CONTROL

- A. Design-Build Entity's Quality Control: Ensure that products, services, workmanship and Site conditions comply with requirements of Drawings and Specifications by coordinating, supervising, testing, and inspecting the Work and by utilizing only suitably qualified and appropriately audited, licensed or trained, personnel.
- B. Quality Requirements: Work shall be accomplished in accordance with quality requirements of Drawings and Specifications, including, by reference, all codes, laws, rules, regulations, and standards. When no quality basis is prescribed, the quality and testing procedures shall be in accordance with the best-accepted practices of the construction industry for the locale of the Project, for projects of this type, or standards set by engineering or technical societies (e.g., ASTM or ASHRAE), whichever is more stringent.
- C. Quality Control Personnel: Employ and assign knowledgeable and skilled personnel as necessary to perform quality control functions to ensure that the Work is provided as required.

1.3 QUALITY OF THE WORK

- A. Quality of Products: Unless otherwise indicated or specified, all products shall be new, free of defects, and fit for the intended use.
- B. Quality of Installation: All Work shall be produced plumb, level, square and true, or true to indicated angle, and with proper alignment and relationship between the various elements, as shown on or required by Contract Documents.
- C. Protection of Completed Work: Take all measures necessary to preserve completed Work free from damage, deterioration, soiling, and staining, until acceptance by District.
- D. Standards and Code Compliance and Manufacturer's Instructions and Recommendations: Unless more stringent requirements are indicated or specified, comply with manufacturer's instructions and recommendations, reference standards and building code research report requirements in preparing, fabricating, erecting, installing, applying, connecting, and finishing Work.
- E. Deviations from Standards and Code Compliance and Manufacturer's Instructions and Recommendations: Secure District's advanced written consent. Document and explain all deviations from reference standards and building code research report requirements and manufacturer's product installation instructions and recommendations, including acknowledgement by the manufacturer that such deviations are acceptable and appropriate for the Project.
- F. Verification of Quality: Work shall be subject to verification of quality by District in accordance with provisions of the Contract Documents.
 - 1. Cooperate by making Work available for inspection by Division of State Architect Inspector and independent testing and inspection agencies.
 - 2. Such verification may include mill, plant, shop, or field inspection as required.
 - 3. Provide access to all parts of the Work, including plants where materials or equipment are manufactured or fabricated.

4. Provide all information and assistance as required, including that by and from subcontractors, fabricators, materials suppliers and manufacturers, for verification of quality by District.
5. Applicable provisions of the Contract Documents shall govern Contract Modifications, if any, resulting from such verification activities.
- G. Observations by District's Consultants: Periodic and occasional observations of Work in progress will be made by District and District's consultants as deemed necessary to review progress of Work and general conformance with design intent.
- H. Limitations on Inspection, Testing and Observation: Neither employment of independent testing and inspection agency nor observations or tests by District and District's consultants shall in any manner relieve Design-Build Entity of obligation to perform Work in full conformance to all requirements of Contract Documents.
- I. District's Acceptance and Rejection of Work: District reserves the right to reject all Work not in conformance to the requirements of the Drawings and Specifications, or otherwise defective.
- J. Correction of Defective Work: Defective Work shall be modified, replaced, repaired or redone by the Design-Build Entity at no change in Contract Sum or Contract Time.
- K. Contract Adjustment for Defective Work: Should District determine that it is not feasible or in District's interest to require defective Work to be repaired or replaced, an equitable reduction in Contract Sum shall be made by agreement between District and Design-Build Entity, and documented in the form of a contract change order. If equitable amount cannot be agreed upon, a Construction Change Directive will be issued and the amount in dispute resolved in accordance with applicable provisions of Document 00 71 00 (General Conditions).
- L. Non-Responsibility for Defective Work: District and District's consultants disclaim any and all responsibility for Work produced not in conformance with the Drawings and Specifications.
- M. Responsibility for Defective Work: Design-Build Entity shall have full responsibility for all consequences resulting from defective work, including without limitation all delays, disruptions, extra inspection and correction costs by Design-Build Entity and District and re-Work, and extra time and costs of all types. Design-Build Entity waives excuses for defective work relating to District's prior review of Submittals and/or prior failure to notice defective work in place on inspection.

1.4 INSPECTIONS BY DIVISION OF THE STATE ARCHITECT INSPECTOR OF RECORD

- A. District will select and pay for a Division of the State Architect (DSA) certified inspector(s) for this project. The Design-Build Entity will coordinate their work with required inspections.
- B. Regulatory Requirements for Testing and Inspection: Design-Build Entity shall comply with Part 1, Title 24, Section 4-335, California Code of Regulations and shall cooperate with the Inspector and District in all testing required by the Office of Regulation Services, Division of State Architect. Design-Build Entity shall comply with Part 2, Title 24, California Code of Regulations and shall cooperate with Inspector in all inspections, testing and approvals required by the Office of Regulation Services, Division of State Architect. Design-Build Entity shall also comply with Uniform Building Code (UBC) requirements and all other requirements of governing authorities having jurisdiction.
 1. Inspections and Tests by Governing Authorities: Contractor shall cause all tests and inspections required by governing authorities having jurisdiction to be made for Work under this Contract.
 2. Such authorities may include, but are not limited to, the Division of State Architect, Fire Department, and similar agencies.
 3. Except as specifically noted, scheduling, conducting and paying for such inspections shall be solely the Contractor's responsibility.

1.5 INSPECTIONS AND TESTS BY SERVING UTILITIES

- A. Cause all tests and inspections required by serving utilities to be made for Work under this Contract. Scheduling, conducting and paying for such inspections shall be solely the Design-Build Entity's responsibility.

1.6 INSPECTIONS AND TESTS BY MANUFACTURER'S REPRESENTATIVES

- A. Cause all tests and inspections specified to be conducted by materials or systems manufacturers to be made. Additionally, all tests and inspections required by materials or systems manufacturers as conditions of warranty or certification of Work shall be made, the cost of which shall be included in the Contract Sum.

1.7 INSPECTIONS BY INDEPENDENT TESTING AND INSPECTION AGENCY

- A. District will select an independent testing and inspection agency or agencies approved by the Division of State Architect to conduct tests and inspections in accordance with Part 1, Title 24, Section 4-335, California Code of Regulations and as indicated on Drawings, in Specifications and as required by governing authorities having jurisdiction.
- B. Responsibility for time and costs shall be as indicated in schedule below. All time and costs for Design-Build Entity’s service related to such tests and inspections shall be included in Contract Time and Contract Sum.
- C. Notify District and Inspector in writing (and, if provided, on inspection request form provided by District) and, if directed by District, testing and inspection agency, when Work is ready for specified tests and inspections. Deliver this written notification at least 48 hours before the requested inspection date.
- D. The Design-Build Entity will pay or reimburse District for all additional charges by testing and inspection agencies and governing authorities having jurisdiction due to the following:
 - 1. Design-Build Entity’s failure to properly schedule or notify testing and inspection agency or authorities having jurisdiction.
 - 2. Changes in sources, lots, or suppliers of products after original tests or inspections.
 - 3. Changes in means, methods, techniques, sequences, and procedures of construction that necessitate additional testing, inspection, and related services.
 - 4. Changes in mix designs for concrete and mortar after review and acceptance of submitted mix design.
 - 5. Design-Build Entity submitted requests to change materials or products, which are accepted, but require testing and/or reinspection beyond original design.
- E. Tests and special inspections to be paid by District may, where required, include the following:

<u>SECTION</u>	<u>MATERIAL TESTS</u>
TBD	Reinforcing steel for concrete and concrete masonry
TBD	Concrete slump and strength
TBD	Masonry block strength, shrinkage and moisture content
TBD	Masonry grout strength
TBD	High strength grout strength
TBD	Masonry mortar strength
TBD	Structural steel bolting and welding
TBD	Pile concrete and reinforcing
TBD	Trench backfill
TBD	Building pad sub-grade and imported fill
TBD	Load test pile dowels

<u>SECTION</u>	<u>SPECIAL INSPECTION</u>
TBD	Placement of reinforcing steel for concrete and concrete masonry
TBD	Placement of cast-in-place concrete
TBD	Placement of concrete block and grout
TBD	Structural steel fabrication, erection, bolting and welding
TBD	Installation of roof membrane
TBD	Installation of anchor bolts, dowels embedded in concrete and masonry
TBD	Installation of adhesive (epoxy) connections
TBD	Placement of pile concrete and reinforcement
TBD	Pile driving
TBD	Site grading, road and parking phase
TBD	Trench backfill

<u>SECTION</u>	<u>ENVIRONMENTAL TESTS</u>
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TBD	Construction noise monitoring
TBD	Storm water runoff sampling
TBD	Air quality monitoring within occupied spaces

- F. Test and Inspection Reports: After each inspection and test, one copy of report shall be promptly submitted to Division of State Architect, District's Representative, the Design-Build Entity and/or any other consultant District designates and any agency having jurisdiction (if required by Code).
1. Reports shall clearly identify the following:
 - a. Date issued.
 - b. Project name and number.
 - c. Identification of product and Specifications Section in which Work is specified.
 - d. Name of inspector.
 - e. Date and time of sampling or inspection.
 - f. Location in Project where sampling or inspection was conducted.
 - g. Type of inspection or test.
 - h. Date of test.
 - i. Results of tests.
 - j. Comments concerning conformance with Contract Documents and other requirements.
 2. Test reports shall indicate specified or required values and shall include statement whether test results indicate satisfactory performance of products.
 3. Samples taken but not tested shall be reported.
 4. Test reports shall confirm that methods used for sampling and testing conform to specified test procedures.
 5. When requested, testing and inspection agency shall provide interpretations of test results.
- G. Design-Build Entity Responsibilities in Inspections and Tests:
1. Unless specified otherwise, notify Inspector, District's Representative, or any other consultant District designates and independent testing and inspection agencies 48 hours in advance of expected time of each test and inspection, and for all other operations requiring inspection and testing services, by submitting Design-Build Entity's inspection request in writing (or, if District provides a specific form, on that form).
 - a. When tests or inspections cannot be performed after such notice, reimburse District for testing and inspection agency personnel and travel expenses incurred due to Design-Build Entity's negligence.
 2. Deliver to laboratory or designated location, adequate samples of materials proposed to be used that require advance testing, together with proposed mix designs.
 3. Cooperate with Inspector, District's Representative, or any other consultant District designates, and District's consultants. Provide access to Work areas and off-Site fabrication and assembly locations, including during weekends and after normal Work hours.
 4. Provide incidental labor and facilities to provide safe access to Work to be tested and inspected, to obtain and handle samples at the Site or at source of products to be tested, and to store and cure test samples.
 5. Provide, at least 15 Days in advance of first test or inspection of each type, a schedule of tests or inspections indicating types of tests or inspections and their projected scheduled dates.

1.8 ADDITIONAL TESTING AND INSPECTION

- A. If initial tests or inspections made by the Inspector or District's Representative, or any other consultant District designates reveal that materials do not comply with Title 24, California Code of Regulations or with the Contract Documents, or if District has reasonable doubt that materials do not comply with Title 24, California Code of Regulations or with Contract Documents, additional tests and inspections shall be made as directed.
1. If additional tests and inspections establish that materials comply with Contract Documents, District shall pay all costs for such tests and inspections.

2. If additional tests and inspections establish that materials do not comply with Contract Documents, all costs of such tests and inspections shall be deducted from Contract Sum.
3. If Work requiring inspection is covered by follow-on or follow-up Work before it is inspected, uncover Work so proper inspections can be performed. All costs of such tests and inspections shall be deducted from Contract Sum.

END OF SECTION

SECTION 01 51 00**TEMPORARY FACILITIES AND CONTROLS****PART 1 GENERAL****1.1 SUMMARY**

- A. Section Includes:
1. Temporary Electricity
 2. Temporary Communications.
 3. Temporary Water
 4. Fences
 5. Protection of Public and Private Property
 6. Temporary Sanitary Facilities
 7. Temporary Barriers and Enclosures
 8. Water Control
 9. Pollution Control
 10. Construction Aids
 11. Erosion Control
 12. Noise Control
 13. Traffic Control
 14. Removal of Temporary Facilities and Controls

1.2 TEMPORARY ELECTRICITY

Design-Build Entity shall provide and maintain electrical power at the Site for construction purposes and for Design-Build Entity's and trailers and any other site offices or trailers required by the District in the Contract Documents to be provided by Design-Build Entity. Power may be obtained from District, but Design-Build Entity must provide all necessary wiring and appurtenances for connection to District's system.

1.3 TEMPORARY COMMUNICATIONS

Provide, maintain, and pay for all applicable communications and data services (including without limitation telephone, facsimile, e-mail and internet) to field office commencing at time of Project mobilization, including all installation and connection charges. In addition, the Design-Build Entity shall provide, maintain and pay for a high speed internet service (such as DSL) at the Site.

1.4 TEMPORARY WATER

- A. Provide and maintain- suitable quality water service required for construction operations.
- B. All water required for and in connection with the Work, including without limitation for dust control, shall be furnished by and at the expense of Design-Build Entity. Design-Build Entity shall be allowed to utilize water from the District for domestic uses. Water shall not be provided for dust control or street cleaning.. However, District does not guarantee availability of this water. There will be no charge to Design-Build Entity for water used. Design-Build Entity shall furnish necessary pipe, hose, nozzles and tools and perform all necessary labor. Unnecessary waste of water will not be permitted. Special hydrant wrenches shall be used for opening and closing fire hydrants; in no case shall pipe wrenches be used for this purpose.

1.5 FENCES

- A. All existing fences affected by the Work shall be maintained by Design-Build Entity until Final Completion. Fences which interfere with construction operations shall not be relocated or dismantled until District gives written permission to do so, and the period the fence may be left relocated or dismantled has been agreed upon. Where fences must be maintained across the construction easement, adequate gates shall be installed. Gates shall be kept closed and locked at all times when not in use.

- B. On completion of the Work across any tract of land, Design-Build Entity shall restore all fences to their original or to a better condition and to their original locations.

1.6 PROTECTION OF PUBLIC AND PRIVATE PROPERTY

- A. Design-Build Entity shall protect, shore, brace, support, and maintain all underground pipes, conduits, drains, and other underground construction uncovered or otherwise affected by its construction operations. All pavement, surfacing, driveways, curbs, walks, buildings, utility poles, guy wires, fences, and other surface structures affected by construction operations, together with all sod and shrubs in yards, parkways, and medians, shall be restored to their original condition, whether within or outside the easement. All replacements shall be made with new materials.
- B. Design-Build Entity shall be responsible for all damage to streets, roads, highways, shoulders, ditches, embankments, culverts, bridges, and other public or private property, regardless of location or character, which may be caused by transporting equipment, materials, or workers to or from the Work, Site or any part thereof, whether by Design-Build Entity or Subcontractors. Design-Build Entity shall make satisfactory and acceptable arrangements with the District, or the agency or authority having jurisdiction over the damaged property, concerning its repair or replacement or payment of costs incurred in connection with the damage.
- C. All fire hydrants and water control valves shall be kept free from obstruction and available for use at all times.

1.7 TEMPORARY SANITARY FACILITIES

- A. Provide and maintain required temporary buildings with sanitary toilets for use of all workers. At a minimum, sanitary facilities shall be located at trailer site, staging area, and adjacent to work area.
- B. Sanitary facilities shall be of reasonable capacity, properly maintained throughout the construction period, and obscured from public view to the greatest practical extent. If toilets of the chemically treated type are used, at least one toilet will be furnished for each 20 persons. Design-Build Entity shall enforce the use of such sanitary facilities by all personnel at the Site.
- C. Comply with all minimum requirements of the Health Department or other public agency having jurisdiction; maintain in a sanitary condition at all times.
- D. Design-Build Entity shall keep sanitary facilities free from graffiti.

1.8 TEMPORARY BARRIERS AND ENCLOSURES

- A. Provide barriers to prevent unauthorized entry to construction areas to allow for District's use of Site, and to protect existing facilities and adjacent properties from damage from construction operations.
- B. Provide barricades required by governing authorities for public access to existing buildings.
- C. Protect vehicular traffic, stored materials, Site, and structures from damage.

1.9 WATER CONTROL

- A. Grade Site to drain.
- B. Maintain excavations free of water.
- C. Protect Site from puddling or running water.
- D. Provide water barriers as required to protect Site from soil erosion.
- E. Provide for drainage of storm water and such water as may be applied or discharged on the Site in performance of the Work. Drainage facilities shall be adequate to prevent damage to the Work, the Site, and adjacent property.
- F. Clean, enlarge and/or supplement existing drainage channels and conduit as necessary to carry all increased runoff attributable to Design-Build Entity's operations. Provide sediment tanks and other features to avoid increased runoff, to protect District's facilities and the Work, and to direct water to drainage channels or conduits. Provide ponding as necessary to prevent downstream flooding.

1.10 POLLUTION CONTROL

- A. Design-Build Entity shall prevent the pollution of drains and watercourses by sanitary wastes, sediment, debris, and other substances resulting from construction activities. No sanitary wastes shall be permitted to enter any drain or watercourse other than sanitary sewers. No sediment, debris, or other substance shall be permitted to enter sanitary sewers without authorization of the receiving sanitary sewer service, and all possible Best Management Practices (BMPs) shall be taken to prevent

- such materials from entering any drain to watercourse. Rate of discharge for storm water may not be increased by the Project during or following construction.
- B. The Design-Build Entity shall implement BMPs during construction activities as specified in the California Storm Water Best Management Practices Handbook (Stormwater Quality Task Force, 1993) and/or the Manual of Standards for Erosion and Sediment Control Measures (ABAG, 1995). Erosion and sedimentation control practices shall include installation of silt fences, straw wattle, soil stabilization, revegetation, and runoff control to limit increases in sediment in stormwater runoff, including but not limited to, detention basins, straw bales, silt fences, check dams, geofabrics, drainage swales, and sand bag dikes.
 - C. In the event that dewatering of excavations is required, Design-Build Entity shall obtain the necessary approval and permits for discharge of the dewatering effluent from the local jurisdiction. Design-Build Entity shall be responsible for assuring that water quality of such discharge meets the appropriate permit requirements prior to any discharge.

1.11 CONSTRUCTION AIDS

- A. Design-Build Entity shall furnish, install, maintain, and operate all construction aids required by it and its Subcontractors in the performance of the Work, except as otherwise provided herein. Such construction aids shall include elevators and hoists, cranes, temporary enclosures, swing staging, scaffolding and temporary stairs.

1.12 EROSION CONTROL

- A. Design-Build Entity shall prevent soil erosion on the Site and adjacent property resulting from its construction activities to the maximum extent practical, including implementation of Best Management practices. Effective measures shall be initiated prior to the commencement of clearing, grading, excavation, or other operations that will disturb the natural protection.
- B. Work shall be scheduled to expose areas subject to erosion for the shortest possible time, and natural vegetation shall be preserved to the greatest extent practicable. Temporary storage and construction buildings shall be located, and construction traffic routed, to minimize erosion. Temporary fast-growing vegetation or other suitable ground cover shall be provided as necessary to control runoff.

1.13 NOISE CONTROL

- A. When required by OSHA Standards, construction workers shall be provided with ear protection to operate equipment.
- B. Design-Build Entity shall take reasonable measures to avoid unnecessary noise. Such measures shall be appropriate for the normal ambient sound levels in the area during working hours. All construction machinery and vehicles shall be equipped with practical sound-muffling devices, and operated in a manner to cause the least noise consistent with efficient performance of the Work. During construction activities on or adjacent to occupied buildings, and when appropriate, Design-Build Entity shall erect screens or barriers effective in reducing noise in the building and shall conduct its operations to avoid unnecessary noise which might interfere with the activities of building occupants.
- C. Ensure and provide certification to District that all construction equipment and vehicles used for the Work are:
 - 1. Maintained in good mechanical condition
 - 2. Equipped with properly installed engine mufflers

1.14 TRAFFIC CONTROL

The college campus is an active site, with vehicular and pedestrian traffic occurring at all times of the day and all days of the week. Design-Build Entity shall coordinate with District's Representative all traffic associated with the construction, including without limitation delivery and mail trucks, in order to minimize disruption to college operations. Delivery trucks and large equipment shall enter the Design-Build Entity's access gate and shall use the route mutually agreed upon between District and Design-Build Entity at the beginning of each phase of work. Design-Build Entity shall provide signs directing construction and delivery traffic to this gate. Sign types and locations shall be reviewed by the District's Representative.

1.15 REMOVAL OF TEMPORARY FACILITIES AND CONTROLS

- A. Remove temporary utilities, equipment, facilities, and materials prior to final inspection.
- B. Remove underground installations.
- C. Clean and repair damage caused by installation or use of temporary work.
- D. Restore existing facilities used during construction to original condition. Restore permanent facilities used during construction to specified condition.

PART 2 PRODUCTS – NOT USED

PART 3 EXECUTION – NOT USED

END OF SECTION

SECTION 01 56 00

SITE SECURITY AND SAFETY**PART 1 GENERAL****1.1 SUMMARY**

- A. Overview
- B. Protection
- C. Control of Site
- D. Site Security
- E. Safety Program
- F. Safety Requirements
- G. Site Safety Officer
- H. Additional Safety Controls

1.2 OVERVIEW

- A. In order to continue support of our educational mission, the District's campuses and many of its facilities will remain occupied during completion of the Work making Site Security and Safety of paramount importance. Campuses are visited, on a daily basis, by an ever-changing and diverse population. Students, District staff, visitors, the public at large and contractor personnel will encounter real and potential safety hazards on a regular basis. Among this population, knowledge of safety and security hazards varies from considerable to none. This makes the risk of an injury of utmost concern to the District.

For this reason, failure to comply with the requirements of this Section will be considered grounds for the District, or its designated representative, to issue an order suspending work or terminate a contract for cause.

