# Solano Community College District Bldg 200 Kitchen Renovation



### **PROJECT MANUAL**

DSA SUBMITTAL February 5, 2016

TRACKING NUMBER:

VOLUME 1 of 1

SCCD – Fairfield Campus 4000 Suisun Valley Road Fairfield, CA 94534



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### **SOLANO COMMUNITY COLLEGE DISTRICT**

# BUILDING 200 KITCHEN RENOVATION PROJECT

**PROJECT NUMBER: 16-008** 

March 10, 2016

### Document 00 01 03 Project Labor Agreement

### SOLANO COMMUNITY COLLEGE DISTRICT PROJECT LABOR AGREEMENT

This Agreement is entered into this 5th day of December, 2013 by and between the Solano Community College District (hereinafter, the "District"), together with contractors and/or subcontractors, who become signatory to this Agreement by signing the "Agreement To Be Bound" (Addendum A) (all of whom are referred to herein as "Contractors/Employers"), and the Napa-Solano Building & Construction Trades Council ("Council") and its affiliated local Unions that have executed this Agreement (all of whom are referred to collectively as "Union" or "Unions").

The purpose of this Agreement is to promote efficiency of construction operations during the Solano Community College District's Measure Q and other construction project(s) ("Project") as defined herein, and to provide for peaceful settlement of labor disputes and grievances without strikes or lockouts, thereby promoting the public interest in assuring the timely and economical completion of the Project. The District and the Council may mutually agree in writing to add additional components to the Project's Scope of Work to be covered under this PLA. The District and the Labor Council seek to form a lasting relationship to Career Technical Education, especially among those underrepresented in the trades (women, minorities, and veterans).

WHEREAS, the timely and successful completion of the Project is of the utmost importance to the Solano Community College District to meet the educational needs of the District's students and to avoid increased costs resulting from delays in construction; and

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

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

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

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

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

WHEREAS, the Agreement is not intended to replace, interfere with, abrogate, diminish or modify existing local or national collective bargaining agreements in effect during the duration of the Project, insofar as a legally binding agreement exists between the Contractor/Employer(s) and the affected Union(s), except to the extent that the provisions of this Agreement are inconsistent with said collective bargaining agreements, in which event, the provisions of this Agreement shall prevail; and

WHEREAS, the contract for construction work on the Project will be awarded in accordance with the applicable provisions of the Public Contract Code, Education Code and other applicable California law; and

WHEREAS, funding for the construction of the Project will come from Measure Q, passed by the Solano County residents in 2012, in contrast to typical California school projects, which are funded through a balance of local and State funds; and

WHEREAS, the District has the absolute right to select the lowest responsive and responsible bidder for the award of the construction contract on the Project, or to reject all bid proposals, or to use other legal project delivery methodologies; and

WHEREAS, the District places high priority upon the development of comprehensive programs for the recruitment, training and employment of local area residents and recognizing the ability of local apprenticeship programs to provide meaningful and sustainable careers in the building and construction industry; and

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

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

### ARTICLE 1 DEFINITIONS

- 1.1 "Agreement" means this Project Labor Agreement.
- 1.2 "District" means the Solano Community College District, its employees, agents, and administrative staff.
- 1.3 "Contractor/Employer(s)" means any individual, firm, partnership or corporation, or combination thereof, including joint ventures, that is an independent business enterprise and enters into a contract with the District or any of its contractors or subcontractors of any tier, with respect to the construction of any part of the Project under contract terms and conditions approved by the District and which incorporate this Agreement.
- 1.4 "Construction Contract" means the public works or improvement contract(s) which will be signed by the District and which are necessary to complete the Project, as defined herein, including subcontracts at any tier.
- 1.5 "Project" is defined to include all public works or improvement project(s) or construction projects funded in whole or in part with Measure Q funding with an

estimated construction cost of \$4.5 million or more. In addition, "Project" includes Building 600 (Administration Building); Building 1200 (Theater Modernization) and Building 200 (Child Development Center). Routine maintenance of District properties (per Public Contract Code section 20656) and emergency public works projects (per Public Contract Code section 20654) are not covered by the scope of this Agreement. The District and the Council may mutually agree in writing to add additional components to the Project's Scope of Work to be covered under this PLA.

- 1.6 "Union" or "Unions" means the Napa-Solano Building & Construction Trades Council, AFL-CIO, ("the Council") and any affiliated labor organization signatory to this Agreement, acting in their own behalf and on behalf of their respective affiliates and member organizations whose names are subscribed hereto and who have through their officers executed this Agreement ("Signatory Unions").
- 1.7 "Project Manager" means the person(s) or business entity(ies) designated by the District to oversee all phases of construction on the Project and to oversee the implementation of this Agreement and who works under the guidance of the District's Authorized Representative.
- 1.8 "Master Agreement" or "Schedule A" means the Master Collective Bargaining Agreement of each craft Union signatory hereto, a copy of which shall be on file with the District.
- 1.9 "Council" means the Napa-Solano Counties Building & Construction Trades Council.

# ARTICLE 2 SCOPE OF AGREEMENT

- 2.1 Parties: The Agreement shall apply and is limited to all Contractors/Employer(s) performing work on the Project (including subcontractors at any tier), the District the Council and the Unions signatory to this Agreement, acting on their own behalf and on behalf of their respective affiliates and member organizations whose names are subscribed hereto and who have through their officers executed this Agreement ("Signatory Unions").
- 2.2 <u>Project Description</u>: The Agreement applies to all prospective public works or improvement project(s) or construction projects funded in whole or in part with Measure Q funding using with an estimated construction cost of \$4.5 million or more. In addition, this Agreement applies to construction and/or modernization of Building 600 (Administration Building); Building 1200 (Theater Modernization) and Building 200 (Child Development Center). Routine maintenance of District properties (per Public Contract Code section 20656) and emergency public works projects (per Public Contract Code section 20654) are not covered by the scope of this Agreement. The District and the Council may mutually agree in writing to add additional components to the Project's Scope of Work to be covered under this PLA.

- 2.3 Covered Work: This Agreement covers, without limitation, all on-site site preparation, surveying, construction, alteration, demolition, installation, painting or repair of buildings, structures and other works, and related activities for the Project, including landscaping and temporary fencing that is within the craft jurisdiction of one of the Unions and which is directly or indirectly part of the Project, including, without limitation to the following examples, pipelines (including those in linear corridors built to serve the project), pumps, pump stations, start-up, modular furniture installation, and on-site soils and material inspection and testing to be performed to complete the Project. On-site work includes work done for the Project in temporary yards or areas adjacent to the Project, and at any on-site or off-site batch plant constructed solely to supply materials to the Project. This scope of work includes all soils and materials testing and inspection where such testing and inspection is a classification in which a prevailing wage determination has been published.
- 2.3.1 This Agreement shall apply to any start-up, calibration, performance testing, repair, maintenance, operational revisions to systems and/or subsystems performed after Completion unless it is performed by District employees.
- 2.3.2 This Agreement covers all on-site fabrication work over which the District, Contractor(s) or subcontractor(s) possess the right of control (including work done for the Project in any temporary yard or area established for the Project.). Additionally, it is agreed hereby that this Agreement covers any off-site work, including fabrication necessary for the Project defined herein, that is covered by a current Schedule A Agreement or local addenda to a National Agreement of the applicable Union(s) that is in effect as of the execution date of this Agreement.
- 2.3.3 It is expressly agreed and understood by the Parties that the District shall have the right to purchase material and equipment from any source and the craftspersons covered under this Agreement will handle and install such material and equipment. There shall be no limitation or restriction upon the choice of materials or upon the full use and installation of equipment, machinery, package units, factory precast, prefabricated or preassembled materials, tools or other labor-saving devices other than as set forth herein. The lawful fabrication provisions of the appropriate national or local agreements shall be applicable.
- 2.3.4 The furnishing of supplies, equipment or materials which are stockpiled for later use shall in no case be considered subcontracting. Construction trucking work, such as the delivery of ready-mix, asphalt, aggregate, sand or other fill material which are directly incorporated into the construction process as well as the off-hauling of debris and excess fill material and/or mud, shall be covered by the terms and conditions of this Agreement, to the fullest extent provided by law and by prevailing wage determinations of the California Department of Industrial Relations.

  Contractor/Employer(s), including brokers, of persons providing construction trucking work shall provide certified payroll records to the District within ten (10) days of written request or as required by bid specifications.

- 2.3.5 Work covered under this Agreement within the craft jurisdiction of the Elevator Constructors will be performed under the terms of the National Agreement of the International Union of Elevator Constructors except that Articles IV and XIII of the Agreement shall prevail and be applied to such work. Work covered by the Agreement within the craft jurisdiction of the Boilermakers will be performed under the terms of the National Transient Lodge (NTL) Articles of Agreement except that Articles IV and XIII of the Agreement shall prevail and be applied to such work. Work covered by the Agreement within the NTL Articles of Agreement, the National Stack/Chimney Agreement, the National Cooling Tower Agreement, all instrument calibration work and loop checking shall be performed under the terms of the UA/IBEW Joint National Agreement for Instrument and Control Systems Technicians, except that Articles IV and XIII of the Agreement shall prevail and be applied to such work.
- 2.4 <u>Exclusions</u>. The following shall be excluded from the scope of this Agreement:
- 2.4.1 The Agreement is not intended to, and shall not affect or govern the award of public works contracts by the District which are not included in the Project.
- 2.4.2 The Agreement shall not apply to a Contractor/Employer's non construction craft employees, including but not limited to executives, managerial employees, engineering employees and supervisors above the level of General Foreman (except those covered by existing Master Agreements), staff engineers or other professional engineers, administrative and management.
- 2.4.3 This Agreement shall not apply to any work performed on or near or leading to the site of work covered by this Agreement that is undertaken by state, county, city or other governmental bodies or their contractors; or by public or private utilities or their contractors.
- 2.4.4 The District shall not be required to comply with this Agreement for any work performed with its own forces as permitted by the Public Contract Code and Education Code.
- 2.4.5 This Agreement shall not apply to off-site maintenance of leased equipment and on-site supervision of such work;
- 2.4.6 This Agreement shall not apply to engineering provided by professional service organizations and laboratory or specialty testing or inspection not ordinarily done by the Unions;
- 2.4.7 This Agreement shall not apply to routine maintenance of District properties and emergency public works projects.
- 2.5 <u>Award of Contracts</u>: It is understood and agreed that the District shall have the absolute right to select any qualified bidder for the award of contracts under this Agreement. The bidder need only be willing, ready and able to execute and comply with this Agreement.

### ARTICLE 3 EFFECT OF AGREEMENT

- 3.1 By executing the Agreement, the Unions and the District agree to be bound by each and all of the provisions of the Agreement.
- 3.2 By accepting the award of a Construction Contract for the Project, whether as contractor or subcontractor, the Contractor/Employer agrees to be bound by each and every provision of the Agreement and agrees that it will evidence its acceptance prior to the commencement of work by executing the **Letter of Assent** in the form attached hereto as **Addendum A**.
- 3.3 At the time that any Contractor/Employer enters into a subcontract with any subcontractor providing for the performance of a construction contract, the Contractor/Employer(s) shall provide a copy of this Agreement, as it may from time to time be modified, to said subcontractor and shall require the subcontractor as a part of accepting an award of a construction subcontract to agree in writing to be bound by each and every provision of this Agreement prior to the commencement of work. The obligations of a Contractor/Employer may not be evaded by subcontracting.
- 3.4 This Agreement shall only be binding on the signatory parties hereto and shall not apply to the parents, affiliates, subsidiaries, or other ventures of any such party. Each Contractor shall alone be liable and responsible for its own individual acts and conduct and for any breach or alleged breach of this Agreement. Any dispute between the Union(s) and the Contractor(s) respecting compliance with the terms of the Agreement shall not affect the rights, liabilities, obligations and duties between the signatory Union(s) and other Contractor(s) party to this Agreement.
- 3.5 It is mutually agreed by the Parties that any liability by a signatory Union to this Agreement shall be several and not joint. Any alleged breach of this Agreement by a signatory Union shall not affect the rights, liabilities, obligations and duties between the signatory Contractor(s) and the other Union(s) party to this Agreement.
- 3.6 The provisions of this Agreement, including Schedules A's, which are the local Master Agreements of the Signatory Unions having jurisdiction over the work on the Project, shall apply to the work covered by this Agreement, notwithstanding the provisions of any other local, area and/or national agreements which may conflict with or differ from the terms of this Agreement. Where a subject covered by the provisions of this Agreement is also covered by a Schedule A, the provisions of this Agreement shall prevail. Where a subject is covered by the provisions of a Schedule A and is not covered by this Agreement, the provisions of the Schedule A shall prevail.

# ARTICLE 4 WORK STOPPAGES, STRIKES, SYMPATHY STRIKES AND LOCKOUTS

4.1 The Unions, District and Contractor/Employers covered by the Agreement agree that for the duration of the Project:

- 4.1.1 There shall be no strikes, sympathy strikes, work stoppages, picketing, hand billing or otherwise advising the public that a labor dispute exists, or slowdowns of any kind, for any reason, by the Unions or employees employed on the Project, at the job site of the Project or at any other facility of District because of a dispute on the Project. Disputes arising between the Unions and Contractor/Employers on other District projects are not governed by the terms of the Agreement or this Article.
- 4.1.2 As to employees employed on the Project, there shall be no lockout of any kind by a Contractor/Employer covered by the Agreement.
- 4.1.3 If a master collective bargaining agreement between a Contractor/Employer and the Union expires before the Contractor/Employer completes the performance of the Construction Contract and the Union or Contractor/Employer gives notice of demands for a new or modified master collective bargaining agreement, the Union agrees that it will not strike on work covered under this Agreement and the Union and the Contractor/Employer agree that the expired master collective bargaining agreement shall continue in full force and effect for work covered under this Agreement until a new or modified master collective bargaining agreement is reached between the Union and Contractor/Employer. If the new or modified master collective bargaining agreement reached between the Union and Contractor/Employer provides that any terms of the master collective bargaining agreement shall be retroactive, the Contractor/Employer agrees to comply with any retroactive terms of the new or modified master collective bargaining agreement which are applicable to employees who were employed on the projects during the interim with retroactive payment due within seven (7) days of the effective date of the modified Master Agreement.
- 4.1.4 In the case of nonpayment of wages and trust fund contributions on the Project, the Union shall give the District or its designated agent and the Contractor/Employer(s) five (5) business days' notice when nonpayment of trust funds has occurred and 2 business days' notice when nonpayment of wages has occurred or when paychecks being tendered to a financial institution normally recognized to honor such paychecks will not honor such paycheck as a result of insufficient funds, of the intent to withhold labor from the Contractor/Employer(s)' or their subcontractor's workforce, during which time the Contractor/Employer shall have the opportunity to correct the default. In this instance, a Union's withholding of labor (but not picketing) from an Contractor/Employer who has failed to pay its fringe benefit contributions or failed to meet its weekly payroll shall not be considered a violation of this Article.
- 4.2 Any party to this Agreement shall institute the following procedure, prior to initiating any other action at law or equity, when a breach of this Article is alleged to have occurred:
- 4.2.1 A party invoking this procedure shall notify Thomas Angelo, as the permanent arbitrator, or, Robert Hirsch, as the alternate arbitrator under this procedure. In the event that the permanent arbitrator is unavailable at any time, the alternate will be contacted. If neither is available, then a selection shall be made from the list of arbitrators in Article 12. Notice to the arbitrator shall be by the most expeditious

means available, with notices by facsimile or telephone to the District and the party alleged to be in violation and to the Council and involved local Union if a Union is alleged to be in violation.

- 4.2.2 Upon receipt of said notice, the District will contact the designated arbitrator named above or his alternate who will attempt to convene a hearing within twenty-four (24) hours if it is contended that the violation still exists.
- 4.2.3 The arbitrator shall notify the parties by facsimile or telephone of the place and time for the hearing. Said hearing shall be completed in one session, which, with appropriate recesses at the arbitrator's discretion, shall not exceed twenty-four (24) hours unless otherwise agreed upon by all parties. A failure of any party to attend said hearings shall not delay the hearing of evidence or the issuance of an award by the arbitrator.
- 4.2.4 The sole issue at the hearing shall be whether or not a violation of Article IV, Section 4.1 of the Agreement has occurred. The arbitrator shall have no authority to consider any matter of justification, explanation or mitigation of such violation or to award damages, which issue is reserved for court proceedings, if any. The award shall be issued in writing within three (3) hours after the close of the hearing, and may be issued without a written opinion. If any party desires a written opinion, one shall be issued within fifteen (15) days, but its issuance shall not delay compliance with or enforcement of the award. The arbitrator may order cessation of the violation of this Article and other appropriate relief and such award shall be served on all parties by hand or registered mail upon issuance.
- 4.2.5 Such award may be enforced by any Court of competent jurisdiction upon the filing of this Agreement and all other relevant documents referred to above in the following manner. Written notice of the filing of such enforcement proceedings shall be given to the other party. In the proceeding to obtain a temporary order enforcing the arbitrator's award as issued under Section 4.2(4) of this Article, all parties waive the right to a hearing and agree that such proceedings may be ex parte. Such agreement does not waive any party's right to participate in a hearing for a final order or enforcement. The Court's order or orders enforcing the arbitrator's award shall be served on all parties by hand or delivered by certified mail.
- 4.2.6 Any rights created by statute or law governing arbitration proceedings inconsistent with the above procedure, or which interfere with compliance, are waived by the parties.
- 4.2.7 The fees and expenses of the arbitrator shall be divided equally between the party instituting the arbitration proceedings provided in this Article and the party alleged to be in breach of its obligation under this Article.

# ARTICLE 5 COORDINATOR AND MEETINGS

- 5.1 The District shall designate Mike Vlaming as the Coordinator, who shall be responsible for the administration and application of this Agreement. The Coordinator shall endeavor to facilitate harmonious relations between the District, the Contractor/Employers and the Unions signatory hereto. The Coordinator shall not be responsible for the acts of the Contractor/Employers and the Unions signatory hereto, and will not be a party to any arbitration or litigation arising out of this Agreement. The District will pay for the Coordinator. If Mike Vlaming subsequently becomes unable or unwilling to continue to act as Coordinator, the District shall consult with the Council before designating another Coordinator.
- 5.2 A pre-construction conference shall be held prior to the commencement of work on each phase of the Project to establish the scope of work in each Contractor/Employer's contract. Such conference shall be attended by a representative each from the participating Contractor/Employer(s), including all subcontractors, Union(s) and the Coordinator. The Contractor/Employer performing the work shall have the responsibility for making work assignments pursuant to this Agreement in writing. Any craft objecting to the Contractor/Employer's proposed assignment of work shall have seven (7) working days from the date of the conference to submit written objections to the Contractor/Employer before the Contractor/Employer makes the work assignments final. Should any jurisdictional issue remain in dispute, it shall be subject to the resolution procedure set forth in Article 12. All efforts will be made to properly raise and resolve any issue that may arise out of such meeting, with a goal that such conferences will be held at least 7 days before the work commences. Pre-construction conferences for different Contractor/Employers may be held together.
- 5.3 There shall be a periodic meeting for the duration of the Project to discuss issues relating to the construction of the Project, including but not limited to discussion of the scheduling and productivity on work performed on the Project. The purpose of these meetings is to promote harmonious relations, ensure adequate communications and advance the efficiency of the Project. The Primary Contractor/Employers shall attend all such meetings.

### ARTICLE 6 NO DISCRIMINATION

6.1 The Contractor/Employers and Unions agree to comply with all antidiscrimination provisions of federal, state and local law, to protect employees and applicants for employment, on the Project, including but not limited to protection against discrimination on the basis of race, color, creed, national origin, ancestry, age, sex, sexual orientation, political affiliation, membership in a labor organization, disability or Acquired Immune Deficiency Syndrome or AIDS Related Condition (AIDS/ARC).

#### ARTICLE 7 UNION SECURITY

- 7.1 The Contractor/Employers recognize the Union(s) as the sole bargaining representative of all craft employees working within the scope of this Agreement.
- 7.2 No employee covered by this Agreement is required to join any Union as a condition of being employed on the Project. However, all employees who are employed by Contractor/Employers to work on the Project will be responsible for payment of applicable monthly working dues and any associated fees uniformly required for union membership in the local Union that is a signatory to this Agreement, and shall, on or before 8 days of consecutive or cumulative employment on the Project, tender such dues and fees to the applicable Union.
- 7.3 Authorized representatives of the Unions shall have access to the Projects whenever work covered by this Agreement is being, has been, or will be performed on the Project.

#### ARTICLE 8 REFERRAL

- 8.1. Contractor/Employers performing construction work on the Project described in the Agreement shall, in filling craft job requirements, utilize and be bound by the registration facilities and referral systems established or authorized by the Unions signatory hereto when such procedures are not in violation of Federal law. The Contractor/Employer(s) shall have the right to reject any applicant referred by the Union(s), in accordance with the applicable Master Agreement.
- 8.2. The Union(s) shall be the sole source of all craft labor employed on the Project. However, in the event that a Contractor(s) has its own core workforce, the Contractor/Employer may request by name, and the Union shall honor, referral of persons who have applied to the local Union for Project work and who demonstrate the following qualifications ("Core Employees"):
  - a. possess any license and/or certifications required by state or federal law for the Project work to be performed;
  - b. have worked a total of at least two thousand (2000) hours in the construction craft during the prior two (2) years;
  - c. were on the Contractor/Employer's active payroll for at least the sixty (60) consecutive calendar business days prior to the contract award;
  - d. have the ability to perform safely the basic functions of the applicable trade; and
  - e. live in Solano County or the city of Winters.

- 8.3. The Union will refer to such Contractor/Employer two journeyman employees from the hiring hall out-of-work list for the affected trade or craft, and will then refer one of such Contractor/Employer's Core Employees as a journeyman and shall repeat the process, one and one, until such Contractor/Employer's crew requirements are met or until Contractor/Employer has hired five (5) Core Employees, whichever occurs first. Thereafter, all additional employees in the affected trade or craft shall be hired exclusively from the hiring hall out-of-work list(s). For the duration of the Contractor/Employer's work the ratio shall be maintained and when the Contractor/Employer's workforce is reduced, employees shall be reduced in reverse order and in the same ratio of core employees to hiring hall referrals as was applied in the initial hiring. Contractor/Employer's signatory to a Local, Regional, and/or National collective bargaining agreements with Union(s) signatory hereto shall be bound to use the hiring hall provisions contained in the Master Collective Bargaining Agreement of the affected Union(s), and nothing in the referral provisions of this Agreement shall be construed to supersede the local hiring hall provisions of the Master Agreement(s) as they relate to such contractors.
- 8.4. The Contractor(s) shall have the unqualified right to select and hire directly all supervisors above the level of general foreman it considers necessary and desirable, without such persons being referred by the Union(s).
- 8.5. In the event that referral facilities maintained by the Union(s) are unable to fill the requisition of a Contractor/Employer for employees within a forty-eight (48) hour period (Saturdays, Sundays and Holidays excluded) after such requisition is made by the Contractor/Employer(s), the Contractor/Employer(s) shall be free to obtain workers from any source. A Contractor who hires any personnel to perform covered work on the Project pursuant to this Section shall immediately provide the appropriate Union with the name and address of such employee(s) and shall immediately refer such employee(s) to the appropriate Union to satisfy the requirements of Article VII of this Agreement.
- 8.6. Unions will exert their utmost efforts to recruit sufficient numbers of skilled craft persons to fulfill the requirements of the Contractor/Employer(s). Recognizing the potential acute shortage of skilled craftspeople, the Unions shall consider a Contractor's request to transfer key employees to work on this Project in a manner consistent with the Union's referral procedures.

### ARTICLE 9 BENEFITS

9.1 All Contractor/Employers agree to pay contributions to the established vacation, pension and other form of deferred compensation plan, apprenticeship, and health benefit funds established by the applicable Master Agreement for each hour worked on the Project in the amounts designated in the Master Agreements or Prevailing Wage Determination, whichever is greater, of the appropriate local unions. The Contractor/Employers shall not be required to pay contributions to any other trust funds that are not contained in the published prevailing wage determination to satisfy their obligation under this Article, except that those Contractor/Employers who are signatory

to the Master Agreements with the respective trades shall continue to pay all trust fund contributions as outlined in such Master Agreements.

- 9.2 By signing this Agreement, the Contractor/Employers adopt and agree to be bound by the written terms of the legally established Trust Agreements, as described in section 9.1, specifying the detailed basis on which payments are to be made into, and benefits paid out of, such Trust Funds.
- 9.3 Wages, Hours, Terms and Conditions of Employment: The wages, hours and other terms and conditions of employment on the Project shall be governed by the Master Agreement or Prevailing Wage Determination, whichever is greater, of the respective crafts, copies of which shall be on file with the District to the extent such Master Agreement is not inconsistent with this Agreement.
- 9.4 Holidays: Holidays shall be established as set forth in the applicable Schedule A.

#### ARTICLE 10 EMPLOYEE GRIEVANCE PROCEDURE

10.1 All disputes involving discipline and/or discharge of employees working on the Project shall be resolved through the grievance and arbitration provision contained in the Master Agreement for the craft of the affected employee. No employee working on the Project shall be disciplined or dismissed without just cause.

#### ARTICLE 11 COMPLIANCE

11.1 It shall be the responsibility of the Contractor/Employer(s) and Unions to investigate and monitor compliance with the provisions of the Agreement contained in Article 9. Nothing in this Agreement shall be construed to interfere with or supersede the usual and customary legal remedies available to the Unions and/or employee benefit Trust Funds to collect delinquent Trust Fund contributions from Contractor/Employer(s) on the Project. The District shall monitor and enforce compliance with the prevailing wage requirements of the state, and the Contractors/Employers' compliance with this Agreement.

### ARTICLE 12 GRIEVANCE ARBITRATION PROCEDURE

12.1 Project Labor Disputes: All Project labor disputes involving the application or interpretation of the Master Collective Bargaining Agreement to which a signatory Contractor/Employer and a signatory Union are parties shall be resolved pursuant to the resolution procedures of the Master Collective Bargaining Agreement. All disputes relating to the interpretation or application of the Agreement shall be subject to resolution by the Grievance arbitration procedures set forth herein.

- 12.2 No grievance shall be recognized unless the grieving party (Local Union or District Council, on its own behalf, or on behalf of an employee whom it represents, or a Contractor/Employer on its own behalf) provides notice in writing to the signatory party with whom it has a dispute within five (5) days after becoming aware of the dispute but in no event more than thirty (30) days after it reasonably should have become aware of the event giving rise to the dispute. The time limits in Section 12.1 may be extended by mutual written agreement of the parties.
  - 12.3 Grievances shall be settled according to the following procedures:
- Step 1: Within five (5) business days after the receipt of the written notice of the grievance, the Business Representative of the involved Local Union or District Council, or his/her designee, or the representative of the employee, and the representative of the involved Contractor/Employer shall confer and attempt to resolve the grievance.
- Step 2: In the event that the representatives are unable to resolve the dispute within the five (5) business days after the meeting to resolve the dispute in Step 1, the International Union Representative and the Contractor/Employer involved shall meet within seven (7) working days of the referral of the dispute to this second step to arrive at a satisfactory settlement thereof. Meeting minutes shall be kept by the Contractor. In the event that these representatives are unable to resolve the dispute, either involved party may submit the grievance in writing within five (5) business days to the Business Manager(s) of the affect Union(s) involved, the Manager of Labor Relations of the Contractor/Employer involved or the Manager's designated representative, and the Project Manager for discussion and resolution.
- Step 3: If the grievance is not settled in Step 2, either party may request the dispute be submitted to arbitration or the time may be extended by mutual consent of both parties. Within five (5) business days after referral of a dispute to Step 3, the representatives shall choose a mutually agreed upon arbitrator for final and binding arbitration. The parties agree that if the permanent arbitrator or his alternate is not available, an arbitrator shall be selected by the alternate striking method from the list of five (5) below. The order of striking names from the list of arbitrators shall be determined by a coin toss, the winner of which shall decide whether they wish to strike first or second.
  - 1. William Riker
  - 2. Barry Winogard
  - 3. Thomas Angelo
  - Robert Hirsch
  - Jeri-Lou Cossack
- 12.4 The decision of the Arbitrator shall be binding on all parties. The Arbitrator shall have no authority to change, amend, add to or detract from any of the

provisions of the Agreement. The expense of the Arbitrator shall be borne equally by both parties. The Arbitrator shall arrange for a hearing on the earliest available date from the date of his/her selection. A decision shall be given to the parties within five (5) calendar days after completion of the hearing unless such time is extended by mutual agreement. A written opinion may be requested by a party from the presiding arbitrator.

- 12.5 The time limits specified in any step of the Grievance Procedure set forth in Section 12.2 may be extended by mutual agreement of the parties initiated by the written request of one party to the other, at the appropriate step of the Grievance Procedure. However, failure to process a grievance, or failure to respond in writing within the time limits provided above, without an agreed upon extension of time, shall be deemed a waiver of such grievance without prejudice, or without precedent to the processing of and/or resolution of like or similar grievances or disputes.
- 12.6 In order to encourage the resolution of disputes and grievances at Steps 1 and 2 of this Grievance Procedure, the parties agree that such settlements shall not be precedent setting.

### ARTICLE 13 WORK ASSIGNMENTS AND JURISDICTIONAL DISPUTES

- 13.1 The assignment of Covered Work will be solely the responsibility of the Employer performing the work involved; and such work assignments will be in accordance with the Plan for the Settlement of the Jurisdictional Disputes in the Construction Industry (the "Plan") or any successor Plan.
- 13.2 All jurisdictional disputes on this Project between or among the building and construction trades Unions and the Employers parties to this Agreement, shall be settled and adjusted according to the present Plan established by the Building and Construction Trades Department or any other plan or method of procedure that may be adopted in the future by the Building and Construction Trades Department. Decisions rendered shall be final, binding and conclusive on the Employers and Unions parties to this Agreement.
- 13.3 For the convenience of the parties, and in recognition of the expense of travel between Northern California and Washington, DC, at the request of any party to a jurisdictional dispute under this Agreement an Arbitrator shall be chosen by the procedures specified in Article V, Section 5, of the Plan from a list composed of John Kagel, Thomas Angelo, Robert Hirsch, and Thomas Pagan, and the Arbitrator's hearing on the dispute shall be held at the offices of the Napa-Solano Building & Construction Trades Council. All other procedures shall be as specified in the Plan.
- 13.4 All jurisdictional disputes shall be resolved without the occurrence of any strike, work stoppage, or slow-down of any nature, and the Employer's assignment shall be adhered to until the dispute is resolved. Individual employees violating this section shall be subject to immediate discharge. Each Employer will conduct a pre-job conference with the Council prior to commencing work. The Project Manager and the

District will be advised in advance of all such conferences. The Primary Contractor shall attend all such meetings and the District and may participate if it wishes. Pre-job conferences for different Employers may be held together.

### ARTICLE 14 APPRENTICES

- 14.1 Recognizing the need to develop adequate numbers of competent workers in the construction industry, the Contractor/Employer(s) shall employ apprentices from California State-approved Joint Apprenticeship Programs in the respective crafts to perform such work as is within their capabilities and which is customarily performed by the craft in which they are indentured.
- 14.2 The apprentice ratios will be in compliance with the applicable provisions of the California Labor Code and Prevailing Wage Rate Determination.
- 14.3 There shall be no restrictions on the utilization of apprentices in performing the work of their craft provided they are properly supervised, except as provided by law and the provisions herein.
- 14.4 The Parties recognize the importance to the Solano Community College District Board of Trustees of providing Solano Community College students and graduates with the opportunity to participate both in the Unions' Apprenticeship Programs and the opportunity to work on the Project(s) under this Agreement. To the extent permitted by law and the hiring hall provisions of the applicable local Union and the rules and bylaws of the applicable joint apprenticeship program and in compliance with the Program's Standards approved by the State of California, Division of Apprenticeship Standards:
  - 14.4.1 The Union apprenticeship programs will provide for direct entry of qualified graduates of local and approved pre-apprenticeship programs upon request from a signatory Contractor/Employer seeking to fulfill local hiring goals specified under this Agreement. The pre-apprentice programs covered under this provision include but are not limited to the pre-apprenticeship bridge programs that will be developed at Solano Community College in partnership with local trades, per Addendum B.
  - 14.4.2 Each Contractor/Subcontractor performing work covered by this Agreement shall employ on the Project, if available, at least one eligible Solano Community College student or graduate who is enrolled and participating in a Joint Apprenticeship Program approved by the State of California, Division of Apprenticeship Standards, for any craft for which such program exists, when the Contractor/Employer has the minimum number of employees as is established by the Department of Apprenticeship Standards regulations for the employment of apprentices. A properly indentured apprentice must be employed under the regulations of the craft or trade at which s/he is indentured and shall be employed only for work of the craft or trade in which s/he is registered. If an apprentice is

not available for referral to a Contractor/Employer when such Contractor/Employer is required to employ an apprentice pursuant to this subsection, the Contractor/Employer shall maintain an open request for such referral, should an opening occur at a later date, as long as its obligations to employ the apprentice exists.

#### ARTICLE 15 LOCAL HIRE

The Parties to this Agreement support the development of increased numbers of skilled construction workers from graduates of District schools and residents of Solano County and the City of Winters to meet the needs of District Projects and the requirements of the industry generally. Toward that end, the Unions agree to encourage the referral and utilization, to the extent permitted by law and the hiring hall procedures, of qualified graduates of District schools, Solano County residents, and residents of the City of Winters as journeymen and apprentices to covered Projects and entrance into such apprenticeship and training programs as may be operated by the Unions. In addition, all efforts will be made for the workforce to represent the ethnic make up of Solano County and the City of Winters.

#### ARTICLE 16 MANAGEMENT RIGHTS

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

#### ARTICLE 17 HELMETS TO HARDHATS

- 17.1 The Contractor/Employers and the Unions recognize a desire to facilitate the entry into the building and construction trades of veterans who are interested in careers in the building and construction industry. The Contractor/Employers and Unions agree to utilize the services of the Center for Military Recruitment, Assessment and Veterans Employment (hereinafter "Center) and the Center's "Helmets to Hardhats" program to serve as a resource for preliminary orientation, assessment of construction aptitude, referral to apprenticeship programs or hiring halls, counseling and mentoring, support network, employment opportunities and other needs as identified by the parties.
- 17.2 The Unions and Contractor/Employers agree to coordinate with the Center to create and maintain an integrated database of veterans interested in working on the Project and of apprenticeship and employment opportunities for this Project. To the extent permitted by law, the Unions will give credit to such veterans for bona fide, provable past experience.

# ARTICLE 18 DRUG & ALCOHOL TESTING

- 18.1 The use, sale, transfer, purchase and/or possession of a controlled substance, alcohol and/or firearms at any time during the work day is prohibited.
- 18.2 Drug and alcohol testing shall be conducted in accordance with the Substance Abuse Prevention Policies set forth in each applicable Schedule A.

#### ARTICLE 19 SAVINGS CLAUSE

- 19.1 The Parties agree that in the event any article, provision, clause, sentence or word of the Agreement is determined to be illegal or void as being in contravention of any applicable law, by a court of competent jurisdiction, the remainder of the Agreement shall remain in full force and effect. The Parties further agree that if any article, provision, clause, sentence or word of the Agreement is determined to be illegal or void, by a court of competent jurisdiction, the Parties shall substitute, by mutual agreement, in its place and stead, an article, provision, clause, sentence or word which will meet the objections to its validity and which will be in accordance with the intent and purpose of the article, provision, clause, sentence or word in question.
- 19.2 The Parties also agree that in the event that a decision of a court of competent jurisdiction materially alters the terms of the Agreement such that the intent of the parties is defeated, then the entire Agreement shall be null and void.
- 19.3 If a court of competent jurisdiction determines that all or part of the Agreement is invalid and/or enjoins the District from complying with all or part of its provisions and the District accordingly determines that the Agreement will not be required as part of an award to a Contractor/Employer, the Unions will no longer be bound by the provisions of Article 4.

#### ARTICLE 20 TERM

- 20.1 The Agreement shall be included in the Bid Documents as a condition of the award of all construction contracts for the Project.
- 20.2 The Agreement shall continue in full force and effective until the completion of the Project.

### ARTICLE 21 MISCELLANEOUS PROVISIONS

21.1 <u>Counterparts</u>: This Agreement may be executed in counterparts, such that original signatures may appear on separate pages, and when bound together all necessary signatures shall constitute an original. Facsimile and electronic signature pages

transmitted to other parties to this Agreement shall be deemed equivalent to an original signature.

- 21.2 <u>Warranty of Authority</u>: Each of the persons signing this Agreement represents and warrants that such person has been duly authorized to sign this Agreement on behalf of the party indicated, and each of the parties by signing this Agreement warrants and represents that such party is legally authorized and entitled to enter into this Agreement.
- 21.3 <u>Ratification by Governing Board</u>: This Agreement shall not be binding on the District until it is approved by the Governing Board of the Solano Community College District.

SOLANO COMMUNITY COLLEGE DISTI	RICT			
Ву:	Date: $12 - 09 - 13$			
NAPA-SOLANO BUILDING & CONSTRU TRADES COUNCIL	CTION			
By: Ben Espinoza, President	Date:			
SIGNATURE BLOCKS FOR UNIONS				
Asbestos Workers Local #16	Bricklayers & Allied Trades Crafts Local #3			
By: Pal Brux	By: Troy Salen			
<b>Boilermakers Local #549</b>	Carpenters 46 Northern California Counties Conference Board			
By: Much ( )	By:			

Plasterers Local #400	Plasterers Local #300
By: Blu Dapinga	By: Hhally
District Council #16 Int'l Union of Painters and Allied Trades	Electrical Workers Local #180
By: CHI CHI 1,	By: Sank Bwallat
Iron Workers Local #378	Northern California District Council of Laborers
By: Aff left En	By: Denbellane
Operating Engineers Local #3	Plumbers & Steamfitters Local #343
By: word Sauce	By: DJO. Path
Roofers & Waterproofers Local #81	Sheetmetal Workers Local #104
By: My Mre	By: Be More
Sprinklerfitters Local #483	Utility/Landscape Local #355
By: Stanly H. Smith	By: Migen Duign
Teamsters Local #315	Elevator Constructors Local #8
By:	By:
Solano Community College District	

**District Council of Cement Masons and** 

**District Council of Cement Masons and** 

**District Council of Cement Masons and** District Council of Cement Masons and Plasterers Local #400 Plasterers Local #300 District Council #16 Int'l Union of **Electrical Workers Local #180 Painters and Allied Trades** Iron Workers Local #378 Northern California District Council of Laborers **Operating Engineers Local #3** Plumbers & Steamfitters Local #343 Roofers & Waterproofers Local #81 Sheetmetal Workers Local #104 Utility/Landscape Local #355

Sprinklerfitters Local #483

**Teamsters Local #315** 

By: Cin W. M. Clash

**Elevator Constructors Local #8** 

Solano Community College District Project Labor Agreement

### ADDENDUM A: AGREED TO LETTER OF ASSENT

[Addressee] [Address]	
[City and State]	
Re: Solano Community College District I	Measure Q Project Labor Agreement.
Dear Mr. /Ms:	
The undersigned party confirms that it agrees Community College District Measure Q Con as such Agreement may, from time to time, be pursuant to its terms.	struction Project, Project Labor Agreement
to be bound by the written terms of the legal detailed basis upon which contributions are t	rsigned party subscribes to, adopts and agrees ly established trust agreements specifying the to be made into, and benefits made out of, crustees appointed by the parties to such trust
Such obligation to be a party to and bound by covered by said Agreement undertaken by the Construction Project. The undersigned party whatever tier, to become similarly bound for Agreement by signing an identical Letter of	e undersigned party on the [Measure Q shall require all of its subcontractors, of all their work within the scope of this
This letter shall constitute a subscription agreletter.	eement, to the extent of the terms of the
CONTRACTOR/SUBCONTRACTOR:	
Project Contract Number:	
California State License Number: or Motor Carrier (CA) Permit Number	
Name and Signature of Authorized Person:	
	(Print Name)
	(Title)
	(Signature) (Date)

#### ADDENDUM B:

### MEMORANDUM OF UNDERSTANDING SOLANO COMMUNITY COLLEGE DISTRICT MEASURE Q PROJECT LABOR AGREEMENT

The parties to this Agreement agree to establish a committee to develop a Construction Career Pathway Partnership ("Partnership") to identify educational and employment opportunities for District students in the construction industry and to actively and regularly engage in exploring the possibility of long-term collaboration on implementing partnership opportunities for apprenticeship training. The committee shall include representatives of the District, Unions and Contractors signatory to this Agreement. Further, as part of this Partnership, the parties agree to mutually support and participate in a one day "Construction Awareness Day" event on each Project covered under this Agreement at a time in which there is active construction on the Project with the purpose of increasing the awareness for students and residents of the District regarding potential careers in the construction industry. Craft workers will be compensated for the time necessary to sufficiently clean the work site to accommodate each one-day event. Those craft workers involved in the skill demonstrations during each one-day event will participate on a voluntary basis.

SOLANO COMMUNITY COLLEGE DISTRICT	NAPA-SOLANO BUILDING & CONSTRUCTION TRADES COUNCIL
Aller.	Ben Espinoza, President
Date 12-09-13	Date

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#### **NOTICE TO BIDDERS**

1. Notice is hereby given that the governing board ("Board") of the Solano Community College District ("District") will receive sealed bids for the following project, Bid No. 16-008,

#### **BUILDING 200 KITCHEN RENOVATION**

2. The Project consists of:

Demolition of existing cabinets, countertops, appliances, and flooring and the installation of new plumbing, electrical, and HVAC components along with new finishes and appliances.

3. To bid on this Project, the Bidder is required to possess the following State of California Contractor License:

В

The Bidder's license(s) must remain active and in good standing throughout the term of the Contract.

- 4. To bid on this Project, the Bidder is required to be registered as a public works contractor with the Department of Industrial Relations. The Bidder's registration must remain active throughout the term of the Contract.
- 5. Contract Documents including drawings and specifications, are available on **March 10, 2016** through BPXpress. They may be viewed and/or obtained by logging on to: <a href="https://www.blueprintexpress.com/sccdmeasureq">www.blueprintexpress.com/sccdmeasureq</a> or by calling BPXpress Reprographics at (707) 745-3593. Bidders can register with BPXpress and purchase a complete set of bid documents for a non-refundable fee.
- 6. Sealed Bids will be received until **11:00 a.m.**, **April 4, 2016**, at Solano Community College, 4000 Suisun Valley Road, Building 600 Board Room, Fairfield California 94534 at which time the bids will be opened and publicly read aloud. Any bid that is submitted after this time shall be non-responsive and returned to the bidder. Any claim by a bidder of error in its bid must be made in compliance with section 5100 et seq. of the Public Contract Code.
- 7. All bids shall be on the form provided by the District. Each bid must conform and be responsive to all pertinent Contract Documents, including, but not limited to, the Instructions to Bidders.
- 8. A bid bond by an admitted surety insurer on the form provided by the District, cash, or a cashier's check or a certified check, drawn to the order of the Solano Community College District, in the amount of ten percent (10%) of the total bid price, shall accompany the Bid Form and Proposal, as a guarantee that the Bidder will, within seven (7) calendar days after the date of the Notice of Award, enter into a contract with the District for the performance of the services as stipulated in the bid.

- 9. A mandatory pre-bid conference and site visit will be held on Thursday March 24, 2016, at 11:00 am at Solano Community College, Building 200 (CDFS Building), 4000 Suisun Valley Road, Fairfield, California 94534. All participants are required to sign in at the CDFS Building. The Site Visit is expected to take approximately one hour. Failure to attend or tardiness will render bid ineligible.
- 10. The successful Bidder shall be required to furnish a 100% Performance Bond and a 100% Payment Bond if it is awarded the contract for the Work.
- 11. The successful Bidder may substitute securities for any monies withheld by the District to ensure performance under the Contract, in accordance with the provisions of section 22300 of the Public Contract Code.
- 12. The Contractor and all Subcontractors under the Contractor shall pay all workers on all work performed pursuant to this Contract not less than the general prevailing rate of per diem wages and the general prevailing rate for holiday and overtime work as determined by the Director of the Department of Industrial Relations, State of California, for the type of work performed and the locality in which the work is to be performed within the boundaries of the District, pursuant to sections 1770 et seq. of the California Labor Code. Prevailing wage rates are also available from the District or on the Internet at: <a href="http://www.dir.ca.gov">http://www.dir.ca.gov</a>.
- 13. This Project is subject to labor compliance monitoring and enforcement by the Department of Industrial Relations pursuant to Labor Code section 1771.4 and subject to the requirements of Title 8 of the California Code of Regulations. The Contractor and all Subcontractors under the Contractor shall furnish electronic certified payroll records directly to the Labor Commissioner weekly or within ten (10) days of any request by the District or the Labor Commissioner. The successful Bidder shall comply with all requirements of Division 2, Part 7, Chapter 1, of the Labor Code.
- 14. The District has entered into a Project Labor Agreement that is applicable to this Project. For questions or assistance concerning the Project Labor Agreement, contact Mike Vlaming from Vlaming and Associates at (707) 552-6040, 447 Georgia Street, Vallejo California 94590. Please see the Labor Agreement that is included as part of this bid package.
- 15. The District shall award the Contract, if it awards it at all, to the lowest responsive responsible bidder based on:
  - A. The base bid amount only.
- 16. The Board reserves the right to reject any and all bids and/or waive any irregularity in any bid received. If the District awards the Contract, the security of unsuccessful bidder(s) shall be returned within sixty (60) days from the time the award is made. Unless otherwise required by law, no bidder may withdraw its bid for ninety (90) days after the date of the bid opening.

END OF DOCUMENT

#### INSTRUCTIONS TO BIDDERS

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

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

1. Bids are requested for a general construction contract, or work described in general, for the following project ("Project" or "Contract"):

#### **BUILDING 200 KITCHEN RENOVATION**

- 2. District will receive sealed Bids from Bidders as stipulated in the Notice to Bidders.
- 3. Bidders must submit Bids on the Bid Form and Proposal and all other required District forms. Bids not submitted on the District's required forms shall be deemed non-responsive and shall not be considered. Additional sheets required to fully respond to requested information are permissible.
- 4. Bidders must supply all information required by each Bid Document. Bids must be full and complete. District reserves the right in its sole discretion to reject any Bid as non-responsive as a result of any error or omission in the Bid. Bidders must complete and submit all of the following documents with the Bid Form and Proposal:
  - a. Bid Bond on the District's form or other security.
  - b. Designated Subcontractors List.
  - c. Site-Visit Certification, if a site visit was required.
  - d. Noncollusion Declaration.
- 5. Bidders must submit with their Bids cash, a cashier's check or a certified check payable to District, or a bid bond by an admitted surety insurer of not less than ten percent (10%) of amount of base Bid, plus all additive alternates. If Bidder chooses to provide a Bid Bond as security, Bidder must use the required form of corporate surety provided by District. The Surety on Bidder's Bid Bond must be an insurer admitted in the State of California and authorized to issue surety bonds in the State of California. Bids submitted without necessary bid security will be deemed non-responsive and will not be considered.
- 7. If Bidder to whom Contract is awarded fails or neglects to enter into Contract and submit required bonds, insurance certificates, and all other required documents, within **SEVEN (7)** calendar days after the date of the Notice of Award, District may deposit Bid Bond, cash, cashier's check, or certified check for collection, and proceeds thereof may be retained by District as liquidated damages for failure of Bidder to enter into Contract, in the sole discretion of District. It is agreed that calculation of damages District may suffer as a result of Bidder's failure to enter into the Contract would be extremely difficult and impractical to determine and that the amount of the Bidder's required bid security shall be the agreed and conclusively presumed amount of damages.

- 8. Bidders must submit with the Bid the Designated Subcontractors List for those subcontractors who will perform any portion of Work, including labor, rendering of service, or specially fabricating and installing a portion of the Work or improvement according to detailed drawings contained in the plans and specifications, in excess of one half of one percent (0.5%) of total Bid. All of the listed subcontractors are required to be registered as a public works contractor with the Department of Industrial Relations. The subcontractor's registration must remain active throughout the term of the Contract. Failure to submit this list when required by law shall result in Bid being deemed non-responsive and the Bid will not be considered.
  - a. An inadvertent error in listing the California contractor license number on the Designated Subcontractors List shall not be grounds for filing a bid protest or grounds for considering the bid nonresponsive if the correct contractor's license number is submitted to the District within 24 hours after the bid opening and the corrected number corresponds with the submitted name and location for that subcontractor.
  - b. An inadvertent error listing an unregistered subcontractor shall not be grounds for filing a bid protest or grounds for considering the bid nonresponsive provided that any of the following apply:
    - (1) The subcontractor is registered prior to the bid opening.
    - (2) The subcontractor is registered and has paid the penalty registration fee within 24 hours after the bid opening.
    - (3) The subcontractor is replaced by another registered subcontractor pursuant to Public Contract Code section 4107.
- 9. If a mandatory pre-bid conference and site visit ("Site Visit") is requested as referenced in the Notice to Bidders, then Bidders must submit the Site-Visit Certification with their Bid. District will transmit to all prospective Bidders of record such Addenda as District in its discretion considers necessary in response to questions arising at the Site Visit. Oral statements shall not be relied upon and will not be binding or legally effective. Addenda issued by the District as a result of the Site Visit, if any, shall constitute the sole and exclusive record and statement of the results of the Site Visit.
- 10. Bidders shall submit the Noncollusion Declaration with their Bids. Bids submitted without the Noncollusion Declaration shall be deemed non-responsive and will not be considered.
- 11. Bids shall be clearly written without erasure or deletions. District reserves the right to reject any Bid containing erasures or deletions.
- 12. Bidders shall not modify the Bid Form and Proposal or qualify their Bids. Bidders shall not submit to the District a scanned, re-typed, word-processed, or otherwise recreated version of the Bid Form and Proposal or other District-provided document.
- 13. The Bidder and all Subcontractors under the Contractor shall pay all workers on all work performed pursuant to this Contract not less than the general prevailing rate of

per diem wages and the general prevailing rate for holiday and overtime work as determined by the Director of the Department of Industrial Relations, State of California, for the type of work performed and the locality in which the work is to be performed within the boundaries of the District, pursuant to sections 1770 et seq. of the California Labor Code. Copies of the general prevailing rates of per diem wages for each craft, classification, or type of worker needed to execute the Contract, as determined by Director of the State of California Department of Industrial Relations, are available upon request at the District's principal office. Prevailing wage rates are also available on the internet at http://www.dir.ca.gov.

- 14. Submission of Bid signifies careful examination of Contract Documents and complete understanding of the nature, extent, and location of Work to be performed. Bidders must complete the tasks listed below as a condition to bidding, and submission of a Bid shall constitute the Bidder's express representation to District that Bidder has fully completed the following:
  - a. Bidder has visited the Site, if required, and has examined thoroughly and understood the nature and extent of the Contract Documents, Work, Site, locality, actual conditions, as-built conditions, and all local conditions and federal, state and local laws, and regulations that in any manner may affect cost, progress, performance, or furnishing of Work or that relate to any aspect of the means, methods, techniques, sequences, or procedures of construction to be employed by Bidder and safety precautions and programs incident thereto;
  - b. Bidder has conducted or obtained and has understood all examinations, investigations, explorations, tests, reports, and studies that pertain to the subsurface conditions, as-built conditions, underground facilities, and all other physical conditions at or contiguous to the Site or otherwise that may affect the cost, progress, performance, or furnishing of Work, as Bidder considers necessary for the performance or furnishing of Work at the Contract Sum, within the Contract Time, and in accordance with the other terms and conditions of Contract Documents, including specifically the provisions of the General Conditions; and no additional examinations, investigations, explorations, tests, reports, studies, or similar information or data are or will be required by Bidder for such purposes;
  - c. Bidder has correlated its knowledge and the results of all such observations, examinations, investigations, explorations, tests, reports, and studies with the terms and conditions of the Contract Documents;
  - d. Bidder has given the District prompt written notice of all conflicts, errors, ambiguities, or discrepancies that it has discovered in or among the Contract Documents and the actual conditions, and the written resolution thereof by the District is acceptable to Bidder;
  - e. Bidder has made a complete disclosure in writing to the District of all facts bearing upon any possible interest, direct or indirect, that Bidder believes any representative of the District or other officer or employee of the District presently has or will have in this Contract or in the performance thereof or in any portion of the profits thereof;

- e. Bidder must, prior to bidding, perform the work, investigations, research, and analysis required by this document and that Bidder represented in its Bid Form and Proposal and the Agreement that it performed prior to bidding. Contractor under this Contract is charged with all information and knowledge that a reasonable bidder would ascertain from having performed this required work, investigation, research, and analysis. Bid prices must include entire cost of all work "incidental" to completion of the Work.
- f. Conditions Shown on the Contract Documents: Information as to underground conditions, as-built conditions, or other conditions or obstructions, indicated in the Contract Documents, e.g., on Drawings or in Specifications, has been obtained with reasonable care, and has been recorded in good faith. However, District only warrants, and Contractor may only rely, on the accuracy of limited types of information.
  - (1) As to above-ground conditions or as-built conditions shown or indicated in the Contract Documents, there is no warranty, express or implied, or any representation express or implied, that such information is correctly shown or indicated. This information is verifiable by independent investigation and Contractor is required to make such verification as a condition to bidding. In submitting its Bid, Contractor shall rely on the results of its own independent investigation. In submitting its Bid, Contractor shall not rely on District-supplied information regarding above-ground conditions or asbuilt conditions.
  - (2) As to any subsurface condition shown or indicated in the Contract Documents, Contractor may rely only upon the general accuracy of actual reported depths, actual reported character of materials, actual reported soil types, actual reported water conditions, or actual obstructions shown or indicated. District is not responsible for the completeness of such information for bidding or construction; nor is District responsible in any way for any conclusions or opinions of Contractor drawn from such information; nor is the District responsible for subsurface conditions that are not specifically shown (for example, District is not responsible for soil conditions in areas contiguous to areas where a subsurface condition is shown).
- g. Conditions Shown in Reports and Drawings Supplied for Informational Purposes: Reference is made to the document entitled Geotechnical Data, and the document entitled Existing Conditions, for identification of:
  - (1) Subsurface Conditions: Those reports of explorations and tests of subsurface conditions at or contiguous to the Site that have been utilized by Architect in preparing the Contract Documents; and
  - (2) Physical Conditions: Those drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site that has been utilized by Architect in preparing the Contract Documents.

- (3) These reports and drawings are <u>not</u> Contract Documents and, except for any "technical" data regarding subsurface conditions specifically identified in Geotechnical Data and Existing Conditions, and underground facilities data, Contractor may not in any manner rely on the information in these reports and drawings. Subject to the foregoing, Contractor must make its own independent investigation of all conditions affecting the Work and must not rely on information provided by District.
- 15. Bidders may examine any available "as-built" drawings of previous work by giving District reasonable advance notice. District will not be responsible for accuracy of "as-built" drawings. The document entitled Existing Conditions applies to all supplied "as-built" drawings.
- 16. All questions about the meaning or intent of the Contract Documents are to be directed in writing to the District. Interpretations or clarifications considered necessary by the District in response to such questions will be issued in writing by Addenda emailed, faxed, mailed, or delivered to all parties recorded by the District as having received the Contract Documents. Questions received less than <a href="SEVEN">SEVEN</a>
  (7) calendar days prior to the date for opening Bids may not be answered. Only questions answered by formal written Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.
- 17. Addenda may also be issued to modify other parts of the Contract Documents as deemed advisable by the District.
- 18. Each Bidder must acknowledge each Addendum in its Bid Form and Proposal by number or its Bid shall be considered non-responsive. Each Addendum shall be part of the Contract Documents. A complete listing of Addenda may be secured from the District.
- 19. Bids shall be based on products and systems specified in Contract Documents or listed by name in Addenda. Whenever in the Specifications any materials, process, or article is indicated or specified by grade, patent, or proprietary name, or by name of manufacturer, that Specification shall be deemed to be followed by the words "or equal." Bidder may, unless otherwise stated, offer any material, process, or article that shall be substantially equal or better in every respect to that so indicated or specified. The District is not responsible and/or liable in any way for a Contractor's damages and/or claims related, in any way, to that Contractor's basing its bid on any requested substitution that the District has not approved. Contractors and materials suppliers who submit requests for substitutions prior to the award of the Contract must do so in writing and in compliance with Public Contract Code section 3400. All requests must comply with the following:
  - a. District must receive any request for substitution a minimum of <u>TEN (10)</u> calendar days prior to bid opening.
  - b. Within 35 days after the date of the Notice of Award, the Successful Bidder shall submit data substantiating a request for substitution containing sufficient information to assess acceptability of product or system and impact on Project, including, without limitation, the requirements specified in the

- Special Conditions and the Specifications. Insufficient information shall be grounds for rejection of substitution.
- c. Approved substitutions, if any, shall be listed in Addenda. District reserves the right not to act upon submittals of substitutions until after bid opening.
- d. Substitutions may be requested after Contract has been awarded only if indicated in and in accordance with requirements specified in the Special Conditions and the Specifications.
- 20. All Bids must be sealed, and marked with name and address of the Bidder and the Project Number, Bid number, Bid package, and time of bid opening. Bids will be received as indicated in the Notice to Bidders.
  - a. Mark envelopes with the name of the Project.
  - Bids must be submitted to the **District Bond Office** by date and time shown in the Notice to Bidders.
  - c. Bids must contain all documents as required herein.
- 21. Bids will be opened at or after the time indicated for receipt of bids.
- 22. The District shall award the Contract, if it awards it at all, to the lowest responsive responsible bidder based on the criteria as indicated in the Notice to Bidders. In the event two or more responsible bidders submit identical bids, the District shall select the Bidder to whom to award the Contract by lot.
- 23. Time for Completion: District may issue a Notice to Proceed within **THREE (3)** months from the date of the Notice of Award. Once Contractor has received the Notice to Proceed, Contractor shall complete the Work within the period of time indicated in the Contract Documents.
  - a. In the event that the District desires to postpone issuing the Notice to Proceed beyond this 3-month period, it is expressly understood that with reasonable notice to the Contractor, the District may postpone issuing the Notice to Proceed.
  - b. It is further expressly understood by Contractor that Contractor shall not be entitled to any claim of additional compensation as a result of the postponement of the issuance of the Notice to Proceed beyond a 3-month period. If the Contractor believes that a postponement of issuance of the Notice to Proceed will cause a hardship to the Contractor, the Contractor may terminate the Contract. Contractor's termination due to a postponement beyond this 3-month period shall be by written notice to District within <a href="TEN">TEN</a> (10) calendar days after receipt by Contractor of District's notice of postponement.
  - It is further understood by the Contractor that in the event that Contractor terminates the Contract as a result of postponement by the District, the District shall only be obligated to pay Contractor for the Work that Contractor had performed at the time of notification of postponement and which the

- District had in writing authorized Contractor to perform prior to issuing a Notice to Proceed.
- d. Should the Contractor terminate the Contract as a result of a notice of postponement, District shall have the authority to award the Contract to the next lowest responsive responsible bidder.
- 24. The Bidder to whom Contract is awarded shall execute and submit the following documents by 5:00 p.m. of the **SEVENTH (7**<sup>th</sup>) calendar day following the date of the Notice of Award. Failure to properly and timely submit these documents entitles District to reject the bid as non-responsive.
  - a. Agreement: To be executed by successful Bidder. Submit four (4) copies, each bearing an original signature.
  - b. Escrow of Bid Documentation: This must include all required documentation. See the document Escrow of Bid Documentation for more information.
  - c. Performance Bond (100%): On the form provided in the Contract Documents and fully executed as indicated on the form.
  - d. Payment Bond (100%) (Contractor's Labor and Material Bond): On the form provided in the Contract Documents and fully executed as indicated on the form.
  - e. Insurance Certificates and Endorsements as required.
  - f. Workers' Compensation Certification.
  - g. Prevailing Wage and Related Labor Requirements Certification.
  - h. Disabled Veterans' Business Enterprise Participation Certification.
  - i. Drug-Free Workplace Certification.
  - j. Tobacco-Free Environment Certification.
  - k. Hazardous Materials Certification.
  - Lead-Based Paint Certification.
  - m. Imported Materials Certification.
  - n. Buy American Certification.
  - o. Roofing Project Certification: from Contractor, Material Manufacturer and/or Vendor.
- 25. Any bid protest by any Bidder regarding any other bid must be submitted in writing to the District, before 5:00 p.m. of the <u>THIRD (3<sup>rd</sup>)</u> business day following bid opening.

- Only a Bidder who has actually submitted a bid, and who could be awarded the Contract if the bid protest is upheld, is eligible to submit a bid protest.
   Subcontractors are not eligible to submit bid protests. A Bidder may not rely on the bid protest submitted by another Bidder.
- b. A bid protest must contain a complete statement of any and all bases for the protest and all supporting documentation. Materials submitted after the bid protest deadline will not be considered.
- c. The protest must refer to the specific portions of all documents that form the basis for the protest.
  - (1) Without limitation to other bases for protest, an inadvertent error in listing the California contractor license number on the Designated Subcontractors List shall not be grounds for filing a bid protest or grounds for considering the bid nonresponsive if the correct contractor's license number is submitted to the District within 24 hours after the bid opening and the corrected number corresponds with the submitted name and location for that subcontractor.
  - (2) Without limitation to other bases for protest, an inadvertent error listing an unregistered subcontractor shall not be grounds for filing a bid protest or grounds for considering the bid nonresponsive provided that any of the following apply:
    - (i) The subcontractor is registered prior to the bid opening.
    - (ii) The subcontractor is registered and has paid the penalty registration fee within 24 hours after the bid opening.
    - (iii) The subcontractor is replaced by another registered subcontractor pursuant to Public Contract Code section 4107.
- d. The protest must include the name, address and telephone number of the person representing the protesting party.
- e. The party filing the protest must concurrently transmit a copy of the protest and any attached documentation to all other parties with a direct financial interest that may be adversely affected by the outcome of the protest. Such parties shall include all other bidders or proposers who appear to have a reasonable prospect of receiving an award depending upon the outcome of the protest.
- f. The procedure and time limits set forth in this paragraph are mandatory and are each bidder's sole and exclusive remedy in the event of bid protest.

  Failure to comply with these procedures shall constitute a waiver of any right to further pursue the bid protest, including filing a Government Code Claim or legal proceedings.
- 26. District reserves the right to reject any or all bids, including without limitation the right to reject any or all nonconforming, non-responsive, unbalanced, or conditional bids, to re-bid, and to reject the bid of any bidder if District believes that it would not

be in the best interest of the District to make an award to that bidder, whether because the bid is not responsive or the bidder is unqualified or of doubtful financial ability or fails to meet any other pertinent standard or criteria established by District. District also reserves the right to waive inconsequential deviations not involving price, time, or changes in the Work. For purposes of this paragraph, an "unbalanced bid" is one having nominal prices for some work items and/or enhanced prices for other work items.

- 27. Discrepancies between written words and figures, or words and numerals, will be resolved in favor of numerals or figures.
- 28. Prior to the award of Contract, District reserves the right to consider the responsibility of the Bidder. District may conduct investigations as District deems necessary to assist in the evaluation of any bid and to establish the responsibility, including, without limitation, qualifications and financial ability of Bidders, proposed subcontractors, suppliers, and other persons and organizations to perform and furnish the Work in accordance with the Contract Documents to District's satisfaction within the prescribed time.

#### **EXISTING CONDITIONS**

# 1. Summary

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

# 2. Reports and Information on Existing Conditions

- a. Documents providing a general description of the Site and conditions of the Work may have been collected by Solano Community College District ("District "), its consultants, contractors, and tenants. These documents may include previous contracts, contract specifications, tenant improvement contracts, as-built drawings, utility drawings, and information regarding underground facilities.
- b. Information regarding existing conditions may be inspected at the District offices or the Construction Manager's offices, if any, and copies may be obtained at cost of reproduction and handling upon Bidder's agreement to pay for such copies. These reports, documents, and other information are <a href="mailto:not">not</a> part of the Contract Documents.
- c. Information regarding existing conditions may also be included in the Project Manual, but shall **not** be considered part of the Contract Documents.
- d. Prior to commencing this Work, Contractor and the District's representative shall survey the Site to document the condition of the Site. Contractor will record the survey in digital videotape format and provide an electronic copy to the District within fourteen (14) days of the survey.
- e. Contractor may also document any pre-existing conditions in writing, provided that both the Contractor and the District's representative agree on said conditions and sign a memorandum documenting the same.
- f. The reports and other data or information regarding existing conditions and underground facilities at or contiguous to the Project are the following:
  - (1) Original Construction Drawings.

#### 3. Use of Information

- a. Information regarding existing conditions was obtained only for use of District and its consultants, contractors, and tenants for planning and design and is **not** part of the Contract Documents.
- District does not warrant, and makes no representation regarding, the
  accuracy or thoroughness of any information regarding existing conditions.
   Bidder represents and agrees that in submitting a bid it is not relying on any
  information regarding existing conditions supplied by District.

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

### 4. Investigations/Site Examinations

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

#### **BID FORM AND PROPOSAL**

Governing Board of Solano Community College District ("District" or "Owner")

	,
From: _	
(	(Proper Name of Bidder)
Notice to to furnis accorda	dersigned declares that the Contract Documents including, without limitation, the o Bidders and the Instructions to Bidders have been read and agrees and proposes sh all necessary labor, materials, and equipment to perform and furnish all work in nce with the terms and conditions of the Contract Documents, including, without on, the Drawings and Specifications of Bid No. 16-008.
	PROJECT: BUILDING 200 KITCHEN RENOVATION
	et" or "Contract") and will accept in full payment for that Work the following total im amount, all taxes included:
BASE B	dollars \$
BASE B	SID
	Allowance. The Bidder's Base Bid and each alternate shall include a ten percent (10%) allowance for unforeseen items.
\ [	The above allowance shall only be allocated for unforeseen items relating to the Work. Contractor shall not bill for or be due any portion of this allowance unless the District has identified specific work, Contractor has submitted a price for that work or the District has proposed a price for that work, the District has accepted the cost for

2. The undersigned has reviewed the Work outlined in the Contract Documents and fully understands the scope of Work required in this Proposal, understands the construction and project management function(s) is described in the Contract Documents, and that each Bidder who is awarded a contract shall be in fact a prime contractor, not a subcontractor, to the District, and agrees that its Proposal, if accepted by the District, will be the basis for the Bidder to enter into a contract with the District in accordance with the intent of the Contract Documents.

that work, and the District has prepared a change order incorporating that work. Contractor hereby authorizes the District to execute a unilateral deductive change order at or near the end of the Project for all or any portion of the allowance not

3. The undersigned has notified the District in writing of any discrepancies or omissions or of any doubt, questions, or ambiguities about the meaning of any of the Contract Documents, and has contacted the Construction Manager before bid date to verify the issuance of any clarifying Addenda.

allocated.

To:

- 4. The undersigned agrees to commence work under this Contract on the date established in the Contract Documents and to complete all work within the time specified in the Contract Documents.
- 5. The liquidated damages clause of the General Conditions and Agreement is hereby acknowledged.
- 6. It is understood that the District reserves the right to reject this bid and that the bid shall remain open to acceptance and is irrevocable for a period of ninety (90) days.
- 7. The following documents are attached hereto:
  - Bid Bond on the District's form or other security
  - Designated Subcontractors List
  - Site-Visit Certification
  - Noncollusion Declaration
- 8. Receipt and acceptance of the following addenda is hereby acknowledged:

No, Dated	No, Dated
No, Dated	No, Dated
No, Dated	No, Dated

- 9. Bidder acknowledges that the license required for performance of the Work is a  $\underline{\mathbf{B}}$  license.
- 10. The undersigned hereby certifies that Bidder is able to furnish labor that can work in harmony with all other elements of labor employed or to be employed on the Work.
- 11. Bidder specifically acknowledges and understands that if it is awarded the Contract, that it shall perform the Work of the Project while complying with all requirements of the Department of Industrial Relations [and with all requirements of the Project Labor Agreement].
- 12. The Bidder represents that it is competent, knowledgeable, and has special skills with respect to the nature, extent, and inherent conditions of the Work to be performed. Bidder further acknowledges that there are certain peculiar and inherent conditions existent in the construction of the Work that may create, during the Work, unusual or peculiar unsafe conditions hazardous to persons and property.
- 13. Bidder expressly acknowledges that it is aware of such peculiar risks and that it has the skill and experience to foresee and to adopt protective measures to adequately and safely perform the Work with respect to such hazards.
- 14. Bidder expressly acknowledges that it is aware that if a false claim is knowingly submitted (as the terms "claim" and "knowingly" are defined in the California False

Claims Act, Cal. Gov. Code, §12650 et seq.), the District will be entitled to civil remedies set forth in the California False Claim Act. It may also be considered fraud and the Contractor may be subject to criminal prosecution.

15. The undersigned Bidder certifies that it is, at the time of bidding, and shall be throughout the period of the contract, licensed by the State of California to do the type of work required under the terms of the Contract Documents and registered as a public works contractor with the Department of Industrial Relations. Bidder further certifies that it is regularly engaged in the general class and type of work called for in the Contract Documents.

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

Dated this	_ day of		20
Name of Bidder			
Type of Organization			
Signed by			
Title of Signer			
Address of Bidder			
Taxpayer's Identification No	o. of Bidder _		
Telephone Number			
Fax Number			
E-mail		Web page	
Contractor's License No(s):	No.:	Class:	Expiration Date:
	No.:	Class:	Expiration Date:
	No.:	Class:	Expiration Date:

Public Works Contractor Registration No.:
If Bidder is a corporation, affix corporate seal.
Name of Corporation:
President:
Secretary:
Treasurer:
Manager:

#### BID BOND

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

KNOW ALL PERSONS BY THESE PRESENTS:	
That the undersigned, as	as Principal ("Principal"),
anda corporation organized and existing under and by virtue of the I California and authorized to do business as a surety in the State firmly bound unto the Solano Community College District ("District California as Obligee, in the sum of	of California, are held and
Dollars	(\$)

lawful money of the United States of America, for the payment of which sum well and truly to be made, we, and each of us, bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

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

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

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

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

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

	trument has been duty executed by the Principal and Sure day of, 20
(Affix Corporate Seal)	Principal
	Ву
(Affix Corporate Seal)	Surety
	Ву
	Name of California Agent of Surety
	Address of California Agent of Surety
	Telephone Number of California Agent of Surety

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

#### **DESIGNATED SUBCONTRACTORS LIST**

(TO BE EXECUTED BY BIDDER AND SUBMITTED WITH BID)

#### PROJECT: No. 16-008, BUILDING 200 KITCHEN RENOVATION

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

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

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

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

Subcontractor Name:	
	Location:
Portion of Work:	
Subcontractor Name:	
CA Cont. Lic. #:	Location:
Portion of Work:	
Subcontractor Name:	
CA Cont. Lic. #:	Location:
Portion of Work:	
Subcontractor Name:	
CA Cont. Lic. #:	Location:
Portion of Work:	

Subcontractor Name:		
CA Cont. Lic. #:	Location:	
Portion of Work:		
Subcontractor Name:		
CA Cont. Lic. #:	Location:	
Portion of Work:		
	Location:	
Portion of Work:		
	Location:	
Portion of Work:		
	Location:	
Portion of Work:		
	Location:	
Portion of Work:		
Date:		
Proper Name of Bidder:		
Signature:		
Print Name:		
Title:		

### **SITE VISIT CERTIFICATION**

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

PROJECT: No. 16-008, BUILDING 200 KITCHEN RENOVATION

Check option that applies:			
the conditions relating	I certify that I visited the Site of the proposed Work and became fully acquainted with the conditions relating to construction and labor. I fully understand the facilities, difficulties, and restrictions attending the execution of the Work under contract.		
the proposed Work ar construction and labo	(Bidder's representative) visited the Site of and became fully acquainted with the conditions relating to r. The Bidder's representative fully understood the facilities, ctions attending the execution of the Work under contract.		
Bidder fully indemnifies the _Solano Community College School District, its Architect, its Engineer, its Construction Manager, and all of their respective officers, agents, employees, and consultants from any damage, or omissions, related to conditions that could have been identified during my visit and/or the Bidder's representative's visit to the Site.			
I certify under penalty of perjury under the laws of the State of California that the foregoing is true and correct.			
Date:			
Proper Name of Bidder:			
Signature:			
Print Name:			
Title:			

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

The undersigned declares:	
I am the of, the p	arty making the foregoing bid.
company, association, organ sham. The bidder has not directly a false or sham bid. The bidder or agreed with any bidder of the bidder has not in a communication, or conferent bidder, or to fix any overheather bidder. All statements indirectly, submitted his or hor divulged information or divulged association, organization, bid	interest of, or on behalf of, any undisclosed person, partnership, nization, or corporation. The bid is genuine and not collusive or rectly or indirectly induced or solicited any other bidder to put in der has not directly or indirectly colluded, conspired, connived, if anyone else to put in a sham bid, or to refrain from bidding any manner, directly or indirectly, sought by agreement, are with anyone to fix the bid price of the bidder or any other ead, profit, or cost element of the bid price, or of that of any is contained in the bid are true. The bidder has not, directly or her bid price or any breakdown thereof, or the contents thereof, ata relative thereto, to any corporation, partnership, company, it depository, or to any member or agent thereof, to effectuate a has not paid, and will not pay, any person or entity for such
partnership, joint venture,	declaration on behalf of a bidder that is a corporation, limited liability company, limited liability partnership, or any nts that he or she has full power to execute, and does execute, the bidder.
	perjury under the laws of the State of California that the ect and that this declaration is executed on[date], at
Date:	
Proper Name of Bidder:	
Signature:	
Print Name:	
Title:	

## **WORKERS' COMPENSATION CERTIFICATION**

	NTRACT NO. 16-008 between Solano Community College District ("District") ("Contractor" or "Bidder")		
("Contract" o	or "Project").		
Labor Code s	section 3700, in relevant part, provides:		
•	employer except the State shall secure the payment of compensation in one or of the following ways:		
a.	By being insured against liability to pay compensation by one or more insurers duly authorized to write compensation insurance in this state; and/or		
b.	By securing from the Director of Industrial Relations a certificate of consent to self-insure, which may be given upon furnishing proof satisfactory to the Director of Industrial Relations of ability to self-insure and to pay any compensation that may become due to his employees.		
employer to insurance in	of the provisions of section 3700 of the Labor Code which require every be insured against liability for workers' compensation or to undertake self-accordance with the provisions of that code, and I will comply with such efore commencing the performance of the Work of this Contract.		
Date:			
Proper Name	e of Contractor:		
Signature:			
Print Name:			
Title:			
	ce with Article Labor Code sections 1860 and 1861, the above certificate must diffiled with the awarding body prior to performing any Work under this		

END OF DOCUMENT

Contract.)

# PREVAILING WAGE AND RELATED LABOR REQUIREMENTS CERTIFICATION

	-008, between Solano Community College_District ("District") ("Contractor" or "Bidder")
("Contract" or "Project").	( *******************************
requirements regarding prev payroll records, and apprenti	nform to the State of California Public Works Contract ailing wages, benefits, on-site audits with 48-hours notice, ice and trainee employment requirements, for all Work on the out limitation, labor compliance monitoring and enforcement by Relations.
Date:	
Proper Name of Contractor:	
Signature:	
Print Name:	
Title:	

# DISABLED VETERAN BUSINESS ENTERPRISE PARTICIPATION CERTIFICATION

PROJECT/CONTRACT NO. 16-008,	between Solano Community College District ("District")
and	("Contractor" or "Bidder")
("Contract" or "Project").	

#### **GENERAL INSTRUCTIONS**

Section 71028 of the Education Code and Public Contract Code section 10115 require community college districts using funds allocated by the State Allocation Board pursuant to the Leroy F. Greene School Facilities Act ("Act") to have a participation of at least three percent (3%), per year, of the overall dollar amount expended each year by the district, for disabled veteran business enterprises ("DVBE"). Therefore, lowest responsive responsible bidder awarded the Contract must submit this document to the District with its executed Agreement, identifying the steps contractor took to solicit DVBE participation in conjunction with this Contract. Do not submit this form with your bids.

Part I – Method of Compliance with DVBE Participation Goals. Check the appropriate box to indicate your method of committing the contract dollar amount.

YOUR BUSINESS ENTERPRISE IS:	AND YOU WILL	AND YOU WILL
A. □ Disabled veteran owned and your forces will perform at least 3% of this Contract	Include a copy of your DVBE letter from Office of Small Business and Disabled Veterans Business Enterprise Services ("OSB")*	Complete Part 1 of this form and the Certification
<b>B.</b> □ Disabled veteran owned but is unable to perform 3% of this Contract with your forces	Use DVBE subcontractors /suppliers to bring the Contract participation to at least 3%	Include a copy of each DVBE's letter from OSB (including yours, if applicable), and
C.   NOT disabled veteran owned	Use DVBE subcontractors /suppliers for at least 3% of this Contract	complete Part 1 of this form and the certification
<b>D.</b> □ Unable to meet the required participation goals	Complete all of this Certification form	

<sup>\*</sup> A DVBE letter from OSB is obtained from the participating DVBE.

# You must complete the following table to show the dollar amount of DVBE participation:

	TOTAL CONTRACT PRICE
A. Prime Bidder, if DVBE (own participation)	\$
B. DVBE Subcontractor or Supplier	
1.	
2.	
3.	
4.	
C. Subtotal (A & B)	
<b>D</b> . Non-DVBE	
E. Total Bid	

**Part II – Contacts.** To identify DVBE subcontractors/suppliers for participation in your contract, you must contact each of the following categories. You should contact several DVBE organizations.

CATEGORY	TELEPHONE NUMBER	DATE CONTACTED	PERSON CONTACTED
1. The District			*
<b>2.</b> OSB, which publishes a list of DVBE's; Internet Address: http://www.dgs.ca.gov/osbcr	(916) 323-5478 (916) 322-5060		*
3. DVBE Organization (List)			*

<sup>\*</sup>Write "recorded message" in this column, if applicable.

**Part III – Advertisement.** You must advertise for DVBE participation in both a trade and focus paper. List the advertisement you place to solicit DVBE participation. Advertisements should be published at least fourteen (14) days prior to bid/proposal opening; if you cannot advertise fourteen (14) days prior, advertisements should be published as soon as possible. Advertisements must include that your firm is seeking DVBE participation, the project name and location, and you firm's name, your contact person, and telephone number. Attach copies of advertisements to this form.

FOCUS/TRADE PAPER NAME	CHECK ONE		DATE OF
	TRADE	FOCUS	ADVERTISEMENT

**Part IV. – DVBE Solicitations.** List DVBE subcontractors/suppliers that were invited to bid. Use the following instructions to complete the remainder of this section (read the three columns as a sentence from left to right). If you need additional space to list DVBE solicitations, please use a separate page and attach to this form.

IF THE DVBE	THEN			AND	
was selected to participate	Check "yes" in			include a copy of	
	"SELECTED" co	olumn		letter(s) from O	SB
was <b>NOT</b> selected to	Check "NO" in	Check "NO" in the		state why in the "REASON	
participate	"SELECTED" co	olumn		NOT SELECTED" column	
did not respond to your	Check the "NO	RESPO	NSE"		
solicitation	column.				
DISABLED VETERANS BUSINESS		SELE	CTED	REASON	NO
ENTERPRISES CONTACTED			1	NOT	RESPONSE
		YES	NO	SELECTED	

A copy of this form must be retained by you and may be subject to a future audit.

#### **CERTIFICATION**

l,	certify that I am the bidder's	
and that I have made representations made herein	e a diligent effort to ascertain the facts with regard to the . In making this certification, I am aware of section 12650 et e providing for the imposition of treble damages for making	
Date:		
Proper Name of Contractor:		
Signature:		
Print Name:		
Title:		
	END OF DOCUMENT	

#### DRUG-FREE WORKPLACE CERTIFICATION

PROJECT/CONTRACT NO. 16-008 between Solano Cor	nmunity College District ("District")
and	("Contractor" or "Bidder")
("Contract" or "Project").	

This Drug-Free Workplace Certification form is required from the successful Bidder pursuant to Government Code section 8350 et seq., the Drug-Free Workplace Act of 1990. The Drug-Free Workplace Act of 1990 requires that every person or organization awarded a contract or grant for the procurement of any property or service from any state agency must certify that it will provide a drug-free workplace by doing certain specified acts. In addition, the Act provides that each contract or grant awarded by a state agency may be subject to suspension of payments or termination of the contract or grant, and the contractor or grantee may be subject to debarment from future contracting, if the contracting agency determines that specified acts have occurred.

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

Contractor shall certify that it will provide a drug-free workplace by doing all of the following:

- a. Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance is prohibited in the person's or organization's workplace and specifying actions which will be taken against employees for violations of the prohibition.
- b. Establishing a drug-free awareness program to inform employees about all of the following:
  - (1) The dangers of drug abuse in the workplace.
  - (2) The person's or organization's policy of maintaining a drug-free workplace.
  - (3) The availability of drug counseling, rehabilitation, and employee-assistance programs.
  - (4) The penalties that may be imposed upon employees for drug abuse violations.
- c. Requiring that each employee engaged in the performance of the contract or grant be given a copy of the statement required above, and that, as a condition of employment on the contract or grant, the employee agrees to abide by the terms of the statement.
- I, the undersigned, agree to fulfill the terms and requirements of Government Code section 8355 listed above and will publish a statement notifying employees concerning (a) the prohibition of controlled substance at the workplace, (b) establishing a drug-free awareness program, and (c) requiring that each employee engaged in the performance of the Contract

be given a copy of the statement required by section 8355(a), and requiring that the employee agree to abide by the terms of that statement.

I also understand that if the District determines that I have either (a) made a false certification herein, or (b) violated this certification by failing to carry out the requirements of section 8355, that the Contract awarded herein is subject to termination, suspension of payments, or both. I further understand that, should I violate the terms of the Drug-Free Workplace Act of 1990, I may be subject to debarment in accordance with the requirements of the aforementioned Act.

I acknowledge that I am aware of the provisions of Government Code section 8350 et seq. and hereby certify that I will adhere to the requirements of the Drug-Free Workplace Act of 1990.

Proper Name of Contractor:
Signature:
Print Name:
Title:

### **TOBACCO-FREE ENVIRONMENT CERTIFICATION**

PROJECT/CONTRACT NO. 16-008, between Solano Community College District ("District") and ("Contractor" or "Bidder")
("Contract" or "Project").
This Tobacco-Free Environment Certification form is required from the successful Bidder.
Pursuant to, without limitation, 20 U.S.C section 6083, Labor Code section 6400 et seq., Health & Safety Code section 104350 et seq. and District Board Policies, all District sites, including the Project site, are tobacco-free environments. Smoking and the use of tobacco products by all persons is prohibited on or in District property. District property includes school buildings, school grounds, school owned vehicles and vehicles owned by others while on District property.
I acknowledge that I am aware of the District's policy regarding tobacco-free environments at District sites, including the Project site and hereby certify that I will adhere to the requirements of that policy and not permit any of my firm's employees, agents, subcontractors, or my firm's subcontractors' employees or agents to use tobacco and/or smoke on the Project site.
Date:
Proper Name of Contractor:
Signature:
Print Name:
Title:

#### HAZARDOUS MATERIALS CERTIFICATION

PROJECT/CONTRACT NO. 16	-008, between Se	Solano Community (	College District	("District")
and			("Contractor"	or "Bidder")
("Contract" or "Project").				

- 1. Contractor hereby certifies that no Asbestos, or Asbestos-Containing Materials, polychlorinated biphenyl (PCB), or any material listed by the federal or state Environmental Protection Agency or federal or state health agencies as a hazardous material, or any other material defined as being hazardous under federal or state laws, rules, or regulations ("New Hazardous Material"), shall be furnished, installed, or incorporated in any way into the Project or in any tools, devices, clothing, or equipment used to affect any portion of Contractor's work on the Project for District.
- **2.** Contractor further certifies that it has instructed its employees with respect to the above-mentioned standards, hazards, risks, and liabilities.
- 3. Asbestos and/or asbestos-containing material shall be defined as all items containing but not limited to chrysotile, crocidolite, amosite, anthophyllite, tremolite, and actinolite. Any or all material containing greater than one-tenth of one percent (0.1%) asbestos shall be defined as asbestos-containing material.
- 4. Any disputes involving the question of whether or not material is New Hazardous Material shall be settled by electron microscopy or other appropriate and recognized testing procedure, at the District's determination. The costs of any such tests shall be paid by Contractor if the material is found to be New Hazardous Material.
- 5. All Work or materials found to be New Hazardous Material or Work or material installed with equipment containing "New Hazardous Material" will be immediately rejected and this Work will be removed at Contractor's expense at no additional cost to the District.
- **6.** Contractor has read and understood the document Hazardous Materials Procedures & Requirements, and shall comply with all the provisions outlined therein.

Date:	
Proper Name of Contractor:	
Signature:	
Print Name:	
Title:	

#### **LEAD-BASED MATERIALS CERTIFICATION**

PROJECT/CONTRACT NO. 16-008, between Solano	Community College District ("District")
and	("Contractor" or "Bidder")
("Contract" or "Project").	

This certification provides notice to the Contractor that:

- (1) Contractor's work may disturb lead-containing building materials.
- (2) Contractor shall notify the District if any work may result in the disturbance of lead-containing building materials.
- (3) Contractor shall comply with the Renovation, Repair and Painting Rule, if lead-based paint is disturbed in a six-square-foot or greater area indoors or a 20-square-foot or greater area outdoors.

#### 1. Lead as a Health Hazard

Lead poisoning is recognized as a serious environmental health hazard facing children today. Even at low levels of exposure, much lower than previously believed, lead can impair the development of a child's central nervous system, causing learning disabilities, and leading to serious behavioral problems. Lead enters the environment as tiny lead particles and lead dust disburses when paint chips, chalks, peels, wears away over time, or is otherwise disturbed. Ingestion of lead dust is the most common pathway of childhood poisoning; lead dust gets on a child's hands and toys and then into a child's mouth through common hand-to-mouth activity. Exposures may result from construction or remodeling activities that disturb lead paint, from ordinary wear and tear of windows and doors, or from friction on other surfaces.

Ordinary construction and renovation or repainting activities carried out without lead-safe work practices can disturb lead-based paint and create significant hazards. Improper removal practices, such as dry scraping, sanding, or water blasting painted surfaces, are likely to generate high volumes of lead dust.

Because the Contractor and its employees will be providing services for the District, and because the Contractor's work may disturb lead-containing building materials, CONTRACTOR IS HEREBY NOTIFIED of the potential presence of lead-containing materials located within certain buildings utilized by the District. All school buildings built prior to 1978 are presumed to contain some lead-based paint until sampling proves otherwise.

#### 2. Overview of California Law

Education Code section 32240 et seq. is known as the Lead-Safe Schools Protection Act. Under this act, the Department of Health Services is to conduct a sample survey of schools in the State of California for the purpose of developing risk factors to predict lead contamination in public schools. (Ed. Code, § 32241.)

Any school that undertakes any action to abate existing risk factors for lead is required to utilize trained and state-certified contractors, inspectors, and workers. (Ed. Code, § 32243, subd. (b).) Moreover, lead-based paint, lead plumbing, and solders, or

other potential sources of lead contamination, shall not be utilized in the construction of any new school facility or the modernization or renovation of any existing school facility. (Ed. Code, § 32244.)

Both the Federal Occupational Safety and Health Administration ("Fed/OSHA") and the California Division of Occupational Safety and Health ("Cal/OSHA") have implemented safety orders applicable to all construction work where a contractor's employee may be occupationally exposed to lead.

The OSHA Regulations apply to all construction work where a contractor's employee may be occupationally exposed to lead. The OSHA Regulations contain specific and detailed requirements imposed on contractors subject to that regulation. The OSHA Regulations define construction work as work for construction, alteration, and/or repair, including painting and decorating. It includes, but is not limited to, the following:

- a. Demolition or salvage of structures where lead or materials containing lead are present;
- b. Removal or encapsulation of materials containing lead;
- c. New construction, alteration, repair, or renovation of structures, substrates, or portions thereof, that contain lead, or materials containing lead;
- d. Installation of products containing lead;
- e. Lead contamination/emergency cleanup;
- f. Transportation, disposal, storage, or containment of lead or materials containing lead on the site or location at which construction activities are performed; and
- g. Maintenance operations associated with the construction activities described in the subsection.

Because it is assumed by the District that all painted surfaces (interior as well as exterior) within the District contain some level of lead, it is imperative that the Contractor, its workers and subcontractors fully and adequately comply with all applicable laws, rules and regulations governing lead-based materials (including title 8, California Code of Regulations, section 1532.1).

Contractor shall notify the District if any Work may result in the disturbance of lead-containing building materials. Any and all Work that may result in the disturbance of lead-containing building materials shall be coordinated through the District. A signed copy of this Certification shall be on file prior to beginning Work on the Project, along with all current insurance certificates.

# 3. Renovation, Repair and Painting Rule, Section 402(c)(3) of the Toxic Substances Control Act

The EPA requires lead safe work practices to reduce exposure to lead hazards created by renovation, repair and painting activities that disturb lead-based paint. Pursuant

to the Renovation, Repair and Painting Rule (RRP), renovations in homes, childcare facilities, and schools built prior to 1978 must be conducted by certified renovations firms, using renovators with training by a EPA-accredited training provider, and fully and adequately complying with all applicable laws, rules and regulations governing lead-based materials, including those rules and regulations appearing within title 40 of the Code of Federal Regulations as part 745 (40 CFR 745).

The RRP requirements apply to all contractors who disturb lead-based paint in a six-square-foot or greater area indoors or a 20-square-foot or greater area outdoors. If a DPH-certified inspector or risk assessor determines that a home constructed before 1978 is lead-free, the federal certification is not required for anyone working on that particular building.

#### 4. <u>Contractor's Liability</u>

If the Contractor fails to comply with any applicable laws, rules, or regulations, and that failure results in a site or worker contamination, the Contractor will be held solely responsible for all costs involved in any required corrective actions, and shall defend, indemnify, and hold harmless the District, pursuant to the indemnification provisions of the Contract, for all damages and other claims arising therefrom.

If lead disturbance is anticipated in the Work, only persons with appropriate accreditation, registrations, licenses, and training shall conduct this Work.

It shall be the responsibility of the Contractor to properly dispose of any and all waste products, including, but not limited to, paint chips, any collected residue, or any other visual material that may occur from the prepping of any painted surface. It will be the responsibility of the Contractor to provide the proper disposal of any hazardous waste by a certified hazardous waste hauler. This company shall be registered with the Department of Transportation (DOT) and shall be able to issue a current manifest number upon transporting any hazardous material from any school site within the District.

The Contractor shall provide the District with any sample results prior to beginning Work, during the Work, and after the completion of the Work. The District may request to examine, prior to the commencement of the Work, the lead training records of each employee of the Contractor.

THE CONTRACTOR HEREBY ACKNOWLEDGES, UNDER PENALTY OF PERJURY, THAT IT:

- HAS RECEIVED NOTIFICATION OF POTENTIAL LEAD-BASED MATERIALS ON THE OWNER'S PROPERTY;
- 2. IS KNOWLEDGEABLE REGARDING AND WILL COMPLY WITH ALL APPLICABLE LAWS, RULES, AND REGULATIONS GOVERNING WORK WITH, AND DISPOSAL, OF LEAD.

AUTHORITY.

Date:

Proper Name of Contractor:

Signature:

Print Name:

THE UNDERSIGNED WARRANTS THAT HE/SHE HAS THE AUTHORITY TO SIGN ON BEHALF

OF AND BIND THE CONTRACTOR. THE DISTRICT MAY REQUIRE PROOF OF SUCH

END OF DOCUMENT

Title:

## **IMPORTED MATERIALS CERTIFICATION**

	ACT NO. 16-008, between Solar		
("Contract" or "Pr	roject").		,
any soils, aggregated requirements of a and guidelines of Public Resources Education Code, i	e executed by all entities that, in ate, or related materials ("Fill") any environmental review of the the California Environmental Or Code ("CEQA"), and all requirer ncluding requirements for a Pha allifornia Department of Education	to the Project Site. Project performed Lality Act, section 2 ments of section 172 ase I environmental	All Fill shall satisfy all pursuant to the statutes 1000 et seq. of the 210 et seq. of the assessment acceptable
Certification of:	<ul><li>Delivery Firm/Transporter</li><li>Wholesaler</li><li>Distributor</li></ul>	<ul><li>□ Supplier</li><li>□ Broker</li><li>□ Other</li></ul>	<ul><li>□ Manufacturer</li><li>□ Retailer</li></ul>
Type of Entity	<ul><li>□ Corporation</li><li>□ Limited Partnership</li><li>□ Sole Proprietorship</li></ul>	<ul><li>General Partnership</li><li>Limited Liability Company</li><li>Other</li></ul>	
Name of firm ("Fi	rm"):		
Mailing address:			
Addresses of brar	nch office used for this Project:		
If subsidiary, nan	ne and address of parent compa	nny:	
	·	J	

By my signature below, I hereby certify that I am aware of section 25260 of the Health and Safety Code and the sections referenced therein regarding the definition of hazardous material. I further certify on behalf of the Firm that all soils, aggregates, or related materials provided, delivered, and/or supplied or that will be provided, delivered, and/or supplied by this Firm to the Project Site are free of any and all hazardous material as defined in section 25260 of the Health and Safety Code. I further certify that I am authorized to make this certification on behalf of the Firm.

Date:	
Proper Name of Firm:	
Signature:	
Print Name:	
Title:	

#### SEX OFFENDER REGISTRATION ACT CERTIFICATION

PROJECT/CONTI	ract no. 1	16-008, be <sup>.</sup>	tween th	e Solano	Community	College	District
("District") and							
("Contractor" or	"Bidder")	("Contract"	or "Pro	ject").			

This certification provides notice to the Contractor that:

- Penal Code section 290.01 requires every person required to register pursuant to sections 290 to 290.009, inclusive, of the Sex Offender Registration Act who is carrying on a vocation at the community college for more than fourteen (14) days, or for an aggregate period exceeding thirty (30) days in a calendar year, shall, in addition to the registration required by the Sex Offender Registration Act, register with the campus police department within five working days of commencing employment at that community college on a form as may be required by the Department of Justice. The terms "employed or carries on a vocation" include employment whether or not financially compensated, volunteered, or performed for government or educational benefit.
- If the community college has no campus police department, the registrant shall instead register with the police of the city in which the campus is located or the sheriff of the county in which the campus is located if the campus is located in an unincorporated area or in a city that has no police department, on a form as may be required by the Department of Justice.
- The registrant shall also notify the campus police department within five (5) working days of ceasing to be employed, or ceasing to carry on a vocation, at the community college.

Contractor hereby acknowledges, under penalty of perjury, that it is aware of the provisions of section 290.01 of the Penal Code, and it will provide notice of the above provisions to all of its employees, subcontractors, and employees of subcontractors regardless of whether they are designated as employees or acting as independent contractors of the Contractor at least five (5) working days before commencing the performance of the Work of this Contract.

THE UNDERSIGNED WARRANTS THAT HE/SHE HAS THE AUTHORITY TO SIGN ON BEHALF OF AND BIND THE CONTRACTOR. THE DISTRICT MAY REQUIRE PROOF OF SUCH AUTHORITY.

Date:	
Proper Name of Contractor:	
Signature:	
Print Name:	
Title:	

## **BUY AMERICAN CERTIFICATION**

PROJECT/CONTRACT NO. 16 and	-008, between Solano Community College District ("District") ("Contractor" or "Bidder")
("Contract" or "Project").	
projects for the construction, maintenance of a public build stimulus funds, with the excellends, be produced in the Uthis requirement because (1) produced in sufficient quantities.	hat all of the iron, steel, and manufactured goods used in installation, repairs, renovation, modernization, or ding or public work funded in part or in whole by federal eption of projects funded by Qualified School Construction nited States of America, unless a federal department waives it is inconsistent with the public interest, (2) the goods are not ties or of satisfactory quality in the United States, or (3) the the cost of the Project overall by more than twenty-five percent
Contractor will take to use go	Certification with its executed agreement, identifying the steps bods produced in the United States of America in carrying out not submit this form with its bid.
Contractor shall retain a copy	y of this form and may be subject to a future audit.
	CERTIFICATION
only iron, steel and manufac	present and covenant that Contractor will use on the Project tured goods produced in the United States of America except partment has waived this requirement.
l,	, certify that I am the Contractor's
and that the representations this certification, I am aware	and covenants made herein are true and correct. In making of section 12650 et seq. of the Government Code providing for ages for making false claims.
Date:	
Proper Name of Contractor:	
Signature:	
Print Name:	
Title:	

END OF DOCUMENT

SOLANO COMMUNITY COLLEGE DISTRICT

#### **POST BID INTERVIEW**

#### **PART 1 – GENERAL**

#### 1.01 SUMMARY

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

#### 1.02 REQUIRED ATTENDANCE

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

#### 1.03 POST BID INTERVIEW PROCEDURE

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

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

#### 1.04 POST BID INTERVIEW DOCUMENTATION

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

#### **POST BID INTERVIEW**

#### **CONSTRUCTION MANAGER** [Name] [Address 1] [Address 2] [Phone] [Fax] BIDDER: \_\_\_\_\_\_ TIME: \_\_\_\_\_ PHONE # \_\_\_\_\_ DATE: I. INTRODUCTIONS: Α. Present CONTRACTOR CONTRACTOR [CM] [CM] П. PROPOSED CONTRACT: Ш. PURPOSE OF INTERVIEW IS TO ASSURE: Α. Do you acknowledge submission of a complete and accurate bid? Yes No B. Do you acknowledge the Bid Document submittal timelines after NOA and NTP and can you meet those timelines? Yes No Do you acknowledge the requirements for the escrow of bid C. documents? Yes No IV. **CONTRACTUAL REQUIREMENTS:** Α. Do you understand you are a prime contractor? Yes No Can you meet specified insurance requirements? B. Yes No Does any of your policies that require Additional Insured 1. endorsements exceed the minimum coverage requirements? Yes No 2. Are you requesting that the District accept an Umbrella or Excess Liability Insurance Policy to meet the policy limit? Yes No 3. Will there be a gap between the per occurrence amount of any

underlying policy and the start of the coverage under the

Umbrella or Excess Liability Insurance Policy?

Yes

Nο

	C.	Will you provide the Performance, and a Labor and Material Bond for 100% of the Contract Price as stipulated?					
		1. Cost for bond:%					
		2. Is the cost of your bond in your base bid?	Yes	No			
		3. Is your surety licensed is issue bonds in California?	Yes	No			
٧.	SCOP	E OF WORK:					
	A.	Acknowledged Receipt of Addenda #1	Yes	No			
	B.	Are the costs for addenda items included in your bid? (if applicable)					
	C.	Do you have a complete understanding of your Scope of Work under the proposed Agreement?	Yes	No			
	D.	You have re-reviewed the documents and understand the Scope of the Work. Are there any items that require clarification?	Yes	No			
		If yes, please identify them.					
		1					
		2.					
		3					
		4.					
		5					
		Is (are) the cost(s) for above items?	Yes	No			
	C.	Review bid alternative (if applicable) #1					
	D.	Are the plans and specifications clear and understandable to your satisfaction?	Yes	No			

	Α.		u acknowledge and agree to the stipulated completion dates ilestones in the contract?	Yes	No
		1.	Will you provide a detailed construction schedule to within the required ten (10) days, per the contract?	Yes	No
		2.	It is understood that the Project schedule is critical and that that weekend and overtime work may be required to meet the milestones.	Yes	No
		3.	It is understood that if rain does occur, then all dewatering and And protection of work is required, per the contract.	Yes	No
			If not, what must change and why?		
	B.		tify critical materials, deliveries, long lead items and other deper ling Owner Furnished items that could affect the completion of yo		
		1			
		2			
		3			
		4			
		5			
/II.	CONTR	RACTOF	R COMMENTS/SUGGESTIONS:		
	1.				
	2.				
	3.				
	4.				
	5.				
	J.				

VI. SCHEDULE:

### VIII. CONTRACTOR

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

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

Sig	gnature	Title:
Da	ate:	
СО	ONSTRUCTION MANAGER	
Sig	gnature	Title:
Da	ate:	<del></del>

### **NOTICE OF AWARD**

Dated	:	2016					
То:	(Contractor)						
То:	(Conti	Contractor)					
	(Addre	ess)					
	From: Governing Board ("Board") of Solano Community College District ("District" or Owner")						
	F	PROJECT: NO. 16-008, BUILDING 200 KITCHEN RENOVATION					
("Proje	ect" or	"Contract").					
		as been awarded the referenced Contract on, 20, by District's Board pursuant to a delegation of authority by the District's Board.					
The Co	ontract	Price is Dollars (\$).					
Notice	Three (3) copies of each of the Contract Documents (except Drawings) accompany this Notice of Award. Three (3) sets of the Drawings will be delivered separately or otherwise made available. Additional copies are available at cost of reproduction.						
		nply with the following conditions precedent within <b>SEVEN (7)</b> calendar days f this Notice of Award.					
	00 p.m.	whom Contract is awarded shall execute and submit the following documents of the <b>SEVENTH (7th)</b> calendar day following the date of the Notice of					
	a.	Agreement: To be executed by successful Bidder. Submit four (4) copies, each bearing an original signature.					
	b.	Escrow of Bid Documentation: This must include all required documentation. See the document Escrow of Bid Documentation for more information.					
	C.	Performance Bond (100%): On the form provided in the Contract Documents and fully executed as indicated on the form.					
	d.	Payment Bond (Contractor's Labor & Material Bond) (100%): On the form provided in the Contract Documents and fully executed as indicated on the form.					
	e.	Insurance Certificates and Endorsements as required.					
	f.	Workers' Compensation Certification.					
	g.	Prevailing Wage and Related Labor Requirements Certification.					

- h. Disabled Veterans' Business Enterprise Participation Certification.
- i. Drug-Free Workplace Certification.
- j. Tobacco-Free Environment Certification.
- k. Hazardous Materials Certification.
- I. Lead-Based Paint Certification.
- m. Imported Materials Certification.
- n. Buy American Certification.
- o. Roofing Project Certification: from Contractor, Material Manufacturer and/or Vendor.

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

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

SOLANO COMMUNITY COLLEGE SCHOOL DISTRICT

BY:			
NAME:			
TITI F.			

### **AGREEMENT**

THIS AGREEMENT IS MADE AND ENTERED INTO THIS	DAY OF	
, 2016, by and between the Solano Community	College District ("District") and _	
	("Contractor")	
("Agreement").		

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

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

### PROJECT: NO. 16-008, BUILDING 200 KITCHEN RENOVATION

("Project" or "Contract" or "Work")

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

- 2. The Contract Documents: The complete Contract consists of all Contract Documents as defined in the General Conditions and incorporated herein by this reference. Any and all obligations of the District and Contractor are fully set forth and described in the Contract Documents. All Contract Documents are intended to cooperate so that any Work called for in one and not mentioned in the other or vice versa is to be executed the same as if mentioned in all Contract Documents.
- the intent or meaning of Contract Documents: Should any question arise concerning the intent or meaning of Contract Documents, including the Drawings or Specifications, the question shall be submitted to the District for interpretation. If a conflict exists in the Contract Documents, modifications, beginning with the most recent, shall control over this Agreement (if any), which shall control over the Special Conditions, which shall control over any Supplemental Conditions, which shall control over the General Conditions, which shall control over the remaining Division 0 documents, which shall control over Division 1 Documents which shall control over Division 2 through Division 18 documents, which shall control over figured dimensions, which shall control over large-scale drawings, which shall control over small-scale drawings. In no case shall a document calling for lower quality and/or quantity material or workmanship control. The decision of the District in the matter shall be final.
- **4. Time for Completion**: It is hereby understood and agreed that the work under this contract shall be completed within <u>Forty-Three (43) days</u> consecutive calendar days ("Contract Time") from the date specified in the District's Notice to Proceed. **Please**

note: Any work still commencing on or after June 13, 2016 will require a work stoppage between the hours of 12:30 pm until 2:30 pm each day to observe quiet time within the building.

- 5. Completion-Extension of Time: Should the Contractor fail to complete this Contract, and the Work provided herein, within the time fixed for completion, due allowance being made for the contingencies provided for herein, the Contractor shall become liable to the District for all loss and damage that the District may suffer on account thereof. The Contractor shall coordinate its work with the Work of all other contractors. The District shall not be liable for delays resulting from Contractor's failure to coordinate its Work with other contractors in a manner that will allow timely completion of Contractor's Work. Contractor shall be liable for delays to other contractors caused by Contractor's failure to coordinate its Work with the work of other contractors.
- 6. Liquidated Damages: Time is of the essence for all work under this Agreement. It is hereby understood and agreed that it is and will be difficult and/or impossible to ascertain and determine the actual damage that the District will sustain in the event of and by reason of Contractor's delay; therefore, Contractor agrees that it shall pay to the District the sum of Five Hundred dollars (\$500.00) per day as liquidated damages for each and every day's delay beyond the time herein prescribed in finishing the Work.

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

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

The time during which the Contract is delayed for cause as hereinafter specified may extend the time of completion for a reasonable time as the District may grant. This provision does not exclude the recovery of damages for delay by either party under other provisions in the Contract Documents.

- 7. Loss Or Damage: The District and its authorized representatives shall not in any way or manner be answerable or suffer loss, damage, expense, or liability for any loss or damage that may happen to the Work, or any part thereof, or in or about the same during its construction and before acceptance, and the Contractor shall assume all liabilities of every kind or nature arising from the Work, either by accident, negligence, theft, vandalism, or any cause whatever; and shall hold the District and its authorized representatives harmless from all liability of every kind and nature arising from accident, negligence, or any cause whatever.
- **8. Insurance and Bonds**: Before commencing the Work, Contractor shall provide all required certificates of insurance, and payment and performance bonds as evidence thereof.
- **9. Prosecution of Work**: If the Contractor should neglect to prosecute the Work properly or fail to perform any provisions of this contract, the District, may, pursuant to the General Conditions and without prejudice to any other remedy it may have,

- make good such deficiencies and may deduct the cost thereof from the payment then or thereafter due the Contractor.
- 10. Authority of Architect, Project Inspector, and DSA: Contractor hereby acknowledges that the Architect(s), the Project Inspector(s), and the Division of the State Architect have authority to approve and/or stop Work if the Contractor's Work does not comply with the requirements of the Contract Documents, Title 24 of the California Code of Regulations, and all applicable laws. The Contractor shall be liable for any delay caused by its non-compliant Work.
- 11. Assignment of Contract: Neither the Contract, nor any part thereof, nor any moneys due or to become due thereunder, may be assigned by the Contractor without the written approval of the District, nor without the written consent of the Surety on the Contractor's Performance Bond (the "Surety"), unless the Surety has waived in writing its right to notice of assignment.
- **12.** Classification of Contractor's License: Contractor hereby acknowledges that it currently holds valid **Type B** Contractor's license(s) issued by the State of California, Contractor's State Licensing Board, in accordance with division 3, chapter 9, of the Business and Professions Code and in the classification called for in the Contract Documents.
- **13. Registration as Public Works Contractor**: The Contractor and all Subcontractors currently are registered as public works contractors with the Department of Industrial Relations, State of California, in accordance with Labor Code section 1771.4.
- 14. Payment of Prevailing Wages: The Contractor and all Subcontractors shall pay all workers on all Work performed pursuant to this Contract not less than the general prevailing rate of per diem wages and the general prevailing rate for holiday and overtime work as determined by the Director of the Department of Industrial Relations, State of California, for the type of work performed and the locality in which the work is to be performed within the boundaries of the District, pursuant to sections 1770 et seq. of the California Labor Code.
- 15. This Project is subject to labor compliance monitoring and enforcement by the Department of Industrial Relations pursuant to Labor Code section 1771.4 and Title 8 of the California Code of Regulations. Contractor specifically acknowledges and understands that it shall perform the Work of this Agreement while complying with all the applicable provisions of Division 2, Part 7, Chapter 1, of the Labor Code, including, without limitation, the requirement that the Contractor and all of its Subcontractors shall timely submit complete and accurate electronic certified payroll records as required by the Contract Documents, or the District may not issue payment.
- **16. Contract Price**: In consideration of the foregoing covenants, promises, and agreements on the part of the Contractor, and the strict and literal fulfillment of each and every covenant, promise, and agreement, and as compensation agreed upon for the Work and construction, erection, and completion as aforesaid, the District covenants, promises, and agrees that it will well and truly pay and cause to be paid to the Contractor in full, and as the full Contract Price and compensation for

construction, erection, and completion of the Work hereinabove agreed to be performed by the Contractor, the following price:

		<u>Dollars</u>
<u>(\$</u>	<u> </u>	

in lawful money of the United States, which sum is to be paid according to the schedule provided by the Contractor and accepted by the District and subject to additions and deductions as provided in the Contract. This amount supersedes any previously stated and/or agreed to amount(s).

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

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

CONTRACTOR	DISTRICT
	SOLANO COMMUNITY COLLEGE DISTRICT
Ву:	By:
Title:	Title:

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

### **NOTICE TO PROCEED**

Dated:	, 20
TO:	
("Co	ontractor")
ADDRESS:	
PRO	JECT:
	ONTRACT NO. 16-008, between the Solano Community College District and ("Contract").
	are notified that the Contract Time under the above Contract will commence to 19, 2016. By that date, you are to start performing your obligations under the
	ocuments. In accordance with the Agreement executed by Contractor, the date on is June 30, 2016. Please note: Any work still commencing on or after
June 13, 2	2016 will require a work stoppage between the hours of 12:30 pm until
2:30 pm e	ach day to observe quiet time within the building.
	ubmit the following documents by 5:00 p.m. of the (TENTH (10th) calendar day ne date of this Notice to Proceed:
a.	Contractor's preliminary schedule of construction.
b.	Contractor's preliminary schedule of values for all of the Work.
C.	Contractor's preliminary schedule of submittals, including Shop Drawings,
	Product Data, and Samples submittals
d.	Contractor's Safety Plan specifically adapted for the Project.
e.	A complete subcontractors list, including the name, address, telephone
	number, facsimile number, California State Contractors License number, classification, and monetary value of all Subcontracts.
Thank you.	We look forward to a very successful Project.
, ,	SOLANO COMMUNITY COLLEGE DISTRICT
	SOLANO COMMUNICITI COLLEGE DISTRICT
	DV.

