



FACILITY PLANNING, DISTRICT  
CONSTRUCTION,  
AND SUPPORT SERVICES  
2323 NORTH BROADWAY, RM 112  
SANTA ANA, CA 92706

TEL: 714-480-7510

Rancho Santiago Community College District  
ATTACHMENT - A  
Division 01 RSCCD Specifications  
Division 14 Modernization of Elevator  
Specifications

Project Name: Bid #1405  
Building D Elevator Modernization  
at Santiago Canyon College

Project Manager: Peter Lee

March 17, 2021

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## SECTION 01 11 00 SUMMARY OF WORK

### PART 1 – GENERAL

#### 1.01 SUMMARY

- A. The Project consists of Elevator Modernization for Rancho Santiago Community College District, in compliance with the Contract Documents and Code requirements.
- A. The furnishing of all labor, materials, equipment, services, and incidentals necessary for Work of Building D Elevator Modernization at Santiago Canyon College, 8045 E. Chapman Avenue, Orange, California, 92869.

#### 1.02 RELATED DOCUMENTS

- A. Construction Services Agreement
- B. Drawings
- C. Specifications

#### 1.03 USE OF PREMISES

- A. Contractor shall sequence, coordinate, and perform the Work to impose minimum impact on the operation and use of the facilities and/or Project site. Contractor shall install all necessary protection for existing improvements, Project site, property, and new Work against dust, dirt, weather, damage, vandalism, and maintain and relocate all protection to accommodate progression of the Work.
- B. Contractor shall confine entrance and exiting to the Project site and/or facilities to routes designated by the District Representative.
- C. Contractor to coordinate with District Representative to obtain keys. Contractor will be required to sign a release form. Key requests need to be made three (3) days in advance. If Contractor loses a key or fails to return a key to the District, Contractor shall be fined \$1,000 for each key lost.
- D. Obtain and pay for the use of field offices, storage, work areas, or parking needed for operations or Contractor's employees. Obtain and pay for all public right of way fees associated with utility connections, street use permits and protective canopies over public right of ways.
- E. Within existing facilities, District Representative may remove portable equipment, furniture, and supplies from Work areas prior to the start of Work. Contractor shall cover and protect remaining items in areas of the Work.
- F. Provide and maintain unimpeded access for police, fire fighting, or rescue equipment.
- G. Contractor is advised school may be in session during performance of the Work. Contractor shall utilize all available means to prevent generation of unnecessary noise/vibrations and maintain noise/vibration levels to a minimum. When required by the District Representative, Contractor shall immediately discontinue noise-generating activities and/or provide alternative methods to minimize noise generation. Contractor shall install and maintain air compressors, tractors, cranes, hoists, vehicles, and other internal combustion engine equipment with mufflers, including unloading cycle of compressors. Contractor shall discontinue operation of equipment producing objectionable noise as determined by District Representative and/or District Representative. When applicable, District Representative will provide a testing schedule to indicate when work may not occur.
- H. Contractor shall furnish, install, and maintain adequate supports, shoring, and bracing to preserve structural integrity and prevent collapse of existing improvements and/or Work modified and/or altered as part of the Work.
- I. Contractor shall secure site, building entrances, exits, and Work areas with locking devices in an acceptable manner to District Representative.

ATTACHMENT - A

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- J. Contractor assumes custody and control of Owner property, both fixed and portable, remaining in existing facilities vacated during the Work.
- K. Contractor shall cover, maintain, and protect surfaces of rooms and spaces in existing facilities turned over for the Work, including Owner property remaining within as required to prevent soiling or damage from dust, dirt, water, and/or fumes. Contractor shall protect areas adjacent to the Work in a similar manner. Prior to Owner occupancy, Contractor shall clean all surfaces including Owner property.
- L. Contractor shall protect all surfaces, coverings, materials, and finished Work from damage. Mobile equipment shall be provided with pneumatic tires.
- M. The District reserves the right to place and install equipment in areas of the Project prior to Substantial Completion provided that it doesn't interfere with the completion of the Work. This partial occupancy shall not constitute acceptance of the Work by the District Representative.
- N. Contractor shall not permit the use of portable and/or fixed radio's or other types of sound producing devices including Walkman's, iPod's, and similar devices.

#### 1.04 EXISTING CONDITIONS

- A. Contractor shall document the existing site and produce still photographs or video recording on DVD, sufficiently detailed, of existing conditions of adjoining construction, roads, and site improvements that might be misconstrued as damage caused by construction operations.
- B. Contractor shall protect items indicated to remain against damage and soiling during construction.
- C. Contractor shall protect existing IT equipment indicated to remain by properly covering and ventilating the equipment. Coordinate procedures with District Representative and District ITS Department.
- D. Contractor shall sequence work in a manner that will prevent any damage upon new construction elements.
- E. Contractor shall replace any items damaged during construction.

#### 1.05 WORK NOT IN CONTRACT

- A. The term "NIC" shall be construed to mean that portions of the Project are not to be furnished, installed or performed by the Contractor. The term shall mean "Not in Contract" or Not a Part of the Work to be performed by the Contractor" except that coordination and installation of certain NIC items specified shall be the Contractor's responsibility. District will award separate contracts for products and installation for the following work and other work as may be indicated on Drawings as NIC (Not in Contract), including:
  - a. Performing tests and inspections specified in the Contract Documents.
- B. When the work of this Contract requires the Contractor to make allowance for the above in his work, and to provide supports, power, conduits, stub-outs and other services to these items, the drawings, manufacturer's data and other information necessary for the Contractor's work will be provided by the District Representative upon request.

#### 1.06 OWNER FURNISHED CONTRACTOR INSTALLED (OFCI) MATERIALS

- A. Certain materials identified in the Contract Documents as Owner Furnished Contractor Installed (OFCI) will be delivered to the Project site by the District Representative. Contractor shall unload, store, uncrate, assemble, install, and connect Owner supplied materials.
- B. **Sixty (60)** days before the date the Contractor needs to have the OFCI materials on site, Contractor shall notify District Representative of the scheduled date for needed OFCI materials. Upon delivery to Project site, Contractor shall store OFCI materials inside rooms and/or protected spaces and will be responsible for security of OFCI materials until Substantial Occupancy. District Representative will sign receipt or bill of lading as applicable.
- C. Contractor shall, within ten days after delivery, uncrate and/or unpack OFCI materials in presence of District Representative who shall inspect delivered items. District Representative shall prepare an inspection report listing damaged or missing parts and accessories. District Representative shall transmit

one copy of the report to Contractor. District Representative will procure and/or replace missing and or damaged OFCI materials, as indicated in inspection report.

- D. Contractor shall install OFCI materials in the locations and orientation as indicated in the Contract Documents. Contractor shall verify exact locations with District Representative before final installation of OFCI materials.
- E. If required, District Representative will furnish setting and or placement drawings for OFCI materials.
- F. Contractor shall install OFCI materials by proper means and methods to ensure an installation as recommended by the manufacturer. Contractor shall furnish and install all necessary fasteners and required blocking to properly install OFCI materials.
- G. Contractor shall install OFCI materials with manufacturer recommended fasteners for the type of construction to which the OFCI materials are being fastened and/or anchored.
- H. Contractor shall provide final connections of any electrical, signal, gas, water, waste, venting and/or similar items to OFCI materials. Contractor shall, prior to final connection, verify the operating characteristics of OFCI materials are consistent with the designated supply.

#### 1.07 CONTACTOR FURNISHED OWNER INSTALLED (CFOI) MATERIALS

- A. Certain materials are identified in the Contract Documents as Contractor Furnished Owner Installed (CFOI). CFOI materials shall be delivered to District Representative by Contractor. Contractor shall furnish the following per the contract documents:
  - a. Key cores – Contractor to provide in accordance with Section 08 71 00, Door Hardware. Materials must be received directly from the manufacturer six months prior to occupancy.

PART 2 – PRODUCTS (Not applicable)

PART 3 – EXECUTION (Not applicable)

END OF SECTION 01 11 00

## SECTION 01 12 16 PHASING OF THE WORK

### PART 1 – GENERAL

#### 1.01 SECTION INCLUDES

- A. Requirements for phasing of the Work include logistics, phasing, and completion of designated phases prior to commencement of subsequent phases.

#### 1.02 RELATED SECTIONS

- A. Section 01 11 00: Summary of Work.
- B. Section 01 31 13: Project Coordination.
- C. Section 01 32 13: Construction Schedule.
- D. Section 01 33 00: Submittal Procedures.
- E. Section 01 50 00: Construction Facilities and Temporary Controls.
- F. Section 01 77 00: Closeout Procedures.

#### 1.03 SUBMITTALS

- A. Contractor shall submit a Project site logistics plan in accordance with and as required by this Section.

### PART 2 – PRODUCTS (Not applicable)

### PART 3 – EXECUTION

#### 3.01 LOGISTICS

- A. Prior to commencement of the Work, Contractor shall prepare and submit to the District Representative, a detailed Project site logistic plan, in the same size and scale of the Drawings, setting forth Contractor plan of the Work relative to the following, but not limited to, items:
  - 1. In accordance with local ordinances a truck access route to and from the Project site.
  - 2. The identification of any overhead wire restrictions for power, street lighting, signal, and/or cable.
  - 3. Local sidewalk access and street closure requirements.
  - 4. Protection of sidewalk pedestrians and vehicular traffic.
  - 5. Project site fencing and access gate locations.
  - 6. Construction parking.
  - 7. Material staging and/or delivery areas.
  - 8. Material storage areas.
  - 9. Temporary trailer locations.
  - 10. Temporary service location and proposed routing of all temporary utilities.
  - 11. Location of temporary and/or accessible fire protection
  - 12. Trash removal and location of dumpsters.
  - 13. Concrete pumping locations.
  - 14. Crane locations.

15. Location of portable sanitary facilities.
  16. Mixer truck wash out locations.
  17. Traffic control signage.
  18. Perimeter and site lighting.
  19. Stockpile and/or lay down areas.
  20. Emergency Vehicle Access Routes.
- B. A revised Project site logistic plan may be required by the District Representative for separately identified phases of the Work as set forth in this Section.
- C. Contractor is responsible for securing and obtaining all approvals and permits from authorities having jurisdiction relative to logistic plan activities.

3.02 PHASING OF THE WORK – SPECIFIC

- A. Contractor shall prepare Construction Schedule, and shall complete the following Milestones, but not limited to, within the designated phases in accordance with the following within 210 total calendar days:
1. *Phase 1 Submittals/Mobilization – (60 days) calendar days*
  2. *Phase 2 Manufacturing & Delivery – (120 days) calendar days*
  3. *Phase 3 Installation, Inspections and Completion – (30 days) calendar days*

**END OF SECTION 01 12 16**

## SECTION 01 21 00 ALLOWANCES

### PART 1 – GENERAL

#### 1.01 SECTION INCLUDES

- A. This Section specifies administrative and procedural requirements governing Contract allowances.
  - 1. Allowances as set forth in the Specifications are to be used as compensation for items as set forth in this Section. The amounts listed in the schedule or Specifications are to be included in the base bid and shall be listed separately in the Schedule of Values and Application for Payment.

#### 1.02 RELATED SECTIONS

- A. Section 01 29 73: Schedule of Values Procedures.
- B. Section 01 29 76: Progress Payment Procedures.
- C. Section 01 32 13: Construction Schedule.

#### 1.03 ALLOWANCES

- A. Use the allowances only as authorized for Owner purposes and only by submitting a form that indicates the amounts to be charged to the respective allowance amount to the District Representative.
- B. District Representative and Architect will review Contractor's basis for its use of any Allowance costs included in Contract Sum as required, and prior to the execution of Work described in Allowances.
- C. At Substantial Completion of the Work or at any time designated by the District Representative, credit unused amounts remaining in the allowances to the Owner via Change Order.

#### 1.04 ALLOWANCE DISBURSEMENT

- A. Contractor shall submit a request for allowance disbursement to the District Representative. Include all substantiating and/or required data along with the request.
- B. The request shall have the requested amount listed as an allowance disbursement without Contractor bond markup.

### PART 2 – PRODUCTS (Not Applicable)

### PART 3 – EXECUTION

#### 3.01 ALLOWANCE USAGE

- A. Allowance shall be used to address potential unforeseen conditions including removal or relocation of conflicting utilities, underground asbestos removal, utility locating services, and other unknown underground work and hazardous waste removal work not identified in the original plans and specifications. PART 1 – GENERAL

#### 1.01 SECTION INCLUDES

- B. This Section specifies administrative and procedural requirements governing Contract allowances.
  - 2. Allowances as set forth in the Specifications are to be used as compensation for items as set forth in this Section. The amounts listed in the schedule or Specifications are to be included in the base bid and shall be listed separately in the Schedule of Values and Application for Payment.

### RELATED SECTIONS



- A. Section 01 29 73: Schedule of Values Procedures.
- B. Section 01 29 76: Progress Payment Procedures.
- C. Section 01 32 13: Construction Schedule.

1.03 ALLOWANCES

- D. Use the allowances only as authorized for Owner purposes and only by submitting a form that indicates the amounts to be charged to the respective allowance amount to the District Representative.
- E. District Representative and Architect will review Contractor’s basis for its use of any Allowance costs included in Contract Sum as required, and prior to the execution of Work described in Allowances.
- F. At Substantial Completion of the Work or at any time designated by the District Representative, credit unused amounts remaining in the allowances to the Owner via Change Order.

1.04 ALLOWANCE DISBURSEMENT

- C. Contractor shall submit a request for allowance disbursement to the District Representative. Include all substantiating and/or required data along with the request.
- D. The request shall have the requested amount listed as an allowance disbursement without Contractor overhead and markup.

PART 2 – PRODUCTS (Not Applicable)

PART 3 – EXECUTION

3.01 SCHEDULE OF ALLOWANCES

- A. Include in the base bid the following allowances in the following amounts:

<u>Section</u>	<u>Description</u>	<u>Amount</u>
SECTION 1	The allowance shall be used solely by the District to address unforeseen repairs related to existing conditions preventing the modernization as specified, additional signage, controls, audible sounds, electrical, mechanical components to ensure modernization complies with state and local codes, replacement of defective elevator components not described in the bid specifications, and fees to expedite materials as directed by the District.	\$20,000.00

END OF SECTION 01 21 00

**SECTION 01 26 13      REQUEST FOR INFORMATION PROCEDURES**

**PART 1 – GENERAL**

**1.01            SECTION INCLUDES**

- A.      Procedure for requesting information of the intent of the Contract Documents.

**1.02            RELATED SECTIONS**

- A.      Section 01 11 00: Summary of Work.
- B.      Section 01 31 13: Project Coordination.
- C.      Section 01 32 13: Construction Schedule.
- D.      Section 01 77 00: Contract Closeout.

**PART 2 – PRODUCTS (Not used)**

**PART 3 – EXECUTION**

**3.01            PROCEDURE**

- A.      Contractor shall prepare a Request for Information. Refer to Appendix A for a sample RFI form. Contractor shall transmit the Request for Information to Architect with sketches, pictures and a suggested solution (if applicable) with a concurrent copy to the District Representative.
- B.      Architect response is a clarification of the intent of the Contract Documents and does not authorize changes in the Contract Amount, Milestones, and/or Contract Time.
- C.      A Request for Information may be returned with a stamp or notation "Not Reviewed," if:
  - 1.      The requested information is ambiguous or unclear.
  - 2.      The requested information is equally available to the requesting party by researching and/or examining the Contract Documents.
  - 3.      Contractor has not reviewed the Request for Information prior to submittal.
- D.      Review Time: After receipt by Architect and District Representative, allow **fourteen (14)** calendar days for response time by Architect. Contractor shall verify and is responsible for verifying Architect and District Representative receipt of a Request for Information.
- E.      Subcontractor-Initiated and Supplier-Initiated RFIs: RFIs from subcontractors and material suppliers shall be submitted through, be reviewed by and be attached to an RFI prepared, Signed and submitted by Contractor. RFIs submitted directly by subcontractors or material suppliers will be returned unanswered to the Contractor.
  - 1.      Contractor shall review all subcontractor and supplier initiated RFIs and take actions to resolve issues of coordination, sequencing, and layout of the Work.
  - 2.      RFIs submitted to request clarification of issues related to means, methods, techniques and sequences of construction or for establishing trade jurisdictions and scopes of subcontracts will be returned without interpretation. Such issues are solely the Contractor's responsibility.
  - 3.      Contractor shall be responsible for delays resulting from the necessity to resubmit an RFI due to insufficient or incorrect information presented in the RFI.
- F.      RFI Log: Contractor shall prepare and maintain a log of RFIs, and at any time requested by the Architect, Project Inspector, or District Representative, the Contractor shall furnish copies of the log showing all outstanding RFIs.

END OF SECTION 01 26 13

## SECTION 01 29 73 SCHEDULE OF VALUES PROCEDURES

### PART 1 – GENERAL

#### 1.01 SECTION INCLUDES

- A. Procedure for submission of a Schedule of Values for review and approval by the District Representative.