The District, or its designated representative, will also perform safety inspections and may issue a written notice ordering a contractor to correct an unsafe act or condition. If the Design-Build Entity 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 Design-Build Entity for the costs associated with the correction.

- B. The Design-Build Entity shall assume overall responsibility for project safety compliance.

1.3 PROTECTION

- A. Continuously maintain protection as necessary to protect the Work, as a whole and in part, and adjacent property and improvements from accidents, injuries or damage.
- B. Properly protect the Work:
 - 1. With lights, guard rails, temporary covers and barricades.
 - 2. Enclose excavations with proper barricades.
 - 3. Brace and secure all parts of the Work against storm and accident.
 - 4. Provide such additional forms of protection that may be necessary under existing circumstances.
- C. Provide and maintain in good condition all protective measures required to adequately protect all persons, including students, District staff, contractors and members of the public from hazards resulting from the Work and to exclude unauthorized persons from the Work. When regulated by Building Code, Cal OSHA, or other authority, such legal requirements for protection shall be considered as minimum requirements. Be responsible for the protection in excess of such minimum requirements as required.

1.4 CONTROL OF SITE

Ensure that no alcohol, firearms, weapons, or controlled substance enters or is used at the Site. Immediately and permanently remove from the Site any employee, contractor, subcontractor, vendor or consultant found in violation of this provision.

- A. Project Work Site parking will be limited to required work trucks, equipment pick-up/delivery vehicles and material delivery only. The Design-Build Entity's employees parking area is specified in Section 00 32 19 (Supplementary Conditions).
- B. In addition to any other requirement in the Project Manual, or to enhance any existing requirement in these documents, the Design-Build Entity shall be aware of (and furnish and install or otherwise provide) the following:
 - a. Access to all existing classrooms must be maintained while isolating the Project Work Site by protective measures. Phasing of the work as (or if) required maintaining access to the buildings shall be a requirement of this Bid.
 - b. Isolation of the Project Work Site referenced immediately above shall be-
 - i. For exterior work (if any) - through the use of "pre-paneled" 6-foot high chain link fence. Fence panels shall include end clips/brackets with which the individual panels can be made into a "fence section" of indefinite length.
 - ii. For interior work (if any)- through the combined use of plywood and plastic sheeting walls constructed to prevent accidental entry to the work area and keep dust from entering occupied areas. Walls shall include end clips/brackets with which the individual panels can be made into a "wall section" of indefinite length.
- C. The fencing shall be maintained and relocated when and as necessary to assure staff/student/ visitor safety while maintaining a positive isolation barrier between the public and the Project Work Site.
- D. The Design-Build Entity shall be responsible for posting, and maintaining, no less than the following construction site signage: CAUTION CONSTRUCTION; HARD HAT AREA; AND KEEP OUT. In the event that the Design-Build Entity's insurance carrier mandates that additional safety signs be posted, this Design-Build Entity shall post and maintain those signs also.
- E. Construction Site signage shall be posted at the entries/exits from the buildings, at every chain link fence corner and in fence line "straight runs" as necessary to assure that the distance between signs does not exceed 500 linear feet.

1.5 SITE SECURITY

- A. As part of the Work included within the Contract Price, Design-Build Entity shall take and be fully responsible for all measures required to protect and maintain the security of persons, existing facilities and property at the Site, including without limitation preventing theft, loss, vandalism and improper concealment of personal property of the District and all persons lawfully present on the Site, and including times where workers are not present on the Site. Design-Build Entity's measures shall include, at a minimum, maintaining a log of all persons entering and leaving the Site and 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 Design-Build Entity shall repair all damage to District's property resulting from Design-Build Entity's failure to provide adequate security measures.
- C. Design-Build Entity shall maintain control of the Construction access gate at all times. Design-Build Entity shall appoint one person to monitor the gate and maintain the sign-in/out list, with person's name, company, reason for entering, what they are delivering or their business purpose, time and date; when not being monitored, Design-Build Entity shall ensure that gate is locked. Alternatively, Design-Build Entity shall provide a full-time guard at the gate at all times to control access and maintain the sign-in/out list. The sign in/out list shall be available to District at anytime upon request.
- D. Design-Build Entity shall supply additional security fencing, barricades, lighting, and other security measures as required to protect and control the Site.

1.6 SAFETY PROGRAM

- A. Within fifteen (15) days after Notice to Proceed, submit a Safety Program 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 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.
- B. Receipt and/or review of the Safety Program by District, Engineer or District's representative shall not relieve Design-Build Entity of any responsibility for complying with all applicable safety regulations.
- C. It is essential that Design-Build Entity and each Subcontractor implement an effective and vigorous Safety and Health Program to cover their respective portions of the Work. Subject to Design-Build Entity's overall

responsibility for Project safety, it shall be understood that the full responsibility for providing a safe place to work with respect to their respective portions of the Work rests with Design-Build Entity and each individual Subcontractor.

- D. Safety Program 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): Describing 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. Confined Space Program: District will provide Design-Build Entity with any available information regarding permit space hazards, entry operations, and safety information relating to work in the permit spaces as set forth in the General Industrial Safety Orders (CCR Title 8, Division 1, Chapter 4, Subchapter 7, Section 5157). Permit space entry is allowed only through compliance with a permit 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 spaces during entry operations.
 - 4. Emergency Response Plan (ERP): Describe procedures that shall be implemented in the event an incident or emergency occurs at the Project Site. The ERP should model multiple incident scenarios (e.g. minor injury, earthquake, fatality, fire, etc.). Special attention should be paid to Project Site access/egress and contractor personnel evacuation/staging areas. The District will provide contact information for designated internal staff.
- E. The wearing of hard hats shall be mandatory at all times for personnel on Site. Supply sufficient hard hats to equip properly all employees and visitors.
- F. Whenever an exposure exists, appropriate personal protective equipment (PPE) shall be used by all affected personnel. Supply PPE to all personnel under Design-Build Entity's direction.

1.7 SAFETY REQUIREMENTS

- A. Standards: Maintain the Project in accordance with state and local safety and insurance standards.
- B. Hazards Control:
 - 1. Store volatile wastes in covered metal containers and remove from premises daily.
 - 2. Prevent accumulation of wastes that create hazardous conditions.
 - 3. Provide adequate ventilation during use of volatile or noxious substances.
- C. 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.
- D. Provide accident information on the forms provided by Design-Build Entity. This information shall be provided on the same day as the occurrence of said incident.
- E. The District, or its designated representative, must be notified of all contractor injuries in accordance with the timeline established by Cal-OSHA/OSHA. Injuries, no matter how minor, to students, District staff or the public at large must be reported to the District immediately. All incidents resulting in damage to District property or third-party must be reported to the District immediately. Damage to contractor property must be reported within 12 hours if Design-Build Entity expects to file a claim against the District or OCIP.
- F. Design-Build Entity must make their employees, agents, contractors, subcontractors, vendors and officers available for post-incident investigations.
- G. Design-Build Entity must make the involved employees, agents, contractors, subcontractors, vendors and officers available for post-incident/injury drug screening. Those employees failing the test will be removed permanently from the job site. The District will bear the cost of these tests.

1.8 SITE SAFETY OFFICER

- A. Designate one of Design-Build Entity's staff as "Site Safety Officer" whose duties shall include the responsibility for enforcing the environmental protection provisions of the Contract Documents including safety and health, the requirements of the Occupational Safety and Health Act, and other applicable federal, state and local standards. Submit for review by District Design-Build Entity's intended traffic flow plan, security plan, program for temporary structures, housecleaning plan, demolition program, and environmental safety and health plan. After

review by District, the implementation and enforcement of these plans shall become the responsibility of the Site Safety Officer. Any changes in the plans shall be requested by Design-Build Entity through the Site Safety Officer for written concurrence by District.

- B. District's risk management representative(s) shall be allowed access to accident/injury and illness reports, inspection reports, scheduling and construction meetings, and safety meetings.

1.9 ADDITIONAL SAFETY CONTROLS

- A. According to industry practices, it is the responsibility of all contractors of every tier to exercise reasonable care to prevent work-related injuries, property and equipment damage at the Project site, as well as minimize risk to the third-party persons and property. All contractors shall undertake loss control prevention practices according to those requirements set by federal, state and local laws, statutes and specific project procedures developed for this Project.
- B. In the event of an accident it will be the responsibility of all contractors of every tier to see that injured workers or third-parties are given immediate medical treatment and that all medical and/or claim forms are filed with the appropriate authorities.
- C. Design-Build Entity and subcontractors participating in the project will be expected to comply with the following safety and loss control requirements:
1. All subcontractors shall identify their contact person(s) to the Design-Build Entity.
 2. All contractors and subcontractors shall follow District procedures regarding dealing with the media.
 3. All construction employees will be required to be attired in workpants, shirt and appropriate boots or closed toe shoes.
 4. Alcohol is prohibited on District property at all times.
 5. Smoking Policy: It is the policy of San Mateo County Community College District to provide a safe learning and working environment for both students and employees. It is recognized that smoke from cigarettes, pipes and/or cigars is hazardous to health; therefore, it is the intent of the District to provide a smoke-free environment to the greatest extent possible. To achieve this goal, the District limits smoking on District property to outdoor areas only, at a minimum of twenty (20) feet away from any doorway, entrance to an indoor facility, or fresh air intake vent. Smoking is prohibited in all indoor locations within the District. The sale or distribution of cigarettes or other smoking material is also prohibited.
 - a. Design-Build Entity shall develop and enforce a smoking policy within work site area(s) that is in alignment with District's smoking policy. Design-Build Entity shall prohibit smoking in existing buildings that are under renovation. Design-Build Entity shall prohibit smoking in new buildings under construction no later than when the roof and exterior walls have been installed.
 - b. Skyline College: Outside of the work site(s), smoking is prohibited except in designated smoking areas on the campus.
 6. Design-Build Entity will be required to respond to all District complaints about objectionable levels of dust or noise and will be required to provide the appropriate abatement as quickly as possible.
 7. Construction personnel cannot enter District grounds other than the construction site unless accompanied by District personnel, and 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.
 8. Fall protection is mandatory on all projects in accordance with CAL OSHA, OSHA and any other appropriate code.
 9. A site specific Injury and Illness Prevention Program shall be available on site with the Design-Build Entity. All contractors shall abide by this program.
 10. Personal radios, headsets, walkmans, I-pods and CD players are not allowed on the job-site.

11. All contractors and subcontractors must attend a pre-construction safety meeting.
12. 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.
13. 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 Design-Build Entity. Any employee disregarding this policy shall be removed from the site until further notice.
14. All contractors 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. No glass containers are permitted on the site.
15. Theft or willful damage to any property of the District, student, or other contractors will be prosecuted fully.
16. 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.
17. All contractors will advise non-English speaking employees in their native language either in a written format or via an interpreter of these policies.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

SECTION 01 74 00

CLEANING**PART 1 GENERAL****1.1 SECTION INCLUDES**

- A. Progress Cleaning
- B. Final Cleaning

1.2 PROGRESS CLEANING

- A. Design-Build Entity shall perform periodic cleaning to ensure that any streets and other District and public properties are maintained free from accumulation of waste materials, dust, mud, and debris.
- B. Where required, Design-Build Entity shall wet down surfaces to lay dust and prevent the blowing of dust to nearby residences or public properties.
- C. Design-Build Entity shall keep all streets clean and free of dust, mud, and debris resulting from Design-Build Entity's operations. Daily cleanup throughout the job will be necessary as Design-Build Entity progresses with its Work, but extra attention to cleanup shall be made prior to weekends and holidays. Without limiting the foregoing, Design-Build Entity shall remove trench spoil along traveled ways daily; grade and vacuum broom surfaces initially where applicable and later water flush with high-pressure sprays, being careful to avoid downstream contamination.
- D. All dust, mud, spoils, and construction debris shall be removed daily from all roadways, ditches, shoulders, and private property (fills or spoils placed on private property at private property owner's written request excepted).
- E. Disposal of Materials:
 - 1. As part of the scope of Work included within the Contract Sum, Design-Build Entity shall be fully responsible for disposing of all construction debris, dirt and spoils resulting from the Work.
 - 2. All waste materials, debris, dirt and rubbish shall be disposed of at sites to be chosen by Design-Build Entity in accordance with applicable local, state, and federal regulations.
 - 3. Design-Build Entity is cautioned that the County of San Mateo and cities within the county have regulations governing the disposal of rubble, broken pavement, and similar materials.
 - 4. Design-Build Entity shall become familiarized with the requirements of the agency having jurisdiction over any contemplated disposal site and shall comply with all such requirements.
 - 5. The Design-Build Entity 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 AB75. Documentation requirements including the nature of materials, destination, volume and tonnage, shall be submitted as follows:
 - a. Up-to-date copies of the Waste Reporting Log (Exhibit A of this Section 01 74 00) shall be submitted with each payment application per Section 01 29 00 (Measurement and Payment) paragraph 1.7.C.8.
 - b. The Design-Build Entity shall submit a cumulative report summarizing the nature of materials, destination, volume and tonnage of materials disposed for the preceding calendar year to the District's Representative by January 31st of each year or at the end of the project as part of the contract closeout.
- F. All excess soil from performance of Work shall be disposed at sites to be chosen by Design-Build Entity in accordance with applicable local, state, and federal regulations. If Design-Build Entity elects to dispose of soil on any private property, prior to any dumping, a letter allowing such dumping shall be obtained from the property owner and presented to District. Design-Build Entity 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 will be required releasing Design-Build Entity, San Mateo County, District and any District consultant from future liability.
- G. If Design-Build Entity does not properly clean the Site, in the opinion of District, then District shall have the option of using outside equipment to perform the cleanup and such cost will be withheld from the Contract Sum.

- H. Design-Build Entity will take care to mitigate dust during interior renovation activities through proper use of dust controls. Dust controls will include, but not be limited to: dust barricades, walk-off mats, negative air machines and daily custodial clean-up employed by the Contract and at not additional cost to the District

1.3 FINAL CLEANING

- A. Design-Build Entity shall execute final cleaning prior to final inspection, using only properly skilled workers.
- B. Remove grease, dust, dirt, stains, labels, fingerprints, and other foreign materials from exposed interior and exterior finished surfaces.
- C. Repair, patch, and touch up marred surfaces to match adjacent finishes.
- D. Clean interior and exterior surfaces exposed to view; remove temporary labels, stains and foreign substances, polish transparent and glossy surfaces, vacuum carpeted and soft surfaces.
- E. Clean equipment and fixtures to a sanitary condition, clean or replace filters of mechanical equipment operated during construction, clean ducts, blowers and coils of units operated without filters during construction.
- F. Clean Site; mechanically sweep paved areas.
- G. Remove waste and surplus materials, rubbish, and construction facilities from Site.

PART 2 PRODUCTS – NOT USED

PART 3 EXECUTION – NOT USED

END OF SECTION

WASTE REPORTING LOG FOLLOWS ON NEXT PAGE

- Per Section 01 74 00 (Cleaning) paragraph 1.2.E.5 a summary report for each calendar year shall be submitted to the District's Representative by January 31st of each year or at the end of the project as part of the contract closeout. The data shall be summarized by 'Nature of Materials Disposed' and 'Destination' for the entire calendar year.

SECTION 01 77 00

CONTRACT CLOSEOUT**PART 1 GENERAL****1.1 SUMMARY**

- A. Section Includes:
 - 1. Description of contract closeout procedures including:
 - a. Removal of Temporary Construction Facilities
 - b. Substantial Completion
 - c. Final Completion
 - d. Final Cleaning
 - e. Project record documents
 - f. Design-Build Entity shall comply with all applicable requirements in Section 01 78 39 (Project Record Documents).
 - g. Project Guarantee
 - h. Warranties
 - i. Turn-In
 - j. Release of Claims
 - k. Fire Inspection Coordination
 - l. Building Inspection Coordination

1.2 REMOVAL OF TEMPORARY CONSTRUCTION FACILITIES

- A. Remove temporary materials, equipment, services, and construction prior to Substantial Completion inspection.
- B. Clean and repair damage caused by installation or use of temporary facilities.
- C. Restore permanent facilities used during construction to specified condition.
- D. Comply with paragraph 1.12 of Section 01 51 00 (Temporary Facilities and Controls).

1.3 SUBSTANTIAL COMPLETION

- A. When Design-Build Entity considers Work or designated portion of the Work as Substantially Complete, submit written notice to District's Representative, with list of items remaining to be completed or corrected.
- B. Within reasonable time, District's Representative will inspect to determine status of completion.
- C. Should District's Representative determine that Work is not Substantially Complete, District will promptly notify Design-Build Entity in writing, listing all defects and omissions.
- D. Remedy deficiencies and send a second written notice of Substantial Completion. District will reinspect the Work. If deficiencies previously noted are not corrected on reinspection, then Design-Build Entity shall pay District's cost of the reinspection.
- E. When District's Representative determines that Work is Substantially Complete, District will issue a Certificate of Substantial Completion, accompanied by Design-Build Entity's list of items to be completed or corrected as verified by District.
- F. Manufactured units, equipment and systems that require startup must have been started up and run for periods prescribed by District before a Certificate of Substantial Completion will be issued.
- G. A punch list examination will be performed upon Substantial Completion. One follow-up review of punch list items for each discipline will be provided. If further Site visits are required to review punch list items due to incompleteness of the Work by Design-Build Entity, Design-Build Entity will reimburse District for costs associated with these visits.
- H. District may enlist Consultants to assist with the above activities.

1.4 FINAL COMPLETION

- A. Final Completion occurs when Work meets requirements for District's Final Acceptance. When Design-Build Entity considers Work is Finally Complete, submit written certification that:

1. Design-Build Entity has inspected Work for compliance with Contract Documents, and all requirements for Final Acceptance have been met.
 2. Except for Design-Build Entity maintenance after Final Acceptance, Work has been completed in accordance with Contract Documents and deficiencies listed with Certificate of Substantial Completion have been corrected. Equipment and systems have been tested in the presence of District, and are operative.
 3. Work is complete and ready for final inspection.
- B. In addition to submittals required by Contract Documents, provide submittals required by governing authorities and submit final statement of accounting giving total adjusted Contract Sum, previous payments, and sum remaining due.
- C. When District's Representative find Work is acceptable and final closeout submittals are complete, District's Representative will issue final Change Order reflecting approved adjustments to Contract Sum not previously made by Change Order. Should District determine that Work is incomplete or defective:
1. District promptly will so notify Design-Build Entity, in writing, listing the incomplete or defective items.
 2. Promptly remedy the deficiencies and notify the District when it is ready for reinspection.
 3. When District determines that the Work is acceptable under the Contract Documents, District will request Design-Build Entity to make closeout submittals.
- D. Final adjustments of accounts:
1. Submit a final statement of accounting to District, showing all adjustments to the Contract Sum and complete and execute Document 00 65 73 (Agreement and Release of Any and All Claims).
 2. If so required, District shall prepare a final Change Order for submittal to Design-Build Entity, showing adjustments to the Contract Sum that were not previously made into a Contract Modification.
- E. District may enlist Consultants to assist with the above activities.

1.5 FINAL CLEANING

Design-Build Entity shall comply with all applicable requirements in Section 01 74 00 (Cleaning).

1.6 PROJECT RECORD DOCUMENTS

Design-Build Entity shall comply with all applicable requirements in Section 01 78 39 (Project Record Documents).

1.7 PROJECT GUARANTEE

- A. Requirements for Design-Build Entity's guarantee of completed Work are included in Article 9 of Document 00 71 00 (General Conditions). Guarantee Work done under Contract against failures, leaks, or breaks or other unsatisfactory conditions due to defective equipment, materials, or workmanship, and perform repair work or replacement required, at Design-Build Entity's sole expense, for period of one year from date of Final Acceptance.
- B. Neither recordation of Final Acceptance nor final certificate for neither payment nor provision of the Contract or partial or entire use or occupancy of premises by District shall constitute acceptance of Work not done in accordance with Contract Documents nor relieve Design-Build Entity of liability in respect to express warranties or responsibility for faulty materials or workmanship.
- C. District may make repairs to defective Work as set forth in Document 00 71 00 (General Conditions), paragraph 9.3.
- 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 Design-Build Entity'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.

1.8 WARRANTIES

- A. Execute Design-Build Entity's submittals and assemble warranty documents, and installation, operations and maintenance manuals described in Section 01 32 19 (Submittal Procedures), executed or supplied by Subcontractors, suppliers, and manufacturers.
 - 1. Provide table of contents and assemble in 8½ inches by 11 inches three-ring binder with durable plastic cover, appropriately separated and organized.
 - 2. Include contact names and phone numbers for District personnel to call during warranty period.
 - 3. Assemble in Specification Section order.
- B. Submit material prior to final application for payment.
 - 1. For equipment put into use with District's permission during construction, submit within 14 Days after first operation.
 - 2. For items of Work delayed materially beyond Date of Substantial Completion, provide updated submittal within 14 Days after acceptance, listing date of acceptance as start of warranty period.
- C. Warranties are intended to protect District against failure of Work and against deficient, defective and faulty materials and workmanship, regardless of sources.
- D. Limitations: Warranties are not intended to cover failures that result from the following:
 - 1. Unusual or abnormal phenomena of the elements
 - 2. Vandalism after Substantial Completion
 - 3. Insurrection or acts of aggression including war
- E. Related Damages and Losses: Remove and replace Work which is damaged as result of defective Work, or which must be removed and replaced to provide access for correction of warranted Work.
- F. Warranty Reinstatement: After correction of warranted Work, reinstate warranty for corrected Work to date of original warranty expiration or to a date not less than one year after corrected Work was done, whichever is later.
- G. Replacement Cost: Replace or restore failing warranted items without regard to anticipated useful service lives.
- H. Warranty Forms: Submit drafts to District for approval prior to execution. Forms shall not detract from or confuse requirements or interpretations of Contract Documents.
 - 1. Warranty shall be countersigned by manufacturers.
 - 2. Where specified, warranty shall be countersigned by Subcontractors and installers.
- I. Rejection of Warranties: District reserves right to reject unsolicited and coincidental product warranties that detract from or confuse requirements or interpretations of Contract Documents.
- J. Term of Warranties: For materials, equipment, systems, and workmanship, warranty period shall be one year minimum from date of Final Completion of entire Work except where:
 - 1. Detailed specifications for certain materials, equipment or systems require longer warranty periods.
 - 2. Materials, equipment or systems are put into beneficial use of District prior to Final Completion as agreed to in writing by District.
- K. Warranty of Title: No material, supplies, or equipment for Work under Contract shall be purchased subject to any chattel mortgage, security agreement, or under a conditional sale or other agreement by which an interest therein or any part thereof is retained by seller or supplier. Design-Build Entity 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 improvements and appurtenances constructed or placed thereon by Design-Build Entity, to District free from any claim, liens, security interest, or charges, and further agrees that neither Design-Build Entity nor any person, firm, or corporation furnishing any materials or labor for any Work covered by Contract shall have right to lien upon premises or improvement or appurtenances thereon. Nothing contained in this paragraph, however, shall defeat or impair right of persons furnishing materials or labor under bond given by Design-Build Entity for their protection or any rights under law permitting persons to look to funds due Design-Build Entity in hands of District.