NAME:			
TITLE:			

### **ESCROW BID DOCUMENTATION**

### 1. Requirement to Escrow Bid Documentation

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

### 2. Ownership of Escrow Bid Documentation

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

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

### 3. Format and Contents of Escrow Bid Documentation

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

### 4. Submittal of Escrow Bid Documentation

- a. The Escrow Bid Documentation shall be submitted by the Contractor in a sealed container within <u>SEVEN (7)</u> calendar days after the date of the Notice of Award. The container shall be clearly marked on the outside with the Contractor's name, date of submittal, project name and the words "Escrow Bid Documentation Intended to be opened in the presence of Authorized Representatives of Both District and Contractor".
- b. By submitting Escrow Bid Documentation, Contractor represents that the material in the Escrow Bid Documentation constitutes all the documentary information used in preparation of the bid and that the Contractor has personally examined the contents of the Escrow Bid Documentation container and has found that the documents in the container are complete.
- c. If Contractor's proposal is based upon subcontracting any part of the work, each subcontractor whose total subcontract price exceeds 5 percent of the total contract price proposed by Contractor, shall provide separate Escrow

Documents to be included with those of Contractor. Those documents shall be opened and examined in the same manner and at the same time as the examination described above for Contractor.

d. If Contractor wishes to subcontract any portion of the Work after award, District retains the right to require Contractor to submit Escrow Documents for the Subcontractor before the subcontract is approved.

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

- a. The Escrow Bid Documentation will be placed in escrow, for the life of the Contract, in a mutually agreeable institution. The cost of storage will be paid by Contractor for the duration of the project until final Contract payment. The storage facilities shall be the appropriate size for all the Escrow Bid Documentation and located conveniently to both District's and Contractor's offices.
- b. The Escrow Bid Documentation shall be examined by both District and Contractor, at any time deemed necessary by either District or Contractor, to assist in the negotiation of price adjustments and change orders or the settlement of disputes and claims. In the case of legal proceedings, Escrow Bid Documentation shall be used subject to the terms of an appropriate protective order if requested by Contractor and ordered by a court of competent jurisdiction. Examination of the Escrow Bid Documentation is subject to the following conditions:
  - (1) As trade secrets, the Escrow Bid Documentation is proprietary and confidential to the extent allowed by law.
  - (2) District and Contractor shall each designate, in writing to the other party **SEVEN (7)** calendar days prior to any examination, the names of representatives who are authorized to examine the Escrow Bid Documentation. No other person shall have access to the Escrow Bid Documentation.
  - (3) Access to the documents may take place only in the presence of duly designated representatives of the District and Contractor. If Contractor fails to designate a representative or appear for joint examination on **SEVEN (7)** calendar days notice, then the District representative may examine the Escrow Bid Documents alone upon an additional **THREE**(3) calendar days notice if a representative of the Contractor does not appear at the time set.
  - (4) If a subcontractor has submitted sealed information to be included in the Escrow Bid Documents, access to those documents may take place only in the presence of a duly designated representative of the District, Contractor and that subcontractor. If that subcontractor fails to designate a representative or appear for joint examination on <a href="SEVEN">SEVEN</a>
    (7) calendar days notice, then the District representative and/or the Contractor may examine the Escrow Bid Documentation without that subcontractor present upon an additional <a href="THREE">THREE</a> (3) calendar days

notice if a representative of that subcontractor does not appear at the time set.

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

# ESCROW AGREEMENT IN LIEU OF RETENTION Public Contact Code Section 22300

(Note: Contractor must use this form.)

		Escrow Agreement ("Escrow Agreement") is made and entered into this day of					
the	Sola	day of, 20, by and between no Community College District ("District"), whose address is, California, and					
whos	e addr	ress is ("Contractor"),					
		("Escrow Agent"),					
a sta	te or fe	ederally chartered bank in the state of California, whose address is					
		·					
For t		sideration hereinafter set forth, District, Contractor, and Escrow Agent agree as					
1.		uant to section 22300 of Public Contract Code of the State of California, which is by incorporated by reference, Contractor has the following two (2) options:					
	Deposit securities with Escrow Agent as a substitute for retention early required to be withheld by District pursuant to the Construction Contract Note that the contract of the Project, in the amount Dollars (\$)						
		dated,, 20, (the "Contract"); <b>or</b>					
		On written request of Contractor, District shall make payments of the retention earnings for the above referenced Contract directly to Escrow Agent.					
	optio depo time least	en Contractor deposits the securities as a substitute for Contract earnings (first on), Escrow Agent shall notify District within ten (10) calendar days of the osit. The market value of the securities at the time of substitution and at all es from substitution until the termination of the Escrow Agreement shall be at the equal to the cash amount then required to be withheld as retention under terms contract between District and Contractor.					
		urities shall be held in name of Solano Community College Community College rict, and shall designate Contractor as beneficial owner.					
2.	wou	rict shall make progress payments to Contractor for those funds which otherwise ld be withheld from progress payments pursuant to Contract provisions, provided Escrow Agent holds securities in form and amount specified above.					
3.	Ager crea	In District makes payment of retention earned directly to Escrow Agent, Escrownt shall hold them for the benefit of Contractor until the time that the escrownted under this Escrow Agreement is terminated. Contractor may direct the stment of the payments into securities. All terms and conditions of this Escrown					

Agreement and the rights and responsibilities of the Parties shall be equally

applicable and binding when District pays Escrow Agent directly.

- 4. Contractor shall be responsible for paying all fees for the expenses incurred by Escrow Agent in administering the Escrow Account, and all expenses of District. The District will charge Contractor \$\_\_\_\_\_\_ for each of District's deposits to the escrow account. These expenses and payment terms shall be determined by District, Contractor, and Escrow Agent.
- 5. Interest earned on securities or money market accounts held in escrow and all interest earned on that interest shall be for sole account of Contractor and shall be subject to withdrawal by Contractor at any time and from time to time without notice to District.
- 6. Contractor shall have the right to withdraw all or any part of the principal in the Escrow Account only by written notice to Escrow Agent accompanied by written authorization from District to Escrow Agent that District consents to withdrawal of amount sought to be withdrawn by Contractor.
- 7. District shall have the right to draw upon the securities and/or withdraw amounts from the Escrow Account in the event of default by Contractor. Upon seven (7) days' written notice to Escrow Agent from District of the default, if applicable, Escrow Agent shall immediately convert the securities to cash and shall distribute the cash as instructed by District.
- 8. Upon receipt of written notification from District certifying that the Contract is final and complete, and that Contractor has complied with all requirements and procedures applicable to the Contract, Escrow Agent shall release to Contractor all securities and interest on deposit less escrow fees and charges of the Escrow Account. The escrow shall be closed immediately upon disbursement of all monies and securities on deposit and payments of fees and charges.
- 9. Escrow Agent shall rely on written notifications from District and Contractor pursuant to Paragraphs 5 through 8, inclusive, of this Escrow Agreement and District and Contractor shall hold Escrow Agent harmless from Escrow Agent's release and disbursement of securities and interest as set forth above.
- 10. Names of persons who are authorized to give written notice or to receive written notice on behalf of District and on behalf of Contractor in connection with the foregoing, and exemplars of their respective signatures are as follows:

On behalf of District:	On behalf of Contractor:
Title	Title
Name	Name
Signature	Signature
Address	Address

On behalf of Escrow Agent:

Title	
Name	
Signature	
Address	
At the time of Escrow Account is a Agent a fully executed of this Agreer	opened, District and Contractor shall deliver to Escrownent.
IN WITNESS WHEREOF, the parties on the date first set forth above.	have executed this Agreement by their proper officers
On behalf of District:	On behalf of Contractor:
Title	Title
Name	Name
Signature	Signature
Address	Address

# PERFORMANCE BOND (100% of Contract Price)

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

KNOW ALL PERSONS BY THESE PRESENTS:				
WHEREAS, the governing board ("Board") of the Solano Community College District, ("District") and				
("Principal") have entered into a contract for the furnishing of all materials and labor, services and transportation, necessary, convenient, and proper to perform the following project:				
PROJECT NO. 16-008, BUILDING 200 KITCHEN RENOVATION				
("Project" or "Contract") which Contract dated, 20, and all of				
the Contract Documents attached to or forming a part of the Contract, are hereby referred to and made a part hereof; and				
WHEREAS, said Principal is required under the terms of the Contract to furnish a bond for the faithful performance of the Contract.				
NOW, THEREFORE, the Principal and				
are held and firmly bound unto the Board of the District in the penal sum of ("Surety")				
Dollars (\$), lawful money of the United States, for the payment of which sum well and truly to be made we bind ourselves, our heirs, executors, administrators, successors, and assigns jointly and severally, firmly by these presents, to:				
- Perform all the work required to complete the Project; and				
<ul> <li>Pay to the District all damages the District incurs as a result of the Principal's failure to perform all the Work required to complete the Project.</li> </ul>				
The condition of the obligation is such that, if the above bounden Principal, his or its heirs, executors, administrators, successors, or assigns, shall in all things stand to and abide by, and well and truly keep and perform the covenants, conditions, and agreements in the Contract and any alteration thereof made as therein provided, on his or its part to be kept and performed at the time and in the intent and meaning, including all contractual guarantees and warrantees of materials and workmanship, and shall indemnify and save harmless the District, its trustees, officers and agents, as therein stipulated, then this obligation shall become null and void, otherwise it shall be and remain in full force and virtue.				
Surety expressly agrees that the District may reject any contractor or subcontractor proposed by Surety to fulfill its obligations in the event of default by the Principal. Surety shall not utilize Principal in completing the Work nor shall Surety accept a Bid from Principal for completion of the Work if the District declares the Principal to be in default and notifies				

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

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

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

shall for all purposes be deemed	identical counterparts of this instrument, each of which an original thereof, have been duly executed by the ed, on the, 20
(Affix Corporate Seal)	Principal
	Ву
	Surety
	Ву
	Name of California Agent of Surety
	Address of California Agent of Surety
	Telephone No. of California Agent of Surety

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

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

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

KNOW ALL PERSONS BY THESE PRESENTS: WHEREAS, the governing board ("Board") of the Solano Community College District, (or "District") and \_\_, ("Principal") have entered into a contract for the furnishing of all materials and labor, services and transportation, necessary, convenient, and proper to perform the following project: PROJECT NO. 16-008, BUILDING 200 KITCHEN RENOVATION ("Project" or "Contract") which Contract dated \_\_\_\_\_\_, 20\_\_\_\_, and all of the Contract Documents attached to or forming a part of the Contract, are hereby referred to and made a part hereof; and WHEREAS, pursuant to law and the Contract, the Principal is required, before entering upon the performance of the work, to file a good and sufficient bond with the body by which the Contract is awarded in an amount equal to one hundred percent (100%) of the Contract price, to secure the claims to which reference is made in sections 9000 through 9510 and 9550 through 9566 of the Civil Code, and division 2, part 7, of the Labor Code. NOW, THEREFORE, the Principal and ("Surety") are held and firmly bound unto all laborers, material men, and other persons referred to in said statutes in the sum of Dollars (\$ ), lawful money of the United States, being a sum not less than the total amount payable by the terms of Contract, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, or assigns, jointly and severally, by these presents. The condition of this obligation is that if the Principal or any of his or its subcontractors, of the heirs, executors, administrators, successors, or assigns of any, all, or either of them shall fail to pay for any labor, materials, provisions, provender, or other supplies, used in, upon, for or about the performance of the work contracted to be done, or for any work or labor thereon of any kind, or for amounts required to be deducted, withheld, and paid over to the Employment Development Department from the wages of employees of the Principal or any of his or its subcontractors of any tier under Section 13020 of the Unemployment Insurance Code with respect to such work or labor, that the Surety will pay the same in an amount not exceeding the amount herein above set forth, and also in case suit is brought upon this bond, will pay a reasonable attorney's fee to be awarded and fixed by the Court,

It is hereby expressly stipulated and agreed that this bond shall inure to the benefit of any and all persons, companies, and corporations entitled to file claims under section 9100 of

and to be taxed as costs and to be included in the judgment therein rendered.

the Civil Code, so as to give a right of action to them or their assigns in any suit brought upon this bond.

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

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

shall for all purposes be deemed	identical counterparts of this instrument, each of which an original thereof, have been duly executed by the ed, on the, 20
(Affix Corporate Seal)	Principal
	Ву
	Surety
	Ву
	Name of California Agent of Surety
	Address of California Agent of Surety
	Telephone No. of California Agent of Surety

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

[Community College District]
[Address]

CHANGE ORDER NO.:	

### **CHANGE ORDER**

Project: Bid No.:			Date: DSA File No.: DSA Appl. No.:
The following Owner:	g parties agree to the terms of the [Name / Address]	nis Change Order: <b>Contractor</b> :	[Name / Address]
Architect:	[Name / Address]	Project Inspector:	[Name / Address]

Reference	Description		Cost	Days Ext.
PCO #	[Description of change]		\$	
Requested by:	[Requester]			
Performed by:	[Performer]			
Reason:	[Reason]			
PCO #	[Description of change]		\$	
Requested by:	[Requester]			
Performed by:	[Performer]			
Reason:	[Reason]			
PCO #	[Description of change]		\$	
Requested by:	[Requester]			
Performed by:	[Performer]			
Reason:	[Reason]			
		T		
		Original Contract Amount:	\$	
Contract time wil	I be adjusted as follows:	Original Contract Amount.	Φ	
Contract time wii	i be adjusted as follows.	Amount of Previously Approved		
Previous Complet	tion Date: [Date]	Change Order(s):	\$	
Trevious comple	non bate. [bate]	Change Order (3).	Ψ	
[#] Cale	endar Days Extension	Amount of this Change Order:	\$	
["] Gaid	a 2a, 2 2o. 131011	, a	Ť	
Current Completi	on Date: [Date]	Contract Amount:	\$	
			<u>'</u>	

The undersigned Contractor approves the foregoing as to the changes, if any, and the Cost, if any, specified for each item and as to the extension of time allowed, if any, for completion of the entire work as stated therein, and agrees to furnish all labor, materials and services and perform all work necessary to complete any additional work specified for the consideration stated therein.

This change order is subject to approval by the governing board of this district and must be signed by the District.

The compensation and time, if any, granted herein represent a full accord and satisfaction for any and all time and cost impacts of the items herein, and Contractor waives any and all further compensation or time extension based on the items herein. The value of the extra work or changes expressly includes any and all of the Contractors costs and expenses, both direct and indirect, resulting

from additional time required on the project or resulting from delay to the project. Any costs, expenses, damages or time extensions not included are deemed waived.

Signatures:			
District:		Contractor:	
-		-	
[Name]	Date	[Name]	Date
Architect:		Project Inspector:	
[Name]	Date	[Name]	Date

### AGREEMENT AND RELEASE OF ANY AND ALL CLAIMS

		DAY OF, 20 by and between the
SOLA	NO COMMUNITY COLLEGE D	DAY OF, 20 by and between the ISTRICT ("District") and
	( CONTRACTO	r"), whose place of business is
	RECITALS:	
1.		ered into PROJECT/CONTRACT NO.16-008 ("Contract" or, California.
2.	The Work under the Contra	act has been completed.
NOW,	THEREFORE, it is mutually	agreed between District and Contractor as follows:
		AGREEMENT
3.	Contractor will only be ass	essed liquidated damages as detailed below:
	Original Contract Sum	\$
	Modified Contract Sum	\$
	Payment to Date	\$
	Liquidated Damages	\$
	Payment Due Contractor	\$
4.	undisputed sum of	ereof, District shall forthwith pay to Contractor the Dollars (\$) under the s represented by any notice to withhold funds on file with uch payment.
5.	outstanding claims in dispu under the Contract, except obligations described in Pa this Agreement and Releas full, final and general relea obligations, costs, expense District, all its respective a	and hereby agrees that there are no unresolved or ute against District arising from the performance of work for the claims described in Paragraph 6 and continuing ragraph 8. It is the intention of the parties in executing the that this Agreement and Release shall be effective as a see of all claims, demands, actions, causes of action, es, damages, losses and liabilities of Contractor against gents, employees, inspectors, assignees and transferees aim is set forth in Paragraph 6 and continuing obligations ereof.
6.		sputed (hereinafter, the "Disputed Claims") and are the operation of this Agreement and Release:

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

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

- 7. Consistent with California Public Contract Code section 7100, Contractor hereby agrees that, in consideration of the payment set forth in Paragraph 4 hereof, Contractor hereby releases and forever discharges District, all its agents, employees, inspectors, assignees, and transferees from any and all liability, claims, demands, actions, or causes of action of whatever kind or nature arising out of or in any way concerned with the Work under the Contract.
- 8. Guarantees and warranties for the Work, and any other continuing obligation of Contractor, shall remain in full force and effect as specified in the Contract Documents.
- 9. To the furthest extent permitted by California law, Contractor shall defend, indemnify, and hold harmless the District, its agents, representatives, officers, consultants, employees, trustees, and volunteers (the "indemnified parties") from any and all losses, liabilities, claims, suits, and actions of any kind, nature, and description, including, but not limited to, attorneys' fees and costs, directly or indirectly arising out of, connected with, or resulting from the performance of the Contract unless caused wholly by the sole negligence or willful misconduct of the indemnified parties.
- 10. Contractor hereby waives the provisions of California Civil Code section 1542 which provides as follows:

A GENERAL RELEASE DOES NOT EXTEND TO CLAIMS WHICH THE CREDITOR DOES NOT KNOW OR SUSPECT TO EXIST IN HIS OR HER FAVOR AT THE TIME OF EXECUTING THE RELEASE, WHICH IF KNOWN BY HIM OR HER MUST HAVE MATERIALLY AFFECTED HIS OR HER SETTLEMENT WITH THE DEBTOR.

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

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

# SIGNATURE: \_\_\_\_\_\_ PRINT NAME: \_\_\_\_\_ TITLE: \_\_\_\_\_ CONTRACTOR: \_\_\_\_\_ SIGNATURE: \_\_\_\_\_ PRINT NAME: \_\_\_\_\_ TITLE: \_\_\_\_\_

SOLANO COMMUNITY COLLEGE DISTRICT

### **GUARANTEE FORM**

	("Contractor") hereby agrees that the	e
	" of Contractor) which Contractor has installed for	
Community College District (	"District") for the following project:	
PROJECT NO. 1	6-008, BUILDING 200 KITCHEN RENOVATION	<u>l</u>
("Project" or "Contract") has	been performed in accordance with the requiremen	nts of the
	t the Work as installed will fulfill the requirements of	of the
Contract Documents.		
The undersigned agrees to re	epair or replace any or all of such Work that may pr	ove to be
	material together with any other adjacent Work that	at may be
	such replacement within a period of	 7107
	r and tear and unusual abuse or neglect excepted.	
completion is	, 20	
In the event of the undersign	ned's failure to comply with the above-mentioned co	onditions
	time, as determined by the District, but not later t	
	in writing by the District, the undersigned authorize	
	aid defects repaired and made good at the expense ed shall pay the costs and charges therefor upon de	
andersigned. The undersigne	ou shan pay the costs and charges therefor apon at	silialia.
Date: _		
Proper Name of Contractor: _		
Signature:		
<u> </u>		
Print Name:		
Title:		
Paprocontativos to be contac	ted for service subject to terms of Contract:	
Representatives to be contac	ted for service subject to terms or contract.	
NAME:		
ADDRESS:		
PHONE NO.:		

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### **DOCUMENT 00 72 13**

### **GENERAL CONDITIONS**

### 1. CONTRACT TERMS AND DEFINITIONS

### 1.1. Definitions

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

- **1.1.1.** Adverse Weather: Shall be only weather that satisfies all of the following conditions: (1) unusually severe precipitation, sleet, snow, hail, heat, or cold conditions in excess of the norm for the location and time of year it occurred, (2) unanticipated, and (3) at the Project.
- **1.1.2. Approval, Approved, and/or Accepted:** Refer to written authorization, unless stated otherwise.
- **1.1.3. Architect**: The individual, partnership, corporation, joint venture, or any combination thereof, named as Architect, who will have the rights and authority assigned to the Architect in the Contract Documents. The term Architect means the Design Professional in General Responsible Charge as defined in DSA PR 13-02 on this Project or the Architect's authorized representative.
- **1.1.4. As-Built Drawings:** Unless otherwise defined in the Special Conditions, reproducible blue line prints of drawings to be prepared on a monthly basis pursuant to the Contract Documents, that reflect changes made during the performance of the Work, recording differences between the original design of the Work and the Work as constructed since the preceding monthly submittal.
- **1.1.5. Bidder:** A contractor who intends to provide a proposal to the District to perform the Work of this Contract.
- **1.1.6. Change Order**: A written order to the Contractor authorizing an addition to, deletion from, or revision in the Work, and/or authorizing an adjustment in the Contract Price or Contract Time.
- **1.1.7. Claim**: A Dispute that remains unresolved at the conclusion of the all the applicable Dispute Resolution requirements provided herein.
- **1.1.8. Construction Change Directive**: A written order prepared and issued by the District, the Construction Manager, and/or the Architect and signed by the District and the Architect, directing a change in the Work.
- **1.1.9. Construction Manager**: The individual, partnership, corporation, joint venture, or any combination thereof, or its authorized representative, named as such by the District. If no Construction Manager is used on the Project that is the subject of this Contract, then all references to Construction Manager herein shall be read to refer to District.

- **1.1.10. Construction Schedule:** The progress schedule of construction of the Project as provided by Contractor and approved by District.
- **1.1.11. Contract, Contract Documents**: The Contract consists exclusively of the documents evidencing the agreement of the District and Contractor, identified as the Contract Documents. The Contract Documents consist of the following documents:
  - **1.1.11.1.** Notice to Bidders
  - **1.1.11.2.** Instructions to Bidders
  - **1.1.11.3**. Bid Form and Proposal
  - **1.1.11.4.** Bid Bond
  - **1.1.11.5.** Designated Subcontractors List
  - **1.1.11.6.** Site-Visit Certification (if a site visit was required)
  - **1.1.11.7.** Noncollusion Declaration
  - **1.1.11.8.** Notice of Award
  - **1.1.11.9.** Notice to Proceed
  - **1.1.11.10.** Agreement
  - **1.1.11.11.** Escrow of Bid Documentation
  - **1.1.11.12.** Escrow Agreement for Security Deposits in Lieu of Retention
  - **1.1.11.13**. Performance Bond
  - **1.1.11.14.** Payment Bond (Contractor's Labor & Material Bond)
  - 1.1.11.15. General Conditions
  - **1.1.11.16.** Special Conditions (if applicable)
  - **1.1.11.17.** Labor Compliance Program Information and Forms (if applicable)
  - **1.1.11.18.** Hazardous Materials Procedures and Requirements
  - **1.1.11.19.** Workers' Compensation Certification
  - **1.1.11.20.** Prevailing Wage Certification
  - **1.1.11.21.** Disabled Veterans Business Enterprise Participation Certification (if applicable)
  - **1.1.11.22.** Drug-Free Workplace Certification
  - **1.1.11.23.** Tobacco-Free Environment Certification
  - **1.1.11.24.** Hazardous Materials Certification
  - **1.1.11.25**. Lead-Based Paint Certification
  - **1.1.11.26.** Imported Materials Certification
  - 1.1.11.27. Criminal Background Investigation/Fingerprinting Certification
  - **1.1.11.28.** Buy American Certification (if applicable)
  - **1.1.11.29.** Roofing Project Certification (if applicable)
  - **1.1.11.30.** Iran Contracting Act Certification (if applicable)
  - 1.1.11.31. All Plans, Technical Specifications, and Drawings
  - **1.1.11.32.** Any and all addenda to any of the above documents
  - **1.1.133.** Any and all change orders or written modifications to the above documents if approved in writing by the District
- **1.1.12. Contract Price**: The total monies payable to the Contractor under the terms and conditions of the Contract Documents.
- **1.1.13. Contract Time**: The time period stated in the Agreement for the completion of the Work.

- **1.1.14. Contractor**: The person or persons identified in the Agreement as contracting to perform the Work to be done under this Contract, or the legal representative of such a person or persons.
- **1.1.15. Daily Job Report(s)**: Daily Project reports prepared by the Contractor's employee(s) who are present on Site, which shall include the information required herein.
- **1.1.16.** Day(s): Unless otherwise designated, day(s) means calendar day(s).
- **1.1.17. Department of Industrial Relations** (or "DIR"): is responsible, among other things, for labor compliance monitoring and enforcement of California prevailing wage laws and regulations for public works contracts.
- **1.1.18. Dispute**: A separate demand by Contractor for a time extension; payment of money or damages arising from Work done by or on behalf of the Contractor pursuant to the Contract and payment of which is not otherwise expressly provided for or Contractor is not otherwise entitled to; or an amount of payment disputed by the District.
- **1.1.19. District:** The public agency or the school district for which the Work is performed. The governing board of the District or its designees will act for the District in all matters pertaining to the Contract. The District may, at any time,
  - **1.1.19.1.** Direct the Contractor to communicate with or provide notice to the Construction Manager or the Architect on matters for which the Contract Documents indicate the Contractor will communicate with or provide notice to the District; and/or
  - **1.1.19.2.** Direct the Construction Manager or the Architect to communicate with or direct the Contractor on matters for which the Contract Documents indicate the District will communicate with or direct the Contractor.
- **1.1.20. Drawings** (or "Plans"): The graphic and pictorial portions of the Contract Documents showing the design, location, scope and dimensions of the work, generally including plans, elevations, sections, details, schedules, sequence of operation, and diagrams.
- **1.1.21. DSA**: Division of the State Architect.
- **1.1.22. Force Account Directive**: A process that may be used when the District and the Contractor cannot agree on a price for a specific portion of work or before the Contractor prepares a prices for a specific portion of work and whereby the Contractor performs the work as indicated herein on a time and materials basis.
- **1.1.23. Labor Commissioner's Office** (or "Labor Commissioner") also known as the Division of Labor Standards Enforcement ("DLSE"): Division of the DIR responsible for adjudicating wage claims, investigating discrimination and public works complaints, and enforcing Labor Code statutes and Industrial Welfare Commission orders.

- **1.1.24. Municipal Separate Storm Sewer System** (or "MS4"): A system of conveyances used to collect and/or convey storm water, including, without limitation, catch basins, curbs, gutters, ditches, man-made channels, and storm drains.
- **1.1.25. Premises:** The real property owned by the District on which the Site is located.
- **1.1.26. Product(s):** New material, machinery, components, equipment, fixtures and systems forming the Work, including existing materials or components required and approved by the District for reuse.
- **1.1.27. Product Data:** Illustrations, standard schedules, performance charts, instructions, brochures, diagrams, and other information furnished by the Contractor to illustrate a material, product, or system for some portion of the Work.
- **1.1.28. Project**: The planned undertaking as provided for in the Contract Documents.
- **1.1.29. Project Inspector** (or "Inspector"): The individual(s) retained by the District in accordance with title 24 of the California Code of Regulations to monitor and inspect the Project.
- **1.1.30. Project Labor Agreement** (or "PLA"): a pre-hire collective bargaining agreement in accordance with Public Contract Code section 2500 et seq. that establishes terms and conditions of employment for a specific construction project or projects and/or is an agreement described in Section 158(f) of Title 29 of the United States Code.
- **1.1.31. Program Manager:** The individual, partnership, corporation, joint venture, or any combination thereof, or its authorized representative, named as such by the District. If no Program Manager is designated for Project that is the subject of this Contract, then all references to Project Manager herein shall be read to refer to District.
- **1.1.32. Provide**: Shall include "provide complete in place," that is, "furnish and install," and "provide complete and functioning as intended in place" unless specifically stated otherwise.
- **1.1.33.** Qualified SWPPP Practitioners ("QSP"): certified personnel that attended a State Water Resources Control Board sponsored or approved training class and passed the qualifying exam.
- **1.1.34. Record Drawings**: Unless otherwise defined in the Special Conditions, Reproducible drawings (or Plans) prepared pursuant to the requirements of the Contract Documents, that reflect all changes made during the performance of the Work, recording differences between the original design of the Work and the Work as constructed upon completion of the Project.
- **1.1.35. Request for Information** (or "RFI"):: A written request prepared by the Contractor requesting that the Architect provide additional information necessary to clarify or amplify an item in the Contract Documents that the Contractor believes is not clearly shown or called for in the Drawings or Specifications or other portions of

the Contract Documents, or to address problems that have arisen under field conditions

- **1.1.36.** Request for Substitution for Specified Item: A request by Contractor to substitute an equal or superior material, product, thing, or service for a specific material, product, thing, or service that has been designated in the Contract Documents by a specific brand or trade name.
- **1.1.37. Safety Orders**: Written and/or verbal orders for construction issued by the California Division of Industrial Safety ("CalOSHA") or by the United States Occupational Safety and Health Administration ("OSHA").
- **1.1.38. Safety Plan**: Contractor's safety plan specifically adapted for the Project. Contractor's Safety Plan shall comply with all provisions regarding Project safety, including all applicable provisions in these General Conditions.
- **1.1.39. Samples**: Physical examples that illustrate materials, products, equipment, finishes, colors, or workmanship and that, when approved in accordance with the Contract Documents, establish standards by which portions of the Work will be judged.
- **1.1.40. Shop Drawings**: All drawings, prints, diagrams, illustrations, brochures, schedules, and other data that are prepared by the Contractor, a subcontractor, manufacturer, supplier, or distributor, that illustrate how specific portions of the Work shall be fabricated or installed.
- **1.1.41. Site**: The Project site as shown on the Drawings.
- **1.1.42. Specifications**: That portion of the Contract Documents, Division 1 through Division 17, and all technical sections, and addenda to all of these, if any, consisting of written descriptions and requirements of a technical nature of materials, equipment, construction methods and systems, standards, and workmanship.
- **1.1.43. State**: The State of California.
- **1.1.44. Storm Water Pollution Prevention Plan** (or "SWPPP"): A document which identifies sources and activities at a particular facility that may contribute pollutants to storm water and contains specific control measures and time frames to prevent or treat such pollutants.
- **1.1.45. Subcontractor**: A contractor and/or supplier who is under contract with the Contractor or with any other subcontractor, regardless of tier, to perform a portion of the Work of the Project.
- **1.1.46. Submittal Schedule:** The schedule of submittals as provided by Contractor and approved by District.
- **1.1.47. Surety**: The person, firm, or corporation that executes as surety the Contractor's Performance Bond and Payment Bond, and must be a California admitted surety insurer as defined in the Code of Civil Procedure section 995.120.

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

#### 1.2. <u>Laws Concerning The Contract</u>

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

# 1.3. No Oral Agreements

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

#### 1.4. No Assignment

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

## 1.5. Notice And Service Thereof

- **1.5.1.** Any notice from one party to the other or otherwise under Contract shall be in writing and shall be dated and signed by the party giving notice or by a duly authorized representative of that party. Any notice shall not be effective for any purpose whatsoever unless served in one of the following manners:
  - **1.5.1.1.** If notice is given by personal delivery thereof, it shall be considered delivered on the day of delivery.
  - **1.5.1.2.** If notice is given by overnight delivery service, it shall be considered delivered on (1) day after date deposited, as indicated by the delivery service.
  - **1.5.1.3.** If notice is given by depositing same in United States mail, enclosed in a sealed envelope, it shall be considered delivered three (3) days after date deposited, as indicated by the postmarked date.

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

## 1.6. No Waiver

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

## 1.7. <u>Substitutions For Specified Items</u>

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

## 1.8. Materials and Work

- **1.8.1.** Except as otherwise specifically stated in this Contract, Contractor shall provide and pay for all materials, labor, tools, equipment, transportation, supervision, temporary constructions of every nature, and all other services, management, and facilities of every nature whatsoever necessary to execute and complete this Contract within the Contract Time.
- **1.8.2.** Unless otherwise specified, all materials shall be new and the best of their respective kinds and grades as noted or specified, and workmanship shall be of good quality.
- **1.8.3.** Materials shall be furnished in ample quantities and at such times as to insure uninterrupted progress of Work and shall be stored properly and protected as required.
- **1.8.4.** For all materials and equipment specified or indicated in the Drawings, the Contractor shall provide all labor, materials, equipment, and services necessary for complete assemblies and complete working systems, functioning as intended. Incidental items not indicated on Drawings, nor mentioned in the Specifications, that can legitimately and reasonably be inferred to belong to the Work described, or be necessary in good practice to provide a complete assembly or system, shall be furnished as though itemized here in every detail. In all instances, material and equipment shall be installed in strict accordance with each manufacturer's most recent published recommendations and specifications.
- **1.8.5.** Contractor shall, after award of Contract by District and after relevant submittals have been approved, place orders for materials and/or equipment as specified so that delivery of same may be made without delays to the Work. Contractor shall, upon demand from District, present documentary evidence showing that orders have been placed.

- **1.8.6.** District reserves the right but has no obligation, for any neglect in complying with the above instructions, to place orders for such materials and/or equipment as it may deem advisable in order that the Work may be completed at the date specified in the Agreement, and all expenses incidental to the procuring of said materials and/or equipment shall be paid for by Contractor or withheld from payment(s) to Contractor.
- **1.8.7.** Contractor warrants good title to all material, supplies, and equipment installed or incorporated in Work and agrees upon completion of all Work to deliver the Site to District, together with all improvements and appurtenances constructed or placed thereon by it, and free from any claims, liens, or charges. Contractor further agrees that neither it nor any person, firm, or corporation furnishing any materials or labor for any work covered by the Contract shall have any right to lien any portion of the Premises or any improvement or appurtenance thereon, except that Contractor may install metering devices or other equipment of utility companies or of political subdivision, title to which is commonly retained by utility company or political subdivision. In the event of installation of any such metering device or equipment, Contractor shall advise District as to owner thereof.
  - **1.8.7.1.** If a lien or a claim based on a stop payment notice of any nature should at any time be filed against the Work or any District property, by any entity that has supplied material or services at the request of the Contractor, Contractor and Contractor's Surety shall promptly, on demand by District and at Contractor's and Surety's own expense, take any and all action necessary to cause any such lien or a claim based on a stop payment notice to be released or discharged immediately therefrom.
  - **1.8.7.2.** If the Contractor fails to furnish to the District within ten (10) calendar days after demand by the District, satisfactory evidence that a lien or a claim based on a stop payment notice has been so released, discharged, or secured, the District may discharge such indebtedness and deduct the amount required therefor, together with any and all losses, costs, damages, and attorney's fees and expense incurred or suffered by District from any sum payable to Contractor under the Contract.
- **1.8.8.** Nothing contained in this Article, however, shall defeat or impair the rights of persons furnishing materials or labor under any bond given by Contractor for their protection or any rights under any law permitting such protection or any rights under any law permitting such persons to look to funds due Contractor in hands of District (e.g., stop payment notices), and this provision shall be inserted in all subcontracts and material contracts and notice of its provisions shall be given to all persons furnishing material for work when no formal contract is entered into for such material.
- **1.8.9.** Title to new materials and/or equipment for the Work of this Contract and attendant liability for its protection and safety shall remain with Contractor until incorporated in the Work of this Contract and accepted by District. No part of any materials and/or equipment shall be removed from its place of storage except for immediate installation in the Work of this Contract. Should the District, in its discretion, allow the Contractor to store materials and/or equipment for the Work off-site, Contractor will store said materials and/or equipment at a bonded

warehouse and with appropriate insurance coverage at no cost to District. Contractor shall keep an accurate inventory of all materials and/or equipment in a manner satisfactory to District or its authorized representative and shall, at the District's request, forward it to the District.

#### 2. ARCHITECT

- **2.1.** The Architect shall represent the District during the Project and will observe the progress and quality of the Work on behalf of the District. Architect shall have the authority to act on behalf of District to the extent expressly provided in the Contract Documents and to the extent determined by District. Architect shall have authority to reject materials, workmanship, and/or the Work whenever rejection may be necessary, in Architect's reasonable opinion, to insure the proper execution of the Contract.
- **2.2.** Architect shall, with the District and on behalf of the District, determine the amount, quality, acceptability, and fitness of all parts of the Work, and interpret the Specifications, Drawings, and shall, with the District, interpret all other Contract Documents.
- **2.3.** Architect shall have all authority and responsibility established by law, including title 24 of the California Code of Regulations.
- **2.4.** Contractor shall provide District and the Construction Manager with a copy of all written communication between Contractor and Architect at the same time as that communication is made to Architect, including, without limitation, all RFIs, correspondence, submittals, claims, and proposed change orders.

## 3. CONSTRUCTION MANAGER

- **3.1.** If a construction manager is used on this Project ("Construction Manager" or "CM"), the Construction Manager will provide administration of the Contract on the District's behalf. After execution of the Contract and Notice to Proceed, all correspondence and/or instructions from Contractor and/or District shall be forwarded through the Construction Manager. The Construction Manager will not be responsible for and will not have control or charge of construction means, methods, techniques, sequences, or procedures or for safety precautions in connection with the Work, which shall all remain the Contractor's responsibility.
- **3.2.** The Construction Manager, however, will have authority to reject materials and/or workmanship not conforming to the Contract Documents, as determined by the District, the Architect, and/or the Project Inspector. The Construction Manager shall also have the authority to require special inspection or testing of any portion of the Work, whether it has been fabricated, installed, or fully completed. Any decision made by the Construction Manager, in good faith, shall not give rise to any duty or responsibility of the Construction Manager to the Contractor, any Subcontractor, their agents, employees, or other persons performing any of the Work. The Construction Manager shall have free access to any or all parts of Work at any time.
- **3.3.** If the District does not use a Construction Manager on this Project, all references to Construction Manager or CM shall be read as District.

#### 4. INSPECTOR, INSPECTIONS, AND TESTS

#### 4.1. Project Inspector

- **4.1.1.** One or more Project Inspector(s), including special Project Inspector(s), as required, will be assigned to the Work by District, in accordance with requirements of title 24, part 1, of the California Code of Regulations, to enforce the building code and monitor compliance with Plans and Specifications for the Project previously approved by the DSA. Duties of Project Inspector(s) are specifically defined in section 4-342 of said part 1 of title 24.
- 4.1.2. No Work shall be carried on except with the knowledge and under the inspection of the Project Inspector(s). The Project Inspector(s) shall have free access to any or all parts of Work at any time. Contractor shall furnish Project Inspector(s) reasonable opportunities for obtaining such information as may be necessary to keep Project Inspector(s) fully informed respecting progress and manner of work and character of materials, including, but not limited to, submission of form DSA 156 (or the most current version) to the Project Inspector at least 48 hours in advance of the commencement and completion of construction of each and every aspect of the Work. Forms are available on the DSA's website at: http://www.dgs.ca.gov/dsa/Forms.aspx. Inspection of Work shall not relieve Contractor from an obligation to fulfill this Contract. Project Inspector(s) and the DSA are authorized to stop work whenever the Contractor and/or its Subcontractor(s) are not complying with the Contract Documents. Any work stoppage by the Project Inspector(s) and/or DSA shall be without liability to the District. Contractor shall instruct its Subcontractors and employees accordingly.
- **4.1.3.** If Contractor and/or any Subcontractor requests that the Project Inspector(s) perform any inspection off-site, this shall only be done if it is allowable pursuant to applicable regulations and DSA, if the Project Inspector(s) agree to do so, and at the expense of the Contractor.

## 4.2. <u>Tests and Inspections</u>

- **4.2.1.** Tests and Inspections shall comply with title 24, part 1, California Code of Regulations, group 1, article 5, section 4-335, and with the provisions of the Specifications.
- **4.2.2.** The District will select an independent testing laboratory to conduct the tests. Selection of the materials required to be tested shall be by the laboratory or the District's representative and not by the Contractor. The Contractor shall notify the District's representative a sufficient time in advance of its readiness for required observation or inspection.
- **4.2.3.** The Contractor shall notify the District's representative a sufficient time in advance of the manufacture of material to be supplied under the Contract Documents, which must by terms of the Contract Documents be tested, in order that the District may arrange for the testing of same at the source of supply. This notice shall be, at a minimum, seventy-two (72) hours prior to the manufacture of the material that needs to be tested.

- **4.2.4.** Any material shipped by the Contractor from the source of supply prior to having satisfactorily passed such testing and inspection or prior to the receipt of notice from said representative that such testing and inspection will not be required, shall not be incorporated into and/or onto the Project.
- **4.2.5.** The District will select and pay testing laboratory costs for all tests and inspections. Costs of tests of any materials found to be not in compliance with the Contract Documents shall be paid for by the District and reimbursed by the Contractor or deducted from the Contract Price.

## 4.3. Costs for After Hours and/or Off Site Inspections

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

## 5. **CONTRACTOR**

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

#### 5.1. Status of Contractor

- **5.1.1.** Contractor is and shall at all times be deemed to be an independent contractor and shall be wholly responsible for the manner in which it and its Subcontractors perform the services required of it by the Contract Documents. Nothing herein contained shall be construed as creating the relationship of employer and employee, or principal and agent, between the District, or any of the District's employees or agents, and Contractor or any of Contractor's Subcontractors, agents or employees. Contractor assumes exclusively the responsibility for the acts of its employees as they relate to the services to be provided during the course and scope of their employment. Contractor, its Subcontractors, agents, and its employees shall not be entitled to any rights or privileges of District employees. District shall be permitted to monitor the Contractor's activities to determine compliance with the terms of this Contract.
- **5.1.2.** As required by law, Contractor and all Subcontractors shall be properly licensed and regulated by the Contractor's State License Board 9821 Business Park Drive, Sacramento, California 95827, <a href="http://www.cslb.ca.gov">http://www.cslb.ca.gov</a>.
- **5.1.3.** As required by law, Contractor and all Subcontractors shall be properly registered as public works contractors by the Department of Industrial Relations at <a href="https://efiling.dir.ca.gov/PWCR/ActionServlet?action=displayPWCRegistrationForm">https://efiling.dir.ca.gov/PWCR/ActionServlet?action=displayPWCRegistrationForm</a> or current URL.

# 5.2. Project Inspection Card(s)

Contractor shall verify that forms DSA 152 (or current version) are issued for the Project prior to the commencement of construction.

## 5.3. Contractor's Supervision

- **5.3.1.** During progress of the Work, Contractor shall keep on the Premises, and at all other locations where any Work related to the Contract is being performed, a competent project manager and construction superintendent who are employees of the Contractor, to whom the District does not object and at least one of whom shall be fluent in English, written and verbal.
- **5.3.2.** The project manager and construction superintendent shall both speak fluently the predominant language of the Contractor's employees.
- **5.3.3.** Before commencing the Work herein, Contractor shall give written notice to District of the name of its project manager and construction superintendent. Neither the Contractor's project manager nor construction superintendent shall be changed except with prior written notice to District, unless the Contractor's project manager and/or construction superintendent proves to be unsatisfactory to Contractor, District, any of the District's employees, agents, the Construction Manager, or the Architect, in which case, Contractor shall notify District in writing. The Contractor's project manager and construction superintendent shall each represent Contractor, and all directions given to Contractor's project manager and/or construction superintendent shall be as binding as if given to Contractor.
- **5.3.4.** Contractor shall give efficient supervision to Work, using its best skill and attention. Contractor shall carefully study and compare all Contract Documents, Drawings, Specifications, and other instructions and shall at once report to District, Construction Manager, and Architect any error, inconsistency, or omission that Contractor or its employees and Subcontractors may discover, in writing, with a copy to District's Project Inspector(s). The Contractor shall have responsibility for discovery of errors, inconsistencies, or omissions.

## 5.4. <u>Duty to Provide Fit Workers</u>

- **5.4.1.** Contractor and Subcontractor(s) shall at all times enforce strict discipline and good order among their employees and shall not employ or work any unfit person or anyone not skilled in work assigned to that person. It shall be the responsibility of Contractor to ensure compliance with this requirement. District may require Contractor to permanently remove unfit persons from Project Site.
- **5.4.2.** Any person in the employ of Contractor or Subcontractor(s) whom District may deem incompetent or unfit shall be excluded from working on the Project and shall not again be employed on the Project except with the prior written consent of District.
- **5.4.3.** The Contractor shall furnish labor that can work in harmony with all other elements of labor employed or to be employed in the Work.
- **5.4.4.** If Contractor intends to make any change in the name or legal nature of the Contractor's entity, Contractor must first notify the District. The District shall

determine if Contractor's intended change is permissible while performing this Contract

## 5.5. Purchase of Materials and Equipment

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

#### 5.6. Documents On Work

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

## 5.6.2. Daily Job Reports.

- **5.6.2.1.** Contractor shall maintain, at a minimum, at least one (1) set of Daily Job Reports on the Project. These must be prepared by the Contractor's employee(s) who are present on Site, and must include, at a minimum, the following information:
  - **5.6.2.1.1.** A brief description of all Work performed on that day.
  - **5.6.2.1.2.** A summary of all other pertinent events and/or occurrences on that day.
  - **5.6.2.1.3.** The weather conditions on that day.
  - **5.6.2.1.4.** A list of all Subcontractor(s) working on that day,
  - **5.6.2.1.5.** A list of each Contractor employee working on that day and the total hours worked for each employee.
  - **5.6.2.1.6.** A complete list of all equipment on Site that day, whether in use or not.
  - **5.6.2.1.7.** All complete list of all materials, supplies, and equipment delivered on that day.
  - **5.6.2.1.8.** A complete list of all inspections and tests performed on that day.
- **5.6.2.2.** Each day Contractor shall provide a copy of the previous day's Daily Job Report to the District or the Construction Manager.

## 5.7. Preservation of Records

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

#### 5.8. Integration of Work

- **5.8.1.** Contractor shall do all cutting, fitting, patching, and preparation of Work as required to make its several parts come together properly, to fit it to receive or be received by work of other contractors, and to coordinate tolerances to various pieces of work, showing upon, or reasonably implied by, the Drawings and Specifications for the completed structure, and shall conform them as District and/or Architect may direct.
- **5.8.2.** Contractor shall make its own layout of lines and elevations and shall be responsible for the accuracy of both Contractor's and Subcontractors' work resulting therefrom.
- **5.8.3.** Contractor and all Subcontractors shall take all field dimensions required in performance of the Work, and shall verify all dimensions and conditions on the Site. All dimensions affecting proper fabrication and installation of all Work must be verified prior to fabrication by taking field measurements of the true conditions. If there are any discrepancies between dimensions in drawings and existing conditions which will affect the Work, Contractor shall bring such discrepancies to the attention of the District and Architect for adjustment before proceeding with the Work. In doing so, it is recognized that Contractor is not acting in the capacity of a licensed design professional, and that Contractor's examination is made in good faith to facilitate construction and does not create an affirmative responsibility to detect errors, omissions or inconsistencies in the Contract Documents or to ascertain compliance with applicable laws, building codes or regulations. Following receipt of written notice from Contractor, the District and/or Architect shall inform Contractor what action, if any, Contractor shall take with regard to such discrepancies
- **5.8.4.** All cost caused by defective or ill-timed Work shall be borne by Contractor, inclusive of repair work.
- **5.8.5.** Contractor shall not endanger any work performed by it or anyone else by cutting, excavating, or otherwise altering work and shall not cut or alter work of any other contractor except with consent of District.

#### 5.9. Notifications

- **5.9.1.** Contractor shall notify the Architect and Project Inspector, in writing, of the commencement of construction of each and every aspect of the Work at least 48 hours in advance by submitting form DSA 156 (or current version) to the Project Inspector. Forms are available on the DSA's website at: <a href="http://www.dgs.ca.gov/dsa/Forms.aspx">http://www.dgs.ca.gov/dsa/Forms.aspx</a>.
- **5.9.2.** Contractor shall notify the Architect and Project Inspector, in writing, of the completion of construction of each and every aspect of the Work at least 48 hours in advance by submitting form DSA 156 (or current version) to the Project Inspector.

# 5.10. Obtaining of Permits, Licenses and Registration

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

## 5.11. Royalties and Patents

- **5.11.1.** Contractor shall obtain and pay, only when legally required, all royalties and license fees necessary for prosecution of Work before the earlier of the date of the commencement of the Work or the date that the license is legally required to continue the Work without interruption. Contractor shall defend suits or claims of infringement of patent, copyright, or other rights and shall hold the District, the Architect, and the Construction Manager harmless and indemnify them from loss on account thereof except when a particular design, process, or make or model of product is required by the Contract Documents. However, if the Contractor has reason to believe that the required design, process, or product is an infringement of a patent or copyright, the Contractor shall indemnify and defend the District, Architect and Construction Manager against any loss or damage unless the Contractor promptly informs the District of its information.
- **5.11.2.** The review by the District or Architect of any method of construction, invention, appliance, process, article, device, or material of any kind shall be only its adequacy for the Work and shall not approve use by the Contractor in violation of any patent or other rights of any person or entity.

## 5.12. Work to Comply With Applicable Laws and Regulations

**5.12.1.** Contractor shall give all notices and comply with the following specific laws, ordinances, rules, and regulations and all other applicable laws, ordinances, rules, and regulations bearing on conduct of Work as indicated and specified, including but not limited to the appropriate statutes and administrative code

sections. If Contractor observes that Drawings and Specifications are at variance therewith, or should Contractor become aware of the development of conditions not covered by Contract Documents that will result in finished Work being at variance therewith, Contractor shall promptly notify District in writing and any changes deemed necessary by District shall be made as provided in Contract for changes in Work.

- **5.12.1.1.** National Electrical Safety Code, U. S. Department of Commerce
- **5.12.1.2.** National Board of Fire Underwriters' Regulations
- **5.12.1.3.** Uniform Building Code, latest addition, and the California Code of Regulations, title 24, and other amendments
- **5.12.1.4.** Manual of Accident Prevention in Construction, latest edition, published by A.G.C. of America
- **5.12.1.5.** Industrial Accident Commission's Safety Orders, State of California
- **5.12.1.6.** Regulations of the State Fire Marshall (title 19, California Code of Regulations) and Pertinent Local Fire Safety Codes
- **5.12.1.7.** Americans with Disabilities Act
- **5.12.1.8.** Education Code of the State of California
- **5.12.1.9.** Government Code of the State of California
- **5.12.1.10.** Labor Code of the State of California, division 2, part 7, Public Works and Public Agencies
- **5.12.1.11.** Public Contract Code of the State of California
- **5.12.1.12.** California Art Preservation Act
- **5.12.1.13.** U. S. Copyright Act
- **5.12.1.14.** U. S. Visual Artists Rights Act
- **5.12.2.** Contractor shall comply with all applicable mitigation measures, if any, adopted by any public agency with respect to this Project pursuant to the California Environmental Quality Act (Public Resources Code section 21000 et seq.)
- **5.12.3.** If Contractor performs any Work that it knew, or through exercise of reasonable care should have known, to be contrary to any applicable laws, ordinance, rules, or regulations, Contractor shall bear all costs arising therefrom.
- **5.12.4.** Where Specifications or Drawings state that materials, processes, or procedures must be approved by the DSA, State Fire Marshall, or other body or agency, Contractor shall be responsible for satisfying requirements of such bodies or agencies.

# 5.13. Safety/Protection of Persons and Property

- **5.13.1.** The Contractor will be solely and completely responsible for conditions of the Work Site, including safety of all persons and property during performance of the Work. This requirement will apply continuously and not be limited to normal working hours.
- **5.13.2.** The wearing of hard hats will be mandatory at all times for all personnel on Site. Contractor shall supply sufficient hard hats to properly equip all employees and visitors.

- **5.13.3.** Any construction review of the Contractor's performance is not intended to include review of the adequacy of the Contractor's safety measures in, on, or near the Work Site.
- **5.13.4.** Implementation and maintenance of safety programs shall be the sole responsibility of the Contractor.
- **5.13.5.** The Contractor shall furnish to the District a copy of the Contractor's safety plan within the time frame indicated in the Contract Documents and specifically adapted for the Project.
- **5.13.6.** Contractor shall be responsible for all damages to persons or property that occur as a result of its fault or negligence in connection with the prosecution of this Contract and shall take all necessary measures and be responsible for the proper care and completion and final acceptance by District. All Work shall be solely at Contractor's risk with the exception of damage to the Work caused by "acts of God" as defined in Public Contract Code section 7105.
- **5.13.7.** Contractor shall take, and require Subcontractors to take, all necessary precautions for safety of workers on the Project and shall comply with all applicable federal, state, local, and other safety laws, standards, orders, rules, regulations, and building codes to prevent accidents or injury to persons on, about, or adjacent to premises where Work is being performed and to provide a safe and healthful place of employment. Contractor shall furnish, erect, and properly maintain at all times, all necessary safety devices, safeguards, construction canopies, signs, nets, barriers, lights, and watchmen for protection of workers and the public and shall post danger signs warning against hazards created by such features in the course of construction.
- **5.13.8.** Hazards Control Contractor shall store volatile wastes in covered metal containers and remove them from the Site daily. Contractor shall prevent accumulation of wastes that create hazardous conditions. Contractor shall provide adequate ventilation during use of volatile or noxious substances.
- **5.13.9.** Contractor shall designate a responsible member of its organization on the Project, whose duty shall be to post information regarding protection and obligations of workers and other notices required under occupational safety and health laws, to comply with reporting and other occupational safety requirements, and to protect the life, safety, and health of workers. Name and position of person so designated shall be reported to District by Contractor.
- **5.13.10.** Contractor shall correct any violations of safety laws, rules, orders, standards, or regulations. Upon the issuance of a citation or notice of violation by the Division of Occupational Safety and Health, Contractor shall correct such violation promptly.
- **5.13.11.** Contractor shall comply with any District storm water requirements that are approved by the District and applicable to the Project, at no additional cost to the District.
- **5.13.12.** In an emergency affecting safety of life or of work or of adjoining property, Contractor, without special instruction or authorization, shall act, at its

discretion, to prevent such threatened loss or injury. Any compensation claimed by Contractor on account of emergency work shall be determined by agreement.

- **5.13.13.** All salvage materials will become the property of the Contractor and shall be removed from the Site unless otherwise called for in the Contract Documents. However, the District reserves the right to designate certain items of value that shall be turned over to the District unless otherwise directed by District.
- **5.13.14.** All connections to public utilities and/or existing on-site services shall be made and maintained in such a manner as to not interfere with the continuing use of same by the District during the entire progress of the Work.
- **5.13.15.** Contractor shall provide such heat, covering, and enclosures as are necessary to protect all Work, materials, equipment, appliances, and tools against damage by weather conditions, such as extreme heat, cold, rain, snow, dry winds, flooding, or dampness.
- **5.13.16.** The Contractor shall protect and preserve the Work from all damage or accident, providing any temporary roofs, window and door coverings, boxings, or other construction as required by the Architect. The Contractor shall be responsible for existing structures, walks, roads, trees, landscaping, and/or improvements in working areas; and shall provide adequate protection therefor. If temporary removal is necessary of any of the above items, or damage occurs due to the Work, the Contractor shall replace same at his expense with same kind, quality, and size of Work or item damaged. This shall include any adjoining property of the District and others.
- **5.13.17.** Contractor shall take adequate precautions to protect existing roads, sidewalks, curbs, pavements, utilities, adjoining property, and structures (including, without limitation, protection from settlement or loss of lateral support), and to avoid damage thereto, and repair any damage thereto caused by construction operations.
- **5.13.18.** Contractor shall confine apparatus, the storage of materials, and the operations of workers to limits indicated by law, ordinances, permits, or directions of Architect, and shall not interfere with the Work or unreasonably encumber Premises or overload any structure with materials. Contractor shall enforce all instructions of District and Architect regarding signs, advertising, fires, and smoking, and require that all workers comply with all regulations while on Project Site.
- **5.13.19.** Contractor, Contractor's employees, Subcontractors, Subcontractors' employees, or any person associated with the Work shall conduct themselves in a manner appropriate for a school site. No verbal or physical contact with neighbors, students, and faculty, profanity, or inappropriate attire or behavior will be permitted. District may require Contractor to permanently remove non-complying persons from Project Site.
- **5.13.20.** Contractor shall take care to prevent disturbing or covering any survey markers, monuments, or other devices marking property boundaries or corners. If such markers are disturbed, Contractor shall have a civil engineer, registered as a professional engineer in California, replace them at no cost to District.

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

## 5.14. Working Evenings and Weekends

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

## 5.15. Cleaning Up

- **5.15.1.** The Contractor shall provide all services, labor, materials, and equipment necessary for protecting the Work, all school occupants, furnishings, equipment, and building structure from damage until its completion and final acceptance by District. Dust barriers shall be provided to isolate dust and dirt from construction operations. At completion of the Work and portions thereof, Contractor shall clean to the original state any areas beyond the Work area that become dust laden as a result of the Work. The Contractor must erect the necessary warning signs and barricades to ensure the safety of all school occupants. The Contractor at all times must maintain good housekeeping practices to reduce the risk of fire damage and must make a fire extinguisher, fire blanket, and/or fire watch, as applicable, available at each location where cutting, braising, soldering, and/or welding is being performed or where there is an increased risk of fire.
- **5.15.2.** Contractor at all times shall keep Premises free from debris such as waste, rubbish, and excess materials and equipment caused by the Work. Contractor shall not leave debris under, in, or about the Premises, but shall promptly remove same from the Premises on a daily basis. If Contractor fails to clean up, District may do so and the cost thereof shall be charged to Contractor. If Contract is for work on an existing facility, Contractor shall also perform specific clean-up on or about the Premises upon request by the District as it deems necessary for the continuing education process. Contractor shall comply with all related provisions of the Specifications.
- **5.15.3.** If the Construction Manager, Architect, or District observes the accumulation of trash and debris, the District will give the Contractor a 24-hour written notice to mitigate the condition.
- **5.15.4.** Should the Contractor fail to perform the required clean-up, or should the clean-up be deemed unsatisfactory by the District, the District will then perform the clean-up. All cost associated with the clean-up work (including all travel, payroll

burden, and costs for supervision) will be deducted from the Contract Price, or District may withhold those amounts from payment(s) to Contractor.

# 6. **SUBCONTRACTORS**

- **6.1.** Contractor shall provide the District with information for all Subcontracts as indicated in the Contractor's Submittals and Schedules Section herein.
- **6.2.** No contractual relationship exists between the District and any Subcontractor, supplier, or sub-subcontractor by reason of this Contract.
- **6.3.** Contractor agrees to bind every Subcontractor by terms of this Contract as far as those terms are applicable to Subcontractor's work including, without limitation, all labor, wage & hour, apprentice and related provisions and requirements. If Contractor shall subcontract any part of this Contract, Contractor shall be as fully responsible to District for acts and omissions of any Subcontractor and of persons either directly or indirectly employed by any Subcontractor, as it is for acts and omissions of persons directly employed by Contractor. The divisions or sections of the Specifications are not intended to control the Contractor in dividing the Work among Subcontractors or limit the work performed by any trade.
- **6.4.** District's consent to, or approval of, or failure to object to, any Subcontractor under this Contract shall not in any way relieve Contractor of any obligations under this Contract and no such consent shall be deemed to waive any provisions of this Contract.
- **6.5.** Contractor is directed to familiarize itself with sections 4100 through 4114 of the Public Contract Code of the State of California, as regards subletting and subcontracting, and to comply with all applicable requirements therein. In addition, Contractor is directed to familiarize itself with sections 1720 through 1861 of the Labor Code of the State of California, as regards the payment of prevailing wages and related issues, and to comply with all applicable requirements therein all including, without limitation, section 1775 and the Contractor's and Subcontractors' obligations and liability for violations of prevailing wage law and other applicable laws.
- **6.6.** No Contractor whose Bid is accepted shall, without consent of the awarding authority and in full compliance with section 4100, et seq. of the Public Contract Code, and section 1771.1 of the Labor Code, including, without limitation, sections 4107, 4107.5, and 4109 of the Public Contract Code, either:
  - **6.6.1.** Substitute any person as a Subcontractor in place of the Subcontractor designated in the original Bid; or
  - **6.6.2.** Permit any Subcontract to be assigned or transferred, or allow any portion of the Work to be performed by anyone other than the original Subcontractor listed in the Bid; or
  - **6.6.3.** Sublet or subcontract any portion of the Work in excess of one-half of one percent (0.5%) of the Contractor's total bid as to which his original bid did not designate a Subcontractor.

- **6.7.** The Contractor shall be responsible for the coordination of the trades, Subcontractors, sub-subcontractors, and material or equipment suppliers working on the Project.
  - **6.7.1.** If the Contract is valued at \$1 million or more and uses or plans to use state bond funds, Contractor is responsible for ensuring that first tier Subcontractors, holding C-4, C-7, C-10, C-16, C-20, C-34, C-36, C-38, C-42, C-43, and/or C-46 licenses, are prequalified by the District to work on the Project pursuant to Public Contract Code section 20111.6.
  - **6.7.2.** Contractor is responsible for ensuring that all Subcontractors are properly registered as public works contractors by the Department of Industrial Relations.
- **6.8.** Contractor is solely responsible for settling any differences between the Contractor and its Subcontractor(s) or between Subcontractors.
- **6.9.** Contractor must include in all of its subcontracts the assignment provisions as indicated in the Termination section of these General Conditions.

## 7. OTHER CONTRACTS/CONTRACTORS

- **7.1.** District reserves the right to let other contracts, and/or to perform work with its own forces, in connection with the Project. Contractor shall afford other contractors reasonable opportunity for introduction and storage of their materials and execution of their work and shall properly coordinate and connect Contractor's Work with the work of other contractors.
- **7.2.** In addition to Contractor's obligation to protect its own Work, Contractor shall protect the work of any other contractor that Contractor encounters while working on the Project.
- **7.3.** If any part of Contractor's Work depends for proper execution or results upon work of District or any other contractor, the Contractor shall inspect and promptly report to the District in writing before proceeding with its Work any defects in District's or any other contractor's work that render Contractor's Work unsuitable for proper execution and results. Contractor shall be held accountable for damages to District for District's or any other contractor's work that Contractor failed to inspect or should have inspected. Contractor's failure to inspect and report shall constitute Contractor's acceptance of all District's or any other contractor's work as fit and proper for reception of Contractor's Work, except as to defects that may develop in District's or any other contractor's work after execution of Contractor's Work.
- **7.4.** To ensure proper execution of its subsequent work, Contractor shall measure and inspect work already in place and shall at once report to the District in writing any discrepancy between that executed work and the Contract Documents.
- **7.5.** Contractor shall ascertain to its own satisfaction the scope of the Project and nature of District's or any other contracts that have been or may be awarded by District in prosecution of the Project to the end that Contractor may perform this Contract in light of the other contracts, if any.

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

#### 8. DRAWINGS AND SPECIFICATIONS

- **8.1.** A complete list of all Drawings that form a part of the Contract is to be found as an index on the Drawings themselves, and/or may be provided to the Contractor and/or in the Table of Contents.
- **8.2.** Materials or Work described in words that so applied have a well known technical or trade meaning shall be deemed to refer to recognized standards, unless noted otherwise.
- **8.3.** Trade Name or Trade Term. It is not the intention of this Contract to go into detailed descriptions of any materials and/or methods commonly known to the trade under "trade name" or "trade term." The mere mention or notation of "trade name" or "trade term" shall be considered a sufficient notice to Contractor that it will be required to complete the work so named, complete, finished, and operable, with all its appurtenances, according to the best practices of the trade.
- **8.4.** The naming of any material and/or equipment shall mean furnishing and installing of same, including all incidental and accessory items thereto and/or labor therefor, as per best practices of the trade(s) involved, unless specifically noted otherwise.
- **8.5.** Contract Documents are complementary, and what is called for by one shall be binding as if called for by all. As such, Drawings and Specifications are intended to be fully cooperative and to agree. However, if Contractor observes that Drawings and Specifications are in conflict, Contractor shall promptly notify District and Architect in writing, and any necessary changes shall be made as provided in the Contract Documents.
- **8.6.** In the case of discrepancy or ambiguity in the Contract Documents, the order of precedence in the Agreement shall prevail. However, in the case of discrepancy or ambiguity solely between and among the Drawings and Specifications, the discrepancy or ambiguity shall be resolved in favor of the interpretation that will provide District with the functionally complete and operable Project described in the Drawings and Specifications. In case of ambiguity, conflict, or lack of information, District will furnish clarifications with reasonable promptness.
- **8.7.** Drawings and Specifications are intended to comply with all laws, ordinances, rules, and regulations of constituted authorities having jurisdiction, and where referred to in the Contract Documents, the laws, ordinances, rules, and regulations shall be considered as a part of the Contract within the limits specified. Contractor shall bear all expense of correcting work done contrary to said laws, ordinances, rules, and regulations.

## 8.8. Ownership of Drawings

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

# 9. CONTRACTOR'S SUBMITTALS AND SCHEDULES

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

#### 9.1. Schedule of Work, Schedule of Submittals, and Schedule of Values

- **9.1.1.** Within <u>TEN (10)</u> calendar days after the date of the Notice to Proceed (unless otherwise specified in the Specifications), the Contractor shall prepare and submit to the District for review, in a form supported by sufficient data to substantiate its accuracy as the District may require:
  - **9.1.1.1. Preliminary Schedule.** A preliminary schedule of construction indicating the starting and completion dates of the various stages of the Work, including any information and following any form as may be specified in the Specifications. Once approved by District, this shall become the Construction Schedule. This schedule shall include and identify all tasks that are on the Project's critical path with a specific determination of the start and completion of each critical path task as well as all Contract milestones and each milestone's completion date(s) as may be required by the District.
  - **9.1.1.2.** Preliminary Schedule of Values. A preliminary schedule of values for all of the Work, which must include quantities and prices of items aggregating the Contract Price and must subdivide the Work into component parts in sufficient detail to serve as the basis for progress payments during construction. Unless the Special Conditions contain different limits, this preliminary schedule of values shall include, at a minimum, the following information and the following structure:
    - **9.1.1.2.1.** Divided into at least the following categories:
      - **9.1.1.2.1.1.** Overhead and profit;
      - **9.1.1.2.1.2.** Supervision;
      - **9.1.1.2.1.3.** General conditions;
      - **9.1.1.2.1.4**. Layout;
      - **9.1.1.2.1.5.** Mobilization;
      - **9.1.1.2.1.6.** Submittals;

- **9.1.1.2.1.7.** Bonds and insurance;
- **9.1.1.2.1.8.** Close-out/Certification documentation:
- **9.1.1.2.1.9.** Demolition:
- **9.1.1.2.1.10.** Installation;
- **9.1.1.2.1.11.** Rough-in;
- **9.1.1.2.1.12.** Finishes;
- **9.1.1.2.1.13**. Testing;
- **9.1.1.2.1.14.** Punchlist and acceptance.
- **9.1.1.2.2.** Divided by each of the following areas:
  - **9.1.1.2.2.1.** Site work;
  - **9.1.1.2.2.2.** By each building;
  - **9.1.1.2.2.3.** By each floor.
- **9.1.1.2.3.** The preliminary schedule of values shall not provide for values any greater than the following percentages of the Contract value:
  - **9.1.1.2.3.1.** Mobilization and layout combined to equal not more than 1%:
  - **9.1.1.2.3.2.** Submittals, samples and shop drawings combined to equal not more than 3%;
  - **9.1.1.2.3.3.** Bonds and insurance combined to equal not more than 2%.
- **9.1.1.2.4.** Closeout documentation shall have a value in the preliminary schedule of not less than 5%.
- **9.1.1.2.5.** Notwithstanding any provision of the Contract Documents to the contrary, payment of the Contractor's overhead, supervision, general conditions costs, and profit, as reflected in the Cost Breakdown, shall be paid based on percentage complete, with the disbursement of Progress Payments and the Final Payment.
- **9.1.1.2.6.**Contractor shall certify that the preliminary schedule of values as submitted to the District is accurate and reflects the costs as developed in preparing Contractor's bid. The preliminary schedule of values shall be subject to the District's review and approval of the form and content thereof. In the event that the District objects to any portion of the preliminary schedule of values, the District shall notify the Contractor, in writing, of the District's objection(s) to the preliminary schedule of values. Within five (5) calendar days of the date of the District's written objection(s), Contractor shall submit a revised preliminary schedule of values to the District for review and approval. The foregoing procedure for the preparation, review and approval of the preliminary schedule of values shall continue until the District has approved the entirety of the preliminary schedule of values.
- **9.1.1.2.7.**Once the preliminary schedule of values is approved by the District, this shall become the Schedule of Values. The Schedule of Values shall not be thereafter modified or amended by the Contractor without the prior consent and approval of the District, which may be granted or withheld in the sole discretion of the District.

- **9.1.1.3.** Preliminary Schedule of Submittals. A preliminary schedule of submittals, including Shop Drawings, Product Data, and Samples submittals. Once approved by District, this shall become the Submittal Schedule. All submittals shall be forwarded to the District by the date indicated on the approved Submittal Schedule, unless an earlier date is necessary to maintain the Construction Schedule, in which case those submittals shall be forwarded to the District so as not to delay the Construction Schedule. Upon request by the District, Contractor shall provide an electronic copy of all submittals to the District.
- **9.1.1.4.** <u>Safety Plan.</u> Contractor's Safety Plan specifically adapted for the Project. Contractor's Safety Plan shall comply with the following requirements:
  - **9.1.1.4.1.** All applicable requirements of California Division of Industrial Safety ("CalOSHA") and/or of the United States Occupational Safety and Health Administration ("OSHA").
  - **9.1.1.4.2.** All provisions regarding Project safety, including all applicable provisions in these General Conditions.
  - **9.1.1.4.3.**Contractor's Safety Plan shall be in English and in the language(s) of the Contractor's and its Subcontractors' employees.
- **9.1.1.5.** <u>Complete Subcontractor List.</u> The name, address, telephone number, facsimile number, California State Contractors License number, classification, and monetary value of all Subcontracts for parties furnishing labor, material, or equipment for completion of the Project.
- **9.1.2.** Contractor must provide all schedules both in hard copy and electronically, in a format (e.g., Microsoft Project or Primavera) approved in advance by the District.
- **9.1.3.** The District will review the schedules submitted and the Contractor shall make changes and corrections in the schedules as requested by the District and resubmit the schedules until approved by the District.
- **9.1.4.** The District shall have the right at any time to revise the schedule of values if, in the District's sole opinion, the schedule of values does not accurately reflect the value of the Work performed.
- **9.1.5.** All submittals and schedules must be approved by the District before Contractor can rely on them as a basis for payment.

# **9.2.** Monthly Progress Schedule(s)

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

# 9.3. Material Safety Data Sheets (MSDS)

Contractor is required to ensure Material Safety Data Sheets are available in a readily accessible place at the Work Site for any material requiring a Material Safety Data Sheet per the Federal "Hazard Communication" standard, or employees right to know law. The Contractor is also required to ensure proper labeling on substance brought onto the job site and that any person working with the material or within the general area of the material is informed of the hazards of the substance and follows proper handling and protection procedures. Two additional copies of the Material Safety Data Sheets shall also be submitted directly to the District.

#### **10.** SITE ACCESS, CONDITIONS, AND REQUIREMENTS

# **10.1**. Site Investigation

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

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

#### 10.2. Soils Investigation Report

**10.2.1.** When a soils investigation report obtained from test holes at Site is available, that report shall be available to the Contractor but shall not be a part of this Contract. Any information obtained from that report or any information given on Drawings as to subsurface soil condition or to elevations of existing grades or elevations of underlying rock is approximate only, is not guaranteed, does not form a part of this Contract, and Contractor may not rely thereon. By submitting its bid,

Contractor acknowledges that it has made visual examination of Site and has made whatever tests Contractor deems appropriate to determine underground condition of soil.

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

## 10.3. Access to Work

District and its representatives shall at all times have access to Work wherever it is in preparation or progress, including storage and fabrication. Contractor shall provide safe and proper facilities for such access so that District's representatives may perform their functions.

## 10.4. Layout and Field Engineering

- **10.4.1.** All field engineering required for layout of this Work and establishing grades for earthwork operations shall be furnished by Contractor at its expense. This Work shall be done by a qualified, California-registered civil engineer approved in writing by District and Architect. Any required Record and/or As-Built Drawings of Site development shall be prepared by the approved civil engineer.
- **10.4.2.** The Contractor shall be responsible for having ascertained pertinent local conditions such as location, accessibility, and general character of the Site and for having satisfied itself as to the conditions under which the Work is to be performed. Contractor shall follow best practices, including but not limited to pot holing to avoid utilities. District shall not be liable for any claim for allowances because of Contractor's error, failure to follow best practices, or negligence in acquainting itself with the conditions at the Site.
- **10.4.3.** Contractor shall protect and preserve established benchmarks and monuments and shall make no changes in locations without the prior written approval of District. Contractor shall replace any benchmarks or monuments that are lost or destroyed subsequent to proper notification of District and with District's approval.

## 10.5. Utilities

Utilities shall be provided as indicated in the Specifications.

## 10.6. Sanitary Facilities

Sanitary facilities shall be provided as indicated in the Specifications.

## 10.7. Regional Notification Center

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

## 10.8. Existing Utility Lines

- **10.8.1.** Pursuant to Government Code section 4215, District assumes the responsibility for removal, relocation, and protection of main or trunk utility lines and facilities located on the construction Site at the time of commencement of construction under this Contract with respect to any such utility facilities that are not identified in the Plans and Specifications. Contractor shall not be assessed for liquidated damages for delay in completion of the Project caused by failure of District or the owner of a utility to provide for removal or relocation of such utility facilities.
- **10.8.2.** Locations of existing utilities provided by District shall not be considered exact, but approximate within reasonable margin and shall not relieve Contractor of responsibilities to exercise reasonable care costs of repair due to Contractor's failure to do so. District shall compensate Contractor for the costs of locating, repairing damage not due to the failure of Contractor to exercise reasonable care, and removing or relocating such utility facilities not indicated in the Plans and Specifications with reasonable accuracy, and for equipment necessarily idle during such work.
- **10.8.3.** No provision herein shall be construed to preclude assessment against Contractor for any other delays in completion of the Work. Nothing in this Article shall be deemed to require District to indicate the presence of existing service laterals, appurtenances, or other utility lines, within the exception of main or trunk utility lines. Whenever the presence of these utilities on the Site of the construction Project can be inferred from the presence of other visible facilities, such as buildings, meter junction boxes, on or adjacent to the Site of the construction.
- **10.8.4.** If Contractor, while performing Work under this Contract, discovers utility facilities not identified by District in Contract Plans and Specifications, Contractor shall immediately notify the District and the utility in writing. The cost of repair for damage to above-mentioned visible facilities without prior written notification to the District shall be borne by the Contractor.

## 10.9. Notification

Contractor understands, acknowledges and agrees that the purpose for prompt notification to the District pursuant to these provisions is to allow the District to

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

#### 10.10. <u>Hazardous Materials</u>

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

## 10.11. No Signs

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

# 11. TRENCHES

#### 11.1. <u>Trenches Greater Than Five Feet</u>

Pursuant to Labor Code section 6705, if the Contract Price exceeds \$25,000 and involves the excavation of any trench or trenches five (5) feet or more in depth, the Contractor shall, in advance of excavation, promptly submit to the District and/or a registered civil or structural engineer employed by the District or Architect, a detailed plan, stamped by a licensed engineer retained by the Contractor, showing the design of shoring for protection from the hazard of caving ground during the excavation of such trench or trenches.

#### 11.2. Excavation Safety

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

## 11.3. No Tort Liability of District

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

#### 11.4. No Excavation Without Permits

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

# 11.5. Discovery of Hazardous Waste and/or Unusual Conditions

- **11.5.1.** Pursuant to Public Contract Code section 7104, if the Work involves digging trenches or other excavations that extend deeper than four feet below the Surface, the Contractor shall promptly, and before the following conditions are disturbed, notify the District, in writing, of any:
  - **11.5.1.1.** Material that the Contractor believes may be material that is hazardous waste, as defined in section 25117 of the Health and Safety Code, is required to be removed to a Class I, Class II, or Class III disposal site in accordance with provisions of existing law.
  - **11.5.1.2.** Subsurface or latent physical conditions at the Site differing from those indicated.
  - **11.5.1.3.** Unknown physical conditions at the Site of any unusual nature, different materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract.
- **11.5.2.** The District shall promptly investigate the conditions, and if it finds that the conditions do materially so differ, or do involve hazardous waste, and cause a decrease or increase in the Contractor's cost of, or the time required for, performance of any part of the Work, shall issue a Change Order under the procedures described herein.
- **11.5.3.** In the event that a dispute arises between District and the Contractor whether the conditions materially differ, or involve hazardous waste, or cause a decrease or increase in the Contractor's cost of, or time required for, performance of any part of the Work, the Contractor shall not be excused from any scheduled completion date provided for by the Contract, but shall proceed with all work to be performed under the Contract. The Contractor shall retain any and all rights provided either by Contract or by law that pertain to the resolution of disputes and protests.

#### 12. INSURANCE AND BONDS

## 12.1. Insurance

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

# 12.1.1. <u>Commercial General Liability and Automobile Liability Insurance</u>

- **12.1.1.1.** Contractor shall procure and maintain, during the life of this Contract, Commercial General Liability Insurance and Automobile Liability Insurance that shall protect Contractor, District, State, Construction Manager(s), Project Inspector(s), and Architect(s) from all claims for bodily injury, property damage, personal injury, death, advertising injury, and medical payments arising from operations under this Contract. This coverage shall be provided in a form at least as broad as Insurance Services (ISO) Form CG 0001 11188. Contractor shall ensure that Products Liability and Completed Operations coverage, Fire Damage Liability, and Any Auto including owned, non-owned, and hired, are included within the above policies and at the required limits, or Contractor shall procure and maintain these coverages separately.
- **12.1.1.2.** Contractor's deductible or self-insured retention for its Commercial General Liability Insurance policy shall not exceed \$25,000 unless approved in writing by District.
- **12.1.1.3.** All such policies shall be written on an occurrence form.

#### 12.1.2. Excess Liability Insurance

- **12.1.2.1.** Contractor may procure and maintain, during the life of this Contract, an Excess Liability Insurance Policy to meet the policy limit requirements of the required policies if Contractor's underlying policy limits are less than required.
- **12.1.2.2.** There shall be no gap between the per occurrence amount of any underlying policy and the start of the coverage under the Excess Liability Insurance Policy. Any Umbrella or Excess Liability Insurance Policy shall be written on a following form and shall protect Contractor, District, State, Construction Manager(s), Project Manager(s), and Architect(s) in amounts and including the provisions as set forth in the Supplementary Conditions (if any) and/or Special Conditions, and that complies with all requirements for Commercial General Liability and Automobile Liability and Employers' Liability Insurance.
- **12.1.3.** <u>Subcontractor(s)</u>: Contractor shall require its Subcontractor(s), if any, to procure and maintain Commercial General Liability Insurance, Automobile Liability Insurance, and Excess Liability Insurance (if Subcontractor elects to satisfy, in part the insurance required herein by procuring and maintaining an Excess Liability Insurance Policy) with forms of coverage and limits equal to the amounts required of the Contractor.

## 12.1.4. Workers' Compensation and Employers' Liability Insurance

- **12.1.4.1.** In accordance with provisions of section 3700 of the California Labor Code, the Contractor and every Subcontractor shall be required to secure the payment of compensation to its employees.
- **12.1.4.2.** Contractor shall procure and maintain, during the life of this Contract, Workers' Compensation Insurance and Employers' Liability Insurance

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

# 12.1.5. Builder's Risk Insurance: Builder's Risk "All Risk" Insurance

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

#### 12.1.6. Pollution Liability Insurance

- **12.1.6.1.** Contractor shall procure and maintain Pollution Liability Insurance that shall protect Contractor, District, State, Construction Manager(s), Project Inspector(s), and Architect(s) from all claims for bodily injury, property damage, including natural resource damage, cleanup costs, removal, storage, disposal, and/or use of the pollutant arising from operations under this Contract, and defense, including costs and expenses incurred in the investigation, defense, or settlement of claims. Coverage shall apply to sudden and/or gradual pollution conditions resulting from the escape or release of smoke, vapors, fumes, acids, alkalis, toxic chemicals, liquids, or gases, natural gas, waste materials, or other irritants, contaminants, or pollutants, including asbestos. This coverage shall be provided in a form at least as broad as Insurance Services (ISO) Form CG 2415, or Contractor shall procure and maintain these coverages separately.
- **12.1.6.2.** Contractor shall warrant that any retroactive date applicable to coverage under the policy predates the effective date of the Contract and that continuous coverage will be maintained or an extended reporting or discovery period will be exercised for a period of three (3) years, beginning from the time that the Work under the Contract is completed.

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

# 12.1.7. <u>Proof of Carriage of Insurance and Other Requirements:</u> Endorsements and Certificates

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

## **12.1.7.2.1.** A clause stating:

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

- **12.1.7.2.2.** Language stating in particular those insured, extent of insurance, location and operation to which insurance applies, expiration date, to whom cancellation and reduction notice will be sent, and length of notice period.
- **12.1.7.3.** All endorsements, certificates and insurance policies shall state that District, its trustees, employees and agents, the State of California, Construction Manager(s), Project Manager(s), Inspector(s) and Architect(s) are named additional insureds under all policies except Workers' Compensation Insurance and Employers' Liability Insurance.
- **12.1.7.4.** Insurance written on a "claims made" basis is to be renewed by the Contractor and all Subcontractors for a period of five (5) years following completion of the Work or termination of this Agreement. Such insurance must have the same coverage and limits as the policy that was in effect during the term of this Agreement, and will cover the Contractor and all Subcontractors for all claims made.
- **12.1.7.5.** Contractor's and Subcontractors' insurance policy(s) shall be primary and non-contributory to any insurance or self-insurance maintained by District, its trustees, employees and/or agents, the State of California, Construction Manager(s), Project Manager(s), Inspector(s), and/or Architect(s).

- **12.1.7.6.** All endorsements shall waive any right to subrogation against any of the named additional insureds.
- **12.1.7.7.** Unless otherwise stated in the Special Conditions, all of Contractor's insurance shall be with insurance companies with an A.M. Best rating of no less than **A: VII.**
- **12.1.7.8.** The insurance requirements set forth herein shall in no way limit the Contractor's liability arising out of or relating to the performance of the Work or related activities.
- **12.1.7.9.** Failure of Contractor and/or its Subcontractor(s) to comply with the insurance requirements herein shall be deemed a material breach of the Agreement.

## 12.1.8. <u>Insurance Policy Limits</u>

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

Commercial General	Product Liability and	\$2,000,000 per
Liability	Completed	occurrence;
_	Operations, Fire	\$4,000,000
	Damage Liability –	aggregate
	Split Limit	
Automobile Liability -	Combined Single Limit	\$1,000,000
Any Auto		
_		
Workers Compensation		Statutory limits
_		pursuant to State law
Employers' Liability		\$1,000,000
Builder's Risk (Course		Issued for the value
of Construction)		and scope of Work
		indicated herein.
Pollution Liability		\$1,000,000 per claim;
		\$2,000,000 aggregate

## 12.2. Contract Security - Bonds

- **12.2.1.** Contractor shall furnish two surety bonds issued by a California admitted surety insurer as follows:
  - **12.2.1.1. Performance Bond**: A bond in an amount at least equal to one hundred percent (100%) of Contract Price as security for faithful performance of this Contract.
  - **12.2.1.2. Payment Bond**: A bond in an amount at least equal to one hundred percent (100%) of the Contract Price as security for payment of persons performing labor and/or furnishing materials in connection with this Contract.
- **12.2.2.** Cost of bonds shall be included in the Bid and Contract Price.

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

#### 13. WARRANTY/GUARANTEE/INDEMNITY

## 13.1. Warranty/Guarantee

- **13.1.1.** The Contractor shall obtain and preserve for the benefit of the District, manufacturer's warranties on materials, fixtures, and equipment incorporated into the Work.
- **13.1.2.** In addition to guarantees required elsewhere, Contractor shall, and hereby does guarantee and warrant all Work furnished on the job against all defects for a period of **ONE (1)** year after the later of the following dates:
  - **13.1.2.1.** The date of completion as defined in Public Contract Code section 7107, subdivision (c), or
  - **13.1.2.2.** The commissioning date for the Project, if any.

At the District's sole option, Contractor shall repair or replace any and all of that Work, together with any other Work that may be displaced in so doing, that may prove defective in workmanship and/or materials within a **ONE (1)** year period from date of completion as defined above without expense whatsoever to District. In the event of failure of Contractor and/or Surety to commence and pursue with diligence said replacements or repairs within ten (10) days after being notified in writing, Contractor and Surety hereby acknowledge and agree that District is authorized to proceed to have defects repaired and made good at expense of Contractor and/or Surety who hereby agree to pay costs and charges therefore immediately on demand.

- **13.1.3.** If, in the opinion of District, defective work creates a dangerous condition or requires immediate correction or attention to prevent further loss to District or to prevent interruption of operations of District, District will attempt to give the notice required above. If Contractor or Surety cannot be contacted or neither complies with District's request for correction within a reasonable time as determined by District, District may, notwithstanding the above provision, proceed to make any and all corrections and/or provide attentions the District believes are necessary. The costs of correction or attention shall be charged against Contractor and Surety of the guarantees provided in this Article or elsewhere in this Contract.
- **13.1.4.** The above provisions do not in any way limit the guarantees on any items for which a longer guarantee is specified or on any items for which a manufacturer gives a guarantee for a longer period. Contractor shall furnish to District all appropriate guarantee or warranty certificates as indicated in the Specifications or upon request by District.
- **13.1.5.** Nothing herein shall limit any other rights or remedies available to District.

## 13.2. Indemnity

- To the furthest extent permitted by California law, the Contractor shall indemnify, defend with legal counsel reasonably acceptable to the District, keep and hold harmless the District, the Architect, and the Construction Manager, their consultants and separate contractors, and their respective board members, officers, representatives, contractors, agents, and employees, in both individual and official capacities ("Indemnitees"), against all suits, claims, damages, losses, and expenses, including but not limited to attorney's fees, caused by, arising out of, resulting from, or incidental to, the performance of the Work under this Contract by the Contractor, its Subcontractors, vendors, or suppliers, except to the extent caused by the sole negligence, active negligence, or willful misconduct of the Indemnitees, and/or to any extent that would render these provisions void or unenforceable. This agreement and obligation of the Contractor shall not be construed to negate, abridge, or otherwise reduce any right or obligation of indemnity that would otherwise exist as to any party or person described herein. This indemnification, defense, and hold harmless obligation includes any failure or alleged failure by Contractor to comply with any provision of law, any failure or alleged failure to timely and properly fulfill all of its obligations under the Contract Documents in strict accordance with their terms, and without limitation, any stop payment notice actions or liens, including Civil Wage and Penalty Assessments and/or Orders by the California Department of Industrial Relations.
- **13.2.2.** The Contractor shall give prompt notice to the District in the event of any injury (including death), loss, or damage included herein. Without limitation of the provisions herein, if the Contractor's agreement to indemnify, defend, and hold harmless the Indemnitees as provided herein shall be determined to be void or unenforceable, in whole or in part, it is the intention of the parties that these circumstances shall not otherwise affect the validity or enforceability of the Contractor's agreement to indemnify, defend, and hold harmless the rest of the Indemnitees, as provided herein. Further, the Contractor shall be and remain fully liable on its agreements and obligations herein to the full extent permitted by law.
- **13.2.3.** In any and all claims against any of the Indemnitees by any employee of the Contractor, any Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, the Contractor's indemnification obligation herein shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for the Contractor or any Subcontractor under workers' compensation acts, disability benefit acts, or other employee benefit acts.
- **13.2.4.** The District may retain so much of the moneys due the Contractor as shall be considered necessary, until disposition of any such suit, claims or actions for damages or until the District, Architect and Construction Manager have received written agreement from the Contractor that they will unconditionally defend the District, Architect and Construction Manager, their officers, agents and employees, and pay any damages due by reason of settlement or judgment.
- **13.2.5.** The defense and indemnification obligations hereunder shall survive the completion of Work, including the warranty/guarantee period, and/or the termination of the Agreement.

#### 14. TIME

#### 14.1. Notice to Proceed

- **14.1.1.** District may issue a Notice to Proceed within three (3) months from the date of the Notice of Award. Once Contractor has received the Notice to Proceed, Contractor shall complete the Work within the period of time indicated in the Contract Documents.
- **14.1.2.** In the event that the District desires to postpone issuing the Notice to Proceed beyond this 3-month period, it is expressly understood that with reasonable notice to the Contractor, the District may postpone issuing the Notice to Proceed. It is further expressly understood by Contractor that Contractor shall not be entitled to any claim of additional compensation as a result of the postponement of the issuance of the Notice to Proceed.
- **14.1.3.** If the Contractor believes that a postponement of issuance of the Notice to Proceed will cause a hardship to Contractor, Contractor may terminate the Contract. Contractor's termination due to a postponement shall be by written notice to District within ten (10) days after receipt by Contractor of District's notice of postponement. It is further understood by Contractor that in the event that Contractor terminates the Contract as a result of postponement by the District, the District shall only be obligated to pay Contractor for the Work that Contractor had performed at the time of notification of postponement. Should Contractor terminate the Contract as a result of a notice of postponement, District shall have the authority to award the Contract to the next lowest responsive responsible bidder.

# 14.2. Computation of Time / Adverse Weather

- **14.2.1.** The Contractor will only be allowed a time extension for Adverse Weather conditions if requested by Contractor and only if all of the following conditions are met:
  - **14.2.1.1.** The weather conditions constitute Adverse Weather, as defined herein and further specified in the Special Conditions;
  - **14.2.1.2.** Contractor can verify that the Adverse Weather caused delays in excess of five hours of the indicated labor required to complete the scheduled tasks of Work on the day affected by the Adverse Weather;
  - **14.2.1.3.** The Contractor's crew is dismissed as a result of the Adverse Weather:
  - **14.2.1.4.** Said delay adversely affects the critical path in the Construction Schedule; and
  - **14.2.1.5.** The number of days of delay for the month exceeds those indicated in the Special Conditions.
- **14.2.2.** If the aforementioned conditions are met, a day-for-day extension will only be allowed for those days in excess of those indicated in the Special Conditions.

- **14.2.3.** The Contractor shall work seven (7) days per week, if necessary, irrespective of inclement weather, to maintain access and the Construction Schedule, and to protect the Work under construction from the effects of Adverse Weather, all at no further cost to the District.
- **14.2.4.** The Contract Time has been determined with consideration given to the average climate weather conditions prevailing in the County in which the Project is located.

### 14.3. Hours of Work

### **14.3.1.** Sufficient Forces

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

## **14.3.2.** Performance During Working Hours

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

## 14.4. Progress and Completion

### **14.4.1.** Time of the Essence

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

## **14.4.2.** No Commencement Without Insurance or Bonds

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

## 14.5. Schedule

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

### 14.6. Expeditious Completion

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

## 15. EXTENSIONS OF TIME – LIQUIDATED DAMAGES

## 15.1. <u>Liquidated Damages</u>

Contractor and District hereby agree that the exact amount of damages for failure to complete the Work within the time specified is extremely difficult or impossible to determine. If the Work is not completed within the time specified in the Contract Documents, it is understood that the District will suffer damage. It being impractical and unfeasible to determine the amount of actual damage, it is agreed the Contractor shall pay to District as fixed and liquidated damages, and not as a penalty, the amount set forth in the Agreement for each calendar day of delay in completion. Contractor and its Surety shall be liable for the amount thereof pursuant to Government Code section 53069.85.

## 15.2. Excusable Delay

- **15.2.1.** Contractor shall not be charged for liquidated damages because of any delays in completion of Work which are not the fault of Contractor or its Subcontractors, including acts of God as defined in Public Contract Code section 7105, acts of enemy, epidemics, and quarantine restrictions. Contractor shall, within five (5) calendar days of beginning of any delay, notify District in writing of causes of delay including documentation and facts explaining the delay. District shall review the facts and extent of any delay and shall grant extension(s) of time for completing Work when, in its judgment, the findings of fact justify an extension. Extension(s) of time shall apply only to that portion of Work affected by delay, and shall not apply to other portions of Work not so affected. An extension of time may only be granted if Contractor has timely submitted the Construction Schedule as required herein.
- **15.2.2.** Contractor shall notify the District pursuant to the claims provisions in these General Conditions of any anticipated delay and its cause. Following submission of a claim, the District may determine whether the delay is to be considered avoidable or unavoidable, how long it continues, and to what extent the prosecution and completion of the Work might be delayed thereby.
- **15.2.3.** In the event the Contractor requests an extension of Contract Time for unavoidable delay, such request shall be submitted in accordance with the provisions in the Contract Documents governing changes in Work. When requesting time, requests must be submitted with full justification and documentation. If the Contractor fails to submit justification, it waives its right to a time extension at a later date. Such justification must be based on the official Construction Schedule as updated at the time of occurrence of the delay or execution of Work related to any changes to the Scope of Work. Any claim for delay must include the following information as support, without limitation:
  - **15.2.3.1.** The duration of the activity relating to the changes in the Work and the resources (manpower, equipment, material, etc.) required to perform the activities within the stated duration.
  - **15.2.3.2.** Specific logical ties to the Contract Schedule for the proposed changes and/or delay showing the activity/activities in the Construction Schedule

that are affected by the change and/or delay. (A portion of any delay of seven (7) days or more must be provided.)

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

# 15.3. No Additional Compensation for Delays Within Contractor's Control

- **15.3.1.** Contractor is aware that governmental agencies, including, without limitation, the Division of the State Architect, the Department of General Services, gas companies, electrical utility companies, water districts, and other agencies may have to approve Contractor-prepared drawings or approve a proposed installation. Accordingly, Contractor shall include in its bid, time for possible review of its drawings and for reasonable delays and damages that may be caused by such agencies. Thus, Contractor is not entitled to make a claim for damages or delays arising from the review of Contractor's drawings.
- **15.3.2.** Contractor shall only be entitled to compensation for delay when all of the following conditions are met:
  - **15.3.2.1.** The District is responsible for the delay;
  - **15.3.2.2.** The delay is unreasonable under the circumstances involved;
  - **15.3.2.3.** The delay was not within the contemplation of the District and Contractor; and
  - **15.3.2.4.** Contractor complies with the claims procedure of the Contract Documents.

### 15.4. Float or Slack in the Schedule

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

## 16. CHANGES IN THE WORK

## 16.1. No Changes Without Authorization

**16.1.1.** There shall be no change whatsoever in the Drawings, Specifications, or in the Work without an executed Change Order or a written Construction Change Directive authorized by the District as herein provided. District shall not be liable for the cost of any extra work or any substitutions, changes, additions, omissions, or deviations from the Drawings and Specifications unless the District's governing board has authorized the same and the cost thereof has been approved in writing by Change Order or Construction Change Directive. No extension of time for performance of the Work shall be allowed hereunder unless claim for such extension is made at the time changes in the Work are ordered, and such time duly adjusted in writing in the Change Order or Construction Change Directive. Contractor shall be responsible for any costs incurred by the District for professional services and DSA

fees and/or delay to the Project Schedule, if any, for DSA to review any request for changes to the DSA approved plans and specifications for the convenience of the Contractor and/or to accommodate the Contractor's means and methods. The provisions of the Contract Documents shall apply to all such changes, additions, and omissions with the same effect as if originally embodied in the Drawings and Specifications.

- **16.1.2.** Contractor shall perform immediately all work that has been authorized by a fully executed Change Order or Construction Change Directive. Contractor shall be fully responsible for any and all delays and/or expenses caused by Contractor's failure to expeditiously perform this Work.
- **16.1.3.** Should any Change Order result in an increase in the Contract Price, the cost of that Change Order shall be agreed to, in writing, in advance by Contractor and District and be subject to the monetary limitations set forth in Public Contract Code section 20118.4. In the event that Contractor proceeds with any change in Work without a Change Order executed by the District or Construction Change Directive, Contractor waives any claim of additional compensation or time for that additional work.
- **16.1.4.** Contractor understands, acknowledges, and agrees that the reason for District authorization is so that District may have an opportunity to analyze the Work and decide whether the District shall proceed with the Change Order or alter the Project so that a change in Work becomes unnecessary.

### 16.2. Architect Authority

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

## 16.3. Change Orders

- **16.3.1.** A Change Order is a written instrument prepared and issued by the District and/or the Architect and signed by the District (as authorized by the District's Board of Trustees), the Contractor, the Architect, and approved by the Project Inspector (if necessary) and DSA (if necessary), stating their agreement regarding all of the following:
  - **16.3.1.1.** A description of a change in the Work;
  - 16.3.1.2. The amount of the adjustment in the Contract Price, if any; and
  - **16.3.1.3**. The extent of the adjustment in the Contract Time, if any.

### 16.4. Construction Change Directives

**16.4.1.** A Construction Change Directive is a written order prepared and issued by the District, the Construction Manager, and/or the Architect and signed by the

District and the Architect, directing a change in the Work. The District may as provided by law, by Construction Change Directive and without invalidating the Contract, order changes in the Work consisting of additions, deletions, or other revisions. The adjustment to the Contract Price or Time, if any, is subject to the provisions of this section regarding Changes in the Work. If all or a portion of the Project is being funded by funds requiring approval by the State Allocation Board (SAB), these revisions may be subject to compensation once approval of same is received and funded by the SAB, and funds are released by the Office of Public School Construction (OPSC). Any dispute as to the adjustment in the Contract Price, if any, of the Construction Change Directive or timing of payment shall be resolved pursuant to the Payment and Claims and Disputes provisions herein.

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

## 16.5. Force Account Directives

- **16.5.1.** When work, for which a definite price has not been agreed upon in advance, is to be paid for on a force account basis, all direct costs necessarily incurred and paid by the Contractor for labor, material, and equipment used in the performance of that Work, shall be subject to the approval of the District and compensation will be determined as set forth herein.
- **16.5.2.** The District will issue a Force Account Directive to proceed with the Work on a force account basis, and a not-to-exceed budget will be established by the District.
- **16.5.3.** All requirements regarding direct cost for labor, labor burden, material, equipment, and markups on direct costs for overhead and profit described in this section shall apply to Force Account Directives. However, the District will only pay for actual costs verified in the field by the District or its authorized representative(s) on a daily basis.
- **16.5.4.** The Contractor shall be responsible for all cost related to the administration of Force Account Directive. The markup for overheard and profit for Contractor modifications shall be full compensation to the Contractor to administer Force Account Directive.
- **16.5.5.** The Contractor shall notify the District or its authorized representative(s) at least twenty-four (24) hours prior to proceeding with any of the force account work. Furthermore, the Contractor shall notify the District when it has consumed eighty percent (80%) of the budget, and shall not exceed the budget unless specifically authorized in writing by the District. The Contractor will not be compensated for force account work in the event that the Contractor fails to timely notify the District regarding the commencement of force account work, or exceeding the force account budget.
- **16.5.6.** The Contractor shall diligently proceed with the work, and on a daily basis, submit a daily force account report on a form supplied by the District no later than 5:00 p.m. each day. The report shall contain a detailed itemization of the daily labor, material, and equipment used on the force account work only. The names of the individuals performing the force account work shall be included on the daily force

account reports. The type and model of equipment shall be identified and listed. The District will review the information contained in the reports, and sign the reports no later than the next work day, and return a copy of the report to the Contractor for their records. The District will not sign, nor will the Contractor receive compensation for work the District cannot verify. The Contractor will provide a weekly force account summary indicating the status of each Force Account Directive in terms of percent complete of the not-to-exceed budget and the estimated percent complete of the work

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

### 16.6. Price Request

## **16.6.1.** <u>Definition of Price Request</u>

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

## **16.6.2.** Scope of Price Request

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

### 16.7. Proposed Change Order

### **16.7.1.** <u>Definition of Proposed Change Order</u>

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

# **16.7.2.** Changes in Contract Price

A PCO shall include breakdowns pursuant to the revisions herein to validate any change in Contract Price. In no case shall Contractor or any of its Subcontractors be permitted to reserve rights for additional compensation for Change Order Work.

# 16.7.3. Changes in Time

A PCO shall also include any changes in time required to complete the Project. Any additional time requested shall not be the number of days to make the proposed change, but must be based upon the impact to the Construction Schedule as defined in the Contract Documents. If Contractor fails to request a time extension in a PCO, then the Contractor is thereafter precluded from requesting time and/or claiming a delay. In no case shall Contractor or any of its Subcontractors be permitted to reserve rights for additional time for Change Order Work.

## 16.7.4. <u>Unknown and/or Unforeseen Conditions</u>

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

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# 16.8. Format for Proposed Change Order

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

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

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

	WORK PERFORMED OTHER THAN BY	ADD	<u>DEDUCT</u>
	CONTRACTOR		
(a)	Material (attach itemized quantity and unit cost		
	plus sales tax)		

(b)	Add Labor (attach itemized hours and rates, fully	
	encumbered)	
(c)	Add Equipment (attach suppliers' invoice)	
(d)	<u>Subtotal</u>	
(e)	Add overhead and profit for any and all tiers	
	of Subcontractor, the total not to exceed ten	
	percent (10%) of Item (d)	
(f)	<u>Subtotal</u>	
(g)	Add overhead and profit for Contractor, not to	
	exceed five percent (5%) of Item (f)	
(h)	<u>Subtotal</u>	
(i)	Add Bond and Insurance, not to exceed one and	
	a half percent (1.5%) of Item (h)	
(j)	<u>TOTAL</u>	
(k)	Time (zero unless indicated)	Calendar
		Days

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

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

- 16.8.3. **Materials.** Contractor shall be compensated for the costs of materials necessarily and actually used or consumed in connection with the performance of the change in the Work. Costs of materials may include reasonable costs of transportation from a source closest to the Site of the Work and delivery to the Site. If discounts by material suppliers are available for materials necessarily used in the performance of the change in the Work, they shall be credited to the District. If materials necessarily used in the performance of the change in the Work are obtained from a supplier or source owned in whole or in part by the Contractor, compensation therefor shall not exceed the current wholesale price for such materials. If, in the reasonable opinion of the District, the costs asserted by the Contractor for materials in connection with any change in the Work are excessive, or if the Contractor fails to provide satisfactory evidence of the actual costs of such materials from its supplier or vendor of the same, the costs of such materials and the District's obligation to pay for the same shall be limited to the then lowest wholesale price at which similar materials are available in the quantities required to perform the change in the Work. The District may elect to furnish materials for the change in the Work, in which event the Contractor shall not be compensated for the costs of furnishing such materials or any mark-up thereon.
- **Equipment**. As a precondition for the District's duty to pay for Equipment rental or loading and transportation, Contractor shall provide satisfactory evidence of the actual costs of Equipment from the supplier, vendor or rental agency of same. Contractor shall be compensated for the actual cost of the necessary and direct use of Equipment in the performance of the change in the Work. Use of such Equipment in the performance of the change in the Work shall be compensated in increments of fifteen (15) minutes. Rental time for Equipment moved by its own power shall include time required to move such Equipment to the site of the Work from the nearest available rental source of the same. If Equipment is not moved to the Site by its own power, Contractor will be compensated for the loading and transportation costs in lieu of rental time. The foregoing notwithstanding, neither moving time or loading and transportation time shall be allowed if the Equipment is used for performance of any portion of the Work other than the change in the Work. Unless prior approval in writing is obtained by the Contractor from the Architect, the Project Inspector and the District, no costs or compensation shall be allowed for time while Construction Equipment is inoperative, idle or on standby, for any reason. Contractor shall not be entitled to an allowance or any other compensation for Equipment or tools used in the performance of change in the Work where such Equipment or tools have a replacement value of \$500.00 or less. Equipment costs claimed by the Contractor in connection with the performance of any Work shall not exceed rental rates established by distributors or construction equipment rental agencies in the locality of the Site; any costs asserted which exceed such rental rates shall not be allowed or paid. Unless otherwise specifically approved in writing by the Architect, the Project Inspector and the District, the allowable rate for the use of Equipment in connection with the Work shall constitute full compensation to the Contractor for the cost of rental, fuel, power, oil, lubrication, supplies, necessary attachments, repairs or maintenance of any kind, depreciation, storage, insurance, labor (exclusive of labor costs of the Equipment operator), and any and all other costs incurred by the Contractor incidental to the use of such Equipment.

### 16.9. Change Order Certification

- **16.9.1.** All Change Orders and PCOs must include the following certification by the Contractor:
  - **16.9.1.1.** The undersigned Contractor approves the foregoing as to the changes, if any, and the Contract Price specified for each item and as to the extension of time allowed, if any, for completion of the entire Work as stated herein, and agrees to furnish all labor, materials, and service, and perform all work necessary to complete any additional work specified for the consideration stated herein. Submission of sums which have no basis in fact or which Contractor knows are false are at the sole risk of Contractor and may be a violation of the False Claims Act set forth under Government Code section 12650 et seq. It is understood that the changes herein to the Contract shall only be effective when approved by the governing board of the District.
  - **16.9.1.2.** It is expressly understood that the value of the extra Work or changes expressly includes any and all of the Contractor's costs and expenses, direct and indirect, resulting from additional time required on the Project or resulting from delay to the Project. Any costs, expenses, damages, or time extensions not included are deemed waived.

## 16.10. Determination of Change Order Cost

- **16.10.1.** The amount of the increase or decrease in the Contract Price from a Change Order, if any, shall be determined in one or more of the following ways as applicable to a specific situation and at the District's discretion:
  - **16.10.1.1.** District acceptance of a PCO:
  - **16.10.1.2.** By unit prices contained in Contractor's original bid;
  - **16.10.1.3.** By agreement between District and Contractor.

## 16.11. <u>Deductive Change Orders</u>

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

# 16.12. Addition or Deletion of Alternate Bid Item(s)

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

### 16.13. Discounts, Rebates, and Refunds

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

## 16.14. Accounting Records

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

## 16.15. Notice Required

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

### 16.16. Applicability to Subcontractors

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

### 16.17. Alteration to Change Order Language

Contractor shall not alter Change Orders or reserve time in Change Orders. Contractor shall execute finalized Change Orders and proceed under the provisions herein with proper notice.

## 16.18. Failure of Contractor to Execute Change Order

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

# 17. REQUEST FOR INFORMATION

- **17.1.** Any Request for Information shall reference all applicable Contract Document(s), including Specification section(s), detail(s), page number(s), drawing number(s), and sheet number(s), etc. The Contractor shall make suggestions and interpretations of the issue raised by each Request for Information. A Request for Information cannot modify the Contract Price, Contract Time, or the Contract Documents. Upon request by the District, Contractor shall provide an electronic copy of the Request for Information in addition to the hard copy.
- **17.2.** The Contractor shall be responsible for any costs incurred for professional services that District may deduct from any amounts owing to the Contractor, if a Request for Information requests an interpretation or decision of a matter where the information sought is equally available to the party making the request. District, at its sole discretion, shall deduct from and/or invoice Contractor for all the professional services arising herein.

#### 18. PAYMENTS

## 18.1. Contract Price

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

### 18.2. Applications for Progress Payments

### **18.2.1.** <u>Procedure for Applications for Progress Payments</u>

# **18.2.1.1.** Application for Progress Payment

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

- **18.2.1.1.1.** The amount paid to the date of the Application to the Contractor, to all its Subcontractors, and all others furnishing labor, material, or equipment for its Contract;
- **18.2.1.1.1.2.** The amount being requested under the Application for Payment by the Contractor on its own behalf and separately stating the amount requested on behalf of each of the Subcontractors and all others furnishing labor, material, and equipment under the Contract;
- **18.2.1.1.3.** The balance that will be due to each of such entities after said payment is made;
- **18.2.1.1.4.** A certification that the As-Built Drawings and annotated Specifications are current;
- **18.2.1.1.5.** Itemized breakdown of work done for the purpose of requesting partial payment;
- **18.2.1.1.6.** An updated and acceptable construction schedule in conformance with the provisions herein;
- **18.2.1.1.7.** The additions to and subtractions from the Contract Price and Contract Time;
- **18.2.1.1.1.8.** A total of the retentions held;
- **18.2.1.1.1.9.** Material invoices, evidence of equipment purchases, rentals, and other support and details of cost as the District may require from time to time;
- **18.2.1.1.10.** The percentage of completion of the Contractor's Work by line item;
- **18.2.1.1.11.** Schedule of Values updated from the preceding Application for Payment;
- **18.2.1.1.1.12.** A duly completed and executed conditional waiver and release upon progress payment compliant with Civil Code section 8132 from the Contractor and each subcontractor of any tier and supplier to be paid from the current progress payment;
- **18.2.1.1.13.** A duly completed and executed unconditional waiver and release upon progress payment compliant with Civil Code section 8134 from the Contractor and each subcontractor of any tier and supplier that was paid from the previous progress payment(s); and
- **18.2.1.1.1.14.** A certification by the Contractor of the following:

The Contractor warrants title to all Work performed as of the date of this payment application has been completed in accordance with the Contract Documents for the Project. The Contractor further warrants that all amounts have been paid for work which previous Certificates for Payment were issued and payments received and all Work performed as of the date of this payment application is free and clear of liens, claims, security interests, or encumbrances in favor of the Contractor, Subcontractors, material and equipment suppliers, workers, or other persons or entities making a claim by reason of having provided labor, materials, and equipment relating to the Work, except those of which the District has been informed.

- **18.2.1.1.15.** The Contractor shall be subject to the False Claims Act set forth in Government Code section 12650 et seq. for information provided with any Application for Progress Payment.
- **18.2.1.1.1.16.** All remaining certified payroll records ("CPR(s)") for each journeyman, apprentice, worker, or other employee employed by the Contractor and/or each Subcontractor in connection with the Work for the period of the Application for Payment. As indicated herein, the District shall not make any payment to Contractor until:
  - **19.2.1.1.16.1** Contractor and/or its Subcontractor(s) provide electronic CPRs weekly for all weeks any journeyman, apprentice, worker or other employee was employed in connection with the Work directly to the DIR, or within ten (10) days of any request by the District or the DIR, and
  - **19.2.1.1.16.2** Any delay in Contractor and/or its Subcontractor(s) providing CPRs in a timely manner may directly delay the Contractor's payment.

## **19.2.2.** Prerequisites for Progress Payments

- **19.2.2.1.** <u>First Payment Request</u>: The following items, if applicable, must be completed before the District will accept and/or process the Contractor's first payment request:
  - **19.2.2.1.1.** Installation of the Project sign;
  - **19.2.2.1.2.** Installation of field office;
  - **19.2.2.1.3.** Installation of temporary facilities and fencing;
  - **19.2.2.1.4.** Schedule of Values:
  - **19.2.2.1.5.** Contractor's Construction Schedule;
  - **19.2.2.1.6.** Schedule of unit prices, if applicable;
  - 19.2.2.1.7. Submittal Schedule;
  - **19.2.2.1.8.** Receipt by Architect of all submittals due as of the date of the payment application;
  - **19.2.2.1.9.** Copies of necessary permits;

- **19.2.2.1.10.** Copies of authorizations and licenses from governing authorities:
- 19.2.2.1.11. Initial progress report;
- 19.2.2.1.12. Surveyor qualifications;
- **19.2.2.1.13.** Written acceptance of District's survey of rough grading, if applicable;
- **19.2.2.1.14.** List of all Subcontractors, with names, license numbers, telephone numbers, and Scope of Work;
- 19.2.2.1.15. All bonds and insurance endorsements; and
- **19.2.2.1.16.** Resumes of Contractor's project manager, and if applicable, job site secretary, record documents recorder, and job site superintendent.
- **19.2.2.2.** <u>Second Payment Request</u> The District will not process the second payment request until and unless all submittals and Shop Drawings have been accepted for review by the Architect.
- **19.2.2.3.** <u>No Waiver of Criteria</u> Any payments made to Contractor where criteria set forth herein have not been met shall not constitute a waiver of said criteria by District. Instead, such payment shall be construed as a good faith effort by District to resolve differences so Contractor may pay its Subcontractors and suppliers. Contractor agrees that failure to submit such items may constitute a breach of contract by Contractor and may subject Contractor to termination.