#### 1.02 RELATED SECTIONS

- A. Section 01 21 00: Allowances.
- B. Section 01 29 76: Progress Payment Procedures.
- C. Section 01 31 13: Project Coordination.
- D. Section 01 32 13: Construction Schedule.
- E. Section 01 32 29: Project Forms.
- F. Section 01 33 00: Submittal Procedures.

### PART 2 – PRODUCTS (Not used)

### PART 3 – EXECUTION

#### 3.01 PREPARATION

- A. In accordance with the General Conditions, Contractor shall commence preparation of a Schedule of Values on the form included in Section 01 32 29.
- B. Contractor shall coordinate the preparation of a Schedule of Values with preparation of the Construction Schedule as set forth in Section 01 32 13.
- C. Round amounts to the nearest whole dollar; the total shall equal the Contract Amount.
- D. Provide a breakdown of the Contract Amount in enough detail acceptable to District Representative to facilitate continued evaluation of Application for Payment and progress reports. Coordinate with the Project Manual table of contents and Schedule of Values form under Section 01 32 29. Provide breakdown of all subcontract amounts.
- E. Provide separate line items for items in the Schedule of Values for total installed value of that part of the Work.
- F. Provide separate line item for labor and material when applicable.
- G. Each item in the Schedule of Values and Applications for Payment shall be complete. Include total cost and proportionate share of general overhead and profit for each item except the amounts shown as separate line items as indicated under Schedule of Values form.
- H. Temporary facilities and other cost items that are not direct cost of actual work-in-place shall be shown as separate line items as indicated under Schedule of Values form.
- I. If at any time, District Representative determines, in its reasonable discretion, that the schedule of Values does not approximate the actual cost being incurred by Contractor to perform the Work, Contractor shall prepare, for District Representative approval, a revised Schedule of Values, which then shall be used as the basis for future progress payments. Without changing the Contract Amount, District Representative reserves the right to require Contractor:
  - 1. To increase or decrease amounts within the line items in the Schedule of Values; and,
  - 2. To conform the price breakdown to Owner accounting practice.

END OF SECTION 01 29 73

## SECTION 01 29 76    PROGRESS PAYMENT PROCEDURES

### PART 1 – GENERAL

#### 1.01    SECTION INCLUDES

- A.      This Section specifies administrative and procedural requirements relative to an Application for Payment.
  - 1.      Coordinate the Schedule of Values and Application for Payment with, but not limited to, the Construction Schedule, submittal log, and list of Subcontractors.

#### 1.02    RELATED SECTIONS

- A.      Section 01 21 00: Allowances.
- B.      Section 01 23 00: Alternates.
- C.      Section 01 29 73: Schedule of Values Procedures.
- D.      Section 01 32 13: Construction Schedule.
- E.      Section 01 32 29: Project Forms.
- F.      Section 01 74 19: Construction and Demolition Waste Management.
- G.      Section 01 77 00: Contract Closeout.

### PART 2 – PRODUCTS (Not applicable)

### PART 3 – EXECUTION

#### 3.01    APPLICATION FOR PAYMENT

- A.      Each Application for Payment shall be consistent with previous applications and payments as reviewed by Project Inspector, Architect, and District Representative. The following Applications for Payment involve additional requirements:
  - 1.      The Initial Application for Payment
  - 2.      The Final Application for Payment
- B.      Payment Application Times: The period of Work covered by each Application for Payment is the payment date for each progress payment as specified in the General Conditions. The period covered by each Application for Payment is the previous month.
- C.      Contractor shall submit a draft Application for Payment seven (7) days prior to the first of each month, to be reviewed by the Architect, District Representative, and Project Inspector.
- D.      Payment Application Checklist: Use required form for the Application for Payment per Section 01 32 29.
- E.      Application Preparation: Complete every entry on the form. Include execution by a person authorized to sign legal documents on behalf of Contractor.
- F.      Transmittal: Submit a minimum of five (5) wet signature originals of each Application for Payment to the District Representative. All copies shall be complete, including releases and similar attachments.
  - 1.      Transmit each copy with a transmittal form listing attachments and recording appropriate information related to the application, in a manner acceptable to District Representative.
- G.      *Initial Application for Payment:* Administrative actions and submittals, that must precede or coincide with submittal for the first Application for Payment include, but are not limited to, the following:
  - 1.      Schedule of Values.
  - 2.      Construction Schedule.

3. Submittal Schedule.
  4. Emergency Contact List.
  5. Local Hire Policy Forms.
  6. Releases.
  7. Resume of Contractor's Project Manager, Job Site Superintendent, and Land Surveyor.
- H. *Applications for Payment:* Administrative actions and submittals that must precede or coincide with submittal of Progress Applications for Payment include, but are not limited to, the following:
1. Certified Payroll (submitted directly to Labor Compliance Consultant in electronic format as specified by District Representative).
  2. Updated and current Project Record Drawings (as-built). Visual verification necessary only.
  3. Monthly Construction Schedule (updated, submitted and approved).
  4. Approved Schedule of Values.
  5. List of Subcontractors (Payments Summary).
  6. Waste Management Progress Report.
  7. Waivers and Releases.
  8. Updated Submittal Schedule.
  9. Material invoices, evidence of equipment purchases, rentals, and other backup materials to support cost as requested by the District Representative.
- I. *Final Payment Application:* Administrative actions and submittals that must precede or coincide with submittal of the final Application for Payment include, but are not limited to, the following:
1. Project Inspector's sign-off and final approval of Project's DSA Form(s) 152.
  2. Contractor's submission of Contractor's Verified Report DSA Form 6-C.
  3. Completion of Contract Closeout requirements.
  4. Updated and Final As-Built drawings – in accordance with General Conditions.
  5. Completion and acceptance of final punch list items.
  6. Delivery of extra materials, products, and/or stock.
  7. Identification of unsettled claims.
  8. Proof that taxes, fees, and similar obligations are paid.
  9. Operating and maintenance instruction manuals.
  10. Consent of surety to final payment.
  11. Waivers and releases.
  12. Warranties, guarantees and maintenance agreements.
  13. Training.
  14. Removal of temporary facilities and services.
  15. Removal of surplus materials, rubbish, and similar elements.
  16. Deductive items pursuant to the General Conditions.
  17. Completion and submission of all final change orders for the project.
  18. Disabled Veteran Business Enterprise (DVBE) Contractor close-out statement.

- J. Any payments made to Contractor where criteria set forth above have not been met shall not constitute a waiver of said criteria by District Representative. Instead, such payment shall be construed as a good faith effort by District Representative to resolve differences so Contractor may pay its Subcontractors and suppliers and that Contractor agrees that failure to submit such items may constitute a breach of contract by Contractor and may subject Contractor to termination.

END OF SECTION 01 29 76

## SECTION 01 31 13 PROJECT COORDINATION

### PART 1 – GENERAL

#### 1.01 SECTION INCLUDES

- A. This Section specifies administrative and procedural requirements necessary for coordinating Work operations including, but not limited to, the following:
  - 1. General coordination procedures.
  - 2. Coordination drawings.

#### 1.02 RELATED SECTIONS

- A. Section 01 32 13: Construction Schedule.
- B. Section 01 33 00: Submittal Procedures.
- C. Section 01 45 23: Testing and Inspection.
- D. Section 01 73 29: Cutting and Patching.

### PART 2 – PRODUCTS (Not used)

### PART 3 – EXECUTION

#### 3.01 COORDINATION

- A. It is the Contractor's responsibility to coordinate the Work to minimize conflicts and optimize efficiency.
- B. School occupancy will remain in session during the school year.
- C. The placement of pipes, conduits, other materials, and the locations, size and reinforcement of holes in the building structure shall conform to the structural Drawings and Specifications. When the requirements of the Mechanical, Electrical or other sections of the Specifications or Drawings are in conflict with the structural requirements, the structural requirements shall take precedence. The Contractor shall take all precautions prior to coring into a building structure. The Contractor must notify the structural engineer and obtain written approval prior to completing any structural penetrations if the structural integrity of an existing building structure is compromised. Refer to section 01 73 29, Cutting and Patching.
- D. Verify that utility, and other building system requirement characteristics of operating equipment are compatible with existing utilities, and other existing building systems. Coordinate work of various Sections having interdependent responsibilities for installing, connecting to, and placing in service, such equipment.
- E. Contractor shall coordinate operations included in various sections of Contract Documents to assure efficient and orderly installation of each part of Work. Coordinate Work operations included under related sections of Contract Documents that depend on each other for proper installation, connection, and operation of Work, including but not limited to:
  - 1. Schedule construction operations in sequence required where installation of one part of Work depends on installation of other components, before or after its own installation.
  - 2. Coordinate installation of different components to assure maximum accessibility for required maintenance, service, and repair.
  - 3. Provide provisions to accommodate items scheduled for later installation.
  - 4. Prepare and administer provisions for coordination drawings.
- F. Where necessary, prepare memoranda for distribution to each party involved, outlining special procedures required for coordination. Include such items as required in notices, reports, attendance at meetings, and:
  - 1. Prepare similar memoranda for District Representative and Separate Work Contract where coordination of their Work is required.

- G. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities to avoid conflicts and assure orderly progress of Work. Such administrative activities include, but are not limited to, the following:
  - 1. Preparation of schedules.
  - 2. Installation, relocation, and removal of temporary facilities.
  - 3. Delivery and processing of submittals.
  - 4. Progress meetings.
  - 5. Project closeout activities.
- H. Conservation: Coordinate Work operations to assure operations are carried out with consideration given to conservation of energy, water, materials, and:
  - 1. Salvage materials and equipment involved in performance of, but not actually incorporated into Work.
- I. Contractor shall provide advance notice (minimum of two (2) working days) to District Representative of any required electrical or HVAC shut down activities for the District to properly prepare for these activities and the down time that will occur.
- J. Contractor shall provide advance notice (minimum of two (2) working days) to District Representative of any required testing of active cabling for the District to properly prepare for these activities and the down time that will occur.

### 3.02 SUBMITTALS

- A. Coordination Drawings: Contractor shall prepare coordination drawings to coordinate the installation of products and materials fabricated, furnished and installed by separate entities, under different parts of the Contract. Contractor shall notify District Representative and Architect of all major conflicts in writing in a timely manner so that the design team can respond without construction delays. Coordination drawings shall address the following at a minimum:
  - 1. Limitations in available space for installation or service. Contractor shall overlay plans of each trade and verify space requirements and conflicts between trades. Minor changes and adjustments that do not affect design intent shall be made by Contractor and shall be highlighted for Architect's review.
  - 2. Incompatibility between items provided under different trades (such as difference in voltage between equipment specified under Divisions 22 and 23 and electrical power provided under Division 26.)
  - 3. Inconsistencies between drawings, specifications and codes (between trades and within each trade).
  - 4. Additional items required for existing facilities construction projects shall be designed and prepared from available as-built drawings that are verified through non-invasive and non-destructive, visual observation only. Contractor shall field verify actual existing conditions during and upon completion of demolition work and incorporate findings into preparation of coordination drawings. Minor changes and adjustments that do not affect design intent shall be made by Contractor and shall be highlighted for District Representative and Architect's reviews.
- B. Contractor and each Subcontractor shall provide and forward reproducible copies and AutoCAD or Revit drawing files in the order described here:
  - 1. Structural shop drawings shall indicate location and sizes of columns, beams and other structural members, as well as wall, roof and slab penetrations, and will be provided to mechanical,



electrical, low voltage and plumbing Sub-Contractors for coordination. Structural items shall be indicated using black lines.

2. HVAC Subcontractor will indicate all ductwork, piping and equipment complete with installation and dimensioned service clearances, duct and pipe sizes, fitting types and sizes, top or bottom of duct and pipe elevations, distances of ducts, pipes and equipment from building reference points and hanger and support locations. Minor changes and adjustments that do not affect design intent shall be made by Subcontractor and shall be highlighted for District Representative and Architect's reviews. Forward drawings to plumbing Subcontractor for further coordination. HVAC items shall be indicated using orange lines.
3. Plumbing Subcontractor will indicate all plumbing lines, and equipment complete with installation and dimensioned service clearances, pipe sizes, fitting types and sizes, top or bottom of pipe elevations, distances of pipes and equipment from building reference points and hanger/support locations Coordinate with HVAC Subcontractor. Minor changes and adjustments that do not affect design intent shall be made by Subcontractor and shall be highlighted for District Representative and Architect's reviews. Upon completion, drawings shall be forwarded to Fire Sprinkler Subcontractor for further coordination. All Plumbing items shall be indicated using blue lines.
4. Fire sprinkler Subcontractor will indicate fire sprinkler piping and equipment complete with installation and dimensioned service clearances, pipe sizes, fitting types and sizes, top or bottom of pipe elevations, distances of pipes and equipment from building reference points and hanger or support locations. Coordinate with Plumbing and HVAC Subcontractors. Minor changes and adjustments that do not affect design intent shall be made by sub-Contractors and shall be highlighted for District Representative and Architect's reviews. Upon completion drawings shall be forwarded to Electrical Contractor for further coordination. Fire sprinkler equipment shall be indicated using red lines.
5. Electrical and Low Voltage Subcontractors will indicate service and feeder conduit runs and other electrical equipment complete, including low voltage with installation and dimensioned service clearances, sizes, top or bottom of conduit and rack elevations, distances of conduits and equipment from building reference points and hanger and support locations. Coordinate with Fire Sprinkler, Plumbing and HVAC Subcontractors. Minor changes and adjustments that do not affect design intent shall be made by sub-Contractors and shall be highlighted for District Representative and Architect's reviews. Upon completion drawings shall be forwarded to Contractor for further coordination. Electrical work shall be indicated in dark green lines. Low voltage work shall be indicated in light green lines.
6. Contractor will be responsible for the overall coordination review. As each coordination drawing is completed, Contractor will meet with Architect and/or District Representative to review and resolve conflicts on coordination drawings.
7. Coordination meetings will be held in Project field office of Contractor. Contractor is required to distribute Shop Drawings, cut sheets and submittals to Subcontractors where appropriate. Reviewed coordination drawings will be maintained in Project field office of Contractor. Meeting minutes shall be developed by Contractor and submitted to District Representative within five (5) days.
8. All Contractors shall review and sign the final coordinated set of drawing(s) prior to construction of system(s) depicted in the drawing(s).

END OF SECTION 01 31 13

## SECTION 01 31 19 PROJECT MEETINGS

### PART 1 – GENERAL

#### 1.01 SECTION INCLUDES

- A. This Section specifies administrative and procedural requirements for Project meetings, including but not limited to, the following:
  - 1. Preconstruction meeting.
  - 2. Pre-installation conferences.
  - 3. Progress meetings.
  - 4. Meetings as required by District Representative.

#### 1.02 RELATED SECTIONS

- A. Section 01 31 13: Project Coordination.
- B. Section 01 32 13: Construction Schedule.
- C. Section 01 33 00: Submittal Procedures.

### PART 2 – PRODUCTS (Not used)

### PART 3 – EXECUTION

#### 3.01 PRECONSTRUCTION MEETING

- A. District Representative will schedule a preconstruction meeting before starting the Work, at a time and date determined by District Representative. Meeting shall be held at the Project site or another location as determined by District Representative. Meeting will be held in order to review responsibilities, procedures, and other administrative requirements contained within the Contract Documents. Major trades may attend.
- B. Authorized representatives of District, Project Inspector, Architect, Contractor and other parties shall attend the meeting. All participants at the meeting shall be familiar with the Project and authorized to conclude matters relating to the Work.
- C. Agenda items shall include significant items which could affect progress of the Work, including, but not limited to the following:
  - 1. Identification of District Representative, key team members, and roles/responsibilities
  - 2. Preliminary Construction Schedule.
  - 3. Critical work sequencing and coordination of other work on campus.
  - 4. Designation of responsible personnel and emergency contacts.
  - 5. Procedures for processing field decisions.
  - 6. Request for Proposal.
  - 7. Request for Information.
  - 8. Construction Change Directive, Immediate Change Directive, and Change Order.
  - 9. Procedures for processing Applications for Payment.

10. Labor Compliance and Wage Determinations.
  11. Submittal and review of Shop Drawings, Product Data, material lists, and Samples.
  12. Preparation of project record documents.
  13. Use of the Project site and/or premises, staging plan, trucking routes, haul routes, etc.
  14. Parking availability.
  15. Office, work, and storage areas.
  16. Equipment deliveries and priorities.
  17. Safety procedures.
  18. Emergency response.
  19. First Aid.
  20. Security.
  21. Housekeeping.
  22. Working hours.
  23. Environmental Health and Safety / Import and Export Testing Requirements.
  24. Substantial Occupancy, Administrative Closeout and Contract Completion requirements and procedures.
  25. Local Hire.
- D. District Representative shall prepare and issue meeting minutes to attendees and interested parties no later than three (3) calendar days after the meeting date.