1.9 TURN-IN

Contract Documents will not be closed out and final payment will not be made until all personnel Identification Media, vehicle permits, keys issued to Design-Build Entity during prosecution of Work, and letters from property owners pursuant to paragraph 1.2.F of Document 01 74 00 (Cleaning) are turned in to District.

1.10 RELEASE OF CLAIMS

Contract Documents will not be closed out and final payment will not be made until Document 00 65 73 (Agreement and Release of Any and All Claims) is completed and executed by Design-Build Entity and District.

1.11 FIRE INSPECTION COORDINATION

Coordinate fire inspection and secure sufficient notice to District to permit convenient scheduling (if applicable).

1.12 BUILDING INSPECTION COORDINATION

Coordinate with District a final inspection for the purpose of obtaining an occupancy certificate (if applicable).

PART 2 PRODUCTS – NOT USED

PART 3 EXECUTION – NOT USED

END OF SECTION

SECTION 01 78 39

PROJECT RECORD DOCUMENTS**PART 1 GENERAL****1.1 SUMMARY**

- A. Section Includes: Administrative and procedural requirements for Project Record Documents.
- B. Project Record Documents required include:
 - 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 on Work that is recorded only schematically
 - 7. Maintenance forms for major equipment
- C. Specific Project Record Documents requirements that expand requirements of this Section are included in Section 99 00 01 Technical Specifications and Requirements.
- D. General Project closeout requirements are included in Section 01 77 00 (Contract Closeout).
- E. Maintenance of Documents and Samples:
 - 1. Store Project Record Documents and Samples in the field office apart from Contract Documents used for construction.
 - 2. Do not permit Project Record Documents to be used for construction purposes.
 - 3. Maintain Project Record Documents in good order and in a clean, dry, legible condition.
 - 4. Make Documents and Samples available at all times for inspection by District.
- F. Dedicate one full size set of the Drawings and one Project Manual for use for recording as-built conditions.

1.2 PROJECT RECORD DRAWINGS

- A. Mark-up Procedure: During the construction period, maintain a set of blue-line or black-line 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 record documents current. Note: 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 permanently conceal any Work until required information has been recorded.
 - 1. Mark these 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 Drawings
 - b. Revisions to details shown on the Drawings
 - c. Depths of various elements of foundation 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. Actual numbering of each electrical circuit
 - h. Field changes of dimension and detail
 - i. Revisions to routing of piping and conduits
 - j. Revisions to electrical circuitry
 - k. Actual equipment locations
 - l. Duct size and routing
 - m. Changes made by Change Order or CCD

- n. Details not on original Contract Drawings
- 2. 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. 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. Mark important additional information that was either shown schematically or omitted from original Drawings.
- 5. Note CCD numbers; alternate numbers, Change Order numbers, and similar identification.
- 6. Responsibility 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.
- B. Preparation of Record Drawings: Immediately prior to inspection for Certification of Substantial Completion, review completed marked-up Project Record Drawings with District, Inspector of Record and Architect of Record to consolidate and ensure accuracy of information. Once accuracy of information is confirmed, prepare and submit a full electronic set, 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 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.
- C. In addition to requirements of this Section, comply with supplemental requirements of other Divisions 2 through 60.
 - 1. Divisions 22, 23, 25 and 26 of the Specifications require the preparation of large scale, detailed layout drawings of the Work of those Divisions. These layout drawings are not Shop Drawings as defined by Section 00 71 00 (General Conditions), 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. Include these layout drawings as part of the Project Record Documents.

1.3 PROJECT RECORD SPECIFICATIONS

- A. During the construction period, maintain one copy of the Project Specifications, including addenda and modifications issued, for Project Record Documents purposes.
- B. Mark the Project Record Specifications to indicate the actual installation where the installation varies substantially from that indicated in Specifications and 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 or measure and record later.
 - 1. In each Specification Section where products, materials or units of equipment are specified or scheduled, mark the copy with the proprietary name and model number of the product furnished.
 - 2. Record the name of the manufacturer, catalog number, supplier and installer, and other information necessary to provide a record of selections made and to document coordination with Project Record Product Data submittals and maintenance manuals.
 - 3. Note related Project Record Product Data, where applicable, for each principal product specified, indicate whether Project Record Product Data has been submitted in maintenance manual instead of submitted as Project Record Product Data.
 - 4. Upon completion of mark-up, submit Project Record Specifications to District for District's records.

1.4 ADDITIONAL REQUIREMENTS FOR FINAL PROJECT RECORD DOCUMENTS

- A. Using a distinct AutoCAD layer, clearly indicate at each affected detail and other drawings a full description of changes made during construction, and the actual location of items as previously specified.

- B. "Cloud" all affected areas using a distinct AutoCAD layer.
- C. Submit duplicate electronic files of all drawings in Tag Image File Format (.tif).
- D. In the event that Design-Build Entity utilizes Building Information Modeling (BIM) software or an alternate computerized application to AutoCAD to design and record its design and construction services, Design-Build Entity shall submit as Project Record Documents the equivalent files, computer software, and any other relevant items, and train District personnel in its use, to allow District to receive and fully utilize the alternate method to meet the intent of the requirements of this Section 01 78 39 Project Record Documents.

1.5 PROJECT RECORD PRODUCT DATA

- A. 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 significant changes in the product delivered to the Site, and changes in manufacturer's instructions and 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. Design-Build Entity is responsible for mark-up and submittal of Project Record Product Data for its own Work.
- B. Material, Equipment, and Finish Data:
 - 1. Provide data for primary materials, equipment and finishes as required under each Specification Section. Submit three (3) hard copy sets and one (1) digital copy, on compact disc (CD) prior to final inspection, bound in 8-1/2 inches by 11 inches three-ring binders with durable plastic covers; provide typewritten table of contents for each volume. Provide project identification information on binder covers and spines.
- C. Arrange by Specification Section number and give names, addresses, and telephone numbers of Subcontractors and suppliers. List:
 - a. Trade names.
 - b. Model or type numbers.
 - c. Assembly diagrams.
 - d. Operating instructions.
 - e. Cleaning instructions.
 - f. Maintenance instructions.
 - g. Recommended spare parts.
 - h. Product data.

1.6 MISCELLANEOUS PROJECT RECORD SUBMITTALS

- A. Refer to other Specification Sections for miscellaneous record keeping requirements and submittals in connection with various construction activities. Immediately prior to Substantial Completion, complete miscellaneous records and place in good order, properly identified, ready for use and reference. Submit to the District for District's electronic records, in Adobe pdf format. Categories of requirements resulting in 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

1.7 MAINTENANCE FORMS FOR MAJOR EQUIPMENT

- A. See Section 01 60 00 Product Requirements

1.8 INSTALLATION, OPERATIONS AND MAINTENANCE MANUALS

- A. The Design-Build Entity shall compile O&M manuals for every piece of equipment and building operating or electrical system, commissioned or not, with the following formats:
1. Quantity: as specified in Section 01 32 19 Submittal Procedures, Paragraph 1.2.R.3 (unless more are required by the technical specifications).
 2. Hard Media Format:
 - (a) Size: 8¹/₂ 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 three-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:

NAME OF PROJECT (YEAR)

INSTALLATION, OPERATION AND MAINTENANCE MANUAL

- (e) Sheet Size: 8¹/₂ x 11 inch
- (f) Drawing Size: Reduce drawings or diagrams to an 8¹/₂ x 11 inch or 11 x 17 inch size. However, 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.
- (g) 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 tag 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.
- (h) Contents
 - (1) Title page, which shall be a duplicate of front binder title
 - (2) Table of Contents
 - (3) Equipment Sections and Sub sections
 - (i) Contractor. 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.
 - (ii) 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.
 - (iii) Operation and Maintenance 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:

1. Model number, serial number and nameplate data for each piece of equipment and any subcomponent.
2. Installation, startup and break-in instructions.
3. All starting, normal shutdown, emergency shutdown, manual operation and normal and emergency operating procedures and data, including any special limitations.
 - i. Step-by-step procedure for system startup, including a pre-start checklist. Refer to controls and indicators by nomenclature consistent with that used on panels and in control diagrams.
 - ii. Sequence of operation, with detailed instruction in proper sequence, for each mode of operation (i.e., day-night; staging of equipment).
 - iii. Emergency operation: 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 or malfunctioning of components, or other unusual condition.
 - iv. 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.
4. O&M and installation instructions that were shipped with the unit.
5. Preventative and corrective maintenance, with service procedures and schedules:
 - i. Provide a schedule for preventive maintenance in a printed format and an electronic format compatible with owner's system. State, preferably in tabular form, the recommended frequency of performance for each preventive maintenance task, cleaning, inspection and scheduled overhauls.
 - ii. Cleaning: Provide instructions and schedules for all routine cleaning and inspection with recommended lubricants.
 - iii. 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.
 - iv. 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.
 - v. Corrective maintenance instructions shall be predicated upon a logical effect-to-cause troubleshooting philosophy and a rapid replacement procedure to minimize equipment downtime.
 - vi. 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.
 - vii. Repair and Replacement: Indicate repair and replacement procedures most likely to be required in the maintenance of the equipment.
 - viii. A list of recommended spare parts with a price list and a list of spare parts provided under this Contract.
 - ix. 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 diagram

6. Safety Precautions: This subsection shall comprise a listing of safety precautions and instructions to be followed before, during and after making repairs, adjustments or routine maintenance.
 7. Manufacturers' brochures (including controls): Manufacturers' descriptive literature covering devices and equipment used in the system, together with illustrations, exploded views and renewal parts lists. Manufacturers' standard brochures and parts list shall be corrected so that information applying to the actual installed equipment is clearly defined.
 8. Supply any special tools required to service or maintain the equipment.
 9. Performance data, ratings and curves.
 10. Warranty and guarantee, which clearly lists conditions to be maintained to keep warranty in effect and conditions that would affect the validity of the warranty.
 11. Any service contracts issued.
- (4) Supplemental Data. Prepare written text and/or special drawings to provide necessary information, where manufacturer's standard printed data is not available and information is necessary for a proper understanding and operation and maintenance of equipment or systems, or where it is necessary to provide additional information to supplement data included in the manual or project documents.
 - (5) Control Diagrams/Drawings. Include the as-built control diagrams/drawings for the piece of equipment and its components, including full points list, full print out of all schedules and set points after testing and acceptance of the system, and copies of all checkout tests and calibrations performed by the contractor (not commissioning tests).
 - (6) Specifications. This section is comprised of the component or system specification section copied and inserted complete with all addenda.
 - (7) System Description. This section shall include the individual equipment portion of the overall system Design Basis Narrative.
3. 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.
 4. A separate manual or chapter shall be provided for each applicable system as follows:
 - (a) Lighting Systems and Controls
 - (b) Switchgear, Transformers, Panel boards, Motor Control Centers and Motor Starters
 - (c) Lightning Protection and Surge Suppression Systems
 - (d) Public Address, Closed Circuit TV, Communication and Telephone Systems
 - (e) Security System
 - (f) Building Management/Temperature Control System (BMS)
 - (g) Power monitoring systems
 - (h) Solar Systems, as described in the Solar Technical Specifications

1.9 COMPUTER PROGRAMS

- A. When any equipment requires operation by computer programs, submit copy of program on appropriate CD, plus a hard-copy and an electronic copy (Adobe .PDF format) of all user manuals and guides for operating the programs and making changes in the programs for upgrading and expanding the databases. Program shall be Windows XP compatible. Provide required licenses to District at no additional cost.

1.10 DISTRICT'S RECOURSE

- A. If Design-Build Entity is not able to provide project record documents in specified formats, District and Design-Build Entity shall negotiate a credit back to the District for this work.

PART 2 PRODUCTS – NOT USED

PART 3 EXECUTION

3.1 RECORDING

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 SUBMITTAL

- A. At completion of Project, deliver Project Record Documents to District, per Section 01 32 19 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

SECTION 01 91 13
GENERAL COMMISSIONING REQUIREMENTS

PART 1 GENERAL

1.01 DESCRIPTION

- A. **Commissioning:** Commissioning is a quality-oriented process for achieving, verifying, and documenting that the performance of facilities, systems and assemblies meet defined objectives and criteria. The Commissioning process begins at project inception (during the pre-design phase) and continues through the life of the facility. The commissioning process includes specific tasks to be conducted during each phase in order to verify that design, construction, and training meets the owner's project requirements.
- B. **Commissioning Team:** The members of the commissioning team consist of the contracted commissioning agent (CxA), the owner's representative/construction manager (CM), the general contractor (GC), the architect and design engineers, the mechanical contractor (MC), the electrical contractor (EC), the testing and balancing (TAB) contractor, the control contractor (CC), the facility operating staff, and any other installing subcontractors or suppliers of equipment. The contracted commissioning agent is hired by the owner directly. The CxA directs and coordinates the project commissioning activities and the reports to the owner. All team members work together to fulfill their contracted responsibilities and meet the objectives of the contract documents.

Commissioning shall:

- 1) Verify that applicable equipment and systems are installed according to the contract documents, manufacturer's recommendations, and industry accepted minimum standards and that they receive adequate operational checkout by installing contractors.
 - 2) Verify and document proper performance of equipment and systems.
 - 3) Verify that O&M documentation left on site is complete.
 - 4) Verify that the owner's operating personnel are adequately trained.
- C. The commissioning process does not take away from or reduce the responsibility of the system designers or installing contractors to provide a finished and fully functioning product.

1.02 RELATED DOCUMENTS

- A. Drawings and general provisions of the contract, including General and Supplementary Conditions and other Division 1 specification sections, apply to this section.
- B. Owner's Project Requirements and Basis of Design documents are included by reference for information only.
- C. ASHRAE Guideline 0-2005, ASHRAE Standards 55 & 62.1-2004

1.03 SUMMARY

- A. This section includes general requirements that apply to the implementation of the commissioning process without regard to specific systems, assemblies and components.

B. Related sections include the following:

Section 99 00 02 Commissioning of Lighting Control and BMS Systems

1.04 DEFINITIONS

Acceptance - A formal action, taken by a person with appropriate provider (which may or may not be contractually defined) to declare that some aspect of the project meets defined requirements, thus permitting subsequent activities to proceed.

Approval - Acceptance that a piece of equipment or system has been properly installed and is functioning in the tested modes according to the contract documents.

Basis of Design - A document that records the concepts, calculations, decisions, and product selections used to meet the owner's project requirements and to satisfy applicable regulatory requirements, standards, and guidelines. The document includes both narrative descriptions and lists of individual items that support the design process.

Checklists - Verification checklists that are developed and used during all phases of the commissioning process to verify that the owner's project requirements are being achieved. This includes checklists for general verification, plus testing, training, and other specific requirements.

Commissioning Authority (CxA) - The entity identified by the owner who leads, plans, schedules, and coordinates the commissioning team to implement the commissioning process.

Commissioning Plan - An overall plan developed by the commissioning agent that provides the structure, schedule and coordination planning for the commissioning process.

Commissioning Process - A quality-focused process for enhancing the delivery of a project. The process focuses upon verifying and documenting that the facility and all of its systems and assemblies are planned, designed, installed, tested, operated, and maintained to meet the owner's project requirements.

Commissioning Process Activities - Components of the commissioning process.

Commissioning Process Progress Report - A written document that details activities completed as part of the commissioning process and significant findings from those activities that is continuously updated during the course of a project. Usually it is incorporated into the commissioning plan as an ongoing appendix.

Commissioning Team - The individuals who through coordinated actions are responsible for implementing the commissioning process.

Construction Checklist - A form used by the contractor to verify that appropriate components are on-site, ready for installation, correctly installed, and functional. Also see **Checklists**.

Construction Documents - This includes a wide range of documents, which will vary from project to project, with the owner's needs and with regulations, laws, and countries. Construction

documents usually include the project manual (specifications), plans (drawings) and general terms and conditions of the contract.

Continuous Commissioning Process - A continuation of the commissioning process well into the occupancy and operations phase to verify that a project continues to meet current and evolving owner's project requirements. Continuous commissioning process activities are on-going for the life of the facility. Also see **On-Going Commissioning Process**.

Contract Documents - This includes a wide range of documents, which will vary from project to project, with the owner's needs and with regulations, laws, and countries. Contract documents frequently include price agreements, construction management process, sub-contractor agreements or requirements, requirements and procedures for submittals, changes, and other construction requirements, timeline for completion, and the construction documents.

Coordination Drawings - Drawings showing the work of all trades to illustrate that equipment can be installed in the space allocated without compromising equipment function or access for maintenance and replacement. These drawings graphically illustrate and dimension manufacturers' recommended maintenance clearances.

Control system - A component of environmental, HVAC, security, and fire systems for reporting/monitoring and issuing of commands to/from field devices.

Data logging - The monitoring and recording of flows, currents, status, pressures, etc., of equipment using stand-alone data recorders separate from the control system or the trending capabilities of control systems.

Deferred Performance Tests (DPTs) - Performance tests that are performed, at the discretion of the CxA, after substantial completion, due to partial occupancy, equipment, seasonal requirements, design, or other site conditions that disallow the test from being performed.

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.

Factory Testing - Testing of equipment on-site or at the factory, by factory personnel, with or without an owner's representative present.

Issues Log - A formal and ongoing record of problems or concerns – and their resolution – that have been raised by members of the commissioning team during the course of the commissioning process.

Nominal Group Technique - A formal, structured brainstorming process used to obtain the maximum possible ranked input from a variety of viewpoints in a short period of time. The typical approach is a workshop session where a question is presented, the attendees each record their responses on a piece of paper, the individual responses are recorded on a flip chart without discussion in a round robin fashion, all of the responses are discussed, and the participants rank their top five responses.

Non-Compliance - See **Deficiency**.

Non-Conformance - See **Deficiency**.

On-Going Commissioning Process - A continuation of the commissioning process well into the occupancy and operations phase to verify that a project continues to meet current and evolving owner's project requirements. On-going commissioning process activities occur throughout the life of the facility. Some of these will be close to continuous in implementation, and others will be either scheduled or unscheduled (as needed). Also see **Continuous Commissioning Process**.

Owner's Project Requirements - A written document that details the functional requirements of a project and the expectations of how it will be used and operated. This includes project goals, measurable performance criteria, cost considerations, benchmarks, success criteria, and supporting information. (The term "Project Intent" is used by some owners for their commissioning process owner's project requirements or design.)

Over-ridden Value -Riding over a sensor value in the equipment's controls to observe the response of the equipment's operation. Also see **Simulated Signal**.

Phased Commissioning - Commissioning that is completed in phases as required by the phasing plan as approved for the project and other scheduling issues.

Quality Based Sampling - A process for evaluating a sub-set (sample) of the total population. The sample is based upon a known or estimated probability distribution of expected values; an assumed statistical distribution based upon data from a similar product, assembly, or system; or a random sampling that has scientific statistical basis.

Re-Commissioning - An application of the commissioning process requirements to a project that has been delivered using the commissioning process. This may be a scheduled re-commissioning developed as part of an ongoing commissioning process, or it may be triggered by use change, operations problems, or other needs.

Retro-Commissioning -The commissioning process applied to an existing facility that was not previously commissioned. This guideline does not specifically address retro-commissioning. However, the same basic process needs to be followed from pre-design through occupancy and operations to optimize the benefits of implementing the commissioning process philosophy and practice.

Seasonal Performance Tests - Performance tests that are deferred until the system(s) will experience conditions closer to their design conditions based on weather conditions.

Simulated Condition - Condition that is created for the purpose of testing the response of a system (e.g., raising/lowering the setpoint of a thermostat to see the response in a VAV box).

Simulated Signal - Disconnecting a sensor and using a signal generator to simulate a sensor value for the purpose of testing a full range of conditions.

Startup - The initial starting or activating of dynamic equipment, including completing construction checklists.

Systems Manual - A system-focused composite document that includes the operation manual, maintenance manual, and additional information of use to the owner during the occupancy and operations phase.

Test Procedure - A written protocol that defines methods, personnel, and expectations for tests conducted on components, equipment, assemblies, systems, and interfaces among systems. The test procedures are specified in the Technical Specifications sections of the contract documents. Performance testing covers the dynamic functions and operations of equipment and systems using manual or monitoring methods. Performance testing is the dynamic testing of systems under full operation. Systems are tested under various modes, such as during low cooling loads, high loads, component failures, unoccupied, varying outside air temperatures, fire alarm, power failure, etc. The systems are run through all the control system's sequences of operation and components are verified to respond as the sequences state.

Training Plan - A written document that details the expectations, schedule, budget, and deliverables of commissioning process activities related to training of project operating and maintenance personnel, users, and occupants.