### 19.3. Progress Payments

- **19.3.1.** <u>District's Approval of Application for Payment</u>
  - **19.3.1.1.** Upon receipt of a Application for Payment, The District shall act in accordance with both of the following:
    - **19.3.1.1.1.** Each Application for Payment shall be reviewed by the District as soon as practicable after receipt for the purpose of determining that the Application for Payment is a proper Application for Payment.
    - 19.3.1.1.2. Any Application for Payment determined not to be a proper Application for Payment suitable for payment shall be returned to the Contractor as soon as practicable, but not later than seven (7) days, after receipt. An Application for Payment returned pursuant to this paragraph shall be accompanied by a document setting forth in writing the reasons why the Application for Payment is not proper. The number of days available to the District to make a payment without incurring interest pursuant to this section shall be reduced by the number of days by which the District exceeds this seven-day return requirement.

- **19.3.1.1.3.** An Application for Payment shall be considered properly executed if funds are available for payment of the Application for Payment, and payment is not delayed due to an audit inquiry by the financial officer of the District.
- **19.3.1.2.** The District's review of the Contractor's Application for Payment will be based on the District's and the Architect's observations at the Site and the data comprising the Application for Payment that the Work has progressed to the point indicated and that, to the best of the District's and the Architect's knowledge, information, and belief, the quality of the Work is in accordance with the Contract Documents. The foregoing representations are subject to:
  - **19.3.1.2.1.** Observation of the Work for general conformance with the Contract Documents,
  - **19.3.1.2.2.** Results of subsequent tests and inspections,
  - **19.3.1.2.3.** Minor deviations from the Contract Documents correctable prior to completion, and
  - **19.3.1.2.4.** Specific qualifications expressed by the Architect.
- **19.3.1.3.** District's approval of the certified Application for Payment shall be based on Contractor complying with all requirements for a fully complete and valid certified Application for Payment.

### **19.3.2.** Payments to Contractor

- 19.3.2.1. Within thirty (30) days after approval of the Application for Payment, Contractor shall be paid a sum equal to ninety-five percent (95%) of the value of the Work performed (as verified by Architect and Inspector and certified by Contractor) up to the last day of the previous month, less the aggregate of previous payments and amount to be withheld. The value of the Work completed shall be Contractor's best estimate. No inaccuracy or error in said estimate shall operate to release the Contractor, or any Surety upon any bond, from damages arising from such Work, or from the District's right to enforce each and every provision of this Contract, and the District shall have the right subsequently to correct any error made in any estimate for payment.
- **19.3.2.2.** The Contractor shall not be entitled to have any payment requests processed, or be entitled to have any payment made for Work performed, so long as any lawful or proper direction given by the District concerning the Work, or any portion thereof, remains incomplete.
- **19.3.2.3.** If the District fails to make any progress payment within thirty (30) days after receipt of an undisputed and properly submitted Application for Payment from the Contractor, the District shall pay interest to the Contractor equivalent to the legal rate set forth in subdivision (a) of Section 685.010 of the Code of Civil Procedure.

### **19.3.3.** No Waiver

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

## 19.4. <u>Decisions to Withhold Payment</u>

### **19.4.1.** Reasons to Withhold Payment

The District may withhold payment in whole, or in part, to the extent reasonably necessary to protect the District if, in the District's opinion, the representations to the District required herein cannot be made. The District may withhold payment, in whole, or in part, to such extent as may be necessary to protect the District from loss because of, but not limited to:

- **19.4.1.1.** Defective Work not remedied within **FORTY-EIGHT (48)** hours of written notice to Contractor.
- **19.4.1.2.** Stop Payment Notices or other liens served upon the District as a result of the Contract. Contractor agrees that the District may withhold up to 125% of the amount claimed in the Stop Payment Notice to answer the claim and to provide for the District's reasonable cost of any litigation pursuant to the stop payment notice.
- **19.4.1.3.** Liquidated damages assessed against the Contractor.
- **19.4.1.4.** The cost of completion of the Contract if there exists reasonable doubt that the Work can be completed for the unpaid balance of the Contract Price or by the completion date.
- **19.4.1.5.** Damage to the District or other contractor(s).
- **19.4.1.6.** Unsatisfactory prosecution of the Work by the Contractor.
- **19.4.1.7.** Failure to store and properly secure materials.
- **19.4.1.8.** Failure of the Contractor to submit, on a timely basis, proper, sufficient, and acceptable documentation required by the Contract Documents, including, without limitation, a Construction Schedule, Schedule of Submittals, Schedule of Values, Monthly Progress Schedules, Shop Drawings, Product Data and samples, Proposed product lists, executed Change Orders, and/or verified reports.
- **19.4.1.9.** Failure of the Contractor to maintain As-Built Drawings.
- **19.4.1.10.** Erroneous estimates by the Contractor of the value of the Work performed, or other false statements in an Application for Payment.
- **19.4.1.11.** Unauthorized deviations from the Contract Documents.

- **19.4.1.12.** Failure of the Contractor to prosecute the Work in a timely manner in compliance with the Construction Schedule, established progress schedules, and/or completion dates.
- **19.4.1.13.** Failure to provide acceptable electronic certified payroll records, as required by the Labor Code, by these Contract Documents, or by written request; for each journeyman, apprentice, worker, or other employee employed by the Contractor and/or by each Subcontractor in connection with the Work for the period of the Application for Payment or if payroll records are delinquent or inadequate.
- **19.4.1.14.** Failure to properly pay prevailing wages as required in Labor Code section 1720 et seq., failure to comply with any other Labor Code requirements, and/or failure to comply with labor compliance monitoring and enforcement by the DIR.
- **19.4.1.15.** Failure to properly pay prevailing wages as required in Labor Code section 1720 et seq., failure to comply with any other Labor Code requirements, and/or failure to comply with State labor compliance monitoring and enforcement, if applicable.
- **19.4.1.16.** Failure to comply with any applicable federal statutes and regulations regarding minimum wages, withholding, payrolls and basic records, apprentice and trainee employment requirements, equal employment opportunity requirements, Copeland Act requirements, Davis-Bacon Act and related requirements, Contract Work Hours and Safety Standards Act requirements, if applicable.
- **19.4.1.17.** Failure to properly maintain or clean up the Site.
- **19.4.1.18.** Failure to timely indemnify, defend, or hold harmless the District.
- **19.4.1.19.** Any payments due to the District, including but not limited to payments for failed tests, utilities changes, or permits.
- **19.4.1.20.** Failure to pay Subcontractor(s) or supplier(s) as required by law and by the Contract Documents.
- **19.4.1.21.** Failure to pay any royalty, license or similar fees.
- **19.4.1.22.** Contractor is otherwise in breach, default, or in substantial violation of any provision of this Contract.
- **19.4.1.23.** Failure to perform any implementation and/or monitoring required by any SWPPP for the Project and/or the imposition of any penalties or fines therefore whether imposed on the District or Contractor.

## **19.4.2.** Reallocation of Withheld Amounts

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

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

## 19.4.3. Payment After Cure

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

## 19.5. Subcontractor Payments

### **19.5.1.** Payments to Subcontractors

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

# **19.5.2.** No Obligation of District for Subcontractor Payment

The District shall have no obligation to pay, or to see to the payment of, money to a Subcontractor except as may otherwise be required by law.

### 19.5.3. Joint Checks

District shall have the right in its sole discretion, if necessary for the protection of the District, to issue joint checks made payable to the Contractor and Subcontractors and/or material or equipment suppliers. The joint check payees shall be responsible for the allocation and disbursement of funds included as part of any such joint payment. In no event shall any joint check payment be construed to create any contract between the District and a Subcontractor of any tier, or a material or equipment supplier, any obligation from the District to such Subcontractor or a material or equipment supplier against the District.

### 20. COMPLETION OF THE WORK

## 20.1. Completion

- **20.1.1.** District will accept completion of Contract and have the Notice of Completion recorded when the entire Work shall have been completed to the satisfaction of District.
- **20.1.2.** The Work may only be accepted as complete by action of the governing board of the District.
- **20.1.3.** District, at its sole option, may accept completion of Contract and have the Notice of Completion recorded when the entire Work shall have been completed to the satisfaction of District, except for minor corrective items, as distinguished from incomplete items. If Contractor fails to complete all minor corrective items within fifteen (15) days after the date of the District's acceptance of completion, District shall withhold from the final payment one hundred fifty percent (150%) of an estimate of the amount sufficient to complete the corrective items, as determined by District, until the item(s) are completed.
- **20.1.4.** At the end of the 15-day period, if there are any items remaining to be corrected, District may elect to proceed as provided herein related to adjustments to Contract Price, and/or District's right to perform the Work of the Contractor.

### 20.2. Close-Out/Certification Procedures

## **20.2.1**. Punch List

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

### **20.2.2.** Close-Out/Certification Requirements

### 20.2.2.1. <u>Utility Connections</u>

Buildings shall be connected to water, gas, sewer, and electric services, complete and ready for use. Service connections shall be made and existing services reconnected.

## 20.2.2. Record Drawings

- **20.2.2.1.** Contractor shall provide exact Record Drawings of the Work upon completion of the Project as indicated in the Specifications.
- **20.2.2.2.** Contractor is liable and responsible for any and all inaccuracies in the Record Drawings, even if inaccuracies become evident at a future date.
- **20.2.2.3.** Upon completion of the Work and as a condition precedent to approval of final payment, Contractor shall obtain the Inspector's approval of the corrected prints and employ a competent draftsman to transfer the Record Drawings information to the most current version of AutoCad that is, at that time, currently utilized for plan check submission by either the District, the Architect, OPSC, and/or DSA, and print a complete set of transparent sepias. When completed, Contractor shall deliver corrected sepias and diskette/CD/other data storage device acceptable to District with AutoCad file to the District.
- **20.2.2.3.** <u>Maintenance Manuals</u>: Contractor shall prepare all operation and maintenance manuals and date as indicated in the Specifications.
- **20.2.2.4.** <u>Source Programming</u>: Contractor shall provide all source programming for all items in the Project.
- **20.2.2.5.** <u>Verified Reports</u>: Contractor shall completely and accurately fill out and file forms DSA 6-C or DSA 152 (or current form), as appropriate. Refer to section 4-336 and section 4-343 of Part 1, Title 24 of the California Code of Regulations.

### 20.3. Final Inspection

- **20.3.1.** Contractor shall comply with Punch List procedures as provided herein, and maintain the presence of a Project Superintendent and Project Manager until the Punch List is complete to ensure proper and timely completion of the Punch List. Under no circumstances shall Contractor demobilize its forces prior to completion of the Punch List. Upon receipt of Contractor's written notice that all of the Punch List items have been fully completed and the Work is ready for final inspection and acceptance, Architect and Project Inspector will inspect the Work and shall submit to Contractor and District a final inspection report noting the Work, if any, required in order to complete in accordance with the Contract Documents. Absent unusual circumstances, this report shall consist of the Punch List items not yet satisfactorily completed.
- **20.3.2.** Upon Contractor's completion of all items on the Punch List and any other uncompleted portions of the Work, the Contractor shall notify the District and Architect, who shall again inspect such Work. If the Architect finds the Work complete and acceptable under the Contract Documents, the Architect will notify

Contractor, who shall then jointly submit to the Architect and the District its final Application for Payment.

## **20.3.3.** Final Inspection Requirements

- **20.3.3.1.** Before calling for final inspection, Contractor shall determine that the following have been performed:
  - **20.3.3.1.1.** The Work has been completed.
  - **20.3.3.1.2.** All life safety items are completed and in working order.
  - **20.3.3.1.3.** Mechanical and electrical Work are complete and tested, fixtures are in place, connected, and ready for tryout.
  - **20.3.3.1.4.** Electrical circuits scheduled in panels and disconnect switches labeled.
  - **20.3.3.1.5.** Painting and special finishes complete.
  - **20.3.3.1.6.** Doors complete with hardware, cleaned of protective film, relieved of sticking or binding, and in working order.
  - **20.3.3.1.7.** Tops and bottoms of doors sealed.
  - **20.3.3.1.8.** Floors waxed and polished as specified.
  - **20.3.3.1.9.** Broken glass replaced and glass cleaned.
  - **20.3.3.1.10.** Grounds cleared of Contractor's equipment, raked clean of debris, and trash removed from Site.
  - **20.3.3.1.11.** Work cleaned, free of stains, scratches, and other foreign matter, of damaged and broken material replaced.
  - **20.3.3.1.12.** Finished and decorative work shall have marks, dirt, and superfluous labels removed.
  - **20.3.3.1.13.** Final cleanup, as provided herein.

### 20.4. Costs of Multiple Inspections

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

## 20.5. Partial Occupancy or Use Prior to Completion

### **20.5.1.** <u>District's Rights to Occupancy</u>

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

# **20.5.2.** <u>Inspection Prior to Occupancy or Use</u>

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

### **20.5.3.** No Waiver

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

### 21. FINAL PAYMENT AND RETENTION

## 21.1. Final Payment

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

**21.2.** <u>Prerequisites for Final Payment</u> The following conditions must be fulfilled prior to Final Payment:

- **21.2.1.** A full release of all Stop Payment Notices served in connection with the Work shall be submitted by Contractor.
- **21.2.2.** A duly completed and executed conditional waiver and release upon final payment compliant with Civil Code section 8136, from the Contractor and each subcontractor of any tier and supplier to be paid from the final payment.
- **21.2.3.** A duly completed and executed unconditional waiver and release upon progress payment compliant with Civil Code section 8134, from the Contractor and each subcontractor of any tier and supplier that was paid from the previous progress payments.
- **21.2.4.** A duly completed and executed Document 00880, "AGREEMENT AND RELEASE OF ANY AND ALL CLAIMS" from the Contractor.
- **21.2.5.** The Contractor shall have made all corrections to the Work that are required to remedy any defects therein, to obtain compliance with the Contract Documents or any requirements of applicable codes and ordinances, or to fulfill any of the orders or directions of District required under the Contract Documents.
- **21.2.6.** Each Subcontractor shall have delivered to the Contractor all written guarantees, warranties, applications, and bonds required by the Contract Documents for its portion of the Work.
- **21.2.7.** Contractor must have completed all requirements set forth under "Close-Out/Certification Procedures," including, without limitation, submission of an approved set of complete Record Drawings.
- **21.2.8.** Architect shall have issued its written approval that final payment can be made.
- **21.2.9.** The Contractor shall have delivered to the District all manuals and materials required by the Contract Documents.
- 21.2.10. The Contractor shall have completed final clean-up as provided herein.

# 21.3. Retention

- **21.3.1.** The retention, less any amounts disputed by the District or that the District has the right to withhold pursuant to provisions herein, shall be paid:
  - **21.3.1.1.** After approval of the District by the Architect's Certificate of Payment,
  - 21.3.1.2. After the satisfaction of the conditions set forth herein, and
  - **21.3.1.3.** After forty-five (45) days after the recording of the Notice of Completion by District.
- **21.3.2.** No interest shall be paid on any retention, or on any amounts withheld due to a failure of the Contractor to perform, in accordance with the terms and conditions of the Contract Documents, except as provided to the contrary in any

Escrow Agreement between the District and the Contractor pursuant to Public Contract Code section 22300.

**21.4.** <u>Substitution of Securities</u> The District will permit the substitution of securities in accordance with the provisions of Public Contract Code section 22300.

# 22. UNCOVERING OF WORK

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

## 23. NONCONFORMING WORK AND CORRECTION OF WORK

# 23.1. Nonconforming Work

- **23.1.1.** Contractor shall promptly remove from Premises all Work identified by District as failing to conform to the Contract Documents whether incorporated or not. Contractor shall promptly replace and re-execute its own Work to comply with the Contract Documents without additional expense to the District and shall bear the expense of making good all work of other contractors destroyed or damaged by any removal or replacement pursuant hereto and/or any delays to the District or other Contractors caused thereby.
- **23.1.2.** If Contractor does not remove Work that District has identified as failing to conform to the Contract Documents within a reasonable time, not to exceed **FORTY-EIGHT (48)** hours, District may remove it and may store any material at Contractor's expense. If Contractor does not pay expense(s) of that removal within ten (10) days' time thereafter, District may, upon ten (10) days' written notice, sell any material at auction or at private sale and shall deduct all costs and expenses incurred by the District and/or District may withhold those amounts from payment(s) to Contractor.

### 23.2. Correction of Work

## **23.2.1.** Correction of Rejected Work

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

# **23.2.2.** One-Year Warranty Corrections

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

# 23.3. <u>District's Right to Perform Work</u>

- **23.3.1.** If the Contractor should neglect to prosecute the Work properly or fail to perform any provisions of this contract, the District, after **FORTY-EIGHT (48)** hours written notice to the Contractor, may, without prejudice to any other remedy it may have, make good such deficiencies and may deduct the cost thereof from the payment then or thereafter due the Contractor.
- **23.3.2.** If it is found at any time, before or after completion of the Work, that Contractor has varied from the Drawings and/or Specifications, including, but not limited to, variation in material, quality, form, or finish, or in the amount or value of the materials and labor used, District may require at its option:
  - **23.3.2.1.** That all such improper Work be removed, remade or replaced, and all work disturbed by these changes be made good by Contractor at no additional cost to the District:
  - **23.3.2.2.** That the District deduct from any amount due Contractor the sum of money equivalent to the difference in value between the work performed and that called for by the Drawings and Specifications; or
  - **23.3.2.3.** That the District exercise any other remedy it may have at law or under the Contract Documents, including but not limited to the District hiring its own forces or another contractor to replace the Contractor's nonconforming Work, in which case the District shall either issue a deductive Change Order, a Construction Change Directive, or invoice the Contractor for the cost of that work. Contractor shall pay any invoices within thirty (30) days of receipt of same or District may withhold those amounts from payment(s) to Contractor.

## 24. TERMINATION AND SUSPENSION

#### 24.1. District's Right to Terminate Contractor for Cause

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

- **24.1.1.1.** Contractor refuses or fails to execute the Work or any separable part thereof with sufficient diligence as will ensure its completion within the time specified or any extension thereof, or
- **24.1.1.2.** Contractor fails to complete said Work within the time specified or any extension thereof, or
- **24.1.1.3.** Contractor persistently fails or refused to perform Work or provide material of sufficient quality as to be in compliance with Contract Documents; or
- **24.1.1.4.** Contractor files a petition for relief as a debtor, or a petition is filed against the Contractor without its consent, and the petition not dismissed within sixty (60) days; or
- **24.1.1.5.** Contractor makes a general assignment for the benefit of its creditors, or a receiver is appointed on account of its insolvency; or
- **24.1.1.6.** Contractor persistently or repeatedly refuses fails, except in cases for which extension of time is provided, to supply enough properly skilled workers or proper materials to complete the Work in the time specified; or
- **24.1.1.7.** Contractor fails to make prompt payment to Subcontractors, or for material, or for labor; or
- **24.1.1.8.** Contractor persistently disregards laws, or ordinances, or instructions of District; or
- **24.1.1.9.** Contractor fails to supply labor, including that of Subcontractors, that can work in harmony with all other elements of labor employed or to be employed on the Work; or
- **24.1.1.10.** Contractor or its Subcontractor(s) is/are otherwise in breach, default, or in substantial violation of any provision of this Contract, including but not limited to a lapse in licensing or registration.

### **24.1.2.** Notification of Termination

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

- **24.1.2.2.1.** Within three (3) days after service upon it of the notice of tender, gives District written notice of Surety's intention to take over and perform this Contract; and
- **24.1.2.2.** Commences performance of this Contract within (three (3) days from date of serving of its notice to District.
- **24.1.2.3.** Surety shall not utilize Contractor in completing the Project if the District notifies Surety of the District's objection to Contractor's further participation in the completion of the Project. Surety expressly agrees that any contractor which Surety proposes to fulfill Surety's obligations is subject to District's approval. District's approval shall not be unreasonably withheld, conditioned or delayed.
- **24.1.2.4.** If Surety fails to notify District or begin performance as indicated herein, District may take over the Work and execute the Work to completion by any method it may deem advisable at the expense of Contractor and/or its Surety. Contractor and/or its Surety shall be liable to District for any excess cost or other damages the District incurs thereby. Time is of the essence in this Contract. If the District takes over the Work as herein provided, District may, without liability for so doing, take possession of and utilize in completing the Work such materials, appliances, plan, and other property belonging to Contractor as may be on the Site of the Work, in bonded storage, or previously paid for.

### **24.1.3**. Effect of Termination

- **24.1.3.1.** Contractor shall, only if ordered to do so by the District, immediately remove from the Site all or any materials and personal property belonging to Contractor that have not been incorporated in the construction of the Work, or which are not in place in the Work. The District retains the right, but not the obligation, to keep and use any materials and personal property belonging to Contractor that have not been incorporated in the construction of the Work, or which are not in place in the Work. The Contractor and its Surety shall be liable upon the performance bond for all damages caused the District by reason of the Contractor's failure to complete the Contract.
- **24.1.3.2.** In the event that the District shall perform any portion of, or the whole of the Work, pursuant to the provisions of the General Conditions, the District shall not be liable nor account to the Contractor in any way for the time within which, or the manner in which, the Work is performed by the District or for any changes the District may make in the Work or for the money expended by the District in satisfying claims and/or suits and/or other obligations in connection with the Work.
- **24.1.3.3.** In the event that the Contract is terminated for any reason, no allowances or compensation will be granted for the loss of any anticipated profit by the Contractor or any impact or impairment of Contractor's bonding capacity.
- **24.1.3.4.** If the expense to the District to finish the Work exceeds the unpaid Contract Price, Contractor and Surety shall pay difference to District within twenty-one (21) days of District's request.

- 24.1.3.5. The District shall have the right (but shall have no obligation) to assume and/or assign to a general contractor or construction manager or other third party who is qualified and has sufficient resources to complete the Work, the rights of the Contractor under its subcontracts with any or all Subcontractors. In the event of an assumption or assignment by the District, no Subcontractor shall have any claim against the District or third party for Work performed by Subcontractor or other matters arising prior to termination of the Contract. The District or any third party, as the case may be, shall be liable only for obligations to the Subcontractor arising after assumption or assignment. Should the District so elect, the Contractor shall execute and deliver all documents and take all steps, including the legal assignment of its contractual rights, as the District may require, for the purpose of fully vesting in the District the rights and benefits of it Subcontractor under Subcontracts or other obligations or commitments. All payments due the Contractor hereunder shall be subject to a right of offset by the District for expenses and damages suffered by the District as a result of any default, acts, or omissions of the Contractor. Contractor must include this assignment provision in all of its contracts with its Subcontractors.
- **24.1.3.6.** The foregoing provisions are in addition to and not in limitation of any other rights or remedies available to District.

## **24.1.4.** Emergency Termination of Public Contracts Act of 1949

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

## **24.1.4.1.1.** Section 4410 of the Government Code states:

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

#### **24.1.4.1.2.** Section 4411 of the Government Code states:

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

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

discretion, may adopt the Contract Price as the reasonable value of the work done or any portion thereof.

## 24.2. Termination of Contractor for Convenience

- **24.2.1.** District in its sole discretion may terminate the Contract upon three (3) days written notice to the Contractor. Under a termination for convenience, the District retains the right to all the options available to the District if there is a termination for cause. In case of a termination for convenience, the Contractor shall have no claims against the District except:
  - **24.2.1.1.** The actual cost for labor, materials, and services performed that is unpaid and can be documented through timesheets, invoices, receipts, or otherwise, and
  - **24.2.1.2.** Five percent (5%) of the total cost of work performed as of the date of termination, or five percent (5%) of the value of the Work yet to be performed, whichever is less. This five percent (5%) amount shall be full compensation for all Contractor's and Subcontractor(s)' mobilization and/or demobilization costs and any anticipated loss profits resulting from termination of the Contractor for convenience.

## 24.3. Suspension of Work

- **24.3.1.** District in its sole discretion may suspend, delay or interrupt the Work in whole or in part for such period of time as the District may determine upon three (3) days written notice to the Contractor.
  - **24.3.1.1.** An adjustment may be made for changes in the cost of performance of the Work caused by any such suspension, delay or interruption. No adjustment shall be made to the extent:
    - **24.3.1.1.** That performance is, was or would have been so suspended, delayed or interrupted by another cause for which Contractor is responsible; or
    - **24.3.1.1.2.** That an equitable adjustment is made or denied under another provision of the Contract; or
    - **24.3.1.1.3.** That the suspension of Work was the direct or indirect result of Contractor's failure to perform any of its obligations hereunder.
  - **24.3.1.2.** Any adjustments in cost of performance may have a fixed or percentage fee as provided in the section on Format for Proposed Change Order herein. This amount shall be full compensation for all Contractor's and its Subcontractor(s)' changes in the cost of performance of the Contract caused by any such suspension, delay or interruption.

## 25. CLAIMS AND DISPUTES

#### 25.1. Performance During Dispute or Claim Process

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

## 25.2. <u>Definition of Dispute</u>

- **25.2.1.** The term "Dispute" means a separate demand by the Contractor for:
  - **25.2.1.1.** A time extension:
  - **25.2.1.2.** Payment of money or damages arising from Work done by or on behalf of the Contractor pursuant to the Contract and payment of which is not otherwise expressly provided for or Contractor is not otherwise entitled to; or
  - **25.2.1.3.** An amount of payment disputed by the District.

## 25.3. <u>Dispute Presentation</u>

- **25.3.1.** If Contractor intends to apply for an increase in the Contract Price or Contract Time for any reason including, without limitation, the acts of District or its agents, Contractor shall, within ten (10) days after the event giving rise to the Dispute, give notice of the Dispute in writing and submit to the District a written statement of the damage sustained or time requested. On or before twenty (20) days after Contractor's written Notice of Dispute, Contractor shall file with the District an itemized statement of the details and amounts of its Dispute for any increase in the Contract Price of Contract Time. Otherwise, Contractor shall have waived and relinquished its dispute against the District and Contractor's claims for compensation or an extension of time shall be forfeited and invalidated. Contractor shall not be entitled to consideration for payment or time on account.
- **25.3.2.** The Notice of Dispute shall identify:
  - **25.3.2.1.** The issues, events, conditions, circumstances and/or causes giving rise to the dispute;
  - **25.3.2.2.** The pertinent dates and/or durations and actual and/or anticipated effects on the Contract Price, Contract Schedule milestones and/or Contract Time adjustments; and
  - **25.3.2.3.** The line-item costs for labor, material, and/or equipment, if applicable.
- **25.3.3.** The Notice of Dispute shall include the following certification by the Contractor:
  - **25.3.3.1.** The undersigned Contractor certifies under penalty of perjury that the attached dispute is made in good faith; that the supporting data is accurate and complete to the best of my knowledge and belief; that the amount requested

accurately reflects the adjustment for which Contractor believes the District is liable; and that I am duly authorized to certify the dispute on behalf of the Contractor.

- **25.3.3.2.** Furthermore, Contractor understands that the value of the attached dispute expressly includes any and all of the Contractor's costs and expenses, direct and indirect, resulting from the Work performed on the Project, additional time required on the Project and/or resulting from delay to the Project. Any costs, expenses, damages, or time extensions not included are deemed waived.
- **25.3.4.** If a Dispute, or any portion thereof, remains unresolved upon satisfaction of all applicable Dispute Resolution requirements, the Contractor shall comply with all claim resolution requirements as provided in Public Contract Code section 20104.
- **25.3.5.** Contractor shall bind its Subcontractors to the provisions of this section and will hold the District harmless against disputes by Subcontractors.

### 25.4. Dispute Resolution

- **25.4.1.** Contractor shall file with the District the Notice of Dispute, including the documents necessary to substantiate it, on or before the day of submitting the application for final payment.
- **25.4.2.** District shall respond in writing within forty-five (45) days of receipt of the Dispute or may request in writing within thirty (30) days of receipt of the Dispute any additional documentation supporting the Dispute or relating to defenses or claims District may have against the Contractor.
  - **25.4.2.1.** If additional information is required, it shall be requested and provided by mutual agreement of the parties.
  - **25.4.2.2.** District's written response to the documented Dispute shall be submitted to the Contractor within fifteen (15) days after receipt of the further documentation or within a period of time no greater than that taken by the Contractor to produce the additional information, whichever is greater.
- **25.4.3.** If Contractor disputes the District's written response, Contractor may file a claim pursuant to the Claim Resolution requirements provided herein.

## 25.5. <u>Definition of Claim</u>

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

## 25.6. Claim Presentations

**25.6.1.** Contractor must timely submit the Notice of Claim and all documents necessary to substantiate any Claim. Otherwise, Contractor shall have waived and relinquished its Claim against the District and Contractor's Claims for compensation or an extension of time shall be forfeited and invalidated, and Contractor shall not be entitled to consideration for payment or time on account of the instant matter. No Claim shall be presented prior to Project completion. Any statute that might

otherwise govern the presentation of an unresolved Dispute, including but not limited to Government Code section 900 et seq. and Public Contract Code section 20104 et seq. shall be tolled for all purposes during the course of construction on the Project.

- **25.6.1.1.** All Claims shall include the following certification by the Contractor:
  - **25.6.1.1.1.** The undersigned Contractor certifies under penalty of perjury that the attached claim is made in good faith; that the supporting data is accurate and complete to the best of my knowledge and belief; that the amount requested accurately reflects the adjustment for which Contractor believes the District is liable; and that I am duly authorized to certify the claim on behalf of the Contractor.
  - **25.6.1.1.2.** Furthermore, Contractor understands that the value of the attached claim expressly includes any and all of the Contractor's costs and expenses, direct and indirect, resulting from the Work performed on the Project, additional time required on the Project and/or resulting from delay to the Project. Any costs, expenses, damages, or time extensions not included are deemed waived.
- **25.6.2.** The attention of the Contractor is drawn to Government Code section 12650, et seq. regarding penalties for false claims.
- **25.6.3.** If a Claim, or any portion thereof, remains in dispute upon satisfaction of all applicable Dispute and Claim Resolution requirements, the Contractor shall comply with all claims presentation requirements as provided in Chapter 1 (commencing with section 900) and Chapter 2 (commencing with section 910) of Part 3 of Division 3.6 of Title 1 of Government Code as a condition precedent to the Contractor's right to bring a civil action against the District. For purposes of those provisions, the running of the time within which a Dispute or Claim must be presented to the District shall be tolled from the time the Contractor submits its written Dispute or Claim until the time the Dispute or Claim is denied, including any time utilized by any applicable meet and confer process.
- **25.6.4.** The Contractor shall bind all its Subcontractors to the provisions of this section and will hold the District harmless against claims by Subcontractors.

# 25.7. Claim Resolution

**25.7.1.** In the event of a disagreement between the parties as to performance of the Work, the interpretation of this Contract, or payment or nonpayment for Work performed or not performed, the parties shall, after the conclusion of the Dispute Resolution requirements, attempt to resolve the Claim by those procedures set forth herein.

### **25.7.2.** Claims of \$375,000 or Less

**25.7.2.1.** For all Claims of three hundred seventy-five thousand dollars (\$375,000) or less which arise between Contractor and District, the procedure set forth in Public Contract Code section 20104 et seq. shall apply:

- **25.7.2.1.1.** Contractor shall file with the District any written Claim, including the documents necessary to substantiate it, upon the application for final payment.
- **25.7.2.1.2.** For claims of less than fifty thousand dollars (\$50,000), the District shall respond in writing within forty-five (45) days of receipt of the Claim or may request in writing within thirty (30) days of receipt of the Claim any additional documentation supporting the claim or relating to defenses or claims the District may have against the Contractor.
  - **25.7.2.1.2.1.** If additional information is required, it shall be requested and provided by mutual agreement of the parties.
  - **25.7.2.1.2.2.** District's written response to the documented Claim shall be submitted to the Contractor within fifteen (15) days after receipt of the further documentation or within a period of time no greater than that taken by the Contractor to produce the additional information, whichever is greater.
- **25.7.2.1.3.** For claims of over fifty thousand dollars (\$50,000) and less than or equal to three hundred seventy-five thousand dollars (\$375,000), the District shall respond in writing to all written Claims within sixty (60) days of receipt of the claim, or may request, in writing, within thirty (30) days of receipt of the Claim any additional documentation supporting the Claim or relating to defenses or claims the District may have against the Contractor.
  - **25.7.2.1.3.1.** If additional information is required, it shall be requested and provided upon mutual agreement of the District and the Contractor.
  - **25.7.2.1.3.2.** The District's written response to the claim, as further documented, shall be submitted to the Contractor within thirty (30) days after receipt of the further documentation, or within a period of time no greater than that taken by the Contractor to produce the additional information or requested documentation, whichever is greater.
- **25.7.2.2.** If Contractor disputes the District's written response, or the District fails to respond within the time prescribed, Contractor may so notify the District, in writing, either within fifteen (15) days of receipt of the District's response or within fifteen (15) days of the District's failure to respond within the time prescribed, respectively, and demand an informal conference to meet and confer for settlement of the issues in dispute. Upon a demand, the District shall schedule a meet and confer conference within thirty (30) days for settlement of the dispute.
- **25.7.2.3.** Following the meet and confer conference, if the claim or any portion of it remains in dispute, the Contractor may file a claim as provided in Chapter 1 (commencing with Section 900) and Chapter 2 (commencing with Section 910) of Part 3 of Division 3.6 of Title 1 of the Government Code. For purposes of those provisions the running of the time within which a claim must be filed shall be tolled from the time the Contractor submits its written Claim until the time the Claim is denied, including any period of time utilized by the meet and confer process.

- **25.7.2.4.** For any civil action filed to resolve claims filed pursuant to this section, within sixty (60) days, but no earlier than thirty (30) days, following the filing of responsive pleadings, the court shall submit the matter to nonbinding mediation unless waived by mutual stipulation of both parties. The mediation process shall provide for the selection within fifteen (15) days by both parties of a disinterested third person as mediator, shall be commenced within thirty (30) days of the submittal, and shall be concluded within fifteen (15) days from the commencement of the mediation unless a time requirement is extended upon a good cause showing to the court or by stipulation of both parties. If the parties fail to select a mediator within the 15-day period, any party may petition the court to appoint the mediator.
- **25.7.2.5.** If the matter remains in dispute, the case shall be submitted to judicial arbitration pursuant to Chapter 2.5 (commencing with Section 1141.10) of the Title 3 of Part 3 of the Code of Civil Procedure, notwithstanding Section 1141.11 of that code. The Civil Discovery Act of 1986, (Article 3 (commencing with Section 2016) of Chapter 3 of Title 3 of part 4 of the Code of Civil Procedure) shall apply to any proceeding brought under this subdivision consistent with the rules pertaining to judicial arbitration.
- **25.7.2.6.** The District shall not fail to pay money as to any portion of a Claim which is undisputed except as otherwise provided in the Contract Documents. In any suit filed pursuant to this section, the District shall pay interest at the legal rate on any arbitration award or judgment. Interest shall begin to accrue on the date the suit is filed in a court of law.

### **25.7.3.** Claims Over \$375,000

- **25.7.3.1.** For all Claims of over three hundred seventy-five thousand dollars (\$375,000) which arise between a Contractor and the District, the following procedure shall apply:
  - **25.7.3.1.1.** The parties agree to first endeavor to settle the dispute in an amicable manner by mediation before having recourse to a judicial forum. The Claim shall be identified in writing to the District within thirty (30) days from the date of Contractor's application for final payment of all Contract balances not in dispute and shall be mediated within one hundred and twenty (120) days from the submission of the Claim to the District. For purposes of filing a Claim to mediation, the running of the time within which mediation must be filed shall be tolled from the time the Contractor submits its written Claim until the time the Claim is denied. Mediator fees and administrative costs of the mediation shall be shared equally by the parties.
  - **25.7.3.1.2.** District may assert any counter-claims it has for damages against Contractor, including, but not limited to, defective Work, delay damages, and liquidated damages.
- **25.7.4.** Contractor shall bind its Subcontractors to the provisions of this section and will hold the District harmless against disputes by Subcontractors.

# 25.8. <u>Dispute and Claim Resolution Non-Applicability</u>

- **25.8.1.** The procedures for dispute and claim resolutions set forth in this Article shall not apply to the following:
  - **25.8.1.1.** Personal injury, wrongful death or property damage claims;
  - **25.8.1.2.** Latent defect or breach of warranty or guarantee to repair;
  - **25.8.1.3.** Stop payment notices;
  - **25.8.1.4.** District's rights set forth in the Article on Suspension and Termination;
  - 25.8.1.5. Disputes arising out of State labor compliance, if applicable; or
  - **25.8.1.6.** District rights and obligations as a public entity set forth in applicable statutes; provided, however, that penalties imposed against a public entity by statutes, including, but not limited to, Public Contract Code sections 20104.50 and 7107, shall be subject to the Dispute and Claim Resolution requirements provided in this Article.
- **25.9.** Contractor's costs incurred in seeking relief under this Article are not recoverable from the District.

#### 26. STATE LABOR, WAGE & HOUR, APPRENTICE, AND RELATED PROVISIONS

# 26.1. <u>Labor Compliance and Enforcement</u>

Since this Project is subject to labor compliance and enforcement by the Department of Industrial Relations ("DIR"), Contractor specifically acknowledges and understands that it shall perform the Work of this Agreement while complying with all the applicable provisions of Division 2, Part 7, Chapter 1, of the Labor Code and Title 8 of the California Code of Regulations, including, without limitation, the requirement that the Contractor and all Subcontractors shall timely furnish complete and accurate electronic certified payroll records directly to the DIR. The District may not issue payment if this requirement is not met.

# 26.2. Wage Rates, Travel, and Subsistence

- **26.2.1.** Pursuant to the provisions of article 2 (commencing at section 1770), chapter 1, part 7, division 2, of the Labor Code of California, the general prevailing rate of per diem wages and the general prevailing rate for holiday and overtime work in the locality in which this public work is to be performed for each craft, classification, or type of worker needed to execute this Contract are on file at the District's principal office and copies will be made available to any interested party on request. Contractor shall obtain and post a copy of these wage rates at the job site.
- **26.2.2.** Holiday and overtime work, when permitted by law, shall be paid for at the general prevailing rate of per diem wages for holiday and overtime work on file with the Director of the Department of Industrial Relations, unless otherwise specified. The holidays upon which those rates shall be paid need not be specified by

the District, but shall be all holidays recognized in the applicable collective bargaining agreement. If the prevailing rate is not based on a collectively bargained rate, the holidays upon which the prevailing rate shall be paid shall be as provided in Section 6700 of the Government Code.

- **26.2.3.** Contractor shall pay and shall cause to be paid each worker engaged in Work on the Project the general prevailing rate of per diem wages determined by the Director of the Department of Industrial Relations, regardless of any contractual relationship which may be alleged to exist between Contractor or any Subcontractor and such workers.
- **26.2.4.** If during the period this bid is required to remain open, the Director of the Department of Industrial Relations determines that there has been a change in any prevailing rate of per diem wages in the locality in which the Work under the Contract is to be performed, such change shall not alter the wage rates in the Notice to Bidders or the Contract subsequently awarded.
- **26.2.5.** Pursuant to Labor Code section 1775, Contractor shall, as a penalty to District, forfeit the statutory amount (believed by the District to be currently up to two hundred dollars (\$200) for each calendar day, or portion thereof, for each worker paid less than the prevailing rates, determined by the District and/or the Director, for the work or craft in which that worker is employed for any public work done under Contract by Contractor or by any Subcontractor under it. The difference between such prevailing wage rates and the amount paid to each worker for each calendar day or portion thereof for which each worker was paid less than the prevailing wage rate shall be paid to each worker by Contractor.
- **26.2.6.** Any worker employed to perform Work on the Project, which Work is not covered by any classification listed in the general prevailing wage rate of per diem wages determined by the Director, shall be paid not less than the minimum rate of wages specified therein for the classification which most nearly corresponds to Work to be performed by him, and such minimum wage rate shall be retroactive to time of initial employment of such person in such classification.
- **26.2.7.** Pursuant to Labor Code section 1773.1, per diem wages are deemed to include employer payments for health and welfare, pension, vacation, travel time, subsistence pay, and apprenticeship or other training programs authorized by Labor Code section 3093, and similar purposes.
- **26.2.8.** Contractor shall post at appropriate conspicuous points on the Site of Project, a schedule showing all determined minimum wage rates and all authorized deductions, if any, from unpaid wages actually earned. In addition, Contractor shall post a sign-in log for all workers and visitors to the Site, a list of all subcontractors of any tier on the Site, and the required Equal Employment Opportunity poster(s).

#### 26.3. Hours of Work

- **26.3.1.** As provided in article 3 (commencing at section 1810), chapter 1, part 7, division 2, of the Labor Code, eight (8) hours of labor shall constitute a legal days work. The time of service of any worker employed at any time by Contractor or by any Subcontractor on any subcontract under this Contract upon the Work or upon any part of the Work contemplated by this Contract shall be limited and restricted by Contractor to eight (8) hours per day, and forty (40) hours during any one week, except as hereinafter provided. Notwithstanding the provisions hereinabove set forth, Work performed by employees of Contractor in excess of eight (8) hours per day and forty (40) hours during any one week, shall be permitted upon this public work upon compensation for all hours worked in excess of eight (8) hours per day at not less than one and one-half times the basic rate of pay.
- **26.3.2.** Contractor shall keep and shall cause each Subcontractor to keep an accurate record showing the name of and actual hours worked each calendar day and each calendar week by each worker employed by Contractor in connection with the Work or any part of the Work contemplated by this Contract. The record shall be kept open at all reasonable hours to the inspection of District and to the Division of Labor Standards Enforcement of the DIR.
- **26.3.3.** Pursuant to Labor Code section 1813, Contractor shall as a penalty to the District forfeit the statutory amount (believed by the District to be currently twenty-five dollars (\$25)) for each worker employed in the execution of this Contract by Contractor or by any Subcontractor for each calendar day during which such worker is required or permitted to work more than eight (8) hours in any one calendar day and forty (40) hours in any one calendar week in violation of the provisions of article 3 (commencing at section 1810), chapter 1, part 7, division 2, of the Labor Code.
- **26.3.4.** Any Work necessary to be performed after regular working hours, or on Sundays or other holidays shall be performed without additional expense to the District.

#### 26.4. Payroll Records

- **26.4.1.** Contractor shall upload, and shall cause each Subcontractor performing any portion of the Work under this Contract to upload, an accurate and complete certified payroll record ("CPR") using the Public Works Payroll Reporting Form, including certification (DIR Form A-1-131 or current version), and Statement of Employer Payments (DIR Form PW 26) through the eCPR application using PDF to the DIR at <a href="https://apps.dir.ca.gov/ecpr/DAS/AltLogin">https://apps.dir.ca.gov/ecpr/DAS/AltLogin</a> or current application and URL, showing the name, address, social security number, work classification, straight time, and overtime hours worked each day and week, and the actual per diem wages paid to each journeyman, apprentice, worker, or other employee employed by the Contractor and/or each Subcontractor in connection with the Work.
  - **26.4.1.1.** The CPRs enumerated hereunder shall be filed directly with the DIR on a weekly basis or to the requesting party, whether the District or DIR, within ten (10) days after receipt of each written request. The CPRs from the Contractor and each Subcontractor for each week shall be provided on or before Wednesday of the week following the week covered by the CPRs. District may not make any payment to Contractor until:

- **26.4.1.1.1.** Contractor and/or its Subcontractor(s) provide CPRs acceptable to the DIR: and
- **26.4.1.1.2.** Any delay in Contractor and/or its Subcontractor(s) providing CPRs to the DIR in a timely manner may directly delay Contractor's payment.
- **26.4.2.** All CPRs shall be available for inspection at all reasonable hours at the principal office of Contractor on the following basis:
  - **26.4.2.1.** A certified copy of an employee's CPR shall be made available for inspection or furnished to the employee or his/her authorized representative on request.
  - **26.4.2.2.** CPRs shall be made available for inspection or furnished upon request to a representative of District, Division of Labor Standards Enforcement, Division of Apprenticeship Standards, and/or the DIR.
  - **26.4.2.3.** CPRs shall be made available upon request by the public for inspection or copies thereof made; provided, however, that a request by the public shall be made through the District, Division of Apprenticeship Standards, or the Division of Labor Standards Enforcement. If the requested CPRs have not been provided pursuant to the provisions herein, the requesting party shall, prior to being provided the records reimburse the costs of preparation by Contractor, Subcontractors, and the entity through which the request was made. The public shall not be given access to the records at the principal office of Contractor.
- **26.4.3.** Any copy of records made available for inspection as copies and furnished upon request to the public or any public agency by District, Division of Apprenticeship Standards, or Division of Labor Standards Enforcement shall be marked or obliterated in such a manner as to prevent disclosure of an individual's name, address, and social security number. The name and address of Contractor awarded Contract or performing Contract shall not be marked or obliterated.
- **26.4.4.** Contractor shall inform District of the location of the records enumerated hereunder, including the street address, city, and county, and shall, within five (5) working days, provide a notice of change of location and address.
- **26.4.5.** In the event of noncompliance with the requirements of this section, Contractor shall have ten (10) days in which to comply subsequent to receipt of written notice specifying in what respects Contractor must comply with this section. Should noncompliance still be evident after the ten (10) day period, Contractor shall, as a penalty to District, forfeit up to one hundred dollars (\$100) for each calendar day, or portion thereof, for each worker, until strict compliance is effectuated. Upon the request of Division of Apprenticeship Standards or Division of Labor Standards Enforcement, these penalties shall be withheld from progress payments then due.
- **26.5.** [RESERVED]
- 26.6. Apprentices

- **26.6.1.** Contractor acknowledges and agrees that, if this Contract involves a dollar amount greater than or a number of working days greater than that specified in Labor Code section 1777.5, then this Contract is governed by the provisions of Labor Code Section 1777.5. It shall be the responsibility of Contractor to ensure compliance with this Article and with Labor Code section 1777.5 for all apprenticeship occupations.
- **26.6.2.** Apprentices of any crafts or trades may be employed and, when required by Labor Code section 1777.5, shall be employed provided they are properly registered in full compliance with the provisions of the Labor Code.
- **26.6.3.** Every such apprentice shall be paid the standard wage paid to apprentices under the regulations of the craft or trade at which he/she is employed, and shall be employed only at the work of the craft or trade to which she/he is registered.
- **26.6.4.** Only apprentices, as defined in section 3077 of the Labor Code, who are in training under apprenticeship standards and written apprentice agreements under chapter 4 (commencing at section 3070), division 3, of the Labor Code, are eligible to be employed. The employment and training of each apprentice shall be in accordance with the provisions of the apprenticeship standards and apprentice agreements under which he/she is training.
- **26.6.5.** Pursuant to Labor Code section 1777.5, if that section applies to this Contract as indicated above, Contractor and any Subcontractors employing workers in any apprenticeable craft or trade in performing any Work under this Contract shall apply to the applicable joint apprenticeship committee for a certificate approving the Contractor or Subcontractor under the applicable apprenticeship standards and fixing the ratio of apprentices to journeymen employed in performing the Work.
- **26.6.6.** Pursuant to Labor Code section 1777.5, if that section applies to this Contract as indicated above, Contractor and any Subcontractor may be required to make contributions to the apprenticeship program.
- **26.6.7.** If Contractor or Subcontractor willfully fails to comply with Labor Code section 1777.5, then, upon a determination of noncompliance by the Administrator of Apprenticeship, it shall:
  - **26.6.7.1.** Be denied the right to bid on any subsequent project for one (1) year from the date of such determination;
  - **26.6.7.2.** Forfeit as a penalty to District the full amount as stated in Labor Code section 1777.7. Interpretation and enforcement of these provisions shall be in accordance with the rules and procedures of the California Apprenticeship Council and under the authority of the Chief of the Division of Apprenticeship Standards.
- **26.6.8.** Contractor and all Subcontractors shall comply with Labor Code section 1777.6, which section forbids certain discriminatory practices in the employment of apprentices.
- **26.6.9.** Contractor shall become fully acquainted with the law regarding apprentices prior to commencement of the Work. Special attention is directed to sections 1777.5, 1777.6, and 1777.7 of the Labor Code, and title 8, California Code

of Regulations, section 200 et seq. Questions may be directed to the State Division of Apprenticeship Standards, 455 Golden Gate Avenue, San Francisco, California 94102.

#### 26.7. Non-Discrimination

- **26.7.1.** Contractor herein agrees not to discriminate in its recruiting, hiring, promotion, demotion, or termination practices on the basis of race, religious creed, national origin, ancestry, sex, age, or physical handicap in the performance of this Contract and to comply with the provisions of the California Fair Employment and Housing Act as set forth in part 2.8 of division 3 of the California Government Code, commencing at section 12900; the Federal Civil Rights Act of 1964, as set forth in Public Law 88-352, and all amendments thereto; Executive Order 11246, and all administrative rules and regulations found to be applicable to Contractor and Subcontractor.
- **26.7.2.** Special requirements for Federally Assisted Construction Contracts: During the performance of this Contract, Contractor agrees to incorporate in all subcontracts the provisions set forth in Chapter 60-1.4(b) of Title 41 published in Volume 33 No. 104 of the Federal Register dated May 28, 1968.

#### 26.8. Labor First Aid

Contractor shall maintain emergency first aid treatment for Contractor's workers on the Project which complies with the Federal Occupational Safety and Health Act of 1970 (29 U.S.C. § 651 et seq.) and the California Occupational Safety and Health Act of 1973 (8 Cal. Code of Regs., §1 et seq.).

#### 27. [RESERVED]

#### 28. MISCELLANEOUS

#### 28.1. Assignment of Antitrust Actions

**28.1.1.** Section 7103.5(b) of the Public Contract Code states:

In entering into a public works contract or subcontract to supply goods, services, or materials pursuant to a public works contract, the Contractor or subcontractor offers and agrees to assign to the awarding body all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. Sec. 15) or under the Cartwright Act (Chapter 2 (commending with Section 16700) of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, made and become effective at the time the awarding body tenders final payment to the Contractor, without further acknowledgment by the parties.

# **28.1.2.** Section 4552 of the Government Code states:

In submitting a bid to a public purchasing body, the bidder offers and agrees that if the bid is accepted, it will assign to the purchasing body all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. Sec. 15) or under the Cartwright Act (Chapter 2 (commencing with Section 16700) of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, materials, or services by the bidder for sale to the purchasing body pursuant to the bid. Such assignment shall be made and become effective at the time the purchasing body tenders final payment to the bidder.

#### **28.1.3.** Section 4553 of the Government Code states:

If an awarding body or public purchasing body receives, either through judgment or settlement, a monetary recovery for a cause of action assigned under this chapter, the assignor shall be entitled to receive reimbursement for actual legal costs incurred and may, upon demand, recover from the public body any portion of the recovery, including treble damages, attributable to overcharges that were paid by the assignor but were not paid by the public body as part of the bid price, less the expenses incurred in obtaining that portion of the recovery.

#### **28.1.4.** Section 4554 of the Government Code states:

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

**28.1.5.** Under this Article, "public purchasing body" is District and "bidder" is Contractor.

# 28.2. Excise Taxes

If, under Federal Excise Tax Law, any transaction hereunder constitutes a sale on which a Federal Excise Tax is imposed and the sale is exempt from such Federal Excise Tax because it is a sale to a State or Local Government for its exclusive use, District, upon request, will execute documents necessary to show (1) that District is a political subdivision of the State for the purposes of such exemption, and (2) that the sale is for the exclusive use of District. No Federal Excise Tax for such materials shall be included in any Contract Price.

# 28.3. <u>Taxes</u>

Contract Price is to include any and all applicable sales taxes or other taxes that may be due in accordance with section 7051 of the Revenue and Taxation Code; Regulation 1521 of the State Board of Equalization or any other tax code that may be applicable.

# 28.4. Shipments

All shipments must be F.O.B. destination to Site or sites, as indicated in the Contract Documents. There must be no charge for containers, packing, unpacking, drayage, or insurance. The total Contract Price shall be all inclusive (including sales tax) and no additional costs of any type will be considered.

# 28.5. Compliance with Government Reporting Requirements

If this Contract is subject to federal or other governmental reporting requirements because of federal or other governmental financing in whole or in part for the Project of which it is part, or for any other reason, Contactor shall comply with those reporting requirements at the request of the District at no additional cost.

# **SPECIAL CONDITIONS**

# 1. <u>Mitigation Measures</u>

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

#### 2. Modernization Projects

- **2.1.** Access. Access to the school buildings and entry to buildings, classrooms, restrooms, mechanical rooms, electrical rooms, or other rooms, for construction purposes, must be coordinated with District and onsite District personnel before Work is to start. Unless agreed to otherwise in writing, only a school custodian will be allowed to unlock and lock doors in existing building(s). The custodian will be available only while school is in session. If a custodian is required to arrive before 7:00 a.m. or leave after 3:30 p.m. to accommodate Contractor's Work, the overtime wages for the custodian will be paid by the Contractor, unless at the discretion of the District, other arrangements are made in advance.
- **2.2.** <u>Master Key</u>. Upon request, the District may, at is own discretion, provide a master key to the school site for the convenience of the Contractor. The Contractor agrees to pay all expenses to re-key the entire school site and all other affected District buildings if the master key is lost or stolen or if any unauthorized party obtains a copy of the key or access to the school.
- **2.3.** <u>Maintaining Services</u>. The Contractor is advised that Work is to be performed in spaces regularly scheduled for instruction. Interruption and/or periods of shutdown of public access, electrical service, water service, lighting, or other utilities shall be only as arranged in advance with the District. Contractor shall provide temporary services to all facilities interrupted by Contractor's Work.
- **2.4.** <u>Maintaining Utilities</u>. The Contractor shall maintain in operation during duration of Contract, drainage lines, storm drains, sewers, water, gas, electrical, steam, and other utility service lines within working area.
- **2.5.** <u>Confidentiality</u>. Contractor shall maintain the confidentiality of all information, documents, programs, procedures and all other items that Contractor encounters while performing the Work. This requirement shall be ongoing and shall survive the expiration or termination of this Contract and specifically includes, without limitation, all student, parent, and employee disciplinary information and health information.
- 2.6. <u>Work During Instructional Time</u>. By submitting its bid, Contractor affirms that Work may be performed during ongoing instruction in existing facilities. If so, Contractor agrees to cooperate to the best of its ability to minimize any disruption to the school up to, and including, rescheduling specific work activities, at no additional cost to District. Please note: Any work still commencing on or after June 13, 2016 will require a work stoppage between the hours of 12:30 pm until 2:30 pm each day to observe quiet time within the building.

**2.7. No Work During Student Testing.** Contractor shall, at no additional cost to the District and at the District's request, coordinate its Work to not disturb District students including, without limitation, not performing any Work when students at the Site are taking State-required tests.

# 3. Substitution for Specified Items

- **3.1.** Whenever in the Specifications any materials, process, or article is indicated or specified by grade, patent, or proprietary name, or by name of manufacturer, that Specification shall be deemed to be followed by the words "or equal." Contractor may, unless otherwise stated, offer any material, process, or article that shall be substantially equal or better in every respect to that so indicated or specified.
  - **3.1.1.** If the material, process, or article offered by Contractor is not, in the opinion of the District, substantially equal or better in every respect to that specified, then Contractor shall furnish the material, process, or article specified in the Specifications without any additional compensation or change order.
  - **3.1.2.** This provision shall not be applicable with respect to any material, product, thing or service for which District made findings and gave notice in accordance with Public Contract Code section 3400(c); therefore, Contractor shall not be entitled to request a substitution with respect to those materials, products or services.
- **3.2.** A request for a substitution shall be submitted as follows:
  - **3.2.1.** Contractor shall notify the District in writing of any request for a substitution at least ten (10) days prior to bid opening as indicated in the Instructions to Bidders.
  - **3.2.2.** Requests for Substitutions after award of the Contract shall be submitted within thirty-five (35) days of the date of the Notice of Award.
- **3.3.** Within 35 days after the date of the Notice of Award, Contractor shall provide data substantiating a request for substitution of "an equal" item, including but not limited to the following:
  - **3.3.1.** All variations of the proposed substitute from the material specified including, but not limited to, principles of operation, materials, or construction finish, thickness or gauge of materials, dimensions, weight, and tolerances;
  - **3.3.2.** Available maintenance, repair or replacement services;
  - **3.3.3.** Increases or decreases in operating, maintenance, repair, replacement, and spare parts costs;
  - **3.3.4.** Whether or not acceptance of the substitute will require other changes in the Work (or in work performed by the District or others under Contract with the District); and
  - **3.3.5.** The time impact on any part of the Work resulting directly or indirectly from acceptance of the proposed substitute.

- **3.4.** No substitutions shall be made until approved, in writing, by the District. The burden of proof as to equality of any material, process, or article shall rest with Contractor. The Contractor warrants that if substitutes are approved:
  - **3.4.1.** The proposed substitute is equal or superior in all respects to that specified, and that such proposed substitute is suitable and fit for the intended purpose and will perform adequately the function and achieve the results called for by the general design and the Contract Documents;
  - **3.4.2.** The Contractor provides the same warranties and guarantees for the substitute that would be provided for that specified;
  - **3.4.3.** The Contractor shall be fully responsible for the installation of the substitute and any changes in the Work required, either directly or indirectly, because of the acceptance of such substitute, with no increase in Contract Price or Contract Time. Incidental changes or extra component parts required to accommodate the substitute will be made by the Contractor without a change in the Contract Price or Contract Time:
  - **3.4.4.** The Contractor shall be responsible for any re-design costs occasioned by District's acceptance and/or approval of any substitute; and
  - **3.4.5.** The Contractor shall, in the event that a substitute is less costly than that specified, credit the District with one hundred percent (100%) of the net difference between the substitute and the originally specified material. In this event, the Contractor agrees to execute a deductive Change Order to reflect that credit.
- **3.5.** In the event Contractor furnishes a material, process, or article more expensive than that specified, the difference in the cost of that material, process, or article so furnished shall be borne by Contractor.
- **3.6.** In no event shall the District be liable for any increase in Contract Price or Contract Time due to any claimed delay in the evaluation of any proposed substitute or in the acceptance or rejection of any proposed substitute.
- **3.7.** Contractor shall be responsible for any costs the District incurs for professional services and/or DSA fees or delay to the Project Schedule, if applicable, while DSA reviews changes for the convenience of Contractor and/or to accommodate Contractor's means and methods. District may deduct those costs from any amounts owing to the Contractor for the review of the request for substitution, even if the request for substitution is not approved. District, at its sole discretion, shall deduct from the payments due to and/or invoice Contractor for all the professional services and/or DSA fees or delay to the Project Schedule, if applicable, while DSA reviews changes for the convenience of Contractor and/or to accommodate Contractor's means and methods arising herein.

# 4. Weather Days

Delays due to Adverse Weather conditions will only be permitted in compliance with the provisions in the General Conditions and only if the number of days of Adverse Weather exceeds the following parameters and Contractor can verify that the excess days of Adverse Weather caused delays:

January	<u>11</u>	July	<u>o</u>
February	<u>10</u>	August	<u>o</u>
March	<u>10</u>	September	1
April	<u>6</u>	October	<u>4</u>
May	3	November	7
June	1	December	<u>10</u>

# 5. Permits, Certificates, Licenses, Fees, Approval

# **5.1.** Payment of Fees for Permits, Certificates, Licenses, and Registrations. As required in the General Conditions, the Contractor shall secure and pay for all permits, licenses, registrations, and certificates necessary for the prosecution of the

Work with the exception of the following:

With respect to the above listed items, Contractor shall be responsible for securing such items; however, District will be responsible for payment of these charges or fees. Contractor shall notify the District of the amount due with respect to such items and to whom the amount is payable. Contractor shall provide the District with an invoice and receipt with respect to such charges or fees.

# 6. As-Builts and Record Drawings

**6.1.** Contractor shall submit Record Drawings pursuant to the Contract Documents consisting of one set of computer-aided design and drafting ("CADD") files and one electronic set in pdf format, plus one hard copy set of Record Drawings.

# 7. Construction Manager

The District will use a Construction Manager on the Project that is the subject of this Contract. Brian Bush, Kitchell CEM, is the Construction Manager for this Project.

# 8. <u>Program Manager</u>

Kitchell CEM is the Program Manager designated for the Project that is the subject of this Contract.

# HAZARDOUS MATERIALS PROCEDURES & REQUIREMENTS

# 1. Summary

This document includes information applicable to hazardous materials and hazard waste abatement.

#### 2. Notice of Hazardous Waste or Materials Conditions

- a. Contractor shall give notice in writing to the District, the Construction Manager, and the Architect promptly, before any of the following conditions are disturbed, and in no event later than twenty-four (24) hours after first observance, of any:
  - (1) Material that Contractor believes may be material that is hazardous waste or hazardous material, as defined in section 25117 of the Health and Safety Code, that is required to be removed to a Class I, Class II, or Class III disposal site in accordance with provisions of existing law;
  - Other material that may present a substantial danger to persons or property exposed thereto in connection with Work at the site.
- b. Contractor's written notice shall indicate whether the hazardous waste or material was shown or indicated in the Contract Documents to be within the scope of Work, and whether the materials were brought to the site by Contractor, its Subcontractors, suppliers, or anyone else for whom Contractor is responsible. As used in this section the term "hazardous materials" shall include, without limitation, asbestos, lead, Polycholrinated biphenyl (PCB), petroleum and related hydrocarbons, and radioactive material.
- c. In response to Contractor's written notice, the District shall investigate the identified conditions.
- d. If the District determines that conditions do not involve hazardous materials or that no change in terms of Contract is justified, the District shall so notify Contractor in writing, stating reasons. If the District and Contractor cannot agree on whether conditions justify an adjustment in Contract Price or Contract Time, or on the extent of any adjustment, Contractor shall proceed with the Work as directed by the District.
- e. If after receipt of notice from the District, Contractor does not agree to resume Work based on a reasonable belief it is unsafe, or does not agree to resume Work under special conditions, then District may order such portion of Work that is in connection with such hazardous condition or such affected area to be deleted from the Work, or performed by others, or District may invoke its rights to terminate the Contract in whole or in part. District will determine entitlement to or the amount or extent of an adjustment, if any, in Contract Price or Contract Time as a result of deleting such portion of Work, or performing the Work by others.

f. If Contractor stops Work in connection with any hazardous condition and in any area affected thereby, Contractor shall immediately redeploy its workers, equipment, and materials, as necessary, to other portions of the Work to minimize delay and disruption.

# 3. Additional Warranties and Representations

- a. Contractor represents and warrants that it, its employees, and its subcontractors and their employees, shall at all times have the required levels of familiarity with the Site and the Work, training, and ability to comply fully with all applicable law and contract requirements for safe and expeditious performance of the Work, including whatever training is or may be required regarding the activities to be performed (including, but not limited to, all training required to address adequately the actual or potential dangers of Contract performance).
- b. Contractor represents and warrants that it, its employees, and its subcontractors and their employees, shall at all times have and maintain in good standing any and all certifications and licenses required by applicable federal, state, and other governmental and quasi-governmental requirements applicable to the Work.
- c. Contractor represents and warrants that it has studied carefully all requirements of the Specifications regarding procedures for demolition, hazardous waste abatement, or safety practices, specified in the Contract, and prior to submitting its bid, has either (a) verified to its satisfaction that the specified procedures are adequate and sufficient to achieve the results intended by the Contract Documents, or (b) by way of approved "or equal" request or request for clarification and written Addenda, secured changes to the specified procedures sufficient to achieve the results intended by the Contract Documents. Contractor accepts the risk that any specified procedure will result in a completed Project in full compliance with the Contract Documents.

#### 4. Monitoring and Testing

- a. District reserves the right, in its sole discretion, to conduct air monitoring, earth monitoring, Work monitoring, and any other tests (in addition to testing required under the agreement or applicable law), to monitor Contract requirements of safe and statutorily compliant work methods and (where applicable) safe re-entry level air standards under state and federal law upon completion of the job, and compliance of the work with periodic and final inspection by public and quasi-public entities having jurisdiction.
- b. Contractor acknowledges that District has the right to perform, or cause to be performed, various activities and tests including, but not limited to, preabatement, during abatement, and post-abatement air monitoring, that District shall have no obligation to perform said activities and tests, and that a portion of said activities and tests may take place prior to the completion of the Work by Contractor. In the event District elects to perform these activities and tests, Contractor shall afford District ample access to the Site and all areas of the Work as may be necessary for the performance of these

- activities and tests. Contractor will include the potential impact of these activities or tests by District in the Contract Price and the Scheduled Completion Date.
- c. Notwithstanding District's rights granted by this paragraph, Contractor may retain its own industrial hygiene consultant at Contractor's own expense and may collect samples and may perform tests including, but not limited to, preabatement, during abatement, and post-abatement personal air monitoring, and District reserves the right to request documentation of all such activities and tests performed by Contractor relating to the Work and Contractor shall immediately provide that documentation upon request.

### 5. Compliance with Laws

- a. Contractor shall perform safe, expeditious, and orderly work in accordance with the best practices and the highest standards in the hazardous waste abatement, removal, and disposal industry, the applicable law, and the Contract Documents, including, but not limited to, all responsibilities relating to the preparation and return of waste shipment records, all requirements of the law, delivering of all requisite notices, and obtaining all necessary governmental and quasi-governmental approvals.
- b. Contractor represents that it is familiar with and shall comply with all laws applicable to the Work or completed Work including, but not limited to, all federal, state, and local laws, statutes, standards, rules, regulations, and ordinances applicable to the Work relating to:
  - (1) The protection of the public health, welfare and environment;
  - (2) Storage, handling, or use of asbestos, PCB, lead, petroleum based products or other hazardous materials;
  - (3) The generation, processing, treatment, storage, transport, disposal, destruction, or other management of asbestos, PCB, lead, petroleum, or hazardous waste materials or other waste materials of any kind; and
  - (4) The protection of environmentally sensitive areas such as wetlands and coastal areas.

# 6. **Disposal**

- a. Contractor has the sole responsibility for determining current waste storage, handling, transportation, and disposal regulations for the job Site and for each waste disposal facility. Contractor must comply fully at its sole cost and expense with these regulations and any applicable law. District may, but is not obligated to, require submittals with this information for it to review consistent with the Contract Documents.
- b. Contractor shall develop and implement a system acceptable to District to track hazardous waste from the Site to disposal, including appropriate "Hazardous Waste Manifests" on the EPA form, so that District may track the

- volume of waste it put in each landfill and receive from each landfill a certificate of receipt.
- c. Contractor shall provide District with the name and address of each waste disposal facility prior to any disposal, and District shall have the express right to reject any proposed disposal facility. Contractor shall not use any disposal facility to which District has objected. Contractor shall document actual disposal or destruction of waste at a designated facility by completing a disposal certificate or certificate of destruction forwarding the original to the District.

#### 7. Permits

- a. Before performing any of the Work, and at such other times as may be required by applicable law, Contractor shall deliver all requisite notices and obtain the approval of all governmental and quasi-governmental authorities having jurisdiction over the Work. Contractor shall submit evidence satisfactory to District that it and any disposal facility
  - (1) have obtained all required permits, approvals, and the like in a timely manner both prior to commencement of the Work and thereafter as and when required by applicable law, and
  - (2) are in compliance with all such permits, approvals and the regulations.

For example, before commencing any work in connection with the Work involving asbestos-containing materials, or PCBs, or other hazardous materials subject to regulation, Contractor agrees to provide the required notice of intent to renovate or demolish to the appropriate state or federal agency having jurisdiction, by certified mail, return receipt requested, or by some other method of transmittal for which a return receipt is obtained, and to send a copy of that notice to District. Contractor shall not conduct any Work involving asbestos-containing materials or PCBs unless Contractor has first confirmed that the appropriate agency having jurisdiction is in receipt of the required notification. All permits, licenses, and bonds that are required by governmental or quasi-governmental authorities, and all fees, deposits, tap fees, offsite easements, and asbestos and PCB disposal facilities expenses necessary for the prosecution of the Work, shall be procured and paid for by Contractor. Contractor shall give all notices and comply with the all applicable laws bearing on the conduct of the Work as drawn and specified. If Contractor observes or reasonably should have observed that Plans and Specifications and other Contract Documents are at variance therewith, it shall be responsible for promptly notifying District in writing of such fact. If Contractor performs any Work contrary to applicable laws, it shall bear all costs arising therefrom.

b. In the case of any permits or notices held in District's name or of necessity to be made in District's name, District shall cooperate with Contractor in securing the permit or giving the notice, but the Contractor shall prepare for District review and execution upon approval, all necessary applications, notices, and other materials.

# 8. Indemnification

To the extent permitted by law, the indemnities and limitations of liability expressed throughout the Contract Documents apply with equal force and effect to any claims or liabilities imposed or existing by virtue of the removal, abatement, and disposal of hazardous waste. This includes, but is not limited to, liabilities connected to the selection and use of a waste disposal facility, a waste transporter, personal injury, property damage, loss of use of property, damage to the environment or natural resources, or "disposal" and "release" of materials associated with the Work (as defined in 42 U.S.C. § 960l et seq.).

#### 9. Termination

District shall have an absolute right to terminate for default immediately without notice and without an opportunity to cure should Contractor knowingly or recklessly commit a material breach of the terms of the Contract Documents, or any applicable law, on any matter involving the exposure of persons or property to hazardous waste. However, if the breach of contract exposing persons or property to hazardous waste is due solely to an ordinary, unintentional, and non-reckless failure to exercise reasonable care, then the procedures for termination for cause shall apply without modification.

#### **SUMMARY OF WORK**

#### **PART 1 - GENERAL**

#### 1.01 RELATED DOCUMENTS AND PROVISIONS:

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions, including, without limitation, Site Access Conditions and Requirements;
- B. Special Conditions.

#### 1.02 SUMMARY OF WORK COVERED BY CONTRACT DOCUMENTS

A. The Work of this Contract may consist of the following:

Selective demolition and construction necessary for the Modernization to the existing main kitchen located within Building 200 including associated architectural, structural, plumbing, mechanical and/or electrical work as indicated in the Drawings and Specifications. Generally, these categories of work involve new finishes, adaptive re-use and modification of certain selected areas, new cabinetry, countertops, and appliances, handicap accessibility retrofits, re-roofing, expanding selected infrastructure utilities, and extensive modifications.

#### 1.03 CONTRACTS

A. Perform the Work under a single, fixed-price Contract.

#### 1.04 CODES, REGULATIONS, AND STANDARDS

- A. The codes, regulations, and standards adopted by the state and federal agencies having jurisdiction shall govern minimum requirements for this project. Where codes, regulations, and standards conflict with the Contract Documents, these conflicts shall be brought to the immediate attention of the District and the Architect.
- B. Codes, regulations, and standards shall be as published effective as of date of bid opening, unless otherwise specified or indicated.

#### 1.05 PROJECT RECORD DOCUMENTS:

- A. Contractor shall maintain on Site one set of the following record documents; Contractor shall record actual revisions to the Work:
  - (1) Contract Drawings.
  - (2) Specifications.

- (3) Addenda.
- (4) Change Orders and other modifications to the Contract.
- (5) Reviewed shop drawings, product data, and samples.
- (6) Field test records.
- (7) Inspection certificates.
- (8) Manufacturer's certificates.
- B. Contractor shall store Record Documents separate from documents used for construction. Provide files, racks, and secure storage for Record Documents and samples.
- C. Contractor shall record information concurrent with construction progress.
- D. Specifications: Contractor shall legibly mark and record at each product section of the Specifications the description of the actual product(s) installed, including the following:
  - (1) Manufacturer's name and product model and number.
  - (2) Product substitutions or alternates utilized.
  - (3) Changes made by Addenda and Change Orders and written directives.

#### 1.06 EXAMINATION OF EXISTING CONDITIONS

- A. Contractor shall be held to have examined the Project Site and acquainted itself with the conditions of the Site or of the streets or roads approaching the Site.
- B. Prior to commencement of Work, Contractor shall survey the Site and existing buildings and improvements to observe existing damage and defects such as cracks, sags, broken, missing or damaged glazing, other building elements and Site improvements, and other damage.
- C. Should Contractor observe cracks, sags, and other damage to and defects of the Site and adjacent buildings, paving, and other items not indicated in the Contract Documents, Contractor shall immediately report same to the District and the Architect.

#### 1.07 CONTRACTOR'S USE OF PREMISES

A. If unoccupied and only with District's prior written approval, Contractor may use the building(s) at the Project Site without limitation for its operations, storage, and office facilities for the performance of the Work. If the District chooses to beneficially occupy any building(s), Contractor must obtain the District's written approval for Contractor's use of spaces and types of

- operations to be performed within the building(s) while so occupied. Contractor's access to the building(s) shall be limited to the areas indicated.
- B. If the space at the Project Site is not sufficient for Contractor's operations, storage, office facilities and/or parking, Contractor shall arrange and pay for any additional facilities needed by Contractor.
- C. Contractor shall not interfere with use of or access to occupied portions of the building(s) or adjacent property.
- D. Contractor shall maintain corridors, stairs, halls, and other exit-ways of building clear and free of debris and obstructions at all times.
- E. No one other than those directly involved in the demolition and construction, or specifically designated by the District or the Architect shall be permitted in the areas of work during demolition and construction activities.
- F. The Contractor shall install the construction security fence and maintain that it will be locked when not in use. Keys to this fencing will be provided to the District.

#### 1.08 PROTECTION OF EXISTING STRUCTURES AND UTILITIES

- A. The Drawings show above-grade and below-grade structures, utility lines, and other installations that are known or believed to exist in the area of the Work. Contractor shall locate these existing installations before proceeding with excavation and other operations that could damage same; maintain them in service, where appropriate; and repair damage to them caused by the performance of the Work. Should damage occur to these existing installations, the costs of repair shall be at the Contractor's expense and made to the District's satisfaction.
- B. Contractor shall be alert to the possibility of the existence of additional structures and utilities. If Contractor encounters additional structures and utilities, Contractor will immediately report to the District for disposition of same as indicated in the General Conditions.

# 1.09 UTILITY SHUTDOWNS AND INTERRUPTIONS

- A. Contractor shall give the District a minimum of three (3) days written notice in advance of any need to shut off existing utility services or to effect equipment interruptions. The District will set exact time and duration for shutdown, and will assist Contractor with shutdown. Work required to reestablish utility services shall be performed by the Contractor.
- B. Contractor shall obtain District's written approval as indicated in the General Conditions in advance of deliveries of material or equipment or other activities that may conflict with District's use of the building(s) or adjacent facilities.

# 1.10 STRUCTURAL INTEGRITY

- A. Contractor shall be responsible for and supervise each operation and work that could affect structural integrity of various building elements, both permanent and temporary.
- B. Contractor shall include structural connections and fastenings as indicated or required for complete performance of the Work.

**PART 2 – PRODUCTS** Not Used.

PART 3 - EXECUTION Not Used.

#### **DOCUMENT 01 22 00**

#### **ALTERNATES AND UNIT PRICING**

#### PART 1 - ALTERNATES

#### 1.01 RELATED DOCUMENTS AND PROVISIONS:

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions:
- B. Special Conditions;
- C. Bid Form and Proposal;
- D. Instruction to Bidders.

#### 1.02 DESCRIPTION

The items of work indicated below propose modifications to, substitutions for, additions to and/or deletions from the various parts of the Work specified in other Sections of the Specifications. The acceptance or rejection of any of the alternates is strictly at the option of the District subject to District's acceptance of Contractor's stated prices contained in this Proposal.

#### 1.03 GENERAL

Where an item is omitted, or scope of Work is decreased, all Work pertaining to the item whether specifically stated or not, shall be omitted and where an items is added or modified or where scope of Work is increased, all Work pertaining to that required to render same ready for use on the Project in accordance with intention of Drawings and Specifications shall be included in an agreed upon price amount.

#### 1.04 BASE BID

The Base Bid includes all work required to construct the Project completely and in accordance with the Contract Documents.

#### 1.05 ALTERNATES

A. No Alternates

#### PART 2 - UNIT PRICING

#### 2.01 GENERAL

Contractor shall completely state all required figures based on Unit Prices listed below. Where scope of Work is decreased, all Work pertaining to the item, whether specifically stated or not, shall be omitted and where scope of Work is increased, all work pertaining to that item required to render same ready for use on the Project in accordance with intention of Drawings and Specifications shall be included in an agreed upon price amount.

# 2.02 UNIT PRICES

Furnish unit prices for each of the named items on a square foot, lineal foot, or per each basis, as applies. Unit prices shall include all labor, materials, services, profit, overhead, insurance, bonds, taxes, and all other incidental costs of Contractor, subcontractors, and supplier(s).

#### **DOCUMENT 01 25 13**

#### PRODUCT OPTIONS AND SUBSTITUTIONS

#### PART 1 - GENERAL

#### 1.01 RELATED DOCUMENTS AND PROVISIONS

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. Instructions to Bidders;
- B. General Conditions, including, without limitation, Substitutions For Specified Items;
- C. Special Conditions.

#### 1.02 SUBSTITUTIONS OF MATERIALS AND EQUIPMENT:

- A. Catalog numbers and specific brands or trade names followed by the designation "or equal" are used in conjunction with material and equipment required by the Specifications to establish the standards of quality, utility, and appearance required. Substitutions which are equal in quality, utility, and appearance to those specified may be reviewed subject to the provisions of the General Conditions.
- B. Wherever more than one manufacturer's product is specified, the first-named product is the basis for the design used in the work and the use of alternative-named manufacturers' products or substitutes may require modifications in that design. If such alternatives are proposed by Contractor and are approved by the District and/or the Architect, Contractor shall assume all costs required to make necessary revisions and modifications of the design resulting from the substitutions requested by the Contractor.
- C. When materials and equipment are specified by first manufacturer's name and product number, second manufacturer's name and "or approved equal," supporting data for the second product, if proposed by Contractor, shall be submitted in accordance with the requirements for substitutions.
- D. If the District and/or Architect, in reviewing proposed substitute materials and equipment, require revisions or corrections to be made to previously accepted Shop Drawings and supplemental supporting data to be resubmitted, Contractor shall promptly do so. If any proposed substitution is judged by the District and/or Architect to be unacceptable, the specified material or equipment shall be provided.
- E. Samples may be required. Tests required by the District and/or Architect for the determination of quality and utility shall be made at the expense of Contractor, with acceptance of the test procedure first given by the District.
- F. In reviewing the supporting data submitted for substitutions, the District and/or Architect will use for purposes of comparison all the characteristics of the

specified material or equipment as they appear in the manufacturer's published data even though all the characteristics may not have been particularly mentioned in the Contract Documents. If more than two (2) submissions of supporting data are required, the cost of reviewing the additional supporting data shall be borne by Contractor, and the District will deduct the costs from the Contract Price.

PART 2 - PRODUCTS Not Used.

PART 3 - EXECUTION Not Used.

# **DOCUMENT 01 26 00**

# **CHANGES IN THE WORK**

CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE PROVISIONS IN THE GENERAL CONDITIONS RELATED TO CHANGES AND/OR REQUESTS FOR CHANGES

# **DOCUMENT 01 29 00**

# APPLICATION FOR PAYMENT AND CONDITIONAL AND UNCONDITIONAL WAIVER AND RELEASE FORMS

CONTRACTOR SHALL COMPLY WITH ALL PROVISIONS IN THE GENERAL CONDITIONS RELATED TO APPLICATIONS FOR PAYMENT AND/OR PAYMENTS.

# CONDITIONAL WAIVER AND RELEASE ON PROGRESS PAYMENT

(Civil Code Section 8132)

NOTICE: THIS DOCUMENT WAIVES THE CLAIMANT'S LIEN, STOP PAYMENT NOTICE, AND PAYMENT BOND RIGHTS EFFECTIVE ON RECEIPT OF PAYMENT. A PERSON SHOULD NOT RELY ON THIS DOCUMENT UNLESS SATISFIED THAT THE CLAIMANT HAS RECEIVED PAYMENT.

Name of Claimant:
Name of Customer:
Job Location:
Owner:
Through Date:
Conditional Waiver and Release
This document waives and releases lien, stop payment notice, and payment bond rights the claimant has for labor and service provided, and equipment and material delivered, to the customer on this job through the Through Date of this document. Rights based upon labor or service provided, or equipment or material delivered, pursuant to a written change order that has been fully executed by the parties prior to the date that this document is signed by the claimant, are waived and released by this document, unless listed as an Exception below. This document is effective only on the claimant's receipt of payment from the financial institution on which the following check is drawn:
Maker of Check:
Amount of Check: \$
Check Payable to:
Exceptions
This document does not affect any of the following:
<ul><li>(1) Retentions.</li><li>(2) Extras for which the claimant has not received payment.</li><li>(3) The following progress payments for which the claimant has previously given a conditional waiver and release but has not received payment:</li></ul>
Date(s) of waiver and release:
Amount(s) of unpaid progress payment(s): \$
(4) Contract rights, including (A) a right based on rescission, abandonment, or breach of contract, and (B) the right to recover compensation for work not compensated by the payment.
Claimant's Signature:

Claimant's Title:	
Date of Signature:	_

# UNCONDITIONAL WAIVER AND RELEASE ON PROGRESS PAYMENT

(Civil Code Section 8134)

NOTICE TO CLAIMANT: THIS DOCUMENT WAIVES AND RELEASES LIEN, STOP PAYMENT NOTICE, AND PAYMENT BOND RIGHTS UNCONDITIONALLY AND STATES THAT YOU HAVE BEEN PAID FOR GIVING UP THOSE RIGHTS. THIS DOCUMENT IS ENFORCEABLE AGAINST YOU IF YOU SIGN IT, EVEN IF YOU HAVE NOT BEEN PAID. IF YOU HAVE NOT BEEN PAID, USE A CONDITIONAL WAIVER AND RELEASE FORM.

Name of Claimant:
Name of Customer:
Job Location:
Owner:
Through Date:
Unconditional Waiver and Release
This document waives and releases lien, stop payment notice, and payment bond rights the claimant has for labor and service provided, and equipment and material delivered, to the customer on this job through the Through Date of this document. Rights based upon labor or service provided, or equipment or material delivered, pursuant to a written change order that has been fully executed by the parties prior to the date that this document is signed by the claimant, are waived and released by this document, unless listed as an Exception below. The claimant has received the following progress payment: \$
Exceptions
This document does not affect any of the following:
(1) Retentions.
(2) Extras for which the claimant has not received payment.
(3) Contract rights, including (A) a right based on rescission, abandonment, or breach of contract, and (B) the right to recover compensation for work not compensated by the payment.
Claimant's Signature:
Claimant's Title:
Date of Signature:

# CONDITIONAL WAIVER AND RELEASE ON FINAL PAYMENT

(Civil Code Section 8136)

NOTICE: THIS DOCUMENT WAIVES THE CLAIMANT'S LIEN, STOP PAYMENT NOTICE, AND PAYMENT BOND RIGHTS EFFECTIVE ON RECEIPT OF PAYMENT. A PERSON SHOULD NOT RELY ON THIS DOCUMENT UNLESS SATISFIED THAT THE CLAIMANT HAS RECEIVED PAYMENT.

Name of Claimant:	
Name of Customer:	
Job Location:	
Owner:	
Conditional Waiver and Release	
This document waives and releases lien, stop payment notice, and payment bo claimant has for labor and service provided, and equipment and material delix customer on this job. Rights based upon labor or service provided, or equipment delivered, pursuant to a written change order that has been fully executed by prior to the date that this document is signed by the claimant, are waived and this document, unless listed as an Exception below. This document is effective claimant's receipt of payment from the financial institution on which the follow drawn:	vered, to the nt or material y the parties d released by e only on the
Maker of Check:	
Amount of Check: \$	
Check Payable to:	
Exceptions	
This document does not affect any of the following:	
Disputed claims for extras in the amount of: \$	
Claimant's Signature:	
Claimant's Title:	
Date of Signature:	

# UNCONDITIONAL WAIVER AND RELEASE ON FINAL PAYMENT

(Civil Code Section 8138)

NOTICE TO CLAIMANT: THIS DOCUMENT WAIVES AND RELEASES LIEN, STOP PAYMENT NOTICE, AND PAYMENT BOND RIGHTS UNCONDITIONALLY AND STATES THAT YOU HAVE BEEN PAID FOR GIVING UP THOSE RIGHTS. THIS DOCUMENT IS ENFORCEABLE AGAINST YOU IF YOU SIGN IT, EVEN IF YOU HAVE NOT BEEN PAID. IF YOU HAVE NOT BEEN PAID, USE A CONDITIONAL WAIVER AND RELEASE FORM.

Name of Claimant:
Name of Customer:
Job Location:
Owner:
Unconditional Waiver and Release
This document waives and releases lien, stop payment notice, and payment bond rights the claimant has for all labor and service provided, and equipment and material delivered, to the customer on this job. Rights based upon labor or service provided, or equipment or material delivered, pursuant to a written change order that has been fully executed by the parties prior to the date that this document is signed by the claimant, are waived and released by this document, unless listed as an Exception below. The claimant has been paid in full.
Exceptions
This document does not affect any of the following:
Disputed claims for extras in the amount of: \$
Claimant's Signature:
Claimant's Title:
Date of Signature:

#### **DOCUMENT 01 31 19**

#### PROJECT MEETINGS

#### PART I - GENERAL

#### 1.01 RELATED DOCUMENTS AND PROVISIONS:

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions:
- B. Special Conditions;
- C. Summary of Work; and
- D. Submittals.

#### 1.02 SECTION INCLUDES:

- A. Scheduling of Work under this Contract shall be performed by Contractor in accordance with requirements of this Section.
  - (1) Development of schedule, cost and resource loading of the schedule, monthly payment requests, and project status reporting requirements of the Contract shall employ computerized Critical Path Method ("CPM") scheduling ("CPM Schedule").
  - (2) CPM Schedule shall be cost loaded based on Schedule of Values as approved by District.
  - (3) Submit schedules and reports as specified in the General Conditions.
- B. Upon Award of Contract, Contractor shall immediately commence development of Initial and Original CPM Schedules to ensure compliance with CPM Schedule submittal requirements.

# 1.03 CONSTRUCTION SCHEDULE:

- A. Within ten (10) days of being awarded the Contract and before request for first progress payment, the Contractor shall prepare and submit to the Project Manager a construction progress schedule conforming to the Milestone Schedule below.
- B. The Construction Schedule shall be continuously updated, and an updated schedule shall be submitted with each application for progress payment. Each revised schedule shall indicate the work actually accomplished during the previous period and the schedule for completion of the remaining work.

#### C. Milestone Schedule:

#### ACTIVITY DESCRIPTION

#### REQUIRED COMPLETION

# CONSTRUCTION STARTS FINAL PROJECT COMPLETION

5/19/2016 6/30/2016

### 1.04 QUALIFICATIONS

- A. Contractor shall employ experienced scheduling personnel qualified to use the latest version of Microsoft Project. Experience level required is set forth below. Contractor may employ such personnel directly or may employ a consultant for this purpose.
  - (1) The written statement shall identify the individual who will perform CPM scheduling.
  - (2) Capability and experience shall be verified by description of construction projects on which individual has successfully applied computerized CPM.
  - (3) Required level of experience shall include at least two (2) projects of similar nature and scope with value not less than three-fourths (¾) of the Total Bid Price of this Project. The written statement shall provide contact persons for referenced projects with current telephone and address information.
- B. District reserves the right to approve or reject Contractor's scheduler or consultant at any time. District reserves the right to refuse replacing Contractor's scheduler or consultant, if District believes replacement will negatively affect the scheduling of Work under this Contract.

# 1.05 GENERAL

- A. Progress Schedule shall be based on and incorporate milestone and completion dates specified in Contract Documents.
- B. Overall time of completion and time of completion for each milestone shown on Progress Schedule shall adhere to times in the Contract, unless an earlier (advanced) time of completion is requested by Contractor and agreed to by District. Any such agreement shall be formalized by a Change Order.
  - (1) District is not required to accept an early completion schedule, i.e., one that shows earlier completion date than the Contract Time.
  - (2) Contractor shall not be entitled to extra compensation in event agreement is reached on an early completion schedule and Contractor completes its Work, for whatever reason, beyond completion date shown in its early completion schedule but within the Contract Time.

- (3) A schedule showing the work completed in less than the Contract Time, and that has been accepted by District, shall be considered to have Project Float. The Project Float is the time between the scheduled completion of the work and the Completion Date. Project Float is a resource available to both District and the Contractor.
- C. Ownership Project Float: Neither the District nor Contractor owns Project Float. The Project owns the Project Float. As such, liability for delay of the Completion Date rests with the party whose actions, last in time, actually cause delay to the Completion Date.
  - (1) For example, if Party A uses some, but not all of the Project Float and Party B later uses remainder of the Project Float as well as additional time beyond the Project Float, Party B shall be liable for the time that represents a delay to the Completion Date.
  - Party A would not be responsible for the time since it did not consume the entire Project Float and additional Project Float remained; therefore, the Completion Date was unaffected by Party A.
- D. Progress Schedule shall be the basis for evaluating job progress, payment requests, and time extension requests. Responsibility for developing Contract CPM Schedule and monitoring actual progress as compared to Progress Schedule rests with Contractor.
- E. Failure of Progress Schedule to include any element of the Work, or any inaccuracy in Progress Schedule, will not relieve Contractor from responsibility for accomplishing the Work in accordance with the Contract. District's acceptance of schedule shall be for its use in monitoring and evaluating job progress, payment requests, and time extension requests and shall not, in any manner, impose a duty of care upon District, or act to relieve Contractor of its responsibility for means and methods of construction.
- F. Software: Use **Microsoft Project**. Such software shall be compatible with Windows operating system. Contractor shall transmit contract file to District on compact disk at times requested by District.
- G. Transmit each item under the form approved by District.
  - (1) Identify Project with District Contract number and name of Contractor.
  - (2) Provide space for Contractor's approval stamp and District's review stamps.
  - (3) Submittals received from sources other than Contractor will be returned to the Contractor without District's review.

## 1.06 INITIAL CPM SCHEDULE

- A Initial CPM Schedule submitted for review at the pre-construction conference shall serve as Contractor's schedule for up to ninety (90) calendar days after the Notice to Proceed.
- B. Indicate detailed plan for the Work to be completed in first ninety (90) days of the Contract; details of planned mobilization of plant and equipment; sequence of early operations; procurement of materials and equipment. Show Work beyond ninety (90) calendar days in summary form.
- C. Initial CPM Schedule shall be time-scaled.
- D. Initial CPM Schedule shall be cost and resource loaded. Accepted cost and resource loaded schedule will be used as basis for monthly progress payments until acceptance of the Original CPM Schedule. Use of Initial CPM Schedule for progress payments shall not exceed ninety (90) calendar days.
- E. District and Contractor shall meet to review and discuss the Initial CPM Schedule within seven (7) calendar days after it has been submitted to District.
  - (1) District's review and comment on the schedule shall be limited to Contract conformance (with sequencing, coordination, and milestone requirements).
  - (2) Contractor shall make corrections to schedule necessary to comply with Contract requirements and shall adjust schedule to incorporate any missing information requested by District. Contractor shall resubmit Initial CPM Schedule if requested by District.
- F. If, during the first ninety (90) days after Notice to Proceed, the Contractor is of the opinion that any of the Work included on its Initial CPM Schedule has been impacted, the Contractor shall submit to District a written Time Impact Evaluation ("TIE") in accordance with Article 1.12 of this Section. The TIE shall be based on the most current update of the Initial CPM Schedule.

## 1.07 ORIGINAL CPM SCHEDULE

- A. Submit a detailed proposed Original CPM Schedule presenting an orderly and realistic plan for completion of the Work in conformance with requirements as specified herein.
- B. Progress Schedule shall include or comply with following requirements:
  - (1) Time scaled, cost and resource (labor and major equipment) loaded CPM schedule.

- (2) No activity on schedule shall have duration longer than fifteen (15) work days, with exception of submittal, approval, fabrication and procurement activities, unless otherwise approved by District.
  - (a) Activity durations shall be total number of actual work days required to perform that activity.
- (3) The start and completion dates of all items of Work, their major components, and milestone completion dates, if any.
- (4) District -furnished materials and equipment, if any, identified as separate activities.
- (5) Activities for maintaining Project Record Documents.
- (6) Dependencies (or relationships) between activities.
- (7) Processing/approval of submittals and shop drawings for all material and equipment required per the Contract. Activities that are dependent on submittal acceptance or material delivery shall not be scheduled to start earlier than expected acceptance or delivery dates.
  - (a) Include time for submittals, re-submittals and reviews by District. Coordinate with accepted schedule for submission of Shop Drawings, samples, and other submittals.
  - (b) Contractor shall be responsible for all impacts resulting from resubmittal of Shop Drawings and submittals.
- (8) Procurement of major equipment, through receipt and inspection at jobsite, identified as separate activity.
  - (a) Include time for fabrication and delivery of manufactured products for the Work.
  - (b) Show dependencies between procurement and construction.
- (9) Activity description; what Work is to be accomplished and where.
- (10) The total cost of performing each activity shall be total of labor, material, and equipment, excluding overhead and profit of Contractor. Overhead and profit of the General Contractor shall be shown as a separate activity in the schedule. Sum of cost for all activities shall equal total Contract value.
- (11) Resources required (labor and major equipment) to perform each activity.
- (12) Responsibility code for each activity corresponding to Contractor or Subcontractor responsible for performing the Work.

- (13) Identify the activities which constitute the controlling operations or critical path. No more than twenty-five (25%) of the activities shall be critical or near critical. Near critical is defined as float in the range of one (1) to (10) days.
- (14) Twenty (20) workdays for developing punch list(s), completion of punch-list items, and final clean up for the Work or any designated portion thereof. No other activities shall be scheduled during this period.
- (15) Interface with the work of other contractors, District, and agencies such as, but not limited to, utility companies.
- (16) Show detailed Subcontractor Work activities. In addition, furnish copies of Subcontractor schedules upon which CPM was built.
  - (a) Also furnish for each Subcontractor, as determined by District, submitted on Subcontractor letterhead, a statement certifying that Subcontractor concurs with Contractor's Original CPM Schedule and that Subcontractor's related schedules have been incorporated, including activity duration, cost and resource loading.
  - (b) Subcontractor schedules shall be independently derived and not a copy of Contractor's schedule.
  - (c) In addition to Contractor's schedule and resource loading, obtain from electrical, mechanical, and plumbing Subcontractors, and other Subcontractors as required by District, productivity calculations common to their trades, such as units per person day, feet of pipe per day per person, feet of wiring per day per person, and similar information.
  - (d) Furnish schedule for Contractor/Subcontractor CPM schedule meetings which shall be held prior to submission of Original CPM schedule to District. District shall be permitted to attend scheduled meetings as an observer.
- (17) Activity durations shall be in Work days.
- (18) Submit with the schedule a list of anticipated non-Work days, such as weekends and holidays. The Progress Schedule shall exclude in its Work day calendar all non-Work days on which Contractor anticipates critical Work will not be performed.
- C. Original CPM Schedule Review Meeting: Contractor shall, within sixty (60) days from the Notice to Proceed date, meet with District to review the Original CPM Schedule submittal.
  - (1) Contractor shall have its Project Manager, Project Superintendent, Project Scheduler, and key Subcontractor representatives, as required by District, in attendance. The meeting will take place over a continuous one (1) day period.

- (2) District's review will be limited to submittal's conformance to Contract requirements including, but not limited to, coordination requirements. However, review may also include:
  - (a) Clarifications of Contract Requirements.
  - (b) Directions to include activities and information missing from submittal.
  - (c) Requests to Contractor to clarify its schedule.
- (3) Within five (5) days of the Schedule Review Meeting, Contractor shall respond in writing to all questions and comments expressed by District at the Meeting.

#### 1.08 ADJUSTMENTS TO CPM SCHEDULE

- A. Adjustments to Original CPM Schedule: Contractor shall have adjusted the Original CPM Schedule submittal to address all review comments from original CPM Schedule review meeting and resubmit network diagrams and reports for District's review.
  - (1) District, within ten (10) days from date that Contractor submitted the revised schedule, will either:
    - (a) Accept schedule and cost and resource loaded activities as submitted, or
    - (b) Advise Contractor in writing to review any part or parts of schedule which either do not meet Contract requirements or are unsatisfactory for District to monitor Project's progress, resources, and status or evaluate monthly payment request by Contractor.
  - (2) District may accept schedule with conditions that the first monthly CPM Schedule update be revised to correct deficiencies identified.
  - (3) When schedule is accepted, it shall be considered the "Original CPM Schedule" which will then be immediately updated to reflect the current status of the work.
  - (4) District reserves right to require Contractor to adjust, add to, or clarify any portion of schedule which may later be discovered to be insufficient for monitoring of Work or approval of partial payment requests. No additional compensation will be provided for such adjustments, additions, or clarifications.

- B. Acceptance of Contractor's schedule by District will be based solely upon schedule's compliance with Contract requirements.
  - (1) By way of Contractor assigning activity durations and proposing sequence of Work, Contractor agrees to utilize sufficient and necessary management and other resources to perform work in accordance with the schedule.
  - (2) Upon submittal of schedule update, updated schedule shall be considered "current" CPM Schedule.
  - (3) Submission of Contractor's schedule to District shall not relieve Contractor of total responsibility for scheduling, sequencing, and pursuing Work to comply with requirements of Contract Documents, including adverse effects such as delays resulting from ill-timed Work.
- C. Submittal of Original CPM Schedule, and subsequent schedule updates, shall be understood to be Contractor's representation that the Schedule meets requirements of Contract Documents and that Work shall be executed in sequence indicated on the schedule.
- D. Contractor shall distribute Original CPM Schedule to Subcontractors for review and written acceptance, which shall be noted on Subcontractors' letterheads to Contractor and transmitted to District for the record.

### 1.09 MONTHLY CPM SCHEDULE UPDATE SUBMITTALS

- A. Following acceptance of Contractor's Original CPM Schedule, Contractor shall monitor progress of Work and adjust schedule each month to reflect actual progress and any anticipated changes to planned activities.
  - (1) Each schedule update submitted shall be complete, including all information requested for the Original CPM Schedule submittal.
  - (2) Each update shall continue to show all Work activities including those already completed. These completed activities shall accurately reflect "as built" information by indicating when activities were actually started and completed.
- B. A meeting will be held on approximately the twenty-fifth (25<sup>th</sup>) of each month to review the schedule update submittal and progress payment application.
  - (1) At this meeting, at a minimum, the following items will be reviewed: Percent (%) complete of each activity; Time Impact Evaluations for Change Orders and Time Extension Request; actual and anticipated activity sequence changes; actual and anticipated duration changes; and actual and anticipated Contractor delays.
  - (2) These meetings are considered a critical component of overall monthly schedule update submittal and Contractor shall have appropriate

- personnel attend. At a minimum, these meetings shall be attended by Contractor's General Superintendent and Scheduler.
- (3) Contractor shall plan on the meeting taking no less than four (4) hours.
- C. Within five (5) working days after monthly schedule update meeting, Contractor shall submit the updated CPM Schedule update.
- D. Within five (5) work days of receipt of above noted revised submittals, District will either accept or reject monthly schedule update submittal.
  - (1) If accepted, percent (%) complete shown in monthly update will be basis for Application for Payment by the Contractor. The schedule update shall be submitted as part of the Contractor's Application for Payment.
  - (2) If rejected, update shall be corrected and resubmitted by Contractor before the Application for Payment is submitted.
- E. Neither updating, changing or revising of any report, curve, schedule, or narrative submitted to District by Contractor under this Contract, nor District's review or acceptance of any such report, curve, schedule or narrative shall have the effect of amending or modifying in any way the Completion Date or milestone dates or of modifying or limiting in any way Contractor's obligations under this Contract.

#### 1.10 SCHEDULE REVISIONS

- A. Updating the Schedule to reflect actual progress shall not be considered revisions to the Schedule. Since scheduling is a dynamic process, revisions to activity durations and sequences are expected on a monthly basis.
- B. To reflect revisions to the schedule, the Contractor shall provide District with a written narrative with a full description and reasons for each Work activity revised. For revisions affecting the sequence of work, the Contractor shall provide a schedule diagram which compares the original sequence to the revised sequence of work. The Contractor shall provide the written narrative and schedule diagram for revisions two (2) working days in advance of the monthly schedule update meeting.
- C. Schedule revisions shall not be incorporated into any schedule update until the revisions have been reviewed by District. District may request further information and justification for schedule revisions and Contractor shall, within three (3) days, provide District with a complete written narrative response to District's request.
- D. If the Contractor's revision is still not accepted by District, and the Contractor disagrees with District's position, the Contractor has seven (7) calendar days from receipt of District's letter rejecting the revision to provide a written narrative providing full justification and explanation for the revision. The Contractor's failure to respond in writing within seven (7) calendar days of

District's written rejection of a schedule revision shall be contractually interpreted as acceptance of District's position, and the Contractor waives its rights to subsequently dispute or file a claim regarding District's position.

E. At District's discretion, the Contractor can be required to provide Subcontractor certifications of performance regarding proposed schedule revisions affecting said Subcontractors.

## 1.11 RECOVERY SCHEDULE

- A. If the Schedule Update shows a completion date twenty-one (21) calendar days beyond the Contract Completion Date, or individual milestone completion dates, the Contractor shall submit to District the proposed revisions to recover the lost time within seven (7) calendar days. As part of this submittal, the Contractor shall provide a written narrative for each revision made to recapture the lost time. If the revisions include sequence changes, the Contractor shall provide a schedule diagram comparing the original sequence to the revised sequence of work.
- B. The revisions shall not be incorporated into any schedule update until the revisions have been reviewed by District.
- C. If the Contractor's revisions are not accepted by District, District and the Contractor shall follow the procedures in paragraph 1.09.C, 1.09.D and 1.09.E above.
- D. At District's discretion, the Contractor can be required to provide Subcontractor certifications for revisions affecting said Subcontractors.

# 1.12 TIME IMPACTS EVALUATION ("TIE") FOR CHANGE ORDERS, AND OTHER DELAYS

- A. When Contractor is directed to proceed with changed Work, the Contractor shall prepare and submit within fourteen (14) calendar days from the Notice to Proceed a TIE which includes both a written narrative and a schedule diagram depicting how the changed Work affects other schedule activities. The schedule diagram shall show how the Contractor proposes to incorporate the changed Work in the schedule and how it impacts the current schedule-update critical path. The Contractor is also responsible for requesting time extensions based on the TIE's impact on the critical path. The diagram must be tied to the main sequence of schedule activities to enable District to evaluate the impact of changed Work to the scheduled critical path.
- B. Contractor shall be required to comply with the requirements of Paragraph 1.09.A for all types of delays such as, but not limited to, Contractor/Subcontractor delays, adverse weather delays, strikes, procurement delays, fabrication delays, etc.
- C. Contractor shall be responsible for all costs associated with the preparation of TIEs, and the process of incorporating them into the current schedule update. The Contractor shall provide District with four (4) copies of each TIE.

D. Once agreement has been reached on a TIE, the Contract Time will be adjusted accordingly. If agreement is not reached on a TIE, the Contract Time may be extended in an amount District allows, and the Contractor may submit a claim for additional time claimed by contractor.

#### 1.13 TIME EXTENSIONS

- A. The Contractor is responsible for requesting time extensions for time impacts that, in the opinion of the Contractor, impact the critical path of the current schedule update. Notice of time impacts shall be given in accord with the General Conditions.
- B. Where an event for which District is responsible impacts the projected Completion Date, the Contractor shall provide a written mitigation plan, including a schedule diagram, which explains how (e.g., increase crew size, overtime, etc.) the impact can be mitigated. The Contractor shall also include a detailed cost breakdown of the labor, equipment, and material the Contractor would expend to mitigate District-caused time impact. The Contractor shall submit its mitigation plan to District within fourteen (14) calendar days from the date of discovery of the impact. The Contractor is responsible for the cost to prepare the mitigation plan.
- C. Failure to request time, provide TIE, or provide the required mitigation plan will result in Contractor waiving its right to a time extension and cost to mitigate the delay.
- D. No time will be granted under this Contract for cumulative effect of changes.
- E. District will not be obligated to consider any time extension request unless the Contractor complies with requirements of Contract Documents.
- F. Failure of the Contractor to perform in accordance with the current schedule update shall not be excused by submittal of time extension requests.
- G. If the Contractor does not submit a TIE within the required fourteen (14) calendar days for any issue, it is mutually agreed that the Contractor does not require a time extension for said issue.

# 1.14 SCHEDULE REPORTS

- A. Submit four (4) copies of the following reports with the Initial CPM Schedule, the Original CPM Schedule, and each monthly update.
- B. Required Reports:
  - (1) Two activity listing reports: one sorted by activity number and one by total Project Float. These reports shall also include each activity's early/late and actual start and finish dates, original and remaining duration, Project Float, responsibility code, and the logic relationship of activities.

- (2) Cost report sorted by activity number including each activity's associated cost, percentage of Work accomplished, earned value- to-date, previous payments, and amount earned for current update period.
- (3) Schedule plots presenting time-scaled network diagram showing activities and their relationships with the controlling operations or critical path clearly highlighted.
- (4) Cash flow report calculated by early start, late start, and indicating actual progress. Provide an exhibit depicting this information in graphic form.
- (5) Planned versus actual resource (i.e., labor) histogram calculated by early start and late start.

# C. Other Reports

In addition to above reports, District may request, from month-to-month, any two of the following reports. Submit four (4) copies of all reports.

- (1) Activities by early start.
- (2) Activities by late start.
- (3) Activities grouped by Subcontractors or selected trades.
- (4) Activities with scheduled early start dates in a given time frame, such as fifteen (15) or thirty (30) day outlook.
- D. Furnish District with report files on compact disks containing all schedule files for each report generated.

### 1.15 PROJECT STATUS REPORTING

- A. In addition to submittal requirements for CPM scheduling identified in this Section, Contractor shall provide a monthly project status report (i.e., written narrative report) to be submitted in conjunction with each CPM Schedule as specified herein. Status reporting shall be in form specified below.
- B. Contractor shall prepare monthly written narrative reports of status of Project for submission to District. Written status reports shall include:
  - (1) Status of major Project components (percent (%) complete, amount of time ahead or behind schedule) and an explanation of how Project will be brought back on schedule if delays have occurred.
  - (2) Progress made on critical activities indicated on CPM Schedule.
  - (3) Explanations for any lack of work on critical path activities planned to be performed during last month.

- (4) Explanations for any schedule changes, including changes to logic or to activity durations.
- (5) List of critical activities scheduled to be performed next month.
- (6) Status of major material and equipment procurement.
- (7) Any delays encountered during reporting period.
- (8) Contractor shall provide printed report indicating actual versus planned resource loading for each trade and each activity. This report shall be provided on weekly and monthly basis.
  - (a) Actual resource shall be accumulated in field by Contractor, and shall be as noted on Contractor's daily reports. These reports will be basis for information provided in computer-generated monthly and weekly printed reports.
  - (b) Contractor shall explain all variances and mitigation measures.
- (9) Contractor may include any other information pertinent to status of Project. Contractor shall include additional status information requested by District at no additional cost.
- (10) Status reports, and the information contained therein, shall not be construed as claims, notice of claims, notice of delay, or requests for changes or compensation.

# 1.16 WEEKLY SCHEDULE REPORT

At the Weekly Progress Meeting, the Contractor shall provide and present a time-scaled three (3) week look-ahead schedule that is based and correlated by activity number to the current schedule (i.e., Initial, Original CPM, or Schedule Update).

## 1.17 DAILY CONSTRUCTION REPORTS

On a daily basis, Contractor shall submit a daily activity report to District for each workday, including weekends and holidays when worked. Contractor shall develop the daily construction reports on a computer-generated database capable of sorting daily Work, manpower, and man-hours by Contractor, Subcontractor, area, sub-area, and Change Order Work. Upon request of District, furnish computer disk of this data base. Obtain District's written approval of daily construction report data base format prior to implementation. Include in report:

- A. Project name and Project number.
- B. Contractor's name and address.
- C. Weather, temperature, and any unusual site conditions.

- D. Brief description and location of the day's scheduled activities and any special problems and accidents, including Work of Subcontractors. Descriptions shall be referenced to CPM scheduled activities.
- E. Worker quantities for its own Work force and for Subcontractors of any tier.
- F. Equipment, other than hand tools, utilized by Contractor and Subcontractors.

## 1.18 PERIODIC VERIFIED REPORTS

Contractor shall complete and verify construction reports on a form prescribed by the Division of the State Architect and file reports on the first day of February, May, August, and November during the preceding quarter year; at the completion of the Contract; at the completion of the Work; at the suspension of Work for a period of more than one (1) month; whenever the services of Contractor or any of Contractor's Subcontractors are terminated for any reason; and at any time a special verified report is required by the Division of the State Architect. Refer to section 4-336 and section 4-343 of Part 1, Title 24 of the California Code of Regulations.

PART 2 - PRODUCTS Not Used.

PART 3 - EXECUTION Not Used.

## **DOCUMENT 01 33 00**

#### **SUBMITTALS**

#### PART 1 - GENERAL

#### 1.01 RELATED DOCUMENTS AND PROVISIONS:

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions, including, without limitation, Contractor's Submittals and Schedules, Drawings and Specifications;
- B. Special Conditions.

#### 1.02 SECTION INCLUDES:

# A. Definitions:

- (1) Shop Drawings and Product Data are as indicated in the General Conditions and include, but are not limited to, fabrication, erection, layout and setting drawings, formwork and falsework drawings, manufacturers' standard drawings, descriptive literature, catalogues, brochures, performance and test data, wiring and control diagrams. In addition, there are other drawings and descriptive data pertaining to materials, equipment, piping, duct and conduit systems, and methods of construction as may be required to show that the materials, equipment or systems and all positions conform to the requirement of the Contract Documents, including, without limitation, the Drawings.
- "Manufactured" applies to standard units usually mass-produced;
  "fabricated" means specifically assembled or made out of selected
  materials to meet design requirements. Shop Drawings shall establish
  the actual detail of manufactured or fabricated items, indicated proper
  relation to adjoining work and amplify design details of mechanical and
  electrical equipment in proper relation to physical spaces in the
  structure.
- (3) Manufacturer's Instructions: Where any item of Work is required by the Contract Documents to be furnished, installed, or performed, at a minimum, in accordance with a specified product manufacturer's instructions, the Contractor shall procure and distribute copies of these to the District, the Architect, and all other concerned parties and shall furnish, install, or perform the work, at a minimum, in accordance with those instructions.
- B. Samples, Shop Drawings, Product Data, and other items as specified, in accordance with the following requirements:

- (1) Contractor shall submit all Shop Drawings, Product Data, and Samples to the District, the Architect, the Project Inspector, and the Construction Manager.
- (2) Contractor shall comply with all time frames herein and in the General Conditions and, in any case, shall submit required information in sufficient time to permit proper consideration and action before ordering any materials or items represented by such Shop Drawings, Product Data, and/or Samples.
- (3) Contractor shall comply with all time frames herein and in the General Conditions and, in any case, shall allow sufficient time so that no delay occurs due to required lead time in ordering or delivery of any item to the Site. Contractor shall be responsible for any delay in progress of Work due to its failure to observe these requirements.
- (4) Time for completion of Work shall not be extended on account of Contractor's failure to promptly submit Shop Drawings, Product Data, and/or Samples.
- (5) Reference numbers on Shop Drawings shall have Architectural and/or Engineering Contract Drawings reference numbers for details, sections, and "cuts" shown on Shop Drawings. These reference numbers shall be in addition to any numbering system that Contractor chooses to use or has adopted as standard.
- (6) When the magnitude or complexity of submittal material prevents a complete review within the stated time frame, Contractor shall make this submittal in increments to avoid extended delays.
- (7) Contractor shall certify on submittals for review that submittals conform to Contract requirements. In event of any variance, Contractor shall specifically state in transmittal and on Shop Drawings, portions vary and require approval of a substitute. Also certify that Contractor-furnished equipment can be installed in allocated space.
- (8) Unless specified otherwise, sampling, preparation of samples, and tests shall be in accordance with the latest standard of the American Society for Testing and Materials.
- (9) Upon demand by Architect or District, Contractor shall submit samples of materials and/or articles for tests or examinations and consideration before Contractor incorporates same in Work. Contractor shall be solely responsible for delays due to sample(s) not being submitted in time to allow for tests. Acceptance or rejection will be expressed in writing. Work shall be equal to approved samples in every respect. Samples that are of value after testing will remain the property of Contractor.