### 3.02 PRE-INSTALLATION CONFERENCES

- A. Contractor shall coordinate and conduct pre-installation conferences at the Project site as required by related Sections of the Contract Documents.
- B. Contractor, manufacturers, and fabricators involved in or affected by the installation and its coordination or integration with other preceding and/or subsequent installations of Work shall attend the meeting. Contractor shall advise District Representative, Project Inspector, and Architect of scheduled meeting dates and provide an agenda 48 hours prior to meeting.
  1. Contractor shall review the progress of construction activities and preparations for the particular activity under consideration at each pre-installation conference, including requirements for the following:
    - a. Contract Documents.
    - b. Options.
    - c. Related Construction Change Directives and Change Orders.
    - d. Purchases.
    - e. Deliveries.
    - f. Shop Drawings, Product Data, and quality-control samples.
    - g. Review of mockups.
    - h. Possible conflicts.
    - i. Compatibility problems.
    - j. Time schedules and work sequence.
    - k. Weather limitations.

- l. Manufacturer's recommendations.
  - m. Warranty requirements.
  - n. Compatibility of materials.
  - o. Acceptability of substrates.
  - p. Temporary facilities.
  - q. Space and access limitations.
  - r. Governing regulations.
  - s. Safety.
  - t. Inspecting and testing requirements.
  - u. Required performance results.
  - v. Recording requirements.
  - w. Protection.
2. Contractor shall record significant discussions and directives received from each conference. Contractor shall, within three (3) calendar days after the meeting date, distribute the minutes of the meeting to all concerned parties, including but not limited to, District Representative, Project Inspector, and Architect.

### 3.03 PROGRESS MEETINGS

- A. Progress meetings will be held at the Project site at regular intervals, typically bi-weekly, as determined by the District Representative.
- B. In addition to representatives of Contractor, District Representative, and Architect, each Subcontractor, supplier, or other entity concerned with current progress or involved in planning, coordination, or performance of the Work shall, if requested by District Representative, be represented at these meetings. All participants at the meeting shall be familiar with the Project and authorized to conclude all matters relating to the Work.
- C. Failure of Contractor to be so represented at any progress meeting which is held at a mutually agreed time or for which a written notice is given, shall not relieve Contractor from abiding by any and all District Representative determinations or directives issued at such meeting.
- D. District Representative will review and correct or approve minutes of the previous progress meeting and will review other significant items affecting progress. Topics for discussion as appropriate to the status of the Project include but are not limited to:
  - 1. Safety.
  - 3. Construction Schedule.
  - 4. Sequence and coordination.
  - 5. Status of submittals / RFIs.
  - 6. Deliveries.
  - 7. Access.
  - 8. Site utilization.
  - 9. Hours of work.
  - 10. Hazards and risks.
  - 11. Housekeeping.
  - 12. Quality of materials, fabrication, and execution.

13. Unforeseen conditions.
14. Testing and Inspection.
15. Defective Work.
16. Construction Change Directive.
17. Change Order Proposals and Change Orders.
18. Documentation of information for payment requests.
19. Application for Payment.
20. Other items as required or as brought forth.
21. Initial Notice of Start of Issue.
22. Final Notice of End of Issue.

3.04 ADDITIONAL MEETINGS

- A. District Representative, upon giving notice to the intended parties and without further obligation, may require additional meetings to discuss Work and/or Project related activities.

END OF SECTION 01 31 19

## SECTION 01 32 13 CONSTRUCTION SCHEDULE

### PART 1 – GENERAL

#### 1.01 SECTION INCLUDES

- A. Construction Schedule procedures, preparation, submittal, updates, and revisions.

#### 1.02 RELATED REQUIREMENTS

- A. Section 01 11 00: Summary of Work.
- B. Section 01 12 16: Phasing of the Work.
- C. Section 01 29 73: Schedule of Values Procedures.
- D. Section 01 29 76: Progress Payment Procedures.
- E. Section 01 31 13: Project Coordination.
- F. Section 01 33 00: Submittal Procedures.
- G. Section 01 45 23: Testing and Inspection.
- H. Section 01 50 00: Construction Facilities and Temporary Controls.
- I. Section 01 78 36: Warranty Procedures.

#### 1.03 PROCEDURES

- A. Within ten (10) calendar days after date of Notice to Proceed, Contractor shall submit to District Representative for review, a detailed Construction Schedule (“Preliminary Baseline Schedule”) setting forth all requirements for complete execution of the Work.
- B. Within seven (7) calendar days after receipt of the District Representative’s review comments, submit a final Construction Schedule acceptable to District Representative (“Approved Baseline Schedule”).
- C. Include a written summary narrative sufficiently comprehensive to explain basis of Contractor’s approach to work.
- D. If a Construction Schedule is considered by District Representative to not be in compliance with any requirement of the Contract, Contractor will be notified to review and revise the Construction Schedule and bring it into compliance. Failure of Contractor to submit a Construction Schedule in full compliance with the Contract Documents will result in withholding of progress payment in accordance with the General Conditions. The Construction Schedule is to be used in evaluating progress for payment approval.
- E. Subsequently with each Progress Payment Request, Contractor shall deliver to District Representative an updated Construction Schedule reflecting Work progress to the end of the Progress Payment Request period. Each such Construction Schedule shall indicate actual progress to date in execution of the Work, together with a projected schedule for completion of all the Work.

#### 1.04 SCHEDULE SUBMITTAL PREPARATION GUIDELINES

- A. The Contract Work shall be scheduled and progress monitored using a Critical Path Method (CPM) network type scheduling system. Schedule shall be broken into sub-activities which shall, as a minimum, include major suppliers, all submittal approvals, all major trades, plumbing, mechanical, electrical, security, fire, and elevators and escalators. Scheduling system shall indicate all inter-relationships between trades and suppliers.
- B. Contractor shall utilize the Critical Path Method (CPM) in the development and maintenance of the construction schedule network.

- D. Construction Schedule shall represent a practical plan to complete the Work within the Contract time requirement.
  - 1. A schedule extending beyond Contract time or less than Contract time will not be acceptable.
  - 2. A schedule found unacceptable by District Representative shall be revised by Contractor and resubmitted.
- E. Construction schedule shall clearly indicate sequence of construction activities, grouped by applicable phase and sorted by areas, buildings, or facilities within phase, and shall specifically indicate:
  - 1. Start and completion of all Work items, their major components, and interim milestone completion dates, as determined by Contractor and District Representative.
  - 2. Activities for procurement, delivery, installation of equipment, materials, and other supplies, including:
    - a. Time for submittals, resubmittals, and reviews. Include decision dates for selection of finishes.
    - b. Time for manufactured products for the Work fabrication and delivery.
    - c. Interdependence of procurement and construction activities.
    - d. As applicable, dates for testing, balancing equipment, and final inspection.
- F. Schedule shall be in sufficient detail to assure adequate planning and execution of the Work.
  - 1. Each task activity shall range in duration from a 1 workday minimum to a fifteen (15) workday maximum and shall be total of actual days required for completion. The activity duration shall include consideration of weather impact on completion of that activity.
  - 2. Schedule shall be suitable, in judgment of District Representative, to allow monitoring and evaluation of progress in performance of the Work; it shall be calendar time-scaled.
  - 3. Activities shall include:
    - a. Description; what is to be accomplished and where.
    - b. Workday duration.
    - c. Scheduled activities shall indicate continuous flow, from left to right.
  - 4. Contractor shall setup up the schedule calendar to identify workdays per week and shifts per day worked, non-work days, weekends and holidays.
- G. Failure to include any element of Work required for performance of this Contract shall not excuse Contractor from completing Work required to comply with the Contract Documents, notwithstanding acceptance of Construction Schedule.
- H. Submittal of Construction Schedule shall be understood to be Contractor's confirmation that the schedule meets requirements of the Contract Documents, and that the Work will be executed in sequence indicated in schedule.

1.05 REVIEWS, UPDATES, AND REVISIONS

- A. District Representative will review and return the initial submittal of Contractor's Construction Schedule, with summary comments. If revisions are required, Contractor shall resubmit Schedule within seven (7) calendar days following receipt of District Representative's comments.
- B. After Contractor and District Representative agree to a base line schedule, it will become the Project Construction Schedule. No changes to the Baseline Schedule will be allowed unless accepted by District Representative.

- C. Contractor shall analyze and update the Project Construction Schedule:
1. As part of monthly payment application, Contractor shall submit to and participate with District Representative in a schedule review to include:
    - a. Actual start dates for Work items started during report period.
    - b. The percent complete on activities that have actual start dates.
    - c. Actual completion dates for Work items completed during report period.
    - d. Estimated remaining duration for Work items in progress, which will not exceed original duration for activity.
    - e. Estimated start dates for Work items scheduled to start during month following report period, if applicable.
    - f. Changes in duration of Work items.
  2. In case of a change to Contractor's planned sequence of Work, Contractor shall include a narrative report with updated progress schedule which shall include, but not be limited to, a description of problem areas, current and anticipated delaying factors, and any proposed revisions for a recovery plan.
  3. Change Orders affecting the scheduled completion date shall be clearly identified as separate and new activities integrated into the schedule at the appropriate time and in the appropriate sequence as reviewed and approved by District Representative.
  4. The Project Construction Schedule Review will not relieve Contractor of responsibility for accomplishing all Work in accordance with the Contract Documents.
- D. Updates: Contractor shall submit to District Representative, with each payment application, an up-to-date Project Construction Schedule. Contractor submission of the Monthly Updated Project Construction Schedule is a condition precedent to District Representative's approval of Progress Payments. The Update Project Construction Schedule shall include the following:
1. Work Item Report: Detailing Work items and dependencies as indicated on the Schedule.
  2. Actual Start and End Dates of Activities under construction
  3. Separate listing of activities completed during reporting period.
  4. Separate listing of activities which are currently in progress, indicating their remaining duration and percentages completed.
  5. Separate listing of activities which are causing delay in Work progress.
  6. Narrative report to define problem areas, anticipated delays, and impact on the Project Construction Schedule. Contractor shall report corrective action taken, or proposed, and its effect, including effect of changes on schedules of separate contractors.
  7. Resolution of conflict between actual Work progress and schedule logic: when out-of-sequence activities develop in the Schedule because of actual construction progress, Contractor shall submit a revised schedule to conform to current job sequence and direction.
- E. If, according to current updated Project Construction Schedule, District Representative determines Contractor is behind schedule or any interim milestone completion dates will not be met, considering all time extensions to which Contractor is entitled, Contractor shall submit a revised recovery schedule, showing a workable plan and a narrative description to complete the project on time. Refer to General Conditions.
- F. Scheduling of change or extra Work orders is responsibility of Contractor.
1. Contractor shall revise the Project Construction Schedule to incorporate all activities involved in completing change orders or extra Work orders and submit it to District Representative for review.



- G. If District Representative finds Contractor is entitled to extension of any completion date, under provisions of the Contract, District Representative's determination of total number of days of extension will be based upon an analysis of the current Project Construction Schedule, and upon data relevant to the extension.
- H. Contractor acknowledges and agrees that delays to non-critical activities will not be considered a basis for a time extension unless activities become critical. Non-critical activities are those activities which, when delayed, do not affect an interim or Substantial Completion date.
- I. Contractor shall allow Float time for inclement weather, Government Delay, and Project Float in the Baseline Schedule. The Inclement Weather Float and the Government Delay Float shall each be identified as a Critical Activity in the Baseline Schedule. No other activities may be concurrent with them. When rainfall at the Project site impacts Critical Path activities, Contractor may provide District Representative with a written request for a rain impact day describing the inclement weather delay on the Critical path activities. The inclement weather delay must be clearly indicated by a seventy-five percent (75%) decrease in the normal field labor workforce hours on Critical Path activities on the day in question as indicated by Contractor's Daily reports from the day in question and the scheduled Work days prior to the day in question. Upon District Representative's independent confirmation of the amount of rainfall and impact, District Representative will authorize Contractor to reduce the duration of the Rain Day Impact Allowance by one day. Rainfall on non-scheduled workdays shall not be granted as rain impact days. If the effects of rain from a non-scheduled Work day carry forward to a scheduled work day and impacts the Critical Path as noted above, then the scheduled work day will be considered impacted by rain.

1.06 CONTRACTOR'S RESPONSIBILITY

- A. Nothing in these requirements shall be deemed to be an usurpation of Contractor's authority and responsibility to plan and schedule Work as Contractor sees fit, subject to all other requirements of Contract Documents.
- B. Contractor shall provide at all times sufficient competent labor, materials, and equipment to properly carry on Work and to insure completion of each part in accordance with Construction Schedule and within time allowed in the Contract.
- C. Contractor shall be responsible for ensuring that all submittals to the District Representative are accurate and consistent. Damage, including extra time and cost, caused by inaccuracies from Contractor will be compensated by Contractor.

1.07 SUSPENSION OF PAYMENTS

- A. Initial Submittal: If Contractor fails to comply with the specified requirements, District Representative reserves the right to engage an independent scheduling consultant to fulfill these requirements. Upon additional notice to Contractor, District Representative shall retain against Contractor all incurred costs for additional services.
- B. Update Submittals: District Representative has the right to withhold progress payments if Contractor fails to update and submit the Project Construction Schedule and reports as required by District Representative.

1.08 RECORD COPY

- A. Prior to the Contract Completion, Contractor shall submit the Project Construction Schedule showing the as-built sequence. The as-built schedule shall have all activities with actual start and end dates.

PART 2 – PRODUCTS (Not Used)

PART 3 – EXECUTION (Not Used)

END OF SECTION 01 32 13

## SECTION 01 32 29 PROJECT FORMS

### PART 1 – GENERAL

#### 1.01 SECTION INCLUDES

- A. The following District administrative forms and documents listed in this Section, but not limited to, shall be utilized in the administration of the Work.
- B. Electronic versions of these forms are available from the District Representative, if requested by Contractor.
- C. From time to time, Owner may release new revisions and new Project Forms. At any time during the Project, if requested by District Representative, Contractor shall use the newly released Project Forms.

#### 1.02 RELATED DOCUMENTS

- A. General Conditions (Parts 1 and 2)
- B. Division 01.

### PART 2 – PRODUCTS (Not applicable)

### PART 3 – EXECUTION

#### 3.01 FORMS

Contractor to utilize the following District standard forms:

- A. Allowance Disbursement Authorization
- B. Request for Information
- C. Application for Payment / Schedule of Values
- D. Change Order
- E. Conditional Waiver and Release – Final Payment
- F. Conditional Waiver and Release – Progress Payment
- G. Immediate Change Directive
- H. Unconditional Waiver and Release – Final Payment
- I. Unconditional Waiver and Release – Progress Payment
- J. Construction Waste Management Plan
- K. Construction Waste Management Progress Report
- L. Local Hire Local Business Forms
- M. Certificate of Substantial Completion
- N. Warranty Guarantee Form

#### 3.02 PROCEDURES

- A. Allowance Disbursement Authorization: This form is used to submit allowance expenditures.
- B. Request for Information (RFI): This form is used in requesting information or clarification while providing a suggested course of action.
- C. Application for Payment/Schedule of Values: This form is used in requesting a progress payment and to establish the basis of the certified application for payment.

- D. Change Order: This form is used to adjust the Contract Amount, Milestones and/or the Contract Time.
- E. Conditional Waiver and Release: Use this form when the claimant is required to execute a waiver and release in exchange for or in order to induce the payment of a progress payment and the claimant has not been paid.
- F. [RESERVED]
- G. Immediate Change Directive: This form is used to issue an Immediate Change Directive.
- H. Unconditional Waiver and Release: Use this form when the claimant is required to execute a waiver and release in exchange for or in order to induce payment of a progress payment and the claimant asserts in the waiver that he or she has in fact been paid the progress payment.
- I. [RESERVED]
- J. Construction Waste Management Plan: This form is used to provide a Waste Management Plan, submitted in accordance with Specification Section 01 74 19 and prior to any waste removal.
- K. Construction Waste Management Progress Report: This form is used to provide a Waste Management Monthly Progress Report, summarizing waste generated by Project and submitted monthly with Application for Payment.
- L. [RESERVED]
- M. Local Hire Local Business Forms: These forms are to be completed by all Contractors, Sub-Contractors, and Suppliers and submitted with each payment application.
- N. Certificate of Substantial Completion: This form is to be completed and signed by all parties once project has been determined to be substantially complete.
- O. Warranty Guarantee Form: This form shall be filled out and signed by Contractor and Subcontractors prior to completion of closeout activities.

END OF SECTION 01 32 29

## SECTION 01 33 00 SUBMITTAL PROCEDURES

### PART 1 – GENERAL

#### 1.01 SECTION INCLUDES

- A. Administrative and procedural requirements for submittals required for the Work, including but not limited to; Shop Drawings, Product Data, Samples, material lists, and quality control items as required by the Contract Documents.
- B. Wherever possible, throughout the Contract Documents, the minimum acceptable quality of workmanship and products has been defined by the name and catalog number of a manufacturer and by reference of recognized industry standards.
- C. To ensure that specified products are furnished and installed in accordance with the design intent, Facility Design Standards and procedures have been established for submittal of design data and for its review by District Representative, Architect, and/or others.

#### 1.02 RELATED SECTIONS

- A. Section 01 12 16: Phasing of the Work
- B. Section 01 29 73: Schedule of Values Procedures.
- C. Section 01 29 76: Progress Payment Procedures.
- D. Section 01 31 13: Project Coordination.
- E. Section 01 32 13: Construction Schedule.
- F. Section 01 45 23: Testing and Inspection.