Verification - The process by which specific documents, components, equipment, assemblies, systems, and interfaces among systems are confirmed to comply with the criteria described in the Owner's Project Requirements.

Trending - The monitoring, by a building management system or other electronic data gathering equipment, and analyzing of the data gathered over a period of time.

Vendor - Supplier of equipment.

Warranty Period - Refer to Document 00 65 36 Guaranty.

1.05 COORDINATION

- A. Project Commissioning Team - The members of the project commissioning team will consist of the commissioning authority and any support personnel, the construction manager, the owner's facility staff (FS) or designee, the general contractor, subcontractors and/or vendors as required, and the architect/ engineer (A/E).
- B. Management - The CxA coordinates the commissioning activities through the construction manager. All members shall work together to fulfill their contracted responsibilities and meet the objectives of the contract documents. Refer to Paragraph 1.06 for additional management details.
- C. Scheduling - The CxA, through the owner or CM, will provide sufficient notice to the contractor for scheduling commissioning activities with respect to the owner's participation. The contractor will integrate all commissioning activities into the overall project schedule. All parties will address scheduling problems and make necessary notifications in a timely manner in order to expedite the commissioning process.

1.06 COMMISSIONING PLAN

- A. The CxA will develop the commissioning plan which shall be included in the project schedule when approved by the owner or CM. The following narrative provides a brief overview of the typical commissioning tasks during construction and the general order in which they occur.
 - 1) Commissioning during construction begins with an initial commissioning meeting conducted

by the CxA where the commissioning process is reviewed with the project commissioning team members.

- 2) Additional meetings will be required throughout construction, scheduled by the CxA, through the owner or CM, with necessary parties attending to plan, scope, coordinate, schedule future activities and resolve problems.
- 3) MEP Equipment documentation is submitted to the CxA, through the owner or CM, during normal submittals, including detailed startup procedures.
- 4) The construction checklists are to be completed by the contractor (or its subcontractors), before and during the startup process.
- 5) Construction checklists, TAB and startup must be completed before performance testing.
- 6) Items of non-compliance in material, installation, or setup shall be corrected at no expense to the owner.
- 7) The contractor ensures that the subcontractors' construction checklists are executed and documented and that startup and initial checkout are performed. The CxA verifies that the TAB, construction checklists and startup were completed according to the approved plans. This includes the CxA approving TAB, checklists and startup plans. This also includes witnessing startup of selected equipment. Any testing failure is to be corrected at no additional cost to the owner, and a re-test is to be performed, observed, and documented.
- 8) The CxA develops and implements equipment and system performance test procedures. The forms and procedures are approved by the owner, CM and A/E.
- 9) The performance tests are executed by the contractor under the direction of the CxA with the assistance of the facility staff. All documentation is by the CxA.
- 10) The CxA reviews the O&M documentation for completeness and provides the commissioning record for the O&M manuals.
- 11) Commissioning should be completed before substantial completion.
- 12) The CxA develops procedures, reviews, pre-approves, coordinates, and implements the training provided by the contractor.
- 13) Deferred testing is conducted as specified or required.

1.07 COMMISSIONING TEAM

- A. Members appointed by contractor(s): Individuals, each having authority to act on behalf of the entity he or she represents, explicitly organized to implement the commissioning process through coordinated actions. The commissioning team shall consist of, but not be limited to, representatives of each contractor, including project superintendent and subcontractors, installers, suppliers, and specialists deemed appropriate by the CxA.

B. Members appointed by owner:

1. CxA - An entity identified by the owner who leads, plans, schedules, and coordinates the commissioning team to implement the commissioning process. Owner will engage the CxA under a separate contract.
2. Representatives of the facility user and operation and maintenance personnel.
3. Architect and engineering design professionals.

1.08 RELATED REQUIREMENTS

- | | |
|----------------------|--------------------------------|
| A. Section 01 32 19 | Submittal Procedures |
| B. Section 01 32 16 | Progress Schedules and Reports |
| C. Section 01 77 00 | Contract Closeout Procedures |
| D. Section 01 78 39 | Project Record Documents |
| E. Document 00 65 36 | Guaranty |
| F. Section 23 08 00 | Commissioning of HVAC |

1.09 RESPONSIBILITIES

- A. The general responsibilities of various parties in the commissioning process are provided in this subsection. The specific responsibilities are in the Technical Specifications.
- B. All Parties
1. Follow the commissioning plan.
 2. Attend initial commissioning meeting and additional meetings as necessary.
- C. Architect (of A/E)

Construction Phase

1. Attend the commissioning scoping meeting and selected commissioning team meetings.
2. Perform normal submittal review, construction observation, as-built drawing preparation, O&M manual preparation, etc., as contracted.
3. Provide any design narrative documentation requested by the CxA.
4. Coordinate resolution of system deficiencies identified during commissioning, according to the contract documents.
5. Prepare and submit final as-built design intent documentation for inclusion in the O&M manuals. Review and approve the O&M manuals.

D. Mechanical and Electrical Designers/Engineers (of the A/E)*Construction Phase*

1. Perform normal submittal review, construction observation, as-built drawing preparation, etc., as contracted. On site observation should be completed just prior to system startup.
2. Provide any design narrative and sequences documentation requested by the CxA. The designers shall assist (along with the contractors) in clarifying the operation and control of commissioned equipment in areas where the specifications, control drawings or equipment documentation is not sufficient for writing detailed testing procedures.
3. Attend commissioning scoping meetings and other selected commissioning team meetings.
4. Participate in the resolution of system deficiencies identified during commissioning, according to the contract documents.
5. Prepare and submit the final as-built design intent and operating parameters documentation for inclusion in the O&M manuals. Review and approve the O&M manuals.
6. From the contractor's red-line drawings, edit and update one-line diagrams developed as part of the design narrative documentation and those provided by the vendor as shop drawings for the chilled and hot water, condenser water, domestic water, steam and condensate systems; supply, return and exhaust air systems and emergency power system.
7. Provide a presentation at one of the training sessions for the owner's personnel.
8. Review and approve the construction checklists for major pieces of equipment for sufficiency prior to their use.
9. Review and approve the performance test procedure forms for major pieces of equipment for sufficiency prior to their use.
10. Witness testing of selected pieces of equipment and systems

Occupancy and Operations Phase

1. Participate in the resolution of non-compliance, non-conformance and design deficiencies identified during commissioning during warranty-period commissioning.
2. Attend lessons learned session

E. Commissioning Authority (CxA)

The contractors will provide all tools or the use of tools to start, check-out and test equipment and systems.

The CxA will verify the execution of commissioning process activities using random sampling. The sampling rate may vary from 1 to 100 percent. Verification will include, but is not limited to, equipment submittals, construction checklists, training, operating and maintenance data, tests, and test reports to verify compliance with the OPR. When a random sample does not meet the requirement, CxA will report the failure in the "Issues Log."

Construction Phase

1. Coordinates and directs the commissioning activities in a logical, sequential and efficient manner using consistent protocols and forms, centralized documentation, clear and regular communications and consultations with all necessary parties, frequently updated timelines and schedules and technical expertise.
2. Coordinate the commissioning work and, with the GC and owner/CM, help integrate commissioning activities into the master schedule.
3. Revise the Construction Phase Commissioning Plan as necessary.
4. Plan and conduct a commissioning scoping meeting and other commissioning meetings.

5. Request and review additional information required to perform commissioning tasks, including O&M materials, contractor startup and checkout procedures.
6. Before startup, gather and review the current control sequences and interlocks and work with contractors and design engineers until sufficient clarity has been obtained, in writing, to be able to write detailed testing procedures.
7. Review and approve normal contractor submittals applicable to systems being commissioned for compliance with commissioning needs, concurrent with the A/E reviews.
8. Write and distribute construction checklists. Prepare and maintain completed construction checklist log.
9. Develop an enhanced startup and initial systems checkout plan with subcontractors.
10. Perform site visits, as necessary, to observe component and system installations. Attend selected planning and job-site meetings to obtain information on construction progress. Review construction meeting minutes for revisions/substitutions relating to the commissioning process. Assist in resolving any discrepancies.
11. Witness all or part of the HVAC piping test and flushing procedure, sufficient to be confident that proper procedures were followed. Document this testing and include the documentation in O&M manuals. Notify owner/CM of any deficiencies in results or procedures.
12. Witness all or part of any ductwork testing and cleaning procedures, sufficient to be confident that proper procedures were followed. Document this testing and include the documentation in O&M manuals. Notify owner's project manager of any deficiencies in results or procedures.
13. Approve construction checklist completion by selected site observation and spot checking.
14. Recommend approval of systems startup by reviewing startup reports and by selected site observation.
15. Review TAB execution plan.
16. Oversee sufficient testing of the control system and approve it to be used for TAB, before TAB is executed.
17. Recommend approval of air and water systems balancing by reviewing completed reports and by selected site observation.
18. With necessary assistance and review from installing contractors, write the performance test procedures for equipment and systems, including energy management control system trending or manual performance testing. Submit to CM for review, and for approval if required.
19. Analyze any performance trend logs and monitoring data to verify performance.
20. Coordinate, witness, and recommend approval of manual performance tests performed by installing contractors. Coordinate retesting as necessary until satisfactory performance is achieved
21. Maintain a master Issues Log and a separate testing record. Provide the owner/ CM with written progress reports and test results with recommended actions.
22. Review equipment warranties to ensure that the owner's responsibilities are clearly defined.
23. Oversee and approve the training of the owner's operating personnel.
24. Compile and maintain a commissioning record and building systems book(s).
25. Review and approve the preparation of the O&M manuals.
26. Provide a final commissioning report (as described in this section).
27. Coordinate the development of a systems manual

28. Prepare a standard trend logging package of primary parameters that will provide the operations staff clear indications of system function in order to identify proper system operation and trouble shoot problems. The CxA shall also provide any needed information on interpreting the trends.

Occupancy and Operations Phase

1. Coordinate and supervise seasonal testing and deficiency corrections.
2. Return to the site at 10 months into the 12 month warranty period and review with facility staff the current building operation and the condition of outstanding issues related to the original and seasonal commissioning. Also interview facility staff and identify problems or concerns they have operating the building as originally intended. Make suggestions for improvements and for recording these changes in the O&M manuals. Identify areas that may come under warranty or under the original construction contract. Assist facility staff in developing reports, documents and requests for services to remedy outstanding problems.
3. Assist in the development of a preventative maintenance plan, a detailed operating plan or an energy and resource management plan or as-built documentation.
4. Attend owner coordinated lessons learned sessions as requested.

F. Owner or Owner's Representative (CM)

Construction and Acceptance Phase

1. Facilitate the coordination of the commissioning work by the CxA, and, with the CM/GC and CxA, ensure that commissioning activities are being scheduled into the master schedule.
2. Review and approve the final *Commissioning Plan—Construction Phase*.
3. Attend a commissioning scoping meeting and other commissioning team meetings.
4. Perform the normal review of MEP contractor submittals.
5. Furnish a copy of all construction documents, addenda, change orders and approved submittals and shop drawings related to commissioned equipment to the CxA.
6. Review and approve the performance test procedures submitted by the CxA, prior to testing.
7. When necessary, observe and witness startup and performance testing of selected equipment.
8. Review commissioning progress and deficiency reports.
9. Coordinate the resolution of non-compliance and design deficiencies identified in all phases of commissioning.
10. Sign-off (final approval) on individual commissioning tests as completed and passing. Recommend completion of the commissioning process to the Project Manager.
11. Assist the GC in coordinating the training of owner personnel.
12. Provide the OPR documentation to the CxA and all contractors for information and use.
13. Provide the BoD documents, prepared by Architect and approved by owner, to the CxA and all contractors for use in developing the commissioning plan, systems manual, and operation and maintenance training plan.
14. Assign operation and maintenance personnel and schedule them to participate in commissioning team activities.

Occupancy and Operations Phase

1. Assist the CxA as necessary in the seasonal or deferred testing and deficiency corrections required by the specifications.
2. Attend lessons learned session

G. Owner's Project Manager (CM&Owner)

Construction Phase

1. Manage the contract of the A/E and of the GC.
2. Arrange for facility operating and maintenance personnel to attend various field commissioning activities and field training sessions.
3. Provide final approval for the completion of the commissioning work.

Occupancy and Operations Phase

1. Ensure that any seasonal or deferred testing and any deficiency issues are addressed.
2. Attend lessons learned session

- H. Contractor. All contractors and their subcontractors and vendors shall assign representatives with expertise and authority to act on their behalf and schedule them to participate in and perform commissioning process activities including, but not limited to, the following:

Construction Phase

1. Facilitate the coordination of the commissioning and incorporate commissioning activities (the Commissioning Plan) into the Overall Project Schedule (OPS).
2. Provide detailed startup procedures
3. Include the cost of commissioning in the total contract price.
4. Ensure that all subcontractors and vendors execute their commissioning responsibilities according to the contract documents and the OPS.
5. Provide copies of all submittals as required in Section 01 32 19 Submittal Procedures, including all changes thereto.
Attend and participate in commissioning team meetings held monthly.
6. No later than 60 days prior to startup of the first piece of major equipment, meet with the CxA, CM, A/E, and PM and owner to finalize the detailed commissioning procedures/schedule.
7. Provide the training of owner personnel.
8. Review and accept construction checklists provided by the commissioning authority.
9. Complete paper or electronic construction checklists as work is completed and provide to the commissioning agent on a weekly basis.
10. Accomplish commissioning process test procedures.
11. Evaluate performance deficiencies identified in test reports and, in collaboration with entity responsible for system and equipment installation, recommend corrective action.
12. Cooperate with the CxA for resolution of issues recorded in the "Issues Log".
13. Prepare O&M manuals, according to the contract documents, including clarifying and updating the original sequences of operation to as-built/as-tested conditions.

Occupancy and Operations Phase

1. Ensure that subcontractors provide assistance for seasonal performance testing, performed by the CxA, according to the specifications.
2. Ensure that subcontractors correct deficiencies and make necessary adjustments to O&M manuals and as-built drawings for applicable issues identified in any seasonal testing.

3. Perform all guarantee work for materials furnished under the contract for the time specified in the contract, including all warranties and curing all latent defects within the time period provided in the contract.

I. Vendors/Subcontractors

1. Provide all requested submittal data, including detailed startup procedures and specific responsibilities of the owner to keep warranties in force.
2. Assist in equipment testing per agreements with subcontractors and/or contractor.
3. Include cost of all special tools and instruments (only available from vendor, specific to a piece of equipment) required for testing, operating, and maintaining equipment according to these contract documents in the base bid price to the contractor.
4. Analyze specified products and verify that the A/E has specified the newest, most current equipment reasonable for this project's scope and budget.
5. Provide requested information regarding equipment sequence of operation and testing procedures.
6. Review construction checklists and test procedures for equipment installed by factory representatives.

1.10 EQUIPMENT/SYSTEMS TO BE COMMISSIONED

A. The following equipment/systems will be commissioned for this project:

1. Chillers and Towers
2. Boilers and related equipment
3. Chilled water system and pumps
4. Hot water system and pumps
5. Steam system and components
6. Air Handling Units (with supply, return and outside air duct, variable air volume boxes and units, air distribution equipment, fan coil units, unit heaters, etc., and temperature control system)
7. Exhaust air systems (including fans, ductwork and interconnection with air handling/supply systems)
8. Supply or make-up air systems (including fans, ductwork and interconnection with air handling and/or exhaust systems)
9. Specialty air removal/ventilation systems (including fans, ductwork and interconnection with air handling/supply systems)
10. Potable water system (including backflow preventers, fixtures, piping cleaning and flushing, hot water generators, and booster pumps)
11. Sanitary drainage/sewer system
12. Storm drainage system
13. Emergency power system (including emergency generator, automatic transfer switch and fuel oil system)
14. Lighting systems (interior and exterior)
15. Switchgear, transformers, panelboards and/or motor control centers
16. Lightning protection and/or surge suppression system
17. Access Control system
18. Elevator systems
19. HVAC, Test, Adjust, and Balance

20. BMS System

PART 2 PRODUCTS

2.01 TEST EQUIPMENT

- A. All standard testing equipment required to perform startup and initial checkout and required performance testing shall be provided by the contractor for the equipment being tested. This includes, but is not limited to, two-way radios, meters, and data recorders. Data recorders may be provided by the CxA at the option of the CxA,
- B. Special equipment, tools, and instruments required for testing equipment according to these contract documents shall be included in the contractor's base bid price and shall be turned over to the owner at Project close-out.
- C. All testing equipment shall be of sufficient quality and accuracy to test and/or measure system performance within the tolerances specified in the specifications. If not otherwise noted, the following minimum requirements apply: Temperature sensors and digital thermometers shall have a certified calibration to NIST traceable standards within the past year to an accuracy of 0.5 degree F and a resolution of + or - 0.1 degree F. Pressure sensors shall have an accuracy of + or - 2.0% of the value range being measured (not full range of meter) and have been calibrated within the last year. All equipment shall be calibrated according to the manufacturer's recommended intervals and when dropped or damaged. Calibration tags shall be affixed or certificates readily available.

PART 3 - EXECUTION

3.01 MEETINGS

- A. Initial Meeting. Within 10 days of the Notice to Proceed (NTP), the CxA, through the owner/CM, will schedule, plan and conduct an initial commissioning meeting. The contractor and its responsible parties are required to attend.
- B. Miscellaneous Meetings. Other meetings will be planned and conducted by the CxA as construction progresses. These meetings will cover coordination, deficiency resolution, and planning issues. These meetings will be held at least monthly, until the final 3 months of construction, when they may be held as frequently as one per week.

3.02 STARTUP, CONSTRUCTION CHECKLISTS, AND INITIAL CHECKOUT

- A. The following procedures apply to all equipment/systems to be commissioned, according to Paragraph 1.10 Equipment/Systems to be commissioned.
- B. General. Construction checklists are important to verify that the equipment and systems are fully connected and operational. It ensures that performance testing (in-depth system checkout) may proceed without unnecessary delays. The construction checklists for a given system must be successfully completed and approved prior to startup and formal performance testing of equipment or subsystems of the given system.

- C. Startup and Checkout Plan. The CxA will assist the project commissioning team members responsible for startup of any equipment. The primary role of the CxA in this process is to ensure that there is written documentation that each of the manufacturer-recommended procedures has been completed. The CxA shall provide construction checklists and startup shall be identified in the commissioning scoping meeting and on the checklist forms.
1. The construction checklists are provided by the CxA. These checklists indicate required procedures to be executed as part of startup and initial checkout of the systems and the party responsible for their execution.
 2. The contractor shall determine which trade is responsible for executing and documenting each of the line item tasks and transmit the checklists to the responsible subcontractors. Each form may have more than one trade responsible for its execution.
 3. The contractor/subcontractor with assistance from the CxA responsible for the purchase of the equipment shall develop the full startup plan by combining the manufacturer's detailed startup and checkout procedures and the construction checklists.
 4. The contractor/subcontractor shall submit the full startup plan to the CxA for review and approval.
 5. The CxA will review and approve the procedures and the documentation format for reporting. The CxA will return the procedures and the documentation format to the contractor, through the CM.
 6. The contractor will transmit the full startup plan to the subcontractors for their review and use.
- D. Sensor and Actuator Calibration. All field-installed temperature, relative humidity, CO, CO₂, refrigerant, O₂, and/or pressure sensors and gages, and all actuators (dampers and valves) on all equipment shall be calibrated. Verify that all locations are appropriate and away from causes of erratic operation. Submit to the CxA through the CM the calibration methods and results. All test instruments shall have had a certified calibration within the last 6 months to NIST traceable standards, and comply with all local, state and/or federal requirements/certifications, as required. Sensors installed in the unit at the factory with calibration certification provided need not be field calibrated. Provide bench testing as required at the direction of the CxA.

Sensor Calibration Methods

All Sensors-- Verify that all sensor locations are appropriate and away from causes of erratic operation. Verify that sensors with shielded cable, are grounded only at one end. For sensor pairs that are used to determine a temperature or pressure difference, make sure they are reading within 0.2°F of each other for temperature and within a tolerance equal to 2% of the reading, of each other, for pressure. Tolerances for critical applications may be tighter.

Sensors Without Transmitters-- Standard Application. Make a reading with a calibrated test instrument within 6 inches of the site sensor. Verify that the sensor reading, via the permanent thermostat, gage or building automation system (BAS), is within the tolerances in the table below of the instrument-measured value. If not, install offset in BAS, calibrate or replace sensor.

Sensors With Transmitters-- Standard Application. Disconnect sensor. Connect a signal generator in place of sensor. Connect amp meter in series between transmitter and BAS control panel. Using manufacturer’s resistance-temperature data, simulate minimum desired temperature. Adjust transmitter potentiometer zero until 4 mA is read by the ammeter. Repeat for the maximum temperature matching 20 mA to the potentiometer span or maximum and verify at the BAS. Record all values and recalibrate controller as necessary to conform with specified control ramps, reset schedules, proportional relationship, reset relationship and P/I reaction. Reconnect sensor. Make a reading with a calibrated test instrument within 6 inches of the site sensor. Verify that the sensor reading, via the permanent thermostat, gage or building automation system (BAS), is within the tolerances in the table below of the instrument-measured value. If not, replace sensor and repeat. For pressure or humidity sensors, perform a similar process with a suitable signal generator.

Critical Applications-- For critical applications (process, manufacturing, etc.) more rigorous calibration techniques may be required for selected sensors. Contractor shall describe any such methods used on an attached sheet.