## C. Submittal Schedule:

(1) Contractor shall prepare its proposed submittal schedule that is coordinated with the its proposed construction schedule and submit both

- to the District within ten (10) days after the date of the Notice to Proceed. Contractor's proposed schedules shall become the Project Construction Schedule and the Project Submittal Schedule after each is approved by the District.
- (2) Contractor is responsible for all lost time should the initial submittal be rejected, marked "revised and resubmit", etc.
- (3) All Submittals shall be forwarded to the District by the date indicated on the approved Submittal Schedule, unless an earlier date is necessary to maintain the Construction Schedule, in which case those Submittals shall be forwarded to the District so as not to delay the Construction Schedule..

# 1.03 SHOP DRAWINGS:

- A. Contractor shall submit one reproducible transparency and six (6) opaque reproductions. The District will review and return the reproducible copy and one (1) opaque reproduction to Contractor.
- B. Before commencing installation of any Work, the Contractor shall submit and receive approval of all drawings, descriptive data, and material list(s) as required to accomplish Work.
- C. Review of Shop Drawings is regarded as a service to assist Contractor and in all cases original Contract Documents shall take precedence as outlined under General Conditions.
- D. No claim for extra time or payment shall be based on work shown on Shop Drawings unless the claim is (1) noted on Contractor's transmittal letter accompanying Shop Drawings and (2) Contractor has complied with all applicable provisions of the General Conditions, including, without limitation, provisions regarding changes and payment, and all required written approvals.
- E. District shall not review Shop Drawings for quantities of materials or number of items supplied.
- F. District's and/or Architect's review of Shop Drawing will be general. District and/or Architect review does not relieve Contractor of responsibility for accuracy, proper fitting, construction of Work, furnishing of materials, or Work required by Contract Documents and not indicated on Shop Drawings. Shop Drawing reviewed by District and/or Architect is not to be construed as approving departures from Contract Documents.
- G. Review of Shop Drawings and Schedules does not relieve Contractor from responsibility for any aspect of those Drawings or Schedules that is a violation of local, County, State, or Federal laws, rules, ordinances, or rules and regulations of commissions, boards, or other authorities or utilities having jurisdiction.
- H. Before submitting Shop Drawings for review, Contractor shall check Shop Drawings of its subcontractors for accuracy, and confirm that all Work

contiguous with and having bearing on other work shown on Shop Drawings is accurately drawn and in conformance with Contract Documents.

- I. Submitted drawings and details must bear stamp of approval of Contractor:
  - (1) Stamp and signature shall clearly certify that Contractor has checked Shop Drawings for compliance with Drawings.
  - (2) If Contractor submits a Shop Drawing without an executed stamp of approval, or whenever it is evident (despite stamp) that Drawings have not been checked the District and/or Architect will not consider them and will return them to the Contractor for revision and resubmission. In that event, it will be deemed that Contractor has not complied with this provision and Contractor shall bear risk of all delays to same extent as if it had not submitted any Shop Drawings or details.
- J. Submission of Shop Drawings (in either original submission or when resubmitted with correction) constitutes evidence that Contractor has checked all information thereon and that it accepts and is willing to perform Work as shown.
- K. Contractor shall pay for cost of any changes in construction due to improper checking and coordination. Contractor shall be responsible for all additional costs, including coordination. Contractor shall be responsible for costs incurred by itself, the District, the Architect, the Project Inspector, the Construction Manager, any other Subcontractor or contractor, etc., due to improperly checked and/or coordination of submittals.
- L. Shop Drawings must clearly delineate the following information:
  - (1) Project name and address.
  - (2) Architect's name and project number.
  - (3) Shop Drawing title, number, date, and scale.
  - (4) Names of Contractor, Subcontractor(s) and fabricator.
  - (5) Working and erection dimensions.
  - (6) Arrangements and sectional views.
  - (7) Necessary details, including complete information for making connections with other Work.
  - (8) Kinds of materials and finishes.
  - (9) Descriptive names of materials and equipment, classified item numbers, and locations at which materials or equipment are to be installed in the Work. Contractor shall use same reference identification(s) as shown on Contract Drawings.

- M. Contractor shall prepare composite drawings and installation layouts when required to solve tight field conditions.
  - (1) Shop Drawings shall consist of dimensioned plans and elevations and must give complete information, particularly as to size and location of sleeves, inserts, attachments, openings, conduits, ducts, boxes, structural interferences, etc.
  - (2) Contractor shall coordinate these composite Shop Drawings and installation layouts in the field between itself and its Subcontractor(s) for proper relationship to the Work, the work of other trades, and the field conditions. The Contractor shall check and approve all submittal(s) before submitting them for final review.

## 1.04 PRODUCT DATA OR NON REPRODUCIBLE SUBMITTALS:

- A. Contractor shall submit manufacturer's printed literature in original form. Any fading type of reproduction will not be accepted. Contract must submit a minimum of six (6) each, to the District. District shall return one (1) to the Contractor, who shall reproduce whatever additional copies it requires for distribution.
- B. Contractor shall submit six (6) copies of a complete list of all major items of mechanical, plumbing, and electrical equipment and materials in accordance with the approved Submittal Schedule, except as required earlier to comply with the approved Construction Schedule. Other items specified are to be submitted prior to commencing Work. Contractor shall submit items of like kind at one time in a neat and orderly manner. Partial lists will not be acceptable.
- C. Submittals shall include manufacturer's specifications, physical dimensions, and ratings of all equipment. Contractor shall furnish performance curves for all pumps and fans. Where printed literature describes items in addition to that item being submitted, submitted item shall be clearly marked on sheet and superfluous information shall be crossed out. If highlighting is used, Contractor shall mark all copies.
- D. Equipment submittals shall be complete and include space requirements, weight, electrical and mechanical requirements, performance data, and supplemental information that may be requested.

#### 1.05 SAMPLES:

- A. Contractor shall submit for approval Samples as required and within the time frame in the Contract Documents. Materials such as concrete, mortar, etc., which require on-site testing will be obtained from Project Site.
- B. Contractor shall submit four (4) samples except where greater or lesser number is specifically required by Contract Documents including, without limitation, the Specifications.

- (1) Samples must be of sufficient size and quality to clearly illustrate functional characteristics, with integrally related parts and attachment devices.
- (2) Samples must show full range of texture, color, and pattern.
- C. Contractor shall make all Submittals, unless it has authorized Subcontractor(s) to submit and Contractor has notified the District in writing to this effect.
- D. Samples to be shipped prepaid or hand-delivered to the District.
- E. Contractor shall mark samples to show name of Project, name of Contractor submitting, Contract number and segment of Work where representative Sample will be used, all applicable Specifications Sections and documents, Contract Drawing Number and detail, and ASTM or FS reference, if applicable.
- F. Contractor shall not deliver any material to Site prior to receipt of District's and/or Architect's completed written review and approval. Contractor shall furnish materials equal in every respect to approved Samples and execute Work in conformance therewith.
- G. District's and/or Architect's review, acceptance, and/or approval of Sample(s) will not preclude rejections of any material upon discovery of defects in same prior to final acceptance of completed Work.
- H. After a material has been approved, no change in brand or make will be permitted.
- I. Contractor shall prepare its Submittal Schedule and submit Samples of materials requiring laboratory tests to specified laboratory for testing not less than ninety (90) days before such materials are required to be used in Work.
- J. Samples which are rejected must be resubmitted promptly after notification of rejection and be marked "Resubmitted Sample" in addition to other information required.
- K. Field Samples and Mock-Ups are to be removed by Contractor at District's direction:
  - (1) Size: As Specified.
  - (2) Furnish catalog numbers and similar data, as requested.

## 1.06 REVIEW AND RESUBMISSION REQUIREMENTS:

A. The District will arrange for review of Sample(s), Shop Drawing(s), Product Data, and other submittal(s) by appropriate reviewer and return to Contractor as provided below within twenty-one (21) days after receipt or within twenty-one (21) days after receipt of all related information necessary for such review, whichever is later.

- B. One (1) copy of product or materials data will be returned to Contractor with the review status.
- C. Samples to be incorporated into the Work will be returned to Contractor, together with a written notice designating the Sample with the appropriate review status and indicating errors discovered on review, if any. Other Samples will not be returned, but the same notice will be given with respect thereto, and that notice shall be considered a return of the Sample.
- D. Contractor shall revise and resubmit any Sample(s), Shop Drawing(s), Product Data, and other submittal(s) as required by the reviewer. Such resubmittals will be reviewed and returned in the same manner as original Sample(s), Shop Drawing(s), Product Data, and other submittal(s), within fourteen (14) days after receipt thereof or within fourteen (14) days after receipt of all related information necessary for such review.
- E. Contractor may proceed with any of the Work covered by Sample(s), Shop Drawing(s), Product Data, and other submittal(s) upon its return if designated as no exception taken, or revise as noted, provided the Contractor proceeds in accordance with the District and/or the Architect's notes and comments.
- F. Contractor shall not begin any of the work covered by a Sample(s), Shop Drawing(s), Product Data, and other submittal(s), designated as revise and resubmit or rejected, until a revision or correction thereof has been reviewed and returned to Contractor.
- G. Sample(s), Shop Drawing(s), Product Data, and other submittal(s) designated as revise and resubmit or rejected and requiring resubmittal, shall be revised or corrected and resubmitted to the District no later than fourteen (14) days or a shorter period as required to comply with the approved Construction Schedule, after its return to Contractor.
- H. Neither the review nor the lack of review of any Sample(s), Shop Drawing(s), Product Data, and other submittal(s) shall waive any of the requirements of the Contract Documents, or relieve Contractor of any obligation thereunder.
- I. District's and/or Architect's review of Shop Drawings does not relieve the Contractor of responsibility for any errors that may exist. Contractor is responsible for the dimensions and design of adequate connections and details and for satisfactory construction of all the Work.

PART 2 - PRODUCTS Not Used.

PART 3 - EXECUTION Not Used.

## DOCUMENT 01 35 13.23

## **SITE STANDARDS**

#### PART 1 - GENERAL

#### 1.01 RELATED DOCUMENTS AND PROVISIONS:

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions, including without limitation, Site Access, Conditions, and Regulations;
- B. Special Conditions;
- C. Drug-Free Workplace Certification;
- D. Tobacco-Free Environment Certification;
- E. Criminal Background Investigation/Fingerprinting Certification;
- F. Temporary Facilities and Controls.

#### 1.02 REQUIREMENTS OF THE DISTRICT:

- A. Drug-Free Schools and Safety Requirements:
  - (1) All school sites and other District Facilities have been declared "Drug-Free Zones." No drugs, alcohol and/or smoking are allowed at any time in any buildings and/or grounds on District property. No students, staff, visitors, or contractors are to use drugs on these sites.
  - (2) Smoking and the use of tobacco products by all persons is prohibited on or in District property. District property includes school buildings, school grounds, school owned vehicles and vehicles owned by others while on District property. Contractor shall be post: "Non-Smoking Area" in a highly visible location on Site. Contractor may designate a smoking area outside of District property within the public right-ofway, provided that this area remains quiet and unobtrusive to adjacent neighbors. This smoking area is to be kept clean at all times.
  - (3) Contractor shall ensure that no alcohol, firearms, weapons, or controlled substances enter or are used at the Site. Contractor shall immediately remove from the Site and terminate the employment of any employee(s) found in violation of this provision.
- B. Language: Unacceptable and/or loud language will not be tolerated, "Cat calls" or other derogatory language toward students or public will not be allowed.
- C. Disturbing the Peace (Noise and Lighting):

- (1) Contractor shall observe the noise ordinance of the Site at all times including, without limitation, all applicable local, city, and/or state laws, ordinances, and/or regulations regarding noise and allowable noise levels.
- (2) The use of radios, etc., shall be controlled to keep all sound at a level that cannot be heard beyond the immediate area of use. District reserves the right to prohibit the use of radios at the Site, except for handheld communication radios (e.g., Nextel phones or radios).
- (3) If portable lights are used after dark, all light must be located so as not to direct light into neighboring property.

#### D. Traffic:

- (1) Driving on the Premises shall be limited to periods when students and public are not present. If driving or deliveries must be made during the school hours, two (2) or more ground guides shall lead the vehicle across the area of travel. In no case shall driving take place across playgrounds or other pedestrian paths during recess, lunch, and/or class period changes. The speed limit on-the Premises shall be five (5) miles per hour (maximum) or less if conditions require.
- (2) All paths of travel for deliveries, including without limitation, material, equipment, and supply deliveries, shall be reviewed and approved by District in advance. Any damage will be repaired to the pre-damaged condition by the Contractor.
- (3) District shall designate a construction entry to the Site. If Contractor requests, District determines it is required, and to the extent possible, District shall designate a staging area so as not to interfere with the normal functioning of school facilities. Location of gates and fencing shall be approved in advance with District and at Contractor's expense.
- (4) Parking areas shall be reviewed and approved by District in advance. No parking is to occur under the drip line of trees or in areas that could otherwise be damaged.
- E. All of the above shall be observed and complied with by the Contractor and all workers on the Site. Failure to follow these directives could result in individual(s) being suspended or removed from the work force at the discretion of the District. The same rules and regulations shall apply equally to delivery personnel, inspectors, consultants, and other visitors to the Site.

PART 2 - PRODUCTS Not Used.

PART 3 - EXECUTION Not Used.

#### DOCUMENT 01 41 00

#### REGULATORY REQUIREMENTS

#### PART 1 - GENERAL

#### 1.01 RELATED DOCUMENTS AND PROVISIONS:

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions, including, without limitation, Obtaining of Permits and Licenses and Work to Comply with All Applicable Regulations;
- B. Special Conditions;
- C. Quality Control.

## 1.02 DESCRIPTION:

This section covers the general requirements for regulatory requirements pertaining to the Work and is supplementary to all other regulatory requirements mentioned or referenced elsewhere in the Contract Documents.

#### 1.03 REQUIREMENTS OF REGULATORY AGENCIES:

- A. All statutes, ordinances, laws, rules, codes, regulations, standards, and the lawful orders of all public authorities having jurisdiction of the Work, are hereby incorporated into these Contract Documents as if repeated in full herein and are intended to be included in any reference to Code or Building Code, unless otherwise specified, including, without limitation, the references in the list below. Contractor shall make available at the Site copies of all the listed documents applicable to the Work as the District and/or Architect may request, including, without limitation, applicable portions of the California Code of Regulations ("CCR").
- B. This Project shall be governed by applicable regulations, including, without limitation, the State of California 's Administrative Regulations for the Division of the State Architect-Structural Safety (DSA/SS), Chapter 4, Part 1, Title 24, CCR, and the most current version on the date the bids are opened and as it pertains to school construction including, without limitation:
  - (1) Test and testing laboratory per Section 4-335 (District shall pay for the testing laboratory.)
  - (2) Special inspections per Section 4-333(c).
  - (3) Verified reports per Section 4-365 & 4-343(c).
  - (4) Duties of the Architect & Engineers shall be per Section 4-333(a) and 4-341.

- (5) Duties of the Contractor shall be per Section 4-343.
- (6) Addenda and Change Orders per Section 4-338.

Contractor shall keep and make available a copy of Part 1 and 2 of the most current version of Title 24 at the Site during construction.

- C. Items of deferred approval shall be clearly marked on the first sheet of the Architect's and/or Engineer's approved Drawings. All items later submitted for approval shall be per Title 24 requirements to the DSA.
  - (1) Building Standards Administrative Code, Part 1, Title 24, CCR
  - (2) California Building Code (CBC), Part 2, Title 24, CCR; (Uniform Building code volumes 1-3 and California Amendments).
  - (3) California Electrical Code (CEC), Part 3, Title 24, CCR; (National Electrical Code and California Amendments).
  - (4) California Mechanical Code (CMC), Part 4, Title 24, CCR; (Uniform Mechanical Code and California Amendments).
  - (5) California Plumbing Code (CPC), Part 5, Title 24, CCR; (Uniform Plumbing Code and California Amendments).
  - (6) California Fire Code (CFC), Part 9, Title 24, CCR; (Fire Plumbing Code and California Amendments).
  - (7) California Referenced Standards Code, Part 12, Title 24, CCR.
  - (8) State Fire Marshal Regulations, Public Safety, Title 19, CCR.
  - (9) Partial List of Applicable NFPA Standards:
    - (a) NFPA 13 Automatic Sprinkler System.
    - (b) NFPA 14 Standpipes Systems.
    - (c) NFPA 17A Wet Chemical System
    - (d) NFPA 24 Private Fire Mains.
    - (e) (California Amended) NFPA 72 National Fire Alarm Codes.
    - (f) NFPA 253 Critical Radiant Flux of Floor Covering System.
    - (g) NFPA 2001 Clean Agent Fire Extinguishing Systems.
  - (10) California Division of the State Architect interpretation of Regulations.

PART 2 - PRODUCTS Not Used.

# PART 3 - EXECUTION Not Used.

## **DOCUMENT 01 42 13**

# **ABBREVIATIONS AND ACRONYMS**

## PART 1 - GENERAL

## 1.01 RELATED DOCUMENTS AND PROVISIONS:

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions including without limitation, Definitions;
- B. Special Conditions.

# 1.02 DOCUMENT INCLUDES:

- A. Abbreviations used throughout the Contract Documents.
- B. Reference to a technical society, organization, or body is by abbreviation, as follows:

1.	AA	Aluminum Association
2.	AAMA	Architectural Aluminum Manufacturers
		Association
3.	AASHTO	American Association of State Highway and
		Transportation Officials
4.	ABPA	Acoustical and Board Products Association
5.	ACI	American Concrete Institute
6.	AGA	American Gas Association
7.	AGC	Associated General Contractors
8.	AHC	Architectural Hardware Consultant
9.	Al	Asphalt Institute
10.	AIA	American Institute of Architects
11.	AIEE	American Institute of Electrical Engineers
12.	AISC	American Institute of Steel Construction
13.	AISI	American Iron and Steel Institute
14.	AMCA	Air Moving and Conditioning Association
15.	ANSI	American National Standards Institute
16.	APA	American Plywood Association
17.	ARI	Air Conditioning and Refrigeration Institute
18.	ASHRAE	American Society of Heating, Refrigeration and
		Air Conditioning Engineers
19.	ASME	American Society of Mechanical Engineers
20.	ASSE	American Society of Structural Engineers
21.	ASTM	American Society of Testing and Materials
22.	AWPB	American Wood Preservers Bureau
23.	AWPI	American Wood preservers Institute
24.	AWS	American Welding Society
25.	AWSC	American Welding Society Code
26.	AWI	Architectural Woodwork Institute
27.	AWWA	American Water Works Association

28.	BIA	Brick Institute of America
29.	CCR	California Code of Regulations
30.	CLFMI	Chain Link Fence Manufacturers Institute
31.	CMG	California Masonry Guild
32.	CRA	California Redwood Association
33.	CRSI	Concrete Reinforcing Steel Institute
34.	CS	Commercial Standards
35.	CSI	Construction Specifications Institute
36.	CTI	Cooling Tower Institute
30. 37.	FGMA	Flat Glass Manufacturer's Association
37. 38.	FIA	
		Factory Insurance Association
39.	FM	Factory Mutual
40.	FS	Federal Specification
41.	FTI	Facing Title Institute
42.	GA	Gypsum Association
43.	ICC	International Code Council
44.	IEEE	Institute of Electrical and Electronic Engineers
45.	IES	Illumination Engineering Society
46.	LIA	Lead Industries Association
47.	MIA	Marble Institute of America
48.	MLMA	Metal Lath Manufacturers Association
49.	MS	Military Specifications
50.	NAAMM	National Association of Architectural Metal
		Manufacturers
51.	NBHA	National Builders Hardware Association
52.	NBFU	National Board of Fire Underwriters
53.	NBS	National Bureau of Standards
54.	NCMA	National Concrete Masonry Association
55.	NEC	National Electrical Code
56.	NEMA	National Electrical Manufacturers Association
57.	NFPA	National Fire Protection Association/National
57.	MITA	Forest Products Association
58.	NMWIA	National Mineral Wool Insulation Association
59.	NTMA	National Terrazzo and Mosaic Association
60.	NWMA	National Woodwork Manufacturer's Association
61.	ORS	Office of Regulatory Services (California)
62.	OSHA	Occupational Safety and Health Act
63.	PCI	Precast Concrete Institute
64.	PCA	Portland Cement Association
65.	PDCA	Painting and Decorating Contractors of America
66.	PDI	Plumbing Drainage Institute
67.	PEI	Porcelain Enamel Institute
68.	PG&E	Pacific Gas & Electric Company
69.	PS	Product Standards
70.	SDI	Steel Door Institute; Steel Deck Institute
71.	SJI	Steel Joist Institute
72.	SSPC	Steel Structures Painting Council
73.	TCA	Tile Council of America
74.	TPI	Truss Plate Institute
75.	UBC	Uniform Building Code
76.	UL	Underwriters Laboratories Code
77.	UMC	Uniform Mechanical Code

78.	USDA	United States Department of Agriculture
79.	VI	Vermiculite Institute
80.	WCLA	West Coast Lumberman's Association
81	WCLB	West Coast Lumber Bureau
82.	WEUSER	Western Electric Utilities Service Engineering
		Requirements
83.	WIC	Woodwork Institute of California
84.	WPOA	Western Plumbing Officials Association

PART 2 - PRODUCTS Not Used.

PART 3 - EXECUTION Not Used.

#### **DOCUMENT 01 42 16**

# **DEFINITIONS**

#### **PART 1 - GENERAL**

#### 1.01 RELATED DOCUMENTS AND PROVISION

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions including without limitation, Definitions;
- B. Special Conditions.

#### 1.02 QUALITY ASSURANCE:

- A. For products or workmanship specified by association, trade, or Federal Standards, Contractor shall comply with requirements of the standard, except when more rigid requirements are specified in the Contract Documents, or are required by applicable codes.
- B. Contractor shall conform to current reference standard publication date in effect on the date of bid opening.
- C. Contractor shall obtain copies of standards unless specifically required not to by the Contract Documents.
- D. Contractor shall maintain a copy of all standards at jobsite during submittals, planning, and progress of the specific Work, until final completion, unless specifically required not to by the Contract Documents.
- E. Should specified reference standards conflict with Contract Documents, Contractor shall request clarification from the District and./or the Architect before proceeding.
- F. The contractual relationship of the parties to the Contract shall not be altered from the contractual relationship as indicated in the Contract Documents by mention or inference otherwise in any referenced document.
- G. Governing Codes shall be as shown in the Contract Documents including, without limitation, the Specifications.

# **REFERENCES**

# **PART 1 - GENERAL**

# 1.01 SCHEDULE OF REFERENCES:

The following information is intended only for the general assistance of the Contractor, and the District does not represent that all of the information is current. It is the Contractor's responsibility to verify the correct information for each of the entities listed.

AA	Aluminum Association 1525 Wilson Blvd., Suite 600 Arlington, VA 22209 www.aluminum.org	703/358-2960
AABC	Associated Air Balance Council 1518 K Street, NW, Suite 503 Washington, DC 20005 www.aabchq.com	202/737-0202
AAMA	American Architectural Manufacturers Association 1827 Walden Office Sq., Suite 550 Schaumburg, IL 60173-4268 www.aamanet.org	847/303-5664
AASHTO	American Association of State Highway and Transportation Officials 444 N Capitol St. NW - Suite 249 Washington, DC 20001 www.transportation.org	202/624-5800
AATCC	American Association of Textile Chemists and Colorists P.O. Box 12215 One Davis Drive Research Triangle Park, NC 27709 2215 www.aatcc.org	919/549-8141
ACA	American Coatings Association 1500 Rhode Island Ave., NW Washington DC, 20005 www.paint.org	202/462-6272
ACI	American Concrete Institute 38800 Country Club Dr. Farmington Hills, MI 48331-3439 www.aci-int.org	248/848-3700
ACPA	American Concrete Pipe Association 8445 Freeport Parkway, Suite 350 Irving, TX 75063-2595 www.concrete-pipe.org	972/506-7216

ADC	Air Diffusion Council 1901 N. Roselle Road, Suite 800 Schaumburg, Illinois 60195 www.flexibleduct.org	847/706-6750
AF&PA	American Forest and Paper Association 1111 Nineteenth Street, NW, Suite 800 Washington, DC 20036 www.afandpa.org	202/463-2700
AGA	American Gas Association 400 North Capitol Street, NW Washington, DC 20001 www.aga.org	202/824-7000
AGC	Associate General Contractors of America 2300 Wilson Blvd., Suite 400 Arlington, VA 22201 www.agc.org	703/548-3118
АНА	American Hardboard Association 1210 West Northwest Highway Palatine, IL 60067 domensino.com/AHA/default.htm	847/934-8800
AI	Asphalt Institute 2696 Research Park Drive Lexington, KY 40511-8480 www.asphaltinstitute.org	859/288-4960
AIA	The American Institute of Architects 1735 New York Ave., NW Washington, DC 20006-5292 www.aia.org	202/626-7300
AISC	American Institute of Steel Construction One East Wacker Drive Suite 700 Chicago, IL 60601-1802 www.aisc.org	312.670.2400
AIA	American Insurance Association (formerly the National Board of Fire Underwriters) 2101 L Street, NW, Suite 400 Washington, DC 20037 www.aiadc.org	202/828-7100
AISI	American Iron and Steel Institute 25 Massachusetts Ave., NW, Suite 800 Washington, DC 20001 www.steel.org	202/452.7100
AITC	American Institute of Timber Construction 7012 S. Revere Parkway Suite 140 Centennial, CO 80112 www.aitc-glulam.org	303/792.9559

ALI	Associated Laboratories, Inc. P.O. Box 152837 Dallas, TX 75315 www.assoc-labs.com	214/565-0593
ALSC	American Lumber Standards Committee, Inc. P.O. Box 210 Germantown, MD 20875 www.alsc.org	301/972-1700
AMCA	Air Movement and Control Association International, Inc. 30 W. University Drive Arlington Heights, IL 60004 www.amca.org	847/394-0150
ANLA	American Nursery & Landscape Association 1200 G Street NW, Suite 800 Washington, DC 20005 www.anla.org	202/789-2900
ANSI	American National Standards Institute 1899 L Street, NW, 11th Floor Washington, DC, 20036 www.ansi.org	202/293.8020
APA	APA-The Engineered Wood Association 7011 S. 19th Street Tacoma, WA 98466-5333 www.apawood.org	253/565-6600
APA	Architectural Precast Association 6710 Winkler Road, Suite 8 Fort Myers, Florida 33919 www.archprecast.org	239/454-6989
ARI	Air Conditioning and Refrigeration Institute 4100 N. Fairfax Drive, Suite 200 Arlington, VA 22203 www.lightindustries.com/ARI	703/524-8800
ARMA	Asphalt Roofing Manufacturers Association Public Information Department 750 National Press Building 529 14th Street, NW Washington, DC 20045 www.asphaltroofing.org	202/591-2450
ASA	The Acoustical Society of America ASA Office Manager Suite 1NO1 2 Huntington Quadrangle Melville, NY 11747-4502 http://asa.aip.org	516/576-2360

ASCE	American Society of Civil Engineers 1801 Alexander Bell Drive Reston, VA 20191 www.asce.org	800/548-2723 703/295-6300
ASHRAE	American Society of Heating, Refrigerating and Air Conditioning Engineers 1791 Tullie Circle, NE Atlanta, GA 30329-2305 www.ashrae.org	800/527-4723 404/636-8400
ASLA	American Society of Landscape Architects 636 Eye Street, NW Washington, DC 20001-3736 www.asla.org	202/898-2444
ASME	American Society of Mechanical Engineers Three Park Avenue New York, NY 10016-5990 www.asme.org	800/434-2763
ASPE	American Society of Plumbing Engineers 2980 S River Rd. Des Plaines, IL 60018 http://aspe.org	847/296-0002
ASQ	American Society for Quality P.O. Box 3005 Milwaukee, WI 53201-3005 or 600 North Plankinton Avenue Milwaukee, WI 53203 http://asq.org	800/248-1946 414/272-8575
ASSE	American Society of Sanitary Engineering 901 Canterbury, Suite A Westlake, Ohio 44145 www.asse-plumbing.org	440/835-3040
ASTM	ASTM International 100 Barr Harbor Drive PO Box C700 West Conshohocken, PA, 19428-2959 www.astm.org	610/832-9500
AWCI	Association of the Wall and Ceiling Industry 513 West Broad Street, Suite 210 Falls Church, VA 22046 www.awci.org	703/538-1600
AWPA	American Wood Protection Association P.O. Box 361784 Birmingham, AL 35236-1784 www.awpa.com	205/733-4077

AWPI	American Wood Preservers Institute 2750 Prosperity Ave. Suite 550 Fairfax, VA 22031-4312 www.arcat.com	800/356-AWPI 703/204-0500
AWS	American Welding Society 8669 Doral Boulevard, Suite 130 Doral, Florida 33166 www.aws.org	800/443-9353 305/443-9353
AWI	Architectural Woodwork Institute 46179 Westlake Drive, Suite 120 Potomac Falls, VA 20165-5874 www.awinet.org	571/323-3636
AWWA	American Water Works Association 6666 West Quincy Avenue Denver, CO 80235 www.awwa.org	800/926-7337 303/794 7711
ВНМА	Builders Hardware Manufacturers Association 355 Lexington Avenue, 15th floor New York, NY 10017 www.buildershardware.com	212/297-2122
BIA	The Brick Industry Association 1850 Centennial Park Drive, Suite 301 Reston, VA 20191 www.gobrick.com	703/620-0010
CGA	Compressed Gas Association 14501 George Carter Way, Suite 103 Chantilly VA 20151-2923 www.cganet.com	703/788-2700
CISCA	Ceilings & Interior Systems Construction Association 1010 Jorie Blvd, Suite 30 Oak Brook, IL 60523 www.cisca.org	630/584-1919
CISPI	Cast Iron Soil Pipe Institute 1064 Delaware Avenue SE Atlanta, GA 30316 www.cispi.org	404/622-0073
CLFMI	Chain Link Fence Manufacturers Institute 10015 Old Columbia Road, Suite B-215 Columbia, MD 21046 www.associationsites.com/main-pub.cfm?usr=clfma	410/290-6267
СРА	Composite Panel Association 19465 Deerfield Avenue, Suite 306 Leesburg, VA 20176 www.compositepanel.org	703/724-1128

CPSC	Consumer Product Safety Commission 4330 East West Highway Bethesda, MD 20814 www.cpsc.gov	301/504-7923 800/638-2772
CRA	California Redwood Association 405 Enfrente Drive, Suite 200 Novato, CA 94949 www.calredwood.org	415/382-0662
CRI	Carpet and Rug Institute P.O. Box 2048 Dalton, Georgia 30722-2048 www.carpet-rug.org	706/278-3176
CRSI	Concrete Reinforcing Steel Institute 933 N. Plum Grove Road Schaumburg, IL 60173 4758 www.crsi.org	847/517-1200
CSI	The Construction Specifications Institute 110 South Union Street, Suite 100 Alexandria VA 22314 www.csinet.org	800/689-2900
CTIOA	Ceramic Tile Institute of America 12061 Jefferson Blvd. Culver City, CA 90230-6219 www.ctioa.org	310/574-7800
DHI	Door and Hardware Institute (formerly National Builders Hardware Association) 14150 Newbrook Dr. Chantilly, VA 20151 www.dhi.org	703/222-2010
DIPRA	Ductile Iron Pipe Research Association 2000 2nd Avenue, South Suite 429 Birmingham, AL 35233 www.dipra.org	205/402-8700
DOC	U.S. Department of Commerce 1401 Constitution Ave., NW Washington, D.C. 20230 www.commerce.gov	202/482-2000
DOT	U.S. Department of Transportation 1200 New Jersey Avenue, SE Washington, DC 20590 www.dot.gov	855/368-4200
EJMA	Expansion Joint Manufacturers Association, Inc. 25 North Broadway Tarrytown, NY 10591 www.ejma.org	914/332-0040

EPA	Environmental Protection Agency	202/272-0167
EPA	Environmental Protection Agency Ariel Rios Building 1200 Pennsylvania Avenue, N.W. Washington, DC 20460 www.epa.gov	202/2/2-010/
FCICA	Floor Covering Installation Contractors Association 7439 Millwood Drive West Bloomfield, MI 48322 www.fcica.com	248/661-5015 877/TO-FCICA
FM Global	Factory Mutual Insurance Company Mary Breighner Global Practice Leader Education, Public Entities, Health Care FM Global 9 Woodcrest Court Cincinnati, OH 45246 www.fmglobal.com	513/742-9516
FS	General Services Administration (GSA) Index of Federal Specifications, Standards and Commercial Item Descriptions 470 East L'Enfant Plaza, SW, Suite 8100 Washington, DC 20407 www.gsa.gov	202/619-8925
GA	The Gypsum Association 6525 Belcrest Road, Suite 480 Hyattsville, MD 20782 www.gypsum.org	301/277-8686
GANA	Glass Association of North America 800 SW Jackson St., Suite 1500 Topeka, KS 66612-1200 www.glasswebsite.com	785/271-0208
НМА	Hardwood Manufacturers Association 665 Rodi Road, Suite 305 Pittsburgh, PA 15235 http://hmamembers.org	412/244-0440
HPVA	Hardwood Plywood & Veneer Association 1825 Michael Faraday Drive Reston, Virginia 20190 www.hpva.org	703/435-2900

IAPMO	International Association of Plumbing and Mechanical Officials (formerly the Western Plumbing Officials Association) 4755 E. Philadelphia St. Ontario, CA 91761 www.iapmo.org	909/472-4100
ICC	International Code Council 500 New Jersey Avenue, NW, 6th Floor Washington, DC 20001 www.iccsafe.org	888/422-7233
IEEE	Institute of Electrical and Electronics Engineers 3 Park Avenue, 17th Floor New York, NY 10016-5997 www.ieee.org	212/419-7900
IES	Illuminating Engineering Society 120 Wall Street, Floor 17 New York, NY 10005-4001 www.ies.org	212/248-5000
ITRK	Intertek Testing Services 3933 US Route 11 Cortland, NY 13045 www.intertek.com	607/753-6711
MCAA	Mechanical Contractors Association of America 1385 Piccard Drive Rockville, MD 20850 www.mcaa.org	301/869-5800
MIA	Marble Institute of America 28901 Clemens Rd, Ste 100 Cleveland, OH 44145 www.marble-institute.com	440/250-9222
MMPA (formerly WMMPA)	Moulding & Millwork Producers Association (formerly Wood Moulding & Millwork Producers Association) 507 First Street Woodland, CA 95695 www.wmmpa.com	530/661-9591 800/550-7889
MSS	Manufacturers Standardization Society (MSS) of the Valve and Fittings Industry 127 Park Street, NE Vienna, VA 22180-4602 http://mss-hq.org	703/281-6613
NAAMM	National Association of Architectural Metal Manufacturers 800 Roosevelt Rd. Bldg. C, Suite 312 Glen Ellyn, IL 60137 www.naamm.org	630/942-6591

NAIMA	North American Insulation Manufacturers Association 44 Canal Center Plaza, Suite 310 Alexandria, VA 22314 www.naima.org	703/684-0084
NAPA	National Asphalt Pavement Association 5100 Forbes Blvd. Lanham, MD USA 20706-4407 www.asphaltpavement.org	888/468-6499 301/731-4748
NCSPA	National Corrugated Steel Pipe Association 14070 Proton Road, Suite 100 LB9 Dallas, TX 75244 www.ncspa.org	972/850-1907
NCMA	National Concrete Masonry Association 13750 Sunrise Valley Drive Herndon, VA 20171-4662 www.ncma.org	703/713-1900
NEBB	National Environmental Balancing Bureau 8575 Grovemont Circle Gaithersburg, MD 20877 www.nebb.org	301/977-3698
NECA	National Electrical Contractors Association 3 Bethesda Metro Center, Suite 1100 Bethesda, MD 20814 www.necanet.org	301/657-3110
	National Electrical Manufacturers Association 1300 North 17th Street, Suite 1752 Rosslyn, Virginia 22209 www.nema.org	703/841-3200
NEII	National Elevator Industry, Inc. 1677 County Route 64 P.O. Box 838 Salem, New York 12865-0838 www.neii.org	518/854-3100
NFPA	National Fire Protection Association  1 Batterymarch Park Quincy, Massachusetts USA 02169-7471 www.nfpa.org	617/770-3000
NHLA	National Hardwood Lumber Association PO Box 34518 Memphis, TN 38184 www.nhla.com	901/377-1818

NIA	National Insulation Association 12100 Sunset Hills Road, Suite 330 Reston, VA 20190 www.insulation.org	703/464-6422
NRCA	National Roofing Contractors Association 10255 W. Higgins Road, Suite 600 Rosemont, IL 60018-5607 www.nrca.net	847/299-9070
NSF	NSF International P.O. Box 130140 789 N. Dixboro Road Ann Arbor, MI 48113-0140, USA www.nsf.org	800/673-6275 734/769-8010
NTMA	National Terrazzo and Mosaic Association PO Box 2605 Fredericksburg, TX 78624 www.ntma.com	800/323-9736
OSHA	Occupational Safety and Health Act U.S. Department of Labor Occupational Safety & Health Administration 200 Constitution Ave., NW Washington, D.C. 20210 www.osha.gov	800/321-OSHA (6742)
PCA	Portland Cement Association 5420 Old Orchard Road Skokie, IL 60077 or 500 New Jersey Ave., N.W. 7 <sup>th</sup> Floor Washington, D.C. 20001 www.cement.org	847/966-6200 202/408-9494
PCI	Precast/Prestressed Concrete Institute 200 W. Adams St. #2100 Chicago, IL 60606 www.pci.org	312/786-0300
PDCA	Painting and Decorating Contractors of America 2316 Millpark Drive, Ste 220 Maryland Heights, MO 63043 www.pdca.com	800/332-PDCA (7322) 314/514-7322
PDI	Plumbing & Drainage Institute 800 Turnpike Street, Suite 300 North Andover, MA 01845 http://pdionline.org	978/557-0720 800/589-8956
PEI	Porcelain Enamel Institute, Inc. P.O. Box 920220 Norcross, GA 30010 www.porcelainenamel.com	770/676-9366

PG&E	Pacific Gas & Electric Company	800/743-5000
	www.pge.com	
PLANET	Professional Landcare Network	703/736-9666
	950 Herndon Parkway, Suite 450 Herndon, Virginia 20170	800/395-2522 703/736-9668
	www.landcarenetwork.org	703/730-9000
DEGL		70//000 0000
RFCI	Resilient Floor Covering Institute 115 Broad Street, Suite 201	706/882-3833
	La Grange GA 30240	
	www.rfci.com	
RIS	Redwood Inspection Service	925/935-1499
	818 Grayson Road, Suite 201	
	Pleasant Hill, CA 94523 www.redwoodinspection.com	
	· ·	
SDI	Steel Deck Institute P.O. Box 25	847/458-4647
	Fox River Grove, IL 60021	
	www.sdi.org	
SDI	Steel Door Institute	440/899-0010
	30200 Detroit Road	
	Westlake, Ohio 44145 www.steeldoor.org	
	steesace.re.ig	
SJI	Steel Joist Institute	843/407-4091
	234 W. Cheves Street	
	Florence, SC 29501 http://steeljoist.org	
SMA	Stucco Manufacturers Association	949/387.7611
	500 East Yale Loop Irvine, CA 92614	
	www.stuccomfgassoc.com	
SMACNA	Sheet Metal and Air Conditioning Contractors'	703/803-2980
	National Association	
	4201 Lafayette Center Drive	
	Chantilly, Virginia 20151-1219 www.smacna.org	
CDI	-	202/07/ 5222
SPI	SPI: The Plastics Industry Trade Association, Inc. 1667 K St., NW, Suite 1000	202/974-5200
	Washington, DC 20006	
	www.plasticsindustry.org	
SSPC	Society for Protective Coatings	412/281-2331
	(formerly the Steel Structures Painting Council)	877/281-7772
	40 24th St 6th Fl Pittsburgh, PA 15222	
	www.sspc.org	

TCA	The Tile Council of North America 100 Clemson Research Blvd. Anderson, SC 29625 www.tcnatile.com	864/646-8453
TPI	Truss Plate Institute 218 North Lee Street, Suite 312 Alexandria, VA 22314 www.tpinst.org	703/683-1010
TPI	Turfgrass Producers International 2 East Main Street East Dundee, IL 60118 www.turfgrasssod.org	800/405-8873 847/649-5555
TCIA	Tree Care Industry Association (formerly the National Arborist Association) 136 Harvey Road, Suite 101 Londonderry, NH 03053 www.tcia.org	800/733-2622
TVI	The Vermiculite Institute c/o The Schundler Company 150 Whitman Avenue Edison, NJ. 08817 www.vermiculiteinstitute.org	732/287-2244
UL	Underwriters Laboratories Inc. 333 Pfingsten Road Northbrook, IL 60062-2096 www.ul.com	847/272-8800 877/854-3577
UNI	Uni-Bell PVC Pipe Association 2711 LBJ Freeway, Suite 1000 Dallas, TX 75234 www.uni-bell.org	972/243-3902
USDA	U.S. Department of Agriculture 1400 Independence Ave., S.W. Washington, DC 20250 www.usda.gov	202/720-2791
WA	Wallcoverings Association 401 North Michigan Avenue Suite 2200 Chicago, IL 60611 www.wallcoverings.org	312/321-5166

WCLIB	West Coast Lumber Inspection Bureau P.O. Box 23145 Portland, OR 97281 or 6980 S.W. Varns Tigard, OR 97223 www.wclib.org	503/639-0651
WCMA	Window Covering Manufacturers Association 355 Lexington Avenue 15th Floor New York, New York 10017 www.wcmanet.org	212/297-2122
WDMA	Window & Door Manufacturers Association 401 N. Michigan Avenue, Suite 2200 Chicago, IL 60611 or 2025 M Street, NW, Ste. 800 Washington, D.C. 20036-3309 www.wdma.com	312/321-6802 202/367-1157
WI	Woodwork Institute P.O. Box 980247 West Sacramento, CA 95798 www.wicnet.org	916/372-9943
WRI	Wire Reinforcement Institute 942 Main Street Hartford, CT 06103 www.wirereinforcementinstitute.org	860/240-9545
WWCA	Western Wall & Ceiling Contractors Association 1910 N. Lime St. Orange, California 92865 www.wwcca.org	714/221-5520
WWPA	Western Wood Products Association 522 SW Fifth Ave., Suite 500 Portland, OR 97204-2122 www2.wwpa.org	503/224-3930

PART 2 - PRODUCTS Not Used.

PART 3 - EXECUTION Not Used.

### DOCUMENT 01 43 00

## MATERIALS AND EQUIPMENT

### **PART 1 - GENERAL**

### 1.01 RELATED DOCUMENTS AND PROVISIONS

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions, including, without limitation, Purchase of Materials and Equipment;
- B. Special Conditions;
- C. Imported Materials Certification.

## 1.02 MATERIAL AND EQUIPMENT

- A. Only items approved by the District and/or Architect shall be used.
- B. Contractor shall submit lists of products and other product information in accordance with the Contract Documents, including, without limitation, the provisions regarding the submittals.

## 1.03 MATERIAL AND EQUIPMENT COLORS

- A. The District and/or Architect will provide a schedule of colors.
- B. No individual color selections will be made until after approval of all pertinent materials and equipment and after receipt of appropriate samples in accordance with the Contract Documents, including, without limitation, the provisions regarding the submittals.
- C. Contractor shall request priority in writing for any item requiring advance ordering to maintain the approved Construction Schedule.

# 1.04 DELIVERY, STORAGE, AND HANDLING

- A. Contractor shall deliver manufactured materials in original packages, containers, or bundles (with seals unbroken), bearing name or identification mark of manufacturer.
- B. Contractor shall deliver fabrications in as large assemblies as practicable; where specified as shop-primed or shop-finished, package or crate as required to preserve such priming or finish intact and free from abrasion.
- C. Contractor shall store materials in such a manner as necessary to properly protect them from damage. Materials or equipment damaged by handling, weather, dirt, or from any other cause will not be accepted.

- D. Materials are not be acceptable that have been warehoused for long periods of time, stored or transported in improper environment, improperly packaged, inadequately labeled, poorly protected, excessively shipped, deviated from normal distribution pattern, or reassembled.
- E. Contractor shall store material so as to cause no obstructions of sidewalks, roadways, and underground services. Contractor shall protect material and equipment furnished under Contract.
- F. Contractor may store materials on Site with prior written approval by the District, all material shall remain under Contractor's control and Contractor shall remain liable for any damage to the materials. Should the Project Site not have storage area available, the Contractor shall provide for off-site storage at a bonded warehouse and with appropriate insurance coverage at no cost to District.
- G. When any room in Project is used as a shop or storeroom, the Contractor shall be responsible for any repairs, patching, or cleaning necessary due to that use. Location of storage space shall be subject to prior written approval by District.

### **PART 2 - PRODUCTS**

# 2.01 MANUFACTURERS

- A. Manufacturers listed in various sections of Contract Documents are names of those manufacturers that are believed to be capable of supplying one or more of items specified therein.
- B. The listing of a manufacturer does not imply that every product of that manufacturer is acceptable as meeting the requirements of the Contract Documents.

# 2.02 FACILITIES AND EQUIPMENT

Contractor shall provide, install, maintain, and operate a complete and adequate facility for handling, the execution, disposal, and distribution of material and equipment as required for proper and timely performance of Work connected with Contract.

## 2.03 MATERIAL REFERENCE STANDARDS

Where material is specified solely by reference to "standard specifications" and if requested by District, Contractor shall submit for review data on actual material proposed to be incorporated into Work of Contract listing name and address of vendor, manufacturer, or producer, and trade or brand names of those materials, and data substantiating compliance with standard specifications.

## **PART 3 - EXECUTION**

### 3.01 WORKMANSHIP

- A. Where not more specifically described in any other Contract Documents, workmanship shall conform to methods and operations of best standards and accepted practices of trade or trades involved and shall include items of fabrication, construction, or installation regularly furnished or required for completion (including finish and for successful operation, as intended).
- B. Work shall be executed by tradespersons skilled in their respective lines of Work. When completed, parts shall have been durably and substantially built and present a neat appearance.

## 3.02 COORDINATION

- A. Contractor shall coordinate installation of Work so as to not interfere with installation of others. Adjustment or rework because of Contractor's failure to coordinate will be at no additional cost to District.
- B. Contractor shall examine in-place work for readiness, completeness, fitness to be concealed or to receive other work, and in compliance with Contract Documents. Concealing or covering Work constitutes acceptance of additional cost which will result should in-place Work be found unsuitable for receiving other Work or otherwise deviating from the requirements of the Contract Documents.

## 3.03 COMPLETENESS

Contractor shall provide all portions of the Work, unless clearly stated otherwise, installed complete and operational with all elements, accessories, anchorages, utility connections, etc., in manner to assure well-balanced performance, in accordance with manufacturer's recommendations and by Contract Documents. For example, electric water coolers require water, electricity, and drain services; roof drains require drain system; sinks fit within countertop, etc. Terms such as "installed complete," "operable condition," "for use intended," "connected to all utilities," "terminate with proper cap," "adequately anchored," "patch and refinish," "to match similar," should be assumed to apply in all cases, except where completeness of functional or operable condition is specifically stated as not required.

### 3.04 APPROVED INSTALLER OR APPLICATOR

Installation by a manufacturer's approved installer or applicator is an understood part of Specifications and only approved installer or applicator is to provide on-site Work where specified manufacturer has on-going program of approving (i.e. certifying, bonding, re-warranting) installers or applicators. Newly established relationships between a manufacturer and an installer or applicator who does not have other approved applicator work in progress or completed is not approved for this Project.

# 3.05 MANUFACTURER'S RECOMMENDATIONS

All installations shall be in accordance with manufacturer's published recommendations and specific written directions of manufacturer's representative. Should Contract Documents differ from recommendations of manufacturer or directions of his representative, Contractor shall analyze differences, make recommendations to the District and the Architect in writing, and shall not proceed until interpretation or clarification has been issued by the District and/or the Architect.

### **DOCUMENT 01 45 00**

### QUALITY CONTROL

### PART 1 - GENERAL

### 1.01 RELATED DOCUMENTS AND PROVISIONS:

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions, including, without limitation, Inspector, Inspections and Tests, Uncovering of Work and Non-conforming of Work and Correction of Work;
- B. Special Conditions.

#### 1.02 RELATED CODES:

- A. The Work is governed by requirements of Title 24, California Code of Regulations ("CCR"), and the Contractor shall keep a copy of these available at the job Site for ready reference during construction.
- B. The Division of the State Architect ("DSA") shall be notified at or before the start of construction.

### 1.03 OBSERVATION AND SUPERVISION:

- A. The District and Architect or their appointed representatives will review the Work and the Contractor shall provide facilities and access to the Work at all times as required to facilitate this review. Administration by the Architect and any consulting Structural Engineer will be in accordance with applicable regulations, including, without limitation, CCR, Part 1, Title 24, Section 4-341.
- B. One or more Project Inspector(s) approved by DSA and employed by or in contract with the District, referred to hereinafter as the "Project Inspector", will observe the work in accordance with CCR, Part 1, Title 24, Sections 4-333(b) and 4-342:
  - (1) The Project Inspector shall have access to the Work wherever it is in preparation or progress for ascertaining that the Work is in accordance with the Contract Documents and all applicable code sections. The Contractor shall provide facilities and access as required and shall provide assistance for sampling or measuring materials.
  - (2) The Project Inspector will notify the District and Architect and call the attention of the Contractor to any observed failure of Work or material to conform to Contract Documents.
  - (3) The Project Inspector shall observe and monitor all testing and inspection activities required.

The Contractor shall conform with all applicable laws as indicated in the Contract Documents, including, without limitation, to CCR, Part 1, Title 24, Section 4-343. The Contractor shall supervise and direct the Work and maintain a competent superintendent on the job who is authorized to act in all matters pertaining to the Work. The Contractor's superintendent shall also inspect all materials, as they arrive, for compliance with the Contract Documents. Contractor shall reject defective Work or materials immediately upon delivery or failure of the Work or material to comply with the Contract Documents. The Contractor shall submit verified reports as indicated in the Contract Documents, including, without limitation, the Specifications and as required by Part 1, Title 24, Section 4-336.

### 1.04 TESTING AGENCIES:

- A. Testing agencies and tests shall be in conformance with the General Documents and the requirements of Part 1, Title 24, Section 4- 335.
- B. Testing and inspection in connection with earthwork shall be under the direction of the District's consulting soils engineer, if any, referred to hereinafter as the "Soils Engineer."
- C. Testing and inspection of construction materials and workmanship shall be performed by a qualified laboratory, referred to hereinafter as the "Testing Laboratory." The Testing Laboratory shall be under direction of an engineer registered in the State of California, shall conform to requirements of ASTM E329, and shall be employed by or in contract with the District.

### 1.05 TESTS AND INSPECTIONS:

- A. The Contractor shall be responsible for notifying the District and Project Inspector of all required tests and inspections. Contractor shall notify the District and Project Inspector at least seventy-two hours (72) hours in advance of performing any Work requiring testing or inspection.
- B. The Contractor shall provide access to Work to be tested and furnish incidental labor, equipment, and facilities to facilitate all inspections and tests.
- C. The District will pay for first inspections and tests required by the "CCR", and other inspections or tests that the District and/or the Architect may direct to have made, including the following principal items:
  - (1) Additional tests directed by the District that establish that materials and installation comply with the Contract Documents.
- D. The District may at its discretion, pay and back charge the Contractor for:
  - (1) Retests or re-inspections, if required, and tests or inspections required due to Contractor error or lack of required identifications of material.
  - (2) Uncovering of work in accordance with Contract Documents.
  - (3) Testing done on weekends, holidays, and overtime will be chargeable to the Contractor for the overtime portion.

- (4) Testing done off Site.
- E. Testing and inspection reports and certifications:
  - (1) If initially received by Contractor, Contractor shall provide to each of the following a copy of the agency or laboratory report of each test or inspection or certification.
    - a. The District;
    - b. The Construction Manager, if any;
    - c. The Architect;
    - d. The Consulting Engineer, if any;
    - e. Other engineers on the Project, as appropriate;
    - f. The Project Inspector; and
    - g. The Contractor.
  - (2) When the test or inspection is one required by the CCR, a copy of the report shall also be provided to the DSA.

PART 2 - PRODUCTS Not Used

PART 3 - EXECUTION Not Used.

### **DOCUMENT 01 50 00**

## **TEMPORARY FACILITIES AND CONTROLS**

### PART 1 - GENERAL

### 1.01 RELATED DOCUMENTS AND PROVISIONS:

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions:
- B. Special Conditions;
- C. Site Standards.

### 1.02 TEMPORARY UTILITIES:

- A. Electric Power and Lighting
  - (1) Contractor will pay for power during the course of the Work. To the extent power is available in the building(s) or on the Site, Contractor may use the District's existing utilities by making prearranged payments to the District for the utilities used by Contractor and all Subcontractors. Contractor shall be responsible for providing temporary facilities required to deliver that power service from its existing location in the building(s) or on the Site to point of intended use.
  - (2) Contractor shall verify characteristics of power available in building(s) or on the Site. Contractor shall take all actions required to make modifications where power of higher voltage or different phases of current are required. Contractor shall be fully responsible for providing that service and shall pay all costs required therefor.
  - (3) Contractor shall furnish, wire for, install, and maintain temporary electrical lights wherever it is necessary to provide illumination for the proper performance and/or observation of the Work: a minimum of 20 foot-candles for rough work and 50 foot-candles for finish work.
  - (4) Contractor shall be responsible for maintaining existing lighting levels in the project vicinity should temporary outages or service interruptions occur.

### B. Heat and Ventilation

- (1) Contractor shall provide temporary heat to maintain environmental conditions to facilitate progress of the Work, to meet specified minimum conditions for the installation and curing of materials, and to protect materials and finishes from damage due to improper temperature and humidity conditions. Portable heaters shall be standard units complete with controls.
- (2) Contractor shall provide forced ventilation and dehumidification, as required, of enclosed areas for proper installation and curing of materials, to disperse humidity, and to prevent hazardous accumulations of dust, fumes, vapors, and gases.
- (3) Contractor shall pay the costs of installation, maintenance, operation, and removal of temporary heat and ventilation, including costs for fuel consumed, required for the performance of the Work.

## C. Water

- (1) Contractor will pay for water during the course of the Work. To the extent water is then available in the building(s) or on the Site, Contractor may use the District's existing utilities by making prearranged payments to the District for the utilities used by Contractor and all Subcontractors. Contractor shall be responsible for providing temporary facilities required to deliver such utility service from its existing location in the building(s) or on the Site to point of intended use.
- (2) Contractor shall use backflow preventers on water lines at point of connection to District's water supply. Backflow preventers shall comply with requirements of Uniform Plumbing Code.
- (3) Contractor shall make potable water available for human consumption.

## D. Sanitary Facilities

- (1) Contractor shall provide sanitary temporary facilities in no fewer numbers than required by law and such additional facilities as may be directed by the Inspector for the use of all workers. The facilities shall be maintained in a sanitary condition at all times and shall be left at the Site until removal is directed by the Inspector or Contractor completes all other work at the Site.
- (2) Use of toilet facilities in the Work under construction shall not be permitted except by consent of the Inspector and the District.

# E. Telephone Service

- (1) Contractor shall arrange with local telephone service company for telephone service for the performance of the Work. Contractor shall, at a minimum, provide in its field office one line for telephone and one line for fax machine.
- (2) Contractor shall pay the costs for telephone and fax lines installation, maintenance, service, and removal.

## F. Fire Protection:

- (1) Contractor shall provide and maintain fire extinguishers and other equipment for fire protection. Such equipment shall be designated for use for fire protection only and shall comply with all requirements of the California Fire, State Fire Marshall and/or its designee.
- (2) Where on-site welding and burning of steel is unavoidable, Contractor shall provide protection for adjacent surfaces.

### G. Trash Removal:

- (1) Contractor shall provide trash removal on a timely basis.
- H. Temporary Facilities:
  - (1) NONE

# 1.03 CONSTRUCTION AIDS:

- A. Plant and Equipment:
  - (1) Contractor shall furnish, operate, and maintain a complete plant for fabricating, handling, conveying, installing, and erecting materials and equipment; and for conveyances for transporting workmen. Include elevators, hoists, debris chutes, and other equipment, tools, and appliances necessary for performance of the Work.
  - (2) Contractor shall maintain plant and equipment in safe and efficient operating condition. Damages due to defective plant and equipment, and uses made thereof, shall be repaired by Contractor at no expense to the District.
- B. None of the District's tools and equipment shall be used by Contractor for the performance of the Work.

## 1.04 BARRIERS AND ENCLOSURES:

A. Contractor shall obtain the District's written permission for locations and types of temporary barriers and enclosures, including fire-rated materials proposed for use, prior to their installation.

- B. Contractor shall provide and maintain temporary enclosures to prevent public entry and to protect persons using other buildings and portions of the Site and/or Premises, the public, and workers. Contractor shall also protect the Work and existing facilities from the elements, and adjacent construction and improvements, persons, and trees and plants from damage and injury from demolition and construction operations.
- C. Contractor shall provide site access to existing facilities for persons using other buildings and portions of the Site, the public, and for deliveries and other services and activities.
- D. Tree and Plant Protection:
  - (1) Contractor shall preserve and protect existing trees and plants on the Premises that are not designated or required to be removed, and those adjacent to the Premises.
  - (2) Contractor shall provide barriers to a minimum height of 4'-0" around drip line of each tree and plant, around each group of trees and plants, as applicable, in the proximity of demolition and construction operations.
  - (3) Contractor shall not park trucks, store materials, perform Work or cross over landscaped areas. Contractor shall not dispose of paint thinners, water from cleaning, plastering or concrete operations, or other deleterious materials in landscaped areas, storm drain systems, or sewers. Plant materials damaged as a result of the performance of the Work shall, at the option of the District and at Contractor's expense, either be replaced with new plant materials equal in size to those damaged or by payment of an amount representing the value of the damaged materials as determined by the District.
  - (4) Contractor shall remove soil that has been contaminated during the performance of the Work by oil, solvents, and other materials which could be harmful to trees and plants, and replace with good soil, at Contractor's expense.
  - (5) Excavation Around Trees:
    - (a) Excavation within drip lines of trees shall be done only where absolutely necessary and with written permission from the District.
    - (b) Where trenching for utilities is required within drip lines, tunneling under and around roots shall be by hand digging and shall be approved by the District. Main lateral roots and taproots shall not be cut. All roots 2 inches in diameter and larger shall be tunneled under and heavily wrapped with wet burlap so as to prevent scarring or excessive drying. Smaller roots that interfere with installation of new work may be cut

- with prior approval by the District. Roots must first be cut with a Vermeer, or equivalent, root cutter prior to any trenching.
- (c) Where excavation for new construction is required within drip line of trees, hand excavation shall be employed to minimize damage to root system. Roots shall be relocated in backfill areas wherever possible. If encountered immediately adjacent to location of new construction, roots shall be cut approximately 6 inches back from new construction.
- (d) Approved excavations shall be carefully backfilled with the excavated materials approved for backfilling. Backfill shall conform to adjacent grades without dips, sunken areas, humps, or other surface irregularities. Do not use mechanical equipment to compact backfill. Tamp carefully using hand tools, refilling and tamping until Final Acceptance as necessary to offset settlement.
- (e) Exposed roots shall not be allowed to dry out before permanent backfill is placed. Temporary earth cover shall be provided, or roots shall be wrapped with four layers of wet, untreated burlap and temporarily supported and protected from damage until permanently relocated and covered with backfill.
- (f) Accidentally broken roots should be sawed cleanly 3 inches behind ragged end.

## 1.05 SECURITY:

The Contractor shall be responsible for project security for materials, tools, equipment, supplies, and completed and partially completed Work.

### 1.06 TEMPORARY CONTROLS:

- A. Noise Control
  - (1) Contractor acknowledges that adjacent facilities may remain in operation during all or a portion of the Work period, and it shall take all reasonable precautions to minimize noise as required by applicable laws and the Contract Documents.
  - (2) Notice of proposed noisy operations, including without limitation, operation of pneumatic demolition tools, concrete saws, and other equipment, shall be submitted to the District a minimum of forty-eight (48) hours in advance of their performance.
- B. Noise and Vibration
  - (1) Equipment and impact tools shall have intake and exhaust mufflers.

(2) Contractor shall cooperate with District to minimize and/or cease the use of noisy and vibratory equipment if that equipment becomes objectionable by its longevity.

## C. Dust and Dirt

- (1) Contractor shall conduct demolition and construction operations to minimize the generation of dust and dirt, and prevent dust and dirt from interfering with the progress of the Work and from accumulating in the Work and adjacent areas including, without limitation, occupied facilities.
- (2) Contractor shall periodically water exterior demolition and construction areas to minimize the generation of dust and dirt.
- (3) Contractor shall ensure that all hauling equipment and trucks carrying loads of soil and debris shall have their loads sprayed with water or covered with tarpaulins, and as otherwise required by local and state ordinance.
- (4) Contractor shall prevent dust and dirt from accumulating on walks, roadways, parking areas, and planting, and from washing into sewer and storm drain lines.

### D. Water

Contractor shall not permit surface and subsurface water, and other liquids, to accumulate in or about the vicinity of the Premises. Should accumulation develop, Contractor shall control the water or other liquid, and suitably dispose of it by means of temporary pumps, piping, drainage lines, troughs, ditches, dams, or other methods.

## E. Pollution

- (1) No burning of refuse, debris, or other materials shall be permitted on or in the vicinity of the Premises.
- (2) Contractor shall comply with applicable regulatory requirements and anti-pollution ordinances during the conduct of the Work including, without limitation, demolition, construction, and disposal operations.

# F. Lighting

(1) If portable lights are used after dark, all light must be located so as not to direct light into neighboring property.

## 1.07 JOB SIGN(S):

A. General:

- (1) Contractor shall provide and maintain a Project identification sign with the design, text, and colors designated by the District and/or the Architect; locate sign as approved by the District.
- (2) Signs other than the specified Project sign and or signs required by law, for safety, or for egress, shall not be permitted, unless otherwise approved in advance by the District.

## B. Materials:

- (1) Structure and Framing: Structurally sound, new or used wood or metal; wood shall be nominal 3/4-inch exterior grade plywood.
- (2) Sign Surface: Minimum 3/4-inch exterior grade plywood.
- (3) Rough Hardware: Galvanized.
- (4) Paint: Exterior quality, of type and colors selected by the District and/or the Architect.

# C. Fabrication:

- (1) Contractor shall fabricate to provide smooth, even surface for painting.
- (2) Size: 4'-0" x 8'-0", unless otherwise indicated.
- (3) Contractor shall paint exposed surfaces of supports, framing, and surface material with exterior grade paint: one coat of primer and one coat of finish paint.
- (4) Text and Graphics: As indicated.

## 1.08 PUBLICITY RELEASES:

A. Contractor shall not release any information, story, photograph, plan, or drawing relating information about the Project to anyone, including press and other public communications medium, including, without limitation, on website(s).

PART 2 - PRODUCTS Not used.

**PART 3 – EXECUTION** Not used.

#### **DOCUMENT 01 50 13**

# **CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL**

## **PART 1 - GENERAL**

### 1.01 RELATED DOCUMENTS AND PROVISIONS:

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions:
- B. Special Conditions;
- C. Document 01 50 00.

# 1.02 SECTION INCLUDES:

- A. Administrative and procedural requirements for the following:
  - (1) Salvaging non-hazardous construction waste.
  - (2) Recycling non-hazardous construction waste.
  - (3) Disposing of non-hazardous construction waste.

# 1.03 **DEFINITIONS**:

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

### 1.04 PERFORMANCE REQUIREMENTS:

A. General: Develop waste management plan that results in end-of Project rates for salvage/recycling of fifty percent (50%) by weight (or by volume, but not a combination) of total waste generated by the Work.

### 1.05 SUBMITTALS:

- A. Waste Management Plan: Submit waste management plan within 30 days of date established for commencement of the Work.
- B. Waste Reduction Progress Reports: Concurrent with each Application for Payment, submit copies of report. Include the following information:
  - (1) Material category.
  - (2) Generation point of waste.
  - (3) Total quantity of waste in tons or cubic yards.
  - (4) Quantity of waste salvaged, both estimated and actual in tons or cubic yards.
  - (5) Quantity of waste recycled, both estimated and actual in tons or cubic yards.
  - (6) Total quantity of waste recovered (salvaged plus recycled) in tons or cubic yards.
  - (7) Total quantity of waste recovered (salvaged plus recycled) as a percentage of total waste.
- C. Waste Reduction Calculations: Before request for final payment, submit copies of calculated end-of-Project rates for salvage, recycling, and disposal as a percentage of total waste generated by the Work.
- D. Records of Donations: Indicate receipt and acceptance of salvageable waste donated to individuals and organizations. Indicate whether organization is tax exempt.
- E. Records of Sales: Indicate receipt and acceptance of salvageable waste sold to individuals and organizations. Indicate whether organization is tax exempt.
- F. Recycling and Processing Facility Records: Indicate receipt and acceptance of recyclable waste by recycling and processing facilities licensed to accept them. Include manifests, weight tickets, receipts, and invoices.

- G. Landfill and Incinerator Disposal Records: Indicate receipt and acceptance of waste by landfills and incinerator facilities licensed to accept them. Include manifests, weight tickets, receipts, and invoices.
- H. CHPS Submittal: CHPS letter template for Credit ME2.0 and ME2.1, signed by Contractor, tabulating total waste material, quantities diverted and means by which it is diverted, and statement that requirements for the credit have been met.
- I. Qualification Data: For Waste Management Coordinator.
- J. Statement of Refrigerant Recovery: Signed by refrigerant recovery technician responsible for recovering refrigerant, stating that all refrigerant that was present was recovered and that recovery was performed according to EPA regulations. Include name and address of technician and date refrigerant was recovered.
- K. Submittal procedures and quantities are specified in Document 01300.

## 1.06 QUALITY ASSURANCE:

- A. Waste Management Coordinator Qualifications: LEED Accredited Professional by U.S. Green Building Council.
- B. Regulatory Requirements: Comply with hauling and disposal regulations of authorities having jurisdiction.
- C. Waste Management Conference: Conduct conference at Project site to comply with requirements. Review methods and procedures related to waste management including, but not limited to, the following:
  - (1) Review and discuss waste management plan including responsibilities of Waste Management Coordinator.
  - (2) Review requirements for documenting quantities of each type of waste and its disposition.
  - (3) Review and finalize procedures for materials separation and verify availability of containers and bins needed to avoid delays.
  - (4) Review procedures for periodic waste collection and transportation to recycling and disposal facilities.
  - (5) Review waste management requirements for each trade.

### 1.07 WASTE MANAGEMENT PLAN:

- A. General: Develop plan consisting of waste identification, waste reduction work plan, and cost/revenue analysis. Indicate quantities by weight or volume, but use same units of measure throughout waste management plan.
- B. Waste Identification: Indicate anticipated types and quantities of site-clearing and construction waste generated by the Work. Include estimated quantities and assumptions for estimates.
- C. Waste Reduction Work Plan: List each type of waste and whether it will be salvaged, recycled, or disposed of in landfill or incinerator. Include points of waste generation, total quantity of each type of waste, quantity for each means of recovery, and handling and transportation procedures.
  - (1) Salvaged Materials for Reuse: For materials that will be salvaged and reused in this Project, describe methods for preparing salvaged materials before incorporation into the Work.
  - (2) Salvaged Materials for Sale: For materials that will be sold to individuals and organizations, include list of their names, addresses, and telephone numbers.
  - (3) Salvaged Materials for Donation: For materials that will be donated to individuals and organizations, include list of their names, addresses, and telephone numbers.
  - (4) Recycled Materials: Include list of local receivers and processors and type of recycled materials each will accept. Include names, addresses, and telephone numbers.
  - (5) Disposed Materials: Indicate how and where materials will be disposed of. Include name, address, and telephone number of each landfill and incinerator facility.
  - (6) Handling and Transportation Procedures: Include method that will be used for separating recyclable waste including sizes of containers, container labeling, and designated location on Project site where materials separation will be located.

PART 2 - PRODUCTS Not Used.

## **PART 3 - EXECUTION**

## 3.01 PLAN IMPLEMENTATION:

- A. General: Implement approved waste management plan. Provide handling, containers, storage, signage, transportation, and other items as required to implement waste management plan during the entire duration of the Contract.
  - (1) Comply with Document 01500 for operation, termination, and removal requirements.
- B. Waste Management Coordinator: Engage a waste management coordinator to be responsible for implementing, monitoring, and reporting status of waste management work plan. Coordinator shall be present at Project site full time for duration of Project.
- C. Training: Train workers, subcontractors, and suppliers on proper waste management procedures, as appropriate for the Work occurring at Project site.
  - (1) Distribute waste management plan to everyone concerned within 3 days of submittal return.
  - (2) Distribute waste management plan to entities when they first begin work on site. Review plan procedures and locations established for salvage, recycling, and disposal.
- D. Site Access and Temporary Controls: Conduct waste management operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.
  - (1) Designate and label specific areas of Project site necessary for separating materials that are to be salvaged, recycled, reused, donated, and sold.
  - (2) Comply with Document 01500 for controlling dust and dirt, environmental protection, and noise control.

## 3.02 RECYCLING CONSTRUCTION WASTE:

- A. General: Recycle paper and beverage containers used by on-site workers.
- B. Recycling Incentives: Revenues, savings, rebates, tax credits, and other incentives received for recycling waste materials shall accrue to the Contractor.
- C. Procedures: Separate recyclable waste from other waste materials, trash, and debris. Separate recyclable waste by type at Project site to the maximum extent practical.

- (1) Provide appropriately marked containers or bins for controlling recyclable waste until they are removed from Project Site. Include list of acceptable and unacceptable materials at each container and bin.
  - (a) Inspect containers and bins for contamination and remove contaminated materials if found.
- (2) Stockpile processed materials on site without intermixing with other materials. Place, grade, and shape stockpiles to drain surface water. Cover to prevent windblown dust.
- (3) Stockpile materials away from construction area. Do not store within drip line of remaining trees.
- (4) Store components off the ground and protect from the weather.
- (5) Remove recyclable waste off District property and transport to recycling receiver or processor.

## D. Packaging:

- (1) Cardboard and Boxes: Break down packaging into flat sheets. Bundle and store in a dry location.
- (2) Polystyrene Packaging: Separate and bag material.
- (3) Pallets: As much as possible, require deliveries using pallets to remove pallets from Project Site. For pallets that remain on Site, break down pallets into component wood pieces and comply with requirements for recycling wood.
- (4) Crates: Break down crates into component wood pieces and comply with requirements for recycling wood.
- E. Site-Clearing Wastes: Chip brush, branches, and trees on site.

### F. Wood Materials:

- (1) Clean Cut-Offs of Lumber: Grind or chip into small pieces.
- (2) Clean Sawdust: Bag sawdust that does not contain painted or treated wood.
- G. Gypsum Board: Stack large clean pieces on wood pallets and store in a dry location.
  - (1) Clean Gypsum Board: Grind scraps of clean gypsum board using small mobile chipper or hammer mill. Screen out paper after grinding.

# 3.03 DISPOSAL OF WASTE:

- A. General: Except for items or materials to be salvaged, recycled, or otherwise reused, remove waste materials from Project Site and legally dispose of them in a landfill or incinerator acceptable to authorities having jurisdiction.
  - (1) Except as otherwise specified, do not allow waste materials that are to be disposed of accumulate on site.
  - (2) Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
- B. Burning: Do not burn waste materials.
- C. Disposal: Transport waste materials off District property and legally dispose of them.

**END OF SECTION** 

## **DOCUMENT 01 64 00**

## **OWNER-FURNISHED PRODUCTS**

## PART 1 - GENERAL

### 1.01 RELATED DOCUMENTS AND PROVISIONS:

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions:
- B. Special Conditions; and
- C. Materials and Equipment.

## 1.02 SECTION INCLUDES:

- A. Requirements for the following:
  - (1) Installing Owner-furnished materials and equipment.
  - (2) Providing necessary utilities, connections and rough-ins.

## 1.03 DEFINITIONS

- A. Owner: District, who is providing/furnishing materials and equipment.
- B. Installer Contactor: Contractor, who is installing the materials and equipment furnished by the Owner.

# 1.04 PRODUCT DELIVERY, STORAGE, AND HANDLING:

- A. Receive, store and handle products in accordance with the manufacturer's instructions.
- B. Protect equipment items as required to prevent damage during storage and construction.

## PART 2 - PRODUCTS

## 2.01 GENERAL PRODUCT REQUIREMENTS:

- A. Installer Contractor's Responsibilities:
  - (1) Verify mounting and utility requirements for Owner-furnished materials and equipment items.

- (2) Provide mounting and utility rough in for all items where required.
  - (a) Rough in locations, sizes, capacities, and similar type items shall be as indicated and required by product manufacturer.
- B. Owner and Installer Contractor(s) Responsibilities:
  - (1) Owner-Furnished/Contractor Installed ("OFCI"): Furnished by the Owner; installed by the Installer Contractor.
    - (a) General: Owner and Installer Contractor(s) will coordinate deliveries of materials and equipment to coincide with the construction schedule.
    - (b) Owner will furnish specified materials and equipment delivered to the site. Owner/vendor's representative shall be present on Site at the time of delivery to comply with the contract requirements and Specifications Section 01600, Materials and Equipment, Article 1.04.
    - (c) The Owner furnishing specified materials and equipment is responsible to provide manufacturer guarantees as required by the Contract to the Installer Contractor.
    - (d) The Installer Contractor shall:
      - 1) Review, verify and accept the approved manufacturer's submittal/Shop Drawings for all materials and equipment required to be installed by the Installer Contractor and furnished by the Owner. Any discrepancies, including but not limited to possible space conflicts, should be brought to the attention of the Project Manager and/or Program Manager, if applicable.
      - 2) Coordinate timely delivery. Installer Contractor shall receive materials and equipment at Site when delivered and give written receipt at time of delivery, noting visible defects or omissions; if such declaration is not given, the Installer Contractor shall assume responsibility for such defects and omissions.
      - 3) Store materials and equipment until ready for installation and protect from loss and damage. Installer Contractor is responsible for providing adequate storage space.
      - 4) Coordinate with other bid package contractors and field measurement to ensure complete installation.
      - 5) Uncrate, assemble, and set in place.
      - 6) Provide adequate supports.

- 7) Install materials and equipment in accordance with manufacturer's recommendations, instructions, and Shop Drawings, supplying labor and material required and making mechanical, plumbing, and electrical connections required to operate equipment.
- 8) Be certified by equipment manufacturer for installation of the specific equipment supplied by the Owner.
- 9) Provide anchorage and/or bracing as required for seismic restraint per Title 24, UBC Standard 27-11 and all other applicable codes.
- 10) Provide the contract-required warranty/guarantee for all work, materials/equipment and installation upon its completion and acceptance by the District. Guarantee includes all costs associated with the removal, shipping to and from the Site, and re-installation of any equipment found to be defective.
- C. Compatibility with Space and Service Requirements:
  - (1) Equipment items shall be compatible with space limitations indicated and as shown on the Contract Documents and specified in other sections of the Specifications.
  - (2) Modifications to equipment items required to conform to space limitations specified for rough in shall not cause additional cost to the District.
- D. Manufacturer's printed descriptions, specifications, and instructions shall govern the Work unless specifically indicated or specified otherwise.

## 2.02 FURNISHED MATERIALS AND EQUIPMENT

A. All furnished materials and equipment are indicated or scheduled on the Contract Documents.

## PART 3 - EXECUTION

# 3.01 INSTALLATION

- A. Install equipment items in accordance with the manufacturer's instructions.
- B. Set equipment items securely in place, rigidly or flexibly mounted in accordance with manufacturers' directions.
- C. Make electrical and mechanical connections as indicated and required.
- D. Touch-up and restore damaged or defaced finishes to the District's satisfaction.

# 3.02 CLEANING AND PROTECTION

- A. Repair or replace items not acceptable to the Architect.
- B. Upon completion of installation, clean equipment items in accordance with manufacturer's recommendations, and protect from damage until final acceptance of the Work by the District.

### SECTION 01 66 00

## PRODUCT DELIVERY, STORAGE AND HANDLING

### **PART 1 - GENERAL**

### 1.01 RELATED DOCUMENTS AND PROVISIONS

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions, including, without limitation, Site Access, Conditions and Requirements;
- B. Special Conditions.

# 1.02 PRODUCTS

- A. Products are as defined in the General Conditions.
- B. Contractor shall not use and/or reuse materials and/or equipment removed from existing Premises, except as specifically permitted by the Contract Documents.
- C. Contractor shall provide interchangeable components of the same manufacturer, for similar components.

## 1.03 TRANSPORTATION AND HANDLING

- A. Contractor shall transport and handle Products in accordance with manufacturer's instructions.
- B. Contractor shall promptly inspect shipments to confirm that Products comply with requirements, quantities are correct, and products are undamaged.
- C. Contractor shall provide equipment and personnel to handle Products by methods to prevent soiling, disfigurement, or damage.

# 1.04 STORAGE AND PROTECTION

- A. Contractor shall store and protect Products in accordance with manufacturer's instructions, with seals and labels intact and legible. Contractor shall store sensitive products in weather-tight, climate controlled enclosures.
- B. For exterior storage of fabricated Products, Contractor shall place on sloped supports, above ground.
- C. Contractor shall provide off-site storage and protection when Site does not permit on-site storage or protection.

- D. Contractor shall cover products subject to deterioration with impervious sheet covering and provide ventilation to avoid condensation.
- E. Contractor shall store loose granular materials on solid flat surfaces in a well-drained area and prevent mixing with foreign matter.
- F. Contractor shall provide equipment and personnel to store Products by methods to prevent soiling, disfigurement, or damage.
- G. Contractor shall arrange storage of Products to permit access for inspection and periodically inspect to assure Products are undamaged and are maintained under specified conditions.

PART 2 - PRODUCTS Not Used.

PART 3 - EXECUTION Not Used.

# **DOCUMENT 01 73 29**

### **CUTTING AND PATCHING**

### 1. PART 1 – GENERAL

### 1.01 RELATED DOCUMENTS AND PROVISIONS:

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions, including, without limitation, Inspector, Inspections, and Tests, Integration of Work, Nonconforming Work, and Correction of Work, and Uncovering Work;
- B. Special Conditions;
- C. Hazardous Materials Procedures and Requirements;
- D. Hazardous Materials Certification;
- E. Lead-Based Paint Certification;
- F. Imported Materials Certification.

### 1.02 CUTTING AND PATCHING:

- A. Contractor shall be responsible for all cutting, fitting, and patching, including associated excavation and backfill, required to complete the Work or to:
  - (1) Make several parts fit together properly.
  - (2) Uncover portions of Work to provide for installation of ill-timed Work.
  - (3) Remove and replace defective Work.
  - (4) Remove and replace Work not conforming to requirements of Contract Documents.
  - (5) Remove Samples of installed Work as specified for testing.
  - (6) Provide routine penetrations of non-structural surfaces for installation of piping and electrical conduit.
  - (7) Attaching new materials to existing remodeling areas including painting (or other finishes) to match existing conditions.
- B. In addition to Contract requirements, upon written instructions from the District, Contractor shall uncover Work to provide for observations of covered Work in accordance with the Contract Documents; remove samples of installed materials for testing as directed by District; and remove Work to provide for alteration of existing Work.

C. Contractor shall not cut or alter Work, or any part of it, in such a way that endangers or compromises the integrity of the Work, the Project, or work of others.

### 1.03 SUBMITTALS:

- A. Prior to any cutting or alterations that may affect the structural safety of Project, or work of others, and well in advance of executing such cutting or alterations, Contractor shall submit written notice to District pursuant to the applicable notice provisions of the Contract Documents, requesting consent to proceed with the cutting or alteration, including the following:
  - (1) The work of the District or other trades.
  - (2) Structural value or integrity of any element of Project.
  - (3) Integrity or effectiveness of weather-exposed or weather-resistant elements or systems.
  - (4) Efficiency, operational life, maintenance or safety of operational elements.
  - (5) Visual qualities of sight-exposed elements.
- B. Contractor's Request shall also include:
  - (1) Identification of Project.
  - (2) Description of affected Work.
  - (3) Necessity for cutting, alteration, or excavations.
  - (4) Affects of Work on District, other trades, or structural or weatherproof integrity of Project.
  - (5) Description of proposed Work:
    - (a) Scope of cutting, patching, alteration, or excavation.
    - (b) Trades that will execute Work.
    - (c) Products proposed to be used.
    - (d) Extent of refinishing to be done.
  - (6) Alternates to cutting and patching.
  - (7) Cost proposal, when applicable.
  - (8) The scheduled date the Contractor intends to perform the Work and the duration of time to complete the Work.

(9) Written permission of other trades whose Work will be affected.

## 1.04 QUALITY ASSURANCE:

- A. Contractor shall ensure that cutting, fitting, and patching shall achieve security, strength, weather protection, appearance for aesthetic match, efficiency, operational life, maintenance, safety of operational elements, and the continuity of existing fire ratings.
- B. Contractor shall ensure that cutting, fitting, and patching shall successfully duplicate undisturbed adjacent profiles, materials, textures, finishes, colors, and that materials shall match existing construction. Where there is dispute as to whether duplication is successful or has been achieved to a reasonable degree, the District's decision shall be final.

### 1.05 PAYMENT FOR COSTS:

- A. Cost caused by ill-timed or defective Work or Work not conforming to Contract Documents, including costs for additional services of the District, its consultants, including but not limited to the Construction Manager, the Architect, the Project Inspector(s), Engineers, and Agents, will be paid by Contractor and/or deducted from the Contract by the District.
- B. District shall only pay for cost of Work if it is part of the original Contract Price or if a change has been made to the contract in compliance with the provisions of the General Conditions. Cost of Work performed upon instructions from the District, other than defective or nonconforming Work, will be paid by District on approval of written Change Order. Contractor shall provide written cost proposals prior to proceeding with cutting and patching.

### PART 2 - PRODUCTS

# 2.01 MATERIALS:

- A. Contractor shall provide for replacement and restoration of Work removed. Contractor shall comply with the Contract Documents and with the Industry Standard(s), for the type of Work, and the Specification requirements for each specific product involved. If not specified, Contractor shall first recommend a product of a manufacturer or appropriate trade association for approval by the District.
- B. Materials to be cut and patched include those damaged by the performance of the Work.

### PART 3 - EXECUTION

## 3.01 INSPECTION:

A. Contractor shall inspect existing conditions of the Site and the Work, including elements subject to movement or damage during cutting and patching,

- excavating and backfilling. After uncovering Work, Contractor shall inspect conditions affecting installation of new products.
- B. Contractor shall report unsatisfactory or questionable conditions in writing to District as indicated in the General Conditions and shall proceed with Work as indicated in the General Conditions by District.

### 3.02 PREPARATION:

- A. Contractor shall provide shoring, bracing and supports as required to maintain structural integrity for all portions of the Project, including all requirements of the Project.
- B. Contractor shall provide devices and methods to protect other portions of Project from damage.
- C. Contractor shall, provide all necessary protection from weather and extremes of temperature and humidity for the Project, including without limitation, any work that may be exposed by cutting and patching Work. Contractor shall keep excavations free from water.

## 3.03 ERECTION, INSTALLATION AND APPLICATION:

- A. With respect to performance, Contractor shall:
  - (1) Execute fitting and adjustment of products to provide finished installation to comply with and match specified tolerances and finishes.
  - (2) Execute cutting and demolition by methods that will prevent damage to other Work, and provide proper surfaces to receive installation of repairs and new Work.
  - (3) Execute cutting, demolition excavating, and backfilling by methods that will prevent damage to other Work and damage from settlement.
- B. Contractor shall employ original installer or fabricator to perform cutting and patching for:
  - (1) Weather-exposed surfaces and moisture-resistant elements such as roofing, sheet metal, sealants, waterproofing, and other trades.
  - (2) Sight-exposed finished surfaces.
- C. Contractor shall execute fitting and adjustment of products to provide a finished installation to comply with specified products, functions, tolerances, and finishes as shown or specified in the Contract Documents including, without limitation, the Drawings and Specifications.
- D. Contractor shall fit Work airtight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces. Contractor shall conform to all Code requirements for penetrations or the Drawings and Specifications, whichever

- calls for a higher quality or more thorough requirement. Contractor shall maintain integrity of both rated and non-rated fire walls, ceilings, floors, etc.
- E. Contractor shall restore Work which has been cut or removed. Contractor shall install new products to provide completed Work in accordance with requirements of the Contract Documents and as required to match surrounding areas and surfaces.
- F. Contractor shall refinish all continuous surfaces to nearest intersection as necessary to match the existing finish to any new finish.

### **DOCUMENT 01 76 00**

# **ALTERATION PROJECT PROCEDURES**

### PART 1 - GENERAL

### 1.01 RELATED DOCUMENTS AND PROVISIONS:

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions, including, without limitation, Integration of Work, Purchase of Materials and Equipment, Uncovering of Work and Nonconforming Work and Correction of Work and Trenches;
- B. Special Conditions.

### **PART 2 - PRODUCTS**

## 2.01 PRODUCTS FOR PATCHING AND EXTENDING WORK:

- A. New Materials: As specified in the Contract Documents including, without limitation, in the Specifications, Contractor shall match existing products, conditions, and work for patching and extending work.
- B. Type and Quality of Existing Products: Contractor shall determine by inspection, by testing products where necessary, by referring to existing conditions and to the Work as a standard.

### **PART 3 - EXECUTION**

# 3.01 EXAMINATION:

- A. Contractor shall verify that demolition is complete and that areas are ready for installation of new Work.
- B. By beginning restoration Work, Contract or acknowledges and accepts the existing conditions.

## 3.02 PREPARATION:

- A. Contractor shall cut, move, or remove items as necessary for access to alterations and renovation Work. Contractor shall replace and restore these at completion.
- B. Contractor shall remove unsuitable material not as salvage unless otherwise indicated in the Contract Documents. Unsuitable material may include, without limitation, rotted wood, corroded metals, and deteriorated masonry and concrete. Contractor shall replace materials as specified for finished Work.

- C. Contractor shall remove debris and abandoned items from all areas of the Site and from concealed spaces.
- D. Contractor shall prepare surface and remove surface finishes to provide for proper installation of new Work and finishes.
- E. Contractor shall close openings in exterior surfaces to protect existing work from weather and extremes of temperature and humidity. Contractor shall insulate ductwork and piping to prevent condensation in exposed areas. Contractor shall insulate building cavities for thermal and/or acoustical protection, as detailed.

## 3.03 INSTALLATION:

- A. Contractor shall coordinate Work of all alternations and renovations to expedite completion and to accommodate District occupancy.
- B. Designated Areas and Finishes: Contractor shall complete all installations in all respects, including operational, mechanical work and electrical work.
- C. Contractor shall remove, cut, and patch Work in a manner to minimize damage and to provide a means of restoring Products and finishes to original or specified condition.
- D. Contractor shall refinish visible existing surfaces to remain in renovated rooms and spaces, to specified condition for each material, with a neat transition to adjacent finishes.
- E. Contractor shall install products as specified in the Contract Documents, including without limitation, the Specifications.

### 3.04 TRANSITIONS:

- A. Where new Work abuts or aligns with existing, Contractor shall perform a smooth and even transition. Patched Work must match existing adjacent work in texture and appearance.
- B. When finished surfaces are cut so that a smooth transition with new Work is not possible, Contractor shall terminate existing surface along a straight line at a natural line of division and make a recommendation for resolution to the District and the Architect for review and approval.

### 3.05 ADJUSTMENTS:

- A. Where removal of partitions or walls results in adjacent spaces becoming one, Contractor shall rework floors, walls, and ceilings to a smooth plane without breaks, steps, or bulkheads.
- B. Where a change of plane of 1/4 inch or more occurs, Contractor shall submit a recommendation for providing a smooth transition to the District and the Architect for review and approval.

- C. Contractor shall trim existing doors as necessary to clear new floor finish and refinish trim as required.
- D. Contractor shall fit Work at penetrations of surfaces.

### 3.06 REPAIR OF DAMAGED SURFACES:

- A. Contractor shall patch or replace portions of existing surfaces which are damaged, lifted, discolored, or showing other imperfections.
- B. Contractor shall repair substrate prior to patching finish.

# 3.07 CULTIVATED AREAS AND OTHER SURFACE IMPROVEMENTS:

- A. Cultivated or planted areas and other surface improvements which are damaged by actions of the Contractor shall be restored by Contractor to their original condition or better, where indicated.
- B. Contractor shall protect and replace, if damaged, all existing guard posts, barricades, and fences.
- C. Contractor shall give special attention to avoid damaging or killing trees, bushes and/or shrubs on the Premises and/or identified the Contract Documents, including without limitation, the Drawings.

## 3.08 FINISHES:

- A. Contractor shall finish surfaces as specified in the Contract Documents, including without limitations, the provisions of all Divisions of the Specifications.
- B. Contractor shall finish patches to produce uniform finish and texture over entire area. When finish cannot be matched, Contractor shall refinish entire surface to nearest intersections.

# 3.09 CLEANING:

A. Contractor shall continually clean the Site and the Premises as indicated in the Contract Documents, including without limitation, the provisions in the General Conditions and the Specifications regarding cleaning.

END OF DOCUMENT

# **DOCUMENT 01 77 00**

## CONTRACT CLOSEOUT AND FINAL CLEANING

### **PART 1 - GENERAL**

### 1.01 RELATED DOCUMENTS AND PROVISIONS

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions, including, without limitation, Completion of Work;
- B. Special Conditions;
- C. Temporary Facilities and Controls.

### 1.02 CLOSEOUT PROCEDURES

Contractor shall comply with all closeout provisions as indicated in the General Conditions.

# 1.03 FINAL CLEANING

- A. Contractor shall execute final cleaning prior to final inspection.
- B. Contractor shall clean interior and exterior glass and surfaces exposed to view; remove temporary labels, tape, stains, and foreign substances, polish transparent and glossy surfaces, wax and polish new vinyl floor surfaces, vacuum carpeted and soft surfaces.
- C. Contractor shall clean equipment and fixtures to a sanitary condition.
- D. Contractor shall replace filters of operating equipment.
- E. Contractor shall clean debris from roofs, gutters, down spouts, and drainage systems.
- F. Contractor shall clean Site, sweep paved areas, and rake clean landscaped surfaces.
- G. Contractor shall remove waste and surplus materials, rubbish, and construction facilities from the Site.

## 1.04 ADJUSTING

Contractor shall adjust operating products and equipment to ensure smooth and unhindered operation.

# 1.05 RECORD DOCUMENTS AND SHOP DRAWINGS

- A. Contractor shall legibly mark each item to record actual construction, including:
  - (1) Measured depths of foundation in relation to finish floor datum.
  - (2) Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permit surface improvements.
  - (3) Measured locations of internal utilities and appurtenances concealed in construction, referenced to visible and accessible features of the Work.
  - (4) Field changes of dimension and detail.
  - (5) Details not on original Contract Drawings
  - (6) Changes made by modification(s).
  - (7) References to related Shop Drawings and modifications.
- B. Contractor will provide one set of Record Drawings to District.
- C. Contractor shall submit all required documents to District and/or Architect prior to or with its final Application for Payment.

## 1.06 INSTRUCTION OF DISTRICT PERSONNEL

- A. Before final inspection, at agreed upon times, Contractor shall instruct District's designated personnel in operation, adjustment, and maintenance of products, equipment, and systems.
- B. For equipment requiring seasonal operation, Contractor shall perform instructions for other seasons within six months.
- C. Contractor shall use operation and maintenance manuals as basis for instruction. Contractor shall review contents of manual with personnel in detail to explain all aspects of operation and maintenance.
- D. Contractor shall prepare and insert additional data in Operation and Maintenance Manual when need for such data becomes apparent during instruction.
- E. Contractor shall use operation and maintenance manuals as basis for instruction. Contractor shall review contents of manual with personnel in detail to explain all aspects of operation and maintenance.

### 1.07 SPARE PARTS AND MAINTENANCE MATERIALS

- A. Contractor shall provide products, spare parts, maintenance, and extra materials in quantities specified in the Specifications and in Manufacturer's recommendations.
- B. Contractor shall provide District all required Operation and Maintenance Data.

PART 2 – PRODUCTS Not used.

**PART 3 – EXECUTION** Not used.

END OF DOCUMENT

# **DOCUMENT 01 78 23**

## **OPERATION AND MAINTENANCE DATA**

### PART 1 - GENERAL

### 1.01 RELATED DOCUMENTS AND PROVISIONS:

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions, including, without limitation, Completion of the Work;
- B. Special Conditions.

### 1.02 QUALITY ASSURANCE:

Contractor shall prepare instructions and data by personnel experienced in maintenance and operation of described products.

### 1.03 FORMAT:

- A. Contractor shall prepare data in the form of an instructional manual entitled "OPERATIONS AND MAINTENANCE MANUAL & INSTRUCTIONS" ("Manual").
- B. Binders: Contractor shall use commercial quality, 8-1/2 by 11 inch, three-side rings, with durable plastic covers; two inch maximum ring size. When multiple binders are used, Contractor shall correlate data into related consistent groupings.
- C. Cover: Contractor shall identify each binder with typed or printed title "OPERATION AND MAINTENANCE MANUAL & INSTRUCTIONS"; and shall list title of Project and identify subject matter of contents.
- D. Contractor shall arrange content by systems process flow under section numbers and sequence of Table of Contents of the Contract Documents.
- E. Contractor shall provide tabbed fly leaf for each separate product and system, with typed description of product and major component parts of equipment.
- F. Text: The content shall include Manufacturer's printed data, or typewritten data on 24 pound paper.
- G. Drawings: Contractor shall provide with reinforced punched binder tab and shall bind in with text; folding larger drawings to size of text pages.

# 1.04 CONTENTS, EACH VOLUME:

A. Table of Contents: Contractor shall provide title of Project; names, addresses, and telephone numbers of the Architect, any engineers, subconsultants, Subcontractor(s), and Contractor with name of responsible parties; and schedule of products and systems, indexed to content of the volume.

- B. For Each Product or System: Contractor shall list names, addresses, and telephone numbers of Subcontractor(s) and suppliers, including local source of supplies and replacement parts.
- C. Product Data: Contractor shall mark each sheet to clearly identify specific products and component parts, and data applicable to installation. Delete inapplicable information.
- D. Drawings: Contractor shall supplement product data to illustrate relations of component parts of equipment and systems, to show control and flow diagrams. Contractor shall not use Project Record Documents as maintenance drawings.
- E. Text: The Contractor shall include any and all information as required to supplement product data. Contractor shall provide logical sequence of instructions for each procedure, incorporating manufacturer's instructions.
- F. Warranties and Bonds: Contractor shall bind in one copy of each.

### 1.05 MANUAL FOR MATERIALS AND FINISHES:

- A. Building Products, Applied Materials, and Finishes: Contractor shall include product data, with catalog number, size, composition, and color and texture designations. Contractor shall provide information for re-ordering custom manufactured products.
- B. Instructions for Care and Maintenance: Contractor shall include Manufacturer's recommendations for cleaning agents and methods, precautions against detrimental agents and methods, and recommended schedule for cleaning and maintenance.
- C. Moisture Protection and Weather Exposed Products: Contractor shall include product data listing applicable reference standards, chemical composition, and details of installation. Contractor shall provide recommendations for inspections, maintenance, and repair.
- D. Additional Requirements: Contractor shall include all additional requirements as specified in the Specifications.
- E. Contractor shall provide a listing in Table of Contents for design data, with tabbed fly sheet and space for insertion of data.

# 1.06 MANUAL FOR EQUIPMENT AND SYSTEMS:

A. Each Item of Equipment and Each System: Contractor shall include description of unit or system, and component parts and identify function, normal operating characteristics, and limiting conditions. Contractor shall include performance curves, with engineering data and tests, and complete nomenclature, and commercial number of replaceable parts.

- B. Panelboard Circuit Directories: Contractor shall provide electrical service characteristics, controls, and communications.
- C. Contractor shall include color coded wiring diagrams as installed.
- D. Operating Procedures: Contractor shall include start-up, break-in, and routine normal operating instructions and sequences. Contractor shall include regulation, control, stopping, shut-down, and emergency instructions. Contractor shall include summer, winter, and any special operating instructions.
- E. Maintenance Requirements: Contractor shall include routine procedures and guide for trouble-shooting; disassembly, repair, and reassembly instructions; and alignment, adjusting, balancing, and checking instructions.
- F. Contractor shall provide servicing and lubrication schedule, and list of lubricants required.
- G. Contractor shall include manufacturer's printed operation and maintenance instructions.
- H. Contractor shall include sequence of operation by controls manufacturer.
- I. Contractor shall provide original manufacturer's parts list, illustrations, assembly drawings, and diagrams required for maintenance.
- J. Contractor shall provide control diagrams by controls manufacturer as installed.
- K. Contractor shall provide Contractor's coordination drawings, with color coded piping diagrams as installed.
- L. Contractor shall provide charts of valve tag numbers, with location and function of each valve, keyed to flow and control diagrams.
- M. Contractor shall provide list of original manufacturer's spare parts, current prices, and recommended quantities to be maintained in storage.
- N. Additional Requirements: Contractor shall include all additional requirements as specified in Specification(s).
- O. Contractor shall provide a listing in Table of Contents for design data, with tabbed fly sheet and space for insertion of data.

## 1.08 SUBMITTAL:

- A. Contractor shall submit to the District for review two (2) copies of preliminary draft or proposed formats and outlines of the contents of the Manual within thirty (30) days of Contractor's start of Work.
- B. For equipment, or component parts of equipment put into service during construction and to be operated by District, Contractor shall submit draft

- content for that portion of the Manual within ten (10) days after acceptance of that equipment or component.
- C. Contractor shall submit two (2) copies of a complete Manual in final form prior to final Application for Payment. Copy will be returned with Architect/Engineer comments. Contractor must revise the content of the Manual as required by District prior to District's approval of Contractor's final Application for Payment.
- D. Contractor must submit two (2) copies of revised Manual in final form within ten (10) days after final inspection.

PART 2 - PRODUCTS Not Used.

PART 3 - EXECUTION Not Used.

END OF DOCUMENT

# **DOCUMENT 01 78 36**

# **WARRANTIES**

# PART 1 - GENERAL

### 1.01 RELATED DOCUMENTS AND PROVISIONS

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions, including, without limitation, Warranty/Guarantee Information;
- B. Special Conditions.

### 1.02 FORMAT

- A. Binders: Contractor shall use commercial quality, 8-1/2 by 11 inch, three-side rings, with durable plastic covers; two inch maximum ring size.
- B. Cover: Contractor shall identify each binder with typed or printed title "WARRANTIES" and shall list title of Project.
- C. Table of Contents: Contractor shall provide title of Project; name, address, and telephone number of Contractor and equipment supplier, and name of responsible principal. Contractor shall identify each item with the number and title of the specific Specification, document, provision, or section in which the name of the product or work item is specified.
- D. Contractor shall separate each warranty with index tab sheets keyed to the Table of Contents listing, providing full information and using separate typed sheets as necessary. Contractor shall list each applicable and/or responsible Subcontractor(s), supplier(s), and/or manufacturer(s), with name, address, and telephone number of each responsible principal(s).

# 1.03 PREPARATION:

- A. Contractor shall obtain warranties, executed in duplicate by each applicable and/or responsible subcontractor(s), supplier(s), and manufacturer(s), within ten (10) days after completion of the applicable item or work. Except for items put into use with District's permission, Contractor shall leave date of beginning of time of warranty until the date of completion is determined.
- B. Contractor shall verify that documents are in proper form, contain full information, and are notarized, when required.
- C. Contractor shall co-execute submittals when required.
- D. Contractor shall retain warranties until time specified for submittal.

# 1.04 TIME OF SUBMITTALS:

- A. For equipment or component parts of equipment put into service during construction with District's permission, Contractor shall submit a draft warranty for that equipment or component within ten (10) days after acceptance of that equipment or component.
- B. Contractor shall submit for District approval all warranties and related documents within ten (10) days after date of completion. Contractor must revise the warranties as required by the District prior to District's approval of Contractor's final Application for Payment.
- C. For items of work delayed beyond date of completion, provide updated submittal within ten days after acceptance, listing the date of acceptance as start of warranty period.

PART 2 - PRODUCTS Not Used.

PART 3 - EXECUTION Not Used.

END OF DOCUMENT

### **DOCUMENT 01 78 39**

## **RECORD DOCUMENTS**

### PART 1 - GENERAL

### 1.01 RELATED DOCUMENTS AND PROVISIONS:

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions, including, without limitation, Documents on Work;
- B. Special Conditions.

### **PART 2 - RECORD DRAWINGS**

### 2.01 GENERAL:

- A. As indicated in the Contract Documents, the District will provide Contractor with one set of the original Contract Drawings.
- B. Contractor shall maintain at each Project Site one set of marked-up plans and shall transfer all changes and information to those marked-up plans, as often as required in the Contract Documents, but in no case less than once each month. Contractor shall submit to the Project Inspector one set of reproducible vellums of the Project Record Drawings ("As-Builts") showing all changes incorporated into the Work since the preceding monthly submittal. The As-Builts shall be available at the Project Site. The Contractor shall submit reproducible vellums at the conclusion of the Project following review of the blueline prints.
- C. Label and date each Record Drawing "RECORD DOCUMENT" in legibly printed letters.
- D. All deviations in construction, including but not limited to pipe and conduit locations and deviations caused by without limitation Change Orders, Construction Claim Directives, RFI's, and Addenda, shall be accurately and legibly recorded by Contractor.
- E. Locations and changes shall be done by Contractor in a neat and legible manner and, where applicable, indicated by drawing a "cloud" around the changed or additional information.

## 2.02 RECORD DRAWING INFORMATION:

- A. Contractor shall record the following information:
  - Locations of Work buried under or outside each building, including, without limitation, all utilities, plumbing and electrical lines, and conduits.

- (2) Actual numbering of each electrical circuit.
- (3) Locations of significant Work concealed inside each building whose general locations are changed from those shown on the Contract Drawings.
- (4) Locations of all items, not necessarily concealed, which vary from the Contract Documents.
- (5) Installed location of all cathodic protection anodes.
- (6) Deviations from the sizes, locations, and other features of installations shown in the Contract Documents.
- (7) Locations of underground work, points of connection with existing utilities, changes in direction, valves, manholes, catch basins, capped stubouts, invert elevations, etc.
- (8) Sufficient information to locate Work concealed in each building with reasonable ease and accuracy.

In some instances, this information may be recorded by dimension. In other instances, it may be recorded in relation to the spaces in the building near which it was installed.

- B. Contractor shall provide additional drawings as necessary for clarification.
- C. Contractor shall provide reproducible record drawings, made from final Shop Drawings marked "No Exceptions Taken" or "Approved as Noted."

## PART 3 - RECORD SPECIFICATIONS

## **3.01 GENERAL:**

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

# **PART 4 - MAINTENANCE OF RECORD DOCUMENTS**

### 4.01 GENERAL

- A. Contractor shall store Record Documents apart from documents used for construction as follows:
  - (1) Provide files and racks for storage of Record Documents.
  - (2) Maintain Record Documents in a clean, dry, legible condition and in good order.
- B. Do not use Record Documents for construction purposes.

# PART 5 - PRODUCTS Not Used.

END OF DOCUMENT

# **SECTION 024119**

## SELECTIVE STRUCTURE DEMOLITION

# PART 1 - GENERAL

### 1.1 SUMMARY

- A. This Section includes the following:
  - 1. Demolition and removal of selected portions of building or structure.
  - 2. Demolition and removal of selected site elements.
  - 3. Salvage of existing items to be reused or recycled.
- B. Related Sections include the following:
  - 1. Division 01 Section "Summary" for use of premises and Owner-occupancy requirements.
  - 2. Division 01 Section "Temporary Facilities and Controls" for temporary construction and environmental-protection measures for selective demolition operations.
  - 3. Division 01 Section "Cutting and Patching" for cutting and patching procedures.
  - 4. Division 01 Section "Construction Waste Management and Disposal" for disposal of demolished materials.

### 1.2 DEFINITIONS

- A. Remove: Detach items from existing construction and legally dispose of them off-site, unless indicated to be removed and salvaged or removed and reinstalled.
- B. Remove and Salvage: Detach items from existing construction and deliver them to Owner ready for reuse.
- C. Remove and Reinstall: Detach items from existing construction, prepare them for reuse, and reinstall them where indicated.
- D. Existing to Remain: Existing items of construction that are not to be removed and that are not otherwise indicated to be removed, removed and salvaged, or removed and reinstalled.

### 1.3 MATERIALS OWNERSHIP

A. Historic items, relics, and similar objects including, but not limited to, cornerstones and their contents, commemorative plaques and tablets, antiques, and other items of interest or value to Owner that may be encountered during selective demolition remain Owner's property. Carefully remove and salvage each item or object in a manner to prevent damage and deliver promptly to Owner.

# 1.4 SUBMITTALS

- A. Qualification Data: For demolition firm and professional engineer.
- B. Schedule of Selective Demolition Activities: Indicate the following:

- 1. Detailed sequence of selective demolition and removal work, with starting and ending dates for each activity.
- 2. Interruption of utility services. Indicate how long utility services will be interrupted.
- 3. Coordination for shutoff, capping, and continuation of utility services.
- 4. Means of protection for items to remain and items in path of waste removal from building.
- C. Inventory: After selective demolition is complete, submit a list of items that have been removed and salvaged.
- D. Predemolition Photographs: Show existing conditions of adjoining construction and site improvements, including finish surfaces, that might be misconstrued as damage caused by selective demolition operations. Submit before Work begins.
- E. Landfill Records: Indicate receipt and acceptance of hazardous wastes by a landfill facility licensed to accept hazardous wastes.
  - 1. Comply with submittal requirements in Division 01 Section "Construction Waste Management and Disposal."

# 1.5 QUALITY ASSURANCE

- A. Demolition Firm Qualifications: An experienced firm that has specialized in demolition work similar in material and extent to that indicated for this Project.
- B. Regulatory Requirements: Comply with governing EPA notification regulations before beginning selective demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.
- C. Standards: Comply with ANSI A10.6 and NFPA 241.
- D. Predemolition Conference: Conduct conference at Project site to comply with requirements in Division 01 Section "Project Management and Coordination." Review methods and procedures related to selective demolition including, but not limited to, the following:
  - 1. Inspect and discuss condition of construction to be selectively demolished.
  - 2. Review structural load limitations of existing structure.
  - 3. Review and finalize selective demolition schedule and verify availability of materials, demolition personnel, equipment, and facilities needed to make progress and avoid delays.
  - 4. Review requirements of work performed by other trades that rely on substrates exposed by selective demolition operations.
  - 5. Review areas where existing construction is to remain and requires protection.

### 1.6 PROJECT CONDITIONS

- A. Conditions existing at time of inspection for bidding purpose will be maintained by Owner as far as practical.
- B. Notify Architect of discrepancies between existing conditions and Drawings before proceeding with selective demolition.
- C. Hazardous Materials: It is unknown whether hazardous materials will be encountered in the Work.
  - 1. If materials suspected of containing hazardous materials are encountered, do not disturb; immediately notify Architect and Owner. Owner will remove hazardous materials under a separate contract.
- D. Storage or sale of removed items or materials on-site is not permitted.
- E. Utility Service: Maintain existing utilities indicated to remain in service and protect them against damage during selective demolition operations.
  - 1. Maintain fire-protection facilities in service during selective demolition operations.

# 1.7 WARRANTY

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

# PART 2 - PRODUCTS (Not Used)

# PART 3 - EXECUTION

# 3.1 EXAMINATION

- A. Verify that utilities have been disconnected and capped.
- B. Survey existing conditions and correlate with requirements indicated to determine extent of selective demolition required.
- C. Inventory and record the condition of items to be removed and reinstalled and items to be removed and salvaged.
- D. When unanticipated mechanical, electrical, or structural elements that conflict with intended function or design are encountered, investigate and measure the nature and extent of conflict. Promptly submit a written report to Architect.
- E. Engage a professional engineer to survey condition of building to determine whether removing any element might result in structural deficiency or unplanned collapse of any portion of structure or adjacent structures during selective demolition operations.

- F. Survey of Existing Conditions: Record existing conditions by use of preconstruction photographs.
  - 1. Before selective demolition or removal of existing building elements that will be reproduced or duplicated in final Work, make permanent record of measurements, materials, and construction details required to make exact reproduction.
- G. Perform surveys as the Work progresses to detect hazards resulting from selective demolition activities.

# 3.2 UTILITY SERVICES AND MECHANICAL/ELECTRICAL SYSTEMS

- A. Existing Services/Systems: Maintain services/systems indicated to remain and protect them against damage during selective demolition operations.
- B. Service/System Requirements: Locate, identify, disconnect, and seal or cap off indicated utility services and mechanical/electrical systems serving areas to be selectively demolished.
  - 1. Arrange to shut off indicated utilities with utility companies.
  - 2. If services/systems are required to be removed, relocated, or abandoned, before proceeding with selective demolition provide temporary services/systems that bypass area of selective demolition and that maintain continuity of services/systems to other parts of building.
  - 3. Cut off pipe or conduit in walls or partitions to be removed. Cap, valve, or plug and seal remaining portion of pipe or conduit after bypassing.
    - a. Where entire wall is to be removed, existing services/systems may be removed with removal of the wall.

# 3.3 PREPARATION

- A. Site Access and Temporary Controls: Conduct selective demolition and debris-removal operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.
  - 1. Comply with requirements for access and protection specified in Division 01 Section "Temporary Facilities and Controls."
- B. Temporary Facilities: Provide temporary barricades and other protection required to prevent injury to people and damage to adjacent buildings and facilities to remain.
  - 1. Provide protection to ensure safe passage of people around selective demolition area.
  - 2. Provide temporary weather protection, during interval between selective demolition of existing construction on exterior surfaces and new construction, to prevent water leakage and damage to structure and interior areas.
  - 3. Protect walls, ceilings, floors, and other existing finish work that are to remain or that are exposed during selective demolition operations.
  - 4. Cover and protect furniture, furnishings, and equipment that have not been removed.
  - 5. Comply with requirements for temporary enclosures, dust control, heating, and cooling specified in Division 01 Section "Temporary Facilities and Controls."
- C. Temporary Shoring: Provide and maintain shoring, bracing, and structural supports as required to preserve stability and prevent movement, settlement, or collapse of construction and finishes to remain, and to prevent unexpected or uncontrolled movement or collapse of construction being demolished.