### PART 2 – PRODUCTS (Not applicable)

### PART 3 – EXECUTION

#### 3.01 GENERAL REQUIREMENTS AND PROCEDURES

- A. Contractor shall clearly identify any deviations from the Contract Documents on each submittal. Any deviation not so noted, even if stamped reviewed, is not acceptable.
- B. After Architect review, Architect shall transmit submittals to Contractor, District Representative, and Project Inspector. Contractor shall further distribute to Subcontractors and others as required. Work shall not commence, unless otherwise approved by District Representative, and/or Architect until approved submittals are transmitted to Contractor.
- C. Contractor's Review and Approval: Every submittal upon which proper execution of the Work is dependent shall bear the Contractor's review and approval stamp, dated and signed by Contractor. Certifying that Contractor (a) has reviewed, checked, and approved the submittal and has coordinated the submittal contents with requirements of Work and Contract Documents including related Work, (b) Contractor coordinated with all other shop drawings received to date and this duty of coordination has not been delegated to subcontractors, material suppliers, the Architect, or the engineers on this project, (c) determined and verified quantities, field measurements, construction criteria, materials, equipment, catalog numbers and identifications, and similar data, or will do so, and (d) states the Work illustrated or described in the submittal is recommended by Contractor and the Contractor's warranty will fully apply thereto.
- D. Contractor shall coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities requiring sequential activity.
- E. Timing of Submittals:

1. Submittals shall not delay the construction schedule and shall be submitted in timely manner in accordance with General Conditions.
  2. In accordance with General Conditions, Contractor shall submit to the Architect, those Shop Drawings, Product Data, diagrams, materials lists, Samples and other submittals required by the Contract Documents.
  3. The Contractor shall submit within ten (10) calendar days of the Notice to Proceed, an itemized listing of required submittals with a scheduled date for each submittal. The schedule of submittals shall provide adequate time between submittals in order to allow for proper review without negative impact to the Construction Schedule.
  4. Schedule of submittals shall be related to Work progress, and shall be so organized as to allow sufficient time for transmitting, reviewing, corrections, resubmission, and re-reviewing.
  5. Contractor shall coordinate submittal of related items and Architect reserves the right to withhold action on a submittal requiring coordination with other submittals until all related submittals are received by Architect.
  6. Contractor shall revise, update and submit submittal schedule to District Representative and Architect on the first of each month, or as required by the District Representative.
  7. Contractor shall allow in the Construction Schedule, at least ten (10) calendar days for Architect review following Architect receipt of submittal. For mechanical, plumbing, electrical, structural, and other submittals requiring joint review with Architect's Consultants, and/or others, Contractor shall allow a minimum of fourteen (14) calendar days following Architect receipt of submittal. Submittals will be reviewed with reasonable promptness, but Architect reserves the right of additional time where required based on but limited to submittal size, complexity, etc.
  8. No adjustments to the Contract Time and/or Milestones will be authorized because of a failure to transmit submittals to Architect sufficiently in advance of the Work to permit review and processing.
  9. In case of product substitution, Shop Drawing preparation shall not commence until such time Architect and District Representative reviews said submittal relative to the General Conditions.
- G. If required, resubmit submittals in a timely manner. Resubmit as specified for initial submittal but identify as such. Review times for re-submitted items shall be as per the time frames for initial submittal review.
- H. Architect, or authorized agent, will stamp each submittal with a uniform, action stamp. Architect, or authorized agent, will mark the stamp appropriately to indicate the action taken, as follows:
1. Final Unrestricted Release: When Architect, or authorized agent, marks a submittal "Reviewed" the Work covered by the submittal may proceed provided it complies with requirements of the Contract Documents. Final payment depends on that compliance.
  2. Final-But-Restricted Release: When Architect, or authorized agent, marks a submittal "Reviewed as Noted" the Work covered by the submittal may proceed provided it complies with notations or corrections on the submittal and requirements of the Contract Documents. Final payment depends on that compliance.
  3. Returned for Re-submittal: When Architect, or authorized agent, marks a submittal "Rejected, Revise and Resubmit" do not proceed with Work covered by the submittal, including purchasing, fabrication, delivery, or other activity. Revise or prepare a new submittal according to the notations; resubmit without delay. Repeat as necessary to obtain different action mark. In case of multiple submittals covering same items of Work, Contractor is responsible for any time delays, schedule disruptions, out of sequence Work, or additional costs due to multiple submissions of the same submittal item. Do not use, or allow others to use, submittals marked "Rejected, Revise and Resubmit" at the Project site or elsewhere where Work is in progress.
  4. Other Action: Where a submittal is for information or record purposes or special processing or other activity, the Architect, or authorized agent, will return the submittal marked "Action Not Required".

- I. Review of Submittals by the Architect: Submittals will be reviewed but only for conformance with the design concept of the Project and with the information indicated on the Drawings and stated in the Specifications. Review of a separate item as such will not indicate approval of the assembly in which the item functions. Review of submittals shall not relieve the Contractor of responsibility for any deviations from requirements of the Contract Documents or any revisions in resubmittals unless Contractor has given written notice of such deviation or revision at the time of submission or resubmission and written approval has been given to the specific deviation or revision, nor shall approval relieve the Contractor of responsibility for error or omissions in the submittals or for the accuracy of dimensions and quantities, the adequacy of connections, and the proper and acceptable fitting, execution, functioning, and completion to the Work.
- J. All costs for the preparation, correction, delivery, and return of the submittals shall be borne by the Contractor.

3.02 SHOP DRAWINGS

- A. Shop Drawings are original drawings prepared by Contractor, Subcontractor, supplier, or distributor illustrating some portion of Work by showing fabrication, layout, setting, or erection details. Do not reproduce Contract Documents or copy standard information as the basis of Shop Drawings. Copies of the Contract Drawing marked to show Shop Drawing information are not acceptable and will be not be reviewed and will be promptly returned to the Contractor.
  - A. Produce Shop Drawings to an accurate scale that is large enough to indicate all pertinent features and methods. Submit Shop Drawings on sheets at least 8-1/2 x 11 inches but no larger than 30 x 42 inches.
- C. Shop Drawings shall include, at a minimum, fabrication and installation drawings, setting diagrams, schedules, patterns, templates, and similar drawings. Include the following information:
  - 1. Dimensions
  - 2. Identification of products and materials included by sheet and detail number.
  - 3. Compliance with specified standards.
  - 4. Notation of coordination requirements.
  - 5. Notation of dimensions established by field measurement.
- C. Provide two (2) spaces, approximately 4 by 5 inches, on the label or beside the title block on Shop Drawings to record Contractor and Architect review, and the action taken. Include the following information on the label for processing and recording action taken:
  - 1. Project name.
  - 2. Project number.
  - 3. Date.
  - 4. Name and address of Architect.
  - 5. Name and address of Contractor.
  - 6. Name and address of Subcontractor.
  - 7. Name and address of supplier.
  - 8. Name and address of manufacturer.
  - 9. Name and title of appropriate Specification section.
  - 10. Drawing number and detail references, as appropriate.

3.03

PRODUCT DATA

- A. Collect Product Data into a single submittal for each element of Work or system. Product Data includes printed information, such as manufacturer's installation instructions, catalog cuts, standard color charts, roughing-in diagrams and templates, wiring diagrams, schedules, illustrations, or performance curves.
1. Mark each copy to show or delineate pertinent materials, products, models, applicable choices, or options. Where Product Data includes information on several products that are not required, clearly mark copies to indicate the applicable information. Include the following information:
    - a. Manufacturer's printed recommendations.
    - b. Compliance with trade association standards.
    - c. Compliance with recognized testing agency standards.
    - d. Application of testing agency labels and seals.
    - e. Notation of dimensions verified by field measurement.
    - f. Notation of coordination requirements.
    - g. Notation of dimensions and required clearances.
    - h. Indicate performance characteristics and capacities.
    - i. Indicate wiring diagrams and controls.
  2. Do not submit Product Data until compliance with requirements of the Contract Documents has been confirmed.

C. Required Copies and Distribution: Same as denoted in Section 3.02, E.

3.04

SAMPLES

A. Submit Samples of sufficient size, quantity (minimum of three), cured and finished and physically identical to the proposed product or material. Samples include partial or full sections or range of manufactured or fabricated components, cuts or containers of materials, color range sets, and swatches denoting color, texture, and/or pattern.

1. Mount or display Samples in the manner to facilitate review of qualities indicated. Include the following:
  - a. Specification section number and reference.
  - b. Generic description of the Sample.
  - c. Sampling source.
  - d. Product name or name of manufacturer.
  - e. Compliance with recognized standards.
  - f. Availability and delivery time.
2. Submit Samples for review of size, kind, color, pattern, and texture. Submit Samples for a final check of these characteristics with other elements and a comparison of these characteristics between the final submittal and the actual component as delivered and installed.
  - a. Where variations in color, pattern, texture, or other characteristic is inherent in the material or product represented, submit at least three (3) multiple units that show the approximate limits of the variations.

- b. Refer to other Specification sections for requirements for Samples that illustrate workmanship, fabrication techniques, assembly details, connections, operation, and similar construction characteristics.
    - c. Refer to other sections for Samples to be returned to Contractor for incorporation into the Work. Such Samples must be undamaged at time of installation. On the transmittal indicate special requests regarding disposition of Sample submittals.
    - d. Samples not incorporated into the Work, or otherwise not designated as Owner property, remain the property of Contractor and shall be removed from the Project site prior to Substantial Completion.
  - 3. Color and Pattern: Whenever a choice of color or pattern is available in a specified product, submit accurate color chips and pattern charts to Architect for review and selection by Architect and District Representative.
  - 4. Required Copies and Distribution: Same as denoted in Section 3.02, E.
- B. When specified, erect field Samples and mock-ups at the Project site to illustrate products, materials, or workmanship and to establish standards by which completed Work shall be judged.
- C. Maintain sets of Samples, as returned, at the Project site, for quality comparisons throughout the course of the Work. Sample sets may be used to obtain final acceptance of the Work associated with each set.

3.05

DEFERRED SUBMITTAL REQUIREMENTS

- A. Installation of deferred submittal items shall not be started until detailed plans, specifications, and engineering calculations have been: 1) accepted by the Architect or Engineer in general responsible charge of design, 2) signed by a California registered Architect or professional engineer who has been delegated responsibility covering the work shown on a particular plan or specification, and 3) approved by the Division of the State Architect (DSA). Deferred submittal items for this Project are as indicated in the Contract Documents.
- B. Deferred submittal drawings and specifications become part of the approved documents for the Project when they are submitted to and approved by DSA.
- C. Submit material using submittal process as defined above.
- D. Identify and specify all supports, fasteners, spacing, penetrations, etc., for each of the deferred submittal items, including calculations for each and all fasteners.
- E. Submit documents to Architect for review prior to requesting that the Architect forward it to the DSA.
- F. Documents shall bear the stamp and signature of the Structural, Mechanical, or Electrical Engineer licensed in California who is responsible for that work.
- G. Architect and its subconsultants will review the documents only for conformance with design concept. The Architect will then forward the Submittal to DSA for approval.
- H. Contractor shall respond to review comments made by DSA and revise and resubmit submittal to the Architect for re-submittal to DSA for final approval.

3.06

QUALITY CONTROL SUBMITTALS

- A. Submit quality control submittals, including design data, certifications, manufacturer's field reports, and other quality control submittals as required under other sections of the Contract Documents.
- B. When other sections of the Contract Documents require manufacturer's certification of a product, material, and/or installation complies with specified requirements, submit a notarized certification from the manufacturer certifying compliance with specified requirements.
- C. Certification shall be signed by an officer of the manufacturer or other individual authorized to sign documents on behalf of the represented company.



- D. Requirements for submittal of inspection and test reports are specified in other sections of the Contract Documents.

3.07 CERTIFICATES

- A. Submit all certificates in triplicate to Project Inspector, in accordance with requirements of each Specification Section.

END OF SECTION 01 33 00

## SECTION 01 45 23 TESTING AND INSPECTION

### PART 1 - GENERAL

#### 1.01 SECTION INCLUDES

- A. Testing and inspection services to meet requirements of California Building Standards Code, Title 24, California Code of Regulations.

#### 1.02 RELATED SECTIONS

- A. Section 01 31 13: Project Coordination.
- B. Section 01 32 13: Construction Schedule.
- C. Section 01 33 00: Submittal Procedures.
- D. Section 01 73 29: Cutting and Patching.
- E. Section 01 78 36: Warranty Procedures.

#### 1.03 COORDINATION OF TESTS AND INSPECTIONS

- A. Contractor shall establish a protocol for requesting inspections and special inspections so as to not delay the progress of the work. Contractor shall review General Conditions and additional requirements.

#### 1.04 TESTING COSTS

- A. District shall pay for special inspections and testing identified in the Statement of Structural Tests and Special Inspections (DSA FORM 103) except Contractor shall reimburse the District for retesting costs caused by failure of materials to pass initial tests. Contractor shall arrange and pay for all other testing that are specified in other specification sections.
  - 1. Reimbursement of Inspection Costs: The Contractor shall reimburse to the District Representative all or any part, as the District Representative may deem just and proper, of the actual excessive inspection costs incurred by the District Representative due to any or all of the following:
    - i. Contractor's failure to complete the Work within the Contract Time stated in the Agreement, and any previously authorized extensions thereof.
    - ii. Claims between separate contractors
    - iii. Covering of any of the Work before the required inspections of tests are performed.
    - iv. Extra inspections required for Contractor's correction of defective Work.
    - v. Overtime costs for acceleration of Work done for Contractor's convenience.

#### 1.07 CONTRACTOR-FURNISHED ASSISTANCE

- A. When requested, Contractor shall furnish access, facilities, and labor assistance as necessary for duties to be performed at the site by Test Laboratory, and Inspector, including ladders, hoisting, temporary lighting, water, and like services.

### PART 2 – PRODUCTS (Not used)

### PART 3 – EXECUTION

#### 3.01 SCHEDULES FOR TESTING

- A. Establishing Schedule:
  - 1. By advance discussion with the testing laboratory selected by the District Representative, determine the time required for the laboratory to perform its tests and to issue each of its findings.
  - 2. Provide required time within the construction schedule.
- B. Revising Schedule: When changes of construction schedule are necessary during construction, coordinate such changes of schedule with the testing laboratory as required.
- C. Adherence to Schedule: When the testing laboratory is ready to test according to the determined schedules, but is prevented from testing or taking specimens due to incompleteness of the work, extra charges for testing attributable to the delay may be back-charged to the Contractor and may be deducted by the District Representative from the contract sum.

### 3.02 REQUESTING TESTING

- A. Contractor shall request testing and inspection through the Project Inspector. Contractor shall provide Project Inspector a minimum of twenty-four (24) hour notice prior to Project Inspector inspections being required and a minimum of forty-eight (48) hour notice prior to special testing and inspections being required.

### 3.03 TESTS

- A. District Representative will select and provide an independent DSA certified testing agency (Testing Agency) to conduct tests, sampling, and testing of materials. Selection of material to be tested shall be by the Testing Agency and not by Contractor.
- B. The Contractor shall not incorporate into the work any material shipped from the source of supply prior to having satisfactorily passed the required testing and inspection, or prior to the receipt of notice from Project Inspector that the testing and inspection is not required.
- C. District Representative will select, and directly reimburse, the Testing Agency for costs of all DSA required tests and inspections; however, the District Representative may be reimbursed by Contractor for such costs as specified or noted in related sections of the Contract Documents.
- D. The independent Testing Agency is not authorized to release, revoke, alter, or enlarge requirements of the Contract Documents or approve or accept any portion of the Work.
- E. The Testing Agency shall not perform any duties of Contractor.
- F. Contractor shall provide an insulated curing box with the capacity for twenty (20) concrete cylinders and will relocate said box and cylinders as rapidly as required in order to provide for progress of the Work.

### 3.04 TEST REPORTS

- A. Test reports shall include all tests performed, regardless of whether such tests indicate the material is satisfactory or unsatisfactory. Samples taken but not tested shall also be reported. Records of special sampling operations, when and as required, shall also be reported. Reports shall indicate the material (or materials) was sampled and tested in accordance with requirements of CBC, Title 24, Parts 1 and 2, as indicated on the Drawings. Test reports shall indicate specified design strength and specifically state whether or not the material (or materials) tested comply with the specified requirements.

### 3.05 VERIFICATION OF TEST REPORTS

- A. Each Testing Agency shall submit to the Division of the State Architect a verified report covering all tests required to be performed by that Testing Agency during the progress of the Work, in accordance with DSA PR 13-01.

### 3.06 INSPECTION BY DISTRICT REPRESENTATIVE

- A. District, and its representatives, shall have access, for purposes of inspection, at all times to all parts of the Work and to all shops wherein the Work is in preparation. Contractor shall, at all times, maintain proper facilities and provide safe access for such inspection.
- B. District Representative shall have the right to reject materials and/or workmanship deemed defective Work and to require correction. Defective workmanship shall be corrected in a satisfactory manner and defective materials shall be removed from the premises and legally disposed of without charge to District Representative. If Contractor does not correct such defective Work within a reasonable time, fixed by written notice and in accordance with the terms and conditions of the Contract Documents, District Representative may correct such defective Work and proceed in accordance with related Articles of the Contract Documents.
- C. Contractor is responsible for compliance to all applicable local, state, and federal regulations regarding codes, regulations, ordinances, restrictions, and requirements.