Tolerances, Standard Applications

<u>Sensor</u>	<u>Required Tolerance (+/-)</u>		<u>Sensor</u>	<u>Required Tolerance (+/-)</u>
Cooling coil, chilled and condenser water temps	0.4F		Flow rates, water Relative humidity	4% of design 4% of design
AHU wet bulb or dew point	2.0F		Combustion flue temps	5.0F
Hot water coil and boiler water temp	1.5F		Oxygen or CO ₂ monitor	0.1 % pts
Outside air, space air, duct air temps	0.5F		CO monitor	0.01 % pts
Wattour, voltage & amperage	1% of design		Natural gas and oil flow rate	1% of design
Pressures, air, water and gas	3% of design		Steam flow rate	3% of design
Flow rates, air	10% of design		Barometric pressure	0.1 in. of Hg

Valve and Damper Stroke Setup and Check EMS Readout-- For all valve and damper actuator positions checked, verify the actual position against the BAS readout. Set pumps or fans to normal operating mode. Command valve or damper closed, visually verify that valve or damper is closed and adjust output zero signal as required. Command valve or damper open, verify position is full open and adjust output signal as required. Command valve or damper to a few intermediate positions. If actual valve or damper position doesn’t reasonably correspond, replace actuator or add pilot positioner (for pneumatics).

Closure for heating coil valves (NO)-- Set heating setpoint 20°F above room temperature. Observe valve open. Remove control air or power from the valve and verify that the valve stem and actuator position do not change. Restore to normal. Set heating setpoint to 20°F below room temperature. Observe the valve close. For pneumatics, by override in the EMS, increase pressure to valve by 3 psi (do not exceed actuator pressure rating) and verify valve stem and actuator position does not change. Restore to normal.

Closure for cooling coil valves (NC)-- Set cooling setpoint 20°F above room temperature. Observe the valve close. Remove control air or power from the valve and verify that the valve stem and actuator position do not change. Restore to normal. Set cooling setpoint to 20°F below room temperature. Observe valve open. For pneumatics, by override in the EMS, increase pressure to valve by 3 psi (do not exceed actuator pressure rating) and verify valve stem and actuator position does not change. Restore to normal.

Spring Return Actuators (NC or NO)—During normal operation, disconnect the power and visually inspect the operation of the desired action (open or closed)

E. Execution of Construction Checklists and Startup.

1. Four weeks prior to the scheduled startup, the contractor shall coordinate startup and checkout with the CM, A/E, and CxA. The execution and approval of the construction checklists, startup, and checkout shall be directed and performed by the contractor, subcontractor or vendor. Signatures are required of the applicable subcontractors for verification of completion of their work.
2. The owner/CM, and A/E as necessary, shall observe, at minimum, the procedures for each piece of primary equipment, unless there are multiple units, in which case a sampling strategy may be used. The CxA will observe all testing.
3. For lower-level components of equipment, (e.g., sensors, controllers), the CxA shall observe a sampling of the startup procedures.
4. The subcontractors and vendors shall execute startup and provide the CxA and A/E, through the owner/CM, with a signed and dated copy of the completed startup and construction checklists.
5. Only individuals of the contractor (technicians, engineers, tradesmen, vendors, etc.) who have direct knowledge and witnessed that a line item task on the construction checklist was actually performed shall check off that item. It is not acceptable for witnessing supervisors to fill out these forms.

F. Deficiencies, Non-Conformance, and Approval in Checklists and Startup(Master Issues Log).

1. The contractor shall ensure that the subcontractors clearly list any outstanding items of the initial startup and construction checklist procedures that were not completed successfully, on an attached sheet. The form and any outstanding deficiencies shall be provided, through the owner/CM, to the CxA within two days of test completion.
2. The CxA will review the report and issue either a non-compliance report or an approval form, through the CM, to the contractor. The installing subcontractors or vendors shall correct all areas that are deficient or incomplete in the checklists and tests in a timely manner, shall notify the owner/CM as soon as outstanding items have been corrected, and resubmit an updated startup report with a Statement of Correction on the original non-compliance report. When satisfactorily completed, the CxA will recommend approval of the execution of the checklists and startup of each system.
3. Items left incomplete, which later cause deficiencies or delays during performance may result in backcharges to the contractor. Refer to Paragraph 3.05, herein, for details.

3.03 SUBMITTALS

- A. The CxA will provide appropriate contractors with a specific request for the type of submittal documentation the CxA requires facilitating the commissioning work. These requests will be

integrated into the normal submittal process and protocol of the construction team. At minimum, the request will include the manufacturer and model number, the manufacturer's printed installation and detailed startup procedures, full sequences of operation, O&M data, performance data, any performance test procedures, control drawings and details of owner contracted tests. In addition, the installation and checkout materials that are actually shipped inside the equipment and the actual field checkout sheet forms to be used by the factory or field technicians shall be submitted to the commissioning authority. All documentation requested by the CxA will be included by the subcontractors in their O&M manual contributions.

- B. The CxA will review and approve submittals related to the commissioned equipment for conformance to the contract documents as it relates to the commissioning process, to the performance of the equipment and adequacy for developing test procedures. This review is intended primarily to aid in the development of performance procedures and only secondarily to verify compliance with equipment specifications. The commissioning authority will notify the owner/CM, PM or A/E as requested, of items missing or areas that are not in conformance with contract documents and which require resubmission.
- C. The CxA may request additional design narrative from the A/E and controls contractor, depending on the completeness of the OPR documentation and sequences provided with the specifications.
- D. These submittals to the CxA do not constitute compliance for O&M manual documentation. The O&M manuals are the responsibility of the contractor, though the CxA will review and approve them.

3.04 PERFORMANCE TESTING

- A. Requirements. The performance testing shall demonstrate that each system is operating according to the documented design intent and contract documents. Performance testing facilitates bringing the systems from a state of individual substantial completion to full dynamic operation. Additionally, during the testing process, areas of deficient performance are identified and corrected, improving the operation and functioning of the systems.
- B. Coordination and Scheduling. The contractor shall provide sufficient notice, regarding their completion schedule for the construction checklists and startup of all equipment and systems to allow the performance testing to be scheduled. The commissioning team shall oversee, witness, and document the performance all equipment and systems. The CxA in association with the contractor/subcontractors and facility staff shall execute the tests. Performance testing shall be conducted after the construction checklists, and startup has been satisfactorily completed. The control system shall be sufficiently tested and approved by the CxA before it is used, to verify performance of other components or systems. The air balancing and water balancing shall be completed before performance testing of air or water-related equipment or systems. Testing proceeds from components to sub-systems to systems. When the proper performance of all interacting individual systems has been achieved, the interface or coordinated responses between systems shall be checked.
- C. Development of Test Procedures. Before test procedures are finalized, the contractor shall provide to the A/E and the CxA all requested documentation and a current list of changes affecting equipment or systems, including an updated points list, program code, control sequences, and testing parameters. Using the testing parameters and requirements in the technical specifications, the CxA shall

update/develop specific test procedures and forms to verify and document proper operation of each piece of equipment and system. Each contractor/subcontractor or vendor, as appropriate, shall provide assistance to the CxA in developing the final procedures. Prior to finalization, the A/E shall review and concur with the test procedure.

D. Test Methods.

1. Performance testing and verification may be achieved by manual testing or by monitoring the performance and analyzing the results using the control system's trend log capabilities or by stand-alone data loggers. The CxA may substitute specified methods or require an additional method to be executed other than what was specified, with the approval of the A/E and owner/CM. The CxA will determine which method is most appropriate for tests that do not have a specified method.
2. Simulated Conditions. Simulating conditions shall be allowed, though timing the testing to experience actual conditions is encouraged wherever practical.
3. Overridden Values. Overriding sensor values to simulate a condition, such as overriding the outside air temperature reading in a control system to be something other than it really is, is acceptable.
4. Simulated Signals. Using a signal generator which creates a simulated signal to test and calibrate transducers and DDC constants is generally recommended over using the sensor to act as the signal generator via simulated conditions or overridden values.
5. Altering Setpoints. Rather than overriding sensor values, and when simulating conditions is difficult, altering setpoints to test a sequence is acceptable.
6. Indirect Indicators. Relying on indirect indicators for responses or performance shall be allowed only after visually and directly verifying and documenting, over the range of the test parameters, that the indirect readings through the control system represent actual conditions and responses.
7. Setup. Each performance test shall be performed under conditions that simulate actual conditions as closely as is practically possible. The contractor/subcontractor(s) assisting the CxA in 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. At completion of the test, the contractor/subcontractor(s) shall return all affected equipment and systems to their approved operating settings.

E. Test Equipment. Refer to Part 2 for test equipment requirements.

F. Problem Solving. The burden of responsibility to solve, correct, and retest malfunctions/failures is with the contractor, with A/E approval as required.

3.05 DOCUMENTATION, NON-CONFORMANCE, AND APPROVAL OF TESTS

A. Documentation. The CxA shall witness and verify/pre-approve the documentation of the results of all performance tests. The CxA shall complete all documentation for performance testing.

B. Non-Conformance.

1. Corrections of minor deficiencies identified may be made during the tests at the discretion of the CxA. In such cases the deficiency and resolution will be documented on the procedure

- form or on an attached sheet.
2. As tests progress and a deficiency is identified, the CxA shall discuss the issue with the commissioning team, and the contractor.
 - a. When there is no dispute on the deficiency and the contractor accepts responsibility to correct it:
 - 1) The CxA will document the deficiency and the contractor's response and intentions. After the day's work, the CxA will submit the non-compliance reports to the CM. The contractor corrects the deficiency, signs the statement of correction at the bottom of the non-compliance form certifying that the equipment is ready to be retested and sends it back to the CxA.
 - 2) The contractor shall reschedule the test; and the test repeated.
 - b. If there is a dispute about a deficiency, regarding whether or not it is a deficiency:
 - 1) The dispute shall be documented on the non-compliance form with the contractor's response.
 - 2) Resolutions are made at the lowest management level possible. Other parties are brought into the discussions as needed. Final interpretive authority is with the A/E. Final acceptance authority is with the construction manager.
 - 3) The CxA documents the resolution process.
 - 4) Once the interpretation and resolution have been decided, the contractor corrects the deficiency, signs the statement of correction on the non-compliance form and provides it to the CxA, through the CM. The contractor shall reschedule the test and the test repeated until satisfactory performance is achieved.
 3. Cost of retesting a performance test hall is the contractor's.
 4. The contractor shall submit in writing to the CM at least as often as commissioning meetings are being scheduled, the status of each outstanding discrepancy identified during commissioning. Discussion shall cover explanations of any disagreement and proposals for their resolutions.
 - a. The CxA retains the original non-conformance forms until the end of the project.
 - b. Retesting shall not be considered a justified reason for a claim of delay or for a time extension by the contractor.
- C. Failure Due to Manufacturer Defect. If 10% (or three, whichever is greater) of identical pieces of equipment fail to perform to the contract documents (mechanically or substantively) due to a manufacturing defect, not allowing it to meet its submitted performance specification, all identical units may be considered unacceptable by the A/E or CxA. In such case, the contractor shall provide the owner with the following:
- a. Within one week of notification from the owner/CM, the contractor or manufacturer's representative shall examine all other identical units making a record of the findings. The findings shall be provided to the CM within two weeks of the original notice.
 - b. Within two weeks of the original notification, the contractor or manufacturer shall provide a signed and dated, written explanation of the problem, cause of failures, etc., and all proposed solutions. The proposed solutions shall not significantly exceed the specification requirements of the original installation.
 - c. The A/E will determine whether a replacement of all identical units or a repair is acceptable.

- d. Two examples, where applicable, of the proposed solution shall be installed by the contractor and the A/E shall be allowed to test the installations for up to one week, upon which the A/E will decide whether to accept the solution.
 - e. Upon acceptance, the contractor and/or manufacturer shall replace or repair all identical items, at their expense. The replacement/repair work shall proceed with reasonable speed beginning within one week from when parts can be obtained.
- D. Approval. The CxA notes each satisfactorily demonstrated function on the test form. Final approval of the performance test by the owner is made after review by the CxA and CM, following recommendations by the A/E.

3.06 DEFERRED TESTING

- A. Unforeseen Deferred Tests. If any check or test cannot be completed due to the project completion level, required occupancy condition or other deficiency, execution of checklists and performance testing may be delayed upon approval of the CxA and CM. These tests will be conducted in the same manner as the seasonal tests as soon as possible. Services of necessary parties will be negotiated.
- B. Seasonal Testing. During the warranty period, seasonal testing (tests delayed until weather conditions are closer to the system's design) shall be completed as part of this contract. The CxA shall coordinate this activity through the owner/CM. Tests will be executed, documented by the CxA and deficiencies should be corrected by the appropriate contractor/ subcontractors with the CxA witnessing. Any final adjustments to the O&M manuals and as-builts due to the testing shall be made by the contractor.

3.07 TRAINING OF OWNER PERSONNEL

- A. The contractor shall provide training coordination, scheduling of subcontractors, and ensure that training is completed. All training shall be coordinated, through the CM, with the CxA.
- B. The contractor shall ensure that each subcontractor and vendor (mechanical, plumbing, fire, electrical, specialty, etc.) shall have the following responsibilities:
 - 1. Provide, to the CxA through the CM, a training plan sixty days before the planned training covering the following elements:
 - a. Equipment
 - b. Intended audience
 - c. Location of training
 - d. Objectives
 - e. Subjects covered (description, duration of discussion, special methods, etc.)
 - f. Duration of training on each subject
 - g. Instructor for each subject
 - h. Methods (classroom lecture, manufacturer's quality video, site walk-through, actual operational demonstrations, written handouts, etc.).
 - 2. Provide designated owner personnel with comprehensive orientation and training in the understanding of the systems and the operation and maintenance of each piece of equipment that makes up the system.
 - 3. Training shall normally start with classroom sessions followed by hands-on demonstration/training on each piece of equipment.
 - 4. During any demonstration, should the system fail to perform in accordance with the

- requirements of the O&M manual or sequence of operations, the system shall be repaired or adjusted as necessary and the demonstration repeated at another scheduled time, if necessary.
5. The appropriate trade or manufacturer's representative shall provide the instructions on each major piece of equipment. Practical building operating expertise as well as in-depth knowledge of all modes of operation of the specific piece of equipment is required. More than one party may be required to execute the training.
 6. The controls contractor shall attend sessions other than the controls training, as specified, to discuss the interaction of the controls system as it relates to the equipment being discussed.
 7. The training sessions shall follow the outline in the table of contents of the operation and maintenance manual and illustrate whenever possible the use of the O&M manuals for reference.
 8. Training shall include:
 - a. Use of the printed installation, operation and maintenance instruction material included in the O&M manuals.
 - b. A review of the written O&M instructions emphasizing safe and proper operating requirements, preventative maintenance, special tools needed and spare parts inventory suggestions. The training shall include startup, operation in all modes possible, shutdown, seasonal changeover and any emergency procedures.
 - c. Discussion of relevant health and safety issues and concerns.
 - d. Discussion of warranties and guarantees.
 - e. Common troubleshooting problems and solutions.
 - f. Explanatory information included in the O&M manuals.
 - g. Discussion of any peculiarities of equipment installation or operation.
 - h. Classroom sessions shall include the use of overhead projections, slides, video/audio-taped material as might be appropriate.
 - i. Hands-on training shall include startup, operation in all modes possible, including manual, shut-down, alarms, power failure and any emergency procedures, and preventative maintenance for all pieces of equipment.
 9. The contractor shall fully explain and demonstrate the operation, function and overrides of any local packaged controls not controlled by the central control system.
- D. At the discretion of the CxA, training may occur before performance testing is complete if required by the facility operators to assist the CxA in the performance testing.
- E. Videotaping of the training sessions will be provided by the contractor and added to the O&M manuals. In addition, factory training videos identifying key troubleshooting, repair, service and/or replacement techniques shall be provided and reviewed with the owner.
- F. The CxA at the beginning of each training session presents the overall system narrative and the design concept of each equipment section.

3.08 INSTALLATION, OPERATION AND MAINTENANCE MANUALS/DATA

- A. The commissioning process requires detailed installation, operation and maintenance documentation as identified in this section and technical specifications.
- B. See Section 01 32 19 Submittal Procedures.
- C. See Section 01 78 39 Project Record Documents.
- D. See Section 23 08 00 Commissioning of HVAC.

3.09 COMMISSIONING RECORD

- A. The CxA is responsible to compile, organize and index the following commissioning data by equipment into labeled, indexed and tabbed, three-ring binders and deliver it to District, to be delivered with the O&M manuals.
- B. Commissioning Plan
- C. System reports including design narratives and criteria including sequences. Each system shall contain the startup plan and report, approvals, corrections, construction checklists, completed performance tests, trending and analysis, training plan and recommended recommissioning schedule.
- D. Final Commissioning Report including an executive summary, list of participants and roles, brief building description, overview of commissioning and testing scope and a general description of testing and verification methods. For each piece of commissioned equipment, the report should contain the disposition of the commissioning authority regarding the adequacy of the equipment, documentation and training meeting the contract documents in the following areas:
 - 1) equipment meeting the equipment specifications
 - 2) equipment installation
 - 3) performance and efficiency
 - 4) equipment documentation and design intent
 - 5) operator training

All outstanding non-compliance items shall be specifically listed. Recommendations for improvement to equipment or operations, future actions, commissioning process changes, etc. shall also be listed. Each non-compliance issue shall be referenced to the specific performance test, inspection, trend log, etc. where the deficiency is documented. The performance and efficiency section for each piece of equipment shall include a brief description of the verification method used (manual testing, BMS trend logs, data loggers, etc.) and include observations and conclusions from the testing.

END OF SECTION

SECTION 99 00 02

COMMISSIONING OF LIGHTING CONTROL & BMS SYSTEMS**PART 1 - GENERAL****1.1 SUMMARY**

- A. The owner will appoint and contract the services of the CxA. The contractor will have to provide all services to assist the owner contracted CxA. Provide all labor required by the contractors responsible for the installation of the Networked Lighting Control and the BMS systems as needed to assist the CxA in the execution of the Functional performance Test (FPT) and to provide the pre-functional tests as outlined in this specification
- B. This section describes the Acceptance Testing and documentation of the lighting system(s) and outlines the duties and responsibilities of the contractor for Acceptance Testing.
- C. This section describes the Acceptance Testing and documentation of the lighting system(s) and outlines the duties and responsibilities of the contractor for Acceptance Testing.

1.2 THE COMMISSIONING TEAM

- A. The Commissioning Team shall include:
 - 1. Electrical contractor's representative
 - 2. Lighting controls manufacturer's representative
 - 3. Building Management System Provider
 - 4. Owner's Commissioning Authority (CxA)
 - 5. Owner's Construction or Project Manager
 - 6. Inspector of Record

1.3 SUBMITTALS

- A. General:
 - 1. Pre Functional Checklists by contractor
 - a. I/O tests, source to final point of annunciation, such as graphic
 - i. Must include any binary state of the point for binary points
 - ii. Must include at least 3 states for linear analog points
 - b. Controller Communications tests
 - c. Any alarm condition, such as
 - i. Failure to follow commended state

- ii. Failure to achieve a setpoint for more than 10 seconds
 - d. Zone or Group Controls
 - e. BMS integration points, BMS to LCS, end to end
 - 2. Functional performance Test (FPT) by CxA
- B. Prior to functional testing:
 - 1. Execute all manufacturer recommended or required commissioning procedures for the equipment installed
 - 2. Submit complete pre-functional tests for review and approval by the CxA at least 4 weeks prior to testing.

1.4 COORDINATION

- A. The Contractor shall coordinate all lighting controls equipment startup and installation with the CxA.

PART 2 – PRODUCTS

2.1 TEST EQUIPMENT

- A. All standard testing equipment required to perform startup and initial checkout and required functional performance testing shall be provided by the Trade Contractor for the equipment being tested.
- B. Datalogging equipment or software required to test equipment shall be provided by the trade contractor, but shall not become the property of the owner if not an integral part of the system.
- C. All testing equipment shall be of sufficient quality and accuracy to test or measure system performance required by the Contract Documents.

PART 3 – EXECUTION

3.1 TESTING PREPARATION

- A. Prerequisites for Testing:
 - 1. Contractor shall certify that lighting systems and their controls are installed, calibrated, and operating according to the contract documents.
 - 2. Contractor shall certify that all other electrical systems identified for functional performance testing have been installed and calibrated and are operating in accordance with the contract documents.

3.2 TESTING

- A. Lighting Contractor BMS contractor and the Electrical Contractor shall perform the functional performance tests described in the following sections under observation by the CxA.
- B. The details of these functional performance tests shall be reviewed and refined during the construction phase by the CxA
- C. The details of these functional performance tests shall be reviewed and refined during the construction phase by the CxA
- D. The trend log defined in the Technical specifications shall be implemented and operational during all portions of the FPT. As a minimum all hardware points such as ON/OFF states of lights, occupancy levels and light levels shall be trended in intervals no longer than 15 minutes, analog and COV for binary points. All setpoints shall also be trended based on the same principals

3.3 ELECTRIC LIGHTING FUNCTIONAL PERFORMANCE TESTS

All test in this section are performed with the CxA by the lighting controls, BMS contractor and electrical contractor.

- A. On/Off controls per Sequence Of Operations (SOO) as shown in the contract documents
- B. Each dimming level measured for each lighting zone in at least two locations. Location and test method to be determined between the electrical engineer of record and the CxA.
- C. Light level verification for non- dimmable areas for each in at least one location per zone. Location and test method to be determined between the electrical engineer of record and the CxA.
- D. Test each scene for intended function per contract documents.
- E. Each occupancy related command issued by the BMS to the networked lighting control systems and the associated response form the networked lighting control system

END OF SECTION

Section 99 00 01

TECHNICAL SPECIFICATIONS AND REQUIREMENTS

DESIGN-BUILD SERVICES FOR

**CAÑADA COLLEGE AND COLLEGE OF SAN MATEO ROADWAY AND PARKING
LOT LED FIXTURE RETROFIT PROJECT**

District RFP Number 86662

San Mateo County Community College District
3401 CSM Drive
San Mateo, CA 94402

March 11, 2014

DOCUMENT 99 00 01

Cañada College and College of San Mateo Roadway and Parking Lot LED Fixture Retrofit Project

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Technical Specifications and Requirements

1. Site Access

Design-Build Entity shall conform to all District rules and requirements for accessing sites, including all provisions of Education Code section 45125.1. Road usage, road closures, number of vehicles, access points, etc., may be regulated by the District. Site visits shall be approved and proper check-in requirements must be followed.