1. Strengthen or add new supports when required during progress of selective demolition.

# 3.4 SELECTIVE DEMOLITION, GENERAL

- A. General: Demolish and remove existing construction only to the extent required by new construction and as indicated. Use methods required to complete the Work within limitations of governing regulations and as follows:
  - 1. Proceed with selective demolition systematically, from higher to lower level. Complete selective demolition operations above each floor or tier before disturbing supporting members on the next lower level.
  - 2. Neatly cut openings and holes plumb, square, and true to dimensions required. Use cutting methods least likely to damage construction to remain or adjoining construction. Use hand tools or small power tools designed for sawing or grinding, not hammering and chopping, to minimize disturbance of adjacent surfaces. Temporarily cover openings to remain.
  - 3. Cut or drill from the exposed or finished side into concealed surfaces to avoid marring existing finished surfaces.
  - 4. Do not use cutting torches until work area is cleared of flammable materials. At concealed spaces, such as duct and pipe interiors, verify condition and contents of hidden space before starting flame-cutting operations. Maintain portable fire-suppression devices during flame-cutting operations.
  - 5. Maintain adequate ventilation when using cutting torches.
  - 6. Remove decayed, vermin-infested, or otherwise dangerous or unsuitable materials and promptly dispose of off-site.
  - 7. Remove structural framing members and lower to ground by method suitable to avoid free fall and to prevent ground impact or dust generation.
  - 8. Locate selective demolition equipment and remove debris and materials so as not to impose excessive loads on supporting walls, floors, or framing.
  - 9. Dispose of demolished items and materials promptly. Comply with requirements in Division 01 Section "Construction Waste Management and Disposal."
- B. Reuse of Building Elements: Project has been designed to result in end-of-Project rates for reuse of building elements as follows. Do not demolish building elements beyond what is indicated on Drawings without Architect's approval.
  - 1. Existing Walls, Floors, and Roof: 75 percent.
- C. Removed and Salvaged Items:
  - 1. Clean salvaged items.
  - 2. Pack or crate items after cleaning. Identify contents of containers.
  - 3. Store items in a secure area until delivery to Owner.
  - 4. Transport items to Owner's storage area designated by Owner.
  - 5. Protect items from damage during transport and storage.
- D. Removed and Reinstalled Items:
  - 1. Clean and repair items to functional condition adequate for intended reuse. Paint equipment to match new equipment.
  - 2. Pack or crate items after cleaning and repairing. Identify contents of containers.
  - 3. Protect items from damage during transport and storage.

- 4. Reinstall items in locations indicated. Comply with installation requirements for new materials and equipment. Provide connections, supports, and miscellaneous materials necessary to make item functional for use indicated.
- E. Existing Items to Remain: Protect construction indicated to remain against damage and soiling during selective demolition. When permitted by Architect, items may be removed to a suitable, protected storage location during selective demolition and cleaned and reinstalled in their original locations after selective demolition operations are complete.
  - 1. Existing, Painted Signs Indicated to Remain: Protect existing, painted signs from damage with plywood panels or other suitable rigid material, solidly attached to surfaces which will not be visible in final construction.

# 3.5 SELECTIVE DEMOLITION PROCEDURES FOR SPECIFIC MATERIALS

- A. Concrete: Demolish in sections. Cut concrete full depth at junctures with construction to remain and at regular intervals, using power-driven saw, then remove concrete between saw cuts.
- B. Masonry: Demolish in small sections. Cut masonry at junctures with construction to remain, using power-driven saw, then remove masonry between saw cuts.
- C. Concrete Slabs-on-Grade: Saw-cut perimeter of area to be demolished, then break up and remove.

# 3.6 DISPOSAL OF DEMOLISHED MATERIALS

- A. General: Except for items or materials indicated to be recycled, reused, salvaged, reinstalled, or otherwise indicated to remain Owner's property, remove demolished materials from Project site and legally dispose of them.
  - 1. Do not allow demolished materials to accumulate on-site.
  - 2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
  - 3. Remove debris from elevated portions of building by chute, hoist, or other device that will convey debris to grade level in a controlled descent.
  - 4. Comply with requirements specified in Division 01 Section "Construction Waste Management and Disposal."
- B. Disposal: Transport demolished materials off Owner's property and legally dispose of them.

# 3.7 CLEANING

A. Clean adjacent structures and improvements of dust, dirt, and debris caused by selective demolition operations. Return adjacent areas to condition existing before selective demolition operations began.

END OF SECTION 024119

Solano Community College District Kitchen Renovation, Bldg 200 Fairfield, California

#### STAINLESS STEEL COUNTERTOPS

### **SECTION 055800**

### PART I - GENERAL

#### 1.1 SUMMARY:

# A. Section includes:

- 1. Stainless steel countertop with integral splashes and edges.
- 2. Supplementary parts and components, such as clips, fasteners, supplementary framing, and other miscellaneous accessories required for a complete installation.

#### B. Related work:

- 1. Division 6 for millwork and casework.
- 2. Division 7 for joint sealants.
- 3. Division 15 for plumbing fixtures and fittings installed in countertops (where applicable).

# 1.2 SYSTEM DESCRIPTION:

A. Design requirements: Engineer, fabricate, assemble and install stainless steel countertops, including attachment to their supports, to meet or exceed the criteria indicated and specified, to conform to the profiles indicated and to other requirements of the Contract Documents. Coordinate shop fabrication with cabinet fabricator prior to fabrication of countertops to comply with dimensions on documents.

## 1.3 SUBMITTALS:

# A. Shop drawings:

- Submit large scale, dimensioned drawings showing materials, profiles, joints, finishes, method of fabrication, anchorage details and coordination with cabinet fabrication. Label individual components and indicate materials and method of field installation.
- 2. Indicate layout, methods of support, connection details, integration of plumbing components, and interface and anchorage to adjacent materials. Show position of openings required, with rough-in sizes.

## 1.4 QUALITY ASSURANCE:

A. Fabricator's qualifications: Firm and individuals with a minimum of 5 consecutive years experience in the fabrication and installation of specified materials on projects similar in material, design and whose work has resulted in applications with a record of successful in-service performance.

## 1.5 HANDLING

- A. Handling: Deliver stainless steel countertop fabrications as one-piece, factory-assembled units with protective crating and covering.
- B. Storage: Store materials indoors, off the floor in original packaging and protected with breathing type covers.

#### PART 2 - PRODUCTS

### 2.1 MATERIALS

#### A. General:

- 1. Provide sheet metals selected for their surface flatness, smoothness and freedom from surface blemishes where exposed to view in the finished unit.
- 2. Exposed surfaces which exhibit pitting, seam marks, roller marks, oil-canning, stains, discolorations, variations in flatness exceeding those permitted by referenced standards for stretcher-leveled metal sheets, or other imperfections are unacceptable.
- B. Stainless Steel: Complying with the following.
  - 1. Bars and shapes ASTM A 276, Type 304.
  - 2. Sheet, strip, plate, and bar: ASTM A 666, Type 304
  - 3. Gage(s) for sheets: Except where noted on the drawings, as necessary for the required spans and use intended without visible deflection, oil-canning and other defects, 16 gage min.

### C. Fasteners:

- 1. Of same basic metal and alloy as fastened metal. Do not use corrosive metals or incompatible materials on metal joints.
- 2. Provide concealed fasteners for interconnection of sheet metal fabrications and for their attachment to other construction, unless otherwise accepted on shop drawings.

# D. Welding electrodes and filler metal:

- 1. Type and alloy of filler metal and electrodes recommended by producer of metal to be welded, complying with applicable AWS specifications, and as required for strength and compatibility in the fabricated items.
- 2. Use filler metals and welding procedures which will blend with and match the color of sheet metal being joined and will prevent discoloration at welds.
- E. Miscellaneous materials: As specified and as necessary to complete this work.

# 2.2 FABRICATION

- A. Comply with AWS D-1.1 "Code for Welding in Building Construction", except as modified by the Drawings and Specifications.
- B. Fabricate countertops to comply with requirements indicated for design, dimensions, materials, joinery and performance.
- C. Coordinate dimensions and attachment methods with those of adjoining construction to produce integrated assemblies with closely fitting, flush joints, and edges and surfaces aligned with one another in relationship indicated.
- D. Increase metal thickness or reinforce metal with concealed stiffeners or backing materials, or both, as required to produce surfaces whose variations in flatness do not exceed those permitted by referenced standards for stretcher-leveled metal sheet and to impart sufficient strength for intended use.

- E. Preassemble countertops in the shop to the greatest extent possible to minimize field splicing and assembly. Disassemble only as necessary for shipping and handling limitations. Clearly mark units for reassembly and coordinated installation.
- F. Form to minimize joints and without exposed cut edges.
  - 1. Fold back exposed ends of unsupported sheet metal to form a ½-inch wide hem on the concealed side, or ease exposed edges with backing to a radius of approximately 1/16-inch.
  - 2. Produce flat, flush surfaces without cracking and grain separation at bends.
- G. Continuously weld joints and seams, except where other methods of joining are indicated or accepted on shop drawings. Grind, fill and dress welds to produce smooth flush exposed surfaces where welds are invisible after final finishing is completed.
- H. Provide holes of proper sizes and in correct locations required for attachment of work of other trades.
  - 1. Cut, tap, and drill as required, including for attachment of work under other Sections.
  - 2. Finishes free of kinks, twist, burrs and open joints. Damaged or distorted materials will not be allowed.
- I. Install supporting members, fastenings, frames, hangers, bracing, brackets, straps, bolts and angles required to set and connect work to other construction.
- J. Drill holes for bolts and screws; countersink holes for exposed screws. Provide rebates, lugs and brackets as required by details.

### 2.3 FINISHING

- A. Provide right, directional polish: NAAMM No. 4 finish or No. 6 Hairline/Matt finish.
- B. When polishing is completed, remove embedded foreign matter and leave surfaces chemically clean.

### **PART III - EXECUTION**

# 3.1 EXAMINATION

- A. Examine adjacent construction and supports.
- B. Verify condition of stainless steel countertops. Do not install stainless steel countertops with scratches, stains and other defects that may be visible in the finished work.
- C. Correct conditions detrimental to the proper and timely completion of this work before proceeding with installation.

### 3.2 INSTALLATION

- A. Install stainless steel countertops plumb and level, with tight hairline flush joints. Shim as required using concealed shims.
- B. Scribe and fit accurately against adjacent surfaces for a close fit.

- C. Attach top securely to steel supports with concealed screws as required for a rigid and secure installation.
- D. Seal interface of countertops with contiguous surfaces with sealant in compliance with the requirements of Section 07920. Tool sealant uniformly to form a cove and shed water.

# 3.3 CLEANING

A. After sealant has cured, clean stainless steel countertop with manufacturer's recommended cleaning material in compliance with manufacturer's cleaning instructions.

### 3.4 PROTECTION

- A. Protect stainless steel countertops in place during the construction period to prevent damage and stains. Remove protection when no longer needed.
- B. Restore damaged areas to match adjacent areas as recommended by the stainless steel countertop manufacturer.
- C. Remove and replace materials that are damaged, scratched, have been stained, that do not match adjacent countertops or cannot be satisfactorily cleaned or repaired, as determined and directed by the Customer.
- D. Seal interface of countertops with contiguous surfaces with sealant in compliance with the requirements of Section 07920. Tool sealant uniformly to form a cove and shed water.

**END OF SECTION** 

# **SECTION 064023**

# INTERIOR ARCHITECTURAL WOODWORK

# PART 1 - GENERAL

### 1.1 SUMMARY

- A. This Section includes the following custom interior architectural woodwork items:
  - 1. Plastic-laminate cabinets and shelving.
  - 2. Plastic-laminate countertops.
- B. Related Sections include the following:
  - 1. Section 055000 "Metal Fabrications" for miscellaneous framing and supports for countertops.
  - 2. Section 061000 "Rough Carpentry" for wood furring, blocking, shims, and hanging strips required for installing woodwork and concealed within other construction before woodwork installation.
  - 3. Section 090623 "Interior Finish Schedule," for product finish information not specified in this Section.
  - 4. Applicable Division 26 Electrical Sections for electrical connections, wiring, and switches for under-cabinet lighting; and for other electrical items associated with interior architectural woodwork.

# 1.2 DEFINITIONS

- A. Interior architectural woodwork includes wood furring, blocking, shims, and hanging strips for installing woodwork items unless concealed within other construction before woodwork installation.
- B. Surface Definitions: These specifications contain references to "exposed," semi-exposed," and "concealed" surfaces of interior architectural woodwork. The definitions of such surfaces are contained in the Woodwork Institute's "Architectural Woodwork Standards" (AWS).

# 1.3 SUBMITTALS

- A. Product Data: For panel products, high-pressure decorative laminate, adhesive for bonding plastic laminate, ABS or other non-PVC edgings, cabinet hardware and accessories, and finishing materials and processes.
- B. Shop Drawings: Show location of each item, dimensioned plans and elevations, large-scale details, attachment devices, and other components.
  - 1. Show details full size.
  - 2. Show locations and sizes of furring, blocking, and hanging strips, including concealed blocking and reinforcement specified in other Sections.
  - 3. Show locations and sizes of cutouts and holes for plumbing fixtures, faucets, soap dispensers, and other items installed in architectural woodwork.
  - 4. Apply WI-certified compliance label to first page of Shop Drawings.

# C. Samples:

- 1. Plastic laminates, 8 by 10 inches, for each type, color, pattern, and surface finish.
- 2. Thermoset decorative-panels, 8 by 10 inches, for each type, color, pattern, and surface finish.
- 3. ABS or other non-PVC edgings, for each type, color, pattern, and surface finish.
- 4. Exposed cabinet hardware and accessories, one unit for each type and finish.

# D. Sustainable Design Submittals:

- Product Data:
  - a. For installation adhesives, including printed statement of VOC content.
  - b. For each composite-wood product used, documentation indicating that the bonding agent contains no urea formaldehyde.
  - c. For each adhesive used, documentation indicating that the adhesive contains no urea formaldehyde.
  - d. For products having recycled content, documentation indicating percentages by weight of postconsumer and preconsumer recycled content
    - 1) Include statement indicating costs for each product having recycled content.
- E. Product Certificates: For each type of product, signed by product manufacturer.
- F. Woodwork Quality Standard Compliance Certificates: WI-certified compliance certificates.
- G. Qualification Data: For Installer and fabricator.

# 1.4 QUALITY ASSURANCE

- A. Fabricator Qualifications: Shop that employs skilled workers who custom-fabricate products similar to those required for this Project and whose products have a record of successful inservice performance. Shop is a licensee of WI's Certified Compliance Program.
- B. Installer Qualifications: Fabricator of products.
- C. Source Limitations: Engage a qualified woodworking firm to assume undivided responsibility for production of interior architectural woodwork.
- D. Quality Standard: Unless otherwise indicated, comply with WI's "Architectural Woodwork Standards" (AWS) for grades of interior architectural woodwork indicated for construction, finishes, installation, and other requirements.
  - 1. Provide WI-certified compliance labels and certificates indicating that woodwork, including installation, complies with requirements of grades specified.
- E. VOC Content of Interior Adhesives and Sealants:
  - 1. Interior Sealants used as Filler: Meet or exceed Bay Area Air Quality Management District Reg. 8, Rule 51 VOC requirements.
  - 2. Interior Adhesives and Other Sealants: Meet or exceed South Coast Air Quality Management District Rule 1168 VOC requirements.
- F. Preinstallation Conference: Conduct conference at Project site.

# 1.5 DELIVERY, STORAGE, AND HANDLING

A. Do not deliver woodwork until painting and similar operations that could damage woodwork have been completed in installation areas. If woodwork must be stored in other than installation areas, store only in areas where environmental conditions comply with requirements specified in "Project Conditions" Article.

# 1.6 PROJECT CONDITIONS

- A. Environmental Limitations: Do not deliver or install woodwork until building is enclosed, wet work is complete, and HVAC system is operating and maintaining temperature and relative humidity at occupancy levels during the remainder of the construction period.
- B. Field Measurements: Where woodwork is indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication, and indicate measurements on Shop Drawings. Coordinate fabrication schedule with construction progress to avoid delaying the Work.
  - 1. Locate concealed framing, blocking, and reinforcements that support woodwork by field measurements before being enclosed, and indicate measurements on Shop Drawings.

# 1.7 COORDINATION

A. Coordinate sizes and locations of framing, blocking, furring, reinforcements, and other related units of Work specified in other Sections to ensure that interior architectural woodwork can be supported and installed as indicated.

# PART 2 - PRODUCTS

# 2.1 MATERIALS

- A. General: Provide materials that comply with requirements of WI's quality standard for each type of woodwork and quality grade specified, unless otherwise indicated.
- B. Wood Products: Comply with the following:
  - 1. Medium-Density Fiberboard: ANSI A208.2, Grade MD, made with binder containing no urea formaldehyde; weight 48 lbs/cu. ft.
    - a. Products:
      - 1) SierraPine's Medite II.
      - 2) Weyerhaeuser's Premier Plus.
      - 3) Accepted equal.
  - 2. Particleboard: ANSI A208.1, Grade M-2-Exterior Glue.
  - 3. Softwood Plywood: DOC PS 1.
- C. Thermoset Decorative Panels: Particleboard or medium-density fiberboard finished with thermally fused, melamine-impregnated decorative paper complying with LMA SAT-1.
  - 1. Provide PVC or polyester edge banding complying with LMA EDG-1 on components with exposed or semiexposed edges.

- D. High-Pressure Decorative Laminate: NEMA LD 3, grades as indicated or, if not indicated, as required by woodwork quality standard.
  - 1. Basis-of-Design Manufacturers, Products, Colors, Patterns, and Finishes: As specified in Section 090623 "Interior Finish Schedule" and indicated on the Drawings.
- E. T-Shaped Edge Moldings: ABS; provide in face widths and profiles indicated.
  - 1. Colors: Matching laminate in color, pattern, and finish.

# 2.2 CABINET HARDWARE AND ACCESSORIES

- A. General: Provide cabinet hardware and accessory materials associated with architectural cabinets.
- B. Butt Hinges: Grade 1, 2-3/4-inch, 5-knuckle steel hinges made from 0.095-inch- thick metal, and as follows:
  - 1. Semiconcealed Hinges for Overlay Doors: BHMA A156.9, B01521.
    - a. Basis-of-Design Product: Rockford Process Control, Inc.'s Model 374, or a comparable product by one of the following:
      - 1) Terry Hinge & Hardware Co.
      - 2) Stanley Hardware.
      - 3) Accepted equal.
- C. Frameless Concealed Hinges (European Type): BHMA A156.9, B01602, 170 degrees of opening, self-closing.
- D. Door and Drawer Pulls:
  - 1. Wire Pulls: BHMA A156.9, B02011; Back mounted, solid metal, 3-3/8 inches long, 5/16 inch in diameter.
- E. Adjustable Shelf Standards and Supports: BHMA A156.9, B04071; with shelf rests, B04081.
  - 1. Basis-of-Design Product: Knape & Vogt (K-V) No. 255 with No. 256 shelf supports.
  - 2. Provide seismic restraints for open shelf supports.
- F. Drawer Slides: BHMA A156.9, B05091.
  - 1. Heavy Duty (Grade 1HD-100 and Grade 1HD-200): Side mounted; full-extension type; zinc-plated steel ball-bearing slides.
  - 2. Box Drawer Slides: Grade 1HD-100; for drawers not more than 6 inches high.
  - 3. File Drawer Slides: Grade 1HD-200; for drawers more than 6 inches high or 24 inches wide
  - 4. Pencil Drawer Slides: Grade 1; for drawers not more than 3 inches high and 24 inches wide.
- G. Mechanical Locks:
  - 1. Door Locks: BHMA A156.11, E07121.
  - 2. Drawer Locks: BHMA A156.11, E07041.
- H. Door Silencers: Provide at tops and bottoms of all doors.

### I. Grommets:

- 1. For Cable Passage through Countertops: 3-inch OD, molded-plastic grommets and matching plastic caps with slot for wire passage.
  - a. Product: Doug Mockett & Co. "XG series" or accepted equal.
  - b. Colors: As selected by Architect from manufacturer's full range.
- J. Exposed Hardware Finishes: For exposed hardware, provide finish that complies with BHMA A156.18 for BHMA finish number indicated.
  - 1. Satin Chromium Plated: BHMA 626 for brass or bronze base; BHMA 652 for steel base.
  - 2. Satin Stainless Steel: BHMA 630.
- K. For concealed hardware, provide manufacturer's standard finish that complies with product class requirements in BHMA A156.9.

# 2.3 MISCELLANEOUS MATERIALS

- A. Furring, Blocking, Shims, and Hanging Strips: Fire-retardant-treated softwood lumber, kiln dried to less than 15 percent moisture content.
- B. Anchors: Select material, type, size, and finish required for each substrate for secure anchorage. Provide nonferrous-metal or hot-dip galvanized anchors and inserts on inside face of exterior walls and elsewhere as required for corrosion resistance. Provide toothed-steel or lead expansion sleeves for drilled-in-place anchors.
- C. Adhesives, General: Do not use adhesives that contain urea formaldehyde.

# 2.4 FABRICATION, GENERAL

- A. Interior Woodwork Grade: Provide interior woodwork complying with quality standard indicated in "Fabrication" article for each woodwork item.
- B. Wood Moisture Content: Comply with requirements of referenced quality standard for wood moisture content in relation to ambient relative humidity during fabrication and in installation areas.
- C. Fabricate woodwork to dimensions, profiles, and details indicated.
- D. Complete fabrication, including assembly, finishing, and hardware application, to maximum extent possible before shipment to Project site. Disassemble components only as necessary for shipment and installation. Where necessary for fitting at site, provide ample allowance for scribing, trimming, and fitting.
  - 1. Trial fit assemblies at fabrication shop that cannot be shipped completely assembled. Install dowels, screws, bolted connectors, and other fastening devices that can be removed after trial fitting. Verify that various parts fit as intended and check measurements of assemblies against field measurements indicated on Shop Drawings before disassembling for shipment.

- E. Shop-cut openings to maximum extent possible to receive hardware, appliances, plumbing fixtures, electrical work, and similar items. Locate openings accurately and use templates or roughing-in diagrams to produce accurately sized and shaped openings. Sand edges of cutouts to remove splinters and burrs.
  - 1. Seal edges of openings in countertops with a coat of varnish.
- F. Door and Drawer Locks: Where indicated, fabricate door and drawer units to receive locking devices.
  - 1. Key locks similarly within each space where locking casework occurs.
  - 2. Key casework differently between different spaces.
  - 3. Provide master key system for all locking casework.

# 2.5 PLASTIC-LAMINATE CABINETS

- A. Applicable Standard: WI's "Architectural Woodwork Standards (AWS)," Section 10; Casework.
- B. Grade: Custom.
- C. AWS Type of Cabinet Construction: Flush overlay.
- D. Laminate Cladding for Exposed Surfaces: High-pressure decorative laminate complying with the following requirements:
  - 1. Horizontal Surfaces Other Than Tops: Grade HGS.
  - 2. Postformed Surfaces: Grade HGP.
  - 3. Vertical Surfaces: Grade VGS.
  - 4. Edges: ABS T-mold matching laminate in color, pattern, and finish.
- E. Materials for Semiexposed Surfaces:
  - 1. Surfaces Other Than Drawer Bodies: High-pressure decorative laminate, Grade VGS.
    - a. Edges of Plastic-Laminate Shelves: ABS T-mold matching laminate in color, pattern, and finish.
    - b. For semiexposed backs of panels with exposed plastic-laminate surfaces, provide surface of high-pressure decorative laminate, Grade VGS.
  - 2. Drawer Sides and Backs: Solid-hardwood lumber.
  - 3. Drawer Bottoms: Thermoset decorative panels.
- F. Concealed Backs of Panels with Exposed Plastic Laminate Surfaces: High-pressure decorative laminate, Grade BKL.

# 2.6 PLASTIC-LAMINATE COUNTERTOPS (Alternate)

- A. Applicable Standard: WI's "Architectural Woodwork Standards (AWS)," Section 11; Countertops.
- B. Grade: Custom.
- C. High-Pressure Decorative Laminate Grade: HGS.

- D. Edge Treatment: ABS T-mold matching laminate in color, pattern, and finish.
- E. Core Material: Exterior-grade plywood.
- F. Backer Sheet: Provide plastic-laminate backer sheet, Grade BKL, on underside of countertop substrate.

# 2.7 SHOP FINISHING

- A. Grade: Provide finishes of same grades as items to be finished.
- B. General: Finish architectural woodwork at fabrication shop as specified in this Section. Defer only final touchup, cleaning, and polishing until after installation.
- C. Preparation for Finishing: Comply with referenced quality standard for sanding, filling countersunk fasteners, sealing concealed surfaces, and similar preparations for finishing architectural woodwork, as applicable to each unit of work.
  - 1. Backpriming: Apply one coat of sealer or primer, compatible with finish coats, to concealed surfaces of woodwork. Apply two coats to back of paneling and to end-grain surfaces. Concealed surfaces of plastic-laminate-clad woodwork do not require backpriming when surfaced with plastic laminate, backing paper, or thermoset decorative panels.

# PART 3 - EXECUTION

## 3.1 PREPARATION

- A. Before installation, condition woodwork to average prevailing humidity conditions in installation areas.
- B. Before installing architectural woodwork, examine shop-fabricated work for completion and complete work as required, including removal of packing and backpriming.

# 3.2 INSTALLATION

- A. Grade: Install woodwork to comply with requirements for the same grade specified in Part 2 for fabrication of type of woodwork involved.
- B. Assemble woodwork and complete fabrication at Project site to comply with requirements for fabrication in Part 2, to extent that it was not completed in the shop.
- C. Install woodwork level, plumb, true, and straight. Shim as required with concealed shims. Install level and plumb (including tops) to a tolerance of 1/8 inch in 96 inches.
- D. Scribe and cut woodwork to fit adjoining work, refinish cut surfaces, and repair damaged finish at cuts.
- E. Anchor woodwork to anchors or blocking built in or directly attached to substrates.

- F. Cabinets: Install without distortion so doors and drawers fit openings properly and are accurately aligned. Adjust hardware to center doors and drawers in openings and to provide unencumbered operation. Complete installation of hardware and accessory items as indicated.
  - Install cabinets with no more than 1/8 inch in 96-inch sag, bow, or other variation from a
  - 2. Fasten wall cabinets through back, near top and bottom, and at ends, at spacing indicated.
- G. Countertops: Anchor securely by screwing through corner blocks of base cabinets or other supports into underside of countertop.
  - Align adjacent solid-surfacing-material countertops and form seams to comply with manufacturer's written recommendations using adhesive in color to match countertop. Carefully dress joints smooth, remove surface scratches, and clean entire surface.
  - 2. Install countertops with no more than 1/8 inch in 96-inch sag, bow, or other variation from a straight line.
  - 3. Secure backsplashes to tops with concealed metal brackets at 16 inches o.c. and to walls with adhesive.
  - 4. Calk space between backsplash and wall with sealant specified in Section 079200 "Joint Sealants."
- Touch up finishing work specified in this Section after installation of woodwork. Fill nail holes H. with matching filler where exposed.

#### 3.3 ADJUSTING AND CLEANING

- A. Repair damaged and defective woodwork, where possible, to eliminate functional and visual defects; where not possible to repair, replace woodwork. Adjust joinery for uniform appearance.
- B. Clean, lubricate, and adjust hardware.
- Clean woodwork on exposed and semiexposed surfaces. Touch up shop-applied finishes to C. restore damaged or soiled areas.

END OF SECTION 064023

# **SECTION 066400**

## PLASTIC PANELING

# PART 1 - GENERAL

### 1.1 SUMMARY

- A. Section includes glass-fiber reinforced plastic (FRP) wall paneling and trim accessories.
- B. Related Sections:
  - Section 090623 "Interior Finish Schedule" for product finish information not specified in this Section.

# 1.2 SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Sustainable Design Submittals:
  - 1. Product Data:
    - a. For adhesives and sealants, including printed statement of VOC content and chemical components.
    - b. For products having recycled content, documentation indicating percentages by weight of postconsumer and preconsumer recycled content.
      - 1) Include statement indicating costs for each product having recycled content.
- C. Samples: For plastic paneling and trim accessories, in manufacturer's standard sizes.

# 1.3 QUALITY ASSURANCE

- A. Source Limitations: Obtain plastic paneling and trim accessories from single manufacturer.
- B. Surface-Burning Characteristics: As determined by testing identical products according to ASTM E 84 by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.
  - 1. Flame-Spread Index: 200 or less.
  - 2. Smoke-Developed Index: 450 or less.
  - 3. Testing Agency: Acceptable to authorities having jurisdiction.
- C. VOC Content of Interior Adhesives and Sealants:
  - 1. Interior Sealants used as Filler: Meet or exceed Bay Area Air Quality Management District Reg. 8, Rule 51 VOC requirements.

Interior Adhesives and Other Sealants: Meet or exceed South Coast Air Quality Management District Rule 1168 VOC requirements.

### 1.4 PROJECT CONDITIONS

A. Environmental Limitations: Do not deliver or install plastic paneling until spaces are enclosed and weathertight and temporary HVAC system is operating and maintaining ambient temperature and humidity conditions at occupancy levels during the remainder of the construction period.

# PART 2 - PRODUCTS

# 2.1 PLASTIC SHEET PANELING

- A. General: Gelcoat-finished, glass-fiber reinforced plastic panels complying with ASTM D 5319.
  - 1. Basis-of-Design Product: The design for plastic paneling is based on Marlite's "Standard FRP."
  - 2. Subject to compliance with requirements, provide the named product or a comparable product by one of the following:
    - a. Kemlite Company Inc.
    - b. Nudo Products, Inc.
    - c. Accepted equal.
  - 3. Nominal Thickness: Not less than 0.09 inch.
  - 4. Surface Finish: As selected by Architect from manufacturer's full range.
  - 5. Color: As specified in Section 090623 "Interior Finish Schedule" and indicated on the Drawings.

# 2.2 ACCESSORIES

- A. Trim Accessories: Manufacturer's standard one-piece vinyl extrusions designed to retain and cover edges of panels. Provide division bars, inside corners, outside corners, and caps as needed to conceal edges.
  - 1. Color: Match panels.
- B. Adhesive: As recommended by plastic paneling manufacturer.
- C. Sealant: Single-component, mildew-resistant, acid-curing silicone sealant recommended by plastic paneling manufacturer and complying with requirements in Section 079200 "Joint Sealants."

# **PART 3 - EXECUTION**

# 3.1 EXAMINATION

A. Examine substrates and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.

Proceed with installation only after unsatisfactory conditions have been corrected

### 3.1 PREPARATION

- A. Clean substrates of substances that could impair bond of adhesive, including oil, grease, dirt, and dust.
- B. Condition panels by unpacking and placing in installation space before installation according to manufacturer's written recommendations.
- C. Lay out paneling before installing. Locate panel joints to provide equal panels at ends of walls not less than half the width of full panels.
  - 1. Mark plumb lines on substrate at trim accessory locations for accurate installation.
  - 2. Locate trim accessories to allow clearance at panel edges according to manufacturer's written instructions.

# 3.2 INSTALLATION

- A. Install plastic paneling according to manufacturer's written instructions.
- B. Install panels in a full spread of adhesive.
- C. Install trim accessories with adhesive.
- D. Fill grooves in trim accessories with sealant before installing panels and bed inside corner trim in a bead of sealant.
- E. Maintain uniform space between panels and wall fixtures. Fill space with sealant.
- F. Remove excess sealant and smears as paneling is installed. Clean with solvent recommended by sealant manufacturer and then wipe with clean dry cloths until no residue remains.

END OF SECTION 066400

# MECHANICALLY-ATTACHED POLYVINYL CHLORIDE ROOFING SECTION 07 54 19.14

#### PART 1 - GENERAL

## 1.1 SUMMARY

- A. Sika Corporation Roofing System: This specifies the following mechanically-attached roofing system or approved equal. This shall be used to patch-in new areas around new mechanical equipment.
  - 1. Seam-attached single-weld system (Sarnafast or approved equal)
- B. Related Work: Include the following sections.
  - 1. Section 076200 Sheet Metal Flashing and Trim

## 1.2 REFERENCES

- A. Current Edition of: Identified reference requirements as put forth by the project specification.
  - 1. 2013 CCR, Title 24 Part II (CBC)
  - 2. American Society of Testing Materials (ASTM)
  - 3. National Roofing Contractors Association (NRCA)
  - 4. Single Ply Roofing Institute (SPRI)

### 1.3 SUBMITTALS

- A. Literature: Copies of current relevant information pertaining to the primary components to be used in the roof system including but not limited to:
  - 1. Specifications
  - 2. Roofing Warranty
  - 3. Applicator Warranty
  - 4. Product Data Sheets
  - 5. Material Safety Data Sheets
  - 6. FM/UL listings/approvals
  - 7. UL Environment validation of recycling claims

# 1.4 QUALITY ASSURANCE

- A. Sika Corporation Roofing Qualifications (or approved equal):
  - 1. Demonstrated performance history of producing PVC roof membranes no less, in duration of years, than the warranty duration specified.
  - 2. Manufactured by membrane supplier and not private labeled.

## B. Installer Qualifications:

1. A qualified firm that is authorized by Sika Corporation (or approved equal) - Roofing to install all work pertaining to product manufacturer's roof system and that is eligible to receive manufacturer's warranty.

- C. Fire Design:
  - 1. Underwriters Laboratories, Inc. (Class Assembly)
  - 2. 2013 CCR Title 24, Part II
- D. Wind Design:
  - 1. System shall meet minimum requirements in accordance of ASCE 7 per code jurisdiction
- E. Special Design:
  - 1. California Energy Commission Title 24
- 1.5 DELIVERY, HANDLING, AND STORAGE
  - A. Deliver roofing materials to project site in original containers with seals unbroken and labeled with product manufacturer's name or product brand name.
  - B. Comply with most current product data sheet requirements when handling, storing, protecting, or installing roofing materials. Including but not limited to avoiding physical damage, deterioration by sunlight, excessive moisture, or other potentially damaging conditions.
  - C. Store liquid materials in their original undamaged containers in a clean, dry, protected location; away from direct sunlight; within the temperature range noted on the product data sheet.
  - D. Handle and store roofing materials and equipment in a manner to avoid permanent deflection of deck.

#### 1.6 FIELD CONDITIONS

- A. Weather Limitations: Proceed with installation only when existing and forecasted weather conditions permit roofing system to be installed according to manufacturer's most current requirements and warranty requirements.
- B. Material Compatibility: Roofing materials shall be compatible with one another and adjacent materials under conditions of service and application required and confirmed by roofing manufacturer.

### 1.7 WARRANTY

- A. Roofing Warranty: Sika (or approved equal) warrants to the owner the specified warranty for the specified warranty period as long as the roofing is installed according to Technical instructions by the Authorized Roofing Applicator. The warranty must be non-prorated and must not exclude coverage due to ponding water.
  - 1. Warranty: Shall be for the Roofing System as it applies to the actual scope of work.
  - 2. Warranty Period: Shall be 10 years from date of substantial completion.
- B. Applicator's Warranty: Signed by installing applicator, covering the work of a System Warranty, including all components of roofing system installation such as membrane roofing, base flashing, roof insulation, fasteners, cover boards, vapor retarders, and walkway products, for the following warranty period:
  - 1. Warranty Period: Shall be 2 years from date of substantial completion.

### PART 2 - PRODUCTS

## 2.1 PERFORMANCE / DESIGN CRITERIA

- A. ASTM D4434: Type III
- B. NSF/ANSI Standard 347: Platinum
- C. Guarantee membrane thickness meets or exceeds specified thickness when tested according to ASTM D751

## 2.2 ROOFING MATERIALS

- A. PVC Sheet:
  - 1. Thermoplastic membrane, polyester scrim reinforced, with lacquer coating
- B. PVC Sheet Thickness:
  - 1. Sarnafil S327(or approved equal):, 48 mil (min) or match existing thickness, whichever is greater (VIF).
- C. PVC Sheet Exposed Face Color:
  - 1. EnergySmart White, initial solar reflectance of 0.83, emittance of 0.90, and solar reflective index (SRI) of 104.
- D. Membrane Attachment Component:
  - 1. Sarnadisc-XPN (or approved equal)
- E. Attachment Fasteners:
  - 1. Sarnafastener #12 (or approved equal)
- F. Deck Primer:
  - 1. Sarnavap Self-Adhered Primer VC (low VOC compliant, or approved equal)
- G. Flashing Materials:
  - 1. Wall/Curb Flashing:
  - 2. G459 (or approved equal)
    - a. Detail Membrane
    - b. Sarnaclad (PVC-coated sheet metal)
- H. Nailers and Blocking:
  - 1. Wood, #2 quality or better, Wolmanized or Osmose treated for fire and rot resistance.
  - 2. Plywood, minimum 1/2 inch CDX (C side out).

### PART 3 - EXECUTION

# [DELETE non required component installations from Sections 3.4 – 3.8]

### 3.1 EXAMINATION

- A. Applicator shall verify that the work done under related sections meets the following conditions:
  - 1. Roof drains and scuppers have been installed properly, or reconditioned, or replaced.
  - 2. Roof curbs, nailers, equipment supports, vents and other roof penetrations are properly secured and prepared to receive new roofing materials.
  - 3. All surfaces are smooth and free of dirt, debris and incompatible materials.
  - 4. For concrete deck, verify that concrete substrate is dry and free of moisture. Verify that concrete curing compounds that will impair adhesion of roofing components to roof deck have been removed.
  - 5. All roof surfaces shall be free of water, ice and snow.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

## 3.2 PREPARATION

- A. Clean substrate of dust, debris, moisture, and other substances detrimental to roofing installation according to roofing system manufacturer's most current requirements. Remove sharp projections.
- B. Prevent materials from entering and clogging roof drains and flashings and from spilling or migrating onto surfaces of other construction. Remove roof drain plugs when no work is taking place or when rain is forecast.

## 3.3 ROOFING INSTALLATION, GENERAL

- A. Install roofing system according to product manufacturer's most current requirements including but not limited to roofing applicator handbook, product data sheets, specifications, and or relevant technical bulletins.
- B. Complete terminations and base flashings and provide temporary seals to prevent water from entering completed sections of roofing system at end of workday or when rain is forecast. Remove and discard temporary seals before beginning work on adjoining roofing.
- C. For tie-in with existing roofing, install roofing and auxiliary materials to maintain weather tightness of transitions.

# 3.4 FIELD QUALITY CONTROL

- A. Arrange for roofing system manufacturer's technical personnel to inspect roofing installation upon completion.
- B. Repair or remove and replace components of roofing system that do not comply with specified requirements.
- C. Correct deficiencies in or remove roofing system that does not comply with requirements, repair substrates, and repair or reinstall roofing system to a condition free of damage and deterioration at time of Substantial Completion and according to warranty requirements.

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D. Additional testing and inspecting, at Contractor's expense, will be performed to determine if replaced or additional work complies with specified requirements.

# 3.5 PROTECTION

A. Protect new roofing system from damage and wear during construction period. Inspect new roofing for damage if used during construction

END OF SECTION

## **SECTION 090020**

#### INTERIOR FINISH SCHEDULE

### 1.1 SUMMARY

- A. Interior finish schedule.
- B. See listed Specification Sections for additional specification information.
- C. See Finish Plans on Drawings for locations of finishes.

## 1.2 SECTION 055000 – METAL FABRICATIONS

- A. Stainless Steel Countertop:
  - 1. Basis-of-Design Manufacturer: 304
  - 2. Texture: #4 Non Directional

## 1.3 SECTION 064023 - INTERIOR ARCHITECTURAL WOODWORK

- A. Plastic Laminate for Cabinets:
  - 1. Basis-of-Design Manufacturer: Nevamar Corporation.
  - 2. Texture: Matte.
  - 3. Color: Luminary Teak WT0005T
- B. Plastic Laminate for Countertops (Alternate):
  - 1. Basis-of-Design Manufacturer: Nevamar
  - 2. Texture: Matte.
  - 3. Color: Precision White S7036T

## 1.4 SECTION 066400 – PLASTIC PANELING

- A. Plastic Paneling:
  - 1. Basis-of-Design Manufacturer: Crane or approved equal
  - 2. Product: FRP Panels, Class A Rated
  - 3. Surface Finish: Smooth.
  - 4. Color: White (85)

# 1.5 SECTION 095113 - ACOUSTICAL PANEL CEILINGS (If Required)

- A. Acoustical Ceiling Panels:
  - 1. Basis-of-Design Manufacturer: USG Interiors, Inc.
  - 2. Product: Frost ClimaPlus, Item No. 419.
  - 3. Edge Profile: 9/16-inch Fineline Bevel.
  - 4. Thickness: 3/4-inch.
  - 5. Modular Size: 24 inches by 24 inches.
  - 6. Color: White.
- B. Ceiling Suspension Systems and Trims:

- 1. Basis-of-Design Manufacturer: USG Interiors, Inc.
- 2. Product: 9/16-inch-wide tee.
- 3. Face Design: Flat, flush.
- 4. Face Finish: Painted white.
- 5. Trim: Perimeter shadow moldings.

## 1.6 SECTION 096513 – RESILIENT WALL BASE AND ACCESSORIES

### A. Resilient Wall Base:

1. Integral Cove, see sheet flooring and drawings

## 1.7 SECTION 096516 – RESILIENT SHEET FLOORING

## A. Linoleum Sheet Floor Coverings:

- 1. Basis-of-Design Manufacturer: Altro Floor Coverings (or approved equal)
- 2. Product: Walkway 20
- 3. Surface Texture: Per Material (Shall meet required slip coefficient)
- 4. Size: Manufacturer's standard size rolls.
- 5 Thickness: min 8mm
- 6. Color: Arena
- 7. VM: 2019P
- 8. LRV:41
- 9. Mastic: A1M20
- 10. Weldrod: WR297

### 1.8 SECTION 099100 – PAINTING

## A. Interior Paint Colors:

- 1. PT-1:
  - a. Basis-of-Design Manufacturer: Sherman Williams Zero VOC Interior Latex Paint (or approved equal).
  - b. Sheen: Semi-Gloss
  - c. Color: Navaho White

### 1.9 SECTION 102113 – TOILET COMPARTMENTS

# A. Toilet Compartments:

- 1. Factory Finish: Manufacturer's standard HDPE.
- 2. Color: As selected by Architect from manufacturer's full range.

## 1.10 SECTION 104413 – FIRE EXTINGUISHER CABINETS

# A. Fire Extinguisher Cabinets:

- 1. Basis-of-Design Manufacturer: JL Industries, Inc.
- 2. Factory Finish: Manufacturer's standard baked enamel.
- 3. Color: Match Architect's samples.
- 4. Color: As selected by Architect from manufacturer's full range.

### END OF SECTION 090020

## **SECTION 092900**

#### **GYPSUM BOARD**

### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. This Section includes the following:
  - 1. Interior gypsum board.
  - 2. Tile backing panels.
- B. Related Sections include the following:
  - 1. Division 07 Section "Building Insulation" for insulation and vapor retarders installed in assemblies that incorporate gypsum board.
  - 2. Division 09 Section "Non-Structural Metal Framing" for non-structural framing and suspension systems that support gypsum board.
  - 3. Division 09 Section "Gypsum Board Shaft Wall Assemblies" for metal shaft-wall framing, gypsum shaft liners, and other components of shaft-wall assemblies.
  - 4. Division 09 painting Sections for primers applied to gypsum board surfaces.

### 1.2 SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Samples: For the following products:
  - 1. Trim Accessories: Full-size Sample in 12-inch- long length for each trim accessory indicated.
- C. LEED Submittals:
  - 1. Product Data:
    - a. For Credit MR 4.1: For products having recycled content, documentation indicating percentages by weight of postconsumer and preconsumer recycled content.
      - 1) Include statement indicating costs for each product having recycled content.
    - b. For Credit EQ 4: For adhesives used to laminate gypsum board panels to substrates, including printed statement of VOC content.

# 1.3 QUALITY ASSURANCE

- A. Fire-Resistance-Rated Assemblies: For fire-resistance-rated assemblies, provide materials and construction identical to those tested in assembly indicated according to ASTM E 119 by an independent testing agency.
- B. STC-Rated Assemblies: For STC-rated assemblies, provide materials and construction identical to those tested in assembly indicated according to ASTM E 90 and classified according to ASTM E 413 by an independent testing agency.
- C. Mockups: Before beginning gypsum board installation, install mockups of at least 100 sq. ft. in surface area to demonstrate aesthetic effects and set quality standards for materials and execution.

- 1. Install mockups for the following:
  - a. Each level of gypsum board finish indicated for use in exposed locations.
  - b. Each texture finish indicated.
- 2. Apply or install final decoration indicated, including painting and wallcoverings, on exposed surfaces for review of mockups.
- 3. Simulate finished lighting conditions for review of mockups.
- 4. Approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

### 1.4 STORAGE AND HANDLING

A. Store materials inside under cover and keep them dry and protected against damage from weather, condensation, direct sunlight, construction traffic, and other causes. Stack panels flat to prevent sagging.

### 1.5 PROJECT CONDITIONS

- A. Environmental Limitations: Comply with ASTM C 840 requirements or gypsum board manufacturer's written recommendations, whichever are more stringent.
- B. Do not install interior products until installation areas are enclosed and conditioned.
- C. Do not install panels that are wet, those that are moisture damaged, and those that are mold damaged.
  - 1. Indications that panels are wet or moisture damaged include, but are not limited to, discoloration, sagging, or irregular shape.
  - 2. Indications that panels are mold damaged include, but are not limited to, fuzzy or splotchy surface contamination and discoloration.

## PART 2 - PRODUCTS

## 2.1 PANELS, GENERAL

A. Size: Provide in maximum lengths and widths available that will minimize joints in each area and that correspond with support system indicated.

# 2.2 INTERIOR GYPSUM BOARD

### A. General:

- 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
  - a. G-P Gypsum.
  - b. National Gypsum Company.
  - c. PABCO Gypsum.
  - d. USG Corporation.
  - e. Accepted equal.
- B. Fire-Rated Type: ASTM C 36/C 36M or ASTM C 1396/C 1396M.
  - 1. Core: 5/8 inch, Type X.
  - 2. Long Edges: Tapered and featured (rounded or beveled) for prefilling.

- C. Abuse-Resistant Type: Manufactured to produce greater resistance to surface indentation, through-penetration (impact resistance), and abrasion than standard Type X gypsum board.
  - 1. Core: 5/8 inch, Type X.
  - 2. Long Edges: Tapered.
- D. Water-Resistant, Fire-Rated Type: ASTM C 630/C 630M or ASTM C 1396/C 1396M.
  - 1. Core: 5/8 inch, Type X.
  - 2. Long Edges: Tapered.

### 2.3 TILE BACKING PANELS

- A. Cementitious Backer Units: ANSI A118.9.
  - 1. Products: Subject to compliance with requirements, provide one of the following:
    - a. Custom Building Products; Wonderboard.
    - b. FinPan, Inc.; Util-A-Crete Concrete Backer Board.
    - c. USG Corporation; DUROCK Cement Board.
    - d. Accepted equal.
  - 2. Thickness: 5/8 inch.

### 2.4 TRIM ACCESSORIES

- A. Interior Trim: ASTM C 1047.
  - 1. Material: Galvanized or aluminum-coated steel sheet or rolled zinc.
  - 2. Shapes:
    - a. Cornerbead.
    - b. LC-Bead: J-shaped; exposed long flange receives joint compound.
    - c. Expansion (control) joint.
    - d. Curved-Edge Cornerbead: With notched or flexible flanges.
- B. Aluminum Trim: Extruded accessories of profiles and dimensions indicated.
  - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
    - a. Fry Reglet Corp.
    - b. Gordon, Inc.
    - c. Pittcon Industries.
    - d. Accepted equal.
  - 2. Aluminum: Alloy and temper with not less than the strength and durability properties of ASTM B 221, Alloy 6063-T5.
  - 3. Finish: Corrosion-resistant primer compatible with joint compound and finish materials specified, or Class II anodic finish, as selected.

### 2.5 JOINT TREATMENT MATERIALS

- A. General: Comply with ASTM C 475/C 475M.
- B. Joint Tape:
  - 1. Interior Gypsum Wallboard: Paper.
  - 2. Tile Backing Panels: As recommended by panel manufacturer.
- C. Joint Compound for Interior Gypsum Wallboard: For each coat use formulation that is compatible with other compounds applied on previous or for successive coats.
  - 1. Prefilling: At open joints, rounded or beveled panel edges, and damaged surface areas,

- use setting-type taping compound.
- 2. Embedding and First Coat: For embedding tape and first coat on joints, fasteners, and trim flanges, use drying-type, all-purpose compound.
  - a. Use setting-type compound for installing paper-faced metal trim accessories.
- 3. Fill Coat: For second coat, use drying-type, all-purpose compound.
- 4. Finish Coat: For third coat, use drying-type, all-purpose compound.
- 5. Skim Coat: For final coat of Level 5 finish, use drying-type, all-purpose compound.
  - a. Contractor's Option: Use high-build interior coating product designed for application by airless sprayer and to be used instead of skim coat to produce Level 5 finish.
    - 1) Product: USG Corporation; Sheetrock Brand Tuff-Hide Primer-Surfacer.
- D. Joint Compound for Tile Backing Panels:
  - 1. Cementitious Backer Units: As recommended by backer unit manufacturer.

### 2.6 AUXILIARY MATERIALS

- A. General: Provide auxiliary materials that comply with referenced installation standards and manufacturer's written recommendations.
- B. Laminating Adhesive: Adhesive or joint compound recommended for directly adhering gypsum panels to continuous substrate.
  - 1. Use adhesives that have a VOC content of 50 g/L or less when calculated according to 40 CFR 59, Subpart D (EPA Method 24).
- C. Steel Drill Screws: ASTM C 1002, unless otherwise indicated.
  - 1. Use screws complying with ASTM C 954 for fastening panels to steel members from 0.033 to 0.112 inch thick.
  - 2. For fastening cementitious backer units, use screws of type and size recommended by panel manufacturer.
- D. Acoustical Sealant: As specified in Division 07 Section "Joint Sealants."
- E. Thermal Insulation: As specified in Division 07 Section "Building Insulation."

# PART 3 - EXECUTION

## 3.1 EXAMINATION

- A. Examine areas and substrates, with Installer present, and including welded hollow-metal frames and framing, for compliance with requirements and other conditions affecting performance.
- B. Examine panels before installation. Reject panels that are wet, moisture damaged, and mold damaged.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.
- 3.2 APPLYING AND FINISHING PANELS, GENERAL
  - A. Comply with ASTM C 840.

- B. Install ceiling panels across framing to minimize the number of abutting end joints and to avoid abutting end joints in central area of each ceiling. Stagger abutting end joints of adjacent panels not less than one framing member.
- C. Install panels with face side out. Butt panels together for a light contact at edges and ends with not more than 1/16 inch of open space between panels. Do not force into place.
- D. Locate edge and end joints over supports, except in ceiling applications where intermediate supports or gypsum board back-blocking is provided behind end joints. Do not place tapered edges against cut edges or ends. Stagger vertical joints on opposite sides of partitions. Do not make joints other than control joints at corners of framed openings.
- E. Form control and expansion joints with space between edges of adjoining gypsum panels.
- F. Cover both faces of support framing with gypsum panels in concealed spaces (above ceilings, etc.), except in chases braced internally.
  - 1. Unless concealed application is indicated or required for sound, fire, air, or smoke ratings, coverage may be accomplished with scraps of not less than 8 sq. ft. in area.
  - 2. Fit gypsum panels around ducts, pipes, and conduits.
  - 3. Where partitions intersect structural members projecting below underside of floor/roof slabs and decks, cut gypsum panels to fit profile formed by structural members; allow 1/4- to 3/8-inch- wide joints to install sealant.
- G. Isolate perimeter of gypsum board applied to non-load-bearing partitions at structural abutments, except floors. Provide 1/4- to 1/2-inch- wide spaces at these locations, and trim edges with edge trim where edges of panels are exposed. Seal joints between edges and abutting structural surfaces with acoustical sealant.
- H. Attachment to Steel Framing: Attach panels so leading edge or end of each panel is attached to open (unsupported) edges of stud flanges first.
- I. STC-Rated Assemblies: Seal construction at perimeters, behind control joints, and at openings and penetrations with a continuous bead of acoustical sealant. Install acoustical sealant at both faces of partitions at perimeters and through penetrations. Comply with ASTM C 919 and with manufacturer's written recommendations for locating edge trim and closing off sound-flanking paths around or through assemblies, including sealing partitions above acoustical ceilings.

## 3.3 APPLYING INTERIOR GYPSUM BOARD

- A. Install interior gypsum board in the following locations:
  - 1. Type X: Throughout, unless otherwise indicated.
  - 2. Abuse-Resistant Type: As indicated on Drawings.
  - 3. Water-Resistant, Fire-Rated Type: As indicated on Drawings.
- B. Single-Layer Application:
  - 1. On ceilings, apply gypsum panels before wall/partition board application to greatest extent possible and at right angles to framing, unless otherwise indicated.
  - 2. On partitions/walls, apply gypsum panels horizontally (perpendicular to framing), unless otherwise indicated or required by fire-resistance-rated assembly, and minimize end joints.

- a. Stagger abutting end joints not less than one framing member in alternate courses of panels.
- b. At stairwells and other high walls, install panels horizontally, unless otherwise indicated or required by fire-resistance-rated assembly.
- 3. On Z-furring members, apply gypsum panels vertically (parallel to framing) with no end joints. Locate edge joints over furring members.
- 4. Fastening Methods: Apply gypsum panels to supports with steel drill screws.

# C. Multilayer Application:

- On ceilings, apply gypsum board indicated for base layers before applying base layers on walls/partitions; apply face layers in same sequence. Apply base layers at right angles to framing members and offset face-layer joints 1 framing member, 16 inches minimum, from parallel base-layer joints, unless otherwise indicated or required by fire-resistancerated assembly.
- 2. On partitions/walls, apply gypsum board indicated for base layers and face layers vertically (parallel to framing) with joints of base layers located over stud or furring member and face-layer joints offset at least one stud or furring member with base-layer joints, unless otherwise indicated or required by fire-resistance-rated assembly. Stagger joints on opposite sides of partitions.
- 3. On Z-furring members, apply base layer vertically (parallel to framing) and face layer either vertically (parallel to framing) or horizontally (perpendicular to framing) with vertical joints offset at least one furring member. Locate edge joints of base layer over furring members.
- 4. Fastening Methods: Fasten base layers with screws; fasten face layers with adhesive and supplementary fasteners.
- D. Laminating to Substrate: Where gypsum panels are indicated as directly adhered to a substrate (other than studs, joists, furring members, or base layer of gypsum board), comply with gypsum board manufacturer's written recommendations and temporarily brace or fasten gypsum panels until fastening adhesive has set.

### E. Curved Surfaces:

- 1. Install panels horizontally (perpendicular to supports) and unbroken, to extent possible, across curved surface plus 12-inch- long straight sections at ends of curves and tangent to them.
- 2. For double-layer construction, fasten base layer to studs with screws 16 inches o.c. Center gypsum board face layer over joints in base layer, and fasten to studs with screws spaced 12 inches o.c.

### 3.4 APPLYING TILE BACKING PANELS

- A. Tile backing Panels: Comply with manufacturer's written installation instructions and install at locations indicated to receive tile. Install with 1/4-inch gap where panels abut other construction or penetrations.
- B. Where tile backing panels abut other types of panels in same plane, shim surfaces to produce a uniform plane across panel surfaces.

# 3.5 INSTALLING TRIM ACCESSORIES

A. General: For trim with back flanges intended for fasteners, attach to framing with same fasteners

used for panels. Otherwise, attach trim according to manufacturer's written instructions.

- B. Control Joints: Install control joints according to ASTM C 840 and in specific locations approved by Architect for visual effect.
- C. Interior Trim: Install in the following locations:
  - 1. Cornerbead: Use at outside corners, unless otherwise indicated.
  - 2. LC-Bead: Use at exposed panel edges.
  - 3. Curved-Edge Cornerbead: Use at curved openings.
- D. Aluminum Trim: Install in locations indicated on Drawings.

## 3.6 FINISHING GYPSUM BOARD

- A. General: Treat gypsum board joints, interior angles, edge trim, control joints, penetrations, fastener heads, surface defects, and elsewhere as required to prepare gypsum board surfaces for decoration. Promptly remove residual joint compound from adjacent surfaces.
- B. Prefill open joints, rounded or beveled edges, and damaged surface areas.
- C. Apply joint tape over gypsum board joints, except those with trim having flanges not intended for tape.
- D. Gypsum Board Finish Levels: Finish panels to levels indicated below and according to ASTM C 840:
  - 1. Level 0: In areas of temporary construction.
  - 2. Level 1: Ceiling plenum areas, concealed areas, and where indicated.
  - 3. Level 2: Panels that are substrate for tile.
  - 4. Level 3: Panels that are substrate for sound-absorptive panels.
  - 5. Level 4: At panel surfaces that will be exposed to view, unless otherwise indicated.
    - a. Primer and its application to surfaces are specified in other Division 09 Sections.
  - 6. Level 5: At panel surfaces that are scheduled to receive paints with semi-gloss or gloss sheen.
    - a. Primer and its application to surfaces are specified in other Division 09 Sections.
- E. Abuse-Resistant Gypsum Wallboard: Finish according to manufacturer's written instructions
- F. Cementitious Backer Units: Finish according to manufacturer's written instructions.

## 3.7 PROTECTION

- A. Protect installed products from damage from weather, condensation, direct sunlight, construction, and other causes during remainder of the construction period.
- B. Remove and replace panels that are wet, moisture damaged, and mold damaged.
  - 1. Indications that panels are wet or moisture damaged include, but are not limited to, discoloration, sagging, or irregular shape.
  - 2. Indications that panels are mold damaged include, but are not limited to, fuzzy or splotchy surface contamination and discoloration.

## **SECTION 099100**

#### **PAINTING**

#### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. This Section includes surface preparation and field painting of exposed exterior and interior items and surfaces.
- B. Related Sections:
  - 1. See "Interior Finish Schedule" for product information not specified in this Section.

## 1.2 SYSTEM DESCRIPTION

- A. General: Paint exterior and interior surfaces as indicated on the Drawings and designated by the Architect.
- B. Surfaces Not to be Painted:
  - 1. Cast-in-place concrete.
  - 2. Portland cement plaster surfaces with integrally-colored finish coats.
  - 3. Factory-finished items specified in various Sections.
  - 4. Prefinished wall, ceiling, and floor coverings.
  - 5. Painting specified elsewhere and included in respective Sections, including but not necessarily limited to, shop priming.
  - 6. Code-Required Labels: Keep equipment identification and fire rating labels free of paint.
  - 7. Surfaces concealed in walls and above ceilings except as specifically indicated otherwise.
  - 8. Ducts, piping, conduit, and equipment concealed in walls and ceilings, unless specifically indicated otherwise.

### 1.3 SUBMITTALS

- A. Product Data: For each product indicated.
- B. Samples: For each type of paint system and in each color and gloss of topcoat indicated.
  - 1. Submit Samples on rigid backing, 8-1/2 inches by 11 inches.
  - 2. Step coats on Samples to show each coat required for system.
  - 3. Label each coat of each Sample.
  - 4. Label each Sample for location and application area
- C. Sustainable Design Submittals:
  - 1. Product Data: Manufacturers' product data for paints, including printed statement of VOC content.

### 1.4 OUALITY ASSURANCE

A. Applicators Qualifications: Engage an experienced applicator who has completed painting system applications similar in material and extent.

- B. Single Source Responsibility: Provide primers and other undercoat paint produced by same manufacturer as finish coats. Use thinners approved by paint manufacturer, and use within recommended limits.
- C. Coordination of Work: Review other Sections in which prime paints are to be provided to ensure compatibility of coatings system for various substrates. Upon request, furnish information or characteristics of finish materials to be used.
- D. Requirements of Regulatory Agencies: Comply with applicable rules and regulations of governing agencies for air quality control.
  - 1. Comply with current applicable regulations of the local air quality district, California Air Resources Board (CARB) and the Environmental Protection Agency (EPA).
  - 2. Regulatory changes may affect the formulation, availability, or use of specified coatings. Confirm availability of coatings to be used prior to start of painting.
  - 3. Paint shall comply with Green Seal GS-11 GC-03 and SCAQMD Rule 1113.

### 1.5 PROJECT CONDITIONS

- A. Store materials not in use in tightly covered containers in a well-ventilated area at a minimum ambient temperature of 45 deg F. Maintain storage containers in a clean condition, free of foreign materials and residue.
- B. Apply waterborne paints only when temperatures of surfaces to be painted and surrounding air are between 50 and 90 deg F.
- C. Do not apply paint in snow, rain, fog, or mist; or when relative humidity exceeds 85 percent; or at temperatures less than 5 deg F above the dew point; or to damp or wet surfaces.

# 1.6 EXTRA MATERIALS

- A. Furnish extra paint materials from the same production run as the materials applied and in the quantities described below. Package with protective covering for storage and identify with labels describing contents. Deliver extra materials to Owner.
  - 1. Quantity: 1 gal. of each material and color applied.

# PART 2 - PRODUCTS

## 2.1 MANUFACTURERS

- A. Owner's Standards Program: Where applicable, provide products under the terms and conditions of the Owner's standards program; no substitutions.
- B. Manufacturers: Products of the following manufacturers are listed in other Part 2 articles and use the abbreviated names shown in parentheses:
  - 1. Sherwin-Williams Co., The (Sherwin-Williams) or approved equal.
- C. Subject to compliance with requirements, provide the named products or comparable products by an accepted equal manufacturer.

### 2.2 PAINT MATERIALS, GENERAL

- A. Material Compatibility: Provide block fillers, primers, and finish-coat materials that are compatible with one another and with the substrates indicated under conditions of service and application, as demonstrated by manufacturer based on testing and field experience.
- B. Material Quality: Provide manufacturer's top-of-the-line-quality paint material of the various coating types specified that are factory formulated and recommended by manufacturer for application indicated. Paint-material containers not displaying manufacturer's product identification will not be acceptable.
- C. Colors:
  - 1. Interior Colors: As specified "Interior Finish Schedule" and indicated on the Drawings

### 2.3 PREPARATORY COATS

- A. Crack Fillers: Factory-formulated acrylic emulsion crack fillers compatible with substrate and finish-coat materials indicated.
- B. Typical Interior Primers: Interior latex-based primers of finish coat manufacturer and recommended in writing by manufacturer for use with finish coat and on substrate indicated.
  - 1. Gypsum Board Substrates: Zero VOC primer/sealer.
    - a. Sherwin-Williams; B28 ProMar 200 Zero or approved equal.
  - 2. Ferrous-Metal, Zinc-Coated Metal, and Aluminum Substrates: Rust-inhibitive acrylic metal primer.

### 2.4 INTERIOR FINISH COATS

- A. Interior Flat Zero VOC/Low Odor Acrylic Paint:
  - 1. Sherwin-Williams; B30-2600 ProMar 200 Zero.
- B. Interior Low-Sheen Zero VOC/Low Odor Acrylic Enamel:
  - 1. Sherwin-Williams; B20-2600 ProMar 200 Zero.
- C. Interior Semigloss Zero VOC/Low Odor Acrylic Enamel:
  - 1. Sherwin-Williams; B31-2600 ProMar 200 Zero.

### PART 3 - EXECUTION

### 3.1 APPLICATION

- A. Examine substrates, areas, and conditions, with Applicator present, for compliance with requirements for paint application.
- B. Coordination of Work: Review other Sections in which primers are provided to ensure compatibility of the total system for various substrates. On request, furnish information on characteristics of finish materials to ensure use of compatible primers.
- C. Remove hardware and hardware accessories, plates, machined surfaces, lighting fixtures, and similar items already installed that are not to be painted. If removal is impractical or impossible because of size or weight of the item, provide surface-applied protection before surface

preparation and painting.

- 1. After completing painting operations in each space or area, reinstall items removed using workers skilled in the trades involved.
- D. Surface Preparation: Clean and prepare surfaces to be painted according to manufacturer's written instructions for each particular substrate condition and as specified.
  - 1. Provide barrier coats over incompatible primers or remove and reprime.
  - 2. Ferrous Metals: Clean ungalvanized ferrous-metal surfaces that have not been shop coated; remove oil, grease, dirt, loose mill scale, and other foreign substances. Use solvent or mechanical cleaning methods that comply with SSPC's recommendations.
    - a. Touch up bare areas and shop-applied prime coats that have been damaged. Wirebrush, clean with solvents recommended by paint manufacturer, and touch up with same primer as the shop coat.

# E. Material Preparation:

- 1. Maintain containers used in mixing and applying paint in a clean condition, free of foreign materials and residue.
- 2. Stir material before application to produce a mixture of uniform density. Stir as required during application. Do not stir surface film into material. If necessary, remove surface film and strain material before using.
- F. Exposed Surfaces: Include areas visible when permanent or built-in fixtures, grilles, convector covers, covers for finned-tube radiation, and similar components are in place. Extend coatings in these areas, as required, to maintain system integrity and provide desired protection.
  - 1. Paint surfaces behind movable equipment and furniture the same as similar exposed surfaces. Before final installation of equipment, paint surfaces behind permanently fixed equipment or furniture with prime coat only.
  - 2. Paint interior surfaces of ducts with a flat, nonspecular black paint where visible through registers or grilles.
  - 3. Paint back sides of access panels and removable or hinged covers to match exposed surfaces.
  - 4. Finish exterior doors on tops, bottoms, and side edges the same as exterior faces.
  - 5. Paint all gypsum board ceiling, wall, and soffit surfaces above metal mesh ceilings and suspended decorative grid ceilings.
- G. Scheduling Painting: Apply first coat to surfaces that have been cleaned, pretreated, or otherwise prepared for painting as soon as practicable after preparation and before subsequent surface deterioration.
  - 1. Omit primer over metal surfaces that have been shop primed and touchup painted.
  - 2. If undercoats, stains, or other conditions show through final coat of paint, apply additional coats until paint film is of uniform finish, color, and appearance.
- H. Application Procedures: Apply paints and coatings by brush, roller, spray, or other applicators according to manufacturer's written instructions.
- I. Minimum Coating Thickness: Apply paint materials no thinner than manufacturer's recommended spreading rate. Provide total dry film thickness of the entire system as recommended by manufacturer.
- J. Mechanical and Electrical Work: Painting of mechanical and electrical work is limited to items exposed in equipment rooms and occupied spaces.

- K. Prime Coats: Before applying finish coats, apply a prime coat, as recommended by manufacturer, to material that is required to be painted or finished and that has not been prime coated by others. Recoat primed and sealed surfaces where evidence of suction spots or unsealed areas in first coat appears, to ensure a finish coat with no burn-through or other defects due to insufficient sealing.
- L. Pigmented (Opaque) Finishes: Completely cover surfaces as necessary to provide a smooth, opaque surface of uniform finish, color, appearance, and coverage. Cloudiness, spotting, holidays, laps, brush marks, runs, sags, ropiness, or other surface imperfections will not be acceptable.

### 3.2 CLEANING AND PROTECTING

- A. At the end of each workday, remove empty cans, rags, rubbish, and other discarded paint materials from Project site.
- B. Protect work of other trades, whether being painted or not, against damage from painting. Correct damage by cleaning, repairing or replacing, and repainting, as approved by Architect
- C. Provide "Wet Paint" signs to protect newly painted finishes. After completing painting operations, remove temporary protective wrappings provided by others to protect their work.
  - 1. After work of other trades is complete, touch up and restore damaged or defaced painted surfaces. Comply with procedures specified in PDCA P1.

# 3.3 WASTE MANAGEMENT

- A. Set aside extra paint for future color matches, or reuse by Owner. Where paint recycling is available, collect all waste paint by type and provide for delivery to recycling or collection facility.
- B. Close and seal tightly all partly used paint and finish containers and store protected in well-ventilated fire-safe area at moderate temperature.
- C. Place empty containers of solvent based paints in areas designated for hazardous materials.
- D. Do not dispose of paints or solvents by pouring on the ground. Place in designated containers for proper disposal.

#### 3.4 INTERIOR PAINT SCHEDULE

## A. Gypsum Board:

- 1. General:
  - a. Paint Sheens: As indicated on the Drawings.
- 2. Walls and Ceilings to receive Low-Luster (Eggshell) Finish:
  - a. General: Acrylic finish, two finish coats over a primer.
  - b. Primer: Primer: Interior zero VOC/low odor primer as specified for substrate indicated.
  - c. Finish Coats: Interior low-luster (eggshell) zero VOC/low odor acrylic enamel.
- 3. Walls and Ceilings to receive Semi-Gloss Finish:

- a. General: Acrylic finish, two finish coats over a primer.
- b. Primer: Primer: Interior zero VOC/low odor primer as specified for substrate indicated.
- c. Finish Coats: Interior semigloss zero VOC/low odor acrylic enamel.
- B. Metal Doors and Frames, and Other Miscellaneous Metal:
  - 1. Ferrous Metal:
    - a. Acrylic Finish: Two finish coats over a primer.
      - 1) Primer: Interior primer as specified for substrate indicated (not required on shop-primed items).
      - 2) Finish Coats: Interior semigloss zero VOC/low odor acrylic enamel.
  - 2. Zinc-Coated Metal:
    - a. Acrylic Finish: Two finish coats over a primer.
      - 1) Primer: Interior primer as specified for substrate indicated (not required on shop-primed items).
      - 2) Finish Coats: Interior semigloss zero VOC/low odor acrylic enamel.

END OF SECTION 099100

## **SECTION 101400**

#### SIGNAGE

#### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. This Section includes the following:
  - 1. Interior, Code-required plaque signs and accessories.
  - 2. Other signs and accessories in accordance with Owner's signage schedule.
- B. Related Sections include the following:
  - 1. Section 015000 for temporary Project identification signs and for temporary information and directional signs.
  - 2. Applicable Division 22 Plumbing Sections for labels, tags, and nameplates for plumbing systems and equipment.
  - 3. Applicable Division 23 Heating, Ventilating, and Air Conditioning Sections for labels, tags, and nameplates for HVAC systems and equipment.
  - 4. Applicable Division 26 Electrical Sections for electrical service and connections for illuminated signs; labels, tags, and nameplates for electrical equipment; and illuminated Exit signs.

#### 1.2 SYSTEM DESCRIPTION

- A. General: Provide, complete with text and attachment devices, signs of the following types:
  - 1. Toilet Room Signs: Provide for every toilet room door and wall adjacent to toilet room door, per applicable code requirements and as indicated.
  - 2. Emergency Exit Map Signs: Provide per applicable code requirements and as indicated.
  - 3. Exit and Exit Route Signs: Provide per applicable code requirements and as indicated.
  - 4. Electrical Equipment Room and Closet Signs: Provide per National Electric Code requirements and as indicated.
  - 5. Room Identification Signs: Provide as indicated.
  - 6. Entry Door Signage: Provide per applicable code requirements and as indicated.
  - 7. Smoking and/or Non-Smoking Policy Signage: Provide per applicable code requirements and as indicated.
  - 8. Other Signs: Provide as indicated.

### 1.3 SUBMITTALS

- A. Product Data: For each product indicated.
- B. Sustainable Design Submittals:
  - 1. Product Data:
    - a. For installation adhesives, including printed statement of VOC content.
    - b. For products having recycled content, documentation indicating percentages by weight of postconsumer and preconsumer recycled content
      - 1) Include statement indicating costs for each product having recycled content.
- C. Shop Drawings: Include plans, elevations, sections, details, and attachments to other Work.

- 1. Verify dimensions by field measurements before fabrication and indicate measurements on Shop Drawings.
- 2. Provide message list for each sign, including large-scale details of wording, lettering, and braille layout.
- D. Samples: For each sign material indicated that involves color selection.

## 1.4 QUALITY ASSURANCE

- A. Regulatory Requirements: Comply with the Americans with Disabilities Act (ADA) and with code provisions as adopted by authorities having jurisdiction.
  - 1. Character Type: Characters on signs shall be raised 1/32-inch minimum, and shall be sans serif uppercase characters accompanied by Grade 2 Braille. Comply with CBC Section 1117B.5.5.
  - 2. Character Size: Per CBC 1117B.5.4, raised characters shall be a minimum of 5/8-inch high and a maximum of 2 inches high.
  - 3. Finish and Contrast: Per CBC Section 1117B.5.2, contrast between character, symbols, and their background must be 70 percent minimum, and have a non-glare finish.
  - 4. Proportions: Per CBC Section 1117B.5.3, characters on signs shall have a width-to-height ratio of between 3:5 and 1:1, and a stroke width-to-height ratio of between 1:5 and 1:10.
    - a. Proportions Test: Per CBC Section 1117B.5.3, all letters measured must be upper case. After choosing a typestyle to test, begin by printing the letters I, X, and O at 1-inch high. Place the template's 1:1 square over the X or O, whichever is narrower. If the character is not wider than 1-inch, nor narrower than the 3:5 rectangle, the proportions are correct. Use the 1:5 rectangle to determine if the stroke of the I is too broad, and the 1:10 rectangle to see if it is too narrow. If all the tests are passed, the typestyle is compliant with the proportion code.
  - 5. Braille: Per CBC Section 1117B.5.6, California Contracted Grade 2 Braille shall be used wherever Braille is required. Dots shall be 1/10-inch on centers in each cell with 2/10 inch space between cells, measured from the second column of dots in the first cell to the first column of dots in the second cell. Dots shall be raised a minimum of 1/40 inch above the background.
    - a. Rounded or domed California Braille dots shall be used, each distinct and separate. Dots with straight sides and flat tops are not acceptable.
  - 6. International Symbol of Accessibility: Provide per CBC Section 1117B5.8 / 1117B.5.8.1.2.
  - 7. Tactile Exit Signs: Provide per CBC Section 1011.3.
- B. VOC Content of Interior Adhesives and Sealants:
  - 1. Interior Sealants used as Filler: Meet or exceed Bay Area Air Quality Management District Reg. 8, Rule 51 VOC requirements.
  - 2. Interior Adhesives and Other Sealants: Meet or exceed South Coast Air Quality Management District Rule 1168 VOC requirements

### PART 2 – PRODUCTS

### 2.1 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
  - 1. Adelphia Graphic Systems.
  - 2. ASI-Modulex, Inc.
  - 3. Mohawk Sign Systems.
  - 4. Accepted equal.

# 2.2 PLAQUE SIGNS

- A. Plaque Signs: Provide plaque signs that comply with California Building Code requirements for materials, thicknesses, finishes, colors, designs, graphic content, shapes, sizes, and details of construction.
- B. Cast-Acrylic Sheet: Manufacturer's standard and as follows:
  - 1. Color: As selected from manufacturer's full range.
  - 2. Colored Coatings for Acrylic Sheet: For copy and background colors, provide Pantone Matching System (PMS) colored coatings, including inks and paints, that are recommended by acrylic manufacturers for optimum adherence to acrylic surface and are nonfading for application intended.
- C. Aluminum Sheet and Plate: ASTM B 209 (ASTM B 209M), alloy and temper recommended by aluminum producer and finisher for type of use and finish indicated, and with not less than the strength and durability properties of 5005-H15.
- D. Stainless-Steel Plate, Sheet, and Strip: Provide stainless-steel plate, sheet, and strip, Type 302 or Type 304, complying with ASTM A 666.
- E. Applied Vinyl: Die-cut characters from vinyl film of nominal thickness of 3 mils with pressure-sensitive adhesive backing, suitable for exterior applications.
  - 1. Copy Size and Style: As indicated on the Drawings.
  - 2. Color: As selected by the Architect from manufacturer's full range.

## 2.3 ACCESSORIES

- A. Adhesive: Use silicone adhesive fabricated from materials that are not corrosive to sign material and mounting surface.
- B. Brackets: Fabricate brackets and fittings for bracket-mounted signs from extruded aluminum to suit panel sign construction and mounting conditions indicated. Factory-paint brackets in color as selected.

### 2.4 FABRICATION

A. Unframed Plaque Signs: Fabricate signs with edges mechanically and smoothly finished to comply with the following requirements:

- 1. Edge Condition: Square cut or beveled, as selected by Architect
- 2. Corner Condition: Square or rounded to radius indicated.
- B. Tactile and Braille Copy: Manufacturer's standard process for producing copy complying with ADA Accessibility Guidelines and ICC/ANSI A117.1. Text shall be accompanied by Grade 2 braille. Produce precisely formed characters with square cut edges free from burrs and cut marks.
  - 1. Raised-Copy Thickness: Not less than 1/32 inch.

## 2.5 ALUMINUM FINISHES

A. Clear Anodic Finish: Manufacturer's standard clear anodic coating, 0.018 mm or thicker, over a satin (directionally textured) mechanical finish.

### 2.6 STEEL FINISHES

- A. Surface Preparation: Remove mill scale and rust, if present, from uncoated steel, complying with SSPC-SP 5/NACE No. 1, "White Metal Blast Cleaning," or SSPC-SP 8, "Pickling."
- B. Baked-Enamel Finish: Immediately after cleaning and pretreating, apply manufacturer's standard two-coat, baked-enamel finish consisting of prime coat and thermosetting topcoat. Comply with paint manufacturer's written instructions for applying and baking to achieve a minimum dry film thickness of 2 mils.

## 2.7 STAINLESS-STEEL FINISHES

- A. Remove tool and die marks and stretch lines or blend into finish. Grind and polish surfaces to produce uniform, directionally textured, polished finish indicated, free of cross scratches. Run grain with long dimension of each piece.
- B. Bright, Directional Polish: No. 4 finish.
- C. When polishing is completed, passivate and rinse surfaces. Remove embedded foreign matter and leave surfaces chemically clean.

## PART 3 - EXECUTION

## 3.1 INSTALLATION

- A. General: Locate signs and accessories where indicated, using mounting methods of types described and in compliance with manufacturer's written instructions.
  - 1. Install signs only after surfaces on which they are to be mounted are painted and finished.
  - 2. Install signs level, plumb, and at heights indicated, with sign surfaces free from distortion and other defects in appearance.
  - 3. Interior Door Signs: Where applicable, install signs on doors as indicated.
  - 4. Interior Wall Signs: Where applicable, install signs on walls adjacent to latch side of door. Where not indicated or possible, such as double doors, install signs on nearest adjacent walls. Locate to allow approach within 3 inches of sign without encountering

- protruding objects or standing within swing of door
- 1. Attachment: Concealed type as recommended by sign manufacturer for type of substrate involved.
- B. Wall- and Door-Mounted Plaque Signs: Attach plaque signs to surfaces using methods indicated below:
  - 1. Silicone-Adhesive Mounting: Use liquid-silicone adhesive recommended in writing by sign manufacturer to attach signs to irregular, porous, or vinyl-covered surfaces. Use double-sided vinyl tape where recommended in writing by sign manufacturer to hold sign in place until adhesive has fully cured.
  - 2. Where plaque signs are scheduled or indicated to be mounted on glass, provide matching plate on opposite side of glass to conceal mounting materials.
- C. Bracket-Mounted Units: Provide manufacturer's standard brackets, fittings, and hardware as appropriate for mounting signs that project at right angles from walls and ceilings. Attach brackets and fittings securely to walls and ceilings with concealed fasteners and anchoring devices to comply with manufacturer's written instructions.
- D. Dimensional Characters: Mount characters using standard fastening methods to comply with manufacturer's written instructions for character form, type of mounting, construction, and condition of exposure indicated. Provide heavy paper template to establish character spacing and to locate holes for fasteners.
- E. Entry Door Signage: Mount characters on glass surfaces to comply with manufacturer's written instructions. Provide template to establish character spacing.
- F. Cleaning: Clean soiled surfaces per manufacturer's recommendations.

END OF SECTION 101400

### **SECTION 102810**

## TOILET AND BATH ACCESSORIES

## PART 1 - GENERAL

### 1.1 SUMMARY

- A. Section Includes:
  - 1. Toilet and bath accessories.
  - Custodial accessories.
- B. Related Sections:
  - 1. Section 061000 "Rough Carpentry" for wood backing for mounting items requiring anchorage.

### 1.2 SUBMITTALS

- A. Product Data: For each type of product indicated. Include the following:
  - 1. Construction details and dimensions.
  - 2. Anchoring and mounting requirements, including requirements for cutouts in other work and substrate preparation.
  - 3. Material and finish descriptions.
  - 4. Features that will be included for Project.
  - 5. Manufacturer's warranty.
- B. Sustainable Design Submittals:
  - 1. Product Data: For products having recycled content, documentation indicating percentages by weight of postconsumer and preconsumer recycled content.
    - a. Include statement indicating costs for each product having recycled content.
- C. Product Schedule: Indicating types, quantities, sizes, and installation locations by room of each accessory required.
  - 1. Identify products using designations indicated.
- D. Maintenance Data: For toilet and bath accessories to include in maintenance manuals.
- E. Warranty: Sample of special warranty.

## 1.3 QUALITY ASSURANCE

A. Source Limitations: For products listed together in the same Part 2 articles, obtain products from single source from single manufacturer

### 1.4 COORDINATION

A. Coordinate accessory locations with other work to prevent interference with clearances required for access by people with disabilities, and for proper installation, adjustment, operation, cleaning,

and servicing of accessories.

B. Deliver inserts and anchoring devices set into concrete or masonry as required to prevent delaying the Work.

### 1.5 WARRANTY

- A. Special Mirror Warranty: Manufacturer's standard form in which manufacturer agrees to replace mirrors that develop visible silver spoilage defects and that fail in materials or workmanship within specified warranty period.
  - 1. Warranty Period: 15 years from date of Substantial Completion.

#### PART 2 - PRODUCTS

### 2.1 MATERIALS

- A. Stainless Steel: ASTM A 666, Type 304, 0.031-inch minimum nominal thickness unless otherwise indicated.
- B. Steel Sheet: ASTM A 1008/A 1008M, Designation CS (cold rolled, commercial steel), 0.036-inch minimum nominal thickness.
- C. Galvanized-Steel Sheet: ASTM A 653/A 653M, with G60 hot-dip zinc coating.
- D. Galvanized-Steel Mounting Devices: ASTM A 153/A 153M, hot-dip galvanized after fabrication.
- E. Fasteners: Screws, bolts, and other devices of same material as accessory unit and tamper-and-theft resistant where exposed, and of galvanized steel where concealed.
- F. Chrome Plating: ASTM B 456, Service Condition Number SC 2 (moderate service).
- G. Mirrors: ASTM C 1503, Mirror Glazing Quality, clear-glass mirrors, nominal 6.0 mm thick.

## 2.2 TOILET AND BATH ACCESSORIES

- A. Basis-of-Design Products: The design for toilet and bath accessories is based on products by Bobrick Washroom Equipment, Inc.
- B. Subject to compliance with requirements, provide the named product or a comparable product by one of the following:
  - 1. American Specialties, Inc.
  - 2. Bradley Corporation.
  - 3. Accepted equal
- C. Marked "GB1" Grab Bar:
  - 1. Basis-of-Design Product: Bobrick; B-6806.99 x 36.
  - 2. Mounting: Flanges with concealed fasteners.
  - 3. Material: Stainless steel, 0.05 inch thick.
  - 4. Finish: No. 4, satin finish.

- 5. Outside Diameter: 1-1/2 inches.
- 6. Configuration and Length: 36-inches long; horizontal, straight type; peened grip.

# D. Marked "GB2" - Grab Bar:

- 1. Basis-of-Design Product: Bobrick; B-6806.99 x 42.
- 2. Mounting: Flanges with concealed fasteners.
- 3. Material: Stainless steel, 0.05 inch thick.
- 4. Finish: No. 4, satin finish.
- 5. Outside Diameter: 1-1/2 inches.
- 6. Configuration and Length: 42-inches long; horizontal, straight type; peened grip.

## E. Marked "MIR" - Mirror Unit:

- 1. Basis-of-Design Product: Bobrick; B-290 Series.
- 2. Frame: Stainless-steel angle with corners mitered, welded, and ground smooth.
- 3. Hangers: Rigid, tamper- and theft-resistant installation.
- 4. Sizes: As indicated on the Drawings.

## F. Marked "PTD" - Paper Towel Dispenser:

- 1. Basis-of-Design Product: Bobrick; B-262.
- 2. Mounting: Surface mounted.
- 3. Minimum Capacity: 400 C-fold or 525 multifold towels.
- 4. Material and Finish: Stainless steel, No. 4 finish (satin).
- 5. Lockset: Tumbler type.
- 6. Refill Indicators: Pierced slots at sides or front.

# G. Marked "SCD" - Seat-Cover Dispenser:

- 1. Basis-of-Design Product: Bobrick; B-221.
- 2. Mounting: Surface mounted.
- 3. Minimum Capacity: 250 seat covers.
- 4. Exposed Material and Finish: Stainless steel, No. 4 finish (satin).
- 5. Lockset: Tumbler type.

## H. Marked "SD" - Soap Dispenser

- 1. Basis-of-Design Product: Bobrick; B-2112.
- 2. Description: Designed for dispensing soap in liquid or lotion form.
- 3. Mounting: Horizontally oriented, surface mounted.
- 4. Capacity: 40 fluid ounces.
- 5. Materials: No. 4 finish (satin) stainless steel cabinet and faceplate with molded plastic soap container, push button, and spout.
- 6. Lockset: Latch release type.
- 7. Refill Indicator: Window type.

### I. Marked "TTD" - Toilet Tissue Dispenser:

- 1. Basis-of-Design Product: Bobrick; B-2888.
- 2. Description: Roll-in-reserve dispenser with hinged front secured with tumbler lockset.
- 3. Mounting: Surface mounted.
- 4. Operation: Noncontrol delivery with theft-resistant spindle.
- 5. Capacity: Designed for 5-1/4-inch maximum diameter tissue rolls.
- 6. Material and Finish: Stainless steel, No. 4 finish (satin).

## 2.3 CUSTODIAL ACCESSORIES

- A. Basis-of-Design Products: The design for custodial accessories is based on products by Bobrick Washroom Equipment, Inc.
- B. Subject to compliance with requirements, provide the named product or a comparable product by one of the following:
  - 1. American Specialties, Inc.
  - 2. Bradley Corporation.
  - 3. Accepted equal.
- C. Marked MBH; Mop and Broom Holder:
  - 1. Basis-of-Design Product: Bobrick Washroom Equipment, Inc.; Model B-223.
  - 2. Length: 36 inches.
  - 3. Mop/Broom Holders: Four, spring-loaded, rubber hat, cam type.
  - 4. Material and Finish: Stainless steel, No. 4 finish (satin).

## 2.4 FABRICATION

- A. General: Fabricate units with tight seams and joints, and exposed edges rolled. Hang doors and access panels with full-length, continuous hinges. Equip units for concealed anchorage and with corrosion-resistant backing plates.
- B. Keys: Provide universal keys for internal access to accessories for servicing and resupplying. Provide minimum of six keys to Owner's representative.

### PART 3 - EXECUTION

### 3.1 INSTALLATION

- A. Install accessories according to manufacturers' written instructions, using fasteners appropriate to substrate indicated and recommended by unit manufacturer. Install units level, plumb, and firmly anchored in locations and at heights indicated.
- B. Grab Bars: Install to withstand a downward load of at least 250 lbf, when tested according to ASTM F 446.

## 3.2 ADJUSTING AND CLEANING

- A. Adjust accessories for unencumbered, smooth operation. Replace damaged or defective items.
- B. Remove temporary labels and protective coatings.
- C. Clean and polish exposed surfaces according to manufacturer's written recommendations.

**END OF SECTION 102810** 

### **SECTION 110010**

# MISCELLANEOUS OWNER-FURNISHED, CONTRACTOR-INSTALLED (OFCI) FURNITURE AND EQUIPMENT

#### PART 1 - GENERAL

### 1.1 SUMMARY

- A. Provide the requirements of this Section when receiving and installing miscellaneous Owner-furnished, Contractor-installed (OFCI) furniture and equipment.
- B. Examine substrate conditions, support provisions, utility rough-ins, and surrounding dimensional tolerances required to accommodate OFCI products. Refer to applicable technical specification sections for installation of each item.
- C. Related Sections include the following:
  - 1. Section 055000 "Metal Fabrications" and Section 061000 "Rough Carpentry," for reinforcements and backing in wood-framed partitions and ceilings for anchoring miscellaneous OFCI furniture and equipment.
  - 2. Section 064023 "Interior Architectural Woodwork," for custom-made cabinets and countertops that receive miscellaneous OFCI furniture and equipment.
  - 3. Section 110020 "Miscellaneous Contractor-Furnished, Contractor-Installed (CFCI) Equipment."
  - 4. Applicable Division 22 Sections for piping connections to miscellaneous OFCI furniture and equipment.
  - 5. Applicable Division 26 Sections for electrical connections, wiring, disconnect switches, and similar items for miscellaneous OFCI furniture and equipment.

# 1.2 STORAGE SITE

- A. Provide a secure area either on-site or off-site for the storage of miscellaneous OFCI furniture and equipment.
  - 1. The area shall be lockable and secure from vandalism or theft.
  - 2. The area shall be weatherproof and waterproof, with adequate ventilation.
  - 3. Provide protection and security of miscellaneous OFCI furniture and equipment.
  - 4. The cost of repair or replacement of any damaged or stolen furniture and equipment will be back-charged to the Contractor, except as otherwise required by the General Conditions of the Contract.
- B. Provide Certificates of Insurance for all off-site storage areas, in accordance with provisions of applicable Division 01 Sections.

# 1.3 AUTHORIZED REPRESENTATIVE

- A. Designate, at the start of construction, a competent on-site individual as the "authorized representative" responsible for miscellaneous OFCI furniture and equipment.
  - 1. This individual will be responsible for:
    - a. Furnishing information to the Owner's Representative on desired delivery schedules.
    - b. Proper receipt and reporting of all shipments received.
    - c. Proper storage and handling of the furniture and equipment at all times.
  - 2. If, at any time during construction, the originally designated individual is replaced at the site, designate a new "authorized representative" immediately and notify the Owner's Representative and Architect in writing.

### 1.4 PURCHASE ORDERS

- A. The Owner will furnish copies of purchase orders covering OFCI furniture and equipment.
  - 1. The nature of the procurement actions involved prevents the furnishing of a complete set of purchase orders immediately after the start of construction.
    - a. These will be forwarded at the time of issuance to the suppliers.
    - b. A copy shall be retained for the Contractor's control records.
  - 2. Purchase orders for miscellaneous furniture and equipment subject to "phased" delivery will be accompanied by appropriate furniture and equipment lists to facilitate identification of components.

## 1.5 OWNER'S EXISTING FURNITURE AND EQUIPMENT TO BE REINSTALLED

A. Owner will provide product data information on existing furniture and equipment to be reinstalled.

## 1.6 DELIVERY SCHEDULE

- A. A portion of the delivery schedule for miscellaneous OFCI furniture and equipment is to be completed by the Contractor no later than 30 days after the start of construction.
  - 1. This schedule includes each piece of miscellaneous OFCI furniture and equipment.
    - a. For each item, complete the two dates required from the Contractor: A "Delivery No Earlier Than" date and a "Delivery No Later Than" date.
    - b. Submit this schedule to the Owner's Representative.
  - 2. This schedule must be based on a realistic construction schedule to assure logical and timely delivery arrangements.
- B. Coordinate the miscellaneous OFCI furniture and equipment items with the project CPM or bar chart schedule and indicate the major furniture and equipment items on the schedule.
  - 1. Review the furniture and equipment delivery schedule not less than once each month to determine whether the construction progress dictates any revisions.
    - a. Notify Owner's Representative in writing of any changes found necessary.
    - b. If, at any time, a delivery date for miscellaneous OFCI furniture and equipment is missed, notify Owner's Representative immediately

## 1.1 SHIPMENT DELIVERY

- A. Upon receipt of a shipment of miscellaneous OFCI furniture and equipment, the Contractor's designated representative shall:
  - 1. Count the number of cartons to verify the quantity received corresponds with the freight bill.
    - a. Clearly note any discrepancies on the original freight bill or delivery ticket.
  - 2. Prior to signing for anything, carefully examine the merchandise for obvious damage.
    - a. If such damage is observed, refuse the shipment.
    - b. Upon refusal, notify the Owner's Representative, and give complete details.
  - 3. Open cartons or uncrate furniture and equipment to permit examination prior to departure of the carrier.
    - a. If the size of the shipment makes this impossible, release the driver and inspect the shipment for concealed damage not later than 24 hours after receipt.
    - b. If it is determined concealed damage does exist, the contact Owner's Representative immediately.

## 1.2 FURNITURE AND EQUIPMENT RECEIVING LOG

A. Keep a "Furniture and Equipment Receiving Log," updated at all times, at the Job Site. Copies of this form will be provided by the Owner.

## 1.3 INSPECTION OF RECORDS

A. The Owner will inspect the miscellaneous OFCI furniture and equipment records on a periodic basis during construction to assure that the data is maintained in an accurate and current condition. Any questions concerning these procedures should be directed to the Owner's Representative.

## 1.4 DAMAGED MERCHANDISE

- A. Exterior or Visible Damage:
  - 1. If container received shows exterior or visible damage, make a notation to that effect on the delivery ticket and have it signed by the delivery carrier and by personnel responsible for receiving the merchandise.
  - 2. Refuse acceptance of damaged merchandise.

## B. Concealed Damage:

1. If container received shows no evidence of damage, but upon examination of the contents thereof "concealed damage" is discovered, notify the Owner's Representative immediately and request an inspection

# C. F.O.B. (Freight on Board) Shipping Point:

- 1. If the merchandise is damaged and F.O.B. is shipping point, then the Owner assumes complete and total liability of merchandise from the point it is placed in the hands of the common carrier to the point of delivery. It is then the Contractor's responsibility to:
  - a. Request an inspection by the delivery carrier's inspector. Do not destroy the original carton, box, etc.

- b. Notify the Owner's Representative of damaged merchandise and request replacement shipment.
- c. Forward the following to Owner's Representative:
  - 1) Inspection Report
  - 2) Bill of Lading
  - 3) Invoice
  - 4) Freight Bill or Delivery Ticket
- d. Hold the damaged merchandise until instructions for its disposition are received from the Owner.

# D. F.O.B. (Freight on Board) Destination:

- 1. If the merchandise is damaged and the F.O.B. is "Destination," then the complete and total liability is assumed by the Vendor from the point it is placed in the hands of the common carrier to the point of delivery. It is then the Vendor's responsibility to file the claim with the carrier to recover the loss of merchandise damaged.
- 2. The Contractor shall:
  - a. Request an inspection by the delivery carrier's inspector. Do not destroy the original carton, box, etc.
  - b. Notify the Vendor of damaged merchandise and obtain authorization from Owner's Representative and replace shipment.
  - c. Hold damaged merchandise until instructions for disposition are received from the Vendor.
  - d. Send the following original documents to the Vendor to assist in filing claim with carrier, retaining a copy for Contractor's records:
    - 1) Inspection Report
    - 2) Bill of Lading
    - 3) Freight Bill or Delivery Ticket

## 1.7 DELIVERY SCHEDULE

A. Contractor shall coordinate delivery of miscellaneous OFCI furniture and equipment with the Owner.

#### PART 2 - PRODUCTS

# 2.1 MISCELLANEOUS OFCI FURNITURE AND EQUIPMENT ITEMS

A. OFCI Items: As indicated on the Drawings

## PART 3 - EXECUTION

#### 3.1 EXAMINATION

- A. Examine conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of work.
- B. Examine roughing-in for piping, electrical, and other utility systems to verify actual locations

of connections before furniture and equipment installation.

C. Proceed with installation only after unsatisfactory conditions have been corrected.

#### 3.2 INSTALLATION

- A. General: Install furniture and equipment in accordance with accepted shop drawings, and manufacturer's written installation instructions and recommendations.
- B. Install level, plumb, and true and securely fastened.
- C. Install furniture and equipment in locations indicated.
- D. Built-in Furniture and Equipment: Securely anchor units to supporting cabinets, countertops and other substrates with concealed fasteners, unless otherwise indicated. Verify that clearances are adequate for proper functioning and rough openings are completely concealed.
- E. Freestanding Furniture and Equipment: Place units in final locations after finishes have been completed in each area. Verify that clearances are adequate to properly operate furniture and equipment.
- F. Utilities: Refer to Divisions 22 and 26 Sections for plumbing and electrical requirements.
- G. Touch up and restore any factory finishes partially damaged or defaced during delivery, relocation, and installation to leave in condition acceptable to Architect.
  - 1. Replace any item not found acceptable following touch-up and restoration at no increase in Contract Sum.

# 3.3 ADJUSTING AND CLEANING

- A. Following installation, clean furniture and equipment in accordance with manufacturers' instructions.
- B. Remove packing materials and other debris, and leave units in clean condition, ready for operation
- C. Test each item to verify proper operation. Make necessary adjustments.
- D. Verify that accessories required have been furnished and installed.

END OF SECTION 110010

#### **SECTION 110020**

# MISCELLANEOUS CONTRACTOR-FURNISHED, CONTRACTOR-INSTALLED (CFCI) EQUIPMENT

### PART 1 - GENERAL

### 1.1 SUMMARY

- A. Provide the requirements of this Section when providing miscellaneous Contractor-furnished, Contractor-installed (CFCI) equipment, as follows:
  - Ceiling fans.
- B. Related Sections include the following:
  - 1. Section 055000 "Metal Fabrications" and Section 061000 "Rough Carpentry," for reinforcements and backing in wood-framed partitions and ceilings for anchoring miscellaneous OFCI furniture and equipment.
  - 2. Section 110010 "Miscellaneous Owner-Furnished, Contractor-Installed (OFCI) Furniture and Equipment."
  - 3. Applicable Division 26 Sections for electrical connections, wiring, disconnect switches, and similar items for miscellaneous OFCI furniture and equipment.

### 1.2 SUBMITTALS

- A. Product Data: For each product indicated. Include operating characteristics, dimensions of individual equipment items, and finishes for each item.
- B. Shop Drawings: Include plans, elevations, sections, details, mounting heights, and attachments to other work.
  - 1. Wiring Diagrams: For power, signal, and control wiring.
- C. Maintenance Data: For each product to include in maintenance manuals.

## 1.3 QUALITY ASSURANCE

- A. Installer Qualifications: An employer of workers trained and approved by manufacturer for installation and maintenance of units required for this Project.
- B. Preinstallation Conference: Conduct conference at Project site.

### PART 2 - PRODUCTS

### 2.1 CEILING FANS

- A. Ceiling Fan:
  - 1. Basis-of-Design Product: The Modern Fan Co.'s "Althus" model.
  - 2. Blade Diameter: [ ]-inches.

- 3. Control Operation: [ ].
- 4. Finish: Brushed aluminum.
- 5. Controls Devices: Provide control devices, including wall switches, cover plates, and other items to match style of specified electrical switches, outlets, and cover plates.

# PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examine conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of work.
- B. Examine roughing-in for electrical and other utility systems to verify actual locations of connections before equipment installation.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.2 INSTALLATION

- A. General: Install equipment in accordance with accepted shop drawings, and manufacturer's written installation instructions and recommendations.
- B. Install level, plumb, and true and securely fastened.
- C. Install equipment in locations indicated.
- D. Securely anchor units to supporting substrates with concealed fasteners, unless otherwise indicated. Verify that clearances are adequate for proper functioning and rough openings are completely concealed.
- E. Utilities: Refer to applicable Electrical Sections for electrical requirements.
- F. Touch up and restore any factory finishes partially damaged or defaced during delivery, relocation, and installation to leave in condition acceptable to Architect.
  - 1. Replace any item not found acceptable following touch-up and restoration at no increase in Contract Sum

## 3.3 ADJUSTING AND CLEANING

- A. Following installation, clean equipment in accordance with manufacturers' instructions.
- B. Remove packing materials and other debris, and leave units in clean condition, ready for operation.
- C. Test each item to verify proper operation. Make necessary adjustments.
- D. Verify that accessories required have been furnished and installed

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## 3.4 DEMONSTRATION

A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain miscellaneous CFCI equipment items.

END OF SECTION 110020

### **SECTION 22 06 00**

#### PIPING SYSTEMS AND AUXILIARIES

#### PART 1-GENERAL

### 1.1 Related Documents:

A. Refer to Section 230100 - Mechanical General Provision for related work.

## 1.2 Description of Work:

- A. This Section is applicable to the work involved in the Plumbing sections.
- B. Where Manufacturers product names are listed in this Section of the specifications, alternate names may be acceptable through the submittal process.

#### PART 2-PRODUCT

## 2.1 Pressure Piping Systems:

- A. Cold and heated water and relief valve piping:
  - Copper pipe with Solder or Brazed Joints; Type L hard drawn copper per ASTM B-88, plain ends. Wrought copper soldered fittings per ANSI Standard B16.22 or cast red bronze, Cast red brass soldered unions, joined with 95& tin, 5% antimony solder, non- corrosive flux or 15% silver brazing alloy, silver brazing flux. Use dielectric connector or cast brass adaptors between dissimilar metals.

## 2.2 Drainage Piping Systems:

- A. Soil (sewage collection and drainage), vent and roof drainage piping:
  - Cast Iron Gasketed Joints; Service weight with plain ends and hot coal tar pitch coating inside and outside, per ASTM A-74; gasketed joint fittings; joined with Duo-Seal neoprene insertion type double seal compression gasket per ASTM C-564, coated with manufacturer's recommended lubricant before installing.
- B. Waste (local collection and drainage), vent and roof drainage piping:
  - 1. Hubless Cast Iron/Sleeve-Clamped Joints; Service Weight cast iron, hubless with hot coal tar pitch coating inside and outside, per Cast Iron Soil Pipe Institute Standard 301; hubless type fittings, each matched with pipe and identified with the manufacturer's name or trademark, the Cast Iron Soil Pipe Institute symbol, and the pipe size; joined with Husky, Clamp-all or acceptable alternate, use 4 clamp fittings for piping below slab and 2 clamp fittings elsewhere with, neoprene sleeve type specifically designed for connecting hubless cast iron pipe, coat gasket with manufacturer's recommended lubricant before installing; stainless steel band clamp and shield over sleeve.

## C. Vent piping:

 Steel/Cast Iron Threaded Drainage Fittings; galvanized steel per ASTM-A-120, threaded ends, Standard Weight Schedule 40; cast iron threaded drainage type, black coated, with recessed shoulder and pitched threads, per ASTM A-126 Class B; Joined with pure lead and graphite thread lubricant.

## 2.3 Piping Auxiliaries:

- A. Piping supports and Accessories; Superstrut, Unistrut or Kin-line Supports.
  - 1. Horizontal piping, general:
    - a. For racked piping, use two-part bolted clamps:

Copper tube - #701 Tubing Strap

Pipe - #702 Pipe clamp.

- b. For suspended piping, use #C-711 Series J type or #C-711 clevis type (CTL 710 for non-insulated copper).
- B. Bare Metal Pipe Isolators: Stoneman "Trisolator", Superstrut "Cush-A-strip" or Unistrut.
- C. Insulated Pipe Shields: Pipe Shields Inc. "Thermal Hanger Shield", 360 degree calcium silicate with sheet metal vapor barrier jacket; thickness shall match adjoining pipe insulation.
- D. Sleeves: Pipe Shields Inc., Model WFB-CS, or WFB-CS-CW galvanized steel.
- E. Sleeves Below Slab or Grade: Schedule 40 PVC, two pipe sizes larger than penetrating pipe. Use split fittings where necessary to facilitate installation, terminate sleeve as detailed. Wire and solvent weld split sections together. Encase all split fittings or sleeve sections in 4" minimum concrete envelope.
- F. Packing: Sealite White Oakum #110, jute core yarn.
- G. Sealant: 3-M, Fire Barrier 2000 silicone sealants or acceptable alternated.
- H. Plates/Collars: 24 gauge galvanized sheet metal. Escutcheons: Polished chrome plated brass in finished areas and painted poly propylene in clean room areas.
- I. Flashings: Stoneman.
  - 1. Vandalproof assemblies No. 1000-3, No. 1000-5.
  - 2. Open top assemblies No. 1-000-2, No. 1000-4.
- J. Pipe Penetration Seals: Link seal, interlocking synthetic rubber links, able to form a watertight seal.
- K. Piping Protective Covering:
  - 1. X-Tru-Coat, factory applied plastic coating with additional field applied double layer wrapping of Scotchrap #51, 20 mil plastic tape.
- L. Piping Flexible Connectors and Expansion Joints (Hot & Cold Water):
  - 1. Metallic Piping Systems: Metraflex Elastomer connectors and joints. Maximum working pressure of 225 psig.
- M. Flexible Hose and Couplings (Gas connections to equipment):

1. Hose: Metraflex Elasto-Flex pipe with stainless steel couplings, not to exceed 12" in length. Maximum working pressure of 150 psig.

#### N. Cleanouts:

- 1. Provide plugs in accordance with manufacturer's recommendations for the particular piping material. Indicate service on cleanout.
- 2. Furnish tee handle wrench to suit plugs.
- 3. Install at 50 feet maximum intervals for piping 4" and smaller and at 100 feet maximum intervals, for piping 6" and larger, at bends exceeding 90 degrees and elsewhere as shown on drawings or required by Code.

### **PART 3-EXECUTION**

#### 3.1 General:

A. Additional installation details may be specified in other piping sections of Division 22.

#### 3.2 Installation:

#### A. Piping installation:

- 1. Install piping level, plumb, and parallel to structure line except where shown otherwise or required by function or regulation to be angled or sloped.
- 2. Install piping concealed within spaces provided in the structure except where shown as exposed.
- 3. Install piping without bending, springing, forcing, or placing undue stress on the pipe, fittings, connected equipment, or terminals.
- 4. Install piping to allow for expansion, contraction, and structural settlement.
- Install piping so it does not directly contact the structure except where shown or specified otherwise.
- 6. Install piping in trenches as soon as trench is prepared for pipe installation.
- 7. Install piping so that it does not interfere with equipment access.
- 8. Prior to installation of heat fused joints in piping, contact an authorized factory representative to arrange for a job site demonstration covering manufacturer's installation procedures. Submit to Engineer written confirmation that such a demonstration has taken place. Written confirmation shall include date, name of installing contractor, system reviewed, name of authorized factory representative, and attendees.
- B. Pipe sizes shown are nominal. Should size not be shown, or erroneously shown undersized for any intermediate section of piping run, install pipe of the same size as the largest pipe connecting to the section in question. Run full pipe size through shut-off valves, gas cocks, balancing valves, etc. Change pipe size within three pipe size diameters of final connection to equipment.
- C. Cut pipe with square ends and true to size; cut with wheel, chain or other appropriate sharp cutters only and ream ends after cutting. Fit piping and make changes of size or direction only

- with proper manufactured fittings; do not bend pipe or use job-fabricated fittings, street ells, bushings, reducing flanges, or close nipples.
- D. Provide unions at connections to equipment, on service side of valves, and elsewhere as required to facilitate maintenance.
- E. Provide dielectric connectors between copper and dissimilar metals.
- F. Provide brass piping connection of copper tubing to threaded terminals or equipment.
- G. Make connections between domestic water systems and equipment or face piping with approved backflow prevention device as required.
- H. Piping Supports and Space Auxiliaries:
  - 1. Support all piping with appropriate manufactured devices as specified in Part 2 above.
  - 2. Size hanger rods, screws, bolts, nuts, etc., according to manufacturer's recommendations. Size hangers to fit around bare pipe, isolator, or insulated pipe shield as appropriate.
  - 3. Use cadmium plated or galvanized hangers, attachments, rods, nuts, bolts and other accessories in high humidity areas, or where exposed to weather.
  - 4. At each support on bare copper tubing system, install an isolator. At each support point on insulated piping systems, install an insulated pipe shield. Use Pipe Shields Model CS on all piping except use Model CS-CW on piping conducting refrigerant.
  - 5. Suspend all horizontal pipelines individually and not in contact with the structure except as specified below. Support each branch line with at least one hanger.
  - 6. Parallel pipelines may be supported on trapeze type hangers. Size trapeze hangers to support weight of piping plus seismic force.
  - 7. Support point spacing in accordance with the latest recommendations of ASHRAE.
  - 8. Support all horizontal piping near the floor by means of adjustable steel pipe stanchions with welded end plates. Secured to the floor.
  - 9. Where pipes penetrate members of the structure, install proper sleeves, packing, flashing, and collars as follows unless shown otherwise:
    - a. Penetrations of concrete walls, footings, floors or slabs: Model WFB sleeve, diameter 1" minimum larger than outside of pipe or pipe insulation, cast in place. Pack annular space with oakum to 3/4" from each exposed face of concrete; fill remaining depth with sealant flush with face of concrete. At concrete walls and intermediate floors, core drilled holes are acceptable. Packing and sealing to be the same as for sleeves. Link Seal may be provided as an alternate method.
    - b. Penetrations of fire rated partitions, walls, and plenum walls other than concrete: Bare pipe use Model WFB sleeve; insulated pipe use Model WFB-CS except pipe conducting chilled water or refrigerant use Model WFB-CS-CW.
    - c. Penetrations of Non-Rated Stud Walls: Cut neat hole in wall covering, seal exposed edges with sealant and provide escutcheon. At exposed face of wall, floor, soffit or ceiling, fit penetrating pipe with a neat, rigid, securely attached collar or escutcheon. In unfinished areas use galvanized plate. In finished areas use chrome plated escutcheon.

- d. Penetrations of roof: Vent piping vandalproof assembly; through piping open top assembly.
- 10. Seismic restraint of Mechanical Systems and Plumbing Systems shall be installed in accordance with the latest addition of the Sheet Metal and Air Conditioning contractor National Association Recommendations Standards (SMACNA).

## 3.3 Field Quality Control:

## A. Piping Cleaning:

After installation and before installing valves or making final connections, flush piping systems clean of foreign substances, using water to flush piping conducting liquids and compressed air to clear piping conducting gases, except as specified otherwise in other piping sections.

## B. Piping Testing:

- Before covering, concealing, or using any piping system or parts thereof, test and prove tight; obtain certification of the inspector that this has been accomplished. Valves and connected equipment or any system component with a pressure rating less than the system test pressure shall not be subjected to the test. If systems are tested in sections, include connections to preceding tested sections in ensuing tests.
- 2. All systems specified to be tested using water as the test medium shall be first checked by pre-testing the test section or system with compressed air at five (5) psig for a period of thirty (30) minutes. Correct any major leak disclosed by this pre-test before proceeding with the specified testing using water as the test medium.
- After producing the specified test pressure, disconnect the pressurizing source; do not
  introduce further pressure for the duration of the test period. Should any pressure loss or
  detectable leak occur within test period, repair piping and retest. Repeat the procedure until
  the system is proved tight.