3.07 PROJECT INSPECTOR

- A. A Project Inspector shall be employed by District Representative in accordance with requirements of Title 24 of the California Code of Regulations with their duties specifically defined therein. Additional DSA certified inspectors may be employed and assigned to the Work by District Representative in accordance with the requirements of California Building Standards Commission's, California Administrative Code with their duties as specifically defined in Section 4-211, 4-219, and 4-238, and in DSA IR A-8.
- B. Inspection of Work shall not relieve Contractor from any obligation to fulfill all terms and conditions of the Contract Documents.
- C. Contractor shall be responsible for scheduling times of inspection, tests, sample taking, and similar activities of the Work.

3.08 TESTS AND INSPECTIONS

- A. The following tests and inspections do not limit inspection of the Work but are required by DSA, other agencies, or are required in related Sections of the Contract Documents.

END OF SECTION 01 45 23

## SECTION 01 73 29 CUTTING AND PATCHING

### PART 1 – GENERAL

#### 1.01 SECTION INCLUDES

- A. This Section specifies procedural requirements for cutting and patching.

#### 1.02 RELATED SECTIONS

- A. Section 01 29 73: Schedule of Values Procedures.
- B. Section 01 31 13: Project Coordination.
- C. Section 01 31 19: Project Meetings.
- D. Section 01 32 13: Construction Schedule.
- E. Section 01 33 00: Submittal Procedures.
- F. Section 01 78 36: Warranty Procedures.

#### 1.03 SUBMITTALS

- A. The word “cutting” as used in the Contract Documents includes, but is not limited to, cutting, drilling, chopping, and other similar operations and the word “patching” includes, but is not limited to, patching, rebuilding, reinforcing, repairing, refurbishing, restoring, replacing, or other similar operations.
- B. Cutting and Patching Proposal: Contractor shall submit a work plan describing procedures well in advance of the time cutting and patching will be performed if the Contract Documents requires approval of these procedures before proceeding. Include the following information, as applicable, in the work plan:
  - 1. Describe the extent of cutting and patching required. Denote how it will be performed and indicate why it cannot be avoided.
  - 2. Describe anticipated results in terms of changes to existing construction. Include changes to structural elements and operating components as well as changes in the building’s appearance or other significant visual elements.
  - 3. List products to be used and firms or entities that will perform this Work.
  - 4. Indicate dates when cutting and patching will be performed.
  - 5. Utilities: List utilities that cutting and patching operations will disturb or affect. List utilities to be relocated and those that will be temporarily out-of-service. Indicate how long service will be disrupted.
  - 6. Where cutting and patching involves adding reinforcement to structural elements, submit details and engineering calculations showing integration of reinforcement with the original structure.
  - 7. Review by Architect and DSA prior to proceeding with cutting and patching does not waive Architect right to later require complete removal and replacement of defective Work.

#### 1.04 QUALITY ASSURANCE

- A. Requirements for structural Work: Do not cut and patch structural elements in a manner that would change their load-carrying capacity or load-deflection ratio.
  - 1. Obtain approval from Architect and DSA of the cutting and patching work plan before cutting and patching the following structural elements:
    - a. Foundation construction.
    - b. Bearing and retaining walls.

- c. Structural concrete.
  - d. Structural steel.
  - e. Lintels.
  - f. Timber and primary wood framing.
  - g. Structural decking.
  - h. Stair systems.
  - i. Miscellaneous structural metals.
  - j. Exterior curtain-wall construction.
  - k. Equipment supports.
  - l. Piping, ductwork, vessels, and equipment.
  - m. Any other structural systems not listed above.
- B. Operational Limitations: Do not cut and patch operating elements or related components in a manner that would result in reducing their capacity to perform as intended. Do not cut and patch operating elements or related components in a manner that would result in increased maintenance or decreased operational life or safety.
- 1. Obtain review of the cutting and patching work plan before cutting and patching the following operating elements or safety related systems:
    - a. Primary operational systems and equipment.
    - b. Air or smoke barriers.
    - c. Water, moisture, or vapor barriers.
    - d. Membranes and flashings.
    - e. Fire protection systems.
    - f. Noise and vibration control elements and systems.
    - g. Control systems.
    - h. Communication and/or data systems.
    - i. Conveying systems.
    - j. Electrical wiring systems.
    - k. Any other operating systems not listed above.
- C. Visual Requirements: Do not cut and patch construction exposed on the exterior or in occupied spaces in a manner that would, in the opinion of Architect, reduce the building's aesthetic qualities. Do not cut and patch construction in a manner that would result in visual evidence of cutting and patching. Remove and replace Work cut and patched in a visually unsatisfactory manner.

#### 1.05 WARRANTY

- A. Existing Warranties: Replace, patch, and repair material and surfaces cut or damaged by methods and with materials in such a manner as not to void any warranties required or existing.

#### PART 2 – PRODUCTS (Not applicable)

#### PART 3 – EXECUTION

#### 3.01 INSPECTION

- A. Examine surfaces to be cut and patched and conditions under which cutting and patching is to be performed before cutting. If unsafe or unsatisfactory conditions are encountered, take corrective action before proceeding.

1. Before proceeding, meet at the Project site with parties involved in cutting and patching, including mechanical and electrical trades. Review areas of potential interference and conflict. Coordinate procedures and resolve potential conflicts before proceeding.

### 3.02 PREPARATION

- A. Temporary support: Provide adequate temporary support of existing improvements or Work to be cut.
- B. Protection: Protect existing improvements and Work during cutting and patching to prevent damage. Provide protection from adverse weather conditions for portions of existing improvements or Work that might be exposed during cutting and patching operations.
- C. Avoid interference with use of adjoining areas or interruption of free passage to adjoining areas.
- D. Where the Work requires sandblasting of existing surfaces in order to receive new materials secured by cementitious, adhesive or chemical bond, completely remove existing finishes, stains, oil, grease, bitumen, mastic and adhesives or other substances deleterious to the new bonding or fastening of new Work. Utilize wet sand blasting for interior surfaces and for exterior surfaces where necessary to prevent objectionable production of dust.

### 3.03 PERFORMANCE

- A. General: Employ skilled workmen to perform cutting and patching. Proceed with cutting and patching at the earliest feasible time and complete without delay. Carefully remove existing Work to be salvaged and/or reinstalled. Protect and store for reuse into the Work. Verify compatibility and suitability of existing substrates before starting the Work.
- B. Cutting: Cut existing construction using methods least likely to damage elements retained or adjoining Work. Where possible, review proposed procedures with the original installer; comply with the original installer's recommendations.
  1. In general, where cutting, use hand or small power tools designed for sawing or grinding, not hammering and chopping. Cut holes and slots as small as possible, neatly to size required, and with minimum disturbance of adjacent surfaces. Temporarily cover openings when not in use.
  2. To avoid marring existing finished surfaces, cut or drill from the exposed or finished side into concealed surfaces.
  3. Cut through concrete and masonry using a cutting machine, such as a carborundum saw or a diamond-core drill. Saw cut reinforcing bars and paint ends per approved submittal except where bonded into new concrete or masonry.
  4. Comply with requirements of applicable Sections of Divisions 31, 32, and 33 where cutting and patching requires excavating, backfill, and recompaction.
- C. Patching: Patch with durable seams that are as invisible as possible. Comply with required tolerances.
  1. Where feasible, inspect and test patched areas to demonstrate integrity of the installation. Verify conditions of existing substrates prior to executing Work.
  2. Restore exposed finishes of patched areas and extend finish restoration into retaining adjoining construction in a manner that will eliminate all evidence of patching and refinishing.
  11. Painting: Prepare areas to be patched, patch and paint as specified under related sections of the Contract Documents.

### 3.04 CLEANING

- A. Clean areas and spaces where cutting and patching are performed. Completely remove paint, mortar, oils, putty, and similar items. Thoroughly clean piping, conduit, and similar features before applying paint or other finishing materials. Restore damaged coverings to their original condition.

END OF SECTION 01 73 29

## SECTION 01 77 00 CONTRACT CLOSEOUT

### PART 1 – GENERAL

#### 1.01 SECTION INCLUDES

- A. This Section includes administrative and procedural requirements for Contract Closeout, including but not limited to, the following:
  - 1. Inspection procedures.
  - 2. Project record documents submittal.
  - 3. Operation and maintenance manual submittal.
  - 4. Owner orientation and instruction.
  - 5. Final cleaning.

#### 1.02 RELATED SECTIONS

- A. Section 01 29 76: Progress Payment Procedures.
- B. Section 01 32 13: Construction Schedule.
- C. Section 01 32 29: Project Forms.
- D. Section 01 33 00: Submittal Procedures.
- E. Section 01 74 19: Construction Demolition and Waste Management.
- F. Section 01 78 36: Warranties.

#### 1.03 REQUIREMENTS FOR PREPARATORY FINAL INSPECTION

- A. All contract work completed.
- B. Remove temporary facilities from the Project site.
- C. Thoroughly clean the Buildings and Project site.
- D. All mechanical equipment shall operate quietly and free from vibrations. Properly adjust, repair, balance, or replace equipment producing objectionable noise or vibration in the occupied areas of the buildings. Provide additional brackets, bracing, or other methods to prevent objectionable noise or vibration. All systems shall operate without humming, surging, or rapid cycling.
- E. Properly mount all operation instructions for equipment and post as specified in their respective Sections.
- F. Job Record specifications and prints “as built” shall be completed, signed, and submitted to the District Representative as specified in respective Specification Sections.
- G. Submit to the District Representative, the material and equipment maintenance instructions, as specified in the body of the Specification Sections.
- H. Submit to the District Representative, all warranties, guarantees, and bonds, as specified in the body of the Specification Sections.
- I. When requested, submit certificates indicating payment of all debts and Claims arising from the Work.
- J. Deliver all tools which are a permanent part of equipment installed in the Work to the District Representative.
- K. Deliver all keys, construction and permanent, properly identified, to the District Representative.
- L. Deliver all extra stock items, as directed by the District Representative, to a location within the District.
- M. Contractor determined the Work has been completed. All life safety items are completed and in working order.
- N. Electrical circuits scheduled in panels and disconnect switches labeled.

ATTACHMENT - A

Division 01 RSCCD Specifications

Division 14 Modernization of Elevator Specifications

Bid #1405 Building D Elevator Modernization at Santiago Canyon College

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- O. Grounds cleared of Contractor's equipment, raked clean of debris, and trash removed from Site.
- P. Work cleaned, free of stains, scratches, marks, dirt, superfluous labels, and other foreign matter, replacement of damaged and broken material.
- Q. Finished and decorative work shall have marks, dirt and superfluous labels removed.
- R. Final cleanup complete.

## PART 2 – PRODUCTS (Not used)

## PART 3 – EXECUTION

### 3.01 SUBSTANTIAL COMPLETION

- A. Inspection Procedures: After all requirements preparatory to the final inspection have been completed, as herein specified in the Specification Sections, the Contractor will notify the District Representative, Architect, and Project Inspector to perform the final inspection.
  - 1. If after inspection of the Work, District Representative does not consider the Work complete, District Representative will notify Contractor.
  - 2. If after inspection, District Representative considers the Work complete, Architect shall prepare a Punch List of items to be corrected.
- B. Re-inspection Procedures: Project Inspector, District Representative, Contractor and Architect will inspect the Work upon notice the Work, including final inspection list items from earlier inspections, has been completed, except for items whose completion is delayed under circumstances acceptable to District Representative.
  - 1. Upon completion of inspection, District Representative will recommend Final Completion. If the Work is incomplete, District Representative will advise Contractor of Work that is incomplete or of obligations that have not been fulfilled but are required for Final Completion.
  - 2. If necessary, re-inspection will be repeated, but may be assessed against Contractor if Owner is subject to additional professional service and or additional costs of inspection.

### 3.02 PROJECT RECORD DOCUMENT SUBMITTAL

- A. General: Do not use project record documents for construction purposes. Protect record documents from deterioration and loss. Provide access to record documents for Architect, Project Inspector, and District Representative reference during normal working hours. Project record document shall be updated on a daily basis prior to work being concealed. Prior to submitting each application for payment, secure Project Inspector approval of project record documents.
- B. Record Drawings: Maintain a clean, undamaged set of prints of Drawings and Shop Drawings. Mark the set to show the actual installation where the installation varies from the Work as originally shown. Mark the Drawing that is most capable of showing conditions fully and accurately. Where Shop Drawings are used, record a cross-reference at the corresponding location on the Drawings. Provide detailed and accurate field dimensions for concealed elements that would be difficult to measure and record at a later date.
  - 1. Mark record sets with red erasable pencil. Use other colors to distinguish between variations in separate categories of the Work. Date and number entries in the same format as submitted. Call attention to entry by a "cloud" around the affected areas.
  - 2. Mark new information important to Owner but was not shown on Drawings or Shop Drawings.
  - 3. Utility mainlines and duct-banks within the building footprint shall be indicated by location and depth below finished grade. All utilities and above ceilings and attic spaces shall be fully

- dimensioned and indicated on record drawings. Dimensions shall be measured from building lines or permanent landmarks and shall be triangulated to those features.
4. Note related Change Order or Construction Directive numbers where applicable. RFI submissions shall be referenced on each affected sheet, Drawing and Shop Drawing.
  5. Organize record drawing sheets into manageable sets. Bind sets with durable-paper cover sheets; print suitable titles, dates, and other identification on the cover of each set.
  6. Prior to Contract Completion of the Work, review of the project record drawings by Architect; prepare a final set of project record drawings and submit to Architect.
- C. Record Specifications: Maintain one (1) complete copy of the Specifications, including Addenda. Include with the Specifications two copies of other written Contract Documents, such as Change Orders or Construction Directives issued during construction.
1. Mark these record documents to show substantial variations in actual Work performed in comparison with the text of the Specifications and modifications.
  2. Give particular attention to substitutions and selection of options and information on concealed Work that cannot otherwise be readily discerned later by direct observation.
  3. Note related record document information with Product Data.
  4. Prior to Contract Completion of the Work, submit record Specifications to Architect for Owner records.
- D. Record Samples: Immediately prior to Substantial Completion, Contractor shall meet with Architect and District Representative at the Project site to determine which Samples are to be transmitted to Owner for record purposes. Comply with District Representative instructions regarding delivery to Owner storage area.
- E. Miscellaneous Records: Refer to other Specification sections for requirements of miscellaneous record keeping and submittals in connection with actual performance of the Work. Prior to the date of Contract Completion, complete and compile miscellaneous records and place in good order. Identify miscellaneous records properly and bind or file, ready for continued use and reference. Submit to Architect for Owner records.
- F. Maintenance Manuals: Shall be submitted and approved by the District Representative prior to commissioning and startup of the corresponding system/product. Organize operation and maintenance data into suitable three (3) sets of manageable size. Bind properly, indexed data in individual, heavy-duty, three-inch 3-ring, vinyl-covered binders, with pocket folders for folded sheet information. Mark appropriate identification on front and spine of each binder. Provide a table of contents in front and all items shall be indexed with tabs. Each manual shall also contain a list of subcontractors, with their scope of work, addresses, phone numbers, email, and the names of persons to contact in cases of emergency. Identifying labels shall provide names of manufactures, their addresses, ratings, and capacities of equipment and machinery. Submit to Architect for Owner records. Include the following types of information.
1. Table of Contents (in each binder)
  2. Emergency instructions.
  3. Spare parts list.
  4. Copies of warranties.
  5. Wiring diagrams.
  6. Recommended "turn-around" cycles.
  7. Inspection procedures.
  8. Shop Drawings and Product Data.
  9. Fixture lamping schedule.

10. Note which items also have video training.
- G. Provide one (1) electronic version of all documents listed above on one (1) flash drive to the District Representative.

### 3.03 OPERATION AND MAINTENANCE:

- A. Operation and Maintenance Instructions: Prior to Substantial Completion, arrange for each installer of equipment that requires regular operation and maintenance to meet with designated Owner personnel to provide instruction in proper operation and maintenance. Provide instruction by manufacturer's representatives if installers are not experienced in operation and maintenance procedures. Include a detailed review of the following items:
  1. Maintenance manuals.
  2. Spare parts and materials.
  3. Tools.
  4. Lubricants.
  5. Fuels.
  6. Identification systems.
  7. Control sequences.
  8. Hazards.
  9. Cleaning.
  10. Warranties and bonds.
  11. Maintenance agreements and similar continuing commitments.
- B. As part of instruction for operating equipment, demonstrate the following procedures:
  1. Start-up.
  2. Shutdown.
  3. Emergency operations.
  4. Noise and vibration adjustments.
  5. Safety procedures.
  6. Economy and efficiency adjustments.
  7. Effective energy utilization.
- C. Notice of Termination: Contractor shall submit a Notice of Termination (NOT) to the District for District issuance to the local Regional Water Quality Control Board (RWQCB). Provide a copy of NOT to District Representative.