2. Project Management

2.1 PROJECT MANAGER

Design-Build Entity shall assign a Project Manager from their firm upon execution of the Agreement and receipt of Notice to Proceed. The Project Manager shall manage all design, procurement, construction, and commissioning phases of the Project. The construction of LED systems shall be accomplished by Design-Build Entity with an on-site construction management team. The Project Manager shall ensure that all contract, schedule, and reporting requirements of the Project are met and shall be the primary point of contact for the District.

2.2 PROJECT SCHEDULE

A Project Schedule is to be prepared and submitted to the District within 14 days of Agreement execution. The District will review and approve the Project Schedule prior to the initiation of work. Updates shall be submitted every other week, though the District may allow less frequent updates at their discretion. The submittal shall be a Critical Path Method (CPM) schedule describing all Project activities, dependencies, and sequencing of tasks. In particular, Design-Build Entity shall include District review of submittals on the Critical Path. The Project Schedule shall describe all elements of project design, equipment procurement, construction and commissioning, and shall be submitted in electronic format (MS Project or Primavera P6). Adobe Acrobat is not acceptable. The schedule shall also reflect the requirement that construction activities must be coordinated to minimize impacts on normal operations at each site, including ongoing construction activities.

Sufficient information shall be shown on the Project Schedule to enable proper control and monitoring of the Work. The Project Schedule shall show the intended time for starting and completing each activity; the duration of each activity; submittal and approval times; design; delivery of materials, equipment and software; all testing; and other significant items related to the progress of the Work. The Project Schedule shall include a CPM network diagram of sufficient detail to show how Mandatory Milestones are intended to be met. If a schedule submitted by Design-Build Entity includes changes affecting the achievement of Mandatory Milestones, Design-Build Entity should clearly identify and justify those changes.

Design-Build Entity is encouraged to phase the Work in a way that supports efficient and effective delivery of design and build services. The following Mandatory Milestones shall be reflected in the schedule and where applicable, represents the dates upon which each milestone is to be achieved for all sites in the Agreement.

Mandatory Milestone	Date
Agreement Executed/NTP Issued (anticipated)	May 29, 2014
Construction Documents Completed – All Sites	
DSA Application Approved (if applicable)	
Substantial Completion – All Sites	
Final Completion – All Sites	

2.3 2.3 SUBMITTALS

Design-Build Entity shall provide the following submittals as part of the performance of the Work. The cost of developing and providing submittals shall be included in the Project price.

Submittal	Submittal Date
I. System Design	
a. System Design Documentation	At each design milestone
b. Warranties	At Construction Documents milestone
c. Testing Plan	At Construction Documents milestone
d. Training Plan	At Construction Documents milestone
II. Procurements and Construction	
a. Quality Assurance / Quality Control (QA/QC) Plan	30 days before commencement of construction
b. As-built Documentation	After completion of Proving Period
III. Testing	
a. Acceptance Test Results	After Acceptance Test
IV. Training	
a. Training Materials	30 days before Training Session
b. Operations & Maintenance Manual	30 days before Training Session

2.4 2.4 UTILITY RETROFIT INCENTIVES AND PROPOSITION 39 DOCUMENTATION

The District has prepared and submitted the necessary documentation for Utility Retrofit incentives from the CCC-IOU Partnership Customized Retrofit program. Upon execution of the Agreement, Design-Build Entity shall be responsible for implementing the project such that the requirements of the Incentive program are met. Design-Build Entity shall assist the District in satisfying the requirements of the Incentive Program. Design-Build Entity shall be responsible for providing updated documentation to Incentive Program administrators throughout the project, as required by rules of the relevant Incentive Programs. This will include copies of detailed, itemized invoices for the work performed and other relevant documentation as required by the Incentive Program. This will also include in a template to be approved by the District prior to project implementation an itemized record of removed and retrofit fixture counts, types and wattages, material and product specifications. Inventory list shall be submitted on a weekly basis. All incentives shall be paid to the District and used to offset the cost of the project.

The District is funding this project using the California Proposition 39 (Prop 39) program. Upon execution of the agreement, design-build entity shall be responsible for implementing the project such that the requirements of the Prop 39 Program are met. Design-Build Entity shall assist the District in satisfying the requirements of the Prop 39 Program. Design-Build Entity shall be responsible for providing updated documentation to Prop 39 Program administrators throughout the project, as required by program rules.

Information regarding both the Utility Retrofit Incentive Program and the Proposition 39 Program can be found at the following web address

3. <http://www.cccutilitypartnership.com/>

3.0 SYSTEM DESIGN

3.1 DESIGN REVIEW PROCESS/PHASES

The District will review and approve design documentation based on the requirements in this RFP. Additional documents may be requested by the District as needed. The precise organization and format of the design submittals shall be agreed upon by Design-Build Entity, the District, and the DSA (if applicable) prior to the first design submission. The District will review all submittals, provide written comments, and conduct Design Review Meetings for each stage of the process. Design-Build Entity shall provide additional detail, as required, at each successive stage of the Design Review. Design-Build Entity shall not order equipment and materials until Schematic Design submittals have been approved by the District. Design-Build Entity shall not begin construction until Construction Documents have been approved and all required permits have been obtained, including DSA (if applicable) approval. The District will formally approve, in writing, each phase of the design and is the sole arbiter of whether each phase of the design has been completed. The Design-Build Entity shall not enter a subsequent design phase without the approval of the District.

Design-Build Entity shall be held solely responsible for obtaining approvals from the District, including revising designs as necessary until they are given approval by the District and all other required entities and organizations. A description of requirements for each design phase is provided below. System design shall comply with all applicable laws, statutes, ordinances, codes, rules, and regulations for construction projects of jurisdictions with authority over the District. Design-Build Entity is responsible for providing designs approved by the appropriate professional engineers registered in the State of California. System designs must take into account District aesthetic issues and not conflict with any current District operations.

3.1.1 Schematic Design

Design-Build Entity shall prepare Schematic Design documents consisting of drawings and other documents illustrating the scale and relationship of Project components, including but not limited to, schematic design studies, electrical single-line diagrams, system architectures for the controls system, equipment lists and bills of material, and equipment cut sheets or specifications.

3.1.2 Design Development

Design Development documents shall consist of elevations, cross sections, and other drawings and documents necessary to depict the design of the Project. This submittal shall include general project layout, architectural, structural, and electrical design documents and equipment specifications to illustrate the size, character, and quality of the Project and demonstrate that it meets the performance specifications defined in this RFP. The Design Development documents shall represent 100% of the intended scope for the Project.

3.1.3 Construction Documents

Design-Build Entity shall prepare Construction Documents (CDs) depicting the detailed construction requirements of the Project. CDs shall conform to all applicable governmental, regulatory, and code requirements, and all pertinent federal, state, and local permitting agencies. The CDs shall show the work to be done, as well as the materials, workmanship, finishes, and equipment required for the Project. CDs shall comply with and illustrate methods to achieve the performance specifications of this RFP. CDs shall be stamped by the engineer of record and any other required engineering disciplines.

3.2 DESIGN-BUILD ENTITY'S LICENSE CLASSIFICATION

In accordance with the provisions of California Public Contract Code §3300, the District requires that Respondents possess, at the time of submission of a Proposal, at the time of award of the Agreement and at all time during construction activities, a General Contractor License (B) and Electrical Contractor License (C-10). It shall be acceptable for a Respondent that does not possess a C-10 License to list a Subcontractor with a C-10 License.

3.3 DESIGN SUBMITTALS

Design-Build Entity shall prepare a comprehensive submittal package for each phase of the Work that will be reviewed and approved by the District. Each submittal package shall include, at a minimum, the required elements that convey in sufficient detail for each phase of the design, the necessary documentation as follows:

- Site Layout Drawings
- Illuminance Calculations
- Energy Savings Calculations
- Construction Specifications (trenching, mounting, etc.)
- Equipment Layout Drawings
- Detailed Drawings
- Single-Line Diagrams
- IT Network Connection Diagrams
- Control System Architecture
- Structural Drawings
- Manufacturer's Cut Sheets
- Equipment Specifications
- Architectural Drawings/Installation Details
- Graphical representation of grouping/zoning of fixtures

Design-Build Entity shall include adequate time for District review and approval of submittals, as well as re-submittals and re-reviews. Minimum District review time shall be ten (10) days from the date of receipt of each submittal package during each phase of the Design Review.

3.4 DIVISION OF THE STATE ARCHITECT (DSA) REVIEW

Construction Documents must be reviewed and approved where applicable by the Division of the State Architect (DSA). For poles less than 35 feet tall (lighting poles, flag poles, etc.), Design-Build Entity may utilize IR A-22 line item #3 DSA review exemption. For educational systems, Design Builder must comply with full DSA review for Design-Build Entity shall be responsible for obtaining all DSA approvals and shall account for DSA requirements in their system designs, project pricing, and schedule. The District will not grant Design-Build Entity relief based on Design-Build Entity's incomplete or incorrect understanding of DSA requirements.

3.5 TECHNICAL REQUIREMENTS

All documentation and components furnished by Design-Build Entity shall be developed, designed, and/or fabricated using high quality design, materials, and workmanship meeting the requirements of

the District and all applicable industry codes and standards. Reference is made in these specifications to various standards under which the Work is to be performed or tested. The installations shall comply with at least, but not limited to, the latest approved versions of the International Building Code (IBC), National Electrical Code (NEC), and all other federal, state, and local jurisdictions having authority.

3.5.1 Electrical Design Standards

The design, products, and installation shall comply with at least, but not limited to, the following electrical industry standards, wherever applicable:

- Electronic Industries Association (EIA) Standard 569
- Illumination Engineering Society of North America (IESNA) Lighting Standards
- Institute of Electrical and Electronics Engineers (IEEE) Standards
- National Electrical Manufacturers Association (NEMA)
- California Electric Code (CEC)
- Insulated Power Cable Engineers Association (IPCEA)
- Certified Ballast Manufacturers Association (CBMA)
- Underwriters Laboratories, Inc. (UL)
- National Fire Protection Association (NFPA)
- Pacific Gas and Electric Utility Requirements
- American National Standards Institute (ANSI)
- Occupational Health and Safety Administration (OSHA)
- American Disabilities Act (ADA)
- American Society for Testing and Materials (ASTM)
- National Electrical Contractors Association (NECA)
- National Electrical Testing Association (NETA)
- International Building Code (IBC)
- All other Authorities Having Jurisdiction

3.5.2 Fixtures

In addition to the above, the LED fixtures proposed by Design-Build Entity shall comply with at least, but not limited to, the following:

- A. Fixtures shall be listed on the DesignLights Consortium® Qualified Products List.
- B. Fixtures and equipment shall be new, undamaged, fully warranted without defect.
- C. If LED modules using hazardous materials are to be provided, then the environmental impact of the hazardous material usage must be disclosed, including any special maintenance requirements and proper disposal/recycling of the modules at the end of their useful life.
- D. Fixtures shall include all control components listed in section 5 and elsewhere in this specification. Such components are individual LED controllers capable of monitoring the fixture photocell and motion detector and communication between the fixture and the networked LCS
- E. New Fixture Installations:

- a. Design-build entity is responsible to provide in addition to the replacement of the existing fixtures, new lighting poles and fixtures at the general locations depicted in the following sheets:
- b. Sheet E-1: Site Plan – College of San Mateo
- c. Sheet E-2: Site Plan – Canada College
- d. Design-build entity shall propose a fixture and controls that meets the required performance specifications set forth in this document. The location and quantity of new fixtures will be determined by the illumination requirements that have been set forth in this document. Design-build entity shall be responsible to coordinate final locations with the district.
- e. Design-build entity shall propose a pole that matches the existing height and design of similar poles installed throughout the respective campus.
- f. Design-build entity shall be responsible to intercept and extend the existing infrastructure and wiring to the new lighting poles and fixtures. Design-build entity shall be responsible to verify the existing power available where circuits will be extended.

3.5.3 Mounting Systems

The mounting systems shall be designed and installed with reliable components proven in similar projects, and shall be designed to resist dead load, live load, corrosion UV degradation, wind loads, and seismic loads appropriate to the geographic area over the expected project lifetime. The Design-Build Entity's design shall sufficiently respond to the design requirements imposed by Federal, State, and local jurisdictions in effect at the time of Agreement execution and any pending code decisions affecting the design shall be identified during Schematic Design. Design-Build Entity shall conduct an analysis, and submit evidence thereof, including calculations, of each structure affected by the performance of the scope described herein, and all attachments and amendments. The analysis shall demonstrate that existing structures are not compromised or adversely impacted by the installation of new lighting equipment, or other activity related to this scope. Mounting systems must also meet the following requirements at a minimum:

- A. All structural components, including fixture support structures, shall be designed in a manner commensurate with attaining the projected design life. Particular attention shall be given to the prevention of corrosion at the connections between dissimilar metals.
- B. Thermal loads caused by fluctuations of component and ambient temperatures shall be accounted for in the design and selection of mounting systems such that neither the mounting system nor the surface on which it is mounted shall degrade or be damaged over time.
- C. Each fixture mounting system must be certified by the fixture manufacturer as (1) an acceptable mounting system that shall not void the fixture warranty, and as (2) a conforming mounting system per the fixture manufacturer's mounting parameters.
- D. Final coating and paint colors shall be reviewed and approved by the District during Design Review.
- E. Painting or other coatings must not interfere with the grounding and bonding of the system.

3.5.4 Corrosion Control

- A. Each LED system and associated components must be designed and selected to withstand the environmental conditions of the site (e.g., temperatures, winds, rain, flooding, etc.) to which they will be exposed without undue maintenance.
- B. Particular attention shall be given to the prevention of corrosion at the connections between dissimilar metals.

- C. A Corrosion control plan must be submitted by Design-Build Entity during the Design Review process for District approval which will include at a minimum the analysis of the corrosion risk and mitigation measures.

3.5.5 Earthwork and Spoils

Design-Build Entity is responsible for all necessary site earthwork in conjunction with and in preparation for any fixtures. Spoils may be used at the site or on the Campus with approval from the District. It is the responsibility of the Design-Build Entity to manage and remove any earthwork spoils at their own expense, if required to do so by the District.

3.5.6 3.5.7 Wiring and Cabling Runs

- A. Design-Build Entity shall layout and install all AC conductors in conduit.
- B. Conduit buried underground shall be suitable for the application and compliant with all applicable codes. PVC shall be constructed of a virgin homopolymer PVC compound and be manufactured according to NEMA and UL specifications. All PVC conduit feeders shall contain a copper grounding conductor sized per NEC requirements and continuity shall be maintained throughout conduit runs and pullboxes. Minimum conduit size shall be ¾". A tracing/caution tape must be installed in the trench over all buried conduit.
- C. Conduit installed using horizontal directional boring (HDB), shall include tracer tape or traceable conduit. The minimum depth of the conduit shall be per NEC 2011 Article 300.5. The Design-Build Entity is responsible for demonstrating that all conduits installed utilizing horizontal boring meets the minimum depth requirement and is solely responsible for any remediation costs and schedule impacts if the specification is not met. Design-Build Entity must provide documentation of final depth and routes of all conduits installed in horizontal bores.
- D. Conduit installed on building roofs shall not be installed near roof edges or parapets to reduce visibility. Any conduit penetrations through roof surfaces shall not be made within five (5) feet of the roof edge to reduce visibility. If conduit is installed on the exterior face of any building, it shall be painted to match the existing building color. In all cases, the visible impact of conduit runs shall be minimized and the design and placement of conduit shall be reviewed and approved by the District as part of Design Review.
- E. Electro-metallic tubing (EMT) shall be used in indoor, above grade locations and where conduit needs to be protected from damage. EMT shall not be installed underground, outdoors, or embedded in concrete. EMT shall be cold-rolled zinc coated steel and be manufactured to UL and ANSI standards. Fittings shall be watertight and malleable gripping ring compression type. Pressure cast material for nuts of compression ring type fittings and set-screw type connections are not acceptable.
- F. Galvanized Rigid Conduit (GRC) shall be used where subject to physical damage in exposed areas. GRC shall be continuous hot-dipped galvanized manufactured per UL and ANSI requirements. Rigid aluminum conduit is not acceptable. Conduit bodies for use with steel conduit, rigid or flexible, shall be manufactured per UL requirements and shall be cast metal with gasketed closures. Fittings for GRC conduit shall be malleable iron or forged steel with cadmium or zinc coating. Union couplings for joining rigid conduit at intermediate runs shall be of the same material as the conduit. Couplings shall be threaded concrete-tight to permit

completing conduit runs when neither conduit can be turned and to permit breaking the conduit run at the union. Set screw connectors are not acceptable.

- G. Minimum conduit size shall be ¾”.
- H. All conduits, boxes, enclosures, etc. shall be secured per NEC 690 requirements.
- I. All conductors shall be insulated copper with type THHN/THWN, rated for 600V, maximum.
- J. All items shall be U.L. listed and shall bear the U.L. label.
- K. All spare conduits shall be cleaned, mandrelled, and provided with a pullwire. Spare conduits shall be required for security cameras for ground mount systems.
- L. All feeders and branch circuits shall be sized to minimize voltage drop and losses and shall be in compliance with CEC requirements.
- M. All systems, conduit, boxes, components, etc. shall be grounded and bonded per California Electrical Code requirements.
- N. Design-Build Entity will be responsible for locating, identifying and protecting existing underground utilities conduits, piping, substructures, etc. and ensuring that no damage is inflicted upon existing infrastructure.

3.5.7 System Security Requirements

- A. Design-Build Entity shall utilize tamper-resistant construction for all accessible LED fixture mounting.
- B. Design-Build Entity shall utilize tamper-resistant fasteners for all electrical fittings, pull boxes and other enclosures.

3.5.8 Other Considerations

- A. All Balance of Systems (wiring, components, conduits, and connections) must be suited for conditions for which they are to be installed.
- B. Outdoor enclosures shall be rated NEMA 3R, NEMA 4, or NEMA 4X.

3.5.9 Permits and Approvals

Design-Build Entity shall produce required documentation in sufficient detail to obtain all regulatory approvals requested for design, construction and operation of the system, including but not limited to all federal, state, and local permits. Securing all approvals, all permits and paying all fees shall be the sole responsibility of Design-Build Entity. To that end, Respondent shall provide a design that is acceptable to the state, county, and local authorities having jurisdiction over this project. The proposed design shall be suitable for construction under the guidelines and regulations in effect at the time the Agreement is executed. The District will not accept responsibility for cost increases or delays resulting from inaccurate interpretation of existing codes and standards.

3.5.10 Environmental Approvals

Design-Build Entity shall comply with all State and Federal regulations. Design-Build Entity shall provide the necessary documentation to the District to satisfy the requirements for compliance. Reference Sections 01 41 00 Regulatory Requirements and 01 41 01 Regulatory Requirements – Hazardous Materials.

3.5.11 FAA Requirements

Design-Build Entity shall be responsible to submit the appropriate FAA Form 7460-1, along with any other required forms and documentation, for all systems within the approach or takeoff paths or on the property of airports as defined by the Code of Federal Regulations Title 14 Part 77.9.

3.5.12 Warranties

Design-Build Entity shall provide a comprehensive warranty schedule in table format on all system components against defects in materials and workmanship under normal application, installation, and use and service conditions.

All work performed by Design-Build Entity must not render void, violate, or otherwise jeopardize any preexisting District facility or building warranties or the warranties of system components.

- Minimum Construction Warranty: 12 months from the period of acceptance
- Minimum Component Warranty: 12 Months from the period of acceptance
- Minimum Fixture Warranty: 60 Months from the period of acceptance
- Component Warranties that exceed the 12 Month period shall be fully extended to the owner.
- Any Components that are installed within/on the fixture shall not void the fixture warranty.

4. **4.0 Procurement/Construction**

4.1 EXISTING CONDITIONS AND DRAWINGS

The Design-Build Entity is responsible for field verification as needed to ensure he/she is satisfied with the existing condition in order for the selected Design-build entity to provide scope as described herein.

4.1.1 Existing Parking Lot and Roadway Pole Lighting

The current parking lots and roadway lighting at San Mateo Community College District contain multiple luminaires and pole bases as depicted in the following sheets:

- C. **Sheet E-1: Site Plan – College of San Mateo (3/6/2014)**
- D. **Sheet E-2: Site Plan – Cañada College (3/6/2014)**
- E. Existing panels or any other already existing equipment shall be assumed to be in working order. The existing infrastructure (conduit, wiring, poles, etc.) are likely be reusable for the new system, with any exceptions to be noted by the Respondent. It is the design-build entity's responsibility to check for hardware or software compatibility with all existing equipment to be reused. Where applicable, the Design-Build Entity shall provide a solution for the proposed fixture in the event that the existing infrastructure is found to be compromised or unusable in any way. All wiring, circuitry or other necessary work shall be included and noted in the Design-Build Entity's proposal in this case.

All non-LED parking lot(s) and roadway lighting (metal halide, high pressure sodium etc.) in the areas designated will be replaced with LED luminaires unless specifically noted.

4.1.2 Existing Lighting Controls

The current pole lighting circuitry is connected on existing Lighting Control Panels (LCP) for exterior lighting via the campus BMS (Building Management System). The existing panels and LCP are assumed to be fully operational. The Contractor shall coordinate with Facilities and the District to ensure system is fully operational before any modifications are done to the existing LCP. The existing LCP associated with the LED replacement will need to be adjusted and/or modified to provide a hard wired connection to provide continuous power at the pole fixture. The Contractor shall be responsible to provide and coordinate the existing LCP modifications, including programming changes on the existing LCP. This also includes: scheduling with District to work on the existing LCP, provide reprogramming of the existing BMS to through the District's BMS service contractor to ensure operation, relabeling electrical panels to address (E) roadway and parking lot lighting circuitry.