## C. Disinfecting:

1. Potable Water: After completing domestic water supply systems, disinfect in accordance with requirements of U.S. Public Health Department. Use 50 parts per million of chlorine with 24 hour retention and flush to leave a residual no greater than supply source. Submit written certification of disinfection completion.

## **END OF SECTION**

## **SECTION 22 11 00**

### **VALVES AND PIPE MOUNTED DEVICES**

#### PART 1 - GENERAL

### 1.1 Related Documents:

A. Refer to Section 230100 - Mechanical General Provisions for Related Work.

## 1.2 Description of Work:

- A. This Valve and Pipe mounted device Section is applicable to the work involved in the Plumbing, Fire Protection and HVAC Sections.
- B. Where manufacturer's names are listed in this section of the specifications, alternate names may be acceptable through the submittal process.

### PART 2-PRODUCT

### 2.1 General Usage Valves:

#### A. Gate Valves:

- 1. Shut-off Valves:
  - a. Sizes 2" and smaller: Fig. T-134-70; bronze body, threaded ends, union bonnet, rising stem.
- 2. Stop Valve Service:
  - a. Class 125, solid wedge gate, OS&Y pattern, Nibco.
  - b. Sizes 2" and larger: Fig. F-617; iron body, brass mounted, threaded ends, bolted bonnet, rising stem.

#### B. Check Valves:

- 1. Swing check, Class 125 Buna-N Disc, Stockham.
  - a. Sizes 2" and smaller: Fig. B-320; bronze body, threaded ends, plug type bonnet.
- C. Ball and Plug Valves:
  - 1. Shut-off Service:
    - a. Bronze body. Nibco.
    - b. Sizes 2" and smaller: Fig. T-580-70, threaded ends, 600 psi, TFE seats, handle with stops, bronze trim.
  - 2. Shut-off service, natural and LP gas, Nibco.

a. Sizes 2" and smaller: Nibco T-580-70, full port ball valve; 600 psi gas service rating; bronze body and ball, TFE seat, guarter turn handle with stops.

## D. Water Vents:

1. Hoffman, Apco, cast brass body, threaded end connection, safety drain connection. Pressure rating to match system operating pressure.

#### E. Gas Valves:

- 1. Shut-off service.
  - Milwaukee Series BB2-102 gas valve, AGA approved for shut-off service or acceptable alternate.

### 2.2 Strainers:

### A. Y-Type:

- 1. B&G, Armstrong, Sarco, cast iron body, monel screen with .045" perforations.
- 2. Sizes 2-1/2" and smaller: 250 psi body, threaded ends, threaded retainer.

#### 2.3 Hose Bib:

A. Woodford, Model Y24, rough brass exterior, chrome finish, vacuum breaker and key.

### **PART 3 - EXECUTION**

#### 3.1 General:

#### A. Application/installation:

Specific application of products shall be a described in other piping sections of the division.

## 3.2 Installation:

#### A. Valves and Strainers:

- 1. Provide valves and strainers of the same size as the pipe in which they are mounted unless specifically shown otherwise.
- 2. Connect valves and strainers in copper piping systems with <u>solder-to-threaded</u> brass adapters.
- 3. Provide valves with trim proper to the service on which they are applied.
- 4. Locate above-grade valves:
  - a. With stems above the horizontal plane of the pipe.
  - b. Within six feet of floor where possible and reasonable.
  - c. Out from under equipment.

d. Readily accessible with adequate clearance around operating wheel or lever handle.

## B. Instrumentation:

1. Install all instrumentation items in a location where they are readily viewable and serviceable.

**END OF SECTION** 

## **SECTION 22 15 00**

### **PLUMBING WORK**

#### PART 1 - GENERAL

#### 1.01 Related Document:

A. Refer to Section 230100 – Mechanical General Provisions for related work.

## 1.02 Description of Work:

- A. Where manufactures product names are listed in this Section of Specifications, alternate names may be acceptable through the submittal process.
- B. Work Included:
  - 1. Furnish and install all plumbing piping, equipment and accessories indicated on the contact drawings or described herein.
  - 2. Service connections to utilities, equipment or other as shown on the contract drawings or described herein.

## PART 2 - PRODUCTS

## 2.01 Pipe and Fittings:

A. Refer to Piping Systems and Auxiliaries:

Section 220600.

B. Refer to Valves and Pipe Mounted Devices:

Section 221100.

C. Refer to Insulation:

Section 230800.

D. Equipment:

As scheduled on drawings.

1. Gas Pressure Regulators:

Rockwell, Reliance

2. Water Pressure Regulators:

Clayton, Wilkens

- 3. Backflow Preventers:
  - a. Vacuum breaker type:

Febco

b. Double check valve type:

Clayton, Hersey, Febco

c. Reduced pressure type:

Clayton, Febco

4. Water Hammer Arrestors:

Jay R. Smith Hydrotol Series 5000, Wade, Zurn, Josam; to suit application type, size, etc., as scheduled on drawings.

5. Hoss Bibbs/Faucets:

Acorn, Chicago

6. Trap Printers:

Jay R. Smith, Wade, Zurn, Josam

7. Water Softeners:

Sta-Rite, Bruner, Culligan.

8. Gas-Fired Water Heaters:

A.O. Smith, P.V.I

9. Gas-Fueled Water Heaters:

PVIA. O. Smith, Rheem

10. Roof Drains:

Jay R. Smith, Wade, Zurn, Josam:

- 11. Storm Drains: (Specify)
- 12. Floor Drains and Receptors:
- 13. Traps:

Jay R. Smith, Wade, Zurn, Josam cast iron

14. Interceptors:

Jay R. Smith, Wade, Zurn, Josam

15. Cleanouts:

Jay R. Smith, Wade, Zurn, Josam

Plug – Countersunk brass with lead seal.

Furnish tee handle wrench to suit plugs.

#### 16. Access Boxes:

For below grade valves and piping devices:

a. Christy Concrete Products Company, Brooks, with galvanized steel checker plate recessed traffic lid flush with rim of box. Lids for boxes located in areas subject to vehicular traffic shall be constructed to withstand H20 Live loading as defined by the American Association of State Highway Officials (16,00 lb. maximum individual wheel load). Service identification shall be conspicuously welded on lid before galvanizing. For gas service, drill twelve (12) 3/8" diameter vent holes through lid before galvanizing. Provide manufacturer's box extensions to bring box bottom 3" below of valve and box top flush with finish grade.

#### 17. Access Panels:

For concealed valves or other manually operated devices use Milcor, Acorn, wall and ceiling access panels which shall be:

- a. Square or rectangular, size as shown or appropriate, flush mounting.
- b. Suited to proper mounting into the surrounding construction (wood, concrete, plaster, acoustical tile or other),
- c. Finished to match surrounding surface; exception: in ceramic tile, panel shall be polished chrome plated brass or satin finish stainless steel.
- d. Fire rated to match the wall or ceiling in which installed (where applicable).
- e. Hinged on one edge, latched on the opposite edge. Hinge shall be non-protruding; latch shall be lock type, keyed the same for all panels.
- E. Fixtures: As scheduled on drawing MP0.
  - 1. Customary Fixtures:
    - a. American Standard
      - i. These include water closets, urinals, lavatories sinks, etc.
      - ii. White in color unless stipulated otherwise on drawings.
  - 2. Other Fixtures:
    - a. Drinking fountains (uncooled):

Elkay

- F. Fixture Trim:
  - 1. Fixture Brass:
    - a. All exposed items:

Polished chromium plated unless noted otherwise on drawings.

b. Faucets, spouts:

Delta

c. Stops and supplies:

Speedway, American Standard

d. Traps:

17 gauge chrome plated tube; cast brass if concealed behind access panel.

e. Flush valves:

Sloan Valve Co., Delaney

- 2. Water Closet Seats:
  - a. Olsonite, Bemeke

White in color unless noted otherwise on drawings.

- G. Fixture Supports and Fittings:
  - 1. Supports and Fittings:
    - a. Jay R. Smith, Wade, Zurn, Josam; match to fixtures per manufacture's recommendations.
  - 2. Connectors:
    - a. Herco, Tyler, flanges for floor-mounted fixtures.
- H. Miscellaneous Items:
  - 1. Access Products:
    - a. Acorn.
  - 2. Circulating Pumps:
    - a. Bell and Gossett, Thrush.
  - 3. Relief Valves:
    - a. Cash ACME, Watts.
  - 4. Flues/Vents:
    - a. Duravent, Metalbestos, double wall flue pipe; include all necessary fittings, thimbles, caps, etc. or PVC flue and combustion air intake with concentric fitting for high efficiency furnaces.

### **PART 3 – EXECUTION**

### 3.01 Preparation:

- A. Utility Services: See Section 230100.
- B. General:

Coordinate requirements of items furnished under other Divisions of the Specifications.

C. Fixtures: Check clearances, floor and wall finishes, and other job conditions or requirements before installing to insure proper installation.

## 3.02 Pipe and Valve Applications:

#### A. General:

For full description of piping systems specified below, refer to Part 2 of Section 220600, Piping Systems and Auxiliaries.

- 1. Cold Water:
  - a. Service: Meter to building, below grade.
    - Copper with soldered or brazed joints. Type K, wrought copper fittings, silver brazed joints.
  - b. Distribution above grade:
    - i. Copper with soldered or brazed joints. Type L, 95-5 solder except silver brazing on concealed joints.
  - c. Valves:
    - i. Gate Valves:
    - ii. Swing Check.
    - iii. Ball Valve.
- 2. Heated Water:
  - a. Below grade or slab.
    - i. All sizes: Use copper with soldered or brazed joints. Type K cooper, wrought copper fittings, silver brazed joints.
  - b. Above grade.
    - Same as Cold Water Distribution above grade.
  - c. Valves.
    - i. Gate Valves.
    - ii. Swing Check.

- iii. Ball check.
- 3. Soil (Sewage Collection and Drainage).
  - a. Sewer: Building to street sewer, below grade.
    - All sizes: Use cast iron with gasketed joints or hubless cast iron with sleeveclamped joints; (2) two clamp above grade and (4) four clamp below grade or approved PVC soil piping.
  - b. Within building to five feet outside below grade.
    - All sizes: use cast iron with gasketed joints or hubless cast iron with sleeveclamped joints.
- 4. Waste-Local Collection and Drainage
  - a. Above grade:
    - i. All sizes: Use cast iron with gasketed joints or hubless cast iron with sleeveclamped joints; (2) two sleeve clamp.
  - b. Below grade or slab:
    - i. All sizes: Use cast iron with gasketed joints or hubless cast iron with sleeveclamped joints; (4) four sleeve clamp joints.
- 5. Vent:
  - a. Below grade or slab:
    - i. All sizes: Use cast iron with gasketed joints or hubless cast iron with sleeveclamped joints.
  - b. Above grade:
    - i. All sizes: Use Cast iron with gasketed joints or hubless cast iron with (2) two sleeve-clamped joints.

## 3.03 Other Applications:

- A. Piping Insulation:
  - 1. Cold water:
    - a. Apply to concealed piping above grade and where indicated on drawings, using Ridgid Molded Sectional with jacket thickness to meet Title 24 requirements.
  - 2. Heated water:
    - a. Apply to all supply and recirculating piping using Rigid Molded Sectional with jacket 1" thickness above grade.

- 3. Roof drainage and overflow drains:
  - a. Apply to concealed horizontal runs only, using Rigid Molded Sectional with jacket 1" thickness.

## B. Piping Protective Covering:

1. Apply to fuel gas piping below grade, extending to 6" above grade.

## 3.04 Installation:

#### A. General:

1. Coordinate plumbing work with that specified in other sections of divisions of the work.

### B. Piping:

- 1. Size local piping, fixture supplies, vent, and drainage, per schedules on drawings.
- 2. Provide trenching and backfill for buried piping and install below the frost line or with the following minimum cover (whichever is deeper) unless shown otherwise:
  - a. Water 24"
  - b. Sewer 24"

## 3. Water piping:

- a. Arrange pitch, and valve for complete drainage and control of each system.
- b. Separate all parallel runs of cold and heated water by at least 6".
- c. Install water hammer arrestors where shown or as required to prevent water hammer and vibration; follow manufacture's directions.
- d. Where laid in same trench with sewer line, install on trench shelf at least 12" above top of sewer pipe.

## 4. Soil and Waste Piping:

- a. Slope lines 3" and smaller 1/4" per foot minimum and 4" and larger 1/8" per foot minimum unless directed otherwise.
- b. Install cleanouts at 100 ft. maximum intervals, at bends exceeding 45 degrees, and elsewhere as shown on drawings. Make take off from horizontal run with Two (2) 1/8 bend fittings or wye and 1/8 bend fittings.
- c. Provide trap at each inlet to sanitary sewer system. Provide trap primers as required by code.

## 5. Vent piping;

- a. Pitch to drain; collect risers where practical; offset toward center of building and extend through the roof. Vent all traps, sumps, and fixtures.
- 6. Flashing:

a. Furnish and install around each pipe, where it passes through roof, a flashing and conterflashing. All flashings shall be made of four pound sheet lead with 8" minimum skirt, conterflash with Semco 1100-2 or 1100-4 flashing fittings or acceptable alternate. For vents provide Semco 1100-3 or 1100-5, or equal, vandalproof top and flashing combination.

## 3.05 Field Quality Control:

## A. Piping Cleaning:

- 1. After installation and before installing valves or making final connections, flush or purge piping systems clean of foreign substances; use water to flush piping conducting liquids and compressed air to clear piping conducting gases.
- 2. After completing cold and heated water systems, disinfect in accordance with requirements of U.S. Public Health Department. Use 50 parts per million of chlorine with 24 hour retention and flush to leave a residual no greater than supply source. Submit written certification of disinfecting completion.
- 3. After installation and testing of systems and before putting into service, remove all strainer screens thoroughly and reinstall.

## B. Piping Testing:

1. Comply with Section 220600.

# 2. Testing Criteria:

## **TEST**

System	Medium	Pressure	Duration	
Water Drainage & Vent	Water Water	150 psig 10 ft. water	4 hours 4 hours	
Diamage a Vent		ND OF SECTION	4 110013	

### **SECTION 23 01 00**

### **MECHANICAL GENERAL PROVISIONS**

#### **PART 1 - GENERAL**

### 1.1 RELATED DOCUMENTS

- A. Refer to the General Conditions, Supplemental General Conditions, Division 1 General Requirements and all other applicable Sections of the specifications.
- B. Provisions of this Section shall apply to all sections of Division 22 and 23.

#### 1.2 DESCRIPTION OF WORK

- A. Furnish and install all materials and equipment and provide all labor required and necessary to complete the work shown on the drawings and/or specified in all Sections of Division 22 and 23.
- B. Provide all necessary piping, ductwork, equipment and auxiliaries as specified.
- C. Provide all excavation and backfill and all cutting and patching including concrete saw cutting, core drilling and concrete replacement required for execution of work performed under this Section and not provided under other Sections.
- D. All work indicated anywhere on the drawings, including valves and other items shown on details or schematics and not on Drawings shall be part of this work. Items not specifically indicated but required for proper functioning of equipment, shall be installed by the craft furnishing the equipment.
- E. Provide flushing out of all piping and chlorination of domestic water piping as specified herein for the protection of user. This must be done and verified prior to allowing personal use of the water.

### 1.3 DEFINITIONS

- A. Above Grade: Not buried in ground and not embedded in concrete slab on ground.
- B. Below Grade: Buried in ground or embedded in concrete slab on ground.
- C. Concealed: Inside building, above ground and located within walls, furred spaces, crawl spaces, attics, above suspended ceilings, etc. In general any item not visible or directly accessible.
- D. Exposed: Either visible or subject to mechanical or weather damage, indoor, or outdoors, including areas such as mechanical and storage rooms. In general, any item that is directly accessible without moving panels, walls ceiling or other parts of structure.
- E. Indoor: Enclosed within building structure, including inside crawl spaces, etc.
- F. Outdoor: Outside of building structure, including inside crawl spaces, etc.
- G. Contractor: Mechanical Subcontractor, unless stated otherwise.
- H. Connect: Complete hook-up of item with required services.

- I. Furnish: Supply and deliver complete.
- J. Install: Place, secure and connect as required to make fully operational.
- K. Rough-in: Provide all indicated services in the necessary arrangement for making final connections to fixture or equipment.
- L. Start-up: Place system or systems in operation using proper sequence for starting and where required equipment personnel to start equipment.

## 1.4 LEGAL REQUIREMENTS, CODES, REGULATIONS

- A. General: Comply with applicable sections of State and local codes, laws, ordinances, rules and regulations of authorities having jurisdiction.
- B. Published specifications, standards, tests or recommended methods of trade, industry, or governmental organizations apply to the work of this Section where cited by abbreviations noted below.
- C. All regulations and standards shall be the latest issue unless the governing authorities require the use of an earlier issue.
  - 1. Air Moving and Conditioning Association (AMCA).
  - 2. American Society of Heating, Refrigeration, and Air Conditioning Engineers (ASHRAE).
  - 3. American National Standards Institute (ANSI).
  - 4. American Society of Mechanical Engineers (ASME).
  - 5. American Society of for Testing and Materials (ASTM).
  - 6. American Conditioning and Refrigeration Institute (ARI).
  - 7. Associated Air Balance Council (AABC).
  - 8. American Welding Society.
  - 9. State of California Title 24 (2013 Edition) Part 1 Building Standards Administration Code
  - State of California Title 24 (2013 Edition) Part 2/ Volume 1 California Building Code
  - 11. State of California Title 24 (2013 Edition) Part 2/ Volume 2 California Building Code
  - 12. State of California Title 24 (2013 Edition) Part 3 California Electrical Code
  - 13. State of California Title 24 (2013 Edition) Part 4 California Mechanical Code
  - 14. State of California Title 24 (2013 Edition) Part 5 California Plumbing Code
  - 15. State of California Title 24 (2013 Edition) Part 6 California Energy Code
  - 16. State of California Title 24 (2013 Edition) Part 9 California Fire Code
  - 17. State of California Title 24 (2013 Edition) Part 11 California Green Building Standards Code
  - 18. State of California Title 24 (2013 Edition) Part 12 California Reference Standards Code
  - 19. Title 19, CCR, Public Safety, State Fire Marshal Regulations
  - 19. National Electrical Manufacturers Association (NEMA).
  - 20. National Fire Protection Association (NFPA).
  - 21. National Environmental Balancing Board (NEBB).

- 22. Sheet Metal and Air Conditioning Contractor's Association (SMACNA).
- 23. Underwriters Laboratories, Inc. (U.L.).
- 24. Occupational Safety and Health Administration (OSHA).
- 25. Owner's Insurers.
- 26. State Fire Marshal.
- 27. Any other applicable Federal, State, and Local laws and regulations.

### D. Minimum Requirements:

- 1. Comply with requirements of authorities as minimum acceptable work.
- The drawings and specifications take precedence when they call for materials or construction of better quality or larger size than required by code, laws, rules and regulations.
- 3. Do not construe anything in these drawings and specifications, to permit work not conforming to these requirements. The regulations shall govern where they require higher standards or are violated by the drawings and specifications. Consider ruling and interpretations of the reinforcing agencies as part of these specifications.

### 1.5 Related Work Under Other Sections

- A. Perform following work, in accordance with appropriate sections of the specifications cited as necessary to furnish a complete working mechanical installation.
- B. Miscellaneous metal work: Include fittings, brackets, supports, welding, and pipe as required for equipment and piping supports.
- C. Moisture protection: Include membrane clamps, sheet metal flashing, caulking and sealant and vapor barriers as required for waterproofing pipes and ductwork penetrations through roof.
- D. Painting: Include surface preparation, priming and finish coating as required on unpainted equipment, exposed insulation piping and ductwork where specified, refer to Division 9, Finishes work. Where color selections are required coordinate with Architect.
- E. Concrete: Include equipment mounting pads, anchors, tie- down blocks and other miscellaneous concrete work relating to the mechanical work, refer to Division 3, Concrete work.
- F. Electrical: Coordinate work as required to insure equipment supplied to be compatible with power available, refer to Division 26, Electrical work.

## 1.6 QUALITY ASSURANCE

- A. Avoid cutting and boring holes through structure or structural members wherever possible. Obtain prior approval of architect and conform to all structural requirements where this becomes necessary.
- B. To insure safety to occupants, operating personnel, conformity to code authorities and contract documents during the installation of this project.

- C. Ascertain and check conditions and elevations and take measurement that affect this work. No allowance shall subsequently be made for any extra expense due to failure or neglect to make examinations.
- D. Material and equipment incorporated in this work shall be new and manufactured or fabricated without defect and in conformance with applicable standards. The same manufacturer shall furnish all items of similar nature.
- E. Employ only experienced, competent and properly equipped workman on this project. Welders shall be certified in accordance with the American Welding Society "Standard Qualification Procedure". Refrigeration work installers shall be certified by American Refrigeration Contractors Association qualification procedures.

### 1.7 ACCURACY OF DATA

A. The general arrangement of existing underground piping, drainpipes, conduits, apparatus, etc. is shown on the drawings from data off existing as-built drawings where available. Minor changes may be necessary to accommodate work and shall be made by this Contractor without extra expense to the Owner. Extreme accuracy of data given herein and on the Drawings is not guaranteed. The Drawings and Specifications are for the assistance and guidance of the contractor, and exact locations, distances and elevations will be governed by actual field conditions.

The Contractor shall examine the contract documents to determine exact routing and final termination for all conduits and placement of equipment.

### 1.8 MATERIALS AND SUBSTUTIONS

- A. Materials shall be new and have specified quality. Deliver materials to and store them at the project in unbroken factory containers, indicating manufacturer's brand, and name of materials, which shall be used throughout the work.
- B. Clearly and permanently mark or stamp all materials with manufacturer's nameplate showing the model number and performance data. All materials shall be new and unused and provided with nameplates to indicate what function it serves.
- C. Brands or trade names are mentioned to set standards of quality; use no substitute materials unless acceptable in writing by the Architect. Acceptance of substitute materials does not relieve the Contractor of responsibility for providing a workable and functioning system as designed.
- D. Proof of equality is the sole responsibility of the Contractor. Descriptive data must be adequate to show the Architect why the materials or equipment meets the job requirements. The Contractor shall submit the elements to a testing laboratory for comments on equality in case of dispute or question, or upon request of the Architect without additional cost.
- E. Material submission is a requirement of these specifications. No payment for any work will be approved until this is done. Partial compliance or partial submittals will not be considered to show intent or ability to perform the work properly.
- F. Mark submittal "As Specified", or accompanied by a letter from the supplier explaining in detail what the difference, if any, exists between the submitted item and the specified item. Failure to point out differences will be considered cause for non-acceptance. The Architect and the Engineer will not assume any responsibility for any delays, damage, or expenses incurred by others due to such action. The Contractor assumes full responsibility for alternative items substituted and is responsible for the cost of redesign due to this substitution.

G. Revisions or additional work required, due to the use of substitute materials, shall be fully indicated on detailed drawings submitted with the shop drawings. Substitutions proposed because of insufficient time for delivery of previously approved item shall be accompanied by the original purchase order with date and "received" stamp by the Vendor.

#### 1.9 SUBMITTALS AND SUBSTITUTIONS

- A. Within 14 calendar days after award of contract and in ample time to avoid delay of the work, prepare a complete list and submittal of all materials including shop drawings, catalog information and other descriptive data for all items and submit to the Owner for review and comment.
- B. Submit shop drawings, catalog information, etc., <u>neatly organized in binders</u> with index and tabs, all at one time, for equipment furnished under this Section. Six (6) copies of all initial submittals are required for materials offered as specified, as well as for any proposed substitutions.
- C. Submittals shall clearly indicate on every copy:
  - 1. Tag, mark, or number by which item is identified in contract documents.
  - 2. Complete dimensional data.
  - 3. Elevation views for complete representation.
  - 4. Construction details.
  - 5. Arrangement of devices and appurtenances.
  - Nameplate legends.
  - 7. Locations and sizes of connections.
  - 8. Finish materials and colors.
  - 9. Complete descriptive information.

### 1.10 FINAL OBSERVATION REPORTS

A. Owner's representative shall make a final observation of the job and note unacceptable items in a punch list. Final acceptance shall not be made until all items of this list have been corrected.

#### 1.11 OPERATION AND MAINTANANCE MANUALS

- A. Submit within 14 days of Final Acceptance.
- B. Deliver to the Architect, for the Owner's use, three (3) complete operating and maintenance manuals covering all equipment and systems installed under this Division.
- C. Include spare parts, lists, wiring diagrams and operating instructions for all operating equipment, as well as approved submittals. All information shall be in a three ring binder with hard cover and tab indexes. Provide index in front cover indicating parts name, date and local vendors for furnishing parts and information on equipment.

### 1.12 EQUIPMENT HANDLING

A. New equipment received at site prior to installation shall be stored indoors; when outdoors shall be mounted a minimum of 6" above grade with at least one (1) layer of heavy polyethylene plastic sheet weather proof covering anchored to prevent damage by high winds.

- B. Care shall be exercised during construction to avoid damage of any kind to mechanical equipment. Equipment shall be protected from dust and moisture during construction. Failure of the Contractor to protect the equipment as outlined herein shall be grounds for rejection of the equipment.
- C. Where equipment is specified to be installed in accordance with manufacturers recommendations, a copy of these recommendations shall be kept on the job site at all times and shall be made available to the Owners upon request.
- D. The general arrangement and location of piping, ductwork and equipment is shown on the Drawings, and shall be installed in accordance therewith, except for minor changes required by conflicts with other trades.

### 1.13 License, Fees and Permits:

- A. Unless otherwise specified, provide, procure and pay for all permits, services, meters, licenses, fee, etc., required to carry on and complete this work.
- B. The Contractor is responsible for all utility services, fees and connections to existing mains. For utility connections that are made by the Local Utility Authority, the Contractor shall arrange with this Authority to make the connections. On site work that relates to other crafts shall be coordinated with the work of this Section.
- C. Upon completion of the work, deliver to the Owner, all certificates of approval, signed by all authorities having jurisdiction.

### 1.14 JOB CONDITIONS

A. Visit to site is required of all bidders prior to submission of bid. All bidders will be held to have familiarized themselves with all discernible conditions and no extra payment will be allowed for work required because of these conditions, whether specifically mentioned or not.

#### 1.15 DRAWING AND SPECIFICATIONS

- A. All drawings and all divisions of these specifications shall be considered as a whole. This contractor shall inform and report any apparent discrepancies before submitting bid.
- B. Every effort to make these drawings as accurate as available information allows has been made; however, the final location of piping, ductwork and equipment shall be verified and coordinated prior to installation.
- C. Submit coordination layout drawings for all ductwork to insure no conflict occurs between piping systems and electrical systems on the project.

### 1.16 SAFETY AND INDEMNIFICATION

- A. Safety: The contractor shall be solely and completely responsible for conditions of the job site, including safety of all persons and property during performance of the work. This requirement will apply continually and not be limited to normal working hours. See Division 1 for General Conditions.
- B. Indemnification: The contractor performing work under this Division of the Specifications shall hold harmless, indemnify, and defend the Owner, the Engineer, the Architect, their consultants and each of their officers, agents and employees from any and all liability claims, losses, or damage arising out of or alleged to arise from bodily injury, sickness, or death of a person or persons and for all damages arising out of injury to or destruction of property arising directly or

indirectly out of or in connection with the performance of the work under this Division of the Specifications, and from the Contractor's negligence in the performance of the work described in the Construction Contract Documents, but not including liability that may be due to the sole negligence of the Owner, the Engineer, the Architect, their consultants or their officers, agents and employees.

1.17 The Contractor shall provide reproducible vellums with all deviations from original drawings clearly indicated.

#### 1.18 GURANTEES

A. Provide written guarantee to replace defects occurring in this work that is due to imperfection of workmanship or materials or due to failure to comply with drawings or specifications. This guarantee shall be effective for a minimum of one year after date of filing of Notice of Completion.

### **PART 2 - PRODUCTS**

#### 2.1 MATERIAL GENERAL

- A. The design, manufacture and testing of mechanical equipment and materials shall conform to or exceed the latest applicable NEMA, ASME, and ANSI standards.
- B. All materials must be new and bear U.L. label. Materials that are not covered by U.L. testing standards shall be tested and listed by an independent testing laboratory of a governmental agency, which laboratory shall be acceptable to the Architect, Owner and code enforcing authority.
- C. These drawings and specifications define the minimum quality of product of equipment by designating a manufacturer's trade name and catalog model number. The design has been based on this equipment selection and where more than one name given, the first is the basis of the design. Other named equipment will require a request for substitution and be submitted as indicated herein. Prior approval may be requested and only listed manufacturers will be acceptable if more than (3) names are listed

#### 2.2 ELECTRICAL REQUIREMENTS

- A. Electrical items or parts as part of mechanical equipment shall be suitable and rated for operation on the power available.
- B. Electrical items shall meet requirements of Division 16- Electrical work, OSHA, DIS, and NEC. Items shall conform to NEMA Standards, and shall bear Underwriters' Laboratory label where applicable.
- C. Motors furnished as part of mechanical equipment shall be of size indicated and shall have starting torque sufficient to start and drive equipment load to which they are connected. Motors shall be the high-energy efficient type.
  - 1. Motor enclosures shall be:
    - Drip proof for general use.
    - b. Totally enclosed for wet or unprotected exterior use.
    - c. Explosion proof for hazardous use.

- Motors to be installed in wet locations, chemical areas or plants, or in corrosive environment shall be General Electric Type K Custom Severe Duty, designed for severe duty and having 1.15 service factor.
- Variable speed drive motors shall consist of Eddy current drives and Eddy current couplings
  mounted in a common housing, or AC adjustable frequency drives or equal design of
  variable speed AC squirrel cage motors.
- D. Starters furnished integral to or specifically for mechanical equipment shall be Square D, General Electric or Cutler-Hammer, and shall comply with the following:

Type 1 general purpose

Type 3 raintight

Type 4 watertight

Type 7 explosion proof

1. Thermal overload protection devices shall be provided as follows:

One for single phase motors.

Three for three phase motors.

One for each ungrounded conductor for each winding of multi-wound or multi-speed motors.

- 2. Starters for motors up to 1/2 HP may be manual type if no interlocking is required.
- 3. Starters for motors larger than ½ HP shall be magnetic across-the-line type except as stipulated above.
- 4. Magnetic starters shall be provided with:

120 volt control circuits.

H-O-A switch in cover.

Auxiliary contacts for necessary interlocking.

Integral disconnect switch or circuit breakers for branch circuit, short-circuit, and ground-fault protection.

- 5. Short-circuit interrupting capacity of starters and disconnects shall be adequate for voltage employed and for current to be interrupted. This may require use of high interrupting capacity breakers or current limiting fuses.
- 6. Starters shall be compatible with the motor they control.

#### **PART 3 - EXECUTION**

## 3.1 PREPARATION

- A. Become familiar with all trade conditions at the jobsite and plan the installation of the mechanical work to conform to these existing conditions.
- B. Review all project drawings and specification; report any discrepancies before proceeding with the work and in time to avoid unnecessary work.

## 3.2 INSTALLATON

- A. Follow manufacturers directions in all cases for installation, testing and energizing.
- B. Accurately set, level, support and fasten all equipment.
- C. Piping and ductwork where exposed shall be installed parallel with walls or structural elements; vertical runs to be plumb, horizontal runs level or parallel with structure.
- D. Earthquake resistant installation fastening of all mechanical equipment shall conform to the Seismic Zone 4 general requirements and SMACNA'S Guidelines for Seismic Restraints of Mechanical Systems and Plumbing Piping Systems.
- E. Steel for equipment supports shall be new material conforming to ASTM A36, latest edition. Brackets, supports, etc., fabricated from ferrous metal shall be hot dipped galvanized after fabrication. Miscellaneous steel, bolts, nuts, washers, etc., shall be of new materials conforming to ASTM A36.
- F. Do not obstruct spaces required by code in front of or around mechanical equipment, access doors, etc.
- G. Equipment, systems or other that generate excessive vibration or which generate or emit undue noise while in operation after installation shall be repaired or replaced as appropriate to obtain acceptable operation levels of vibration or noise. Other means of suppression or absorption may be acceptable if proven effective.
- H. All line voltage power wiring connections shall be provided under Division 16, Electrical work unless specified otherwise. Equipment starters shall be furnished under Division 16, Electrical work unless an integral part of the mechanical equipment being supplied. Provide and install all control devices mounted in mechanical systems unless specified otherwise. Provide transient over voltage protection for all solid state control devices not having protection built into the device.

## 3.3 QUALITY OF WORK AND SUPERVISION

- A. Refer to Division 1, General Conditions.
- B. Testing and inspections of materials, equipment, and systems of this division shall be performed. Arrange for all inspections, witnessing and certification of tests when required.
- C. Provide adjustment of all operating equipment as necessary to obtain optimum operation, function, and appearance. Verify that all components are operating within the parameters set forth in these documents. Provide for all tools, apparatus, personnel and other required performing this work.

#### 3.4 CLEANING AND PAINTING

A. Refer to Division 1, General Requirements

### 3.5 FINISHING

A. Valve Identification: Seton, Brady or Kolbi; valve identifiers, brass or plastic tags, 1 1/2 inch diameter minimum, other shapes acceptable, secured to valve body with chain, 1/2 inch minimum height letters stamped or engraved in tag. Identification shall reflect service of line installed.

- B. Piping Identification: Seton, Brady or Kolbi self-adhering tape markers, sized to suit pipe being marked. Marker shall conform to ANSI standards for tape color codes.
- C. Equipment Identification: Seton, Brady or Kolbi engraved plastic tags with 1/2 inch minimum height letters permanently secured to the equipment being identified.
- D. Where work or equipment has been installed under other divisions, and has been damaged by the work of this division, the contractor shall provide for patching, repair or replacement of the damaged work and pay all costs thereof. Where work and equipment installed under this division has been damaged, the contractor shall repair, replace or otherwise to bring the damaged work to acceptance condition or appearance.
- E. Clean up all debris and remnants resulting from the work of this division for a finished appearance of all work.
- F. Familiarize the owner's personnel in the proper operation and maintenance of all systems. Provide "Operations and Maintenance" manuals for review at this time. Provide people who are knowledgeable about the equipment and systems to indoctrinate the owner's personnel.

**END OF SECTION** 

### **SECTION 23 08 00**

#### INSULATION

#### PART 1 - GENERAL

### 1.1 Related Documents:

- A. Refer to Section 230100 Mechanical General Provisions for Related Work.
- 1.2 Description of Work:
  - A. This insulation specification is applicable to the Plumbing specifications.
  - B. Where manufacturers' names are listed in this specification, alternate names may be acceptable through the submittal process.
  - C. Insulation thicknesses shall be as specified by Title 24 California Code of Regulations Part 4 CMC.

### PART 2-PRODUCTS

## 2.1 Piping Insulations:

- A. Rigid Molded Sectional with Jacket:
  - 1. Regular shape (straight run)
    - a. Molded sectional, factory fabricated of heavy density resin-bonded fibrous glass, with integral factory-applied all-service jacket of Kraft paper/aluminum foil/glass fiber reinforcement.
    - b. Insulation shall have a thermal conductivity k factor of 0.23 at 75 degrees F mean temperature and be suitable for direct application and service on piping having operating surface temperatures of -60 to 450 degrees F.
    - c. Jacket:
      - i. Extend 1-1/2" (minimum) along one edge of longitudinal joint to form a sealing lap which shall be faced inside with a paper-protected pressure sensitive adhesive.
      - ii. Have a permeance rating of 0.02 perm/in. and a Beach puncture resistance of 50 units.
      - iii. Have an exterior suitable for painting with latex or water base paint.
    - d. Fiberglas ASJ/SSL-II, Certaineed Snap-On or Johns- Mansville Micro-Lok 650.
  - 2. Irregular Shape (fittings, flanges, valves, etc.)
    - a. Fibrous glass of same density, thickness, and other properties or characteristics as the adjacent regular shape insulation, either pre-molded or field-formed to fit the item being insulated.
    - b. Insulation shall be snugly jacketed with John- Mansville Zeston, Certainteed Snap-Form, factory- molded PVC covers.

### **PART 3-EXECUTION**

#### 3.1 Installation:

#### A. General:

- 1. Apply insulations in accordance with the manufacturer's recommendations and with instructions specified herein or noted on the drawings.
- 2. Fit insulation snugly to the item being insulated; butt all joints tightly with no voids, spaces, or thin spots.
- 3. Seal all joints completely; where sealing tape is used, center the tape over the joint.
- 4. Except where specified or necessary, do not use staples or fasteners which penetrate vapor barrier jackets or covers on cold systems or equipment; where such penetrating fasteners are used, seal each penetration completely to maintain the vapor barrier integrity.
- 5. Use adhesives, mastics, cements, sealants, and finishes undiluted unless specifically directed otherwise; apply per manufacturer's directions.
- 6. Install outdoor jacketing or other specified weather proofing or finishing on all insulations outdoors (exposed to the weather).

## 3.2 Piping Insulations:

### A. General

- 1. Unless specifically excluded herein or on the drawings, insulate all parts of hot and cold piping systems including fittings, flanges, valves, and pipe-mounted devices, except do not cover nameplates on devices.
- 2. Install insulation butted tightly to transitions such as insulated pipe shields, insulated pipe sleeves, equipment connections, etc.
- 3. Insulate equipment face piping completely to the point of equipment connection.

## B. Rigid Molded Sectional/Jacketed:

- 1. Apply to all hot and cold piping installed above grade indoors and outdoors, concealed or exposed.
- 2. Seal all transverse joints with circumferential applied 3" minimum width tape of same material as the jacket, faced with the same adhesive as the longitudinal lap. Seal transverse joints at PVC tape and vapor barrier mastic adhesive.
- 3. Fit insulation terminations with Zeston or SnapForm end cap jackets, or seal with Hardcast tape as specified above for joints.
- 4. On all piping installed outdoors, install outdoor jacketing. Install aluminum sheet jacket with all joints turned down at 45 degrees below horizontal; secure in place with non-corroding bands and/or blind rivets.

## 3.3 Finishings:

## A. Finishes and Protection:

- 1. Insure that the exterior finish of all insulation is applied and complete as required, ready for painting, or painted where required.
- 2. Install all required metal jackets or protective sheathing.

## B. Repair, Touchup:

1. Properly repair and touchup all dents, rips, tears, or other damage inflicted on jackets or exterior surfaces of insulation.

## **END OF SECTION**

### **SECTION 23 81 50**

#### **HVAC DUCTWORK**

#### **PART 1 - GENERAL**

### 1.1 Related Documents:

A. Refer to Section 230100 Mechanical General Provisions for related work.

### 1.2 Description of Work:

- A. Provide all ductwork and accessories for all supply, return and exhaust air systems as specified or shown on the drawings.
- B. Where manufacturer's names are listed in this Section of the specifications, alternate names may be acceptable through the submittal process.

### 1.3 Definitions:

- A. Ductwork Classifications:
  - 1. Supply air ducts are classified as follows:

Low Pressure: Velocity less than 2,000 feet per minute (fpm) and static pressure (s.p.) less than 2" water gauge (w.g.)

Medium Pressure: Velocity greater than 2,000 fpm and s.p. between 2" w.g. and 6" w.g.

2. All return and exhaust air ductwork is classified as low pressure.

#### 1.4 Submittals:

A. Refer to Section 230100 Mechanical General Provisions.

### **PART 2 - PRODUCTS**

## 2.1 Normal Construction:

- A. Requirements:
  - 1. Shop fabricated ductwork:
    - a. Fabricate ductwork as required by classification and to requirements specified below, and of configuration and sizes shown on the drawings. Note that duct sizes shown are net inside; where ducts are lined, fabricate larger than shown to accommodate lining.
    - b. Fabricate ducts and fittings as shown on drawings, or if not detailed, in accordance with SMACNA "HVAC DUCT CONSTRUCTION STANDARDS" Metal and Flexible ductwork handbook. This applies to all ductwork specified herein.
    - c. Factory fabricated ductwork construction shall conform to applicable requirements stipulated above for shop fabricated ductwork.
- B. Galvanized Steel Ductwork:

- 1. Rectangular and Circular Cross Section:
  - a. Shop-fabricated of prime grade lock form quality galvanized steel sheet.
- C. Aluminum Ductwork:
  - 1. Rectangular and round cross section:
    - a. Shop fabricated of Commercial Designation 3003 Temper H14 or Duct Sheet aluminum alloy sheet.
    - b. Ductwork, plenums, auxiliaries as specified for galvanized steel ductwork.
- D. Stainless Steel Ductwork:
  - 1. Rectangular and round cross section:
    - a. ASTM A 480/A 480M, Type 304, and having a No. 2D finish for concealed ducts and No. 4 for exposed ducts.
- E. Flexible Fiberglass Ductwork:
  - 1. Round cross section:
    - a. Thermaflex, Type M-KA insulated flexible glass fiber duct factory fabricated with a resilient core of continuous inner air barrier and a reinforced vapor barrier jacket. Product shall qualify as Class I Air Duct per UL 181.
    - b. Joint sealant: Fiberglas Type II glass fabric duct tape.

## 2.2 Duct Supports:

- A. Rectangular and Round Ducts:
  - 1. Support in accordance with SMACNA "HVAC Duct Construction Standards" Metal and Flexible ductwork and Seismic Restraints of Mechanical Systems.

## 2.3 Ductwork Auxiliaries:

- A. Flexible Connectors:
  - 1. Duro Dyne, Ventlok Duralon flexible fabric with Metalfab connectors at connections to fans and air handling equipment.
- B. Air Turning Vanes and Devices:
  - 1. Install in square turn in elbows: Air Devices Airturns, Aero Dyne Type HEP turning vanes.
  - 2. Install at duct branches or take-offs: Air Devices Deflectrols.
- C. Volume Dampers and Accessories:
  - 1. United McGill or acceptable alternate, opposed blade dampers with 6" maximum blade width and 14" Ø maximum single blade in accordance with SMACNA recommendation.

- 2. Provide operating rod extension, offsets, combination bearing sets, steel angle gears, spacers on insulated ducts or other trim as necessary to connect manual or automatic operator.
- 3. Provide damper operators, "Belimo" or acceptable alternate regulators: Automatic as specified in the HVAC Controls; Manual regulators: Ventlok, Young #666 or 677 in finished areas, #688 in exposed areas, #637 in mechanical rooms and concealed areas.
- Provide "Ruskin" model IAQ40 damper with integral pressure measuring ports in outdoor intake ducts or openings. Damper shall meet ASHRAE Standard 62-89 minimum ventilation rate.

## D. Splitter Dampers and Accessories:

- 1. Construct dampers of 18 gauge galvanized sheet metal.
- 2. Manual regulators: Ventlok, Young #690 on exposed ductwork, #691 on concealed duct. Provide stop to prevent damper from being wound off end of rod. Where access is limited at side of duct, provide combination bearing sets, offset rods, cut steel angle gears and other trim as required.

### E. Fire Dampers:

- 1. Provide fire dampers or fire damper assemblies which are U.L listed and California State Fire Marshall approved.
- 2. Blade widths shall be such that the blades do not interfere with adjacent ductwork components or auxiliaries.
- 3. Dampers shall be held open by hooked connection of a fusible link. Links installed in dampers near forced air furnaces shall be rated at 212 degrees F; links installed elsewhere shall be rated at 160 degrees.
- 4. Each fire damper to be installed in or through a fire rated wall or other vertical fire separation shall be factory mounted in a sleeve which extends 3" beyond each face of the wall. Connect the duct to the sleeve with "S" clips only.
- 5. Shutter type dampers shall be designed so that the blade stack in the open position is held clear of the duct airflow.

### 6. Identifications:

a. Label all fire damper access doors or panels with the words "Fire Damper" in letters not less than 1/2" in height.

### F. COMBINATION FIRE AND SMOKE DAMPERS

- 1. General Description: Labeled according to UL 555S for use in dynamic and static systems. Combination fire and smoke dampers shall be labeled according to UL 555 for 1-1/2-hour or 3-hour rating.
- 2. Fusible Links: Replaceable, 165 deg F rated.
- 3. Frame: 16 gauge galvanized, hat shaped steel channel.

- 4. Blades: Opposed blade action, airfoil shaped, double skin construction with 14 gauge equivalent thickness and maximum 6-inches wide.
- 5. Bearings: Stainless steel sleeve, pressed into frame.
- 6. Jamb Seals: Stainless steel, flexible metal compression type.
- 7. Blade Seals: Silicone edge type for smoke seal to 450 degree F and galvanized steel for flame seal to 1900 degree F.
- 8. Mounting Sleeve: Factory-installed, 0.052-inch thick, galvanized sheet steel; length to suit wall or floor application.
- 9. Damper Motors: Provide for two-position action with end switches at both positions.
  - a. Permanent-Split-Capacitor or Shaded-Pole Motors: With oil-immersed and sealed gear trains.
  - b. Spring-Return Motors: Equip with an integral spiral-spring mechanism. Enclose entire spring mechanism in a removable housing designed for service or adjustments. Size for running torque rating of 150 in. x lbf and breakaway torque rating of 150 in. x lbf.
  - Outdoor Motors and Motors in Outside-Air Intakes: Equip with O-ring gaskets
    designed to make motors weatherproof. Equip motors with internal heaters to permit
    normal operation at minus 40 deg F.
  - d. Electrical Connection: 115 V, single phase, 60 Hz.
- G. Access and Inspection Panels and Doors:
  - 1. Inspection panels: Air Balance Inc. #FSA 100 G, 10"x10" size for un-insulated and insulated ducts.
  - Access panels: United Sheet Metal Type AR-W, with transparent shatter proof cover, 18" wide by 3/4 of the duct height.
  - Plenum doors: In accordance with SMACNA "HVAC Duct Construction Standards"
- H. Duct Penetrations:
  - 1. Where ducts penetrate fire separations in the building, provide fire dampers as specified above.
  - 2. Where ducts penetrate roof or exterior walls, provide 24 gauge minimum, galvanized sheet metal flashing and counter flashing: solder all joints and make watertight.
- I. Sealants:
  - 1. Products Research Co., 3-M; Rubber Caulk 5000 one part polysulfide base sealant in gray color.
  - 2. Silicone sealer shall be used in all areas subject to acid or corrosive fumes.

3. Provide for securing pipe and duct supports to sprayed on roofing materials with either silicone, such as General Electric Silicone, or single component polyurethane elastomer, such as Vulkem-921 or Sikaflex-la. Roof field caulking shall be compatible with the respective elastomeric coating. Verify with Owner on each project.

### J. Tapes and Adhesives:

1. Pressureless tapes: Hardcast, 4" wide Type DT mineral impregnated woven fiber tape with manufacturer's FTA-20 activator adhesive indoors and RTA-50 activator adhesive outdoors, applied with brush or roller in accordance with manufacturer's directions.

#### 2.4 Ductwork:

- A. Intake or exhaust Screens:
  - 1. Provide 1/2" mesh 18 gauge galvanized iron or aluminum hardware cloth bird screens at all exterior openings in mechanical systems except where provided by other.
- B. Transverse Duct Connection:
  - 1. Ductmate #35 slide on duct connection system as manufactured by Ductmate Industries Inc.
  - 2. Install in accordance with manufacturer's recommendations and instructions.

#### **PART 3 - EXECUTION**

#### 3.1 Ductwork:

- A. Galvanized Steel Ductwork:
  - 1. Except where specified or shown otherwise, use galvanized steel ductwork in all locations.
- B. Aluminum Ductwork:
  - 1. Use on all exhaust systems for shower or locker rooms, dishwasher and all other high humidity.
- C. Flexible Fiberglass Duct:
  - 1. Use only where specifically called for on the drawings, as connections between terminal units and air outlets. Where restricted spaces occur that prevents the use of solid metal ductwork, flexible duct may be use with prior approval.
- D. Stainless Steel Duct:
  - 1. Use only where specifically called for on the drawings.

### 3.2 Installation:

- A. Ductwork and Supports:
  - 1. Install all ductwork in accordance with SMACNA "HVAC Duct Construction Standards" for Metal and Flexible ductwork recommendations, and Seismic Restraint of Mechanical Systems, manufacturer's recommendation and best practice.

- Install ductwork rigidly, securely and air tight. Seal all joints and seams on all outdoor ductwork and plenums, on all indoor supply ductwork, and on all shower or high humidity area exhaust ductwork; use one layer of pressureless tape for sealing. Seal other ductwork where noted on drawings.
- 3. Support ductwork independently of ductwork connected equipment.

### B. Ductwork Accessories:

- 1. Provide a 2" minimum gap between the ductwork sections where flexible connections are to be installed. Provide a generous fold in the connector to allow for movement.
- 2. Provide a 24 gauge galvanized sheet metal weather shield on top and sides of the flexible duct connectors on outside installations
- 3. Provide turning vanes at all square elbows and elsewhere as shown on drawings.
- 4. Provide deflectrols at all supply air outlet connections. Secure to ductwork in accordance with manufacturer's recommendations.
- 5. Provide balancing dampers at each divided flow fitting in rectangular ductwork. Provide splitter dampers only where shown on the drawings. Provide means to balance each air outlet with balancing dampers above the outlet unless a damper is shown in the ductwork attached to the outlet.
- 6. Install Fire Dampers in accordance with the manufacturer's recommendations and approvals.
- 7. Provide inspection access panels and doors at each splitter damper, fire damper and other locations where as required to provide access to duct mounted panels. Coordinate size and location to obtain good access.

# 3.3 Field Quality Control:

## A. Demonstrations:

1. Before enclosing ductwork, operate each fire damper in the presence of the job inspector or the Engineer to demonstrate that each damper is functional.

## B. Observations:

1. Poor fabrication or installation as disclosed by job site observations, will be cause for rejection, replacement or repair, of defective work at no additional cost to the Owner.

## C. Ductwork Cleaning:

- Clean all ductwork in the shop prior to shipping. All ductwork shall be transported to the site in covered vans to eliminate contamination and shall be protected from contamination at the site.
- 2. During installation on job site, seal sections of open ductwork with plastic sheeting to prevent infiltration of dirt and debris.
- 3. Before final balance and connections are made, blow clean all the ductwork serving areas not classified as rated clean spaces with the system fans, operating at normal conditions.

## 3.4 Adjusting and Finishing:

## A. General:

Comply with requirements of Section 230100, Mechanical General Provisions and Section 239900, HVAC Testing, Adjusting and Balancing. END OF SECTION

### **SECTION 239900**

# **HVAC TESTING, ADJUSTING AND BALANCING**

#### PART 1-GENERAL

### 1.01 Related Documents:

A. Refer to Section 230100 Mechanical General Provisions for related work.

## 1.02 Description of Work:

- A. Testing, adjusting, and balancing (TAB) of the air conditioning systems and related ancillary equipment will be performed by a technically qualified TAB Firm.
- B. TAB Firm shall be capable of performing the TAB services as specified in accordance with the Contract Documents, including the preparation and submittal of a detailed report of the actual TAB Work performed.
- C. TAB Firm shall check, adjust, and balance components of the air conditioning system which will result in optimal noise, temperature, and airflow conditions in the conditioned spaces of the building while the system equipment is operating economically and efficiently. This is intended to be accomplished after the system components are installed and operating as specified in the Contract Documents. It is the responsibility of the Contractor to place the equipment into service. Variable air volume systems shall be balanced in accordance with AABC Standard, Latest Edition or NEBB Standards for Testing, Adjusting, Balancing of Environmental Systems (Latest Edition).

## D. Early Field Inspection:

- 1. TAB Firm shall act as a liaison between the Owner, Architect and Contractor. TAB Firm shall perform the following reviews (observations) and tests:
  - a. During construction, review all HVAC submittals such as control diagrams, air handling devices, etc., that pertain to the ability to satisfactorily balance systems.
  - b. Test at least one or at least 10 percent of the single and fan-powered terminal units if the number of units are greater then twenty (20), for casing and damper leakage when the shipment arrives at the Project Site. All testing (except for the initial terminal units) shall be performed at the Project Site.
  - c. Test one (1) lab configuration including fume hood with air valve, general exhaust air with air valve and supply air with air valve for performance capability through a full range of inlet pressures. The tracking capability of the exhaust air versus the supply air will be with the submitted hood sash fully open and as the sash is closed in 2 inch increments until fully closed. Track the valves' response time in relation to sash movement and the lab differential.
- 2. During the balancing process, as the TAB Firm discovers abnormalities and malfunctions of equipment or components, the TAB Firm shall advise the Contractor in writing so that the condition can be corrected by the Contractor prior to finishing the TAB scope of Work. Data from malfunctioning equipment shall not be recorded in the final TAB report.

# 1.03 Quality Assurance:

### A. Codes and Standards:

1. The latest published specifications, standards, tests or recommended methods of trade, industry, or governmental organizations apply to work of this Section where cited by ab-

breviations (AABC) Associated Air Balance Council, National Standards for Total System Balance. (NEBB) National Environmental Balancing Board.

# 1.04 Submittals:

## A. Requirements:

1. Refer to Section 230100, Mechanical General Provisions.

## B. Evidence of Qualification:

- 1. Submit the name of the test and balance agency and evidence of qualification within 30 days after award of the contract. The test and balance agency shall be done by a separate independent company other than the mechanical contractor.
- 2. The test and balance agency shall submit the following information for review:
  - a. The name and registration number or license of the Test and Balance Engineer.
  - b. Detailed procedures.
  - c. Report forms.
  - d. AABC Performance or other approved warranty.

## C. Test and Balance Report:

1. Submit three (3) typewritten copies of the complete test and balance report with all pertinent data. List specified and tested data

### PART 2-PRODUCTS

## 2.01 Materials:

## A. General:

1. The test and balance agency shall supply all instrumentation, tools, and equipment necessary for the total system balance.

## **PART 3-EXECUTION**

## 3.01 AIR BALANCE

- A. When systems are installed and ready for operation, the TAB Firm shall perform an air balance for all air systems and record the results. The outside, supply, exhaust and return air volume for each air handling unit, supply fan and exhaust fan and the supply, exhaust or return air volume for each distribution device shall be adjusted to within +/- 5 percent of the value shown on the Drawings. Air handling unit and fan volumes shall be adjusted by changing fan speed and adjusting volume dampers associated with the unit. Air distribution devices shall be balanced with air patterns as specified. Duct volume dampers shall be adjusted to provide air volume to branch ducts where such dampers are shown.
- B. The general scope of balancing by the TAB Firm shall include, but is not limited to, the following:

- 1. Filters: Check air filters and filter media and balance only systems with essentially clean filters and filter media. The Contractor shall install new filters and filter media prior to the final air balance.
- 2. Blower Speed: Measure RPM at each fan or blower to design requirements. Where a speed adjustment is required, the Contractor shall make any required changes.
- 3. Ampere Readings: Measure and record full load amperes for motors.
- 4. Static Pressure: Static pressure gains or losses shall be measured across each supply fan, cooling coil, heating coil, return air fan, air handling unit filter and exhaust fan. These readings shall be measured and recorded for this report at the furthest air device or terminal unit from the air handler supplying that device. Static pressure readings shall also be provided for systems, which do not perform as designed.
- 5. Equipment Air Flow: Adjust and record exhaust, return, outside and supply air CFM(s) and temperatures, as applicable, at each fan, blower and coil.
- 6. Coil Temperatures: Set controls for full cooling and for full heating loads. Read and record entering and leaving dry bulb and wet bulb temperatures (cooling only) at each cooling coil, heating coil and reheat coil at each VAV terminal unit. At the time of reading record water flow and entering and leaving water temperatures (In variable flow systems adjust the water flow to design for all the above readings).
- 7. Zone Air Flow: Adjust each HVAC VAV terminal unit and VAV air handling unit for design CFM.
- 8. Outlet Air Flow: Adjust each exhaust inlet and supply diffuser, register and grille to within + 5 percent of design air CFM. Include all terminal points of air supply and all points of exhaust. Note: For Labs and rooms that are negative exhaust air flow shall be set to design + 10 percent and supply to design 5 percent. Positive areas will have opposite tolerances.
- 9. Pitot Tube Traverses: For use in future troubleshooting by Owner, all exhaust ducts, main supply ducts and return ducts shall have air velocity and volume measured and recorded by the traverse method. Locations of these traverse test stations shall be described on the sheet containing the data.
- 10. Maximum and minimum air flow on terminal units.

## 3.02 SOUND VIBRATION AND ALIGNMENT

- A. Sound: Read and record sound levels at up to fifteen (15) locations per floor in the building as designated by the Architect/Engineer. All measurements shall be made using an Octave Band Analyzer. All tests shall be conducted when the building is quiet and in the presence of the Architect/Engineer, at the Architect/Engineer's option.
- B. Vibration: Read and record vibration for all water circulating pumps, air handling units, and fans which have motors larger than 10 horsepower. Include equipment vibration, bearing housing vibration, foundation vibration, building structure vibration, and other tests as directed by the Architect/Engineer. Readings will be made using portable IRD (or approved equal) equipment capable of filtering out various unwanted frequencies and standard reporting forms. Maximum vibration at any point listed above, or specified, shall not exceed one mil on fans and one mil on pumps unless otherwise specified. Equipment manufacturer shall rectify all systems exceeding vibration tolerances.

## 3.03 Procedure:

## A. General:

- 1. The total system balance shall be performed in accordance with the AABC standards.
- 2. Provide for a rebalance after owner has taken occupancy of the building area of a minimum of (2) days to fine tune the building

# 3.04 Finishing:

# A. General:

1. Submit (3) three sets of completed test and balance reports to the Owner's representative for review. Make final adjustments to the system as required by the owner's representative. **END OF SECTION** 

### **SECTION 26 05 00**

### COMMON WORK RESULTS FOR ELECTRICAL

## **PART 1 - GENERAL**

## 1.1 SCOPE OF WORK

A. The work under this Division of the specifications includes furnishing and installing all equipment including the supervision, labor, materials, tools, transportation, services, facilities, testing and temporary work necessary to provide the electrical system as shown on the Plans and as specified herein. The work shall also include furnishing and installing all materials, mountings, devices and fittings even where not specifically mentioned herein or indicated on the Plans, but which are necessary to produce a complete and fully-functional installation.

## 1.2 RELATED DOCUMENTS

A. Plans, General Conditions and Division 1 of the Contract apply to all Division 26 sections.

## 1.3 CODES AND REGULATIONS

- A. The Contractor shall coordinate and obtain inspections required for the work described herein. All work performed hereunder shall conform to building safety codes, ordinances, rules and regulations of the legal authorities having jurisdiction.
- B. The installation shall conform to, as a minimum, the applicable standards, rules and regulations that apply from the latest accepted edition of the following publications:
  - 1. ANSI C2, National Electrical Safety Code.
  - 2. NFPA 70, National Electrical Code (NEC).
  - 3. Title 8, California Administrative Code, Basic Electrical Regulations, sub-chapter 5, Low Voltage and High Voltage Safety Orders.
  - 4. 29 CFR 1910, Occupational Safety and Health Administration (OSHA).
  - 5. Laws and Ordinances of Solano County.
  - 6. Standards, Institute of Electrical and Electronic Engineers (IEEE).
  - 7. Standards, Underwriters Laboratories, Inc. (UL).
- C. Where these specifications require or describe materials or construction of better quality or larger size than required by the governing codes, rules and regulations, the provisions of these specifications shall prevail. Nothing shown in the Plans or these Specifications shall be considered as authorizing any installation that violates the requirements of such codes.
- D. All electrical equipment and systems installed shall comply with applicable Uniform Building Code Seismic Zone 4 design criteria.

### 1.4 PLANS

- A. The Plans indicate the approximate location and general arrangement of electrical equipment, conduits and devices. Contractor shall coordinate with other trades and, where necessary, shall adjust conduit routing, duct bank elevations and configurations, equipment location and arrangement to avoid interferences or obstructions. The installation shall be in accordance with applicable codes and generally-accepted construction industry standards. Dimensions shown shall be field-verified with civil, structural, mechanical and related Plans.
- B. If any departure from the Plans is deemed necessary by the Contractor, details of such departure and the reason therefore shall be submitted as soon as is practicable to the Engineer for approval. No such departure shall be made without prior written approval of the Engineer.
- C. Circuit "homerun" designations on the Plans generally indicate source panel, circuit number, size and configuration. Where the Plans do not indicate the exact wire quantity or size, Contractor shall size branch circuits or feeders per NEC requirements to serve the loads involved. Wire sizing shall consider maximum voltage drops of 3% for branch circuits and 2% for feeders. Wire quantity shall be as required for the circuiting shown on the Plans.
- D. Contractor shall verify ratings of actual equipment installed and shall resize feeders and branch circuits as required to serve the actual equipment installed, if ratings differ from those shown on the Plans. The cost of such resizing shall be borne solely by the Contractor.

## 1.5 **DEFINITIONS AND ABBREVIATIONS**

- A. "Connection of" or "Installation of" shall mean to procure and install a complete electrical system necessary for the operation of the facility. Contractor is exempt from procuring equipment or material specifically denoted as "Owner-Furnished Equipment or Material".
- B. "Pre-wired" shall mean equipment for which power, control and/or instrument wiring are installed on the equipment at the factory and all that is necessary for operation is connection at manufacturer's designated customer's terminals by the Contractor.
- C. The following entities may be referenced within this specification by their initials:

1.	ANSI	American National Standards Institute
2.	ASTM	American Society of Testing and Materials
3.	IEEE	Institute of Electrical and Electronic Engineers
4.	IPCEA	Insulated Power Cable Engineers Association
5.	NEMA	National Electrical Manufacturers Assn.
6.	NFPA	National Fire Protection Association
7.	UL	Underwriter Laboratories, Inc.

## 1.6 MATERIALS

A. The equipment to be furnished under this specification shall be a standard product of the manufacturer. All units of the same type equipment shall be products of the same manufacturer. All materials and products used on this project shall be new and unused and shall be delivered to the jobsite in the original factory packaging.

B. All electrical materials and equipment shall be UL-listed and labeled, where a UL standard has been developed for such material and equipment.

## 1.7 **EXAMINATION OF SITE**

A. Contractor shall, prior to bid submittal, visit the jobsite and familiarize himself with the conditions affecting the proposed installation. Contractor shall include in bid the cost of all such conditions. Failure to examine the site prior to bid submittal shall not relieve Contractor of the obligation to provide a fully functional facility in complete compliance with the Plans and Specifications.

### 1.8 **SUBMITTALS**

- A. Equipment submittals shall be made in accordance with Division 1 requirements.
- B. Material and equipment lists, catalog cuts, shop drawings, calculations, samples, factory and field test reports and other submittal data as delineated in each Specification Section shall be delivered to the Engineer for review and approval.
- C. The submittals shall include manufacturer's name, brand names, catalog numbers, testing lab approvals and catalog cuts, together with drawings and such other descriptive data and ratings as may be required to show compliance with specification requirements.
- D. Structural calculations for the design of equipment supports and anchorage for equipment weighing over 300 lbs. shall be submitted to the Engineer for review and approval.
- E. A nameplate schedule shall be submitted for Engineer's review.
- F. Review of materials and equipment will be based on manufacturer's published ratings and compliance with these specifications. No materials or equipment shall be purchased or installed until review by the Engineer is completed.
- G. Equipment operating and maintenance data shall be provided in maintenance manuals in accordance with Division 1 requirements.
- H. As-built drawing set shall be provided by Contractor to Engineer in accordance with Division 1 requirements. Contractor shall keep the red-line markup set on the jobsite at all times, updating it as necessary to accurately reflect changes or added detail in equipment installation, location and routing.

### 1.9 MATERIAL SUBSTITUTIONS

- A. Electrical materials are selected on the basis of function, size of units, performance, quality of fabrication, aesthetic appearance, availability of spare parts, arrangement of controls and factory service facilities. The manufacturers and catalog numbers specified establish a standard for electrical materials and equipment, and material substitutions shall be equivalent or superior in all respects.
- B. Approval of substitution or alternate products and materials will be considered under the terms and conditions specified in Division 1.

#### 1.10 QUALIFIED CONTRACTOR

A. The electrical work shall be performed by an electrical contractor who has been actively engaged in the installation of similar industrial facilities and electrical systems for at least ten (10) years. Provide project list and references with bid to substantiate the required

experience.

B. The Contractor shall be familiar with local electrical codes and include the special requirements of local codes as part of the work to be completed.

## 1.11 TEMPORARY CONSTRUCTION POWER AND LIGHTING

- A. Temporary construction power and lighting shall be provided to meet the requirements of OSHA and all other applicable safety codes and standards.
- B. At all times, sufficient lighting shall be provided for the safety of construction workers. In areas where work is being performed, sufficient lighting shall be installed to ensure good workmanship.
- C. Circuits and receptacles used for the operation of portable and fixed tools shall be provided with ground fault protection.
- D. The Contractor is responsible for the design, installation, testing and operation of all temporary power and lighting systems. Contractor shall coordinate with the Engineer to secure temporary power and lighting sources, including phased demolition and relocation of existing facilities and temporary power systems to accommodate the progression of construction.

### 1.12 COMPLIANCE WITH FACTORY AND FIELD TESTS

A. Materials, products and/or equipment furnished by the Contractor shall pass the factory and/or field tests called for in the Plans and Specifications. Materials, products and/or equipment failing to pass the factory and field tests, or found to be non-compliant with the Plans and Specifications will be rejected and shall be replaced with compliant products and/or equipment at Contractor's sole expense.

# **PART 2 - PRODUCTS**

### 2.1 NAMEPLATES

- A. Provide laminated plastic nameplates for panelboards, equipment enclosure, relay, switch, and device. Descriptions shall be as indicated on the Plans. Each nameplate inscription shall include the description and basic rating, e.g.: "240/120V PANELBOARD A".
- B. Nameplates shall be melamine plastic, 0.125 inch thick, white with black center core and high-strength self-adhesive backing. Surface shall be matte finish. Corners shall be square. Accurately align lettering and engrave into the core. Minimum size of nameplates shall be 1.0 inch x 2.5 inches. Lettering shall be a minimum of 0.25-inch high normal block style.

#### **PART 3 - EXECUTION**

## 3.1 COORDINATION WITH OTHER TRADES

- A. Contractor shall coordinate equipment and conduit locations to avoid obstructing structural support and bracing members, skylights, doors and door opening mechanisms, and similar building appurtenances.
- B. Contractor shall organize the progress of work so as to adequately coordinate with and match with the progress of other trades, in order to avoid performing ill-timed or out-of-sequence work.
- C. The cost of selective demolition of new work, re-patching and re-installation due to out-of-

sequence work shall be borne solely by the Contractor.

## 3.2 EQUIPMENT AND MATERIAL DELIVERY, STORAGE AND HANDLING

- A. Contractor shall be responsible for receiving, off-loading, transporting and storing all equipment and material required for this project.
- B. Contractor shall store equipment, materials and tools in a secure location and shall be responsible for the security of all such items.
- C. Equipment and material shall be stored in accordance with manufacturer recommendations, including: weatherproofing, elevation above grade using pallets or similar hardware, and space heating to prevent condensation.
- D. Equipment and material shall be handled and transported in accordance with manufacturer recommendations including the use of cranes, slings, spreader bars, trailers, skids and rollers, which shall be provided by Contractor.

#### 3.3 MANUFACTURER'S RECOMMNEDATIONS

A. Products and equipment shall be installed in accordance with manufacturers' written instructions. Manufacturer-recommended details, auxiliary equipment, protection, fittings, disconnects, controls, and similar instructions shall be incorporated by Contractor into the finished installation.

## 3.4 MOUNTING ELEVATIONS

A. Mounting elevations of equipment, lighting fixtures, wiring devices and other control devices shall be as indicated in the Plans and Specifications. Where elevations are not shown, submit a written request for this information to the Engineer. Verify all mounting elevations with Engineer prior to installation.

## 3.5 EQUIPMENT AND DEVICE ARRANGEMENT

- A. Equipment and devices shall be arranged and installed to permit ready access for inspection, testing and maintenance. NEC-required working clearances shall be maintained around all electrical equipment.
- B. NEMA ratings shown for electrical equipment enclosures are the minimum ratings required for the environment at the time of design. Should more stringent enclosures become necessary due to installation conditions (e.g.: panelboards located beneath water, steam or other liquid piping), Contractor shall provide such enclosures necessary for the actual installation conditions at Contractor's sole expense.
- C. Access doors shall be provided for all concealed equipment and junction boxes that require access according to code requirements or for maintenance or inspection

### 3.6 ELECTRICAL PENETRATIONS

A. Raceway and cable penetrations through non-fire rated walls and ceilings shall be sealed with a general purpose 50-year, paintable silicone caulk. White caulk shall be used in unfinished spaces or in finished spaces having white walls or ceilings. Where wall or ceiling color is other than white, the caulking shall be painted to match the wall or ceiling color. Large openings where caulking would not be appropriate may be sealed using gland plates and sealing fittings or similar fittings such as those developed for sealing around cable trays.

- B. Raceway and cable penetrations through fire-rated walls and ceilings shall be sealed using approved fire-rated caulking or other fire-rated sealing systems developed and listed for the particular application. Finished installation shall maintain the original fire rating of the wall or ceiling.
- C. Roof penetrations shall be made via pre-formed, self-flashing roof jacks of appropriate sizes for the conduits involved. Sealant shall be applied in accordance with manufacturer recommendations and penetrations shall be watertight.

### 3.7 CLEANING

- A. All electrical equipment and enclosures shall be vacuumed clean and wiped down by hand prior to energizing or testing, and again at project completion. Contractor shall provide labor, tools and equipment necessary to open panels for Engineer's observation.
- B. Contractor shall avoid accumulation of debris on-site by removing all debris from the work area on a daily basis, keeping the jobsite clean to Engineer's satisfaction. All debris shall be removed and legally disposed of off-site.

### 3.8 TESTING

- A. All electrical equipment and systems shall be tested as required in the applicable Specification sections.
- B. Contractor shall demonstrate operation of electrical equipment and systems to Engineer to prove compliance with the Specifications. Any defective or non-compliant equipment, systems or components shall be replaced at Contractor's cost and re-tested to demonstrate compliance.

**END OF SECTION** 

### **SECTION 26 05 19**

## LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES (600 V AND LESS)

## **PART 1 - GENERAL**

## 1.1 SCOPE OF WORK

- A. This section covers provision and installation of wire and cable including: low-voltage wire and cable, wire and cable terminations, hardware and accessories.
- B. Telecommunications cabling is by others and is not-in-contract.

## 1.2 **RELATED DOCUMENTS**

- A. Plans, General Conditions and Division 1 shall apply to work under this section.
- B. Section 260500 shall apply to work under this section.

### 1.3 **SUBMITTALS**

- A. Contractor shall submit catalog cuts of all wire, cable and accessory products to Engineer for review, including but not limited to:
  - 1. Low-voltage wire and cable.
  - 2. Wire and cable termination accessories: tape, lugs, markers.
- B. Contractor shall submit the proposed wire numbering scheme for Engineer's approval.

#### **PART 2 - PRODUCTS**

# 2.1 **GENERAL**

- A. Wire shall be unbroken for the full length of the reels. Reels with any spliced or damaged wire shall be totally rejected.
- B. Wire and cable types and ratings shall be suitable for the temperature, conditions, and locations where installed.

## 2.2 MANUFACTURERS

A. The following manufacturers are approved for the following products:

1	1.	Low-Volta	ge Power	Wire and	Cable	Alpha,Cablec,	Okonite,Pire	elli, Southwire

2. Instrumentation and Data Cable Belden or equal

3. Compression Lugs and Connectors Thomas & Betts or equal

4. Wire and Cable Markers Thomas & Betts or equal

### 2.3 LOW-VOLTAGE POWER WIRE AND CABLE

A. The following applications shall use Class B stranded copper conductors with Type XHHW-2 600V insulation rated for operation at a conductor temperature of 90 °C in wet and dry locations:

- All underground low-voltage feeders and wiring.
- 2. All Type MC Cable.
- B. All other applicable low-voltage feeders and wiring, unless otherwise noted, shall be Class B stranded copper conductors with Type THWN/THHN 600V insulation rated for operation at a conductor temperature of 90 °C in dry locations and 75 °C in wet locations.
- C. Type MC cable may be used where concealed in walls horizontally between outlets and for lighting fixture connections from junction box. Vertical drops to outlets in walls shall utilize conduit and wire.
- D. Flexible cord shall be Type SOOW extra hard usage flexible cord with flexible-stranded copper conductors and Type XHHW insulation.
- E. Wire and cable shall be factory tested to ensure that they have been manufactured in accordance with this specification and the applicable standards.
- F. Contractor shall size and install branch-circuit wiring per the NEC as required for devices where wire sizes are not shown.
- G. Minimum wire size for power wiring shall be #12 AWG.
- H. All power wiring shall be color coded as follows (assuming that circuits from different voltage levels do not occupy the same raceways, pull boxes or enclosures):
  - 1. 240/120V Circuits:

Phase A Black
Phase B Red
Phase C Blue
Neutral White
Ground Green

# 2.4 WIRE MARKERS

A. Wire markers shall be white polymer sleeves or white adhesive wrap-around tapes with clear adhesive cover wrap. Wire numbers shall be legibly and indelibly machine imprinted on marker.

### **PART 3 - EXECUTION**

### 3.1 PULL ROPES

A. A pull rope shall be installed in all conduits, including telecommunications conduits. Pull rope shall be 160 lb. test yellow polypropylene.

## 3.2 LOW-VOLTAGE WIRE AND CABLE INSTALLATION

- A. Prior to installing cables in 1-1/2" conduit or larger, a steel mandrel shall be pulled through all conduits. Mandrel shall be 1/2" smaller in diameter than the conduit.
- B. Wire and cable shall be lubricated with a lubricating compound recommended by the wire or cable manufacturer. Pulling sleeves and sheaves shall have a minimum radius of 15 times the diameter of the cable.
- C. Vertical runs of cables shall be provided with supports as required by codes.

- D. At wiring devices, 6" long (minimum) tails shall be left for wiring device connections.
- E. Gauge of wire flagged on homeruns shall be extended to all outlet boxes unless otherwise designated.
- F. Each wire shall be marked with a wire marker indicating the circuit number and panel of origin. Wires shall be marked at the following locations:
  - 1. At pull, outlet and junction boxes.
  - 2. At device and panel terminations.

### 3.3 LOW-VOLTAGE SPLICES

- A. Splices shall not be installed in junction boxes below grade unless specifically approved by the Engineer prior to installation. This restriction is applicable to all secondary, low-voltage circuits and communication circuits.
- B. Splices in underground distribution systems shall be made only in accessible locations such as manholes and pull boxes, with compression connector on the conductor and by insulating and waterproofing by one of the following methods suitable for continuous submersion in water and complying with ANSI C119.1:
  - Provide cast-type splice insulation by means of mold casting process employing a thermosetting epoxy resin insulating material applied by a gravity poured method or by a pressure injected method. Provide component materials of the resin insulation in a packaged form ready for convenient mixing without removing from the package. Do not allow the cables to be moved until after the splicing material has completely set.
  - Gravity poured method shall employ materials and equipment contained in an approved commercial splicing kit which includes a mold suitable for the cables to be spliced. When the mold is in place around the joined conductors, prepare the resin mix and pour into the mold. Do not allow cables to be moved until after the splicing materials have completely set.
  - 3. Provide heavy wall heat shrinkable splice insulation by means of a thermoplastic adhesive sealant material which should be applied by a clean burning propane gas torch. Cables may be moved when joint is cool to the touch.
  - 4. Provide a cold-shrink rubber splice which consists of EPDM rubber tube which has been factory stretched onto a spiraled core which is removed during splice installation. The installation shall not require heat or flame, or any additional materials such as coverings or adhesive. It shall be designed for use with inline compression type connectors in indoor, outdoor direct-burial or submerged locations.
- C. Above grade splices shall be installed as follows:
  - 1. Conductors #10 AWG and smaller, compression- or spring-type connectors, insulated with two half-lapped, helically-applied layers of Scotch 33+ electrical tape.
  - Conductors #8 AWG and larger: Splices and taps shall be installed with appropriate compression sleeves, pressure connectors, or equal and insulated as follows:

a. Two layers of Scotchfill electrical putty tape and four layers of Scotch 33+ tape shall be applied as a minimum. The thickness of insulation over the splice shall be at least the same as that of the wire insulation.

**END OF SECTION** 

## **SECTION 26 05 26:**

## **GROUNGING - LOW VOLTAGE**

## PART 1: GENERAL

## 1.1 DESCRIPTION

A. This section describes the requirements for furnishing and installing a complete low voltage grounding system in accordance with Article 250 of the National Electrical Code, as indicated on the drawings and as specified herein.

## 1.2 REFERENCE SPECIFICATIONS, CODES, AND STANDARDS

- A. American Society for Materials and Testing (ASTM)
  - 1. ASTM B3 Specification for Soft or Annealed Copper Wire
  - 2. ASTM B8 Specification for Concentric-Lay-Stranded Copper Conductors,

Hard, Medium-Hard, or Soft

3. ASTM B33 Specification for Tinned Soft or Annealed Copper Wire for

**Electrical Purposes** 

- B. National Electrical Code (NEC)
  - 1. Article 250 Grounding

# 1.3 SUBMITTALS

- A. Manufacturers' catalog sheets with catalog numbers marked for the items furnished, which shall include:
  - Compression swaging grounding connectors
  - 2. Terminal lugs and clamps
  - 3. Copper ground cable
  - Ground rods
  - 5. Ground connection hardware
  - 6. Exothermic welding materials

# **PART 2: MATERIALS**

## 2.1 GROUNDING CONDUCTORS

- A. Provide bare or green insulated grounding conductors in accordance with the National Electrical Code, soft drawn copper cable or bar, not smaller than 12 AWG.
- B. Identify 6 AWG and larger insulated conductors used for grounding with green electrical tape. Spiral tape around conductor for its entire length or exposed length in boxes or when emerging from

protective conduits.

C. The grounding conductor shall be Southwire's Proof Positive® copper cable. The Proof Positive® copper cable shall provide an etched code in the tinned, core strand which signifies PG&E ownership.

Table 1 – Material Codes for Ordering Proof Positive® Cab		
Copper Cable Size, MHD		
6 AWG, 7-Strand		
4 AWG, 7-Strand		
2 AWG, 7-Strand		
1/0 AWG, 7-Strand		
250 kcmil, 19-Strand		
500 kcmil 37-Strand		
1000 kcmil, 61-Strand		

#### 2.2 GROUNDING CABLES

- A. Provide soft temper, high conductivity, copper grounding cable, meeting standards ASTM B8 for stranded cable.
- B. Insulated soft drawn copper, Class B stranding with green colored polyvinyl chloride insulation, UL 83, Type TW, THW, or THHN.

## 2.3 COMPRESSION GROUNDING

A. Provide grounding cable splices and joints that will be inaccessible upon completion of construction in accordance with the requirements of IEEE Standard 837. Use DCM Power Swage Tool Burndy "Hyground or approved equal, and furnish grounding connectors for grounding system connections.

### 2.4 GROUND CONNECTION HARDWARE

A. Provide ground connection hardware, bolts and nuts of high strength, high conductivity copper alloy.

### PART 3: EXECUTION

## 3.1 INSTALLATION

- A. Install grounding electrode conductors in accordance with the Drawings. Bond the protecting conduits to the grounding electrode conductors at both ends. Do not allow the points of connections to be painted.
- B. Install grounding conductors with all three-phase feeders.
- C. Install grounding conductors with all single-phase branch circuits.
- D. Fit conduits stubbed-up below a switchgear or motor control center with insulated grounding bushings and connect them to the equipment ground bus. Size the grounding wire in accordance with Table 250-122 of the National Electrical Code, except that a minimum No. 12 AWG shall be used.

- E. Install bonding jumpers in liquidtight flexible metal conduit in sizes 1½-inch and larger and in any size flexible conduit longer than four feet.
- F. Ground all equipment enclosures, motor and transformer frames, conduit systems, cable armor, exposed structural steel and similar items.
- G. Make grounding connections to equipment and ground buses with copper ground lugs or clamps. If enclosures are not provided with ground buses or ground terminals, use clamp type lugs added under permanent assembly bolts or by grounding locknuts or bushings. If enclosures are not rated "explosion proof", new bolts may be installed through holes drilled in the enclosure.
- H. Meter and Relay Cabinets: Installed one #1/0 AWG copper cable connection to the main ground grid via thru bolt and one-hole terminal connectors. Make connections to the side of the cabinet and the ground bus inside the cabinet.
- I. Ensure good ground continuity, in particular between the conduit system and equipment frames and enclosures. Where necessary, install jumper wires.
- J. Install grounding cable through building exterior walls within three feet below finish grade and install a water stop. Fill the space between the strands in the cable with solder and solder a 12-inch copper disc over the cable; to provide a waterstop.

## 3.2 LIGHTING AND RECEPTACLES

- A. Ground lighting fixtures by a bare or green insulated copper conductor in addition to the conduit system grounding connection.
- B. Ground convenience outlet receptacles by a bare or green insulated copper conductor in addition to the conduit system grounding connection.

## 3.3 CONDUIT GROUNDING

- A. All grounding bushings within all enclosures, including equipment enclosures, shall be wired together and connected internally to the enclosure grounding lug or grounding bus with a bare copper conductor.
- B. Grounding bushings shall be grounded with conductors sized in accordance with NEC, but not smaller than 8 AWG.
- C. All grounding bushings on conduit runs which are terminated at tray shall be connected to the tray grounding cable with bare copper conductor sized as specified above.
- D. Where a conduit run is terminated at tray and the conduit carries a separate grounding conductor, this grounding conductor shall be terminated on the tray grounding cable. If the conduit run is terminated with a grounding bushing and the separate ground conductor it carries is sized in accordance with the requirements of the preceding paragraph for conduit bushing grounding, the ground conductor in the conduit run shall be continued through the conduit bushing ground connection and terminated on the tray grounding cable making unnecessary the installation of a separate conduit bushing grounding cable.

E. A bare grounding conductor shall be installed the entire length of cable trays where indicated on the Drawings. The grounding conductor shall be connected to each tray section and the tray grounding system shall be connected to the station ground grid as indicated on the Drawings.

## 3.4 EQUIPMENT GROUNDING

- A. All new electrical equipment shall be connected to the new or existing ground grid with copper grounding conductor. The term "electrical equipment," as used herein, shall include all enclosures containing electrical connections or bare conductors except that individual devices such as solenoids, pressure switches, and limit switches shall be exempt from this requirement unless the device requires grounding for proper operation. Large equipment such as metal-clad or metal-enclosed switchgear will be furnished with a grounding bus which the Contractor shall connect to the ground grid. Most other equipment will be furnished with grounding pads and/or grounding lugs which the Contractor shall connect to the ground grid. All ground connection surfaces shall be cleaned immediately prior to connection. The Contractor shall furnish all grounding material required but not furnished with the equipment.
- B. Where ground grid extension stingers are indicated on the Drawings to be provided for connection to electrical equipment, the Contractor shall connect the bare grounding conductor to the equipment ground bus, pad, or lug.
- C. In addition to the ground grid extension stingers, a ground conductor shall be provided from the tray ground cable to each end of the ground bus assembly in the metal-clad switchgear.
- D. Where a ground conductor is included with the phase conductors of power circuits, the ground conductor shall be connected to the equipment grounding facilities and to the source ground bus. Where a ground conductor is not included with the phase conductors, the equipment shall be grounded by connecting a separate ground cable to the equipment grounding facilities and to the tray ground cable or source ground bus.
- E. Except where otherwise indicated on the Drawings, all equipment ground conductors that are not an integral part of a cable assembly shall be sized in accordance with the requirements of NEC. All ground conductors installed in conduit shall be insulated.
- F. Suitable grounding facilities, acceptable to PG&E, shall be furnished on electrical equipment not so equipped. The grounding facilities shall consist of compression type terminal connectors bolted to the equipment frame or enclosure and providing a minimum of joint resistance.
- G. The conduit system is not considered to be a grounding conductor except for itself.
- H. No grounding conductor shall be smaller in size than 12 AWG unless it is a part of an acceptable cable assembly.

## 3.5 GROUND SYSTEM RESISTANCE

A. All ground resistance measurements shall be made with a three terminal "megger" type ground tester that applies alternating current to the electrodes and that gives a reading in

direct current ohms. Two reference ground probes shall be used and all tests shall be made in accordance with the instrument manufacturer's instructions for ground resistance testing. Some of the acceptable instruments are as follows:

- 1. Meg and megger ground testers, James G. Biddle and Co.
- 2. Vibroground, Associated Research, Inc.
- 3. Ground-Ohmer, Herman H. Sticht Co., Inc.
- B. After connection of ground rods to the grounding system, the Contractor shall obtain a ground resistance measurement from a selected location on the ground grid where indicated on the Drawings. These data shall be obtained, identified, and recorded under the supervision of PG&E and records of the results shall be sent to the PG&E within 5 days.
- C. Any ground grid resistance of 1.5 ohm or greater shall be brought to the attention of the PG&E engineer for further evaluation
- D. The ground resistance measurement data may indicate that additional ground rods are required. The Contractor shall furnish, install, and connect additional ground rods as PG&E may direct. The Contractor will be reimbursed for the extra work required in accordance with the unit prices quoted in the Proposal.

#### 3.6 FIELD TESTS AND INSPECTION

- A. Test all exothermic weld connections by striking the weld with moderate hammer blows. Remake any connection which fails such test or which, upon inspection, indicates a porous or deformed weld.
- B. Provide exothermic welds which encompass 100 percent of the ends of the materials being welded. Remake welds which do not meet this requirement.
- C. Test the completed grounding system with calibrated test equipment specifically designed to test grounding systems. Provide at least 48 hours notice of this test to PG&E, to allow PG&E personnel to witness the test.

**END OF SECTION** 

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### **SECTION 26 05 33**

## RACEWAY AND BOXES FOR ELECTRICAL SYSTEM

## PART 1 - GENERAL

### 1.1 **SCOPE OF WORK**

- A. This section covers the aboveground electrical raceway work required to interconnect electrical or related equipment, including, but not limited to: conduits, cable trays, fittings, pull boxes and outlet boxes as indicated on the Plans and as specified herein.
- B. Above-ground raceway work includes low-voltage (<600V) and telecommunication raceway systems.
- C. Support hooks for telecommunications cabling are by others.

### 1.2 RELATED DOCUMENTS

- A. Plans, General Conditions and Division 1 shall apply to work under this section.
- B. Section 260500 shall apply to work under this section.

## 1.3 SUBMITTALS

- A. The Contractor shall submit catalog cuts of all above-ground raceway products, including but not limited to:
  - 1. Conduits and fittings.
  - 2. Wireways and fittings.
  - 3. Pull boxes and accessories.
  - 4. Outlet and junction boxes.
  - 5. Above-grade grounding hardware.

# PART 2 - PRODUCTS

#### 2.1 MANUFACTURERS

A. The following manufacturers are approved for the following products:

1. Rigid Galvanized Steel (RGS) Conduit Triangle, LTV-Republic

2. RGS Condulets Crouse-Hinds or equal

3. Other RGS Fittings T&B, O-Z Gedney, Myers

4. Electrical Metallic Tubing (EMT) Triangle, LTV-Republic

EMT Condulets Crouse-Hinds I

6. Other EMT Fittings T&B, O-Z Gedney I

7. Outlet and Device Boxes T&B Steel City (Sheet Steel), Crouse-Hinds FD (Cast)

8. Pull Boxes (NEMA 4X and 12) Hoffman

9. Wireway Hoffman

10. Surface Metal Raceway Wiremold

11. Grounding Compression Lugs Burndy

## 2.2 **CONDUIT AND FITTINGS**

A. Rigid Galvanized Steel (RGS) conduit shall conform to the requirements of ANSI C80.1 and UL 6.

- B. Electrical Metallic Tubing (EMT) shall conform to the requirements of ANSI C80.3 and UL 797.
- C. Flexible Metal Conduit shall conform to the requirements of UL 1.
- D. Liquidtight Flexible Metal Conduit shall conform to the requirements of UL 360.
- E. Conduit fittings and outlet bodies shall comply with ANSI C80.4 and UL Standard 514.
- F. Conduit types shall be applied as follows:

1. RGS Conduit: Outdoor locations.

EMT: Interior locations

- 3. Flexible Metal Conduit: Dry interior office locations where flexibility or vibration isolation is required.
- 4. Liquidtight Flexible Metal Conduit: Exterior, damp or wet or locations where flexibility or vibration isolation is required.
- G. Liquidtight flexible metal conduit or flexible metal conduit (see above for application requirements) shall be installed at: motor junction box connections, recessed light fixtures, instruments, as shown on the Plans, whenever flexibility is desired and wherever vibration may be present.
- H. Conduit minimum trade size shall be ¾", unless otherwise noted. Flexible conduit connections may be reduced to ½" trade size when the destination equipment is supplied with ½" hubs and the NEC conduit fill requirements are maintained.
- I. Where conduit sizes are not shown on the Plans, Contractor shall size conduits to meet NEC fill requirements.
- J. Conduit bodies for use with EMT shall be Crouse-Hinds Mark 9 series or equal and shall have sheet aluminum covers with neoprene gaskets. EMT fittings shall be compressiontype and approved for the type of installation.
- K. Conduit bodies for use with RGS conduit shall be Crouse-Hinds Form 8 series or equal and shall have cast iron covers with neoprene gaskets and corrosion-resistant screws.
- L. Bushings, hubs and other similar fittings shall be hot-dip galvanized for outdoor, wet, or damp applications. Indoor fittings may be zinc electroplate or similar.

M. RGS conduit fittings shall be steel or malleable iron. Zinc die-cast fittings are unacceptable.

## 2.3 PULL, OUTLET AND JUNCTION BOXES

- A. Outdoor pull boxes larger than 6" x 6" shall be NEMA 4X 304 stainless-steel enclosures with stainless-steel piano hinged, clamped and gasketed door and rear mounting panel. Enclosure shall include a padlockable hasp.
- B. Outdoor pull, outlet and junction boxes 6" x 6" and smaller shall be malleable cast iron with threaded hubs and aluminum finish.
- C. Indoor pull boxes shall be NEMA 12 sheet steel with single hinged, clamped, gasketed door, rear mounting panel, ANSI 61 gray exterior finish and white interior finish. Rear mounting panel shall include screwed cable tie base strip (T&B #TC1112 or equal) continuously mounted around the panel perimeter to provide ample cable support points.
- D. Indoor outlet and junction boxes flush-mounted in finished areas shall be galvanized sheet steel with knockouts, mounting hardware, brackets, and extension rings as required. Minimum junction box size shall be 4" x 4" square.
- E. Back-to-back telecom outlet boxes in non-fire rated walls shall use a common, thru-wall box with single conduit stub-up to accessible ceiling space
- F. Junction boxes in outdoor areas shall be cast metal. Conduit bodies may be used in lieu of junction boxes if conductor and splice fill requirements are met and the conduit body has the required number and size of conduit entries.
- G. Outlet, device and switch boxes in outdoor or shop areas shall be cast malleable iron with aluminum finish.
- H. Floor boxes shall be flush mounted approved for use in concrete floor construction and have been tested by UL to their standard UL451A.
- I. Floor boxes shall be available in one, two, or three-gang configurations and available in stamped-steel and cast iron versions. All boxes shall be the "deep version" manufactured by Walker, Omnibox series.

### 2.4 WIREWAY

- A. Wireway for interior use shall be NEMA 12 feed-through type with hinged, gasketed and clamped covers. Exterior wireway shall be of NEMA 4 construction.
- B. Wireway shall be 14 gauge sheet steel with ANSI 61 gray polyester powder finish inside and out.
- C. Provide hangers, elbows, tees, box connectors, telecoping fittings and other accessories required for a complete wireway system.
- D. Wireway sizes shall be provided as shown on the Plans.

### **PART 3 - EXECUTION**

## 3.1 **CONDUIT SYSTEMS**

A. Bonding jumpers must be installed per NEC and local code requirements. the length shall not exceed 24 inches.

- B. Conduit runs shall be installed in a neat and craftsman-like manner, parallel or perpendicular to structural members, plumb and level.
- C. Conduits shall be installed no closer than 6" to flues, hot water or steam piping.
- D. In finished areas, install conduit concealed in wall and ceiling spaces.
- E. All conduits shall be routed so as to avoid any tripping hazard or interference with piping, ducting, structures, process equipment, instruments, ceiling tile removal, etc. Conduit run on concrete foundations shall be run on the sides of the foundation.
- F. All conduits shall be adequately supported in accordance with applicable codes. Conduits shall not be supported from piping, ducting or ceiling support wires.
- G. Conduits shall be supported on trapeze-type racks fabricated from Unistrut P1001 Series channel or equal and shall have provisions for future conduits equal to 50 percent of installed conduits. Space for mounting of future conduits shall be reserved on the bottom side of the strut. Spacing of conduit supports shall comply with NEC requirements.
- H. Trapeze-type conduit racks shall be braced per channel manufacturer's California-approved seismic bracing standards.
- Conduits shall be routed on common, centrally-located conduit racks above corridors and large open office areas. Conduits shall branch off at right angles from the rack as required to reach destination equipment.
- J. Beam clamps may be used for single conduits 1-inch and smaller perpendicular to beam members and shall be U-bolt type. Beam clamps shall not be used where conduit runs parallel with beam members.
- K. Conduit connections to cable trays shall utilize adjustable grounding-type clamps (O.Z. series "CTC" or equal) and insulated-throat bushings.
- L. All conduit ends shall be cut square, properly reamed, and threaded to engage not less than five threads. Conduit joints must be made up using a joint compound that will prevent corrosion, ensure ground continuity, and allow re-entry at a later date.
- M. There shall be no more than 3-1/2 quarter bends (315° total) between conduit termination points, including offsets and bends at fittings.
- N. Bends in parallel conduit runs on conduit racks shall be made using concentric-radius bends.
- O. Conduit bends shall be free from "flats", "kinks" or other deformations which impair the full inside dimensions of the conduit size. Unless otherwise shown on the Plans, all conduit bends are to have a minimum radius as defined below:

## 1. CONDUIT TRADE DIAMETER RADIUS

a. 0.75" through 1" 16"b. 1.25" through 1.5" 18"

c. 2" through 2.5" 24"

d. 3" through 5" 36"

P. Indoor RGS conduits shall be terminated to sheet metal boxes and enclosures using

- double locknuts and insulated-throat bushings, or sealing hubs.
- Q. Indoor EMT shall be terminated to sheet metal boxes and enclosures using compression-type box connectors.
- R. Grounding-type bushings with lay-in lugs shall be used where necessary for conduit stubups, service equipment or grounding multiple conduits.
- S. All conduit entries into outdoor sheet metal enclosures shall be made using Myer's sealing hubs. The hubs shall have O-ring seals, insulated bushing throats, and bonding screws.
- T. Underground conduit stub-ups inside the building shall be terminated with conduit sealing bushings (OZ Gedney type CSB or equal) with appropriately sized neoprene bushings. Curved part of stub-up bend shall not be visible above the finished floor.
- U. Conduit stub-ups in hazardous (classified) areas shall be avoided. Where conduit stub-ups in hazardous areas are necessary, provide material, installation, and cable/conduit sealing to comply with NEC requirements for classified areas.
- V. Unions shall be provided at end devices where the final connection is made by threaded RGS conduit.
- W. When conduits are required to pass through bulkheads or floor plates, bulkhead hubs shall be used.
- X. All required conduit fittings and hardware are not shown on the Plans. Contractor shall provide all fittings, reducers, hubs, miscellaneous fittings and hardware necessary to complete the conduit installation. Conduit fittings and hardware shall be installed as required to provide a complete installation and a neat, workmanlike appearance.
- Y. All condulet-type fittings shall be of adequate size so that the cable can be installed without bending it to a radius less than six times the cable diameter. All fittings shall be installed so that the covers are easily removable.
- Z. Expansion fittings, complete with bonding jumpers, shall be installed every 200 feet in straight continuous conduit runs and wherever conduit crosses building expansion, isolation or separation joints.
- AA. Expansion fittings, complete with bonding jumpers, shall be installed every 200 feet in straight continuous conduit runs and wherever conduit crosses building expansion, isolation or separation joints.
- BB. Completed conduit systems shall be checked for continuity and cleaned by using mandrels, cleaning brushes and swabs pulled through each conduit. Conduits shall be blown out with compressed air and capped with bushings and conduit pennies until conductors are ready to be installed. Conduit systems shall be completed and cleaned prior to the installation of any wiring. Bushings and pennies shall be left in place on spare conduits.
- CC. Telecommunciations conduits 2" and smaller shall be installed with a maximum length of 150 feet and with a maximum of two 90-degree bends or equivalent between pull points. Install pull or junction boxes where necessary to comply with these requirements.

## 3.2 PULL, OUTLET AND JUNCTION BOXES

A. Not all pull boxes are shown on the Plans. Install pull boxes where required to meet conduit bend criteria.

- B. Contractor shall size pull boxes to meet NEC requirements. Where NEC requirements do not apply, Contractor shall size pull boxes to provide ample room for pulling, feeding and securing cabling.
- C. Access panels shall be provided where necessary for access to concealed pull boxes. Panels shall be flush with wall or ceiling surface and shall be finished to match wall or ceiling finish.

# 3.3 WIREWAY

- A. Wireway shall be installed plumb and level, supported in accordance with NEC and UL listing requirements.
- B. Wireway conduit fill limitations shall not be exceeded. Where conductor fill does exceed NEC limits, install parallel wireway.

**END OF SECTION** 

#### **SECTION 26 08 00**

## **ELECTRICAL ACCEPTANCE TESTING AND COMMISSIONING**

## PART 1 - GENERAL

## 1.1 INCLUDED SYSTEMS AND EQUIPMENT

- A. The following is a list of the equipment and system test requirements included in this section:
  - 1. Daylight dimming controls
  - Occupant sensors

## 1.2 **DESCRIPTION**

- A. This section specifies the functional testing requirements for Division 26 systems and equipment. From these requirements, the Commissioning Authority (CA) shall develop step by-step procedures to be executed by the Subs. The test requirements for each piece of equipment or system contain the following:
  - 1. The contractors responsible to execute the tests, under the direction of the CA.
  - 2. A list of the integral components being tested.
  - 3. Prefunctional checklists associated with the components.
  - 4. Functions and modes to be tested.
  - 5. Required conditions of the test for each mode.
  - 6. Special procedures.
  - 7. Required methods of testing.
  - 8. Required monitoring.
  - 9. Acceptance criteria.
  - 10. Sampling strategies allowed.

## 1.3 PREREQUISITES

- A. The following applicable generic prerequisite checklist items are required to be listed on each written functional test form and be completed and checked off by CA prior to functional testing.
  - 1. All related equipment has been started up and start-up reports and prefunctional checklists submitted and approved ready for functional testing:
  - 2. All control system functions for this and all interlocking systems are programmed and operable per contract documents, including final setpoints and schedules with debugging, loop tuning and sensor calibrations completed.

- 3. All A/E punchlist items for this equipment corrected.
- 4. These functional test procedures reviewed and approved by installing contractor.
- 5. Other miscellaneous checks of the prefunctional checklist and start-up reports completed successfully.

## 1.4 **MONITORING**

- A. Monitoring is a method of testing as a stand-alone method or to augment manual testing.
- B. All points listed in the required monitoring section of the test requirements which are control system monitored points shall be trended by the controls contractor. Other points shall be monitored by the CA using dataloggers. At the option of the CA, some control system monitoring may be replaced with datalogger monitoring. At the CA's request, the controls contractor shall trend up to 20% more points than listed at no extra charge.
- C. Hard copies of monitored data must be in columnar format with time down the left column and at least 4 columns of point values on the same page. Graphical output is a desirable option, if the system can produce it.

# **PART 2 - PRODUCTS - NOT USED**

## **PART 3 - EXECUTION**

## 3.1 OCCUPANCY CONTROLS

- A. Parties Responsible to Execute Functional Test.
  - 1. Controls contractor: operate the controls
  - 2. Electrical contractor: assist in testing sequences
  - 3. CA: to witness, direct and document testing.

## B. Prerequisites

- 1. The applicable prerequisite checklist items listed in the beginning of Section 1.3 shall be listed on each functional test form and checked off prior to functional testing.
- C. Functions / Modes Required To Be Tested and Test Methods The following testing requirements are an addition to and do not replace any testing requirements elsewhere in this Division.

Function / Mode	Test Method Manual (demonstration), Monitoring, Either or Both
MISCELLANEOUS FUNCTIONS	
1. All specified functions and features are set up, debugged and fully operable.	Verbal discussion of features
2. Occupant over-ride functions and duration setting.	Demonstration
3. Scheduling features fully functional and setup, including holidays.	Observation in terminal screens or printouts

4. Date and time setting in Lighting Integrator Panel.	Demonstration	

Function / Mode	Test Method Manual (demonstration), Monitoring, Either or Both
5. Verify that delays and ramp times are set and functioning so that the speed of change of light fixture output is slow enough to be judged non-bothersome to occupants.	Manual
6. Verify that the controls and sensors are not easily overridden or disabled by occupants.	Visual inspection
7. Verify that the photo sensor is in an adequate location and is not being affected by direct sunlight or obstructions.	Visual inspection

- D. Special Procedures (other equipment to test with, etc.; reference to function ID)
  - 1. None
- E. Required Monitoring
  - 1. None required, though monitoring can substitute for manual testing for most functions. See Section 1.4 above.
- F. Acceptance Criteria (referenced by function or mode ID)
  - For the conditions, sequences and modes tested, the dimming controls, integral (All)
    components and related equipment respond to changing conditions and
    parameters appropriately as expected, as specified and according to acceptable
    operating practice.
- G. Sampling Strategy for Identical Units
  - 1. Each photosensor and its controlled zone must be tested (no sampling).

## **END OF SECTION**

# **SECTION 26 24 16**

# **PANELBOARDS**

## **PART 1 - GENERAL**

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.
- B. Section 260500 shall apply to work under this section.

## 1.2 **SUMMARY**

A. This Section includes lighting and power panelboards and associated auxiliary equipment rated 600 V or less.

## 1.3 **DEFINITIONS**

- A. Panelboard: A panelboard with thermal magnetic circuit-breaker branches, primarily of the bolt-on type, designed for commercial projects, operating at 240 V and below, available in both single and three-phase versions and equipped with combination flush/surface mounting trim.
- B. Overcurrent Protective Device (OCPD): A device operative on excessive current that causes and maintains the interruption of power in the circuit it protects.

# 1.4 **SUBMITTALS**

- General: Submit the following in accordance with Conditions of Contract and Division 1 Specification Sections.
- B. Product data for each type panelboard, accessory item and component specified.
  - 1. Bus configuration and current and voltage ratings.
  - 2. Short-circuit current rating of panelboard.
  - 3. Features, characteristics, ratings and factory settings of individual protective devices and auxiliary components.

## 1.5 **QUALITY ASSURANCE**

- A. Listing and Labeling: Provide products specified in this Section that are listed and labeled.
  - 1. The terms "listed" and "labeled" shall be defined as they are in the National Electrical Code, Article 100.
- B. Electrical Component Standard: Components and installation shall comply with National Fire Protection Agency (NFPA) 70, "National Electrical Code."
- C. National Electrical Manufacturers Association (NEMA) Standard: Comply with NEMA PB1, "Panelboards."

D. Underwriters Laboratory (UL) Standards: Comply with UL 61, "Panelboards," and UL 50, "Cabinets and Boxes."

## 1.6 **EXTRA MATERIALS**

A. Keys: Furnish six spares of each type for panelboard cabinet locks. All locks shall be keyed the same.

#### **PART 2 - PRODUCTS**

#### 2.1 MANUFACTURERS

- A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products which may be incorporated in the work include, but not limited to, the following:
  - 1. Square D Company
  - Cutler-Hammer
  - General Electric Co.

## 2.2 PANELBOARDS, GENERAL REQUIREMENTS

- A. Enclosures: Cabinets, flush or surface mounted, shall be provided with hinged "door-in-door" type doors, locks with common keys.
- B. Panelboard shall be rated for 120/240 volt, 1- phase, 3- wire service shall be Square D type NQOB, or approved equal. All panelboards shall conform to standards and bear the label of the Underwriters Laboratories.
- C. Busbars shall be sized to limit the temperature rise within the panelboard to 50-degree C over a 40 degree C ambient temperature. Busbars shall be 98% conductivity round edge copper with silver-plated bolted joint connections. Bolted joint connections shall be accessible for inspection and proper maintenance.
- D. The panelboards shall be assembled complete with molded case bolted-in circuit breakers and spare spaces as indicated on the Drawings. Panelboards shall be bussed for all breakers, including spare spaces. All breakers shall be quick-make, quick break type with thermal and magnetic trips as required. All 2 and 3 pole breakers shall have common trip action and shall be interchangeable with single pole breakers.
- E. Panelboards shall be provided with an equipment ground bar bonded to the cabinet with a minimum of twenty-four terminal points. Provide additional ground bars as required where additional equipment ground conductors are shown on drawings.
- F. Panelboards shall be provided with neutral bus capable of terminating oversize or double neutral conductors. Neutral bus shall be 100% rated.
- G. All two-section panelboards shall be connected with copper cable equal to or greater than the main bus amperage capacity.
- H. Panelboard main lugs and feed-through lugs connected to #6 AWG or larger copper conductors shall be furnished to accommodate compression connectors. Adequate wiring space shall be provided to accommodate the compression connectors and so certified on submittal data.

### 2.3 **IDENTIFICATION**

A. Panelboard Nameplates: Engraved, laminated plastic or metal nameplate for each panelboard.

## **PART 3 - EXECUTION**

### 3.1 **INSTALLATION**

- A. General: Install panelboards and accessory items in accordance with NEMA PB 1.1, "General Instructions for Proper Installation, Operation and Maintenance of Panelboards Rated 600 Volts or Less" and manufacturers' written installation instructions.
- B. Mounting Heights: Top of trim 6'-2" above finished floor, except as indicated.
- C. Mounting: Plumb and rigid without distortion of box. Mount flush panels uniformly flush with wall finish.
- D. Circuit Directory: Typed and reflective of final circuit changes required to balance panel loads. Obtain approval before installing.
- E. Install filler plates in unused spaces.
- F. Provision for Future Circuits at Flush Panelboards: Stub (4) four I" empty conduits from panel into accessible ceiling space.
- G. Wiring in Panel Gutters: Train conductors neatly in groups, bundle and wrap with wire ties after completion of load balancing.

### 3.2 **GROUNDING**

- A. Connections: Make equipment grounding connections for panelboards as indicated.
- B. Provide ground continuity to main electrical ground bus indicated

### 3.3 CONNECTIONS

A. Tighten electrical connectors and terminals, including grounding connections, in accordance with manufacturer's published torque-tightening values. Where manufacturer's torque values are not indicated, use those specified in UL 486A and UL 486B.

### 3.4 FIELD QUALITY CONTROL

- A. Visual and Mechanical Inspection: Include the following inspections and related work:
  - 1. Inspect for defects and physical damage, labeling and nameplate compliance with requirements of up-to-date drawings and panelboard schedules.
  - 2. Exercise and perform of operational tests of all mechanical components and other operable devices in accordance with manufacturer's instruction manual.
  - 3. Check panelboard mounting, area clearances and alignment and fit of components.
  - 4. Check tightness of bolted electrical connections with calibrated torque wrench. Refer to manufacturer's instructions for proper torque values.

5. Perform visual and mechanical inspection and related work for overcurrent protective devices as specified in Division 16 Section "Overcurrent Protective Devices."

## 3.5 **CLEANING**

A. Upon completion of installation, inspect interior and exterior of panelboards. Remove paint splatters and other spots, dirt and debris. Touch up scratches and mars of finish to match original finish.

**END OF SECTION** 

### **SECTION 26 27 26**

## **WIRING DEVICES**

## **PART 1 - GENERAL**

## 1.1 SCOPE OF WORK

- A. This Section includes the following:
  - Receptacles.
  - 2. Ground Fault Circuit Interrupter Receptacles.
  - 3. Wall Switches.
  - 4. Occupancy sensor.

### 1.2 RELATED DOCUMENTS

- A. Plans, General Conditions and Division 1 shall apply to work under this section.
- B. Section 260500 shall apply to work under this section.

## 1.3 **SUBMITTALS**

A. Product data for each type of product specified.

### 1.4 QUALITY ASSURANCE

- A. Regulatory Requirements: Comply with provisions of the following codes.
- B. NFPA 70 "National Electrical Code."
- C. UL and NEMA Compliance: Provide wiring devices which are listed and labeled by UL and comply with applicable UL and NEMA standards.

# 1.5 **SEQUENCE AND SCHEDULING**

A. Schedule installation of finish plates after the surface upon which they are installed has received final finish.

### **PART 2 - PRODUCTS**

### 2.1 MANUFACTURERS

A. Leviton, Bryant Electric, Hubbell, Inc. Watt Stopper or equal

## 2.2 WIRING DEVICES

A. General: Provide temper-proof wiring devices, in types, characteristics, grades, colors and electrical ratings for applications indicated which are UL-listed and which comply with NEMA WD I and other applicable UL and NEMA standards. Provide white color devices and wall plates except as otherwise indicated. Verify color selections with Architect. Unless otherwise noted, all wiring devices in finished areas shall be Decorator Series.

B. Receptacles: Comply with UL 498 and NEMA WD1.

Current Rating	Voltage Rating	Description	NEMA	Leviton Cat. No.
(Amps)			Configuration	
20	125	Duplex	5-20R	5362-W20 125V
20	125	Duplex GFIC	5-20R	GFTR2-W 125V

#### C. Wall Switches:

Typical Application	Load Rating	Voltage	Pole	Cat. No.
		Rating		
Control Lights	20A	120/277	1	Leviton Decora
				5621-2W 20A 120/277V
				Rocker switch

 Wall mount occupancy sensor shall be passive infrared type with integrated dual level switches.

Typical Application	Load Rating	Voltage Rating	Watt Stopper Cat. No.
Control Lights in Small Areas/Rooms	20A	120/277	PW-200 W

E. Ceiling mount occupancy shall be combination passive infrared and ultrasonic type with power pack.

Typical Application	Load Rating	Voltage Rating	Watt Stopper Cat. No.
Control Lights at Large Areas/Rooms	20A	120/277	DT-300 with BZ-150 Power Pack

#### 2.3 WIRING DEVICES ACCESSORIES

- A. Wall Plates: Single and combination, of types, sizes and with ganging and cutouts as indicated. Provide plates which mate and match with wiring devices to which attached. Provide metal screws for securing plates to devices with screw heads colored to match finish of plates. Provide wall plate color to match wiring devices except as otherwise indicated. Provide wall plates with engraved legend where indicated. Conform to requirements of Section, "Electrical Identification." Provide plates possessing the following additional construction features:
  - 1. Material and Finish: Plastic, smooth.