### 3.04 FINAL CLEANING

- A. General: The Contractor shall be solely responsible for all cleaning operations during the Project.
- B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to the condition expected in a normal, commercial building cleaning and maintenance program. Comply with manufacturer's instructions.
  1. Complete the following cleaning operations before requesting inspection for a certificate of Substantial Completion.
    - a. Remove labels that are not permanent labels.

- b. Clean transparent materials, including mirrors and glass in doors and windows. Remove glazing compounds and other substances that are noticeable vision-obscuring materials. Replace chipped or broken glass and other damaged transparent materials.
- c. Clean exposed exterior and interior hard-surfaced finished to a dust-free condition, free of stains, films, and similar foreign substances. Restore reflective surfaces to their original condition. Leave concrete floors broom clean. Vacuum carpeted surfaces.
- d. Wipe surfaces of mechanical and electrical equipment. Remove excess lubrication and other substances. Clean plumbing fixtures to a sanitary condition. Clean light fixtures and lamps.
- e. Clean the Project site, including landscape development areas, of rubbish, litter, and other foreign substances. Sweep paved areas broom clean; remove stains, spills, and other foreign deposits. Rake grounds that are neither paved nor planted to a smooth, even-textured surface.
- f. Complete the final filter change replacing all HVAC filters.

END OF SECTION 01 77 00

## SECTION 01 78 36 WARRANTY PROCEDURES

### PART 1 – GENERAL

#### 1.01 SECTION INCLUDES

- A. This Section includes procedural requirements for warranties, including manufacturers and installer's standard warranties on products and special product warranties.

#### 1.02 RELATED SECTIONS

- A. Section 01 32 29: Project Forms
- B. Section 01 73 29: Cutting and Patching.
- C. Division 2 through Division 32.

#### 1.03 SUBMITTALS

- A. Form of Submittal: In accordance with the General Conditions, compile two (2) copies of each required final warranty properly executed by Contractor, or by Contractor and Subcontractor, installer, supplier, or manufacturer. Organize the warranty documents into an orderly sequence based on the Specifications and provide a table of contents.
- B. Bind warranties and bonds in heavy-duty, commercial-quality, durable three ring, vinyl-covered loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8½ by 11 paper.
  - 1. Provide heavy paper dividers with celluloid covered tabs for each separate warranty. Mark the tab to identify the item or installation. Provide a typed description of the product or installation, including the name of the product, and the name, address, and telephone number of the installer.
  - 2. Identify each binder on the front and spine with the typed or printed title "WARRANTIES," Project title and/or name, and name of Contractor.
  - 3. When warranted Work requires operation and maintenance manuals, provide additional copies of each required warranty, as necessary, for inclusion in each required manual.
- C. Provide one (1) electronic version of all documents listed above on one (1) flash drive to the District Representative.
- D. Provide a Warranty Guarantee Form on the District's form provided in Section 01 32 29 as part of the Closeout documentation.

### PART 2 – PRODUCTS (Not applicable)

### PART 3 – EXECUTION (Not applicable)

END OF SECTION 01 78 36

## SECTION 14 22 10 MODERNIZATION OF ELEVATORS

### PART 1 - GENERAL:

#### 1.01 GENERAL CONDITIONS:

- A. Bidders Note: All clarifications, exceptions and qualifications to this document must be submitted at bid time. The format shall be this document marked up to reflect bidder's proposed product for this project. Additional pages in letter form with regard to work by others or instructions to the contractor are acceptable, but all other clarifications to this document will be submitted with the bid as a mark-up of this document. The marked-up document when submitted will be reviewed and negotiated, and will become a part of the Contract.
- B. Bidding documents:
  - 1. Bidders shall examine existing conditions. Any discrepancies which affect the elevator work or conditions adverse to the bidder's equipment shall be brought to Owner's Representative's attention at least seven (7) days prior to the bid date. If no discrepancies are presented, changes required to accommodate bidder's equipment become the responsibility and cost to Contractor.
  - 2. Bidders are responsible to identify all required building related work at time of bidding and included with their bid documents.
- C. The specifications are written to be included as an attachment to the modernization contract.
- D. A copy of the final contract with all attachments shall be onsite in the machine room at all times.
- E. The Elevator Contractor shall be responsible for all building modifications to provide a code compliant elevator modernization. All sub-contractors will be contracted directly with the elevator contractor. Elevator contractor shall obtain bids from sub-contractors that are approved by the Owner and/or Owners Representative.
- F. Contractor shall provide a lock-box for each machine room.

#### 1.02 RELATED DOCUMENTS:

- A. The following documents for the contract and complete scope of work related to the modernization and maintenance of the project.
  - 1. RSCCD Contract
  - 2. RSCCD Insurance Requirements
  - 3. RSCCD Bid Form and Bidders Instructions

#### 1.03 DEFINITIONS:

- A. Main Lobby: Ground Level unless otherwise indicated.
- B. Fire Recall Level: As directed by local fire authority.
- C. Alternate Fire Recall Level: As directed by local fire authority.
- D. All retained existing equipment shall be of equal condition and life span as of new equipment.
- E. Serviceability: It is recognized that each manufacturers' system contains components that are proprietary to the development of their systems. The Owner may wish to have the elevator system maintained by

another technically qualified service provider and by submitting a bid for this project, the manufacturer shall guarantee that for a minimum of 20 years they will provide the following:

1. Diagnostic, adjusting and monitoring tools for all components including documents, manuals, and wiring diagrams. Devices shall not self-destruct, require charging or exchange. Remote monitoring devices are excluded from this requirement, however if such devices are removed all wiring shall be neatly terminated, tied within a junction box and properly marked as to its content.
2. Manufacturer shall guarantee to support the equipment for this project with regard to notification to Owner of system corrective updates, provide and install such updates at no cost to Owner.
3. Provide contact information for their separate parts warehouse so that the Owner or designated service provider can order parts on a 24-hour basis and delivered within 48 hours. Parts may be provided from inventory when adequate stock exists. In some cases, parts will have to be special ordered from the factory or other vendor. Proprietary parts will be made available on an exchange basis.
4. Provide a list of parts of each component manufactured and stored at the warehouse and the retail cost of each at close out of the project and estimated escalation cost. The cost of these parts is what would be charged to Owner or other service provider.
5. Provide contact information for technical support so that the Owner or designated service provider can obtain technical support on a 24-hour basis to provide assistance in trouble shooting problems. Indicate hourly rate charged to Owner or designated service provider for such service.
6. In the event that a company other than the Original Equipment Manufacturer (OEM) maintains the elevators, and if the equipment was unable to be repaired by the non- OEM maintenance company, a factory-trained OEM technician would be required to assist (as it would if Contractor's own technician were in the same situation). If such an event was to occur, OEM Contractor would make its factory-trained technician available for assistance upon request of the Owner within three (3) business days, based on the original contractual hourly rates subject to established annual escalations. This shall survive any termination of the maintenance agreement.
7. The above will survive any termination of the maintenance agreement.
8. Contractor shall be defined as "Elevator Contractor".
9. Subcontractor shall be defined as any contractor contracted by either "Owner or Elevator Contractor".

#### 1.04 DESCRIPTION:

- A. Examination of site to occur during bid job-walk:
  1. Contractor shall visit the building, examine the existing elevators and contract documents, determine condition of all retained components, space conditions, power supply and mainline disconnect.
  2. Make all surveys necessary to meet the requirements of this specification and compatibility to products provided.
- B. Field measurements:
  1. Field verify dimensions before proceeding with the work.
  2. Coordinate related work by other trades.
  3. Contractor shall assume responsibility and provide full maintenance of the elevator equipment upon award of this contract and shall continue to do such throughout the modernization.

#### 1.05 RELATED WORK INCLUDED BY OTHERS IN THIS SECTION:

1. Contractor shall visit the building, examine the existing conditions, power supply,

standby/emergency power supply, mainline disconnect, and include all work needed to ensure a fully code compliant modernization. Contractor or his sub-contractors shall perform this work, which may include but is not limited to the following:

a. General:

- 1) Legal access consisting of self-closing and self-locking access doors, ladders, gratings and steps to machine rooms, controller areas, pits and hoistways.
- 2) Providing supports to carry structural reaction, impact and uplift loads imposed by elevator equipment.
- 3) Support full width of hoistway at edge of slab for attachment of sill support angles to be provided and installed by Contractor.
- 4) Grouting behind entrance frames where concrete walls occur.
- 5) Patching of floors, walls and surfaces constituting final finishes.
- 6) Block-outs, pockets and chases in walls and floors for entrances, signals, fixtures, cables and conduit.
- 7) Construction and modifications not limited to the hoistways, machine rooms and controller areas, all areas properly framed, enclosed and adequately ventilated.

b. Electrical work:

- 1) Power feeders: Modification to existing, or installation and connection of three phase power, through fused mainline switches or circuit breakers and extended to terminals of controllers. Provide continuous ground where needed.
- 2) Light circuits: Single-phase circuit through disconnects and extended to controller for car lights and fan.
- 3) Communication circuit: Telephone circuit terminated at junction box of each controller.
- 4) Illumination: Lights with guards, illuminating light switches and convenience outlets in pits, machine rooms, controller areas and overhead sheave spaces.
- 5) Conduit: Installation of electrical conduit and pull boxes with pull wire between hoistways and remote locations of each indicator and control panel.
- 6) GFCI Outlets: Provide in machine room and pits.
- 7) Standby power: Automatic transfer of standby/emergency power and lighting supply through normal feeders with means of absorbing regenerative power. Two (2) No. 14 wires from "Form C" contacts on transfer switch to designated controller to elevator machine rooms to signal transfer of power.
- 8) Provide machine room and pit lighting as required by local code authorities.
- 9) Provide NEMA 4 approved electrical devices and conduits for all electrical installed below the lowest sill level.

c. Fire Life Safety:

- 1) **For all Fire Life Safety Work required, the Work must be coordinated with the District's Fire Alarm Contracted Firm – Cosco Fire Protection, Inc.**
- 2) Sensing devices: Installation and or removal modification to smoke detectors, heat detectors, sprinklers, or products of combustion sensors in elevator lobbies, machine rooms, hoistways and alternate fire recall floor with circuits terminated at junction box in machine rooms for emergency fire service operation.
- 3) Life safety circuits: Circuits terminated at junction box at each controller for life safety speakers and fireman's phone jack to each car in the car canopy or as directed by the Owner and/or local code authority. Note phone jacks are not permitted in corridor call button boxes.



- 4) Pit Sump Pumps: Install or remove sump pumps and/or drainage as required by local code authority.
- 5) Provide fire proofing as required by lode code authority.

1.06 RELATED WORK INCLUDED BY ELEVATOR CONTRACTOR IN THIS SECTION:

1. Barricades for protection of open hoistways during construction.
  - a. Provide lobby signage for modernization impact and lobby kickoff building.
2. Temporary screens: Contractor shall provide code compliant hoistway screening between elevators before construction starts and remove at completion of project.
3. Painting: Field painting of prime-finish items constituting final finishes.
4. Card readers: Including wire from machine room j-box to car top j-box, interfacing with elevator controls and installation in elevator car, connection in machine room and testing of system. Note card reader panel is not allowed inside the machine room. Contractor shall coordinate with sub-contractors to complete all required work at no additional cost to the Owner.
5. Closed circuit T.V: Including wire from machine room j-box to elevator car top j-box, connection in machine room and testing. Car top and machine j-box and labeled. Contractor shall coordinate with sub-contractors to complete all required work at no additional cost to the Owner.
6. Contractor shall coordinate and perform all pretesting of all building systems prior to inspection at no additional cost to the Owner.

1.07 QUALITY ASSURANCE:

A. Qualifications of Contractors:

1. General: The entire elevator installation shall be installed and maintained by the acceptable Contractors. No portion of the work shall be subcontracted unless qualified and accepted by addendum.
2. Installer's qualifications: Installer must be a licensed, certified conveyance mechanic in the state where installation is located.
3. Personnel list: Contractor shall, at time of bid, submit to Owner's Representative for review and approval a complete organization chart that depicts Contractor's "Project Team" exclusively assigned and dedicated to the modernization and maintenance for this project. The chart shall include, but not be limited to, administrative personnel, managers, supervisors, mechanics, apprentices, and all others who shall provide the requirements, services, and obligations of this contract. Personnel quantities, resumes, certification, titles, labor affiliations, exact roles and responsibilities and reporting structures under this contract shall be included.
4. Maintenance qualifications: Contractor must be a licensed elevator contractor in the state where installation is located.
5. Serviceman qualifications: All Contractor's mechanics that shall be assigned to this project, shall have been in the elevator business or trade for a minimum of ten (10) years with continuous and past experience in the preventative maintenance, repair, modernization, inspection and testing of elevator equipment of similar characteristics to those included in this project.
  - a. Manufacturer's qualifications: The design, engineering and manufacture of major elevator components such as machines, motors, motor drive units, controllers, door operators, safeties, governors, selectors, etc. shall be from manufactures that have been in the business for the last ten (10) years. Equipment proposed must have a history of successful operation under similar conditions for the last five (5) years.
  - b. Directly employ sufficient competent personnel within twenty-five (25) miles of project

- to handle construction and maintenance duties.
  - c. Maintain local stock of parts adequate for replacement on permanent or emergency basis.
  - d. Be able to respond to trouble calls within one (1) hour during normal business hours and two (2) hours after normal business hours.
  - e. Be able to respond to entrapments within thirty (30) minutes during normal business hours and one (1) hour after normal business hours.
- 6. Approved company uniforms shall be worn at all times. Names shall be visible at all times.
- 7. Approved company identification shall be visible at all times.
- B. Sub-contractors:
  - 1. Contractor shall be solely responsible for any and all of the work done by his sub- contractor or other employees and all orders or instructions from the Owner's Representative shall be through him to them. It shall be Contractor's duty to see that all of his sub-contractors commence their work properly at the proper time, and carry it on with due diligence so that they do not delay or injure either work or materials; and that all damage caused by them or their workmen is properly made good by them or by himself at his cost. Contractor shall submit names of his sub-contractors for approval by the Owner's Representative.
  - 2. The use of sub-contractors is to be limited to work outside the scope of elevator construction work; for example, patching, painting, coring of walls, marble work and refinishing.
- C. Elevator cabs and entrances:
  - 1. Manufactured or rehabilitated by one of the following or accepted equal:
    - a. Elevator manufacturer
    - b. Citylift
    - c. Eklund
    - d. Sterling Corporation
- D. Quality of work and workmanship:
  - 1. When completed, the installation shall be modern in all respects.
  - 2. All components specified as new shall be provided as new. All components specified to be retained may be provided as new at Contractor's option subject to approval of Owner's Representative. All retained components are to be examined, cleaned, adjusted, repaired and/or replaced with new parts. Contractor must be willing to accept all retained equipment on full maintenance without prorating.
  - 3. All work performed shall be conducted in a workmanship type manner.
- E. Requirements of regulatory agencies:
  - 1. Codes: In accordance with the latest applicable edition requirements of the following and as specified:
    - a. A.D.A.: Americans with Disabilities Act
    - b. ASME: American Society of Mechanical Engineers - A17.1; Safety Code for Elevators and Escalators
    - c. CBC: Title 24; California Building Codes
    - d. CCR: Title 8; California Code of Regulations
    - e. IEEE
    - f. NEC: National Electric Code / NFPA 70.
    - g. NFPA-72

- h. IBC: International Building Code
- i. All local codes and Amendments and Administration, which govern
- j. Requirements of the Division of the State Architect (DSA). Refer to "SUBMITTALS" for deferred approval for public schools and essential facilities other than hospitals

F. Permits, Inspections, and Taxes:

- 1. Arrange and pay for inspections by governing authorities.
- 2. Obtain and post operating permits per applicable code.
- 3. Arrange and pay for all applicable taxes.

G. Safety Policies and Practices:

- 1. Installation and maintenance contractors are required to follow their company's safety practices and policies
- 2. Installation and maintenance contractors are required to follow all practices and policies of the building management.
- 3. Installation and maintenance contractors are required to follow governing authorities' safety practices and policies.

1.08 SUBMITTALS:

A. Shop drawings:

- 1. Submit three copies of the following prior to ordering any materials:
  - a. All submittals shall be provided digitally.
  - b. Layouts: Plan of machinery and hoistway spaces showing new equipment and existing equipment; include impact and static loads imposed on building structure and clearances around equipment.
  - c. Details: Submit details of cab interiors, fixtures, and entrances.
  - d. Data: Indicate on layouts or separate data sheets; machine spaces heat release, power requirements, conduit runs outside of hoistways and machine rooms, car and counterweight roller guides, control systems, motor drive units and door operators.
  - e. Provide all structural submittals with an approved Professional Engineer stamp and signature.

B. Samples:

- 1. Provide samples of materials and finishes exposed to public view and additional, if specifically requested, 6 inch x 6 inch panels, 12 inch lengths or full size if smaller, as applicable.

1.09 CONTRACT:

A. Contract:

- 1. Contractor to agree and execute Owner's contract with all related documents for this project. Contract will be based on approval of the Owner and/or Owner's representative.