Any existing light fixtures and controls that are not being replaced as part of the scope of work shall remain fully operational throughout and beyond the construction and installation period.

4.2 SCOPE OF SUPPLY

Design-Build Entity shall provide all necessary labor, materials, equipment, and services required to install complete integrated lighting system, as described in this Section. The lighting system installations shall comply with all contract requirements, technical specifications, approved design documents, and applicable regulatory codes and requirements. Design-Build Entity shall submit As-Built Construction Drawings in hard copy with four (4) sets and an electronic copy in DWG format on compact disc to the District after completion of the Proving Period for each system at each site.

The Design-build entity shall review the required scope and ensure scheduling of parking lot and roadway lighting repair is coordinated with San Mateo County Community College District (SMCCD) guidelines for traffic safety.

4.2.1 New Parking Lot and Roadway Pole Lighting with Networking Capabilities.

Existing non-LED lights (metal halide, high pressure sodium, etc.) unless noted shall be replaced with new LED fixtures that are capable of being controlled through an individually addressable controls system

The new LED parking lot(s) and roadway lighting shall reuse the existing infrastructure and wiring to the greatest extent possible to connect the new LED fixtures to the existing infrastructure. Existing wiring that is damaged or defective shall be replaced.

The Design-build entity is responsible for all new data and power wiring installations required for a complete and functioning system. All data and power wiring, if required, shall comply with all local, state, federal codes and SMCCCD design standards.

4.2.2 Lighting Pole Identification

All lighting poles where new work is performed shall be provided with a number system to identify the pole, subject to approval of District. Design-Build Entity shall coordinate with District to identify the parking lot # assigned to each individual parking lot prior to labeling. Design-build entity shall provide industry standard outdoor rated label. Locate label 10 feet above finished grade to avoid vandalism.

4.2.3 Lighting Pole and Fixture Replacement

In the event where the Design-Build Entity deems it necessary to replace or modify an existing lighting pole, the associate fixture shall match existing height and design of adjacent poles and arms.

4.3 MATERIALS AND EQUIPMENT

Materials and equipment incorporated in the Work shall be new and suitable for the use intended. No material or equipment shall be used for any purpose other than that for which it is designed, specified or indicated.

Design-Build Entity shall use means necessary to protect the materials and equipment before, during and after installation. Design-Build Entity shall promptly replace lost or damaged materials and equipment with equal, or District-approved, replacements, or repair them, at no additional cost to the District.

5. Performance Specifications

5.1 FIXTURES

- A. Proposed fixture must be UL listed for wet locations and wiring cavity must be field accessible for service or repair needs.
- B. At the College of San Mateo Design-Build Entity shall attempt to aesthetically match LED fixtures already installed at the College of San Mateo
- C. At Cañada College lighting fixtures are not required to match those installed at the College of San Mateo but are required to meet all other performance specifications as spelled out in this RFP
- D. Fixture manufacturer shall be an established reputable company with at least 5 years of business in the industry.
- E. Clearly show that the proposed fixtures are DesignLights Consortium (DLC) approved, and/or Utility approved for an incentive.
- F. The proposed fixture shall be a complete replacement of the head. Proposer should clearly indicate in their Proposal response which fixture replacement is proposed for the associated existing fixture.
- G. The proposed product meets or exceeds the District standards for performance. Provide backup data, materials and calculations.
- H. The proposed lighting fixture source must provide a minimum of 60 lumens/Watt.
- I. Luminaire shall incorporate thermal management to maximize LED performance and life, and to extend component life.
- J. LED drivers shall meet the following requirements:
 - a. Drivers shall have a minimum efficiency of 85%
 - b. Starting temperature -40°F
 - c. Input voltage 120V to 480V ($\pm 10\%$)
 - d. Power Factor (PF): ≥ 0.90
 - e. Total Harmonic Distortion (THD): $\leq 20\%$
 - f. Drivers must be Reduction of Hazardous Substances (RoHS) compliant.
 - g. 0-10V Dimming
- K. LED sources shall meet the following requirements:
 - a. Operating temperature rating shall be between -40°F and 120°F
 - b. Correlated Color Temperature (CCT): Options for multiple Color temperatures between 2700K - 6000K
 - c. Color Rendering Index (CRI): ≥ 70

- d. Minimum of 60 lumens/Watt
- e. LED wattages shall utilize high performance Class 1 LED system.
- L. The Design-Build Entity to verify proposed fixture matches existing LED fixture, where applicable, color temperature and CRI as well as the wind and weight load limits of the reused pole and mounting equipment.
- M. Describe in the proposal the ability of your fixture and/or control methodology to vary light distribution.
- N. DBE to provide the appropriate fixture scale for the pole height.

5.2 ILLUMINATION REQUIREMENTS

- A. The proposed product shall be capable of providing IES types II, III, IV, and V distributions as well as backlight control.
- B. The proposed product meets or exceeds the performance of the existing light fixtures. Provided backup data, materials and calculations.
- C. The proposed products meet or exceed the IES standard requirements for the area being illuminated. Backup data calculations must be provided. Calculations must include a point by point photometric analysis for each area using IES files for the proposed fixture. Indicate average footcandles, and average-to-minimum footcandles.
- D. It is the Design-Build Entity’s responsibility to provide a fixture that is capable of meeting or exceeding the existing lighting illumination throughout the college campus. Design-Build Entity’s shall design toward the following site lighting illumination requirements.
- E. Illuminance levels shall meet the requirements outlined in the Tables G and H below
- F. Illumination shall meet the enhanced security Illuminance levels defined in tables G and H below for programmed “occupied” periods and be reduced to Basic Maintained Illuminance during programmed “unoccupied” periods.

G. Parking Lot Illumination Requirements			
Level	Horizontal Illuminance Footcandles (avg)	Vertical Illuminance Footcandle (avg)	Uniformity Ratio (max/min)
Basic Maintained Illuminance	0.2	0.1	20/1
Enhanced Security Illuminance	0.5	0.25	15/1

H. Street Lighting Illumination Requirements			
Street Lighting Classification	Illuminance Footcandle (avg)	Illuminance Uniformity	
		(avg/min)	
Road Way Lighting	0.5	6/1	

5.3 LIFE CYCLE COST

For purposes of calculating life cycle cost, respondent to provide the following data:

- A. . Cost per fixture to District (\$/fixture)

- B. Fixture Life (hours) – The point at which fixture emits 70% or less lumens of rated capacity
- C. Total number of fixtures required (each) – Calculated by Design-build entity as the total number of fixtures required to meet lumens called out in RFP x no. of fixtures/fixture.
- D. Energy consumption per fixture (watts)

District to then calculate Life Cycle Cost as follows:

$$\text{Fixture cost (a/b) x c x 50,000 hours plus Energy Cost =} \\ \text{c x d x 50,000 hours x 1 kW/1000 Watts x \$0.12/kwh}$$

5.4 CONTROLS

5.4.1 Network Lighting Controls System (LCS) :

- A. Communications between fixtures and the network LCS shall be conducted over IEEE802.15.4 using Zigbee Mesh or other wireless technology. If connectivity between the LCS and the mesh network fails, the default for lighting shall be designated as “ON”
- B. The network lighting control system will control all lights in zones (parking lot, roadway, etc.) and sub zones (intersections areas, high traffic, secure areas, etc.) that will be defined by the user during the project. The network lighting control system will execute the sequence of operations that is defined by the user during the project.
- C. Photocell control will be provided on each fixture to control a high (adjustable) and low (adjustable) light level based on a signal from the network lighting control system.
- D. Occupancy sensors will be installed on each fixture to control a high (adjustable) and low (adjustable) light level based on a signal from the network lighting control system.
- E. The network lighting control system will be capable of allowing each fixture to be controlled by its own occupancy sensor and photo cell, with programmable time delays, sensitivity and light levels.
- F. The network lighting control system will also allow fixtures to be in multiple control groups so that their on-off and dimming operation is remotely controlled according to programmable logic. This will allow a large group, such as a section of parking lot, to be controlled together. It will also allow the programming of smaller groups, such as every fixture adjacent to any other fixture, so that a finer level of control can be achieved. Each fixture can be in multiple control groups.
- G. The network lighting control system shall have the capability to monitor, track, report, and store operating and energy use data for the controlled fixtures.
- H. The network lighting control shall retain basic sequence of operations and functionality in the event of loss of communication with the BMS.
- I. The network lighting control system shall be provided with functionality to override the basic control sequences, e.g. when override control is required.

- J. When the system operates improperly, such as fixtures not following required commands, the network lighting control system software shall initiate factory-programmed diagnosis of failure and display messages identifying the problem and possible causes.
- K. The network lighting control system functionality should be accessible through a web-based service with multi-level password and access control.
- L. The network lighting control system shall have the ability to interface with the existing campus building management system via BACnet IP.
- M. DBE shall provide a data drop (CAT 5 or 6 where appropriate) and route to the nearest IDF cabinet or data connection (in Coordination with District Information Technology Services).

5.4.2 LCS Controls Execution

System manufacturer shall meet the following qualifications and at a minimum shall make the following site visits to ensure proper system installation and operation:

- A. Qualifications for factory certified field service engineer:
 - a. Minimum experience of 2 years training in the electrical/electronic field.
 - b. Certified by the equipment manufacturer on the system installed.
- B. Prior to installation of wiring, system manufacturer shall review with the District the following items:
 - a. The desired sequence of operations, grouping and sub grouping of fixtures associated with the advanced control system. (Street Lighting, Parking Lots, Secure Areas etc.)
 - b. Network wiring requirements for the advanced control system.
 - c. Connections to other equipment (BMS).
 - d. Advance control system locations and location of associated devices.
- C. Upon completion of the installation, all systems of the networked lighting control system including all other components controlling the associated lights, such as photocell, individual lighting controllers and the networked lighting control systems shall be tested by the manufacturer's certified field service engineer(s) who will commission communication devices, program schedules and all interfaces to ensure a trouble-free wireless outdoor monitoring and control system. System manufacturer shall provide operation, administration and maintenance training of the advance control system to the District at the project site. It shall be comprehensive and cover all aspects of the wireless communication monitoring and advance control system operation, configuration and troubleshooting. Submit a synopsis of the training content with detailed content for approval to the owner at least 4 weeks prior to the initial training.

5.5 BUILDING MANAGEMENT SYSTEM (BMS) INTEGRATION

- A. The DBE is responsible for ensuring that the network lighting control system (LCS) shall be interfaced to the existing campus BMS. The network lighting control system will control all lights in zones that will be defined by the user during the project. In general, the BMS will provide time schedule information and will activate and deactivate those zones only. The network lighting control system will execute the sequence of operations that is defined by the user.
- B. The zone override and the schedules are communicated via BACnet from the BMS system.

5.5.1 BMS Integration to LCS

- A. LCS shall utilize “open” system architecture(s) using the BACnet IP communication protocol (ASHRAE standard 135-2012) communications interfaces with 3rd party equipment. **No proprietary communications protocol shall be allowed.**
- B. Develop, install and test software sequences of operation as specified and required for the efficient operation of all included systems. This shall include work necessary to provide for complete and operating systems whether or not specifically defined herein.
 - a. A breakdown of test procedures and activities with associated hours should be submitted.
 - b. Based on supplied specifications and drawing outlining the system performance; estimates and description of required functional tests should be provided.
- C. Develop and provide graphical dynamic data system displays in accordance with project and specification requirements. Different levels of graphics shall be developed for facilities operators with varying levels of control. In order to facilitate this Operator-BMS Interface, it is critical that the LCS and BMS integration be able to display an accurate graphic representation of each piece of equipment on the sites. In addition, Equipment Graphics representing the actual interface of each piece of integrated equipment shall be provided for all integrated systems. These graphics shall incorporate real time live data from the associated interface points.
 - a. Overall Site Graphic
 - b. Illuminated Area Graphics
 - c. Lighting System Graphics
 - d. Equipment graphics shall have accurate representation itself. The graphics shall incorporate real time live data from the associated points to form a complete system.
- D. Provide all point to point checkout, controller startup, controller LAN configuration and startup, commissioning, acceptance testing and demonstration of the entire LCS on site. Provide complete adjustment, calibration and tuning of all LCS set-points, system flags, equipment run times, and sequences.
- E. Instruct District’s operating staff on maintenance and operation of the complete LCS and BMS integration.

5.5.2 BMS Integration Special Instructions

- A. Integrate into the design and coordinating all aspects of the work required to be performed by each impacted sub-contractor in order to properly integrate their work.
- B. Provide dynamic graphic displays depicting all systems and equipment operations and modes connected under this Work.

5.5.3 BMS Integration Controls Execution

5.5.3.1 Sub-System Requirements

- A. Provide all software, programming labor, point mapping, configuration and startup of specified communications to enable communication to the existing Schneider Electric Niagara R2 or the future Niagara AX Building Management System (BMS).

5.5.3.2 Campus Controls Interface/Monitoring

- A. Design-build entity is responsible for tie-in of Lighting control system from each Campus.
- B. Coordinate into work of BMS controls and sequence based upon Lighting System requirements for exterior lighting zones.
- C. Review each project Campus and Site for additional monitoring/interface requirements for the Lighting Control system. Lighting Control System monitoring requirements shall include mapping of critical system requirements as necessary at each building as is required for 24 hour alarm monitoring of critical systems.

5.5.3.3 Electrical Wiring and Materials

- A. Install, connect and wire the items included under this Section. This work includes providing required conduit, wire, fittings, and related wiring accessories.
- B. Provide, coordinate and install conduit and wiring between all control devices (of all trades affected) and the nearest standby power source.
- C. Provide/Install all necessary transformers/power supplies required to power LCS instrumentation.
- D. Specify and coordinate cabling at and between each building within the Campus and Site as necessary. Wiring between buildings shall be run in dedicated conduits. Allow tie-in of all data from this system to Campus network system at the main Operator's Work Station (OWS). The system shall operate from OWS regardless of web connectivity). All systems provided for the campus shall be fully web enabled.
- E. DBE to coordinate with BMS provider and LCS equipment manufacturer to ensure the required amount and type of integration hardware is provided to meet the intent of the BMS/LCS functionality defined in this RFP.

5.5.3.4 System Configuration

- A. Site-Specific Application Programming
 - a. Provide all database creation and site-specific application control programming as required by these Specifications, national and local standards and for a fully functioning system. Design-build entity shall provide all initial site-specific application programming and thoroughly document programming. Generally meet the intent of the written sequences of operation. It is the Design-build entity's responsibility to request clarification on sequence issues that require such clarification.
 - b. All site-specific programming shall be fully documented and submitted for review and approval, both prior to downloading into the panel, at the completion of functional performance testing, and at the end of the warranty period.
 - c. All programming, graphics and data files must be maintained in a logical system of directories with self-explanatory file names. All files developed for the project will be the property of the District and shall remain on the workstation(s)/server(s) at the completion of the project.
- B. Point Parameters
 - a. Provide the following minimum programming for each analog input:
 - i. Name
 - ii. Address
 - iii. Scanning Frequency or COV threshold
 - iv. Engineering units
 - v. Offset calibration and scaling factor for engineering units

- vi. Default value to be used when the actual measured value is not reporting. This is required only for points that are transferred across the primary and/or secondary controlling networks and used in control programs residing in control units other than the one in which the point resides. Events causing the default value to be used shall include failure of the control unit in which the point resides, or failure of any network over which the point value is transferred.
- b. Provide the following minimum programming for each analog output:
 - i. Name
 - ii. Address
 - iii. Scanning Frequency or COV threshold
 - iv. Engineering units
 - v. Output Range
 - vi. Default value to be used when the normal controlling value is not reporting.
 - c. Provide the following minimum programming for each digital input:
 - i. Name
 - ii. Address
 - iii. Scanning Frequency or COV threshold
 - iv. Engineering units (on/off)
 - v. Message and alarm reporting as specified
 - vi. Totalization of on-time, and accumulated number of off-to-on transitions.
 - d. Provide the following minimum programming for each digital output:
 - i. Name
 - ii. Address
 - iii. Scanning Frequency or COV threshold
 - iv. Engineering units (on/off)
 - v. Totalization of on-time, and accumulated number of off-to-on transitions.
 - vi. Default value to be used when the normal controlling value is not reporting.

C. Trends

- a. Design-build entity shall establish and store trend logs. Trend logs shall be prepared for each physical input and output point, and all dynamic virtual points such as Enable/Disable, On/Off, Status, Fault and the like as directed by Owner.
- b. Owner will analyze trend logs of the system operating parameters to evaluate normal system functionality. Design-build entity shall establish these trends and ensure they are being stored properly.
- c. The Design-build entity shall demonstrate functional trends as specified for a period of 30 days after successful system demonstration before Substantial Completion of the system.
- e. Each trend shall be at average of 15 minutes.
- f. Additional requirement
 - i. Refer to sections 5.3.3.6 and 5.3.3.10 for Commissioning requirements.

D. Alarms

- a. General: Design-build entity will be responsible for setting initial alarm parameters. No reporting actions will be initiated during construction unless directed by District.
- b. Override Alarms: Any point that is overridden through the override feature of the graphic workstation software shall be reported as a Level 3 alarm.

- c. Analog Input Alarms: For each analog input, program an alarm message for reporting whenever the analog value is outside of the programmed alarm limits. Report a 'Return-to-Normal' message after the analog value returns to the normal range, using a programmed alarm differential. Design-build entity shall coordinate with District for final values based on the following parameters:
- d. Lighting Control System Failure Alarm: Generate alarm that reads "Lighting Control System Failure". Alarm shall be generated when communication is lost to any controller or when any controller is determined to be in an abnormal state.

E. Graphic Screens

- a. Illuminated Area Plan Screens: The contract document drawings will be made available to the Design-build entity in AutoCAD format upon request. These drawings may be used only for developing backgrounds for specified graphic screens; however the District does not guarantee the suitability of these drawings for the Design-build entity's purpose.
 - i. Provide graphic illuminated area screens. Indicate the location of all equipment that is not located on the equipment room screens. Indicate all lighting zones with corresponding ON/OFF status. Indicate the location of LED Lamps associated with each controlled zone on the site plan screens. Display the status point adjacent to each LED Lamp fixture symbol. Use a distinct line symbol to demarcate each zone boundary. Use distinct colors to demarcate each lighting zone. Site plan drawings will be made available to the Design-build entity upon request for the purpose of determining zone boundaries. Indicate parking lot numbers or street names as provided by the District.
 - iii. If multiple site plans are necessary to show all areas, provide a graphic campus key plan. Use elevation views and/or plan views as necessary to graphically indicate the location of all of the larger scale plans. Link graphic site key plan to larger scale partial lot plans. Provide links from each larger scale graphic lot plan screen to the site key plan and to each of the other graphic lot plan screens.
 - iv. Provide a graphic site plan with links to and from each lot plan.
- b. System Schematic Screens: Provide graphic system schematic screen for each lighting subsystem controlled with each I/O point in the project appearing on at least one graphic screen. System graphics shall be consistent with current SMCCD style; coordinate with District. System graphics shall include flow diagrams with status, set points, current analog input and output values, operator commands, etc. as applicable. General layout of the system shall be schematically correct. Input/output devices shall be shown in their schematically correct locations. Include appropriate engineering units for each displayed point value. Verbose names (English language descriptors) shall be included for each point on all graphics; this may be accomplished by the use of a pop-up window accessed by selecting the displayed point with the mouse. Indicate all adjustable setpoints on the applicable system schematic graphic screen or, if space does not allow, on a supplemental linked-setpoint screen.
- c. Provide a link to as-built LCS schematics, and sequences of operation for each piece of equipment from the equipment graphic screen. Link should open document in a separate window without closing or modifying the current BAS graphic view.
- d. Alarms: Each programmed alarm shall appear on at least one graphic screen related to the equipment in alarm and a cumulative graphic alarm screen showing all active alarms for the current building. In general, alarms shall be displayed on the graphic system schematic screen for the system that the alarm is associated with. For all

graphic screens, display analog and digital values that are in an ‘alarm’ condition in a red color.

- e. Alarm and Trend Points Table
 - i. The following sample table lists the example points. Design-build Entity shall present formatted alarm and trend table to District for final approval. The number of zones will vary and may be more or less than shown in this sample
 - ii. All points on major/critical equipment/space shall be included.

SAMPLE – Alarm and Trend Points Table				
Parking Lot X	Alarm		Alarm Setpoint	Trend
Zone 1 Enable/Disable				x
Zone 1 Status	x		If False	x
Zone 1 Fault	x		If True	
Zone 1 Communication Heartbeat				
Zone 2 Enable/Disable				x
Zone 2 Status	x		If False	x
Zone 2 Fault	x		If True	x
Zone 2 Communication Heartbeat				
Zone 3 Enable/Disable				x
Zone 3 Status	x		If False	x
Zone 3 Fault	x		If True	x
Zone 3 Communication Heartbeat				
Zone 4 Enable/Disable				x
Zone 4 Status	x		If False	x
Zone 4 Fault	x		If True	
Zone 4 Communication Heartbeat				

5.3.3.5 BMS Integration – BMS/LCS Commissioning

- A. The Scope of Commissioning on this project shall include the LCS Integration with the BMS System, including:
 - A) Start-Up And Functional Performance Testing
 - b) Validation of proper and thorough installation of LCS and integration to BMS and associated equipment
 - c) Draft Start-Up Documentation for LCS and BMS Integration
 - d) Development of final Start-Up Documentation for LCS and BMS Integration
 - e) Functional Performance Testing of LCS and BMS Integration
 - f) Coordination of LCS-related training
 - g) Documentation of LCS Operation and Maintenance Documentation

5.3.3.6 Design-Build Entity Responsibilities

- A. Assist District in verification and Functional Performance Testing. Assistance will typically include the following:
- i) Establish trend and alarm logs of system operation as specified herein.
 - ii) Manipulate systems and equipment to facilitate Functional Performance
 - iii) Testing as outlined in this section. Typically, this will only be for initial samples of like systems.
 - iv) Provide electronic access to the District's control server at the time of testing, using District's laptop or desktop computer.
 - v) Provide District with appropriate passwords, keys, and access to control panels and workstations.
 - vi) Where control systems do not allow a test mode or the overriding of physical input values for testing, program an interim virtual point for all inputs that can be used to represent the point and be overridden for testing.
- B. Final Systems Operation Training: The BAS/LCS shall train the District Operators on whole-building operation and use of the LCS. This training shall focus primarily on LCS and BAS control of building systems and operation and its impact on building performance, and shall be conducted after Functional Completion.