#### **PART 3 - EXECUTION**

#### 3.1 INSTALLATION OF WIRING DEVICES AND ACCESSORIES

A. Install wiring devices and accessories as indicated, in accordance with manufacturer's written instructions, applicable requirements of NEC and in accordance with recognized

- industry practices to fulfill project requirements.
- B. Coordinate with other Work, including painting, electrical boxes and wiring installations, as necessary to interface installation of wiring devices with other Work.
- C. Install wiring devices only in electrical boxes which are clean and free from building materials, dirt and debris.
- D. Install galvanized steel wall cover plates in unfinished spaces and install brushed stainless steel wall cover plates at ceramic tile walls of toilet and shower rooms.
- E. Install wiring devices after wiring work is completed.
- F. Install wall plates after painting work is completed.
- G. Tighten connectors and terminals, including screws and bolts, in accordance with equipment Manufacturer's published torque-tightening values for wiring devices. Where manufacturer's torque requirements are not indicated, tighten connectors and terminals to comply with tightening torques specified in UL Standard 486A. Use properly scaled torque-indicating hand tool.

#### 3.2 PROTECTION

A. Protect installed components from damage. Replace damaged items prior to final acceptance.

#### 3.3 FIELD QUALITY CONTROL

- A. Testing: Prior to energizing circuits, test wiring for electrical continuity and for short-circuits. Ensure proper polarity of connections is maintained. Subsequent to energizing, test wiring devices and demonstrate compliance with requirements, operating each operable device at least six times.
- B. Test ground fault interrupter operation with both local and remote fault simulations in accordance with manufacturer recommendations.

#### **END OF SECTION**

# SECTION 0311000 DEMOLITION AND SITE CLEARING

**GENERAL** 

#### **SCOPE**

The work includes demolition, salvage of identified items and materials, and removal of resulting rubbish and debris. Rubbish and debris shall be removed from job site daily, unless otherwise directed, to avoid accumulation at the demolition site. Materials that cannot be removed daily shall be stored in areas specified by the Owner's Representative. Clear the site as shown on drawings in preparation for grading, planting, and new construction, including, but not limited to the following:

Protection of existing trees, vegetation and elements to remain.

Remove designated existing concrete curbs, concrete paving, turf and other surfacing as directed by the Owner's Representative.

Removal of designated trees and vegetation. Protect existing

utilities

Dispose of materials.

Installation of temporary construction fencing.

### RELATED WORK SPECIFIED ELSEWHERE

Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

Related Sections include the following: Section

02231 - Tree Protection Section 02310 -

Grading

CA Architects February 5, 2016 Solano Community College District Kitchen Renovation, Bldg 200 Fairfield, California

#### CODES AND REQUIREMENTS

#### **Dust Control**

Conform to applicable codes for demolition work, dust control, products requiring electrical disconnection and re-connection. The amount of dust resulting from demolition shall be controlled to prevent the spread of dust to occupied portions of the construction site and to avoid creation of a nuisance in the surrounding area. Use of water will not be permitted when it will result in, or create, hazardous or objectionable conditions such as flooding, excessive mud, and pollution.

#### Hazardous Materials

Conform to procedures applicable when hazardous or contaminated materials are discovered. Separate hazardous materials.

#### **PROTECTION**

### Protection of Existing Property

Before beginning any demolition work, the Contractor shall carefully survey the site and examine the Drawings and Specifications to determine the extent of the work. The Contractor shall take all necessary precautions to avoid damage to existing items to remain in place, to be reused, or to remain the property of the Owner, and any damaged items shall be repaired or replaced as approved by Owner's Representative at no additional cost to the Owner. The Contractor shall carefully coordinate the work of this section with all other work and shall construct and maintain shoring, bracing and supports, as required. The Contractor shall ensure that structural elements are not overloaded and shall be responsible for increasing structural supports or adding new supports as may be required as a result of any cutting, removal, or demolition work performed under this contract.

#### **MATERIALS**

#### **SALVAGE**

Material indicated for salvage shall be carefully removed and stockpiled on site for reuse or delivered as directed by Owner's Representative

#### TEMPORARY CONSTRUCTION FENCING

Fencing shall be City standard, with movable footing.

#### **EXECUTION PREPARATION**

CA Architects February 5, 2016 Solano Community College District Kitchen Renovation, Bldg 200 Fairfield, California

Contractor shall review with the Owner's Representative, the exact extent of materials to be cleared from the site prior to beginning work. Trees to be removed are shown generally on the drawings. Contractor shall flag trees to be removed and shall receive approval by the Owner's Representative before proceeding with tree removal.

Contractor shall coordinate the exact location of temporary construction fencing with the Owner's Representative.

#### PHASING OF WORK

Contractor shall review project schedule with the Owner's Representative prior to start of work.

#### PROTECTION OF EXISTING TREES AND OTHER VEGETATION

Provide tree protection for existing trees to remain according to Section 02231 Tree Protection. No machine operations shall be permitted within the drip line. Hand work only will be permitted. No storage of supplies or materials shall be allowed within the trees' drip lines.

Care shall be taken to retain adjacent plant material not indicated for removal in order to maintain the natural character of the site.

#### **PRUNING**

Contractor shall review condition of trees and vegetation in the immediate project area prior to submitting bid, and make allowance for required pruning of dead wood or hazardous limbs. Pruning operations shall be as directed by, and in consultation with the Owner's Representative

### **STRIPPING**

Construction areas shall be stripped of all vegetation and organic debris in preparation for grading.

#### Tree stumps

Tree stumps shall be cut and ground to 24" below grade. Remove the entire stump if required for installation of new work.

#### INSPECTION

Prior to commencement of site grading work the Contractor shall notify the Owner's Representative that the site has been cleared. The Owner's Representative shall have sufficient time to inspect the site prior to start of site grading operations.

#### REMOVAL

CA Architects February 5, 2016 Solano Community College District Kitchen Renovation, Bldg 200 Fairfield, California

Where required by the Drawings or Specifications and when so directed to be salvaged and/or reused, existing materials shall be removed in the most careful manner possible to avoid damage; and, if damaged, such items shall be restored to conditions satisfactory to the Owner's Representative.

#### DISPOSITION OF MATERIAL

Title to materials and equipment to be demolished, is vested in the Contractor upon receipt of notice to proceed. The Owner will not be responsible for the condition, loss, or damage to such property after Notice to Proceed.

Salvageable Items and Materials

Contractor shall salvage items and materials to the maximum extent possible.

Unsalvageable Materials

All unsalvageable materials shall be disposed of off the site.

**CLEAN-UP** 

Debris shall be removed and transported in a manner that prevents spillage on streets or adjacent areas. Local regulations regarding hauling and disposal shall apply.

END OF SECTION 02120

### **SECTION 321313**

### **CONCRETE PAVING**

#### PART 1 - GENERAL

#### 1.1 SCOPE

- A. Provide all labor, equipment, and materials to accomplish the following:
  - 1. All concrete paving and curbs, including aggregate base.
  - 2. All forms, reinforcing, and miscellaneous items.
  - 3. Color and finish.

#### 1.2 RELATED SECTIONS

- A. Section Grading
- B. Section 033000 Cast-in-Place Concrete
- C. Section 033500 Concrete Finishes
- D. Section 061063 Exterior Carpentry

#### 1.3 STANDARDS

- A. Project soils report will be provided by the Owner and paving design shall conform to the recommendations contained in the soils report.
- B. Unless otherwise shown or specified all materials and methods shall conform to the appropriate current sections of:
  - 1. The State of California, Department of Transportation (CALTRANS), Standard Specifications (DTSS).
  - 2. Applicable ASTM Specifications.
  - 3. City of Santa Rosa Engineering Standard Plans.

#### 1.4 TOLERANCES

- A. Subgrade and Sub-base Tolerance: Tolerances for subgrade and sub-base shall be as specified by DTSS. Provide full specified depth of aggregate base and concrete as shown.
- B. Surface Tolerance: For finished paving surfaces, no more than 6 mm (1/4") variance when measured with a 10-foot metal straightedge. For face and top of walls, no more than 3 mm (1/8") variance when measured with a 3-meter (10- foot) straightedge. Correct "birdbaths" and other irregularities to the satisfaction of the Owner's Representative. If necessary, remove and replace unsatisfactory work.

#### 1.5 QUALITY CONTROL

- A. Qualifications of Workers: Contractor shall demonstrate to the satisfaction of the Owner's Representative that all people employed for this portion of the work by contractor and /or subcontractor, including laborers as well as job foreman, possess substantial experience and skill in performance of all aspects of placement and finishing concrete. Insofar as possible, the same workers shall be present from start to finish.
- B. Sample Concrete Finishes: For each concrete finish or color, a 4-foot-square sample shall be poured and finished, including edge treatment, at the site for approval of the Owner's Representative prior to beginning concrete work. Owner reserves the right to change color based on review of sample. Contractor shall meet or exceed the quality of the approved finish in all subsequent work. Contractor shall remove the sample at completion of the work.
- C. Testing: Samples of the work may be taken for testing by a qualified laboratory, when determined necessary by the Owner's Representative. Costs of the initial test will be paid by the Owner's Representative; retesting shall be paid for by the Contractor. Should tests show that concrete is below specified strength, Contractor shall remove and replace all such concrete to the satisfaction of, and at no expense to the Owner's Representative.

#### 1.6 JOB CONDITIONS

- A. Weather Limitations: Place concrete only when atmospheric temperature is above 8 degrees C [40 degrees F], when rain is not expected, and the base is dry.
- B. Grade Control: Establish the required lines and grades prior to construction, and maintain during construction operations.

#### 1.7 INSPECTION

- A. Notify the Owner's Representative three (3) days in advance to review installed work prior to beginning the next phase. Review shall be called for at the following stages:
  - 1. After preparation of subgrade, prior to placing aggregate base.
  - 2. After placement and compaction of aggregate base.

- 3. After installation of forms and reinforcement, prior to placing concrete.
- 4. To witness the pour and finishing operations.

#### PART 2 - PRODUCTS

#### 2.1 MATERIALS

- A. Forms and Reinforcing
  - 1. Forms: Either steel or wood, of size and strength to resist movement during concrete placement and to retain horizontal and vertical alignment until removal. Use forms that are straight and free of distortion and defects.
  - 2. Use flexible spring-steel forms or laminated boards to form radius bends as required.
  - 3. Coat forms with a non-staining form release agent that will not discolor or deface the surface of the concrete.
  - 4. Reinforcing Bars and Dowels: Deformed steel bars, ASTM A615, Grade 40, unless otherwise shown.
  - 5. Wire Mesh: ASTM A185, 6" x 6" 10/10 mesh.
- B. Aggregate Base: Class 2, 20 mm (3/4") maximum size, in accordance with DTSS.
- C. Concrete: All slabs, steps, curbs, gutters, and walls shall be Class A conforming to DTSS, Section 90.
  - 1. Cement: Type II modified conforming to ASTM C-150.
  - 2. Aggregate: Maximum size 20 mm (3/4")
- D. Retarder: Burke formula B, light etch, or equal
- E. Expansion Joints: 10mm (3/8") premolded asphalt saturated felt expansion joint filler in accordance with ASTM D1751. Joints to have backer rod and be sealed with Sikaflex caulking
- F. Cleaning Agents: 10% muriatic acid
- G. Mix Design: Shall conform to the American Concrete Institute (ACI) Manual of Concrete Practice and PCA "Design and Control of Concrete Mixtures." Compressive strength shall be 20 MPa (2500 psi) at 28 days; maximum slump: 100 mm (4").
- H. Color

#### PART 3 - EXECUTION

#### 3.1 PREPARATION

- A. Verify that the sub-base is properly compacted and at suitable grade for receiving aggregate base. Clear area to be paved of all debris and organic material. Recompact and regrade as necessary to place aggregate base.
- B. Take all steps necessary for protection of existing improvements before and during construction. As the concrete is being placed, take extreme care not to discolor or damage adjacent surfaces or other installed work. If damage occurs, repair same, and if satisfactory repair cannot be made, remove and replace the section as directed, at Contractor's expense.
- C. Dispose of all excavated material offsite, unless directed otherwise. If suitable as fill material, it may be utilized on site, subject to approval of the Owner's Representative.

#### D. Formwork and Reinforcement

- 1. Assure that excavations and formwork are completed. Make forms true to line and grade, thoroughly braced and mortar tight. Wavy edges or uneven surfaces will not be accepted. Surfaces shall be even and dense.
- 2. Check completed formwork for grade and alignment to the following tolerances:
  - a. Top of Form Units: Not more than 1/8 inch in 10 feet.
  - b. Vertical Face: Longitudinal axis not more than <sup>1</sup>/<sub>4</sub>" in 10 feet.
- 3. Check that reinforcement is secured in place with proper clearances. Prevent movement of reinforcement and other items during placement of concrete. Coordinate with other trades for timely installation of their work.
- 4. Verify that expansion joint material, anchors and other embedded items are secured in position.
- 5. Notify the Owner's Representative to review formwork and reinforcement prior to placing concrete.
- 6. Aggregate Base Course: Spread, shape and compact all aggregate base to not less than 95% of maximum density.

#### 3.2 INSTALLATION

A. General: Install all work in conformance with applicable sections of DTSS unless noted otherwise on Plans.

#### B. Joints

- 1. General: Construct expansion, control (contraction) and construction joints true to line with face perpendicular to surface of the concrete, unless otherwise shown. Construct transverse joints at right angles to the centerline, unless otherwise shown.
- 2. When joining adjacent structures, place transverse joints to align with previously placed joints, unless otherwise shown.
- C. Expansion Joints: Provide premolded joint filler for expansion joints abutting concrete curbs, catch basins, manholes, inlets, structures, and other fixed objects.
- D. Deep Joints/ Control (Contraction) Joints: Provide control (contraction) joints, sectioning concrete into areas as shown on drawings. Construct control joints for a depth equal to at least one quarter of concrete by grooving top portion with an appropriate cutting tool and finishing edges with a jointer.
- E. Construction Joints: Place construction joints at the end of all pours and at locations where placement operations are stopped for a period of more than ½ hour, except where such pours terminate at expansion joints.
- F. Scorelines: Sawcut scorelines in locations shown on Drawings per Construction Details in Drawings.

#### 3.3 FINISHING

A. Finish concrete paving as specified in Section 03350 Concrete Finishes

#### 3.4 CURING

A. Cure finished concrete no less than seven (7) days in accordance with applicable portions of Cast-in-Place Concrete - Section 03300.

#### 3.5 REPLACEMENT

A. Defects in concrete that cannot be repaired to the satisfaction of the Owner's Representative shall be removed and replaced at Contractor's expense.

Remove and replace (R&R), when directed by the Owner's Representative, all surfaces which show excessive shrinkage cracks, spalling, or other defects in workmanship

**END OF SECTION 02750** 

# KITCHEN REMODEL

SOLANO COMMUNITY COLLEGE DISTRICT 4000 SUISUN VALLEY ROAD, FAIRFIELD, CA 94534 PROJECT NO: APPLICATION NO:

SUBMITTAL

**SOLANO COMMUNITY** COLLEGE DISTRICT

4000 Suisun Valley Road Fairfield, CA 94534

		SUDITITIAL		
GENERAL NOTES	LEGEND	PROJECT SCOPE	INDEX	PROJECT DIRECTORY
1. FIELD VERIFY ALL EXISTING DIMENSIONS AND NOTIFY ARCHITECT OF ACTUAL FIELD CONDTIONS PRIOR TO THE COMMENCEMENT OF ANY WORK. THIS SHALL INCLUDE ALL FINISH ELEVATIONS AND CLEARANCES AS SHOWN ON EXISTING/DEMO SHEETS AND PROPOSED PLANS TO CONFIRM IN-FIELD CONDITIONS CONFORM TO DOCUMENTS.  2. ELEVATIONS. ALL ELEVATIONS ARE TO/FROM TOP OF FINISH FLOOR, U.O.N.	NORTH ARROW  DOOR REFERENCE  DOOR NUMBER  COLUMN OR GRID LINE  LETTERS LEFT TO RIGHT.  NUMBERS TOP TO BOTTOM.  REVISION REFERENCE  REVISION NUMBER  CLOUD AROUND REVISION	PROJECT SCOPE IS LIMITED TO INTERIOR RENOVATION WORK ONLY WITHIN THE EXISTING DAY CARE CENTER (BLD 200). THIS CENTER WAS BUILT AND DSA CERTIFIED IN 1993 (#60163). WORK SHALL CONSIST OF REPLACEMENT IN-KIND OF EXISTING CABINETS, RANGE, D/W AND VC FLOORING. NEW WORK SHALL CONSIST OF THE ADDITION OF A NEW FIRE SUPPRESSION SYSTEM, NEW GREASE TRAP/FLOOR DRAINS, NEW HAND WASH SINK AND MODIFICATIONS TO	GENERAL DRAWINGS A0.00 COVER SHEET, INDEX  ARCHITECTURE DRAWINGS A0.02 ADA - ACCESSIBILITY A1.00 ACCESSIBLE PATH OF TRAVEL A1.01 BUILDING PLAN (ACCESS & FS) D2.00 DEMO PLAN/RCP/ELEVATIONS A2.00 PROPOSED - PLAN/RCP/DETAILS A2.01 PROPOSED - ELEVATIONS /SCHEDULES A9.00 DETAILS	DISTRICT  NAME ADDRESS A000 SUISUN VALLEY ROAD ADDRESS FAIRFIELD CA 94534 PHONE 707-864-7112 PHONE 707-864-7197  CM  NAME KITCHELL CEM - BRIAN BUSH ADDRESS 360 CAMPUS LANE, SUITE 203 ADDRESS FAIRFIELD, CA 94534 PHONE 916-540-6629 PHONE 707-864-7000 ext 5852 E-MAIL Brian.Bush@solano.edu  ARCHITECT  NAME ACHITECT ADDRESS AUSALITO, CA 94965 PHONE 415-331-7655 FAX 415-331-7656 E-MAIL jcohn@ca-arch.com
3. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING FENCE HEIGHTS AND ANY MOUNTING REQUIREMENTS FOR ANY FENCEWORK PRIOR TO INSTALLATION.	BUILDING SECTION  SECTION IDENTIFICATION  SHADED HALF IS THE SIDE CONSIDERED  SHOWN  MATCH LINE  SHADED HALF IS THE SIDE CONSIDERED	ADDRESS ACCESS COMPLIANCE.  COST OF CONSTRUCTION IS ESTIMATED TO BE LESS THAN \$150,244.00. THERE WILL BE NO STRUCTURAL WORK	ELECTRICAL DRAWINGS  E0.10 GENERAL NOTES  E0.20 TITLE 24 - COMPLIANCE FORM  E0.30 TITLE 24 - COMPLIANCE FORM	ELECTRIC NAME C&N ENGINEERS, INC. ADDRESS 319 SUTTER STREET, SUITE 202 ADDRESS SAN FRANCISCO, CA 94108 PHONE 415-982-1828 FAX 415-772-8005 E-MAIL raymond@cnengr.com
4. ALL EXITS, EXIT LIGHTING, FIRE PROTECTIVE DEVICES SHALL BE MAINTAINED FOR THE DURATION OF THE WORK OF THE PROJECT. CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH THE SCHOOL TO ALLOW FOR STORAGE FOR MATERIALS, LOCATION OF DEMO BOX AND ALL SCHOOL USE PROTOCOLS THAT ARE REQUIRED TO BE MAINTAINED DURING CONSTRUCTION.	EXTERIOR ELEVATION  ELEVATION IDENTIFICATION  SHEET WHERE ELEVATION IS SHOWN  SECTION DETAIL  DETAIL IDENTIFICATION	AS PART OF THIS PROJECT SCOPE.  PROJECT DOCUMENTS SHALL INCLUDE PROJECTS SPECIFICATIONS.  THE PROJECT SITE IS LOCATED OUTSIDE THE FLOOD PLAN.	E0.40 TITLE 24 - COMPLIANCE FORM E0.50 TITLE 24 - COMPLIANCE FORM E1.00 ELECTRICAL PLAN  MEP DRAWINGS M0 MECH SYMBOLS, NOTES, LEGEND & SCHEDULE M0.1 MECH TITLE 24 M2.1 MECH FLOOR PLAN	MEP  NAME EXCEL ENGINEERS ADDRESS 825 ORANGE AVE ADDRESS SUNNYVALE, CA 94087 PHONE 408-230-9164 FAX 408-749-9989 E-MAIL yuexu_99@yahoo.com  FS  NAME TRI-SIGNAL INTEGRATION, INC. ADDRESS 5007 WINDPLAY DRIVE ADDRESS EL DORADO HILLS, CA 95762 PHONE 916-933-3155 FAX 916-933-4157 E-MAIL smarchetti@tri-signal.com
5. UNOBSTRUCTED ACCESS TO EXISTING EXITS AND ANY EMERGENCY LIGHTING SHALL BE MAINTAINED THOUGHOUT CONSTRUCTION. ALL EXITS, EXIT LIGHTING, FIRE PROTECTIVE DEVICES SHALL BE MAINTAINED FOR THE DURATION OF THE WORK OF THE PROJECT.	A8.2 SHEET WHERE DETAIL IS SHOWN  OFFICE ROOM NAME A101 ROOM NUMBER 101 USER ROOM NUMBER  INTERIOR ELEVATION – MULTIPLE VIEWS  SHEET WHERE ELEVATION IS SHOWN  KEY NOTE CORRESPONDING NOTE NUMBER		M6.1 SPECIFICATIONS M6.2 MECH DETAILS P0 PLUMBING, SYMBOL, NOTES, LEDGEND AND SCHEDULE P2.1A PLUMBING FLOOR PLAN - SEWER & VENT P2.1B PLUMBING FLOOR PLAN - COLD AND HOT WATER	PROJECT INSPECTOR: TBD VERIFY WITH SSCD
6. ALL WORK PERFORMED UNDER THESE DOCUMENTS SHALL BE IN ACCORDANCE WITH ALL APPLICABLE CODES AND REQUIREMENTS. ALL NEW WORK SHALL NOT DIMINISH ANY EXISTING CONDITIONS WITH RESPECT TO	A WINDOW TAG	DSA APPLICATION NUMBERS	FIRE PROTECTION DRAWINGS FS-01  DRAWINGS BY OTHERS	CODES & REGULATIONS
THEIR ADHERENCE TO APPLICABLE CODES AND REQUIREMENTS (TYP.). THIS SHALL INCLUDE INSPECTIONS AND SUPERVISION OF WORK BY A LICENSED INSPECTOR OF RECORD (IOR) IN ACCORDANCE WITH DSA.  7. THESE DOCUMENTS ARE TO REFLECT GENERAL INTENT OF THE ARCHITECTURAL SCOPE OF WORK. THE INFORMATION SHOWN IN	ADDITIVE ALTERNATE REFERENCE  corresponding note number	APPL NO:  PER REQ'TS OUTLINED FOR THE DSA LFA-810, NO REVIEW IS REQUIRED.  EXISTING BLD # PER 1993: #60163	Example of Statement of General Conformance and Signature Block per IR A-18  Statement of General Conformance  FOR ARCHITECTS/ENGINEERS WHO UTILIZE PLANS, INCLUDING BUT NOT LIMITED TO SHOP DRAWINGS, PREPARED BY OTHER LICENSED DESIGN PROFESSIONALS AND/OR CONSULTANTS  (Application No. TBD File No)  The drawings or sheets listed on the cover or index sheet This drawing, page of specifications/calculations  have been prepared by other design professionals or consultants who are licensed and/or authorized to prepare such drawings in this state. It has been	2013 BUILDING STANDARDS ADMINISTRATIVE CODE, PART 1, TITLE 24 C.C.R.  2013 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24 C.C.R.  (2009 INTERNATIONAL BUILDING CODE AND 2010 CALIFORNIA AMENDMENTS)  2013 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 C.C.R.  (2008 NATIONAL ELECTRICAL CODE AND 2010 CALIFORNIA AMENDMENTS)  2013 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24 C.C.R.  (2009 UNIFORM MECHANICAL CODE AND 2010 CALIFORNIA AMENDMENTS)
THESE DOCUMENT SHOW PURPOSE AND INTENT AND ARE NOT COMPLETE IN EVERY DETAIL. THE CONTRACTOR SHALL COMPLY	CAMPUS MAP	ADJACENT PARKING LOTS: LOT C #02-107552 LOT D #02-107552	licensed and/or authorized to prepare such drawings in this state. It has been examined by me for:  1) design intent and appears to meet the appropriate requirements of Title 24, California Code of Regulations and the project specifications prepared by me, and 2) coordination with my plans and specifications and is acceptable for incorporation into the construction of this project.	2013 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 C.C.R.  (2009 UNIFORM PLUMBING CODE AND 2010 CALIFORNIA AMENDMENTS)
WITH THEIR INTENT AND MEANING, TAKEN AS A WHOLE, AND SHALL NOT AVAIL ITSELF OF ANY MANIFEST ERROR, OMISSION, AND DISCREPANCY OF AMBIGUITY WHICH APPEAR IN THE DOCUMENTS.  8. CONTRACTOR SHALL ENGAGE USA TO VERIFY AND LOCATE ANY (E) UTILITIES WITHIN AREA OF SCOPE OF WORK PRIOR TO COMMENCENT OF DEMO WORK.	700 1400 1500 1000 1000 1000 1000 1000 10		The Statement of General Conformance "shall not be construed as relieving me of my rights, duties, and responsibilities under Sections 17302 and 81138 of the Education Code and Sections 4-336, 4-341 and 4-344" of Title 24, Part 1. (Title 24, Part 1, Section 4-317 (b))  I certify that: All drawings or sheets listed on the cover or index sheet This drawing or page Signature Date Signature Date  Architect or Engineer designated to be in responsible charge  Joshua Cohn 02/09/2016  Print Name C-23410 11/30/2017  License Number Expiration Date License Number Expiration Date  GENERAL NOTE: TOPOGRAPHIC: INFORMATION WAS PROVIDED BY SCCD TO CA ARCHITECTS FOR USE AS EXISTING CONDITIONS FOR	2013 CALIFORNIA ENERGY CODE, PART 6, TITLE 24 C.C.R. — WHERE APPLICABLE  2013 CALIFORNIA FIRE CODE, PART 9, TITLE 24 C.C.R. (2009 INTERNATIONAL FIRE CODE AND 2013 CALIFORNIA AMENDMENTS)  2013 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN), PART 11, TITLE 24 C.C.R. (WHERE APPLICABLE)  2013 CALIFORNIA REFERENCED STANDARDS, PART. 12, TITLE 24 C.C.R.  TITLE 19 C.C.R. PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS.  PARTIAL LIST OF APPLICABLE STANDARDS;  NFPA 13, AUTOMATIC SPRINKLER SYSTEMS, 2013 EDITION  NEPA 72, NATIONAL FIRE ALARM CODE (CALIFORNIA AMENDED), 2013 EDITION  NFPA 80, FIRE DOOR AND OTHER OPENING PROTECTIVES, 2013 EDITION  NFPA 2012, CLEAN AGENT FIRE EXTINGUISHING SYSTEMS, 2012 EDITION  REFERENCE CODE SECTION FOR NFPA STANDARDS — 2013 CBC (SFM) CHAPTER 35.  SEE CHAPTER 35 FOR STATE OF CALIFORNIA AMENDMENTS TO NFPA STANDARDS.

THIS PROJECT

PROJECT LOCATION

CA ARCHITECTS 75 Gate Five Road, Suite 107 Sausalito, CA 94965 415.331.7655 415.331.7656 UILDING 200 ITCHEN RENOVATION ONSULTANT TEAM:

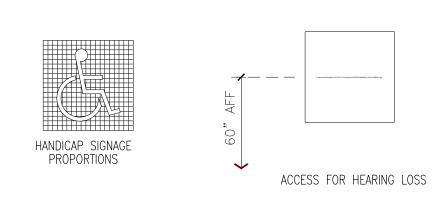
SUE/REVISION: IO: DATE: DESCRIPTION:

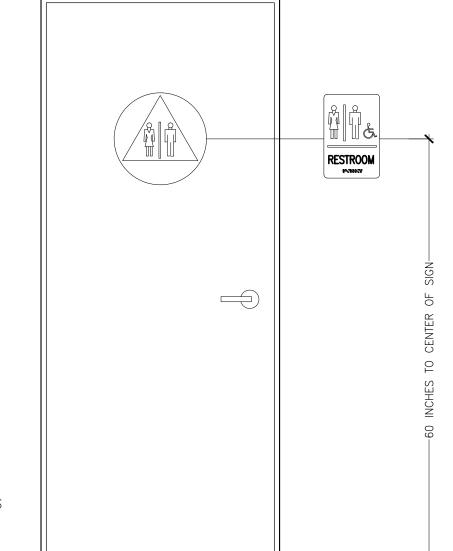
02/ 09/ 2016 - ISSUE FOR PERMIT

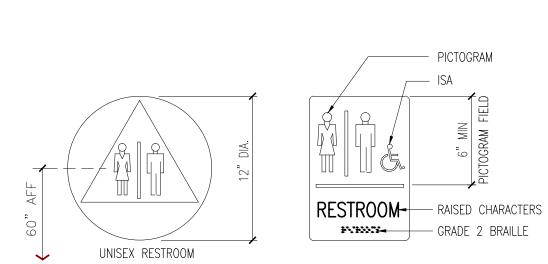
ATE: 02/09/2016 ROJECT NO: ERMIT APPLICATION NO.:

COVER SHEET INDEX

- 1. PROVIDE & INSTALL SIGNAGE & IDENTIFICATION DEVICES IN ACCORDANCE WITH 2010 CBC 1117B.5.
- 2. PROVIDE & INSTALL TACTILE EXIT SIGNS IN ACCORDANCE WITH 2007 CBC 1011.3. WITH 2010 CBC 1117B.5
- 3. REFER TO SPEC. SECTION 101400 "SIGNS" FOR GENERAL SIGNAGE SCOPE.

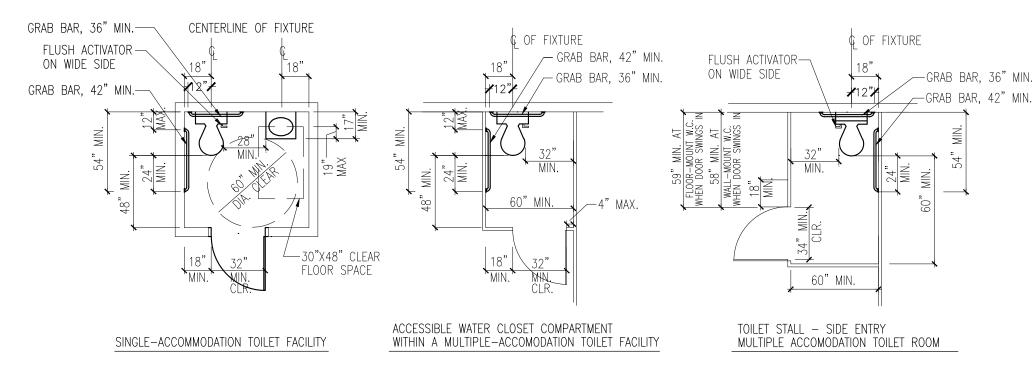




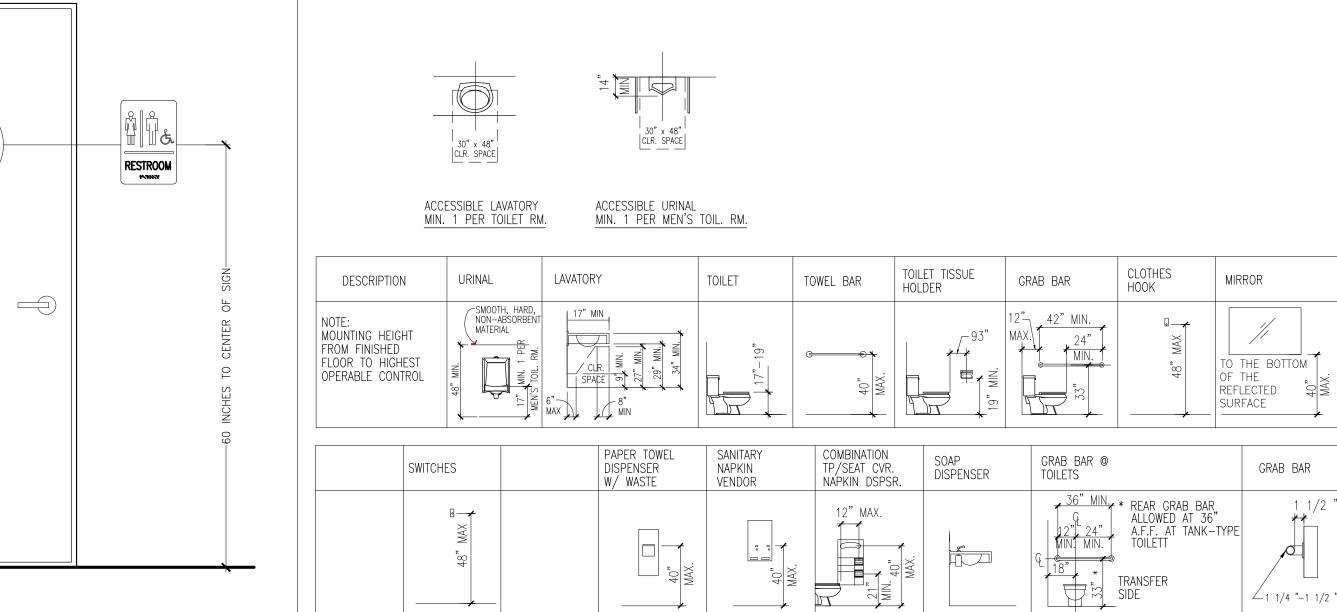


### 12 SIGN LOCATION AND INSTALLATION

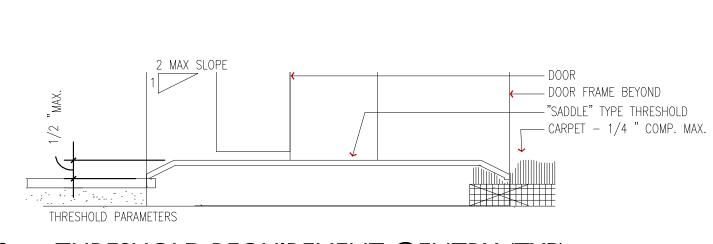
NOTE: DIMENSIONS SHOWN DESCRIBE MINIMUM REQUIREMENTS ONLY, REFER TO CONSTRUCTION DOCUMENTS FOR SIZE & LOCATIONS OF SPECIFIC FIXTURES & ACCESSORIES.



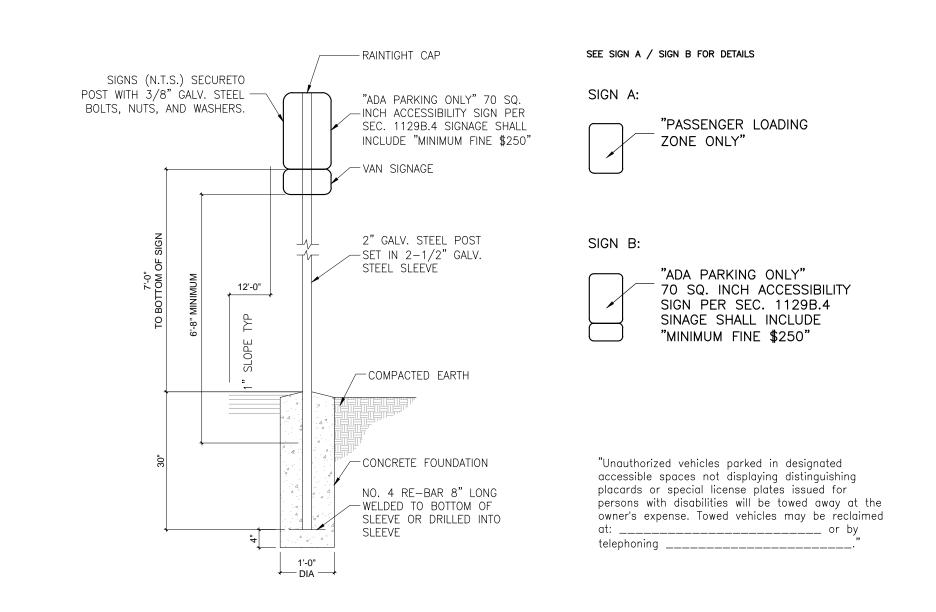
## BATHROOM CLEARANCES



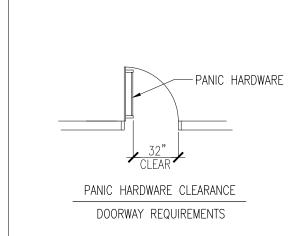


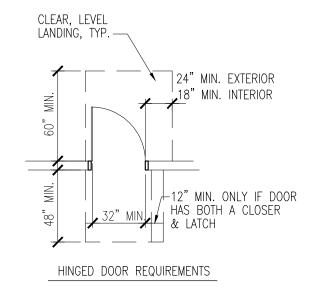


### THRESHOLD REQUIREMENT @ENTRY (TYP)



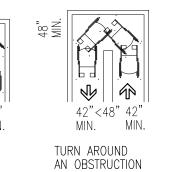
07 ACCESSIBLE SIGNAGE @ PARKING



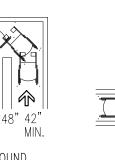


NOTE: PER 11B-404.2.9 MAXIMUM EFFORT TO OPERATE DOORS SHALL NOT EXCEED 5 LBS. FOR EXTERIOR DOORS, 5 LBS. FOR INTERIOR DOORS AND 15 LBS. (OR AS ALLOWED BY APPROPRIATE ADMINISTRATIVE AGENCY) FOR FIRE DOORS

### DOORWAY REQUIREMENTS



90° TURNS





TWO WHEELCHAIRS



CONSULTANT TEAM:

ARCHITECT:

**CA** ARCHITECTS

**T** 415.331.7655

**BUILDING 200** 

**F** 415.331.7656

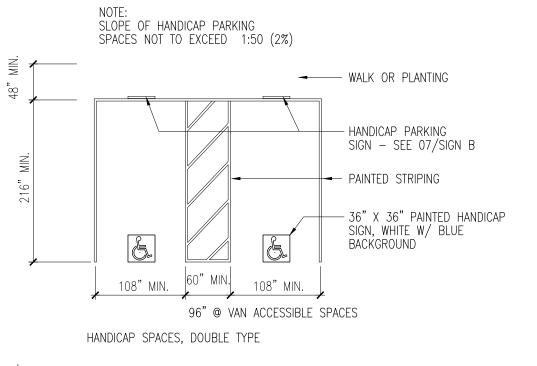
PROJECT:

Sausalito, CA 94965

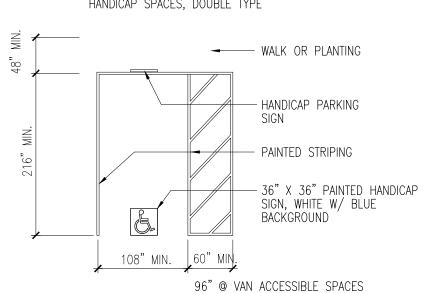
KITCHEN RENOVATION

475 Gate Five Road, Suite 107

WHEELCHAIR TURNING REQUIREMENTS IN AN ACCESSIBLE ROUTE



T-SHAPE 180° TURNS



ACCESSIBLE PARKING SPACE

WHERE INDICATED:

INSTALL NEW DETECTABLE WARNINGS AT EXISTING CURB RAMP AND SHALL EXTEND THE FULL WIDTH OF THE RAMP PER 11B-705.1.2.2. ONLT APPROVED DSA-AC DETECTABLE WARNING PRODUCTS SHALL BE INSTALLED PER 11B-705.3. SLOPE SHALL NOT EXCEED – 1:10 (MAX) PER 11B-406.2.2 (V.I.F.) OUTLINE OF -(E) RAMP DETECTABLE — WARNING STRIP

ACCESSIBLE CURB CUT - VIF



**SOLANO COMMUNITY** 

4000 Suisun Valley Road

**COLLEGE DISTRICT** 

Fairfield, CA 94534

SHEET LEGEND:

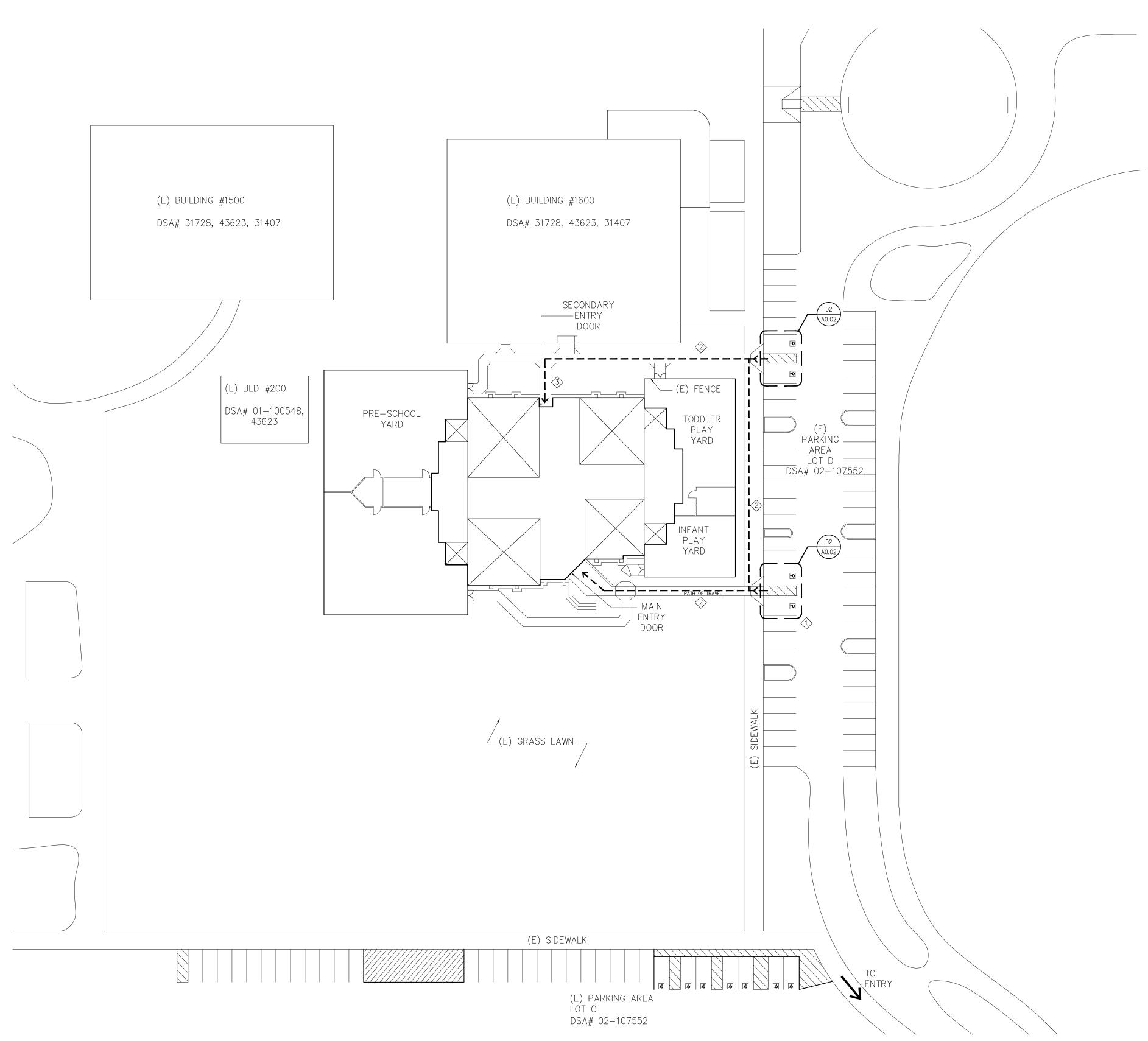
ISSUE/REVISION:

NO: DATE: DESCRIPTION: 02/ 09/ 2016 - ISSUE FOR PERMIT

KEY PLAN:

SCALE: AS SHOWN DATE: 02/09/2016 PROJECT NO: PERMIT APPLICATION NO.:

ADA - ACCESS



SITE PLAN - ACCESS - BACKGROUND INFORMATION PROVIDED BY SCCD







**EXISTING CONDITIONS - PHOTO** 

### <u>GENERAL NOTES:</u>

EXISTING STRIPING TO BE STRIPPED AND RE-STRIPPED PER DET 03/A0.02

EXISTING PATH OF TRAVEL SHALL NOT EXCEED 4.9% SLOPE IN DIRECTION OF TRAVEL, ALL REQ'D LEVEL LANDINGS AND ACCESSIBLE PARKING STALLS SHALL NOT EXCEED 2% SLOPE IN ANY DIRECTION (TYP.)

3 ENTRY DOORS SHALL COMPLY DET A0.02

ARCHITECT: **CA** ARCHITECTS 475 Gate Five Road, Suite 107 Sausalito, CA 94965 **T** 415.331.7655 **F** 415.331.7656

**SOLANO COMMUNITY** 

4000 Suisun Valley Road

**COLLEGE DISTRICT** 

Fairfield, CA 94534

PROJECT:

**BUILDING 200** KITCHEN RENOVATION

CONSULTANT TEAM:



ISSUE/REVISION: NO: DATE: DESCRIPTION:

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KEY PLAN:

### ACCESSIBLE PARKING

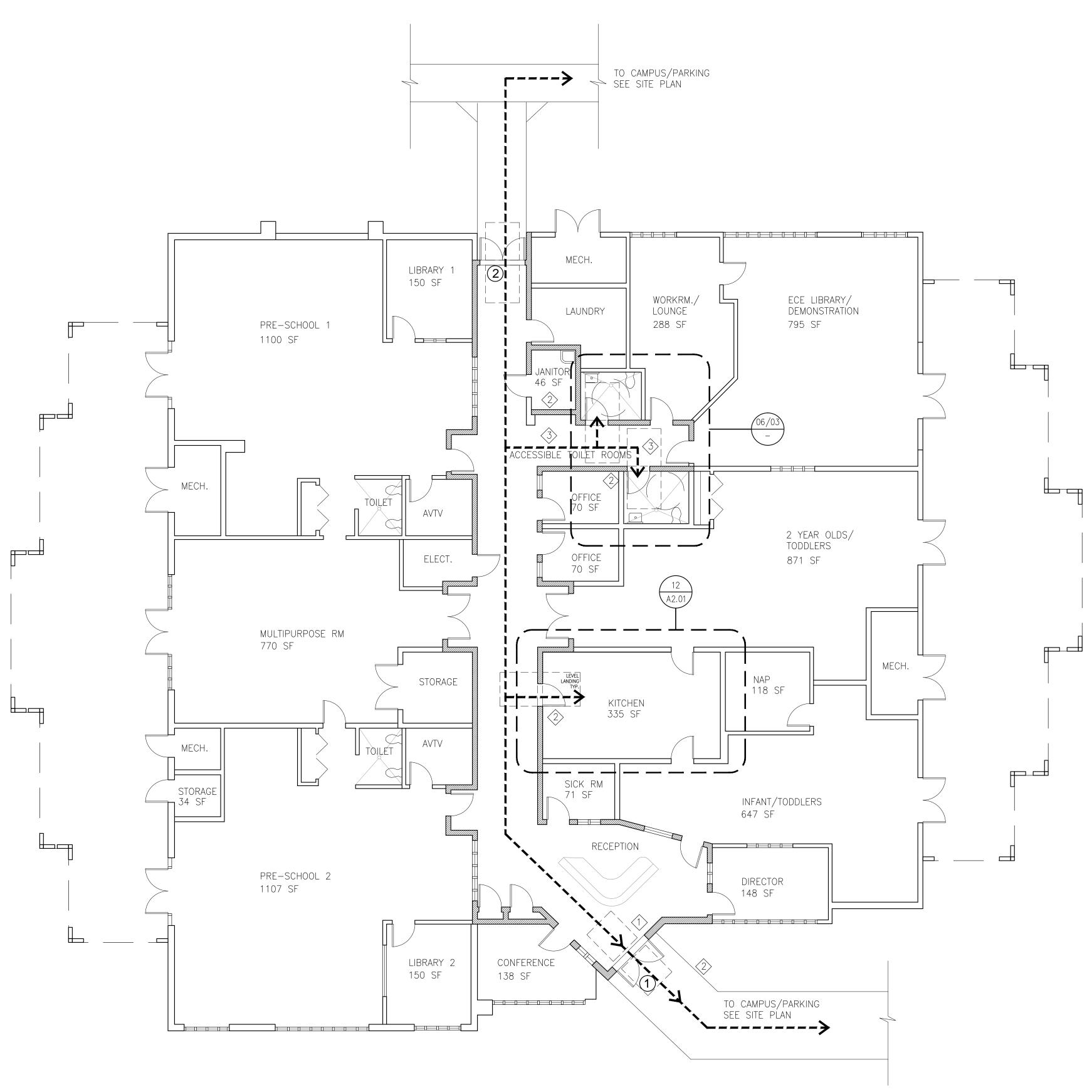
SCALE: 1/32" = 1' - 0"

(PER SECT 1129B - TABLE 11B-6)

Total Number of Parking Spaces in Parking Facility (Lot or Garage)	(E)	Minimum Number of Accessible Parking Spaces Required	(E)
51 - 75	52	REQ'D 3	PROV.

SCALE: AS SHOWN DATE: 02/09/2016 PROJECT NO: PERMIT APPLICATION NO.:

SITE PLAN ACCESSIBILE PATH OF TRAVEL



BUILDING PLAN - BUILDING 200

PUBLIC TOILET STAFF/EMPLYEE UNISEX TOILET ROOM 18" MIN \_\_\_\_ STAFF TOILET PUBLIC TOILET SCALE: 1/2" = 1' - 0" SCALE: 1/2" = 1' - 0"

OOC.

LOAD

15

15

15

100

100

100

100

100

100

200

20

20

20

20

150

150

138

795

288

70

70

148

118

71

335

1100

1107

871

647

7136

TOTAL

51

79.5

2.88

0.70

0.70

3.08

1.48

1.18

0.71

1.7

55

55.35

43.55

32.35

358

**SOLANO COMMUNITY COLLEGE DISTRICT** 4000 Suisun Valley Road Fairfield, CA 94534

**CA** ARCHITECTS 475 Gate Five Road, Suite 107

Sausalito, CA 94965 **T** 415.331.7655 **F** 415.331.7656

PROJECT:

**BUILDING 200** KITCHEN RENOVATION

CONSULTANT TEAM:

EGRESS WIDTH (PER 1005.1)

OCCU	Ρ.	RE	Q'D	PROV.
		DOC	OR (0.2 INCHES)	
	$\overline{(+)}$	179	35.8	72
	2	179	35.8	72

ISSUE/REVISION:

**KEY PLAN:** 

NO: DATE: DESCRIPTION: 02/ 09/ 2016 - ISSUE FOR PERMIT

SHEET NOTES:

LOADS: PER TABLE 1004.1.1

LIBRARY 1

LIBRARY 1

WORKROOM

RECEPTION

SICK ROOM

PRE-SCHOOL 1

PRE-SCHOOL 2

2 YEAR OLDS/TODDLERS

INFANT/TODDLERS

KITCHEN

DIRECTOR

NAP

TOTAL

SCALE: 1/8" = 1' - 0"

OFFICE

OFFICE

**ROOM NAME** 

MULTIPURPOSE RM

ECE LIBRARY/DEMONST.

CONFERENCE RM

DASHED OUTLINE OF LEVEL LANDING

/////// (E) 1-HR RATED WALL ASSEMBLY - NO CHANGE IN EXISTING RATING (NO NEW WALLS)

\_\_\_\_\_(E) TYPICAL NON-RATED WALL ASSEMBLE

EXISTING BUILDING: TYPE III - N.R. EXISTING AREA: 9.650 SF AREA ALLOWED: 14,500 SF (PER 503 GROUP E) NO CHNAGE TO AREA OR USE

1 THRESHOLD - SEE DETAIL 08/A0.02

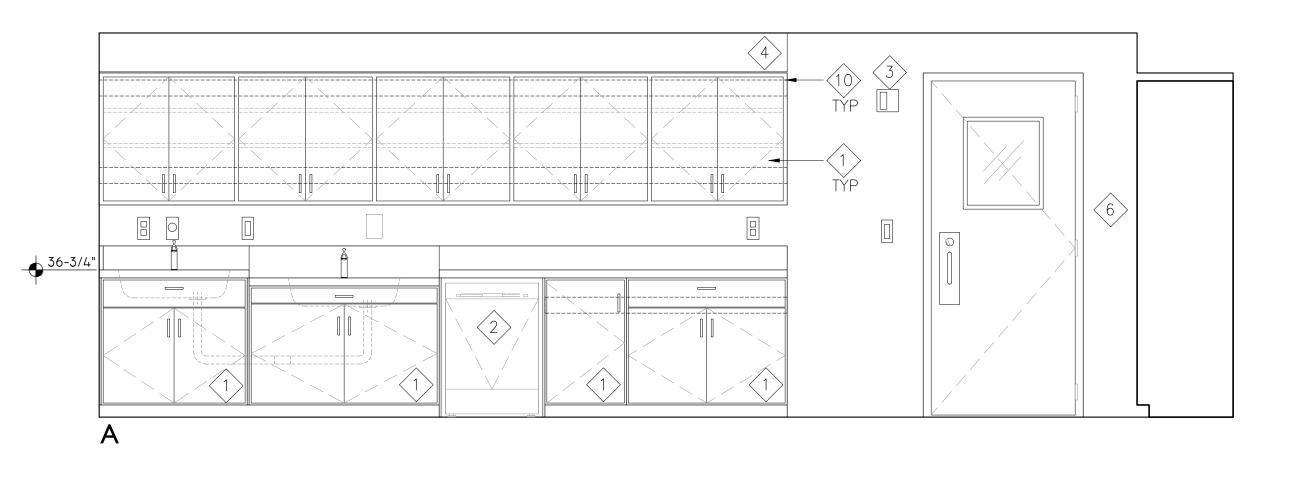
(E) DOOR HARDWARE SHALL COMPLY WITH REQ'TS LISTED @04/A0.02. ENTRY SHALL COMPLY W/ LEVEL LANDING REQ'TS.

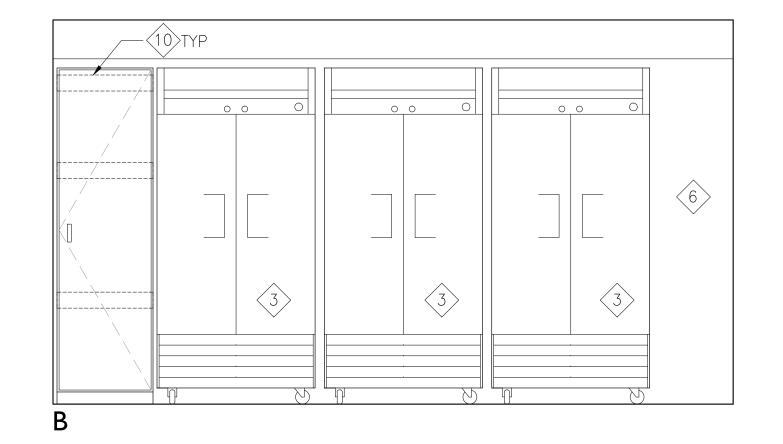
PROVIDE UNISEX TOILET ROOM SIGNAGE @EA TOILET ROOM PER A0.02

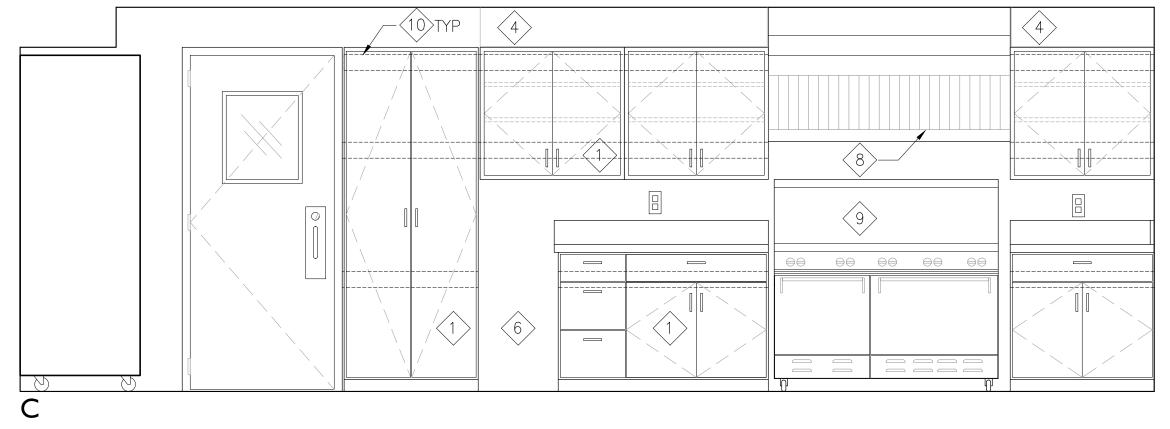
MOVE (E) MIRRORS AND ACCESSORIES TO COMPLY WITH DETAILS PROVIDED ON A0.02 (TYP)

SCALE: AS SHOWN DATE: 02/09/2016 PROJECT NO: PERMIT APPLICATION NO.:

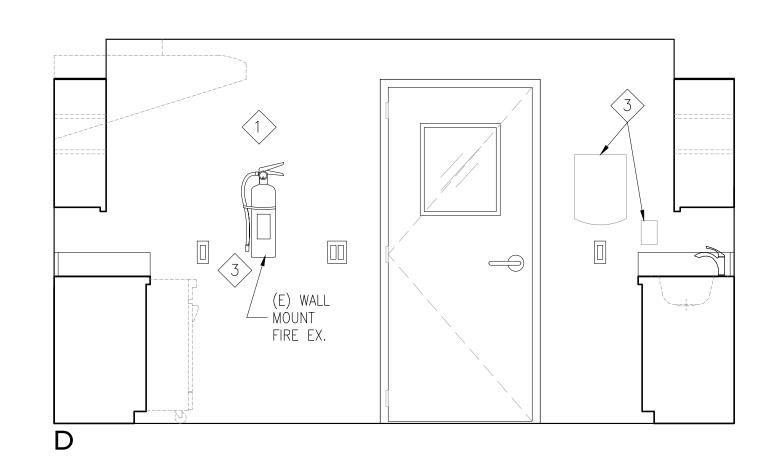
**BUILDING PLAN** 







**EXISTING ELEVATIONS** 



GENERAL DEMO NOTES:

- DEMO (E) CABINETS, FRP (CONFIRM EXTENT), GWB & LOCATION OF (E) BACKING IN WALLS (TYP). PROVIDE NEW BACKING PER 001/A2.00 IF REQ'D.
- REMOVE (E) PORTABLE FIXTURES/APPLIANCES AND STORE FOR OWNER.
- REMOVE (E) FIXTURES/EQUIPMENT AND STORE DURING CONSTRUCTION. RE-INSTALL TO COMPLETE PROJECT. PREP SURFACES FOR FRP/PAINT (TYP)
- REMOVE (E) SOFFITS AND PREP FOR PAINTING AND (N) CABINETS TO BE INSTALLED.
- REMOVE PORTIONS OF (E) CONCRETE SUFFICIENT TO INSTALL (N) GREASE TRAP AND CONNCET TO (E) DRAIN SEE MP DRAWINGS)
- 6 REMOVE (E) FRP PANEL AND PREP WALL FOR (N) FRP.
- REMOVE (E) RESILIENT FLOORING AND PREP SURFACE TO RECIEVE (N) RESILIENT FLOORING/COVE BASE.
- (E) HOOD TO REMAIN, CLEAN AND PREP FOR FIRE SUPPRESSION SYSTEM
- PREMOVE (E) RANGE AND GAP ALL UTILITIES AS REQUIRED. STORE FOR OWNER.
- 10 DIAGRAMMATIC LOCATION OF REQ'D BACKING

OWNER

SOLANO COMMUNITY COLLEGE DISTRICT 4000 Suisun Valley Road Fairfield, CA 94534

ADCLUTECT.

CA ARCHITECTS
475 Gate Five Road, Suite 107
Sausalito, CA 94965
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PROJECT:

BUILDING 200 KITCHEN RENOVATION

CONSULTANT TEAM:

\_\_\_\_\_\_STA



SHEET LEGEND:

ISSUE/REVISION:

NO: DATE: DESCRIPTION:

02/ 09/ 2016 - ISSUE FOR PERMIT

KEY PLAN:

SCALE: AS SHOWN

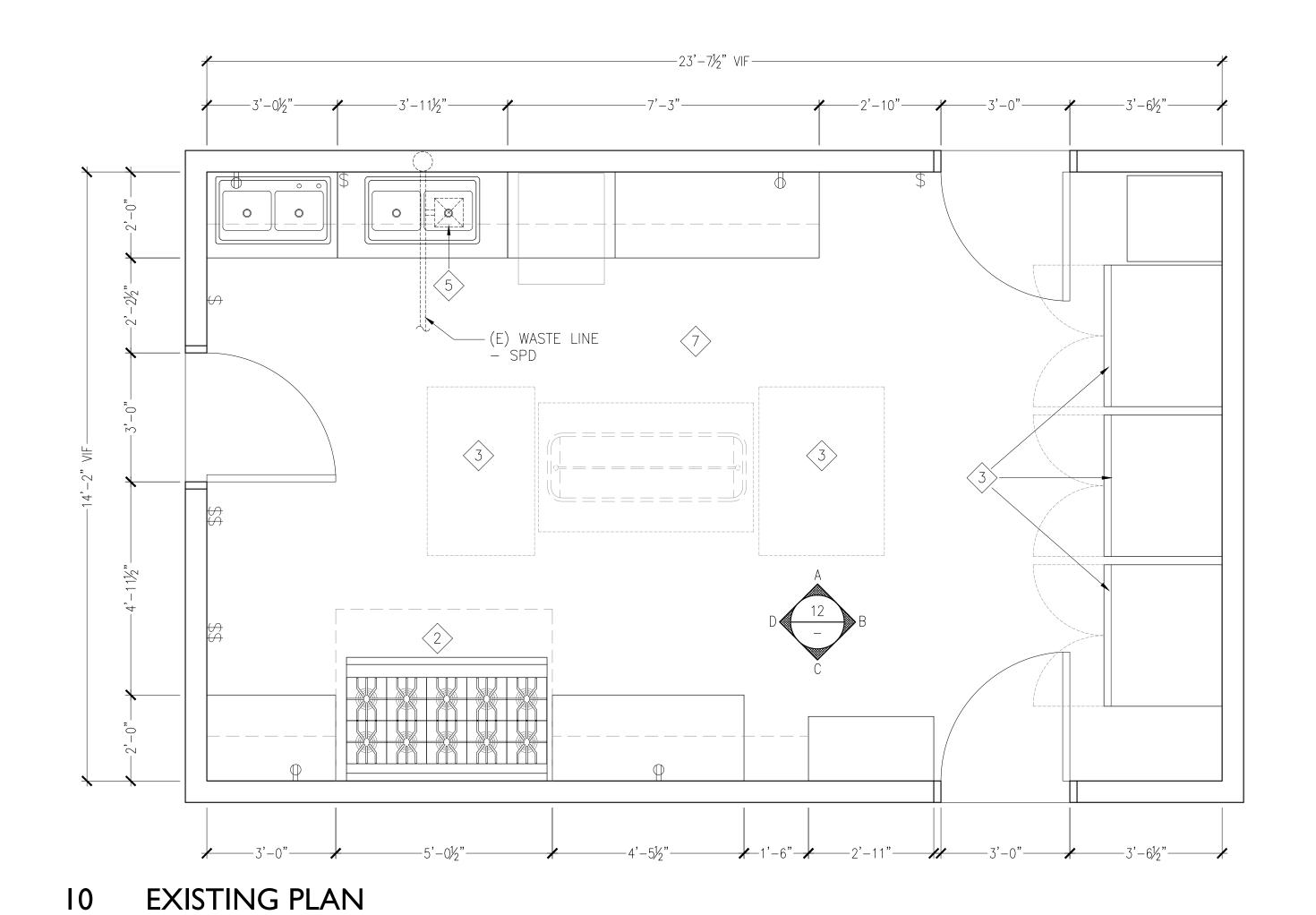
DATE: 02/09/16

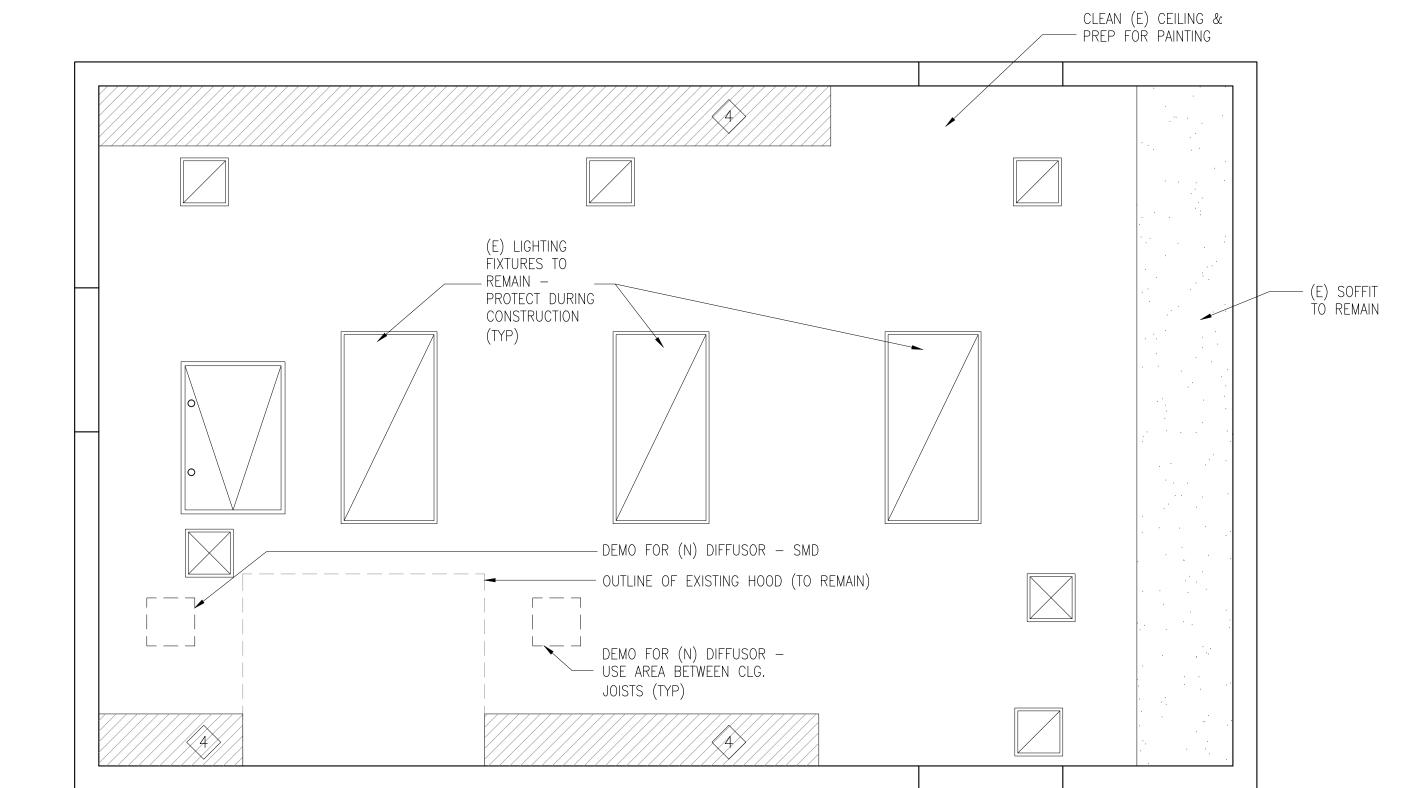
PROJECT NO:
PERMIT APPLICATION NO.:

EXISTING RCP, PLAN & ELEVATIONS

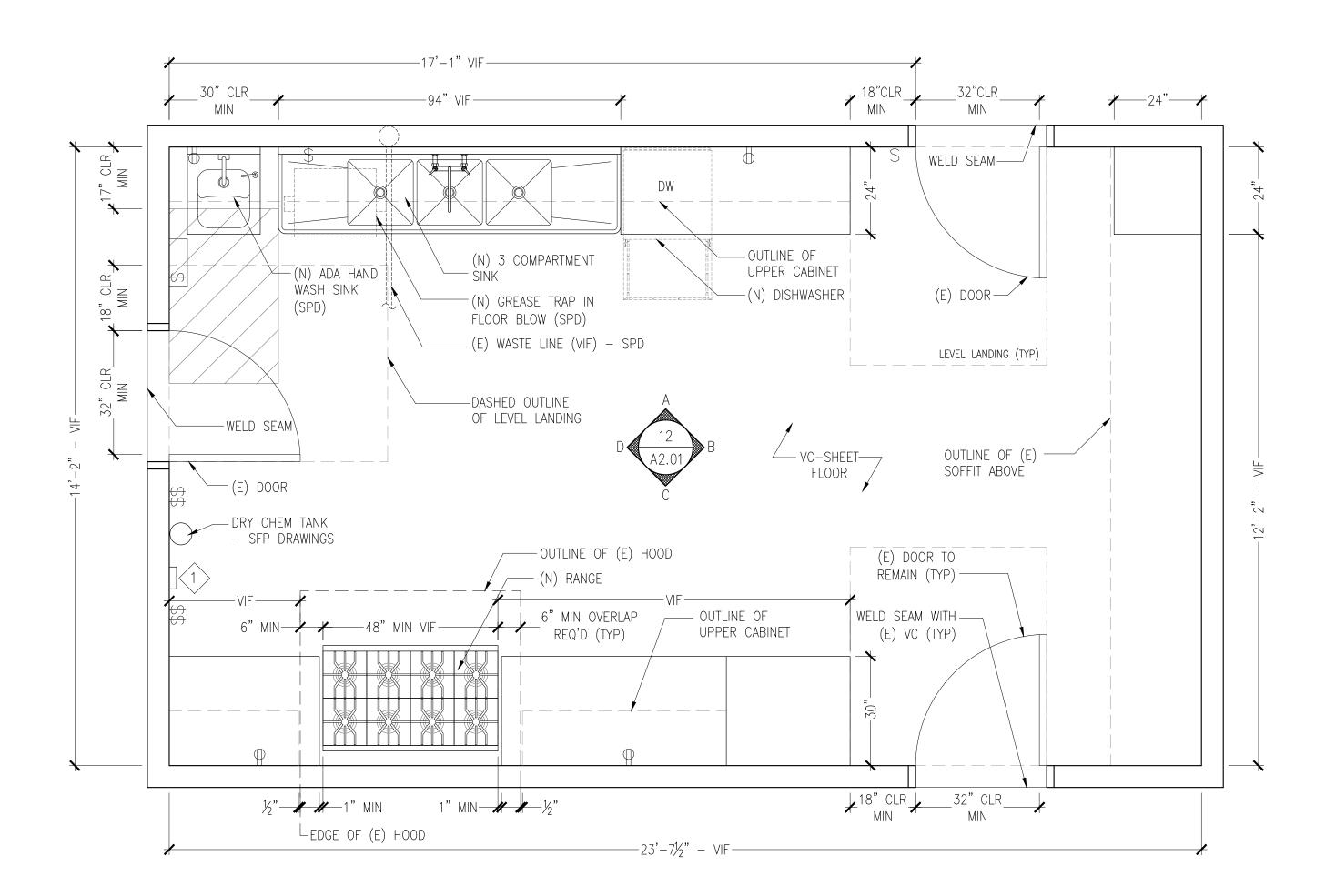
D2.00

SCALE: 1/2"=1'-0"





04 EXISTING RCP

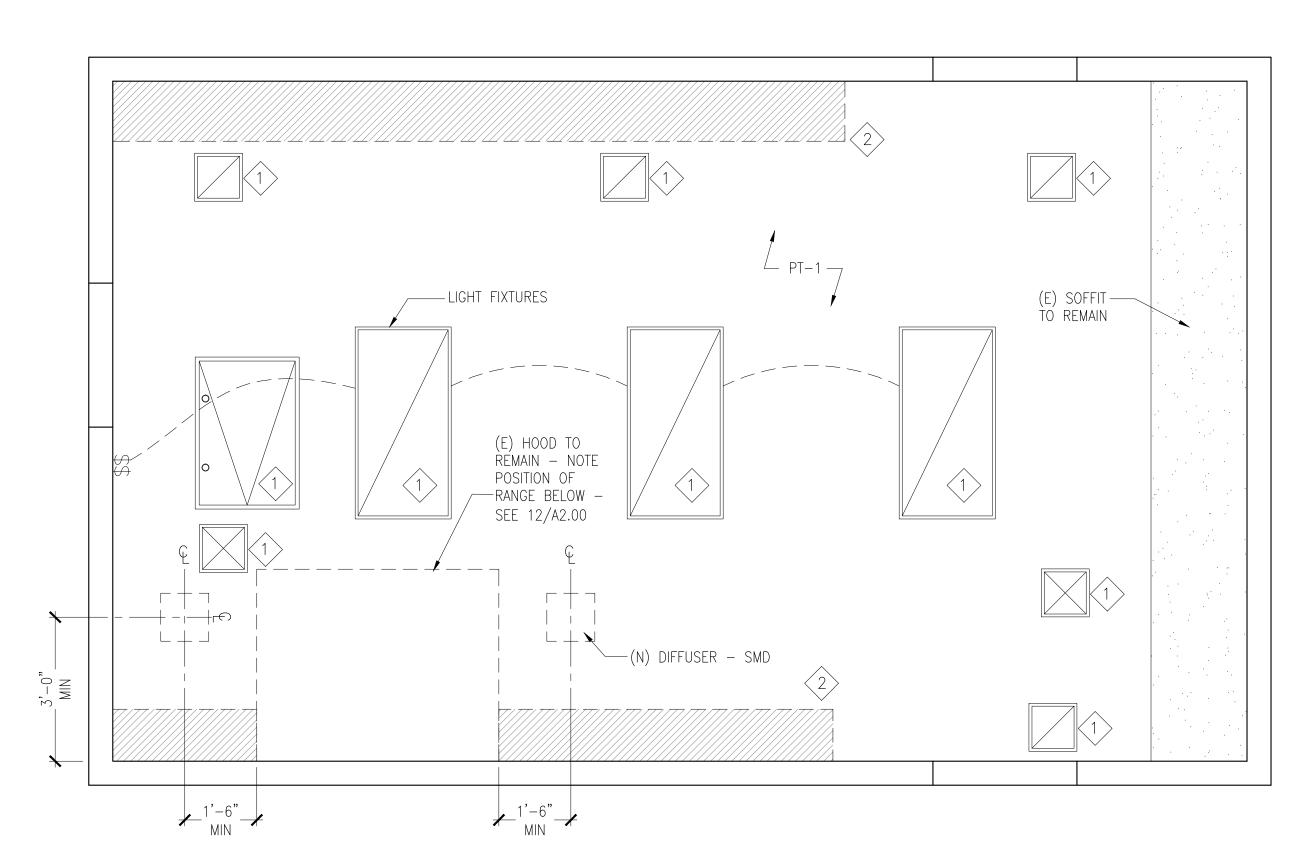


GENERAL PROPOSED PLAN NOTES:

- (1) RE-INSTALL SD, TEST FOR COMPLIANCE
- VIF ALL FIELD CONDITIONS PRIOR TO FABRICATION AND INSTALLATION OF EQUIPMENT, CABINETS AND MATERIALS.

12 PROPOSED PLAN

SCALE: 1/2"=1'-0"



10 PROPOSED RCP

SCALE: 1/2"=1'-0"

GENERAL PROPOSED RFP NOTES:

- EXISTING TO REMAIN REMOVE TRIM & PREP FOR PAINTING AND REINSTALL RIM PROTECT DURING CONSTRUCTION
- 2 PATCH & PREPARE SURFACE FOR PAINTING SEE 099100
- 3 NEW DIFFUSOR INSTALL TRIM AFTER PAINTING (TYP)

OWNER:

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ARCHITECT:

PROJECT:

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BUILDING 200 KITCHEN RENOVATION

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SHEET LEGEND:

ISSUE/REVISION:
NO: DATE: DESCRIPTION:

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KEY PLAN:

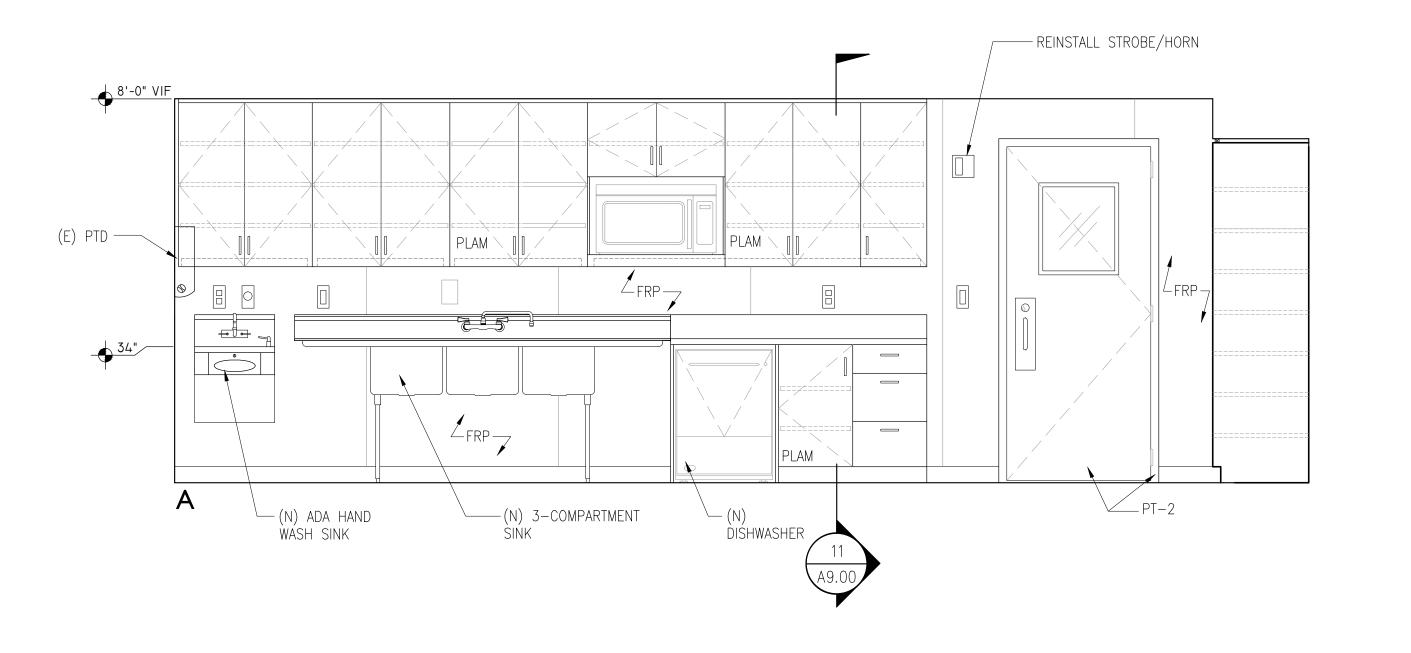
SCALE: AS SHOWN

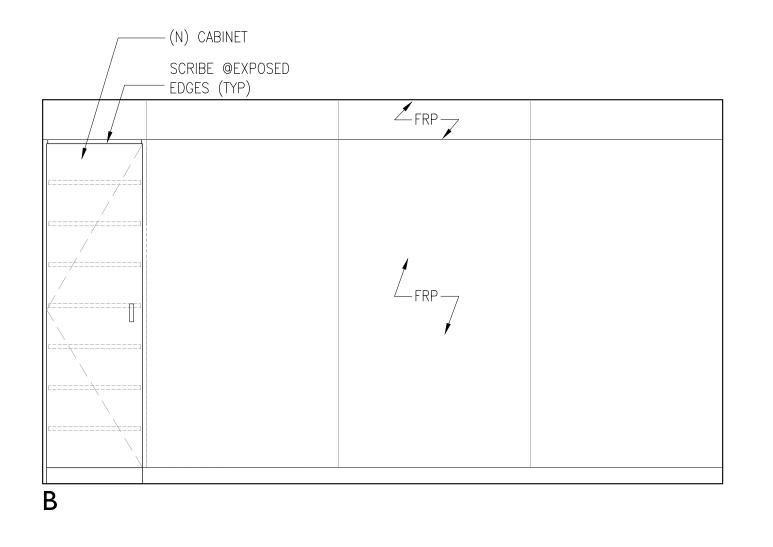
DATE: 02/09/16

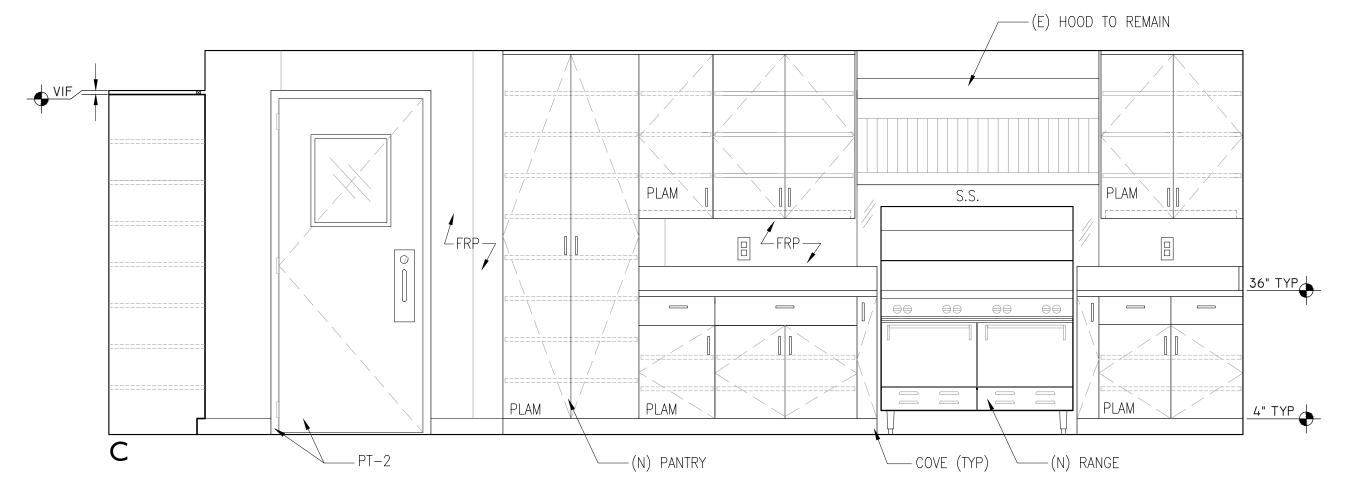
PROJECT NO:
PERMIT APPLICATION NO.:

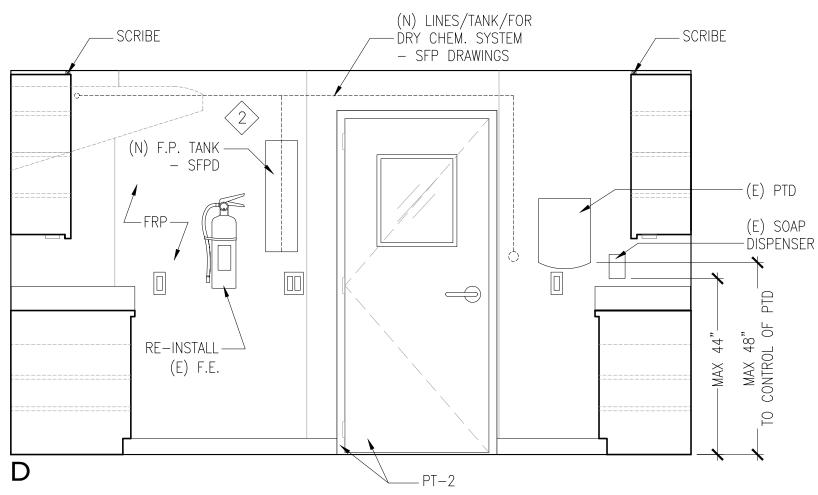
PROPOSED PLAN & RCP

A2.00









### 12 PROPOSED ELEVATIONS

SCALE: 1/2"=1'-0"

## FINISH SCHEDULE

ROOM NO.	ROOM NAME	FLOOR	BASE	WA	<b>ALL</b>	CEI	LING	CLG	REMARKS
				MATERIAL	FIN / COLOR	MATERIAL	FIN / COLOR	HT.	
GROUND L	_EVEL								
1	KITCHEN	VC-SHEET	VC-SHEET	FRP	P-1	GWB (E)		VARIES	INTEGRAL CURB — SEE DET

## FINISH KEY

MATERIAL	DESCRIPTION	PT COLOR	REMARKS
VC-SHEET	ALTRO WALKWAY 20	BISCUIT	VM20907
FRP	CRANE-SMOOTH FINISH	IVORY 84	CLASS C FIRE RATING
P-1	SHERMAN WILLIAMS INTERIOR LATEX	NAVAJO WHITE	ZERO VOC — SEMI GLOSS (SEE SPEC. 099100)
P-2	SHERMAN WILLIAMS FOR FERROUS SURFACE	KILUM BEIGE SW 6106	INSIDE FACE OF DOORS/ FRAMES TO MATCH EXISTING (SEE SPEC. 099100)
PLAM-1	NEVAMAR	WTOO5T LUMINARY TEAK	
SS	SEE SPECIFICATION	#4	

## FIXTURE/APPLIANCE SCHEDULE

ROOM	APPLIANCE TYPE	FAB/MODEL NUMBER
KITCHEN		
1	ADA HAND SINK W/ WALLMOUNT FAUCET	ADVANCE TABCO #7-PS-46
1	WELDED SIDE SPLASH	ADVANCE TABCO #7-PS-11C
1	3-COMPARTMENT SINK	ELKAY SSP #3C18X24-2-18
1	FAUCET - FOR 3 COMP SINK	MOEN #8119
1	UNDERCOUNTER DISHWASHER	JACKSON WWS AVENGER L ENERGY STAR COMPLIANT
1	RANGE, 48", 8 OPEN BURNERS	IMPERIAL #IR-8

GENERAL PROPOSED NOTES:

PORTABLE EQUIPMENT SHALL BE STORED FOR OWNER — COORDINATE LOCATION WITH OWNER. REINSTALL AFTER PROJECT SUBSTANTIALLY COMPLETE.

SEE FIRE PROTECTION DRAWING FOR ROUTING AND LOCATION OF EQUIPMENT.

SOLANO COMMUNITY COLLEGE DISTRICT 4000 Suisun Valley Road Fairfield, CA 94534

ARCHITECT:

PROJECT:

CA ARCHITECTS
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T 415.331.7655
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BUILDING 200 KITCHEN RENOVATION

CONSULTANT TEAM:



ISSUE/REVISION:

NO: DATE: DESCRIPTION:

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KEY PLAN:

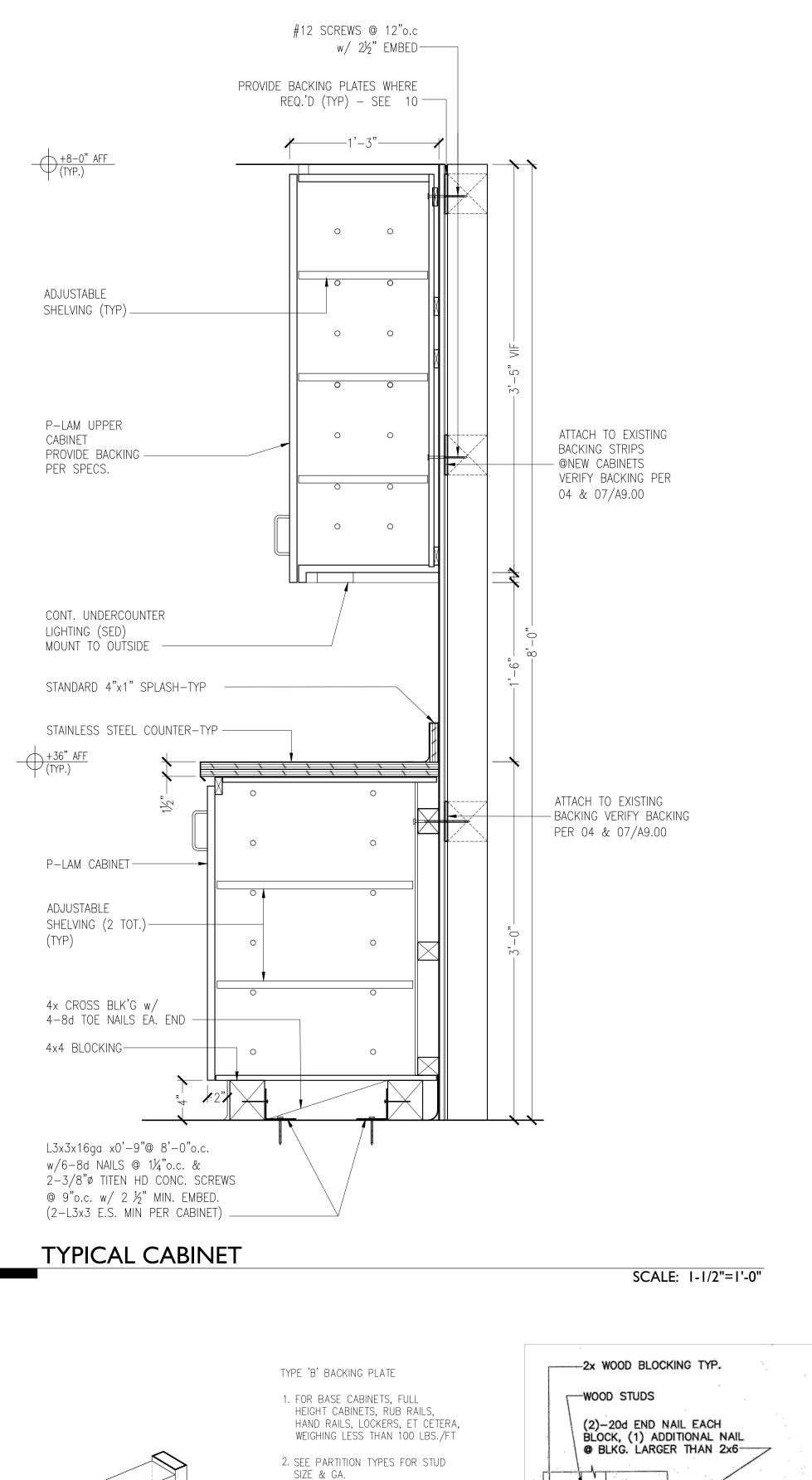
SCALE: AS SHOWN

DATE: 02/09/16

PROJECT NO:
PERMIT APPLICATION NO.:

PROPOSED ELEVATIONS SCHEDULES

A2 01



3. VERIFY LENGTH, HEIGHT, LOCATION, & QUANTITY OF BACKING PLATES

4. FASTEN 14 GA X 6" STRAP P

5. SPAN BACKING PLATE OVER 3

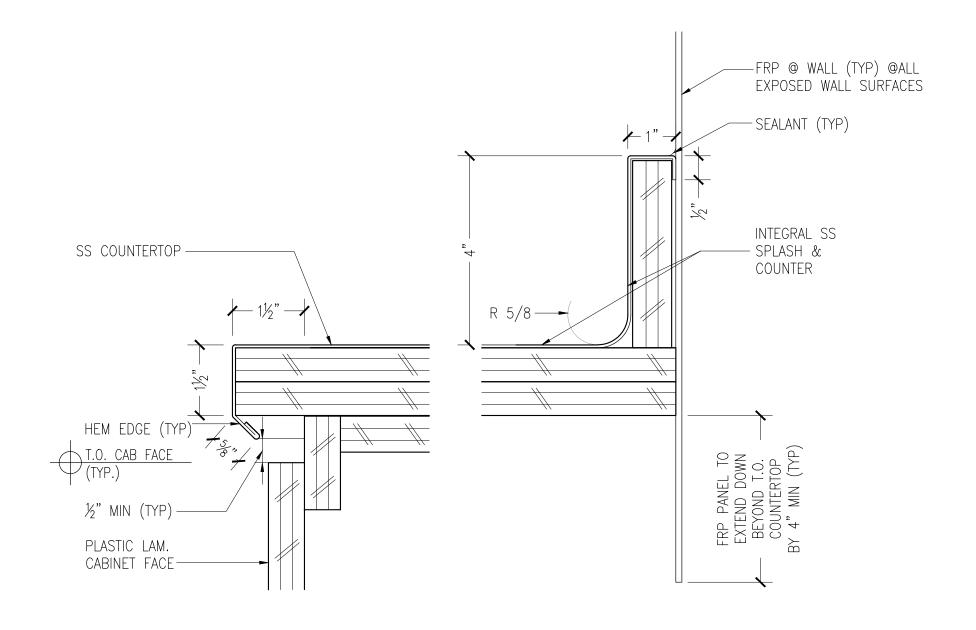
6. ATTACH ITEMS TO BACKING

PLATE WITH #12 WOOD

STUDS MIN.

SCREWS, U.O.N.

TO EA STUD W/ (3) #12 WOOD SCREWS @EA STRAP (TYP).



SPLASH & EDGE DETAIL @ CAB. FACE SCALE: 6"=1'-0" TYP @ ALL EDGES U.O.N.

NOTE: WHERE ACCESS CLEARANCE IS REQ'D , MEASURE FOR OUTSIDE FACE OF COUNTERTOP — TYP. CLOSE ENDS WELD & GRIND SMOOTH (TYP) SS COUNTERTOP -EASE EDGE (TYP) — 1½" — NOTE: STAINLESS STEEL FABRICATOR - SHALL COORDINATE AND PROVIDE WOOD SUBSTRATE FOR COUNTERTOPS HEM EDGE (TYP)

(PER APP. #60163)

SCALE: 3"=1'-0"

EDGE SIDE DETAIL (TYP)

PLASTIC LAM.

CABINET FACE

(E) WALL PREPARED— SILICONE SEALANT (BY WALL CONTRACTOR) ALTRO C-4 CAP STRIP-ALTRO FLOORING (0.080" to 0.14") -COVER FORMER-

COVE DETAIL @WALL (TYP)

P-LAM CABINET---

ALTRO C-7 CAP STRIP-

ALTRO FLOORING (0.080" to 0.14") -

P-LAM CABINET @ SIDE BASE-

ALTRO FLOORING (0.080" to 0.14") -

ALTRO C-7 CAP STRIP-

SCALE: 3"=1'-0"

**CA** ARCHITECTS 475 Gate Five Road, Suite 107 Sausalito, CA 94965 **T** 415.331.7655 **F** 415.331.7656

**BUILDING 200** KITCHEN RENOVATION

**SOLANO COMMUNITY** 

4000 Suisun Valley Road

**COLLEGE DISTRICT** 

Fairfield, CA 94534

CONSULTANT TEAM:

PROJECT:

STAMP



TYP. COVE BASE @CABINET KICK

SCALE: 3"=1'-0"

SCALE: 3"=1'-0'

SEE DETAIL 11/A9.00 — FOR ATTACHMENT TO

SLAB (TYP)

ISSUE/REVISION: NO: DATE: DESCRIPTION:

02/ 09/ 2016 - ISSUE FOR PERMIT

02 TYP. COVE BASE @ CABINET SIDE

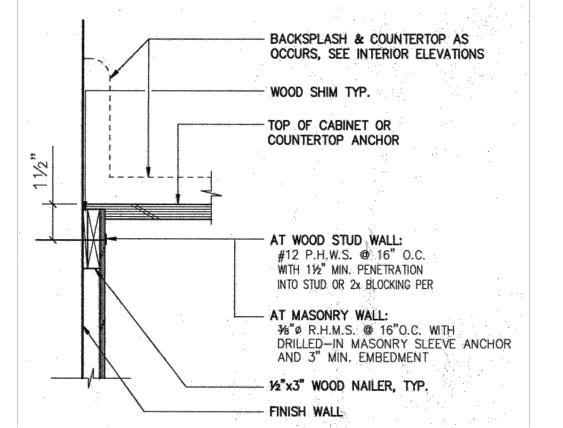
ВОТТОМ

**KEY PLAN:** 

SCALE: 02/09/16 DATE: PROJECT NO: PERMIT APPLICATION NO.:

**DETAILS** 

-WOOD STUDS WOOD STUDS-A35 CLIPS EACH END, TOP & BOTTOM -A35 CLIPS EACH END, TOP & BOTTOM A34 CLIPS EACH END, WOOD BLKG. TOP & BOT. 3x\_WD. BLKG., - 16d TOENAIL TOP & BOTTOM (1) ADDITIONAL NAIL @ BLKG. LARGER THAN 2x6 VERT. 4X VERT. 3X HORZ. 3X OR 4X TYP. 2X



SCALE: 3"=1'-0" **EXISTING - VIF** 

BASE CAB. ANCHOR (PER APP. #60163) 01 WALL HUNG CAB. ANCHOR (PER APP. #60163)



SCALE: 6"=1'-0"

FINISH WALL

WOOD SHIM TYP.

AT WOOD STUD WALL: #12 P.H.W.S. @ 16" O.C. WITH 11/2" MIN. PENETRATION INTO

STUD OR VERT. 3x BLKG. PER

AT WOOD STUD WALL: #12 P.H.W.S. @ 16" O.C. WITH

11/2" MIN. PENETRATION INTO

STUD OR 2x BLOCKING PER

- 1/2"x3" WOOD NAILER ,TYP.

### 1. THE WORK INCLUDES THE FURNISHING OF ALL LABOR AND MATERIALS FOR THE COMPLETE INSTALLATION OF ALL ELECTRICAL SYSTEMS AND EQUIPMENT REFERRED TO, IMPLIED OR SHOWN ON THE DRAWINGS EXCEPT SUCH MATERIALS AND EQUIPMENT AS MAY BE SPECIFIED OR INDICATED TO BE PROVIDED BY OTHERS.

**GENERAL NOTES** 

- 2. THE ELECTRICAL CONTRACTOR SHALL VISIT JOB SITE AND VERIFY FIELD CONDITIONS BEFORE BIDDING AND SHALL INCLUDE IN HIS BID THE NECESSARY COSTS TO CONSTRUCT THIS PROJECT IN ACCORDANCE WITH THE INTENT OF THE ELECTRICAL DRAWINGS AND ALL APPLICABLE CODES. ELECTRICAL CONTRACTOR SHALL ALLOW FOR DEMOLITION WORK NECESSARY FOR A COMPLETE INSTALLATION OF THE NEW ELECTRICAL EQUIPMENT.
- 3. THE ELECTRICAL CONTRACTOR SHALL PERFORM HIS WORK IN ACCORDANCE WITH ALL CODES, RULES AND REGULATIONS OF GOVERNING AGENCIES HAVING JURISDICTION, ALL OF WHICH ARE HEREBY MADE A PART OF THE PLANS. THE CONTRACTOR SHALL OBTAIN NECESSARY PERMITS, HAVE WORK INSPECTED AND PAY FOR THE SAME, UPON COMPLETION OF WORK, THE CONTRACTOR SHALL DELIVER TO OWNER A "CERTIFICATE OF INSPECTION" APPROVED BY THE LOCAL AUTHORITY HAVING JURISDICTION.
- 4. LOCATION OF ALL EQUIPMENT AND OUTLETS AS SHOWN ON THE DRAWINGS ARE APPROXIMATELY ONLY, EXCEPT WHERE DIRECTED BY DIMENSIONS, HEIGHT OR DETAILS. CONFIRM LOCATIONS BY REFERENCE TO ARCHITECTURAL, AND EQUIPMENT DETAILS AND VERIFY WITH ARCHITECT.
- 5. THE ELECTRICAL CONTRACTOR SHALL INFORM HIMSELF PRIOR TO SUBMISSION OF BIDS AS TO THE ELECTRICAL WORK REQUIRED BY OTHER SECTIONS OF THE PLANS, SUCH AS THE ARCHITECTURAL, MECHANICAL, ETC. AND INCLUDE THOSE ITEMS INDICATED TO BE PROVIDED BY THE ELECTRICAL CONTRACTOR OR "BY OTHERS".
- 6. THE ARCHITECTURAL DRAWINGS TAKE PRECEDENCE OVER THE ELECTRICAL DRAWINGS IN THE REPRESENTATION OF THE GENERAL CONSTRUCTION WORK AND THE DRAWINGS OF THE VARIOUS TRADES TAKE PRECEDENCE IN THE REPRESENTATION OF THE WORK OF THOSE TRADES. THE CONTRACTOR SHALL REFER TO ALL DRAWINGS TO COORDINATE THE ELECTRICAL WORK WITH THE WORK DONE ON OTHER TRADES.
- 7. THE ARCHITECT RESERVES THE RIGHT TO MOVE ANY OUTLETS WITHIN THE RADIUS OF SIX FEET WITHOUT ADDITIONAL EXPENSES TO THE OWNER. NO ALLOWANCE WILL BE MADE FOR EXTRAS FOR ANY CHANGES IN LOCATIONS EXCEPT WHERE EQUIPMENT HAS BEEN SET AND CONNECTED BEFORE ANY CHANGE IS ORDERED AND THEN ONLY WHEN SUCH CHANGE IS IN WRITING.
- 8. THE SIZE AND LOCATION OF EQUIPMENT IS SHOWN TO SCALE WHENEVER POSSIBLE, BUT THE CONTRACTOR SHALL MAKE USE OF ALL DATA IN ALL THE CONTRACT DOCUMENTS AND SHALL VERIFY THIS INFORMATION.
- 9. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL THE CONDUITS WITH MINIMUM NUMBER OF BENDS IN SUCH A MANNER AS TO CONFORM TO THE STRUCTURES, AVOID OBSTRUCTIONS, MAINTAIN HEAD ROOM, DEEP OPENINGS AND PASSAGEWAYS CLEAR, BE COMPATIBLE WITH LATEST CONSTRUCTION METHOD, AND MEET ALL STRUCTURAL CODE REQUIREMENTS. FURNISH AND INSTALL PULL BOX AS NECESSARY FOR LONG CONDUIT RUNS.
- 10. ALL ELECTRICAL OUTLETS, MOTORS, DEVICES, APPARATUS, EQUIPMENT FIXTURES AND APPLIANCES WHEREVER INSTALLED, "BY OTHERS", SHALL BE FULLY CONNECTED TO THE PROPER ELECTRICAL SOURCES AND CONTROLS AND LEFT IN OPERATIONAL CONDITION.
- 11. WHERE CONNECTIONS ARE SPECIFIED TO BE MADE TO EQUIPMENT FURNISHED BY OTHER DIVISIONS, OBTAIN THE REQUIRED ROUGH-IN DIMENSIONS AND CONNECTION DIAGRAMS FROM THE RESPECTIVE DIVISIONS FOR EACH ITEM AND ASSUME FULL RESPONSIBILITY FOR NEAT AND WORKMANLIKE INSTALLATION OF CONDUIT AND WIRE CONNECTION.
- 12. CONTRACTOR TO BE RESPONSIBLE FOR ALL ELECTRICAL GROUNDING AND BRACING REQUIREMENTS FOR EQUIPMENT.
- 13. THE COMPLETE INSTALLATION, INCLUDING THE NEUTRAL CONDUCTOR, METAL LIC CONDUIT AND RACEWAYS, BOXES, CABINETS AND EQUIPMENT, SHALL BE PERMANENTLY AND EFFECTIVELY GROUNDED IN ACCORDANCE WITH ALL CODE REQUIREMENTS. WHETHER OR NOT SUCH CONNECTIONS ARE SPECIFICALLY SHOWN AND/OR SPECIFIED.
- 14. EACH OUTLET SHALL BE TESTED AND BE PLACED IN WORKING ORDER BEFORE THE INSTALLATION SHALL BE CONSIDERED COMPLETE. ALL PARTS OF THE ELECTRICAL SYSTEM SHALL BE GUARANTEED TO PERFORM THE REQUIRED FUNCTION IN ACCORDANCE WITH THE PERFORMANCE REQUIREMENTS WHICH ARE INDICATED OR WHERE SUCH PARTICULAR REQUIREMENTS ARE NOT STATED, THEY SHALL PERFORM IN ACCORDANCE WITH THE PREVAILING RECOGNIZED TRADE STANDARDS OF PERFORMANCE. DURING THE PERIOD OF ONE YEAR REPAIRS OR REPLACEMENTS NECESSARY TO ACCOMPLISH THE REQUIRED PERFORMANCE.
- 15. IN THE EVENT OF FAILURE OF ANY WORK, EQUIPMENT OR SERVICE DURING THE LIFE OF THE GUARANTEE, CONTRACTOR SHALL REPAIR OR REPLACE THE DEFECTIVE WORK AND SHALL REMOVE, REPLACE OR RESTORE, AT NO COST TO OWNER, ANY PART OF THE STRUCTURE OR BUILDING WHICH MAY BE DAMAGED AS THE DIRECT RESULT OF HIS DEFECTIVE WORK OR MATERIAL.

- 16. ALL ELECTRICAL EQUIPMENT, FUSES AND CIRCUIT BREAKERS SHALL HAVE AN INTERRUPTING RATING NOT LESS THAN THE MAXIMUM SHORT CIRCUIT TO WHICH THEY MAY BE SUBJECTED.
- 17. ELECTRICAL CONTRACTOR SHALL SEE THAT ALL CONDUIT, METALLIC RACEWAYS DO NOT MAKE CONTACT WITH PLUMBING LINES AND MECHANICAL DUCTS.
- 18. THE CONTRACTOR SHALL BE LICENSED TO PERFORM THE WORK OUTLINED. TO BE FAMILIAR WITH ALL LOCAL CODES HAVING JURISDICTION AND TO HAVE REVIEWED THE DRAWINGS AND SPECIFICATIONS AND VERIFIED THAT ALL SYSTEMS CONTAINED THEREIN ARE IN COMPLIANCE WITH THOSE CODES HAVING JURISDICTION BY THE ACT OF SUBMITTING A BID. THE CONTRACTOR SHALL BE DEEMED TO HAVE ACCEPTED SUCH CONDITIONS AND RESPONSIBILITY AND TO HAVE MADE ALLOWANCES THEREFORE IN PREPARING HIS FIGURES SO THAT THERE WILL BE NO ADDITIONAL COSTS REQUESTED FOR ANY ADDITIONAL REQUIREMENTS MADE BY THOSE AGENCIES HAVING JURISDICTION.
- 19. ALL ELECTRICAL MATERIALS AND EQUIPMENT SHALL BE NEW UNLESS OTHERWISE NOTED ON DRAWINGS, AND LISTED BY UNDERWRITERS LABORATORIES.
- 20. SECONDARY WIRES AND CABLES SHALL BE SINGLE CONDUCTOR, RATED 600 VOLTS, TYPE THHN/THWN INSULATION, COLOR CODES PER INSPECTION AUTHORITY. ALL CONDUCTORS SHALL BE COPPER. NUMBER 12 AWG MINIMUM.
- 21. ALL WIRES AND CABLES SHALL BE INSTALLED IN ELECTRICAL METALLIC CONDUIT OR SURFACE METAL RACEWAY. UNLESS OTHERWISE NOTED.
- 22. MOUNTING, SUPPORTING, AND ANCHORING OF ALL ELECTRICAL EQUIPMENT SHALL BE IN STRICT COMPLIANCE WITH SEISMIC RESTRAINT REQUIREMENTS OF THE OFFICE OF THE STATE ARCHITECT.
- 23. ALL BRANCH CIRCUITS SHOWN ON DRAWING ARE NEW. PANELBOARD CIRCUIT DIRECTORY SHALL BE LABELED (TYPEWRITTEN) AS PER PANEL SCHEDULE.
- 26. PENETRATION OF FIRE RATED WALLS, CEILING, OR FLOOR SHALL COMPLY WITH U.B.C. REQUIREMENTS. PENETRATIONS ARE TO BE SEALED PROMPTLY USING APPROVED SEALANT TO INSURE THE INTEGRITY OF THE EXISTING FIRE RATING. FOAM TYPE AEROSOL SEALANT SHALL NOT BE USED.
- 27. ALL JUNCTION BOXES, PULL BOXES, CONDUITS ENTERING OR LEAVING AN AREA OR ROOM OR PASSING THROUGH A WALL OR FLOOR FOR BRANCH CIRCUITS SHALL BE CLEARLY MARKED WITH PERMANENT BLACK INK PEN IDENTIFYING THE BRANCH CIRCUIT CONTAINED.
- 26. CONTRACTOR SHALL BEAR FULL RESPONSIBILITY FOR MODIFICATION TO EXISTING WIRING IN PANELBOARD TO SUIT NEW CIRCUITRY.
- 27. CORING OR CUTTING IN WALLS OR SLABS REQUIRES PRIOR WRITTEN AUTHORIZATION AND SCHEDULING THROUGH THE ARCHITECT AND BUILDING OWNER AND MUST BE PERFORMED AFTER NORMAL BUILDING HOURS.
- 28. ALL METALLIC RACEWAYS, INCLUDING THE EXISTING, SHALL BE SECURELY FASTENED IN PLACE WITH APPROVED HANGERS NOT MORE THAN 10 FEET APART AND WITHIN 3 FEET OF EACH OUTLET BOX, JUNCTION BOX, DEVICE BOX, CABINET, CONDUIT BODY, OR OTHER RACEWAY TERMINATIONS.
- 29. SUBMITTALS: CATALOG CUTS SHALL BE SUBMITTED FOR ALL MATERIALS AND EQUIPMENT. SUBMIT MINIMUM 3 COPIES FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.
- 30. ELECTRICAL CONTRACTOR SHALL FURNISH AS-BUILT DRAWINGS TO THE ARCHITECT ON COMPLETION OF THE JOB.
- 31. DRAWINGS DO NOT NECESSARILY SHOW EVERY PULL BOX REQUIRED. ADDITIONAL BOXES MAY BE ADDED WHEN DESIRABLE TO SAVE LABOR AND AVOID DIFFICULTIES; AND WHEN CODE REQUIREMENTS LIMIT THE NUMBER OF BENDS BETWEEN BOXES. ADDITIONAL BOXES SHALL BE PROVIDED WITHOUT ADDED COST TO THE OWNER. BOXES SHALL BE SIZED ACCORDING TO CODE AND SHALL BE UNDERWRITER'S LABORATORIES LISTED. BOXES SHALL BE ACCESSIBLE AT THE TIME OF COMPLETION AND IN FINISHED AREAS SHALL BE LOCATED ONLY AFTER APPROVAL OF ARCHITECT DUE TO APPEARANCE CONSIDERATIONS.
- 32. ALL RECEPTACLE, LIGHT SWITCH, DISCONNECT SWITCH SHALL BE LABELED WITH CIRCUIT NUMBER AND PANEL NAME. LABEL SHALL BE WHITE BACKGROUND WITH BLACK LETTERING
- 33. ELECTRICAL CONTRACTOR SHALL PROVIDE ALL COMPLETE/SIGNED CALIFORNIA ENERGY COMMISSION ACCEPTANCE FORMS "CEC-NRCA" AND INSTALLATION FORMS "CEC-NRCI" ASSOCIATED WITH ALL LIGHTNG AND POWER DESIGN IN THESE DESIGN DRAWINGS. AND SHALL INCLUDE ALL FEE ASSOCIATED WITH THE COMPLETION OF THESE FORMS IN THE BID.