1.10 PRODUCT DELIVERY, STORAGE AND HANDLING:

A. Delivery and storage:

- 1. Protect equipment during transportation, erection and construction. Store under cover to prevent damage due to weather conditions. Replace damaged materials. Storage space on site will not be available, if off-site storage is required, Contractor shall be responsible for all related costs. Additionally, if onsite storage is provided and a storage container and or fencing is required to

properly secure and store all equipment, it shall be provided at no cost to the Owner.

B. Handling:

1. Owner's Representative has the first right of refusal to retain any elevator components that are to be removed and modernized with new equipment. All removed components shall remain property of the Owner's Representative, until the Owner's Representative notifies Contractor, in writing, of removed components that Owner's Representative would like to retain. All remaining elevator equipment not to be retained by the Owner's Representative or reused by Contractor shall be promptly removed from the building by Contractor at no cost to the Owner's Representative, and become the property of Contractor.
2. Contractor shall make every attempt to recycle removed elevator equipment. Contractor shall correct any damage to building surfaces and surrounding areas if damaged during removal of this equipment, at no cost to the Owner's Representative.

1.11 SCHEDULING AND SEQUENCING:

A. Schedule:

1. Submit construction schedule with bid indicating time required from award of contract to;
  - a. Submittals
  - b. Equipment fabrication and delivery to site
  - c. Installation and testing per elevator
  - d. Final acceptance of all elevators
2. Contractor shall be responsible for scheduling related work with other sub-contractors to avoid omissions and delays in job progress. Elevators shall not be removed from service, without prior approval, until all equipment has been manufactured and delivered to the project site for all elevators.

B. Sequence:

1. Work under this contract shall be done in the following sequence. Any change to this must be approved by the Owner's Representative. Complete all work for each sequence before proceeding with the next.
  - a. Sequence (1) One: Elevator No. 1

C. Building operations:

1. The building will remain in operation during the execution of this contract. Cooperate with building management in scheduling work in such a way as not to cause interruption of or interference with the building operations.

D. Electrical shutdowns:

1. Temporary electrical shutdowns will not be allowed except for brief periods to be scheduled outside normal hours and at least forty-eight (48) hours in advance and approved by Owner's Representative in advance.

1.12 WARRANTY:

A. Guarantee and Warranty:

1. Provide special project warranty, signed by Contractor, Installer and Manufacturer, agreeing to replace/repair/restore defective materials and workmanship of all work performed which may develop within one (1) year from final date of completion and acceptance of the **entire installation**. "Defective" is hereby defined to include, but not by way of limitation, operation or control system failures, performances below required minimums, excessive wear, unusual deterioration or aging of materials or finishes, unsafe conditions, the need for excessive maintenance, abnormal noise or

vibration and similar unusual, unexpected and unsatisfactory conditions.

**PART 2 - PRODUCTS:**

2.01 DESCRIPTION OF SYSTEMS:

A. Elevator No. 1:

- |                               |  |
|-------------------------------|--|
| 1. Type:                      | Hydraulic Direct Plunger                           |
| 2. Capacity:                  | 2500 Pounds  |
| 3. Speed:                     | 125 FPM  |
| 4. Stops:                     | 2  |
| 5. Openings:                  | 2  |
| 6. Travel:                    | Existing   |
| 7. Control:                   | Soft Start AC                                      |
| 8. Operation:                 | New Microprocessor<br>Simplex Selective Collective |
| 9. Machine Location:          | Remote   |
| 10. Special Operations:       |  |
| a. Independent Service        |  |
| b. Fire Emergency Service     |  |
| c. Emergency Battery Lowering |  |
| d. Tenant Security            |  |
| 11. Door Operation:           | Provide New  |
| 12. Door Protection:          | Provide New  |
| 13. Guide Rails:              | Retain   |
| 14. Guide Shoes:              | Provide New  |
| 15. Plunger Unit:             | Retain   |
| 16. Cylinder Unit:            | Retain   |
| 17. Buffers:                  | Retain   |
| 18. Car Frame & Platforms:    | Retain   |
| 19. Power Unit:               | Provide New  |
| 20. Controllers:              | Provide New  |
| 21. Piping:                   | Retain   |
| 22. Car Operating Panels:     | Provide New  |
| 23. Car Position Indicators:  | Provide New  |
| 24. Hall Position Indicators: | Provide New  |
| 25. Service Cabinet:          | Provide New  |
| 26. Communications:           | Provide New  |

- |     |                        |   |
|-----|------------------------|---|
| 27. | Hall Button Stations:  | Provide New   |
| 28. | Hall Lanterns:         | Provide New   |
| 29. | Handicap Requirements: | Provide New, as required  |
| 30. | Wiring:                | Provide New   |
| 31. | Car Enclosure:         | Retain  |
| 32. | Hoistway Entrances:    | Retain, clad as specified   |
| 33. | Miscellaneous Items:   |   |
|     | a.                     | Key Operated Hoistway Access  |
|     | b.                     | Seismic Requirements  |
|     | c.                     | Card Reader Provisions  |
|     | d.                     | Clean hoistways, machine rooms and equipment; paint machine room floor, pit floor, car top, and all existing metal work |

## 2.02 MATERIALS:

- A. Aluminum: Alloy and temper best suited for anodizing finish specified.
- B. Nickel silver: CDA Alloy 796, leaded nickel silver.
- C. Plywood: PS-1, A-D exterior Grade Douglas Fir, fire retardant treated.
- D. Sheet steel: ASTM A366, uncoated, pickled, free from defects.
- E. Stainless steel: ASTM A167; type 302 or 304.

## 2.03 FINISHES:

- A. Exposed-to-view surfaces:
  - 1. Provide as follows unless otherwise specified.
    - a. Aluminum: Clear anodized finish.
    - b. Sheet steel:
      - 1) Shop prime: Degrease clean of foreign substances and apply one coat of corrosion inhibiting primer compatible with finish paint selected. Hoistway items visible to public shall be painted one additional coat of black paint.
      - 2) Finish paint: Three coats baked enamel; sand each coat smooth; color as selected.
    - c. Stainless steel:
      - 1) Plain: Satin, directional polish, No. 4 finish unless otherwise specified.
    - d. Touch-up:
      - 1) Prime surfaces: Use same paint as factory for field touch-up.
      - 2) Finish painted surfaces: Refinish whole panel with shop prime and finish paint as specified above.
- B. Non-exposed-to-view surfaces:
  - 1. Degrease or remove any rust and shop paint manufacturer's standard corrosion inhibiting

primer.

#### 2.04 AUTOMATIC OPERATION:

##### A. General operation of individual elevators:

1. Provide a non-proprietary diagnostic microprocessor-controlled dispatching system, based on real time calculations, designed to monitor all types of traffic and sufficiently flexible so that it can be modified to accommodate changes in traffic patterns.
2. Serial link communications: Provide a distributed processing network consisting of localized processors located in machine rooms, car stations, hall stations and top of car to allow system to make fast decisions based on data shared by the processor involved in the different operations of the elevators. For group dispatch operations, all elevators in the group shall be capable of acting as a group common dispatcher as the need arises.
3. Fault diagnostic system: Provide Owner's Representative with all hardware such as on-board LED diagnostics, hand held device or laptop computer, as standard with manufacturer, and supporting software documentation. Diagnostic system shall be capable of determining faults most difficult to find, as well as be capable of performing all code required testing.
4. The system shall be flexible, irrespective of the number of elevators in normal service.

##### B. Simplex selective collective operation:

1. Arrange for simplex selective collective automatic operation. Operate elevators from a single riser of landing buttons and from operating device in car.
2. Momentary pressure of one or more car or landing buttons, other than those for landing at which car is standing, starts car, and causes car to stop at first landing for which a car or landing call is registered corresponding to direction in which car is traveling. Stops made in order in which landings are reached, irrespective of sequence in which calls are registered.

#### 2.05 SPECIAL OPERATIONS:

##### A. Inspection operation:

1. Provide key-operated hoistway access device and car top operating device. Key switches shall be mounted in door frames with a separate cover plate at terminal landings.

##### B. Independent service:

1. Independent service operation shall be provided so that, by means of a switch located in the car service cabinet, the car can be removed from automatic operation and be operated by an attendant. The attendant shall have full control of the starting, stopping and direction of car travel.
2. The car shall respond to car buttons only. The hall signals for the car on independent service shall not operate.

##### C. Voice Annunciation:

1. Provide a complete California ADA compliant Voice Annunciation Unit (including the Device, the Wiring to the elevator cab, Speaker and Control System Software designed to include a Voice Annunciation Interface). The Annunciator shall announce the floor number and the intended direction of travel.

##### D. Operation under fire or other emergency conditions:

1. Provide special emergency service to comply with current ASME and CCR Title 8, CBC Title 24, IBC, and local codes having jurisdiction.
2. Provide Phase 1 recall switch at main floor elevator lobby.
3. Key switches at main floor shall be integrated in hall button station with engraved instructions.

- E. Emergency Battery Lowering:
  1. Automatically activates during power loss.
  2. Supplies power for rescue operation.
  3. Causes car to descend smoothly to lowest landing.
  4. Keeps doors closed until proper floor level is reached.
  5. Automatically opens doors at lowest landing.
  6. Safely shuts down elevator until normal power is restored.
  7. Automatically resets for future emergencies.
  8. Differentiates between actual power failure and manual operation of elevator disconnect switch.
- F. Tenant security:
  1. Arrange control system to enable and disable car call buttons as follows:
    - a. Function, which locks out all cars in a group so that all car buttons are inoperative, except the main floor.
    - b. Function which locks out any selected car button for all elevators in a group serving that floor.
    - c. Tenant security operations can be overridden by cars on independent, any special emergency service or by card reader access.

2.06 DOOR OPERATION:

- A. Passenger type:
  1. Provide door times available as specified under "Design Criteria."
  2. Car and hoistway doors shall open and close simultaneously, quietly and smoothly; door movement shall be cushioned at both limits of travel. Door operation shall not cause cars to move appreciably.
  3. Door hold open times shall be readily and independently adjustable when car stops for a car or hall call. Main floor door hold times shall be adjustable independent of other floors.
  4. Provide closed loop regulated speed performance, onboard diagnostics, adjustable times, nudging, and test switches.
- B. Door operator:
  1. Provide new heavy-duty master type solid state closed loop door operators mounted on car enclosure utilizing minimum 12-gauge support angles to isolate from direct mounting of operator on the car top.
  2. Pre-approved closed loop heavy duty door operators:
    - a. GAL MOVFR
  3. Provide code compliant door weight data tag.
- C. Door Protection:
  1. Remove existing door protection devices and provide new electronic optical 3D scanning type:
    - a. Provide a door protective system which does not rely on physical contact with a person or object to inhibit door movement or initiate door reversal.
    - b. Pre-approved optical door sensors:
      - 1) Elevator Contractor



- 2) Adams GateKeeper Max
- 3) Janus Pana Chrome 3D, with voice annunciation
- 4) Tritronics Leading Edge
- c. The system shall be able to detect a 2-inch diameter rod introduced at any position within the door movement and between the height of 2 inches and 63 inches above sill level.
- d. Detection of intrusion into the protected area shall cause the doors, if fully open, to be held in the open position and, if closing, to reverse to fully open position.
- e. If doors are prevented from closing for an adjustable period of 15 to 45 seconds or upon activation of fire emergency service, they shall proceed to close at reduced speed and a loud buzzer shall sound. Door closing force shall not exceed 2-1/2 ft.-lb. when door re-opening device is not in operation.
- f. For side-opening doors, the detector for the strike jamb side shall be recessed, flush with strike jamb.

## 2.07 SIGNALS AND OPERATING FIXTURES:

### A. General:

1. Provide signals and fixtures as shown and specified. Location and arrangement of fixtures shall comply with disabled access requirements.
  - a. Passenger Elevator Buttons: Provide minimum 1-inch diameter mechanical, with fully illuminated buttons with LED's and engraved identifications. Buttons shall be raised 1/8 inch from surrounding surface with square shoulders.
  - b. Switches: Toggle type typically or key operated where noted.
  - c. Provide ten (10) keys for each elevator keyed device, with proper labeled identification upon turnover of elevator.
  - d. Cabinets: Provide with pulls, concealed hinges and doors mounted flush with hairline joints to adjacent surface.
  - e. Arrangement: Arrangement of fixtures shall generally conform to that specified, but components may be rearranged, if desired, subject to Owner's Representative's approval.
  - f. Engraving: Of size indicated; color backfill with epoxy paint in contrasting color as selected. No applied engraved plates.
  - g. Lamps: Miniature LED type.
  - h. Audible Chimes: Electronic adjustable audible chimes; bell type gong not acceptable.
  - i. Provide floor passing signal of the adjustable electronic audible chime type.
  - j. Tactile Markings: Provide raised Braille and alpha characters, numerals or symbols adjacent to operating buttons and devices used by the public according to local codes. Indications may be engraved directly on faceplates or separate plates flush mounted with hairline joints and concealed mechanical fasteners. Plates shall be of same size and shape as buttons or integral "fishtail" type.
  - k. Acceptable manufacturers: EPCO, ERM, MAD, or INNOVATION, fixtures with 5/8" engraved identifications. Operation of car or hall button shall cause button to illuminate. Response of car to car or hall call shall cause corresponding button to extinguish.
  - l. Faceplates: Provide of material and finish as indicated and specified; 1/8-inch minimum thickness with sharp edges relieved. Faceplates shall be sized to cover holes left by removal of existing fixtures where new fixtures are provided and provided with engraved fire sign, per A17.1. New faceplates shall cover all existing holes or Contractor shall patch at no additional cost to the Owner.

- m. Audible chimes: Electronic adjustable audible chimes from 75 to 85 dB in elevator lobby 3' - 0" above floor and 3' - 0" away from elevator entrance; bell type gong not acceptable.
- B. Car operating panels:
  - 1. General: Provide buttons numbered to conform to floors served and the following:
    - a. Locate top operating button at 48 inches above floor.
    - b. Locate emergency stop switch and illuminated alarm button in bottom row at 35 inches above floor.
    - c. Provide "Door Open" and "Door Close" buttons located above emergency stop and alarm of same design as car button.
    - d. All signage required by local codes shall be engraved and painted as directed by Owner's representative.
    - e. Provide fire emergency features, per code. Provide FEO-F1 key switch for fire service unless local code requires different.
    - f. Make provisions for card readers.
  - 2. Provide one new panel; integrate cabinets, buttons and engraving into hinged single piece faceplate mounted to front return panel.
- C. Car position indicators:
  - 1. Provide car position indicators with 2 inch indications corresponding to floor designations with matching direction arrows.
    - a. Provide new digital alpha numeric type segmented LED readout indicator with minimum two-inch high indications mounted integral with each car operating panel.
- D. Service cabinet:
  - 1. Provide new cabinet, door with a lock and concealed hinge as an integral part of car operating panel mounted with flush hairline joints. Cabinet door shall be provided with a flush glazed window of required size to hold elevator-operating permit, mounted horizontally. Service cabinet shall contain the following:
    - a. Independent service switch
    - b. Two-speed ventilation switch (Hi-Off-Low)
    - c. Light switch as applicable
    - d. Inspection switch, key operated
    - e. Duplex GFI convenience outlet
    - f. Buzzers as required
    - g. Constant pressure test switch for emergency car lighting
    - h. Card reader over-ride switch-key operated
- E. Communication equipment:
  - 1. Provide a new complete communication system in compliance with ADA regulations consisting of a combination speaker/microphone, amplifier, automatic dialer with 4 number rollover capability and matching car station push button with telephone symbol to activate system and acknowledgment lights. Mount in car operating panel behind a pattern of holes, wire to machine room and program automatic dialer as directed by Owner's Representative.
- F. Hall button fixtures:
  - 1. Each fixture shall contain buttons, which light to indicate hall call registration and extinguish when call is answered. Provide intermediate fixtures with two buttons and terminal fixtures with one. Engrave fire-exiting instructions on faceplates. Provide minimum of two fasteners at

top and bottom of faceplate.

- a. Provide elevator with one riser of hall button stations.

G. Hall position indicators:

1. Provide with indications corresponding to floor designations with matching direction arrows.
  - a. Provide new digital alphanumeric type segmented LED readout indicator with minimum two-inch high indications.

H. Hall lanterns:

1. Provide with single chime for up and double chime for down direction. Lantern illuminates white for up and red for down. As car approaches floor, lantern shall illuminate and chime approximately 4 seconds prior to doors opening to indicate next direction of travel. Chime sound level shall be at 10 decibels over ambient.
  - a. Provide manufacturer's standard hall lanterns with equilateral triangular projecting lenses.

I. Disabled access requirements:

1. Provide to meet local codes having jurisdiction including handrail and button configuration.
  - a. Car operating panels: Provide raised Braille and alpha characters, numerals or symbols to the left of operating buttons and devices used by the public. Indications may be engraved directly on faceplates or separate plates flush mounted with hairline joints and concealed mechanical fasteners. Plates shall be of same size and shape as buttons. Raised characters shall be white on a black background with Braille designations directly below the character. Provide "star" at main egress landing.
  - b. Entrances: Provide raised Braille and alpha characters, numerals or symbols similar to those for car stations of size required by governing authority. Locate on each entrance jamb at 60 inches above floor indicating floor designation. Material and finish of plates shall be white on black. Braille designation shall be to the bottom of the raised character. Provide "star" at main egress landing. Provide mounting means similar to those on car panels.
  - c. Entrances: Provide plate with elevator number for first floor entrance. Character shall be a minimum of 3".