5.3.3.7 Sequencing

The following list outlines the general sequence of events for Commissioning of the BMS .

A. Construction Phase:

- i. Collaborate on construction scheduling.
- ii. Submit Product data and Shop Drawings, and receive approval.
- iii. Meet with Cx Team to coordinate with all trades.
- iv. Begin BMS Hardware Installation (if applicable)
- v. Receive BMS Start-Up Documents approval from CM
- vi. Submit Training Plan content.
- vii. Receive approval of Training Plan content.
- viii. Provide alarm list and receive approval.
- ix. Provide sample graphics and receive approval. The following may occur on a system by system basis with the approval of the CM Authority.
 - x. Complete BMS Hardware installation (if applicable).
 - xi. Place LCS system under BMS control.
 - xii. Complete BMS graphics.
 - xiii. Perform BMS system start up and complete Start-Up Documentation
 - xiv. Submit completed BMS Start-up Documentation
 - xv. Enter alarms as approved by Owner.
 - xvi. Train Owner on BMS operation and maintenance.
 - xvii. Receive BMS Start-Up Documentation approval and approval to schedule BMS demonstration of completeness.
 - xviii. Demonstrate systems to CM and Owner.
 - xix. Submit trend logs in format specified.

- xx. Receive FPT or BMS demonstration approval and approval to schedule Acceptance Phase.
- B. Acceptance Phase.
 - i. CM performs Functional Performance Testing and BMS/LCS Contractor participates in initial samples.
 - ii. Receive Functional Completion approval for the BMS/LCS.
 - iii. Formal BMS System Turn-Over Meeting
 - iv. Substantial Completion
 - 1. Two-week BMS Observation Period to witness stable BMS operation.
 - 2. Provide administrator access password access to Owner.
 - 3. Train Owner on final sequences and modes of operation (*Final Systems Operation Training*).
 - 4. Update Systems Manual content with any changes.
 - 5. Revise and re-submit record drawings and O&M manuals.
 - 6. Install framed or panel mounted as-built control drawings.
 - 7. Final Completion
- C. Warranty Phase.
 - i. Opposite-season operational test and Functional Performance Testing
 - ii. Receive opposite-season operational test and FPT approval.
 - iii. Revise and re-submit record drawings and O&M manuals.
 - iv. Update framed control drawings.
 - v. Complete owner training.
 - vi. End of Warranty Period

5.3.3.8 Instrumentation

- A. General: All testing equipment used by any Party shall be of sufficient quality and accuracy to test and/or measure system performance with the tolerances specified.
- B. Special Tools: Special software, hardware, equipment, tools and instruments (only available from vendor, specific to a piece of equipment) required for testing equipment, according to these Contract Documents shall be included in the BMS bid price to the Design-build entity and turned over to the District upon project completion.

5.3.3.9 Commissioning Execution

- A. BMS/LCS Start-up Testing, Adjusting and Calibration
 - 1. BMS/LCS work and lighting systems shall be fully functioning prior to Demonstration and Acceptance Phase. Design-build entity shall start, test, adjust, and calibrate all work and/or systems under this contract, as described below:
 - b) Inspect the installation of all devices. Review the manufacturer's installation instructions and validate that the device is installed in accordance with them.
 - c) Verify proper electrical voltages and amperages, and verify that all circuits are free from faults.
 - d) Verify integrity/safety of all electrical connections.
 - e) Check each digital control point by making a comparison between the control command at the CU and the status of the controlled device. Check each digital

input point by making a comparison of the state of the sensing device and the OI display. Record the results for each device.

- f) Verify proper sequences by using the approved Start-Up Documentation to record results. Verify proper sequence and operation of all specified functions.

B. For Communication Interfaces and LCS Control Panels:

- a. Ensure devices are properly installed with adequate clearance for maintenance and with clear labels.
- b. Ensure that terminations are safe, secure and labeled in accordance with the record drawings.
- c. Check power supplies for proper voltage ranges and loading.
- d. Ensure that wiring and tubing are run in a neat and workman-like manner, either bound or enclosed in trough.
- e. Check for adequate signal strength and acceptable LAN and/or bandwidth utilization on communication networks.
- f. Check for stand-alone performance of controllers by disconnecting the controller from the LAN. Verify the event is annunciated at Operator Interfaces. Verify that the controlling LAN reconfigures as specified in the event of a LAN disconnection.
- g. Ensure that all outputs and devices fail to their proper positions/states.
- h. Ensure that buffered and/or volatile information is retained through power outage.
- i. With all system and communications operating normally and all trends functioning, sample and record update/annunciation times for critical alarms fed from the panel to the Operator Interface.
- j. Check for adequate grounding of all LCS panels and devices.
- k. Run self-diagnostic routines and ensure they are functional.
- l. Check the memory allocation and loading to ensure adequate and excess capacity is available and that it will not affect control functionality.
- m. Coordinate desired initial alarm strategies with District's Operators. Set all required alarms and document the initial settings in the Start-Up Documentation.
- n. Coordinate all initial setpoints with District's Operators. Ensure those setpoints are active.

C. For Operator Interfaces (OI's):

- a. Verify that all elements on the graphics are functional and are properly bound to physical devices and/or virtual points, and that hot links or page jumps are functional and logical.
- b. Output all specified BMS reports for review and approval.
- c. Verify that the alarm printing and logging is functional and per requirements.
- d. Verify alarm enunciation functionality. Time delay from actual occurrence to the time updated or enunciated on the screen. Ensure it is per the specified requirements.
- e. Verify that real time and historical trends are accessible and viewable in graph format.
- f. Verify that paging/dial out alarm annunciation is functional.
- j. Demonstrate open protocol and custom third party interfaces reliably communicate and check response time.
- k. Verify response times and screen update and refresh times are per the requirements.

- l. Verify that all custom programs are editable from the OI. Check upload, download, backup and restore capabilities of system configuration information as well as custom programs.
- m. Verify schedules are set up and working.
- n. Verify District stipulated security and permissions is set up and functional.
- o. In concert with the Building Power Outage test, validate that critical GUI installations are properly powered by UPS and emergency outlets to keep it functional during a power outage. Validate that the space has adequate lighting to manage the building in the event of an outage.

D. Graphic Coordination

- a. The Design-build entity shall prepare all graphics with points embedded for review of District. District shall use these graphics to provide direction to Design-build entity for the required final graphic. All final graphics must be complete and active before functional testing. Any deviation from the approved graphics will be considered a failure from the perspective of the functional test.

5.3.3.10 LCS AND BMS Integration Demonstration

- A. Demonstrate the operation and integration of the BMS/LCS hardware, software, and all related components and systems to the satisfaction of the District. Schedule the demonstration with the District's representative 1 week in advance. Demonstration shall not be scheduled until all hardware and software submittals, and the Start-Up Test Report are approved. If the Work fails to be demonstrated to conform to Contract specifications, so as to require scheduling of additional site visits by the District for re-demonstration, Design-build entity shall reimburse District for costs of subsequent District site visits.
- B. The Design-build entity shall supply all personnel and equipment for the demonstration, including, but not limited to, instruments, ladders, etc. Design-build entity supplied personnel must be competent with and knowledgeable of all project-specific hardware, software, and the systems. All training documentation and submittals shall be at the job site.
- C. Demonstration shall typically involve small representative samples of systems/equipment randomly selected by the District.
- D. The system shall be demonstrated following the same procedures used in the Start-Up Test by using the approved Commissioning Checklists. Demonstration shall include, but not necessarily be limited to, the following:
 - a. Demonstrate that required software is installed on BMS workstations.
 - b. Demonstrate that graphic screens, alarms, trends, and reports are installed as submitted and approved.
 - c. Demonstrate that points specified and shown can be interrogated and/or commanded (as applicable) from all workstations, as specified.

- d. Demonstrate that remote communication abilities are in accordance with these Specifications.
 - e. Demonstrate correct calibration of input/output devices using the same methods specified for the start-Up tests. A maximum of 10 percent of I/O points shall be selected at random by District for demonstration. Upon failure of any device to meet the specified end-to-end accuracy, an additional 10 percent of I/O points shall be selected at random by District for demonstration. This process shall be repeated until 100 percent of randomly selected I/O points have been demonstrated to meet specified end-to-end accuracy.
 - f. Demonstrate that all LCS and other software programs exist at respective field panels. The BMS programming and point database shall be as submitted and approved.
 - g. Demonstrate that all LCS programs accomplish the specified sequences of operation.
 - h. Demonstrate that the panels automatically recover from power failures, as specified.
 - i. Demonstrate that the stand-alone operation of panels meets the requirements of these Specifications. Demonstrate that the panels' response to LAN communication failures meets the requirements of these Specifications.
 - j. Identify access to equipment selected by District. Demonstrate that access is sufficient to perform required maintenance.
 - k. Demonstrate that required trend graphs and trend logs are set up per the requirements. Provide a sample of the data archive. Indicate the file names and locations.
- E. BMS/LCS Integration Demonstration shall be completed and approved prior to Functional Performance Testing. District shall determine if the system is ready for Functional Performance Testing and document any problems requiring Design-Build Entity attention.
- F. If the systems are not ready for Functional Performance Testing, Design-build entity shall correct problems and provide notification to the District's representative that all problems have been corrected. The Acceptance Period shall be restarted at a mutually scheduled time for an additional one week period. This process shall be repeated until District issues notice that the BMS/LCS is ready for Functional Performance Testing.
- G. Any tests successfully completed during the BMS/LCS Integration Demonstration will be recorded as 'Passed' for the Functional Performance Testing and will not have to be re-accomplished.

5.3.3.11 BMS/LCS Acceptance Phase and Observation Period

- A. BMS/LCS Acceptance Phase: BMS/LCS Acceptance Phase consists of the Functional Performance Testing process of the BMS/LCS by the District and shall begin after approval of the LCS Demonstration and prior to issuance of Substantial Completion. Acceptance Phase for the BMS shall not be scheduled until Lighting Control System is in operation, the Start-Up Documentation has been reviewed and approved. Acceptance Phase and its approval to begin

will be performed on a system-by-system basis if mutually agreed upon by Design-build entity and District. All Cx requirements listed in this section are to be provided by the contractor. See sections 01 91 13 and 99 00 02 for additional CxA requirements. The CxA is hired by the owner and is considered an owners representative.

- B. BMS/LCS Observation Period: After Functional Performance Testing, the BMS/LCS shall be shown to operate properly for 2 weeks without malfunction, without alarm caused by control action or device failure, and with smooth and stable control of systems and equipment in conformance with these District for review.
- C. During the Acceptance Phase, the Design-build entity shall maintain a log of all alarms generated by the BMS/LCS. For each alarm received, Design-build entity shall diagnose the cause of the alarm, and shall list on the log for each alarm, the diagnosed cause of the alarm, and the corrective action taken. If in the Design-build entity's opinion, the cause of the alarm is outside of the scope of the construction contract, Design-build entity shall immediately notify the District's representative for resolution.
- D During the Acceptance Phase, the Design-build entity shall maintain all controller network and workstation hardware and software in a state that will allow remote access by CxA to trend logs as specified below.

5.3.3.12 BMS Trend Requirements

- A. Trends are accessible historical archives on computer servers, drives or disks that document the operation of the systems and equipment. Trends can be time-series (interval) recordings of system I/O parameters or change-of-value (COV) based trends that record when a system value changes by more than a specified threshold.
- B District will analyze trend logs of the system operating parameters to evaluate normal system functionality. The requirements of the trending are specified below. Design-Build Entity shall establish these trends, ensure they are being stored properly, and forward the data in electronic format to the District.
- C. Data shall include a single row of field headings and the data thereafter shall be contiguous. Each record shall include a date and time field. Recorded parameters for a given piece of equipment or component shall be trended at the same time intervals and be presented in a maximum of two separate two dimensional formats with time being the vertical axis and field name being the horizontal axis. Data shall be maintained on the District's server for remote access by the District or shall be forwarded in one of the following formats.
 - a. Microsoft Access Database (.mdb)
 - b. Microsoft Excel Spreadsheet (.xls)
 - c. Comma Separated Value (.csv or .txt), preferably with quotes delimiting text fields and # delimiting date/time fields.
- D. Sample times indicated as COV (\pm) mean that the changed parameter only needs to be recorded whenever the value changes by the amount listed. When output to the trend file, the latest recorded value shall be listed along with the time increment record. If the BMS/LCS does not have the capability to record based on COV, the parameter shall be recorded based on the time interval common to other point trends for the system.

- E. Design-Build Entity shall provide the District with required passwords, phone numbers, etc. to allow the District access to the trend log data and allow downloading to a remote location. Design-Build Entity shall also provide step-by-step written instructions for accessing the data.
- F. Trending Requirements: All I/O points on primary equipment shall be trended throughout the Cx process on 15 min. intervals for analog values and change-of value for binary values. For existing systems, the District's standard trend protocol for interval and COV shall be used. All points on primary equipment and a District selected sampling of terminal points determined based on the terminal type unless approved otherwise. Trends shall include but are not necessarily limited to the following points:
 - a. All inputs and outputs to LCS
 - b. All safety indications
 - c. Status on all primary equipment
 - d. Electricity consumption where monitored.
- G. Trending used to document ongoing FPTs may need to be at a more frequent interval to verify proper short term operation. Consult with the CxA to determine the required intervals for functional testing and modify intervals as required.

5.3.3.13 Trend Graphs

- A. Trend graphs shall be used during Functional Performance Testing to facilitate and document testing. Design-build entity shall prepare controller and workstation software to display graphical format trends throughout the Acceptance Phase. Trend graphs shall demonstrate compliance with contract documents. Trended values and intervals shall be the same as those specified for the Functional Performance Tests.
- B. Lines shall be labeled and shall be distinguishable from each other by using either different line types or different line colors.
- C. Trend On/Off commands, Status, Fault, Feedback, etc...
- D. All points trended for one Lighting Zone subsystem (e.g. On/Off, Enable/Disable, Status, Fault, Feedback, etc.) shall be trended simultaneously and on a common trend period.
- E. Each graph shall be clearly labeled with Lighting subsystem title, date, and times.

5.3.3.14 Warranty Phase – Trending and Testing

- A. Trending: Throughout the Warranty Phase, trend logs shall be maintained as required for the Acceptance Phase. Design Build Entity Shall forward archive trend logs to the CxA for review upon request. CxA will review these and notify Design Build Entity of any warranty work required.

5.3.3.15. BMS Operator Training

- A. Common requirements applicable to each building:
 - a. Provide up to 6 complete sets of User Manuals (hard copy and one electronic copy) to be used for training.
 - b. BMS Contractor shall submit a Training Plan per the requirements of Div 01 to the District who will forward it to the A/E for review.

- c. On Site Training: Provide services of BMS Contractor's qualified technical personnel for up to the hours as described below to instruct District's personnel in operation and maintenance of the BMS. Instruction shall be in classroom setting at the project site for appropriate portions of the training. Training may be in non-contiguous days at the request of the District. The District's representative shall notify Design-Build entity 1-week in advance of each day of requested training. The Design-build Entity's designated training personnel shall meet with the A/E, CxA and District for the purpose of discussing and fine-tuning the training agenda prior to the first training session. Training agenda shall be as follows:
 - B. Basic Operator Workstation Training – For all potential users of the OWS:
 - a. Brief walk-through of site plan, including identification of all controlled equipment and condensed demonstration of controller portable and built-in operator interface device display capabilities.
 - b. Brief overview of the various parts of the BMS O&M manuals, including hardware and software programming and operating publications, catalog data, controls installation drawings, and BMS programming documentation.
 - c. Demonstration of workstation menu penetration and broad overview of the various workstation features.
 - d. Overview of systems installed.
 - e. Present all site-specific naming conventions and points lists, open protocol information, configuration databases, back up sequences, upload/download procedures, etc.
 - f. Overview of scheduling procedures and project specific setup
 - g. Overview of alarm set-up
 - h. Overview of trend set-up
 - i. Overview of workstation reporting set-up
 - C. BMS Technician Training: For individuals who will troubleshoot the system hardware, I/O devices, and the systems in general.
 - a. General review of sequence of operation and control logic for the project site, including standalone and fail safe modes of operation;
 - b. Uploading/downloading and backing up controller configuration and application programs;
 - c. Review of installed components including all communication devices, controllers, I/O, etc., and how to install/replace, maintain, commission, and diagnose them;
 - d. Introduction to controller programming and overview of the programming application interface;
 - e. Review of setpoint optimization and fine-tuning concepts
 - D. System Administrator Training: For the persons who will be maintaining the system from an IT perspective as well as District's IT personnel. Agenda shall be as follows:
 - a. Overview of system architecture including all routers, bridges, repeaters, gateways, communications protocols, servers, controllers, etc.
 - b. Follow-up Training: Provide up to four half day training sessions at District's request during the warranty period.

6. Software Service Agreement

- A. Technical Support: Beginning with Final Completion, provide software support for 2 years for all associated light control systems and interfaces. Technical Support shall address software

upgrades, updates, and patches associated with the fixtures, Light Control systems and BMS interface.

- B. Upgrade Service: Update software to latest version at Project completion. Install and program software upgrades that become available within 2 years from date of Substantial Completion. Upgrade shall include new or revise licenses for use of the software.
 - a. Provide 30-day notice to District to allow scheduling and access to system and to allow District to upgrade computer equipment, if necessary.

7. Quality Assurance and Quality Control

- A. Design-Build Entity shall implement a Quality Assurance / Quality Control (QA/QC) plan for construction activities on District sites. At least 30 days prior to the planned commencement of construction, Design-Build Entity shall submit a copy of the QA/QC Plan for review and approval by the District.
- B. To ensure the highest quality of the installation, Design-Build Entity shall:
 - a. Implement policies and procedures to ensure proper oversight of construction work, verification of adherence to construction documents and contractual requirements, and rapid identification and mitigation of issues and risks.
 - b. Utilize best practice methods for communicating progress, performing work according to the approved Project schedule, and completing the Project on-time.
 - c. Keep the Site clean and orderly throughout the duration of construction. All trash and rubbish shall be disposed of off-site by licensed waste disposal companies and in accordance with applicable Law.
 - d. Provide equipment marking, as well as labeling and signage for the Project that shall be removed after Project completion.
 - e. Fully comply with all applicable notification, safety and Work rules (including District safety standards) when working on or near District facilities.
 - f. Route all electrical collection system wiring and conduits in a neat and orderly fashion and in accordance with all applicable code requirements. All cable terminations, excluding module-to-module and module-to-cable harness connections, shall be permanently labeled.
 - g. Provide all temporary road and warning signs, flagmen or equipment as required to safely execute the Work. Street sweeping services shall also be provided as required to keep any dirt, soil, mud, etc. off of roads.

8. Testing

- A. Following completion of construction, Design-Build Entity shall provide the following services related to startup and performance testing of the lighting systems:
 - a. Acceptance Testing
- B. A detailed Testing Plan covering each of the phases above shall be submitted and approved by the District prior to substantial completion of construction. A detailed description of each phase is provided below.

- C. Design-Build Entity shall perform a complete acceptance test for each Lighting System. The acceptance test procedures include component tests as well as other standard tests, inspections, safety and quality checks. All testing and commissioning shall be conducted in accordance with the manufacturer's specifications.
- D. The Testing Plan shall cover at least the following:
 - a. Detailed test methods, including sample calculations and reference to standards as required or applicable, and list of tested equipment.
 - b. Pre-test checklist to ensure readiness and any safety measures are in-place.
 - c. Details of all necessary adjustments, balancing, required equipment isolation or configuration, test equipment and instruments, calibration, and personnel needed.
 - d. Acceptance Criteria: For each test phase, specifically indicate what is considered an acceptable test result.
- E. After Design-Build Entity conducts all Acceptance Testing based on the Testing Plan approved by the District prior to substantial completion, Design-Build Entity shall submit a detailed Acceptance Test Report to the District for review.
- F. The Acceptance Test Report shall document the results of the tests conducted following the Testing Plan, and include additional information such as the date and time each test was performed. It shall also make reference to any problem and deficiencies found during testing. If there was troubleshooting done, the Report shall describe the troubleshooting methods and strategy. Design-Build Entity shall be responsible for providing the labor and equipment necessary to troubleshoot the System.

9. Training

- A. The Respondent shall provide sixteen (16) hours (8 hours per campus) of on-site training for District personnel in all aspects of operation, routine maintenance, and safety of the LED systems. At a minimum, training topics shall include the following:
 - a. System safety, including shut-down procedures
 - b. LED fixture maintenance and troubleshooting
 - c. Fixture mounting elements maintenance and repair guidelines
 - d. Calibration and adjustment procedures for the fixture and mounting systems (if any)
 - e. Fixture/lamp replacement
 - f. Controls system and interface
 - g. How to identify and wireless and wired network issues
- B. Design-Build Entity shall submit a proposed Training Plan during the design process for approval and provide all training materials and manuals to support on-site training in advance of scheduled training sessions (see schedule of submittals in Section 2.2.3, "Submittals"). The on-site portion of the training program shall be scheduled to take place at the jobsite at a time agreeable to both the District and Design-Build Entity

END OF DOCUMENT

Lighting Control System Architecture