**ABBREVIATIONS** 

- ABOVE COUNTER
- ABOVE FINISHED FLOOR
- TEL TFI FPHONE
- CONDUIT
- TYP
- TYPICAL C.O. CONDUIT ONLY
- UNLESS OTHERWISE NOTED
- C.B CIRCUIT BREAKER
- CIRCUIT CKT
- DRAWING
- ELECTRICAL ELEC END OF LINE REGISTER
- ΕM **EMERGENCY**
- GARBAGE DISPOSAL GB
- GROUND FAULT INTERRUPTER
- ISOLATED GROUND
- LCP LIGHTING CONTROL PANEL.
- NOT IN CONTRACT
- OWNER FURNISH, CONTRACTOR INSTALL
- PNL **PANELBOARD**
- REF REFRIGERATOR
- SEE ARCHITECTURAL DRAWINGS
- SEE MECHANICAL DRAWINGS
- TO BE DETERMINED
- WP
- WEATHER PROOF
- RELOCATED
- (N) NEW
- EXISTING TO REMAIN, U.O.N.

# 34. SOLANO COMMUNITY COLLEGE DISTRICT DESIGN STANDARD SHALL BE FOLLOW!

AND TAKE PRECEDENT OVER ELECTRICAL NOTES ON THESE PLAN,

- APPLICABLE SECTIONS ARE, BUT NOT LIMITED TO THE FOLLOWING:
- 26 00 00 BASIC ELECTRICAL SYSTEMS 26 05 19 - WIRES CABLES AND CONNECTORS
- 26 05 26 GROUNDING
- 26 05 33 RACEWAYS
- 26 05 34 BOXES
- 26 05 48 SUPPORTING DEVICES 26 05 53 — ELECTRICAL IDENTIFICATION
- 26 08 05 ELECTRICAL ACCEPTANCE TESTING
- 26 22 00 DRY-TYPE TRANSFORMERS
- 26 24 00 SWITCHBOARDS & DISTRIBUTION PANELS
- 26 27 26 WIRING DEVICES
- 26 28 00 OVERCURRENT PROTECTIVE DEVICES
- 26 28 19 CIRCUIT & MOTOR DISCONNECTS

## DRAWING INDEX

- GENERAL NOTES, ABBREVIATIONS AND LEGEND
- E1.00 ELECTRICAL PLAN

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### LEGEND

BUILDING STANDARD QUAD / DUPLEX RECEPTACLE AT 18" AFF U.O.N

- LEVITON T5825-W, 20A, 125V SPLIT-WIRED DUPLEX RECEPTACLE
- 208V RECEPTACLE
- GROUND FAULT CIRCUIT INTERRUPTER RECEPTACLE AT 18" AFF.
- ₩. RECEPTACLE ON DEDICATED CIRCUIT AT 18" AFF U.O.N.
- CEILING MOUNTED RECEPTACLE.
- FLOOR MOUNTED RECEPTACLE.
- DIMMING SWITCH AT 48" AFF
- LIGHT SWITCH AND SWITCH LEG IDENTIFICATION AT 48"AFF
- BUILDING STANDARD HORSEPOWER RATED SWITCH.
- LEVITON 1221-2W, 20A, 120/277V AT 48" AFF DATA / VOICE OUTLET BOX AT 18" AFF.
- FLOOR MOUNTED DATA / VOICE OUTLET BOX

SURFACE / FLUSH MTD. PANELBOARD.

- LIGHTING CONTROL PANEL
- WALL MOUNTED / CEILING
- MOUNTED JUNCTION BOX. **BUILDING STANDARD CEILING/WALL**
- MOUNTED STROBE HORN.

**BUILDING STANDARD STROBE** 

- EM 🙀 **CEILING MOUNTED EXIT LIGHT**
- EXIT EM LOW LEVEL WALL MOUNTED EXIT LIGHT
- **TELEPHONE CABINET**

X

- / EQ **EQUIPMENT TAG**
- SHEET NOTE TAG.
- EPO **ENERGEBCY POWER OFF BUTTON**
- ED EMON DMON WATT METER

WITH COVER

CA ARCHITECTS 475 Gate Five Road, Suite 107 Sausalito, CA 94965

SOLANO COMMUNITY

4000 Suisun Valley Road

COLLEGE DISTRICT

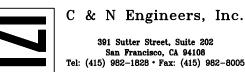
Fairfield, CA 94534

T 415.331.7655 F 415.331.7656

PROJECT:

BUILDING 200 KITCHEN RENOVATION

CONSULTANT TEAM





SHEET LEGEND:

ISSUE/REVISION: NO: DATE: DESCRIPTION:

1. 01/27/2016: PRICING/BID

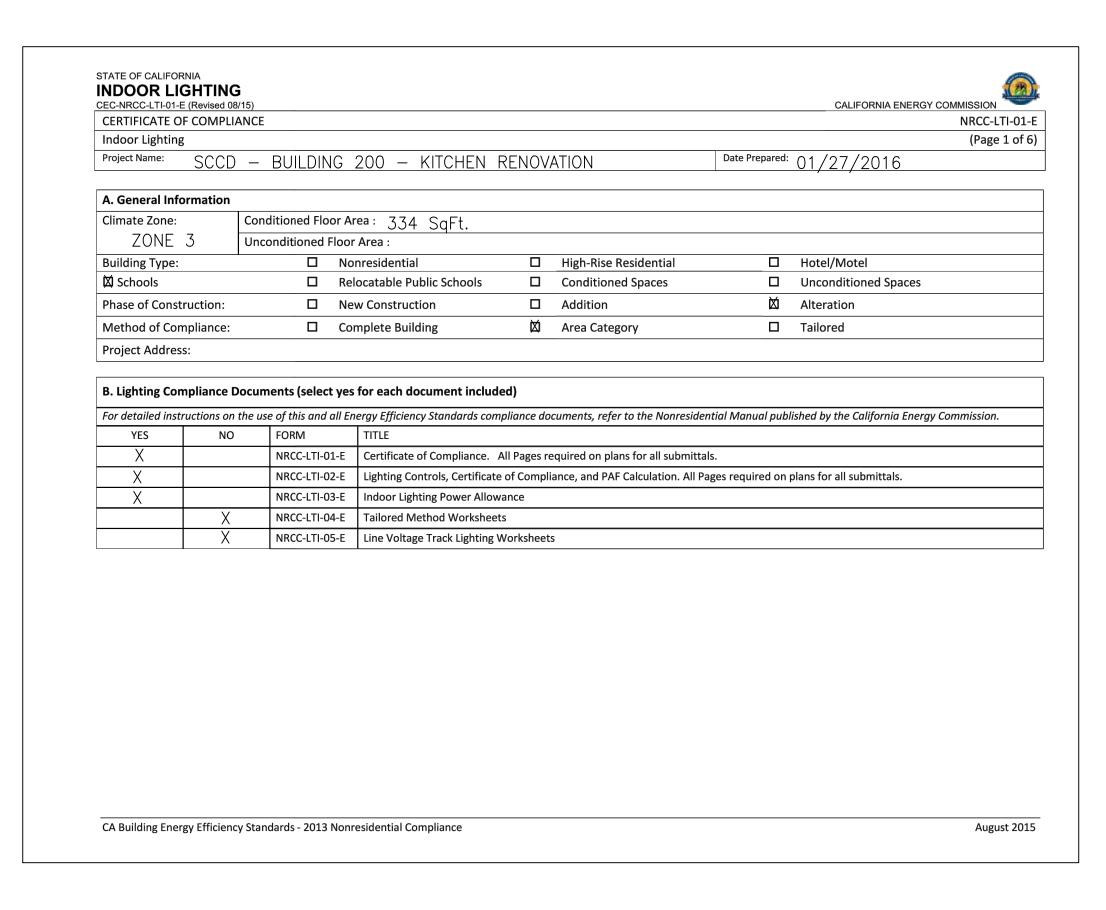
2. 02/05/2016: PERMIT

KEY PLAN:

SCALE: NO SCALE

PROJECT NO: PERMIT APPLICATION NO.:

GENERAL NOTES ABBREV. & LEGEND



CEDTIFICA	TI-01-E (Revis	ING sed 08/15)		CALIFORNIA ENERGY COMMISSIO
	ATE OF CON	MPLIANCE		NRCC
Indoor Lig Project Nam		AND DIMEDING ONE WITCHEN DEMONATION	Data Propared	(Pa
Project Nam	ie. SC	CCD – BUILDING 200 – KITCHEN RENOVATION	Date Prepared:	01/27/2016
E. Declara	ation of Re	quired Certificates of Acceptance		
		all of the Certificates of Acceptance that will be submitted. (Retain copies and ver	ify forms are completed ar	nd signed.)
YES	NO	Form/Title		
X		NRCA-LTI-02-A - Must be submitted for occupancy sensors and automatic time s	switch controls.	☐ Field Inspector
	X	NRCA-LTI-03-A - Must be submitted for automatic daylight controls.		☐ Field Inspector
	X	NRCA-LTI-04-A - Must be submitted for demand responsive lighting controls.		☐ Field Inspector
☐ Wher ☐ Wher ☐ Wher	nctual indoo n Complete n Area Cate	chedule and Field Inspection Energy Checklist or lighting power listed on this page and on the next page includes all installed per Building Method is used for compliance, list each different type of luminaire on so gory Method or Tailored Method is used for compliance, list each different type o k lighting in schedule, and submit the track lighting compliance form (NRCC-LTI-0)	eparate lines. f luminaire by each differe	nt function area on separate lines
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		Indoor Lighting Power for Conditioned Spaces		Watts	Indoor Lighting Power for Uncond	itione	a Spac	Watts
		Installed Lighting			Installed Lig	hting		vvatts
1.		NRCC-LTI-01-E, page 4	+	485	NRCC-LTI-01-E, p		+	
2.		PORTABLE ONLY FOR OFFICES	+	0				
		NRCC-LTI-01-E, page 3  Minus Lighting Control Credits			Minus Lighting Control Cr	redite		
3.		NRCC-LTI-02-E, page 2	-	0	NRCC-LTI-02-E, p		-	
4.	Adjusted Installed Lighting Power _ Adjusted Installed Lighting F				ower	_		
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5.		Complies ONLY	if <b>Inst</b>	alled ≤ Allowed	Compli	es ONL	Y if Ins	stalled ≤ Allowed
6.		Allowed Lighting Power						
0.	Allowed Lighting Power Conditioned NRCC-LTI-03-E, page 1 534				Unconditioned NPCC LTL02 E page 1			
					Unconditioned NRCC-LTI-03-E, page 1			
		equired Installation Certificates yes for all Installation Certificates that will be sub-	mitte	d. (Retain copies a				
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	200 –	KITC							(Pag	e 4 of 6)
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e form.										
sed to determine if greate	er than 0.3 w	atts of p	portable ligh	ting is plai	nned for an	y office				
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OWNER:

SOLANO COMMUNITY COLLEGE DISTRICT 4000 Suisun Valley Road Fairfield, CA 94534

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CA ARCHITECTS
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Sausalito, CA 94965
T 415.331.7655

PROJECT:

F 415.331.7656

BUILDING 200 KITCHEN RENOVATION

CONSULTANT TEAM:



C & N Engineers, Inc.

391 Sutter Street, Suite 202
San Francisco, CA 94108
Tel: (415) 962-1628 • Fax: (415) 962-8005

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ISSUE/REVISION:
NO: DATE: DESCRIPTION:

I. 01/27/2016: PRICING/BID

2. 02/05/2016: PERMIT

KEY PLAN:

SCALE: NO SCALE

DATE:

PROJECT NO:

PERMIT APPLICATION NO.:

TITLE 24 COMPLIANCE FORM

F0 20

### STATE OF CALIFORNIA INDOOR LIGHTING CEC-NRCC-LTI-01-E (Revised 08/15) CERTIFICATE OF COMPLIANCE NRCC-LTI-01-E Indoor Lighting (Page 5 of 6) Project Name: SCCD - BUILDING 200 - KITCHEN RENOVATION Date Prepared: 01/27/2016 A separate Lighting Schedule Must Be Filled Out for Conditioned and Unconditioned Spaces. Installed Lighting Power listed on this Lighting Schedule is only for: ☐ CONDITIONED SPACE ☐ UNCONDITIONED SPACE H. INDOOR LIGHTING SCHEDULE and FIELD INSPECTION ENERGY CHECKLIST Luminaire Schedule Field Inspector 1 Installed Watts Location E F How wattage was Complete Luminaire Description Primary Function area in which (i.e, 3 lamp fluorescent troffer, F32T8, one dimmable electronic ballast) Pass Fail 12inch dim. LED undercounter fixture 120 Kitchen 360 Kitchen 24inch dim. LED undercounter fixture **⋈** □ 3 (E) 2x4 FLUOR. W/(4)F32T8, DIM BALL. INSTALLED WATTS PAGE TOTAL: Enter sum total of all pages into NRCC-LTI-01-E; Page 2

August 2015

CA Building Energy Efficiency Standards - 2013 Nonresidential Compliance

CEC-NRCC-LTI-01-E (Revised 08/15)					CALIFORN	IIA ENERGY COMMISS	
CERTIFICATE OF COMPLIANCE							C-LTI-01-
Indoor Lighting				Data Danasa I			age 6 of 6
Project Name: SCCD —	BUILDING 200 - KITCHEN RENO	VATION		Date Prepared:	<u>01/27/20</u>	<u>16</u>	
DOCUMENTATION AUTHOR'S DE	CLARATION STATEMENT						
	of Compliance documentation is accurate and complete.						
Documentation Author Name: DEN	NNIS CHEUNG	Documentation Au	thor Signature:		7		
C&N EN	GINEERS, INC.	Signature Date:	01/27	//2016			
	ITER STREET, SUITE 202	CEA Certification Id	lentification (if app	icable):			
	ANCISCO, CA 94108	Phone:	415-9	982-1828			
RESPONSIBLE PERSON'S DECLAR							
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SOLANO COMMUNITY COLLEGE DISTRICT 4000 Suisun Valley Road Fairfield, CA 94534

ARCHITECT:

CA ARCHITECTS 475 Gate Five Road, Suite 107 Sausalito, CA 94965

T 415.331.7655 F 415.331.7656

PROJECT:

BUILDING 200 KITCHEN RENOVATION

CONSULTANT TEAM:





SHEET LEGEND:

ISSUE/REVISION:

NO: DATE: DESCRIPTION: 1. 01/27/2016: PRICING/BID

2. 02/05/2016: PERMIT

KEY PLAN:

SCALE:

DATE:

PROJECT NO:

PERMIT APPLICATION NO.: NO SCALE

TITLE 24 COMPLIANCE FORM

#### STATE OF CALIFORNIA INDOOR LIGHTING – LIGHTING CONTROLS CALIFORNIA ENERGY COMMISSION CEC-NRCC-LTI-02-E (Revised 05/15) CERTIFICATE OF COMPLIANCE NRCC-LTI-02-E Indoor Lighting - Lighting Controls (Page 1 of 3) Date Prepared: 01/27/2016 SCCD — BUILDING 200 — KITCHEN RENOVATION

The NRCC-LTI-02-E shall be used to document all mandatory and prescriptive lighting controls that are applicable to the project.

YES	NO	Control Requirements
Χ		Lighting shall be controlled by self-contained lighting control devices which are certified to the Energy Commission according to the Title 20 Appliance Efficiency Regulations in accordance with Section 110.9.
Χ		Lighting shall be controlled by a lighting control a system or energy management control system in accordance with §110.9. An Installation Certificate shall be submitted in accordance with Section 130.4(b).
	Х	One or more Track Lighting Integral Current Limiters shall be installed which have been certified to the Energy Commission in accordance with §110.9 and §130.0. Additionally, an Installation Certificate shall be submitted in accordance with Section 130.4(b).
	Х	A Track Lighting Supplementary Overcurrent Protection Panel shall be installed in accordance with Section 110.9 and Section 130.0. Additionally, an Installation Certificate shall be installed in accordance with Section 130.4(b).
Χ		All lighting controls and equipment shall comply with the applicable requirements in §110.9 and shall be installed in accordance with the manufacturer's instructions in accordance with Section 130.1.
Χ		All luminaires shall be functionally controlled with manually switched ON and OFF lighting controls in accordance with Section 130.1(a).
X		General lighting shall be separately controlled from all other lighting systems in an area. Floor and wall display, window display, case display, ornamental and special effects lighting shall each be separately controlled on circuits that are 20 amps or less. When track lighting is used, general, display, ornamental, and special effects lighting shall each be separately controlled; in accordance with Section 130.1(a)4.
Χ		The general lighting of any enclosed area 100 square feet or larger, with a connected lighting load that exceeds 0.5 watts per square foot shall meet the multi-level lighting control requirements in accordance with Section 130.1(b).
Χ		All installed indoor lighting shall be equipped with controls that meet the applicable Shut-OFF control requirements in Section 130.1(c).
	Х	Lighting in all Daylit Zones shall be controlled in accordance with the requirements in Section 130.1(d) and daylit zones are shown on the plans.
	Х	Lighting power in buildings larger than 10,000 square feet shall be capable of being automatically reduced in response to a Demand Responsive Signal in accordance with Section 130.1(e).
X		Before an occupancy permit is granted for a newly constructed building or area, or a new lighting system serving a building, area, or site is operated for normal use, indoor lighting controls serving the building, area, or site shall be certified as meeting the Acceptance Requirements for Code Compliance in accordance with Section 130.4.(a). The controls required to meet the Acceptance Requirements include automatic daylight controls, automatic shut-OFF controls, and demand responsive controls.

STATE OF CALIFORNIA CALIFORNIA ENERGY COMMISSION INDOOR LIGHTING – LIGHTING CONTROLS CEC-NRCC-LTI-02-E (Revised 05/15) CERTIFICATE OF COMPLIANCE NRCC-LTI-02-E Indoor Lighting - Lighting Controls (Page 2 of **3**) Date Prepared: 01/27/2016 SCCD - BUILDING 200 - KITCHEN RENOVATION A separate document must be filled out for Conditioned and Unconditioned Spaces. This page is used only for the following: ☐ UNCONDITIONED SPACES ☐ UNCONDITIONED SPACES B. Mandatory and Prescriptive Indoor Lighting Control Schedule, PAF Calculation, and Field Inspection Checklist PAF Credit Calculation <sup>2</sup> Standards Complying With <sup>1</sup> (✓ all that apply, or enter 'E' if Exempted) Lighting Control Schedule C D E F G H I J Type/ Description of Lighting Control (i.e.: occupancy sensor, automatic time switch, Location in Building dimmer, automatic daylight, KITCHEN Dim/Timeclock Control Credit PAGE TOTAL (Sum of Column M): IF MULTIPLE PAGES ARE USED, ENTER SUM TOTAL OF Control Credit for all pages HERE (Sum of all Column M): **Enter Control Credit total** into NRCC-LTI-01-E; Page 1.  $\S130.1(a)$  = Manual area controls;  $\S130.0(b)$  = Multi Level;  $\S130.1(c)$  = Auto Shut-Off;  $\S130.1(d)$  = Mandatory Daylight;  $\S130.1(e)$  = Demand Responsive;  $\S140.6(d)$  = Additional lighting controls installed to earn a PAF; §140.6(d) = Prescriptive Secondary Sidelit Daylight Controls.2. Check Table 140.6-A for correct Factor. PAFs shall not be traded between conditioned and unconditioned spaces. As a condition to earn a PAF, an Installation Certificate is also required to be filled out, signed, and submitted. CA Building Energy Efficiency Standards - 2013 Nonresidential Compliance May 2015

Indoor Lighting		ANCE			NRCC-LTI-02-
Project Name:	g - Lightin	g Controls			(Page 3 of 3
	SCCE	) - BUILDING 200 - KITCHEN RENOV	VATION		Date Prepared: 01/27/2016
DOCUMENTATION	ON AUTHO	PR'S DECLARATION STATEMENT			
		ficate of Compliance documentation is accurate and complete.			
Documentation Auth	ior Name:	DENNIS CHEUNG	Documentation Aut	nor Signature:	
Company:	C&N	ENGINEERS, INC.	Signature Date:	01/2	7/2016
Address:		SUTTER STREET, SUITE 202	CEA Certification Id	entification (if ap	plicable):
City/State/Zip:		FRANCISCO, CA 94108	Phone:	415-	-982-1828
RESPONSIBLE P	ERSON'S C	ECLARATION STATEMENT	<u>'</u>		
	ovides to th	for all applicable inspections. I understand that a completed sign e building owner at occupancy.  DENNIS CHEUNG	Responsible Design		
Company :		ENGINEERS, INC.	Date Signed:	01/2	7/2016
Address:		SUTTER STREET, SUITE 202	License:	E927	
City/State/Zip:		FRANCISCO, CA 94108	Phone:		-982–1828
		TRAINCISCO, CA 54100		710	302 1020

SOLANO COMMUNITY COLLEGE DISTRICT 4000 Suisun Valley Road Fairfield, CA 94534

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KEY PLAN:

NO SCALE PROJECT NO:
PERMIT APPLICATION NO.:

TITLE 24 COMPLIANCE FORM

TOTAL ALLOWED BUILDING WATTS. Enter number into correct cell on NRCC-LTI-01,  Check here if building contains both conditioned and unconditioned areas.	Page 2, Row 1				
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1. Complete Building Method Allowed Watts. Documented in section B of NRCC-LTI-03-E (below on	this page)				
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3. Tailored Method Allowed Watts. Documented in section A of NRCC-LTI-04-E		50			534_
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TYPE OF BUILDING (From §140.6 Table 140.6-B)		2.		#	
TYPE OF BUILDING (From §140.6 Table 140.6-B)	Total Are	a:			
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Total Watts. Enter To	Total Are tal Watts into section A	, row 1	(Above on this page		Watts 534
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Total Watts. Enter Total C -1 AREA CATEGORY METHOD TOTAL LIGHTING POWER ALLOWANCES (D plus E)	Total Are tal Watts into section A  To	tal fron	n section C-2 . n section C-3 .	Į.	534
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STATE OF CALIFORNIA INDOOR LIGHTI		ALLOWAN	CE		OALIEODA.	IA ENERGY GO	MAIOGIGN
CEC-NRCC-LTI-03-E (Revise					CALIFORN	IA ENERGY CO	NRCC-LTI-03
Certificate of Complia							(Page 3 of
Project Name: SC	<u>CD — BUIL</u>	<u>DING 200</u>	- KITCHEN R	ENOVATION	Oate Prepared: 01/27/20	16	
A separate page mus	t be filled out for	Conditioned an	d Unconditioned Spa	ces. This page is only for:			
CONDITIONED sp			NDITIONED spaces	,			
C 2 ADEA CATECORY	ACTUOD ADDITU	ONAL LICUTING	WATTACE ALLOWA	NICE (from Table 140 C C Footmates)			
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		Additional	Wattage				ALLOWED WATTS
Primary Function	Sq Ft or linear ft <sup>1</sup>	Watts Allowed	Allowance (B x C)	Description(s) and Quantity of Sp Luminaire Types in each Primary Func		tal Design Watts <sup>3</sup>	Smaller of D or F
			(2113)				
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CONDITIONED space		LI UNCC	NDITIONED spaces			
				ANCE (from Table 140.6-C Footnotes)		I
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Primary Function	Sq Ft or linear ft <sup>1</sup>	Allowed	(B x C)	Luminaire Types in each Primary Function Area	Watts <sup>3</sup>	D or F
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			TOTALS – E	Enter into TOTAL AREA CATEGORY METHOD ADDITIONAL ALLOV	VANCES – Section C-1 .	
Use linear feet only fo	or additional allo	owance for whit	e board or chalk bo	ard. All other additional Area Category allowances shall u	se watts per square foo	t.
. Additional watts are	available only w	hen allowed ac	cording to the footn	otes on bottom of Table 146-C, which include: Specialize	d task work; Ornamenta	al lighting;
	-		-	l or chalk board; Accent, display and feature lighting; and		

EC-NRCC-LTI-03-E (Revised 05/15) CERTIFICATE OF COMPLIANCE				o, ten ordan		COMMISSION  NRCC-LTI-03-I
Certificate of Compliance - Indoor Lighting F	Power Allowance					(Page 2 of 4
Project Name: SCCD — BUILDING	G 200 – KITCHEN RENOVATION	D	ate Prepared:	01/27/201	 6	
				01/2//201		
A separate page must be filled out for Cond	ditioned and Unconditioned Spaces. This page is only for:					
CONDITIONED spaces	□ UNCONDITIONED spaces					
C -2 AREA CATEGORY METHOD GENERAL LIC						
·	ces. Portable lighting for offices shall be documented only in	n section B of NF	RCC-LTI-0	1-E.		
Separately list lighting for each primary	function area as defined in §100.1 of the Standards.					
	A	В		С	1	D
	(From §140.6 Table 140.6-C)	WATTS				ALLOWED
Location in Building	Primary Function Area per Table 140.6-C	PER (ft <sup>2</sup> )	X	` ,	<u> </u>	WATTS
KITCHEN	FOOD PREP	1.6		334	] [	534
					1	
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		TO	TALS	334	1	534
Enter su	m total Area Category allowed watts into section C-1	of NRCC-LTI-03	-E (this o		<b>,</b>	534
	<b>5</b> ,		•		· L	
						WATT

Documentation Author Name:  DENNIS CHEUNG  Company:  C&N ENGINEERS, INC.  Signature Date:  O1/27/2016  CEA Certification Identification (if applicable):  CEA Certification Identification in Identification	CERTIFICATE C	E (Revised 05 OF COMPLIA		CALIFORNIA ENERGY COMMISSION  NRCC-LTI-03-E
OCUMENTATION AUTHOR'S DECLARATION STATEMENT  I certify that this Certificate of Compliance documentation is accurate and complete.  Ocumentation Author Name:  DENNIS CHEUNG  DENNIS CHEUNG  Decrementation Author Name:  DENNIS CHEUNG  Decrementation Author Signature  Decrementation Author Name:  DENNIS CHEUNG  Signature Date:  O1/27/2016  CEA Certification Identification (if applicable):  Responsible PERSON'S DECLARATION STATEMENT  Certify the following under penalty of perjury, under the laws of the State of California:  The information provided on this Certificate of Compliance is true and correct.  I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer).  The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.  The building design features or system design features identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.  The building design features or system design features identified on this Certificate of Compliance on form to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.  The building design features or system design features identified on this Certificate of Compliance of C	ertificate of (	Compliance	e - Indoor Lighting Power Allowance	(Page 4 of 4)
Tecrtify that this Certificate of Compliance documentation is accurate and complete.    Dennis Cheung   Dennis	oject Name:	SCCD	- BUILDING 200 - KITCHEN RE	NOVATION Date Prepared: 01/27/2016
Certify that this Certificate of Compliance documentation is accurate and complete.				, ,
DENNIS CHEUNG    Decumentation Author Name:   DENNIS CHEUNG				ete.
Idress: 391 SUTTER STREET, SUITE 202  CEA Certification Identification (if applicable):  SAN FRANCISCO, CA 94108  Phone: 415–982–1828  ESPONSIBLE PERSON'S DECLARATION STATEMENT  Certify the following under penalty of perjury, under the laws of the State of California:  The information provided on this Certificate of Compliance is true and correct.  I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer).  The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.  The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.  I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit application.  I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.  Benominate C&N ENGINEERS, INC.  DENNIS CHEUNG  Date Signed:  01/27/2016  Date Signed:  01/27/2016				
An Francisco, CA 94108  San Francisco, CA 94108  Seponsible Person's Declaration Statement  Certify the following under penalty of perjury, under the laws of the State of California:  The information provided on this Certificate of Compliance is true and correct.  I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer).  The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.  The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.  I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit (s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.  Seponsible Designer Name:  DENNIS CHEUNG  Density (7/2)  Density (7/2	mpany:	C&N	ENGINEERS, INC.	Signature Date: 01/27/2016
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C&N ENGINEERS, INC.  01/27/2016  Idress: 391 SUTTER STREET, SUITE 202  E9279  Phone:	The inform I am eligibl (responsib The energy Complianc The buildir documents I will ensur	le under Div le designer) y features and e conform t ng design fea s, workshee re that a cor	ision 3 of the Business and Professions Code to accept res nd performance specifications, materials, components, an o the requirements of Title 24, Part 1 and Part 6 of the Ca atures or system design features identified on this Certific ts, calculations, plans and specifications submitted to the npleted signed copy of this Certificate of Compliance shall	I manufactured devices for the building design or system design identified on this Certificate of fornia Code of Regulations.  It is of Compliance are consistent with the information provided on other applicable compliance enforcement agency for approval with this building permit application.  be made available with the building permit(s) issued for the building, and made available to the
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SOLANO COMMUNITY COLLEGE DISTRICT 4000 Suisun Valley Road Fairfield, CA 94534

CA ARCHITECTS 475 Gate Five Road, Suite 107 Sausalito, CA 94965

T 415.331.7655 F 415.331.7656

PROJECT:

BUILDING 200 KITCHEN RENOVATION

CONSULTANT TEAM:





SHEET LEGEND:

ISSUE/REVISION: NO: DATE: DESCRIPTION: I. 01/27/2016: PRICING/BID

2. 02/05/2016: PERMIT

KEY PLAN:

SCALE:

DATE:

PROJECT NO:

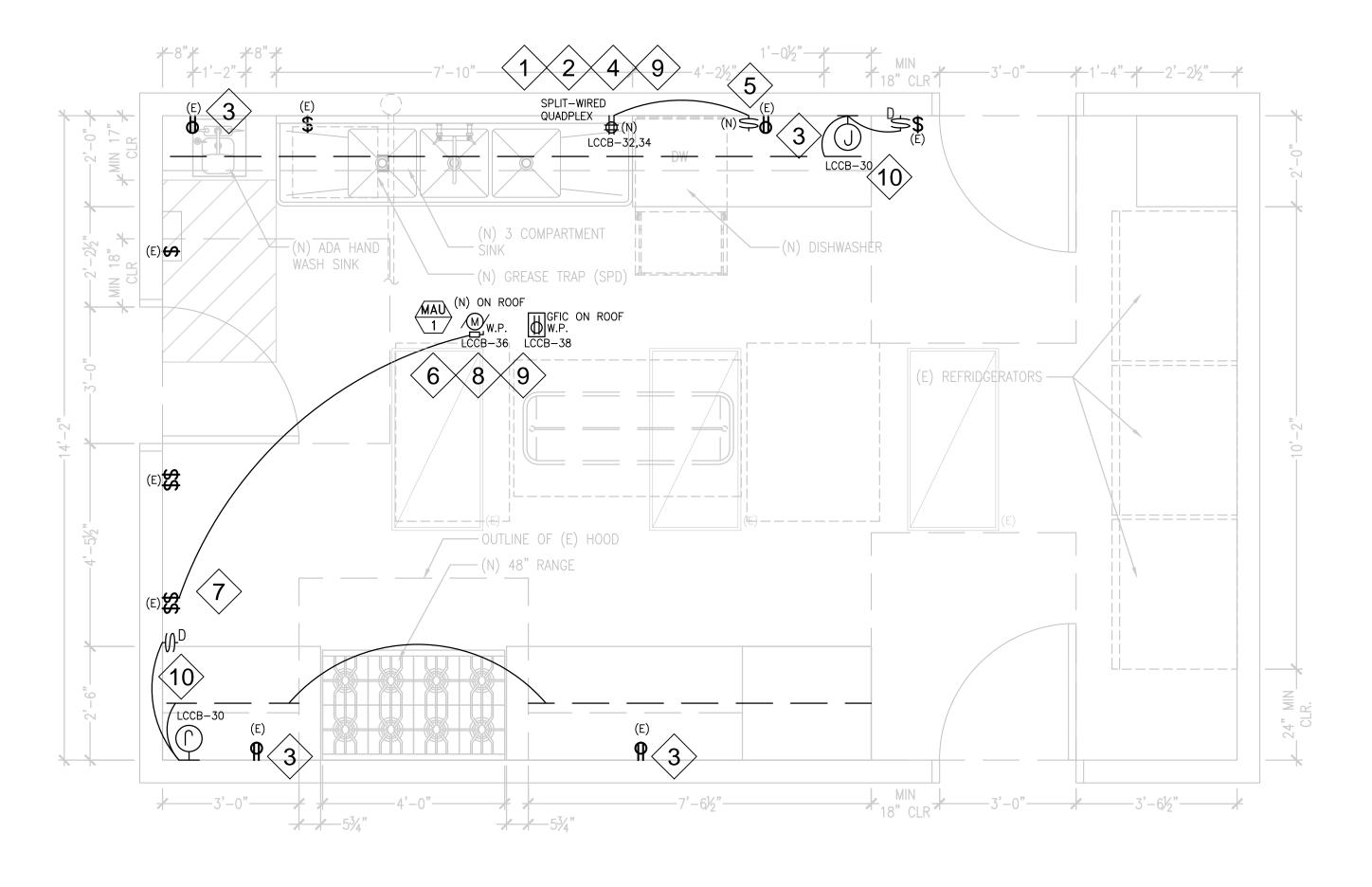
PERMIT APPLICATION NO.: NO SCALE

TITLE 24 COMPLIANCE FORM

### SHEET NOTES

- CIRCUIT NUMBERS ARE SCHEMATIC AND SHOW THE DESIGN INTENTION AND LOAD BALANCE REQUIREMENTS. CONTRACTOR SHALL INDICATE ACTUAL CIRCUITS USED ON AS-BUILD DRAWINGS AND PANEL DIRECTORY.
- 2 ALL CIRCUIT TO BE FEED FROM EXISTING PANEL "LCCB", U.O.N.
- EXISTING COUTNER OUTLETS SHALL BE REPLACE IN PLACE WITH TEMPER RESISTANT GFIC RECEPTACLE. MODEL NUMBER TO BE LEVITON GFTR2—W OR EQUAL.
- 4 FURNISH AND INSTALL NEW SPLIT-WIRE QUAD RECEPTACLE FOR DISHWASHER AND GARBAGE DISPOSAL.
- SWITCH FOR GARBAGE DISPOSAL SHALL BE GANG WITH EXISTING COUNTER RECEPTACLE, WITH SINGLE FACE PLATE.
- FURNISH AND INSTALL POWER AND DISCONNECT FOR MAKE-UP AIR AIR ON ROOF. COORDINATE WITH OWNER AND MECHANICAL DRAWING FOR FINAL LOCATION OF FAN.
- MAKE-UP AIR FAN TO BE INTERLOCK WITH EXISTING EXHAUST FAN. CONTRACTOR PROVIDE ALL RELAY/COMPONENT NEEDED FOR THE INTERLOCK. COORDINATE WITH FIRE ALARM CONTRACTOR FOR ANY COMPONENT NEEDED WITH FIRE ALARM REQUIRED FAN SHUT OFF.
- CONTRACTOR TO VERIFY AN OPERATIONAL ROOF RECEPTACLE IS WITHIN 25 FEET OF ROOF EQUIPMENT. OTHERWISE FURNISH AND INSTALL NEW GFIC, IN WEATHERPROOF ENCLOSURE WITH 25 FT OF EQUIPMENT, FOR MAINTENANCE USE.
- ALL RECEPTACLES, LIGHT SWITCHES, DISCONNECT SWITCHES SHALL BE LABEL WITH PANEL NAME AND CIRCUIT NUMBER ON WHITE BACKGROUND WITH BLACK LETTERING.
- FURNISH AND INSTALL NEW UNDERCOUNTER FIXTURE WITH DIMMER SWITCH, AND ROUTED THROUGH BUILDING LIGHTING TIMER. FIXTURE SHALL BE LITHONIA UCLS12 AND UCLS24, OR SIMILAR.

SOLANO COMMUNITY COLLEGE DISTRICT 4000 Suisun Valley Road Fairfield, CA 94534



ARCHITECT: CA ARCHITECTS 475 Gate Five Road, Suite 107 Sausalito, CA 94965 T 415.331.7655 F 415.331.7656

PROJECT:

BUILDING 200 KITCHEN RENOVATION

CONSULTANT TEAM:

C & N Engineers, Inc.

391 Sutter Street, Suite 202 San Francisco, CA 94108 Tel: (415) 982-1828 • Fax: (415) 982-8005



SHEET LEGEND:

ISSUE/REVISION: NO: DATE: DESCRIPTION:

I. 01/27/2016: PRICING/BID

2. 02/05/2016: PERMIT

KEY PLAN:

SCALE: 1/2" = 1'-0"

SCALE:

DATE:

PROJECT NO:

PERMIT APPLICATION NO.: 1/8"=1'-0"

ELECTRICAL PLAN

ELECTRICAL PLAN

SYMBOL	DESCRIPTION
<b>•</b>	POINT OF CONNECTION (POC)
T	THERMOSTAT OR TEMPERATURE SENSOR, MAX 48" A.F.F
$\mathbb{H}$	HUMIDISTAT
S	SMOKE DETECTOR
	SECTION AT ROUND DUCT
	SECTION AT RECTANGULAR SUPPLY AIR DUCT
	SECTION AT RECTANGULAR RETURN AIR DUCT
	SECTION AT RECTANGULAR EXHAUST AIR DUCT
	LAY-IN SUPPLY AIR DIFFUSER
	LAY-IN RETURN AIR GRILLE
	LAY-IN EXHAUST AIR GRILLE
	SIDEWALL DIFFUSER/GRILLE
<del></del>	SUPPLY AIR FLOW ARROW
<b>←//</b> ─	RETURN/EXHAUST AIR FLOW ARROW
	SURFACE MOUNTED SUPPLY AIR DIFFUSER
	SURFACE MOUNTED RETURN AIR GRILLE
	ROUND SUPPLY AIR DIFFUSER
300 CFM	CFM - AIRFLOW
_	MANUAL VOLUME DAMPER
M	MOTORIZED DAMPER
→ BD	BACKDRAFT DAMPER
►AAA FSD	COMBINATION FIRE/SMOKE DAMPER

RE	ECTANGULAR DUCT LEGEND
SYMBOL	DESCRIPTION
	RECTANGULAR DUCT WITH LINING
20"x 2" }	DUCT WIDTH × HEIGHT, DIMENSIONS ARE NET INSIDE.
RORD	DUCT RISE OR DROP IN DIRECTION OF AIRFLOW
	FLEXIBLE DUCT (SHOWN WITH DIFFUSER)
	SQUARE-TO-ROUND TRANSITION
	FLEXIBLE CONNECTION
	90° ELL W/ TURNING VANES (RADIUS ELL IS ACCEPTABLE)
	90° TAP
	45° TAP
	RECTANGULER TEE

	ROUND DUCT LEGEND
LINETYPE	DESCRIPTION
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	AIR DUCT (SINGLE LINE) AIR DUCT (DOUBLE LINE), DIMENSION IS NET INSIDE
\	45° DUCT BRANCH
\\	90° DUCT BRANCH
	SHORT RADIUS 90° ELBOW (SPIRAL)
	LONG RADIUS 90° ELBOW (SPIRAL)
	SHORT RADIUS 45° ELBOW (SPIRAL)
	LONG RADIUS 45° ELBOW (SPIRAL)
	BULL HEAD TEE (SPIRAL)
	ROUND DUCT TRANSITION (SPIRAL)
	SQUARE-TO-ROUND DUCT TRANSITION (SPIRAL)
	90° DUCT TAP (SPIRAL)
(5)	DUCT OR FLUE THRU ROOF OR FLOOR

	MECHANIC	CAL LEGE	END
ABBREVIATION	DESCRIPTION	ABBREVIATION	DESCRIPTION
AAV	AUTOMATIC AIR VENT	HHWS	HEATING HOT WATER SUPPLY
AFF	ABOVE FINISHED FLOOR	HHWR	HEATING HOT WATER RETURN
APPROX.	APPROXIMATELY	IN	INCHES
BFP	BACKFLOW PREVENTER	LBS	POUNDS
BPT	BYPASS TIMER	MFR	MANUFACTURER
CD	CONDENSATE DRAIN	(N)	NEM
CFM	CUBIC FEET PER MINUTE	NC	NORMALLY CLOSED
CTE	CONNECT TO EXISTING	NIC	NOT IN CONTRACT
DIA	DIAMETER	NO	NORMALLY OPEN
DN	DOMN	NTS	NOT TO SCALE
DWG	DRAWING	00	ON CENTER
(E)	EXISTING	OD	OUTSIDE DIAMETER
EA	EXHAUST AIR	PD	PRESSURE DROP
EF	EXHAUST FAN	POC	POINT OF CONNECTION
EL	ELEVATION	PSI	POUNDS PER SQUARE INCH
ESP	EXTERNAL STATIC PRESSURE	(RL)	RELOCATED
(F)	FUTURE	RPM	REVOLUTIONS PER MINUTE
FC	FLEX CONNECTOR	SD	SMIOKE DETECTOR
FD	FIRE DAMPER	SP	STATIC PRESSURE
FT	FEET	50V	SHUT-OFF VALVE
FSD	FIRE SMOKE DAMPER	ST	STRAINER
GA	U.S. GAUGE	TYP.	TYPICAL
GSM	GALVANIZED SHEET METAL	UCD	UNDERCUT DOOR
GPH	GALLONS PER HOUR	UON	UNLESS OTHERWISE NOTED
GPM	GALLONS PER MINUTE		

	(E)	E	XΗ	AU	ST	F	AN SC	HEDU	LE	
	MANUFACTURER		F	<b>4</b> Ν			MOTOR	CONTROLS	OPERATING	
MARK	\$ MODEL NO.	CFM	SP	RPM	SONES	HP	ELECTRICAL POWER	BY	WEIGHT LBS	REMARKS
(E) EF-I	"GREENHECK" SMB-10-5	1,250	ı	-	-	ı	1		-	2

(I) INTERLOCK WITH MUA-I (2) FIELD VERIFY AND PROVIDE GREASE CUP AS NEEDED

				MAKE-I	JP AIR L	JNI	T S	C	HE	DULE				
VA DIC	MANUFACTURER		PERFORMANCE	COOLING PERFORMANCE- ARI			N PERFO	RMA	NCE	ELECTRICAL DATA				
MARK	# MODEL No.	HEATING INPUT (MBH	)HEATING OUTPUT (MBH,	COOLING OUTPUT (MBH) SENSIBLE / TOTAL	COOLING EFFICIENCY EER / SEER	CFM	E.S.P. (IN. WG.)	RPM	<u>+</u>	NOM. VOLTAGE V-PH-HZ	MCA	MOCP	MEIGHT	COMMENTS
MAU-I	"GREENHECK" SAF-110-5	1	-	-	1	1,250	0.5		1/2	115/1/60	1		210	

NOTES: (I) INTERLOCK WITH (E) GREASE HOOD EXHAUST FAN EF-I

2 FURNISHED WITH PRE-FAB CURB, ALUMINUM FILTER, DAMPER AND DAMPER ACTUATOR

	DIF	FUSER,	GRILLI	E AND	REGI	STER SCHEDULE
MARK	MAKER	MODEL	FACE SIZE	NECK SIZE	SERVICE	REMARKS
CD-I	TITUS	TDCA	-	2"X 2"	SUPPLY	#26 WHITE

## GENERAL NOTES

- I. ALL WORK UNDER THIS DIVISION SHALL BE COORDINATED WITH OTHER TRADES.

  DUCT, PIPE AND WIRING SHALL BE ROUTED TO CLEAR ARCHITECTUAL OPENINGS,

  STRUCTUAL MEMBERS OR OTHER OBSTRUCTION.
- 2. CONTRACTOR SHALL BE THROUGHLY FAMILIAR WITH THE INTENT OF THE CONSTRUCTION DOCUMENT AND SCOPE OF WORK BEFORE SUBMITING A BID. DURING CONSTRUCTION, CONTRACTOR IS RESPONSIBLE FOR SAFE WORKING CONDITIONS THAT INCLUDES SAFETY OF ALL PERSONS AND PROPERTY.
- 3. PROVIDE ALL LABOR, MATERIAL AND EQUIPMENT THAT ARE REQUIRED TO PROVIDE A COMPLETE INSTALLATION AS SHOWN ON THE DRAWINGS, INCLUDING THAT REASONABLLY INFERRED FOR PROPER EXECUTION OF THE INSTALLATION.

  PROVIDE CUTTING AND PATCHING AS REQUIRED FOR THE INSTALLATION. REPAIR OR REPLACE ANY DAMAGE CAUSED BY THE WORK AND LEAKS/BREAKS OF THE SYSTEM.

  FURNISH VLAVES AND TRIM NOT SPECIFICALLY INDICAED BUT REQUIRED FOR PROPER FUNCTIONING OF EQUIPMENT.
- 4. DRAWINGS ARE DIAGRAMMATIC. IT'S CONTRACTOR'S RESPONSIBILITY TO VERIFY ACTUAL BUILDING CONDITIONS, EQUIPEMT SIZE, LOCATION AND CONNECTION COMPLY WITH MFG'S INSTALLATION REQUIREMENT.
- 5. DIFFUSERS AND GRILLES SHALL BE LOCATED ACCORDING TO ARCHITECTUAL REFLECTED CEILING PLAN. CONTRACTOR SHALL INSTALL DAMPER/DAMPER REGULATOR AS REQUIRED.
- 6. ALL HVAC DUCTWORK SHALL BE GALVANIZED SHEET METAL CONSTRUCTED PER SMACNA'S
  "HVAC DUCT CONSTRUCTION STANDARDS" UNLESS OTHERWISE NOTED.
  SEAL DUCT SEAM AND JOINTS ACCORDING TO SMACNA'S "HVAC DUCT CONSTRUCTION STANDARDS".
  ALL HVAC DUCT AND PIPE HANGERS/SUPPORTS SHALL BE PER 2008 SMACNA SEISMIC
  RESTRAINT MANUAL.
- 7. INSULATE DUCTWORK & HOT WATER PIPE IN ACCORDANCE WITH LATEST TITLE 24 REQUIREMENT.
- 8. HOT WATER PIPE SHALL BE TYPE L DRAWN-TEMPER COPPER TUBING WITH SOLDERED JOINTS.
- 9. NEW ROOM THERMOSTATS SHALL INSTALLED @48" A.F.F.
- 10. MECHANICAL CONTRACTOR TO PROVIDE (NEBB) CERTIFIED AIR \$ WATER BALANCE REPORT.
- II. DUCT MOUNTED SMOKE DETECTOR SHALL BE PROVIDED BY ELECTRICAL CONTRACTOR, INSTALLED BY MECHANICAL CONTRACTOR, POWERED BY ELECTRICAL CONTRACTOR, INTERLOCKED FOR FAN-SHUTDOWN BY MECHANICAL CONTRACTOR AND WIRED TO FIRE ALARM PANEL BY ELECTRICAL CONTRACTOR.

MO	MECHANICAL NOTES, SYMBOL, LEGEND AND SCHEDULE
MO.I	MECHANICAL TITLE 24
M2.I	MECHANICAL FLOOR PLAN
M6.I	"3M" DUCT WRAP INSTALLATION GUIDELINE
M6.2	MECHANICAL DETAILS

OWNER

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TAMP



SHEET LEGEND:

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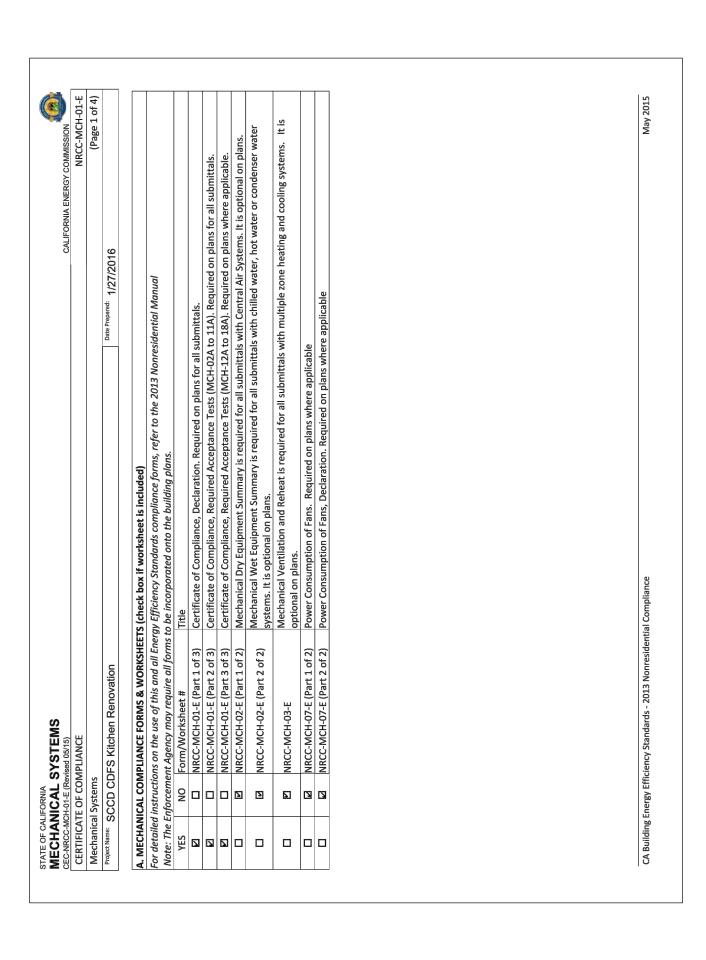
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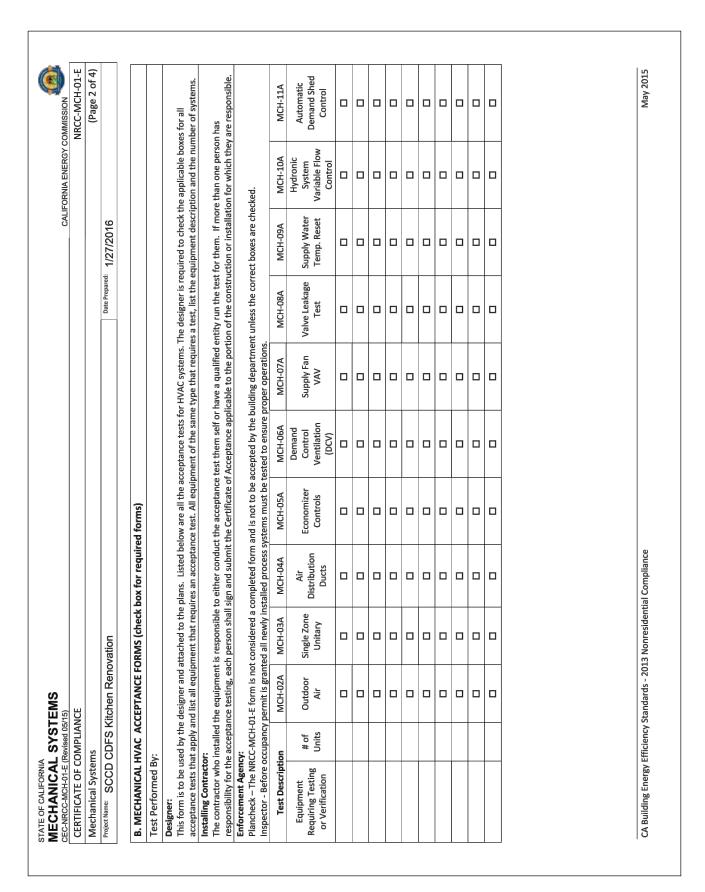
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SCALE:
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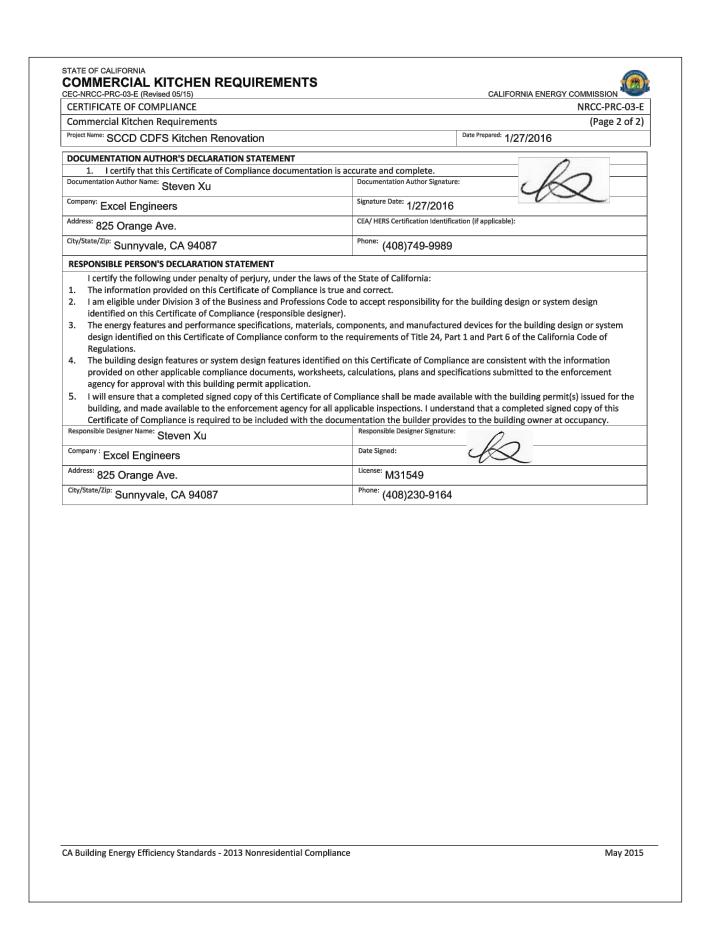
MECHANICAL SYMBOL, NOTES, LEGEND AND SCHEDULE

MO





COMMERCIAL KITCHEN REQ CEC-NRCC-PRC-03-E (Revised 07/15)	O.I. (C.IVICIA I O				CALIFORNIA ENERGY	COMMISSION W		
CERTIFICATE OF COMPLIANCE						NRCC-PRC-03-		
Commercial Kitchen Requirements	-4!			Date Pro	epared: 1/27/2016	(Page 1 of 2		
Project Name: SCCD CDFS Kitchen Renova	ation			Date Fit	1/27/2016			
VENTILATION COMPLIANCE METHOD:						2		
Small Kitchens (≤5,000 CFM Type I and II	Hood Exhaust) check	k one			140.9(b)2 A i	140.9(b)2Aii		
Large Kitchens (>5,000 CFM Type I and II check one	Hood Exhaust)	140.	9(b)2Bi	140.9(b)2Bii(a), (b), (c) and (d)	140.9(b)2Biii	140.9(b)2Biv		
KITCHEN ROOM NUMBER <sup>1</sup>	-			Exis	sting Kitchen			
TOTAL INSTALLED TYPE I and II KITCHEN	HOOD EXHAUST (CF	M) <sup>2</sup> :			1,250			
TOTAL BYPASS HOOD MUA (CFM)3:					1,250			
TOTAL TRANSFER AIR AIRFLOW (CFM)4:					0			
TOTAL MECHANICALLY HEATED OR COO	LED MAKE UP AIR (CF	-M) <sup>5</sup> :			0			
TOTAL AIR NEEDED FOR HEATING OR CO	OLING (CFM) <sup>6</sup> :				0			
TOTAL EXHAUST AIR WITH DEMAND VEN	NTILATION SYSTEMS <sup>7</sup>	:			0			
Equipment Tags and System Description <sup>8</sup>			EF-1	M	AU-1			
PRESCRIPTIVE MEASURES	T-24 Sections	T-24 Sections Reference to the Requirements in the						
Bypass Hood Exhaust and MUA	140.9(b)1A		MO	M0				
Type I/II Hood Exhaust	140.9(b)1B, Table 140.9-A		МО		МО			
Mechanically heated or cooled make up air	140.9(b)2A		МО		мо			
Replacement Air/Transfer Air Exhaust	140.9(b)2Bi		MO		МО			
Demand Ventilation Systems	140.9(b)2Bii		MO		МО			
Energy Recovery Systems	140.9(b)2Biii		MO		МО			
Tempered/Non Mechanical Cooling Air	140.9(b)2Biv		МО		МО			
Systems Notes:	No.			1				
Fill in one form for each kitchen in the	project							
2. Enter the total installed type I and II ki		airflov	v in cubic	feet per minute (cf	m).			
3. Enter the make-up air to bypass hood	s (cfm).							
<ul><li>4. Enter the total transfer air (cfm).</li><li>5. Enter the total mechanically cooled or</li></ul>	booted make up air	(afm)						
Enter the total mechanically cooled or     Enter the maximum air needed for her								
7 Enter the design airflow (cfm) of exhau		-		ontrols				
8. Provide equipment tags (e.g., AHU 1 8					these requirement	s. Equipment		
that is similar in requirements and comp					*!	and sale		
<ol> <li>Provide references to plans (i.e. Drawi paragraphs) where each requirement is exceptions used to avoid a requirement.</li> </ol>	specified. Enter "N/A							
enceptions used to avoid a requirement.								



SY COMMISSION	NRCC-MCH-01-E	(Page 3 of 4)			boxes for all number of systems.	erson has they are responsible.		MCH-18A	ECMS	_	_		_					
CALIFORNIA ENERGY COMMISSION			1/27/2016		to check the applicable lent description and the	em. If more than one pe or installation for which	res are checked.	MCH-17A	Condenser Water Reset Controls	0	_	_						
		·	Date Prepared: 1/27		Designer: This form is to be used by the designer and attached to the plans. Listed below are all the acceptance tests for HVAC systems. The designer is required to check the applicable boxes for all acceptance tests that apply and list all equipment that requires an acceptance test. All equipment of the same type that requires a test, list the equipment description and the number of systems.	Installing Contractor:  The contractor who installed the equipment is responsible to either conduct the acceptance test them self or have a qualified entity run the test for them. If more than one person has responsibility for the acceptance testing, each person shall sign and submit the Certificate of Acceptance applicable to the portion of the construction or installation for which they are responsible. The following tests conting a	Enforcement Agency: Enforcement Agency: Enforcement Agency: Inspector - Berow CONCHACH-01-E form is not considered a completed form and is not to be accepted by the building department unless the correct boxes are checked. Inspector - Before occupancy permit is granted all newly installed process systems must be tested to ensure proper operations.	MCH-16A	Supply Air Temperature Reset Controls	_	_			_				
					tests for HVAC systems.	self or have a qualified ce applicable to the port	y the building departme	MCH-15A	Thermal Energy Storage (TES) Systems	0				_				
				orms)	v are all the acceptance test. All equipment of th	ne acceptance test them Certificate of Acceptan	d is not to be accepted b	MCH-14A	Distributed Energy Storage DX AC Systems	_	_							
				(check box tor required torms)	o the plans. Listed belov requires an acceptance	sible to either conduct the	idered a completed form and is not to be accepted by the building departmen newly installed process systems must be tested to ensure proper operations.	MCH-13A	Automatic Fault Detection & Diagnostics for Air & Zone	_	_			_				
EMS	ICE		Project Name: SCCD CDFS Kitchen Renovation	EPTANCE FORMS (ch	designer and attached to	the equipment is respont ace testing, each person	Enforcement Agency: Plancheck — The NRCC-MCH-01-E form is not consider Inspector - Before occupancy permit is granted all new	MCH-12A	Fault Detection & Diagnostics for DX Units	0	0			_	0	0		
SYSTEMS Revised 05/15)	OMPLIAN	ns	CDFS Ki	IVAC ACC	sed by the	installed t e acceptan	ccupancy I	on O	# of units									
MECHANICAL SYSTE CEC-NRCC-MCH-01-E (Revised 05/15)	CERTIFICATE OF COMPLIANCE	Mechanical Systems	Project Name: SCCD (	C. MECHANICAL HVAC ACCEPTANCE FORMS Test Performed Bv:	Designer: This form is to be used by the designer and attach acceptance tests that apply and list all equipment	Installing Contractor: The contractor who installed responsibility for the accepta	Enforcement Agency: Plancheck – The NRCC Inspector - Before occ	Test Description	Equipment Requiring Testing or Verification									

STATE OF CALIFORNIA  MECHANICAL SYSTE  CEC-NRCC-MCH-01-E (Revised 05/15)	SYSTEMS wised 05/15)		CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE	MPLIANCE		NRCC-MCH-01-E
	N		(Page 4 of 4)
Project Name: SCCD C	SCCD CDFS Kitchen Renovation		Date Prepared: 1/27/2016
DOCUMENTATION AU	DOCUMENTATION AUTHOR'S DECLARATION STATEMENT		0
<ol> <li>I certify that this (</li> </ol>	I certify that this Certificate of Compliance documentation is accurate and complete.	,	
Documentation Author Name:	ne: Steven Xu	Documentation Author Signature:	gnature:
Company:	Excel Engineers	Signature Date: 1/27/2016	2016
Address:	825 Orange Ave.	CEA/ HERS Certification Ic	CEA/ HERS Certification Identification (if applicable):
City/State/Zip:	Sunnyvale, CA 94087	Phone: (408)749-9989	6866
RESPONSIBLE PERSON	RESPONSIBLE PERSON'S DECLARATION STATEMENT		
I certify the following  1. The information 2. I am eligible unde	l certify the following under penalty of perjury, under the laws of the State of California:  1. The information provided on this Certificate of Compliance is true and correct. 2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible	for the building design	or system design identified on this Certificate of Compliance (responsible
designer). 3. The energy featu	designer). The energy features and performance specifications, materials, components, and manufact	tured devices for the b	specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance
conform to the re 4. The building desi	conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations. The building design features or system design features identified on this Certificate of Complian	ions. pliance are consistent	conform to the requirements of Trile 24, Part 1 and Part 6 of the California Code of Regulations. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents,
worksheets, calculations, plar 5. I will ensure that a completed agency for all applicable inspe	worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included building appropriate.	r approval with this bu wailable with the build tificate of Compliance	worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.  I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building away as a company.
Responsible Designer Name:	: Steven Xu	Responsible Designer Signature:	nature:
Company:	Excel Engineers	Date Signed:	
Address:	825 Orange Ave.	License:	M31549
City/State/Zip:	Sunnyvale, CA 94087	Phone:	(408)230-9164
CA Building Energy Eff	CA Building Energy Efficiency Standards - 2013 Nonresidential Compliance		May 2015

OWNER:

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PROJECT:

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BUILDING 200 KITCHEN RENOVATION

CONSULTANT TEAM:

**EXCEL ENGINEERS** 

825 ORANGE AVE. SUNNYVALE, CA 94087 Telephone: 408 - 230-9164 Fax: 408 - 749-9989

NO.31549
EXP.
12/31/16 \*

SHEET LEGEND:

KEY PLAN:

ISSUE/REVISION:
NO: DATE: DESCRIPTION:

SCALE:
DATE:
PROJECT NO:
PERMIT APPLICATION NO.:

MECHANICAL TITLE 24

MO.1

### **GENERAL NOTES:**

- I. (E) HOOD EXHAUST FAN AND DUCT ARE SHOWN FOR REFERENCE ONLY FIELD VERIFY LOCATION AND DIMENSION PRIOR TO CONSTRUCTION
- 2. (N) GREASE EXH. DUCT SHALL BE CONSTRUCTED OF MIN. 18GA STAINLESS STEEL
- 3. AT THE TIME OF ROUGH INSTALLATION, OR DURING STORAGE ON THE CONSTRUCTION SITE UNTIL FINAL STARTUP, THE EQUIPMENT, ALL DUCT AND OTHER RELATED AIR DISTRIBUTION COMPONENT OPENINGS SHALL BE COVERED WITH TAPE, PLASTIC OR SHEET METAL TO REDUCE THE AMOUNT OF DUST OR DEBRIS WHICH MAY COLLECT IN THE SYSTEM.

4. (E) HVAC SUPPLY AND RETURN DUCT/DIFFUSERS SERVING THE KITCHEN SHALL REMAIN

(N) MAKEUP AIR UNIT MAU-I AND -14X12 SA FROM MAKEUP AIR UNIT FRESH AIR INTAKE HOOD ON ROOF (210 LBS) MAU-I ON ROOF W/ FLEX CONNECTOR MIN. 10'-0" AWAY FROM (E) HOOD EXH FAN VERIFY IN FIELD 16"Φ CD-625 CFM ABANDON (E) ROOF SUPPLY FAN IN PLACE DISCONNECT POWER/INTERLOCK CD-I 625 CFM (E) HOOD EXHAUST FAN EF-I -AND EXHAUST DUCT ON ROOF (N) 12" P GREASE EXH DUCT CONNECT TO (E) DUCT UNDERNEATH THE ROOF/PLATFORM OF THE FAN

> -(N) |2"Φ GREASE EXH DUCT FROM (E) HOOD TO (E) EXHAUST FAN ON ROOF INSTALL "3M" DUCT WRAP FROM CEILING OPENING TO MIN. 18" BEYOND THE ROOF SEE DETAIL 2/M62

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STAMP



KEY PLAN:

ISSUE/REVISION:

NO: DATE: DESCRIPTION:

SCALE: |/2" = |'-O"

DATE:

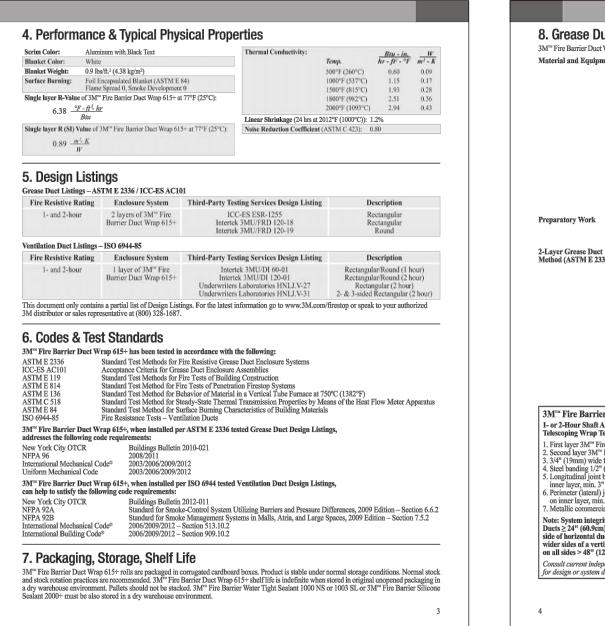
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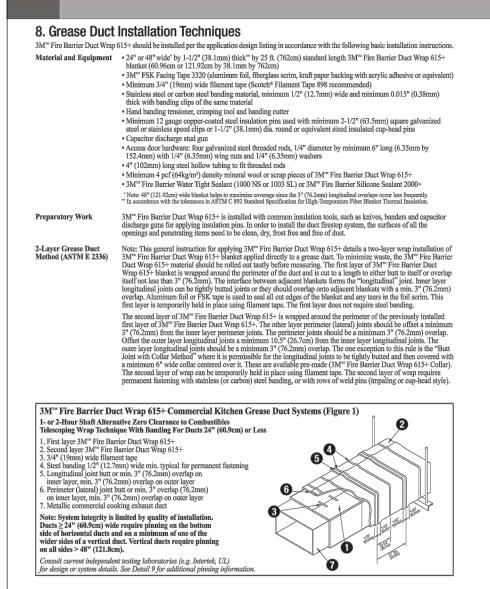
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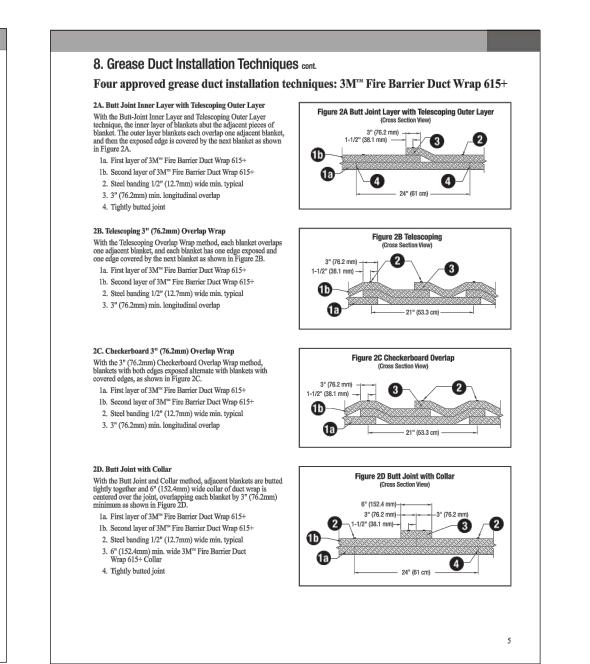
MECHANICAL FLOOR PLAN

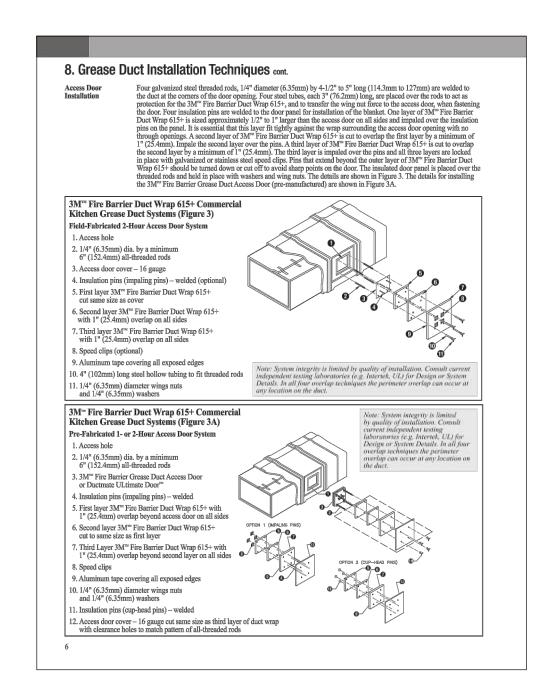


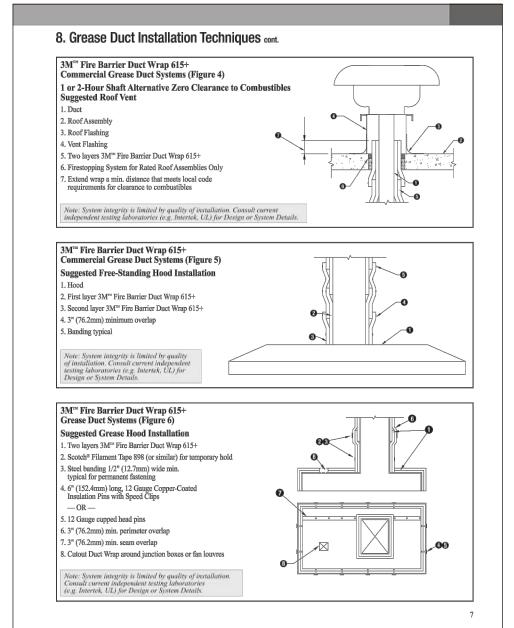


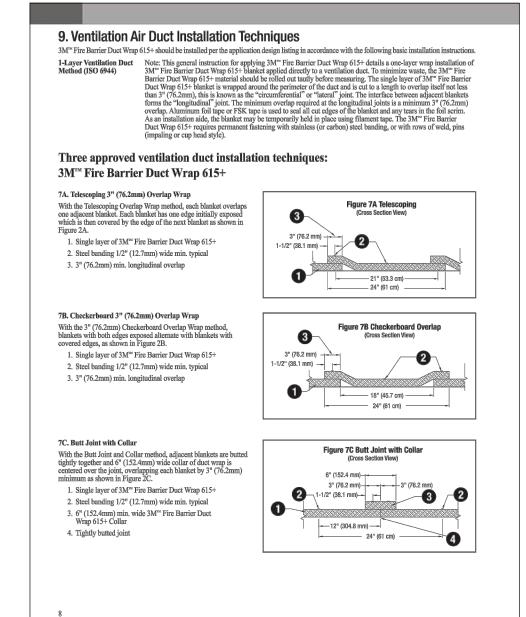


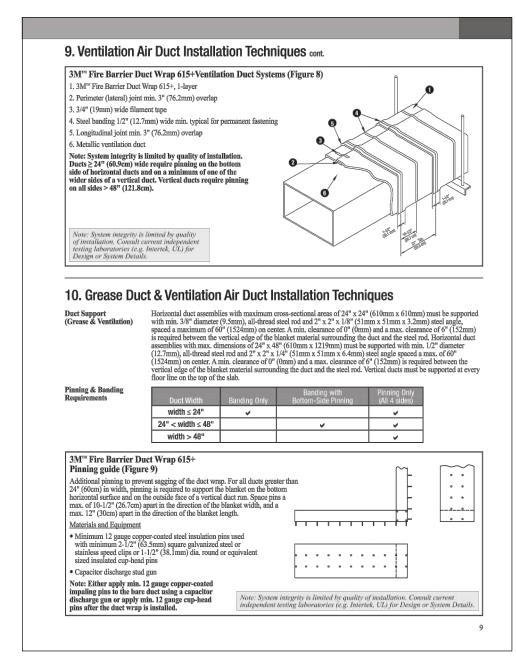


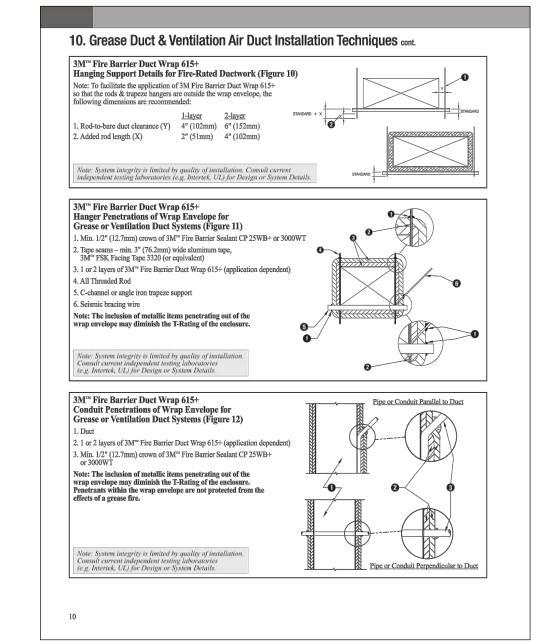


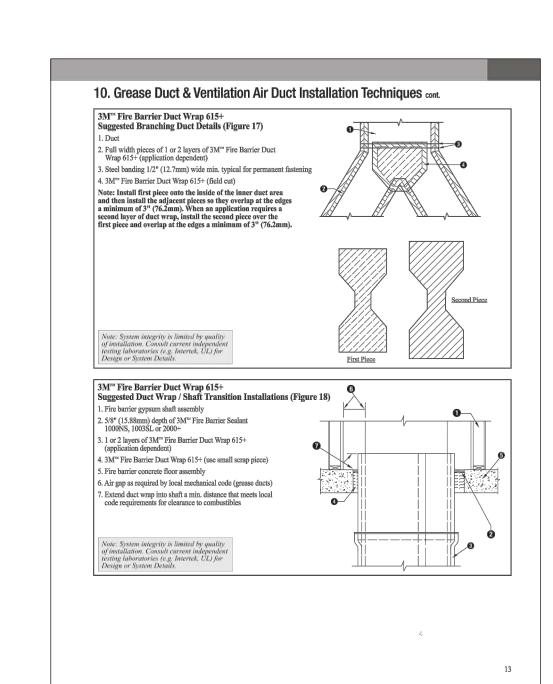


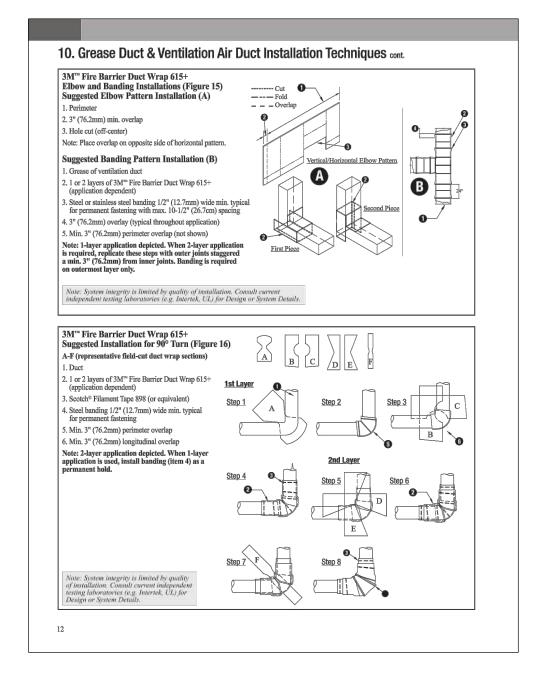


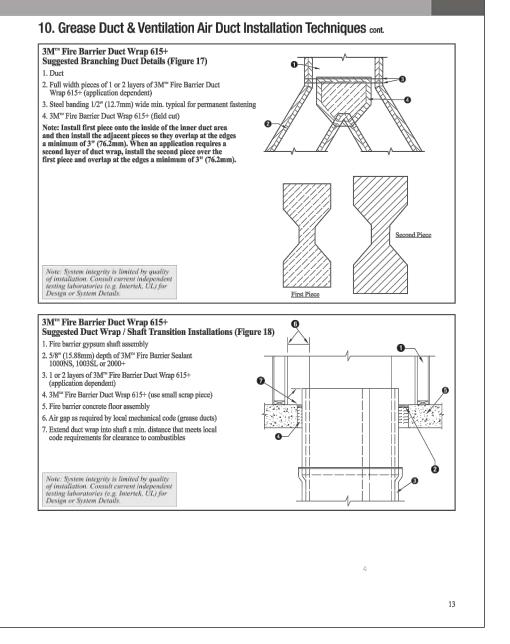


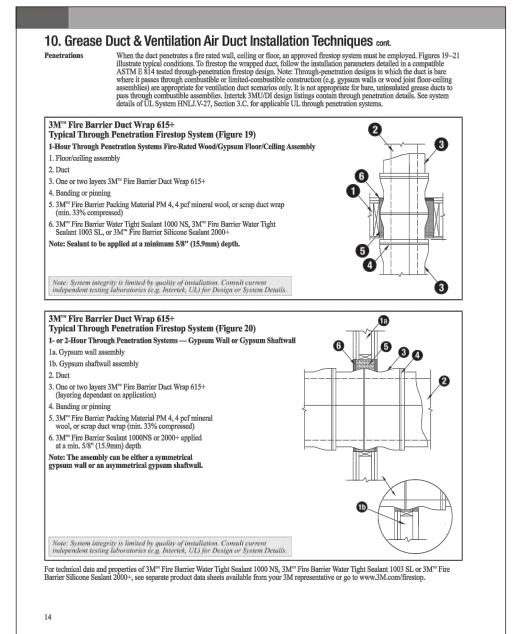


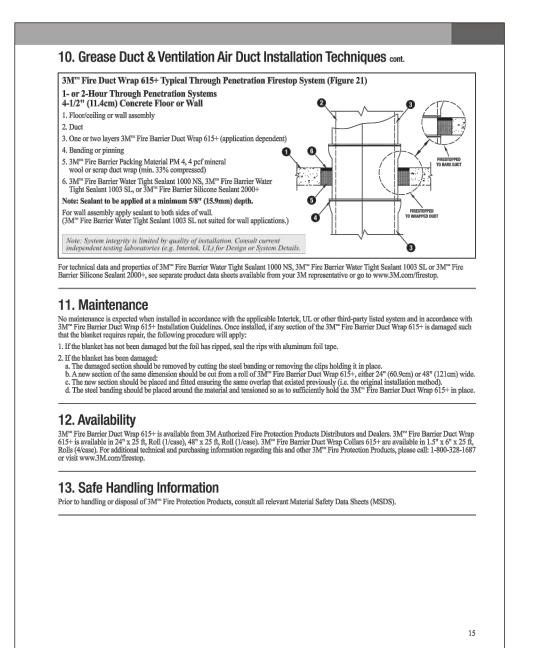












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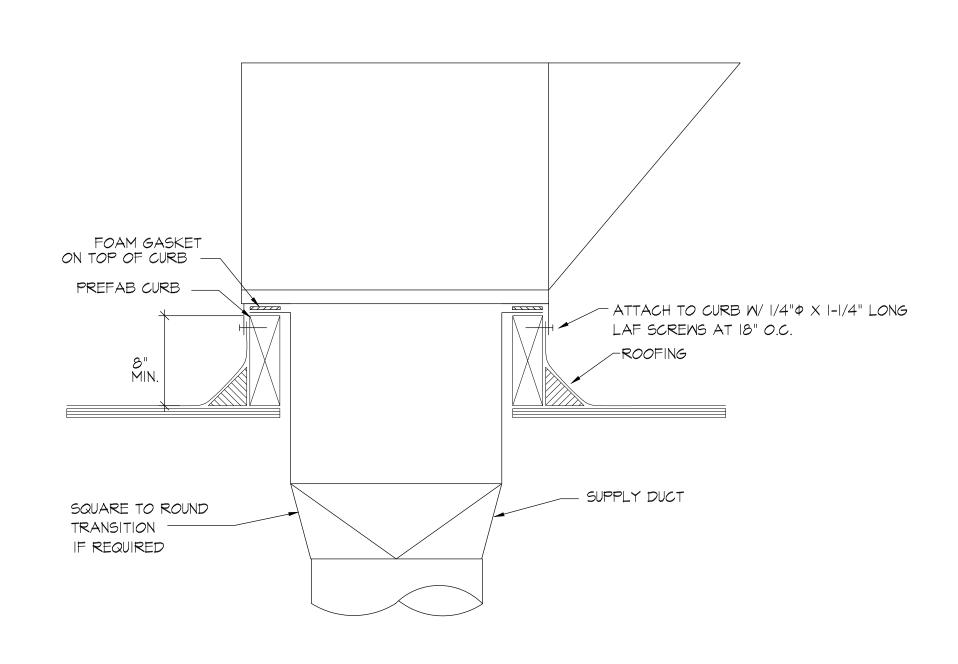


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	/REVISION:		
NO:	DATE:	DESCRIPTION:	
KEY	PLAN:		

SCALE:	
DATE:	
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"3M" DUCT WRAP INSTALLATION DETAIL

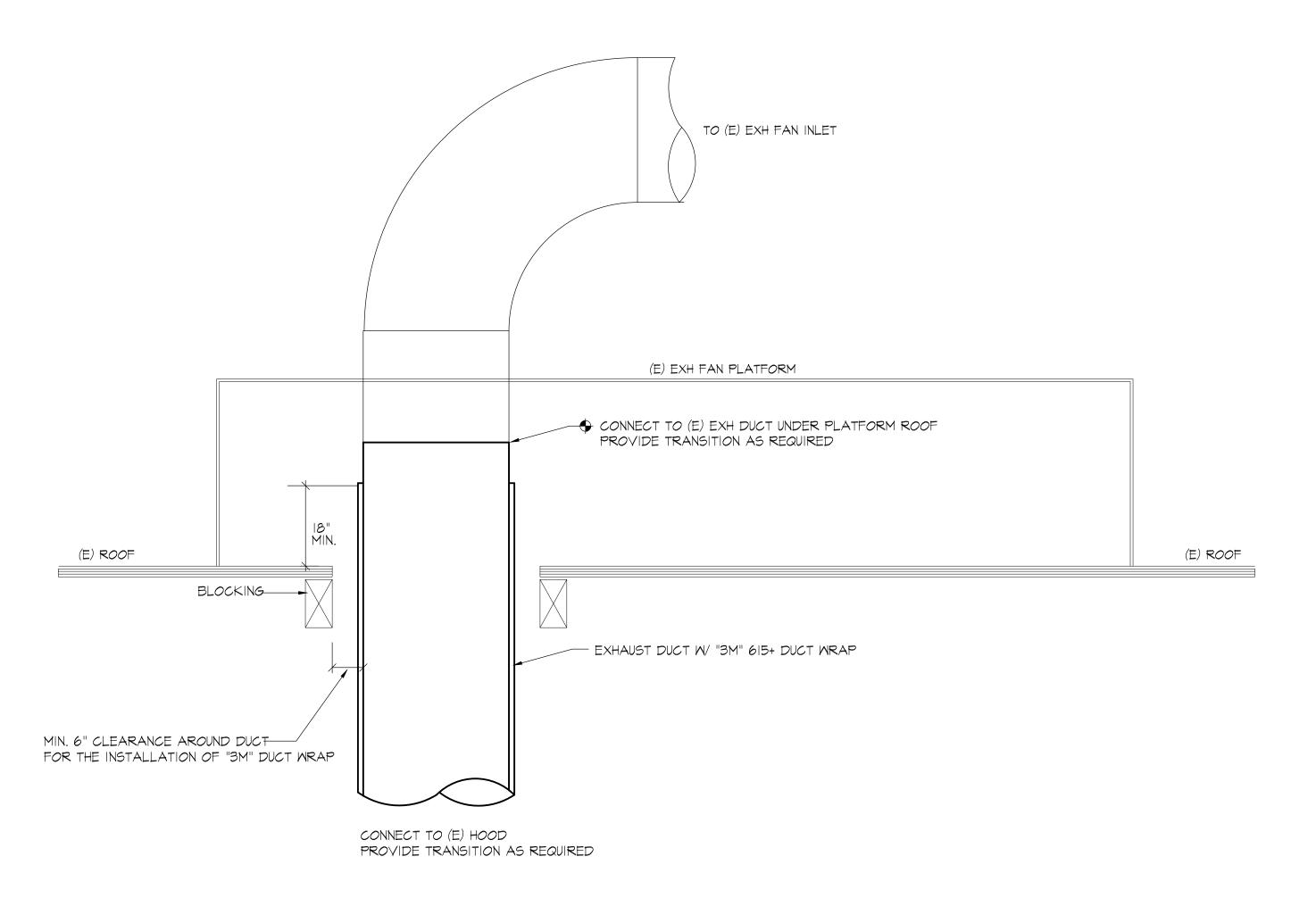
M6.1





# MAKEUP AIR UNIT INSTALLATION DETAIL

SCALE: NONE



# (N) GREASE EXH DUCT INSTALLATION DETAIL

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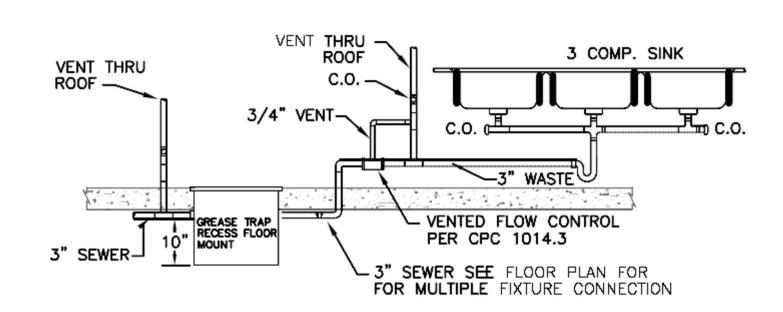
PROJECT NO: PERMIT APPLICATION NO.:

MECHANICAL DETAILS

M6.2

PL	UMBING SYMBO	LS AND AB	BREVIATIONS
AFF	ABOVE FINISH FLOOR		
BFP	BACKFLOW PREVENTER ASSEMBLY	——————————————————————————————————————	GAS
COTG	CLEAN OUT TO GRADE		VENT PIPING
CM (E)	COLD WATER		COLD WATER LINE
. ,	EXISTING		HOT WATER LINE
EMH	ELECTRIC WATER HEATER		SANITARY SEWER
FU	FIXTURE UNIT		
FCO FD	FLOOR CLEANOUT FLOOR DRAIN	(I)———	CLEAN OUT TO GRADE
FS	FLOOR SINK	C	PIPE DOWN
G	<i>G</i> AS	<u> </u>	PIPE UP
GWH GT	GAS WATER HEATER GREASE TRAP		PIPE DROP
HM KS	HOT WATER KITCHEN SINK		GATE VALVE
LAV	LAVATORY		
MV	MIXING VALVE		TEMPERATURE & PRESSURE RELIEF VALVE
(N)	NEW	<b>—</b>	FLOOR DRAIN
POC	POINT OF CONNECTION	M	WATER METER
SA	SHOCK ARRESTOR		
SK	SINK	<del></del>	SHUT-OFF VALVE IN "CHRISTY"
50V	SHUT-OFF VALVE		CONCRETE BOX.
55 	SANITARY SEWER	——————————————————————————————————————	EWH - ELECTRIC WATER HEATER
TP (TYP)	TRAP PRIMER TYPICAL		LAIT - ELECTRIC MATER HEATER
UR	URINAL		(E) WORK TO BE REMOVED
V(T)R	VENT (THRU) ROOF		PLUG OR CAP
M	SANITARY WASTE	———————————————————————————————————————	WALL CLEANOUT
MC	WATER CLOSET	1.	
MCO	WALL CLEAN OUT	<b>—</b>	POINT OF CONNECTION (POC)

	DRAWING INDEX								
PO	PLUMBING NOTES, SYMBOL, LEGEND AND SCHEDULE								
P2.IA	PLUMBING FLOOR PLAN - SEWER AND VENT								
P2.IB	FLOOR PLAN - COLD AND HOT WATER								





	FIXTURE AND EQUIPMENT SCHEDULE									
MARK	FIXTURE / EQUIPMENT	MODEL NO.	CM	HM	М	VENT	TRIM / ACCDESSORIES	REMARKS		
SK-I	POT SINK	SEE ARCH PLAN	1/2"	1/2"	3"	2"				
5K-2	HAND SINK	SEE ARCH PLAN	1/2"	1/2"	2"	I-I/2"				
FD	FLOOR DRAIN	"J.R. SMITH" 2010 AD			3"	2"	6" DIA. POLISHED NICKLE BRONZE STRAINER TRAP PRIMER CONNECTION			
TP	TRAP PRIMER	"J.R. SMITH" 2699	1/2"				1/2" COPPER FITTINGS			
FS	FLOOR SINK	"J.R. SMITH" 3140Y			2"	I-I/2"	I/2" GRATE			
GT	GREASE TRAP	"ZURN" GT2700-35			3"	2"	PROVIDED W/ FLOW CONTROL AND EXTENTION AS REQUIRED			
DM	DISH WASHER	SEE ARCH PLAN	-	3/4"	2"					

### GENERAL NOTES

- I. ALL NEW CONSTRUCTION SHALL CONFORM TO APPLICABLE CODES, STANDARDS AND REQUIREMENTS.
- 2. THE CONTRACTOR, PRIOR TO BIDDING, SHALL VISIT THE JOB SITE TO BECOME ACQUAINTED WITH THE EXISTING INSTALLATION AND SYSTEMS RELATED TO HIS WORK, AND SHALL INCLUDE IN THE BID PROPOSAL ALL LABOR AND MATERIALS REQUIRED FOR THE INSTALLATION TO BE COMPLETE AND OPERATIVE.
- 3. EXTREME CAUTION SHALL BE USED IN LOCATING (E) UNDERGROUND UTILITIES ANY UTILITIE AND EQUIPMENT DAMAGED BY CONTRACTOR DURING CONSTRUCTION, SHALL BE IMMEDIATELY REPAIRED BY THE CONTRACTOR TO ORIGINAL OR BETTER CONDITION AT NO INCREASE TO CONTRACT AMOUNT.
- 4. THE CONTRACTOR SHALL COORDINATE PIPE ROUTING AND DROPS WITH OTHER TRADES PRIOR TO START OF WORK.
- 5. ELECTRONICALLY LOCATE (E) UNDERGROUND LINES PRIOR TO START OF WORK AND "POTHOLE" TO DISCOVER AND VERIFY EXACT LOCATIONS PRIOR TO TRENCHING.
- 6. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE ENGINEER UPON DISCOVERY OF ANY FIELD CONFLICTS.
- 7. PIPES SHALL BE SUPPORTED AND BRACED PER SMACNA GUIDELINES FOR SEISMIC RESTRAINTS OF PLUMBING SYSTEM.
- 8. CONTRACTOR SHALL COORDINATE WITH ALL OTHER TRADES PRIOR TO INSTALLATION OF PIPING IN CEILING SPACE FOR POSSIBLE INTERFERENCE WITH DUCTWORK, LIGHTING FIXTURES, CONDUITS CABLE TRAYS ETC.
- 9. DRAWINGS ARE DIAGRAMMATIC AND EXISTING CONDITIONS SHALL BE FIELD VERIFIED FOR EXACT LOCATION, SIZES AND INVERT ELEVATION OF EXISTING UTILITIES, THE PROPOSED POINT OF CONNECTIONS TO EXISTING SYSTEMS AND NEW ROUTINGS.
- 10. PROVIDE PERMANENT IDENTIFICATION SIGN ON THE LID OF ALL ABANDONED SHUT-OFF VALVE CONCRETE BOXES. PROVIDE PERMANENT IDENTIFICATION SIGN ("GAS" OR "WATER") ON THE LID OF ALL NEW INSTALLED SHUT-OFF VALVE CONCRETE BOXES.
- II. PLUMBING SYSTEM SHALL BE INSTALLED IN A MANNER CONFORMING TO 2013 CPC CODE AND THE MANUFACTURER'S RECOMMENDATIONS.
- 12. PLUMBING PIPE MATERIAL SHALL FOLLOW CPC 2013 AND FOLLOWNG UNLESS OTHERWISE NOTED:

COLD/HOT WATER PIPE ABOVE GRADE - TYPE L COPPER, 95/5 SOLDERED SEMER/VENT PIPE BELOW OR ABOVE GRADE - HUBLESS CAST IRON W/ SLEEVE-CLAMPED JOINTS GAS PIPE ABOVE GRADE - SCHEDULE 40 BLACK STEEL W/ THREADED FITTING, OR GALVANIZED WHERE EXPOSED TO WEATHER.

13. PRESSURE TEST PLUMBING SYSTEM AS FOLLOWING: WATER PIPE - 150 PSI W/ WATER, 4 HOURS DRAINAGE AND VENT PIPE - 10 FT. WATER, 4 HOURS GAS PIPE - 10 PSI W/ AIR, 24 HOURS

SOLANO COMMUNITY COLLEGE DISTRICT 4000 Suisun Valley Road Fairfield, CA 94534

ARCHITECT:

CA ARCHITECTS 475 Gate Five Road, Suite 107 Sausalito, CA 94965 T 415.331.7655 F 415.331.7656

PROJECT:

BUILDING 200 KITCHEN RENOVATION

CONSULTANT TEAM:

**EXCEL ENGINEERS** 

825 ORANGE AVE. SUNNYVALE, CA 94087 Telephone: 408 - 230-9164 Fax: 408 - 749-9989



ISSUE/REVISION:

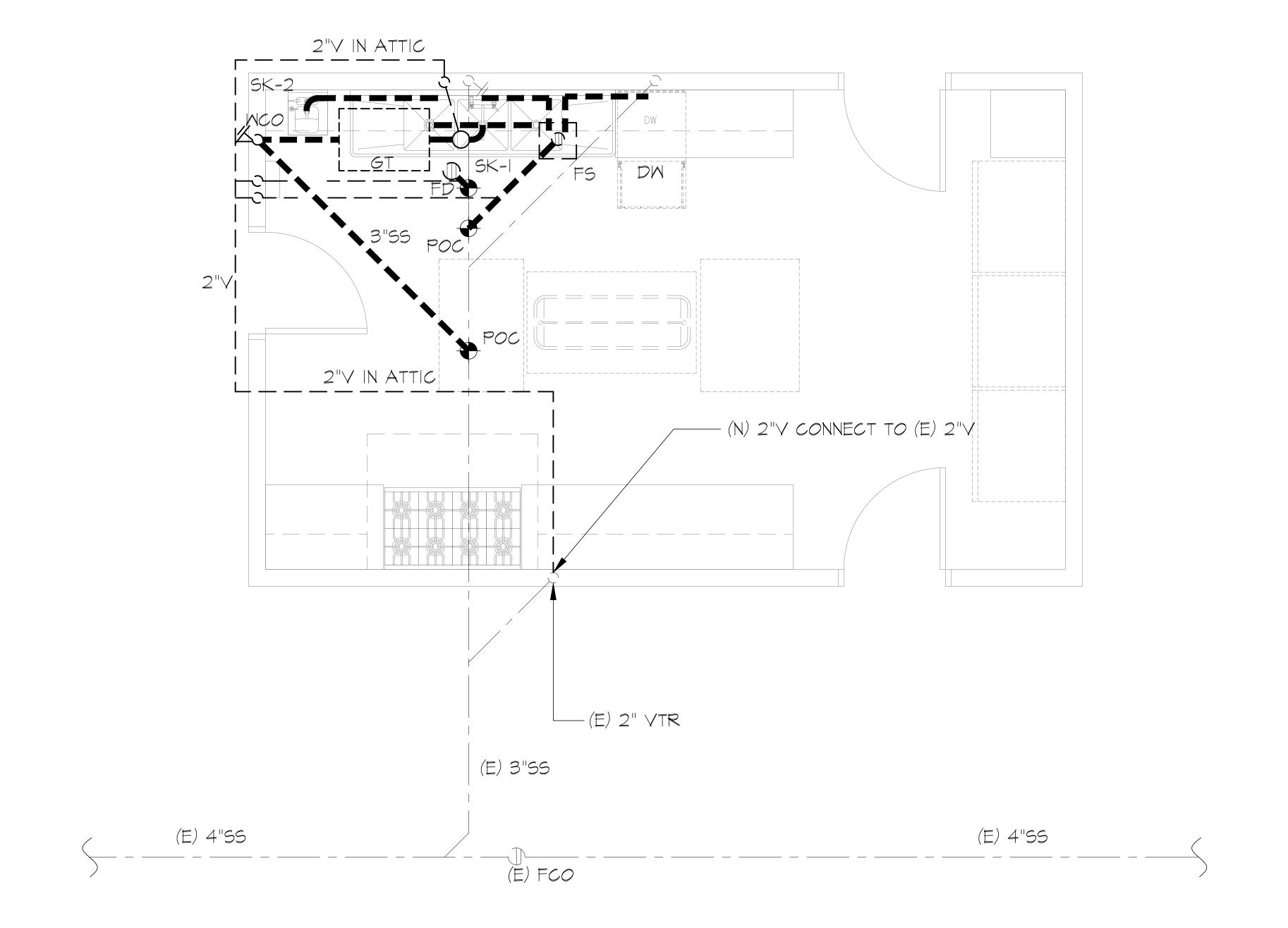
KEY PLAN:

NO: DATE: DESCRIPTION:

SCALE:
DATE:
PROJECT NO:
PERMIT APPLICATION NO

PLUMBING SYMBOL, NOTES, LEGEND AND SCHEDULE

PO



1WO

SOLANO COMMUNITY COLLEGE DISTRICT 4000 Suisun Valley Road Fairfield, CA 94534

CA ARCHITECTS
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PROJECT:

BUILDING 200 Kitchen Renovation

CONSULTANT TEAM:

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SHEET LEGEND

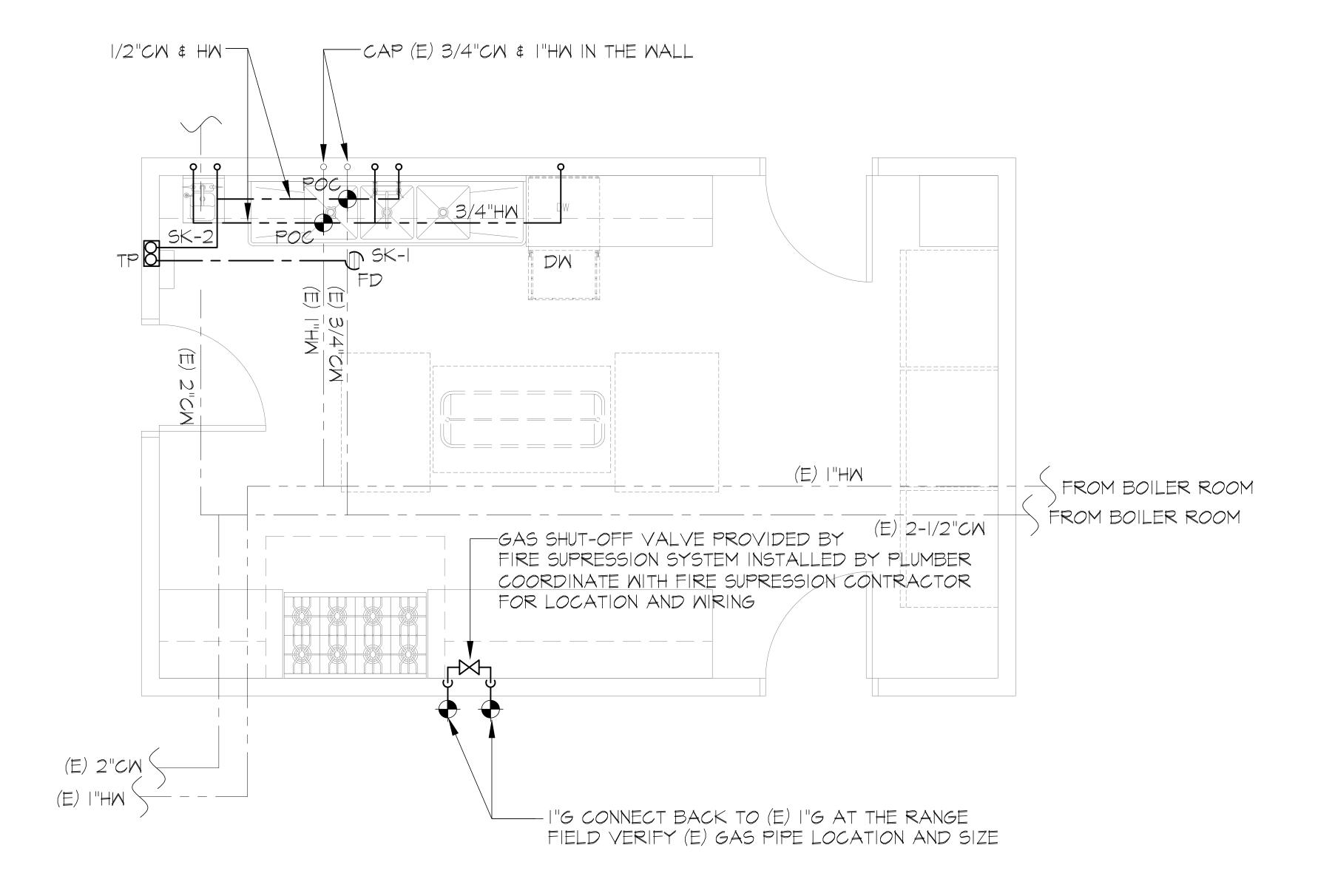
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110.	D/(IL.	DESCRIPTION.	

SCALE:	/2" =  '-0"
DATE:	
PROJECT N	IO:
PERMIT APP	PLICATION NO.:

PLUMBING FLOOR PLAN – SEWER & VENT

**P2.1A** 



OWNER

SOLANO COMMUNITY COLLEGE DISTRICT 4000 Suisun Valley Road Fairfield, CA 94534

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475 Gate Five Road, Suite 107
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PROJECT:

BUILDING 200 KITCHEN RENOVATION

CONSULTANT TEAM:

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ISSUE/REVISION:

NO: DATE: DESCRIPTION:

KEY PLAN:

SCALE: |/2" = |'-0"

DATE:

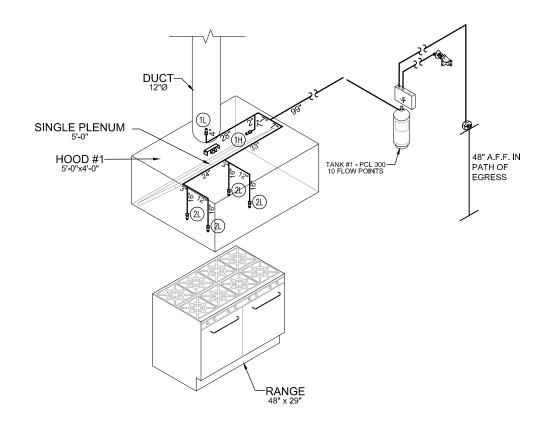
PROJECT NO:

PERMIT APPLICATION NO.:

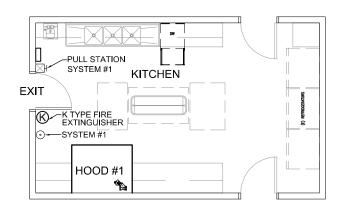
PLUMBING FLOOR PLAN — COLD AND HOT WATER

**P2.1B** 

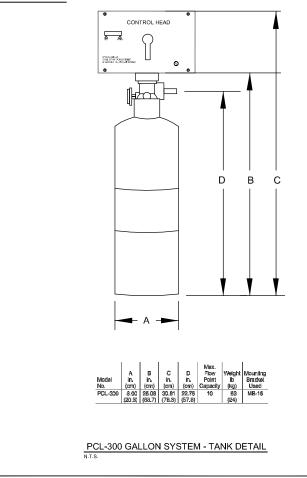
#### HOOD PLAN: SCALE: 1/4" = 1'-0'



#### FLOOR PLAN: SCALE: 1/8" = 1'-0"



#### **DETAILS:**



#### SCOPE OF WORK:

3.0 GALLON, PYROCHEM KITCHEN KNIGHT II SYSTEM TO BE INSTALLED AS PER MANUFACTURER'S SPECIFICATIONS FOR NEW HOODS AND APPLIANCES PROTECTION.

- NFPA 72 2010,
- NFPA 17A 2013,

- MANUFACTURER'S REQUIREMENTS.
  REMOTE PULL STATION IS MOUNTED NO HIGHER THAN 48" FROM FINISHED FROM THE HOOD AND NOT FURTHER THAN 20 FT. FROM THE HOOD.
- SYSTEM SHALL BE INTERCONNECTED TO THE FUEL OR CURRENT SUPPLY. SO THAT THE FUEL OR CURRENT IS AUTOMATICALLY SHUT OFF TO ALL
- A K-CLASS RATED FIRE EXTINGUISHER ACCESSIBLE WITHIN A 30' UNOBSTRUCTED FROM COOKING EQUIPMENT AND AT PATH OF EGRESS IS REQUIRED, EXTINGUISHER SHALL BE INSTALLED WITHIN 30 FT. OF COMMERCIAL FOOD HEAT-PROCESSING EQUIPMENT.
- COMPLETION AND PRIOR TO SYSTEM BEING PUT INTO SERVICE. TEST TO INCLUDE OPERATION OF REMOTE PULL STATION, LAST FUSIBLE LINK ON
- MAINTAIN AND SERVICE THE SYSTEM AS PRESCRIBED BY LOCAL AND STATE

- CONTROL HEAD INDICATES SYSTEM AS BEING "SET" OR "DISCHARGED". THE EXISTING SYSTEM SHALL BE CONNECTED TO THE FIRE ALARM SYSTEM.
- IF PROVIDED, IN ACCORDANCE WITH THE REQUIREMENTS OF NFPA 72, SO THAT THE ACTUATION OF THE EXTINGUISHING SYSTEM WILL SOUND THE FIRE ALARM AS WELL AS PROVIDE THE FUNCTION OF THE EXTINGUISHING SYSTEM.

#### **GENERAL NOTES:**

- INSTALLATION TO BE PER: STANDARD UL 300,

- CALIFORNIA FIRE CODE (CFC) 2013,
- FLOOR SURFACE AND ON WAY TO EGRESS. PULL STATION CLEARLY STATES USE ON COVER PLATE, THE PULL SHALL BE LOCATED NO CLOSER THAN 10F PER NFPA AND UNIFORM FIRE CODE, AUTOMATIC FIRE EXTINGUISHING
- EQUIPMENT UNDER THE HOOD WHEN THE SYSTEM IS ACTIVATED.
- SYSTEM TO BE TESTED-FIRED AND WITNESSED BY FIRE AUTHORITIES UPON
- DETECTION LINE AND FUEL SHUT-OFF DEVICE. IT WILL BE THE SOLE RESPONSIBILITY OF THE RESTAURANT OWNER TO
- ALL SUPPLY AIR SHALL BE SHUT DOWN UPON ACTIVATION OF SYSTEM. ALL
- EXHAUST IN THE VENTILATING SYSTEM WILL REMAIN ON. ALL ELECTRICITY UNDER PERIMETER OF HOOD WILL SHUT DOWN WHEN FIRE SUPPRESSION SYSTEM IS ACTUATED WITH MICROSWITCH.
- ALL PIPING TO BE 3/8" SCH.-40 BLACK, CHROME PLATED OR STAINLESS STEEL. FITTINGS SHALL BE RATED 150 LB.

SNAL GRATION, I

Windp rado H (916) (916)

C-10, C-16 LICENSE NO. 758792 02/28/2017

758792 02/28/2017 OF CALIFORNIA

Andy Sheehy

ER: DS

Y: NM

#### COMPONENT LIST:

	ITEM	PART NUMBER	QTY	SYMBOL
1.)	RPS-M PULL STATION	551074	1	$\Delta \Theta$
2.)	FL-450 FUSIBLE LINK KIT	550367	1	
3.)	GAS SHUT-OFF VALVE	551049	1	•
4.)	PCL-300 STORAGE CYLINDER	551194	1	$\odot$
5.)	MCH3 MECHANICAL CONTROL HEAD	551200	1	P
6.)	16 GRAM CO2 CARTRIDGE	551059	1	
	FOUR SWITCH KIT	551157	1	
	ALARM INITIATING SWITCH	550077	1	

TANK #1

### SUISUN VALLEY RD, Community 94534 College FAIRFIELD, CA Solano 4000

DATE SUBMITTED:	
01/28/201	6

00-000-00

**FS-01** 

#### PIPING CALCULATIONS

TANK SIZE	MAX. FLOW NUMBER	MAX. PIPE VOLUME (MLS)	MAX. VOLUME ALLOWED BETEWEEN FIRST NOZZLE LAST NOZZLE
PCL-300	10	1910	1125 PER SIDE

SYSTEM 1 - TANK #1-PCL-300 PIPE BETWEEN 1ST NOZZLE AND LAST NOZZLE: 3/8 in.: 17,16 FT × 37.5 MLS/FT = 643,75 MLS
TANK TO FIRST TEE 1/2 in: 8.25 FT X 59.8 = 493.35 MLS
TOTAL VOLUME: 462.5 + 493.35 = <u>1137.1 MLS</u>

PIPING FROM TANK TO FIRST TEE TO BE 1/2" SCH.-40 BLACK IRON. PIPING FROM FIRST TEE TO LAST NOZZLE TO BE 3/8" SCH.-40 BLACK IRON.

VOLUME CHART 1/4 IN. PIPE = 20.5 MLS/FT 3/8 IN. PIPE = 37.5 MLS/FT 1/2 IN. PIPE = 59.8 MLS/FT 3/4 IN. PIPE = 105.0 MLS/FT

#### **NOZZLE TABLE:**

						IAI	AV #T
HAZARD	NOZZLE	P/N	FLOW POINTS PER NOZZLE	MAX. HAZARD DIMENSIONS	NOZZLE HEIGHTS (IN)	QTY	TOTAL
DUCT	<b>1</b> L	551026	1	MAXIMUM DIAMETER 16 IN.	0 - 6	1	1
SINGLE PLENUM	1H	551029	1	LENGTH 10 FT	-	1	1
RANGE	2L	551027	2	LONGEST SIDE 28 IN. 784 SQ, IN.	34 - 48	4	8
				TOTAL FLOW POINT	rs		10
				MAX. FLOW POINTS	ALLOWED		10