J. Medical emergency elevator:

1. Conform to current code requirements.
2. The identification symbol (Star of Life) shall be fabricated from material and finish matching hall button stations and mounted with concealed mechanical fasteners. Submit samples.
3. Local jurisdictional authority shall designate the medical emergency elevator.

## 2.08 WIRING:

A. General:

1. Provide all necessary wiring and 25% spares between cars and controllers and to all remote-control stations; minimum of eight. Furnish shielded wires in cables for all communications card readers, cameras, digital displays, and speakers. Include four additional pairs of shielded spares and two RG-6 coaxial cables or equivalent, for each car. Electrical wire runs will be free of splices or connection unless at designated junction points.

B. Traveling Cables:

1. Use minimum number of traveling cables. Include shielded wires and spares as noted above. Cord thoroughly and protect cables from rubbing against hoistways or car items. Provide with steel cable core and properly anchored to relieve strain on individual conductors.
  2. All traveling cables shall be wired from machine to elevator, without junction box or spliced connections.
- C. Hoistway Wiring:
1. All wiring shall be neatly terminated, tied within a junction box and properly marked as to its content.
  2. If junction boxes are used, NEC approved terminal strips shall be used and properly identified.
  3. No splices shall be allowed.
  4. Install new hoistway gutter in each hoistway that currently does not have hoistway gutter installed.
- D. Work light and GFCI convenience outlet:
1. Provide on top of car with protective plastic lamp guard.
  2. Provide compact fluorescent type (CFL)
- E. Stop switch:
1. Provide in each pit. Provide NEMA 4 enclosure.
  2. Provide on each top of car.
- F. Alarm gong:
1. Provide on top of each elevator to be actuated by corresponding alarm button or emergency stop switch.
- G. Auxiliary disconnect switches:
1. Provide as required in remote controller rooms or at remote equipment not in view of mainline switches; include all wiring and conduit.
- H. CCTV circuit:
1. Provide provisions for closed circuit television camera in elevators. Run from elevator car top to outside of the elevator machine room, as directed by Owner at no additional cost to the Owner.

## 2.09 CAR ENCLOSURES:

- A. General:
1. Fabricate finish work smooth and free from warps, buckles, squeaks and rattles; joints lightproof. Car shall be sound isolated from car frame. No visible fastenings except as indicated.
  2. Elevator shall be weighed before work begins to determine actual weight of car enclosures. Contractor shall keep a log of all equipment and weight removed and added to the suspension system. Contractor is responsible for complying with all applicable ASME and local codes.
  3. Elevator shall be weighed at the completion of the project. Provide all documentation to the governing authority and Owner's Representative for permanent record.
  4. Provide new crosshead data as required by ASME and local code authorities.
- B. Emergency lighting:
1. Provide an emergency car lighting unit mounted on top of car, battery driven and self-rechargeable. Upon outage of normal power the unit shall, within 5 seconds, light two lamps as part of normal car lighting. The unit shall have sufficient capacity to keep the lights in continuous operation for four hours and the alarm bell for one hour. Provide a readily accessible means for

testing the unit in service cabinet. Light fixtures mounted in car front returns or operating panels are not acceptable. Illuminate lights directly over car operating panels.

C. Retain existing shell enclosure and rehabilitate as follows:

1. Front returns: Clad, stainless steel #4
2. Car operating panels: Provide new, stainless steel #4
3. Wall panels: Retain
4. Transom: Clad, stainless steel #4
5. Hand rails: Provide new, stainless steel #4, CA, ADA Compliant
6. Ceiling and lighting: Provide new  
Provide a suspended ceiling fabricated from stainless steel No. 4 finish applied to particleboard. Provide multiple equally spaced low-voltage LED down lights in ceiling with appropriate dimmer switch controls located in service cabinet.  
Light fixtures to provide uniform illumination of 25 foot-candles at handrail height.
7. Ventilation: Provide new, two-speed squirrel cage exhaust blower (Morrison SOE, or equal) with sound isolation mounting on canopy.
8. Emergency exit: Retain, provide code compliant switch
9. Car Doors: Provide new, stainless steel #4
10. Finish flooring: Provide new
11. Protective pads: Provide one set of heavy quilted protection pads. Pads shall cover all walls with cutout sections for car operating panels. Provide pads with studs, S-hooks, or rubber-coated 'J' type hooks sewn into top of pad for mounting on top of removable panels.

2.10 HOISTWAY ENTRANCES:

A. General:

1. Retain existing or provide new as specified.

B. Hangers and Tracks:

1. Provide all new door tracks and hanger assemblies. Sheave type with two-point suspension. Steel sheaves with flanged groove and resilient sound-absorbing tires. Minimum 2-1/2-inch diameter for hoistway, 3 inch for car. Manufacturer's heavy-duty tracks and ball or roller bearing with adjustable up thrusts.

C. Hanger headers:

1. Provide new; minimum 3/16-inch-thick extending from strut to strut.

D. Struts:

1. Retain existing, clean and paint.
  - a. Provide rubber door stops.

- E. Closers:
  - 1. Provide new cable relating torsion spring mechanical type or broken arm jack knife type as required for door assembly. Provide Smart Tork Spirators.
- F. Dust and hanger covers:
  - 1. Provide new; minimum 16-gauge sheet steel reinforced to ensure rigidity. Paint black.
- G. Fascia, toe and head guards:
  - 1. Retain existing, modify to comply with code, refinish with black paint and refasten for greater rigidity.
- H. Interlocks:
  - 1. Provide all new. Equip each hoistway door with a tamper-proof interlock which shall prevent operation of the car until doors are locked in the close position as defined by the Code and shall prevent opening of doors at landing from corridor side unless car is at rest at landing in leveling zone or, hoistway access switch is used. Provide all new type "SF" high temperature wiring for interlock circuits.
- I. Pick-up roller assemblies:
  - 1. Provide all new pick-up roller assemblies as required for door operating equipment furnished.
- J. Door restrictor:
  - 1. Provide new, door restrictor device compatible with new door equipment.
- K. Sills:
  - 1. Provide new extruded sills with non-slip surfaces and grooves suitable for guides. Extend strut to strut and mount with concealed fasteners. Provide all support angles and levelers required for a complete installation. Sill material as scheduled.
- L. Limit Switches:
  - 1. Provide new
- M. Frames:
  - 1. Retain existing.
- N. Hoistway doors:
  - 1. Provide new door panels. Fabricate from 16-gauge material sufficiently reinforced with steel to ensure rigidity. Provide two guides per panel, which will remain engaged in sill if guiding member is destroyed. Provide full-length neoprene astragals on leading edge and non-vision wings of material and finish to match doors. There shall be no keyholes in the door unless required by governing authority. Corridor side of door panel material and finish as scheduled. Corridor side of door panel material and finish as scheduled. Return the finish a minimum of 1/2 inch around edges of door. Stainless steel #4.
- O. Passenger Elevator Entrance Schedule:
  - a. Size: 3' – 6" wide by 7' – 0" high.
  - b. Type: Side opening, Single speed
  - c. Frames:
    - 1) Main floor: Clad, stainless steel #4
    - 2) Typical floors: Clad, stainless steel #4

- d. Doors
  - 1) Main floor: Provide new, stainless steel #4
  - 2) Typical floors: Provide new, stainless steel #4
- e. Sills:
  - 1) Main floor: Retain
  - 2) Typical floors: Retain

2.11 HYDRAULIC ELEVATOR EQUIPMENT:

A. Design Criteria:

1. Performance:

- a. Contract Speed: Maximum ten percent (10%) speed variation under any loading condition in both directions.
- b. Motion Time: From start to stop of elevators motion as measured in both directions for a typical one floor run under any loading condition.
  - 1) Elevator No. 1: 9.1 seconds
- c. Door Open Times:
  - 1) Elevator No. 1: 3.2 seconds
- d. Door close times: Minimum, without exceeding kinetic energy and closing force, allowed by code.
- e. Door dwell times: Comply with A.D.A. formula and provide separate adjustable timers with initial settings as follows:
  - 1) Main lobby hall call: 5.0 to 6.0 seconds.
  - 2) Upper lobby hall call: 5.0 to 6.0 seconds.
  - 3) Car call: 5.0 to 6.0 seconds.
  - 4) Interruption of door protective device: Reduce dwell to 1 second.
- f. Leveling: Within 1/4 inch under any loading condition. Level into floor at all times, do not overrun floor and level back.
- g. Hydraulic pressure: Hydraulic components shall be factory tested for 600 PSI. Maximum operating pressure shall be 425 PSI.

2. Operating qualities: Owner's Representative will judge riding qualities of cars and enforce the following requirements. Make all necessary adjustments.

- a. Acceleration and deceleration: Starting and stopping shall be smooth and comfortable, without obvious steps of acceleration. Slowdown, stopping and leveling shall be without jars or bumps. Elevator shall start movement within .5 seconds of fully closed doors. Stopping upon operation of emergency stop switch shall be rapid but not violent.
- b. Horizontal Acceleration (ISO A95 Scaling): Maximum 12 mg peak-to-peak measured at full speed for full travel in both directions.
- c. Vertical Vibration: Ride shall be free of vibration throughout acceleration, full speed and deceleration for full travel in both directions.

3. Sound control: (A Scaled – fast – Lmax over the duration of the operation).

- a. Vibration: Sound isolate machines and motor drives from beams and building structure to prevent objectionable noise and vibration transmission to occupied building spaces.
- b. Airborne noise: Maximum acoustical output level of:
  - 1) 85 dB measured in machine room. With the meter located 3' - 0" from each machine

- room door at floor level.
- 2) 55 dB measured in elevator cars during all sequences of operation.
- 3) 50 dB measured in elevator lobbies. From the nearest staff work station to the elevator lobby.

2.12 HYDRAULIC HOISTWAY EQUIPMENT:

- A. Guide rails and brackets:
  - 1. Retain existing rails, realign, clean, check, tighten and replace Code non-complying brackets, fishplates and bolts.
    - a. Provide log of the alignment corrections to the Owner's Representative.
- B. Guide shoes:
  - 1. Provide new guide shoes of the roller type with neoprene tires, minimum 3/4-inch-wide and fully adjustable spring loaded to provide continuous contact with rail surfaces. Balance car to insure equal guide shoe pressure on all wheels and not exceed manufacturer's recommendations. Nominal roller diameter shall be 6".
    - a. Static balance car.
- C. Buffers:
  - 1. Retain existing.
- D. Car frame and platform:
  - 1. Retain existing car frame. Clean down and tighten frame bolts. Static balance weight to be added as required.
- E. Platen isolation:
  - 1. Provide minimum 3/4-inch-thick steel plates between top of plunger and car frame with 1 inch rubber or neoprene isolation material between.
- F. Cylinder:
  - 1) Retain
  - 2. Piping:
    - a. Reuse existing.
      - 1) Provide new gaskets for Victaulic fittings and test for leaks.
  - 3. Isolation coupling
    - a. Provide at least two isolation couplings one in the machine room and one in the pit.
- G. Pit Valves:
- H. Oil:
  - 1) Provide in each elevator pit a gate valve to shut off oil between cylinder and pumping plant.
  - 2) Provided new a pressure type line rupture safety valve to shut off oil between cylinder head and pit valve. Activation of safety valve shall not void operation of lowering valve.
    - 1. Hydraulic Fluid: Provide new.

2.13 MACHINE ROOM EQUIPMENT:

- A. General:
  - 1. Provide equipment to fit existing space and structural limitations. Coordinate related electrical,



structural and mechanical work with other trades.

B. Pumping plant:

1. Provide new.
  - a. General: Self-contained unit with sound reducing cabinet and sound isolated base.
  - b. Pump: IMO, Roper or accepted equal for 150 SSU oil, belt driven or submersible. Maximum speed 3600 RPM. Maximum pressure 425 pounds per square inch.
  - c. Tank: Capacity equal to plunger displacement plus 50%. Provide strainers, oil level gauge and device to maintain uniform oil temperature.
  - d. Electronic Control Valves: Integral type by Elevator Equipment Company, Maxton Company or by elevator manufacturer. Provide conveniently located manual lowering valve accessible without removing pumping plant enclosure panels.
  - e. Provide a gate valve to shut off oil for each pumping plant.
  - f. Motor: General Electric, Imperial, Westinghouse or accepted equal; maximum speed 1800 RPM for belt driven and 3600 RPM for submersible. Provide minimum 120 start heavy-duty motor, continuous rated, 50 degrees C. temperature rise, Class A insulation or 70 degrees C. rise for Class B insulation.
  - g. Muffler/Silencer: Blow-out proof type between pumping plant and cylinder.

C. Controller:

1. Integral, floor or wall mounted as applicable to space conditions. Include door operating relays combined with controller. Provide solid state soft starting with starting switches rated at minimum 57% of horsepower rating. IEC method of line starter application is unacceptable. Provide three (3) manual reset overload relays, one in each line and reverse phase relay. Provide externally mounted permanently identified junction boxes on controller cabinets for termination of communication circuits. Pre-approved controllers:
  - a. Motion Control Engineering HMC-2000

D. Smartrise Controls Hydraulic elevator protective circuit:

1. In the event the car should stall due to low oil in the system or, if for other cause the car fails to reach the top landing within a predetermined time while traveling "up", a special circuit shall be provided which shall automatically return the car to the bottom landing and open the doors for 10 seconds after which the elevator will close doors and completely shut down. Recycling the mainline switch shall restore Service.

**PART 3 - EXECUTION:**

3.01 INSTALLATION:

A. General:

1. Install per manufacturer's requirements, those of regulatory agencies and as specified.

B. Welded Construction:

1. Provide welded connections for installation of elevator work where bolted connections are not required for subsequent removal or for normal operation, adjustments, inspection, maintenance and replacement of worn parts.
2. Comply with AWS standards for workmanship and for qualifications of welding operators.

- C. Sound Isolation:
1. Mount rotating and vibrating elevator equipment and components on vibration- absorption mounts, designed to effectively prevent transmission of vibrations to structure and thereby, eliminate sources of structure-borne noise from elevator system.
- D. Lubrication:
1. Lubricate operating parts of systems as recommended by manufacturer.
- E. Hazardous Disposal Certification:
1. Contractor to provide oil and hazardous waste removal documentation per required EPA standards. Provide copy of documentation to Owner.
- F. Alignment:
1. Coordinate alignment of hoistway entrances with elevator guide rails, for accurate alignment of entrances with cars. Where possible, delay final adjustment of sills and doors until car is operable in shaft. Reduce clearances to minimum, safe workable dimensions at each landing.
  2. Align guide rails plumb and parallel with maximum deviation of 1/16 inch. Anchorage of guide rails in pits shall not compromise waterproofing.
- G. Graphics:
1. Provide graphics visible to public as selected by Owner's Representative.
- H. Manufacturer's nameplates:
1. Manufacturer's nameplates, trademarks or logos not permitted on surfaces visible to public.
- I. Cleaning of the installation:
1. After the installation of each elevator has been completed and immediately prior to the carrying out of the tests, the machine room and all equipment therein, the elevator hoistways including outside of car and all ledges and similar areas, the elevator pit and equipment therein, and all door hanger runners, guides, tracks and sills shall be thoroughly cleaned down, preferably with vacuum cleaning equipment, and all dust, fluff, dirt, grit, excessive oil and grease and rubbish shall be removed from site.
- J. Finish painting after tests:
1. After satisfactory completion of the tests, any damage to the paint work shall be made good and the installation re-cleaned, if necessary, after which at least one final coat of gloss oil resistant or enamelled paint shall be applied by brushing or spraying in Contractor's customary colors to all the existing and new equipment in the machine room and also to such items in the hoistway or elsewhere which have received only a primer coat.
  2. Painting shall be performed either during normal working hours or after hours at no additional cost to the Owner.
- K. Painting of machine room floor and pit floors:
1. After the completion of the entire installation, the floor of machine room and pit areas shall be thoroughly cleaned down and brush painted with one coat of traffic paint having oil resistant properties. Pit floors shall be painted after the completion of the waterproofing. Owner's Representative will advise the color.
  2. Painting shall be performed either during normal working hours or after hours at no additional cost to the Owner.

### 3.02 NOISE CONTROL:

- A. General:
  - 1. Contractor, in the preparation and the execution of the work, shall recognize the particular and mandatory requirements of the remodeling project due to the character of the work and the use occupancy of the building.
  - 2. Contractor shall perform all noisy work as directed by Owner's Representative.
- B. Building operations:
  - 1. Noise and vibration generated by this construction for this work may, at times, create a problem for the operations of the building. In the event the noise produced by the construction work conflicts with the building function, Contractor, at the request of the Owner's Representative, shall reduce or stop the noise.
  - 2. All disruptive work including removal of old materials and deliveries of new materials shall be done on overtime at no additional cost to Owner.
  - 3. All disruptive work will be performed after hours at no additional cost to Owner.
- C. Measurement:
  - 1. The noise level shall be measured on the "A" Scale of a sound level meter as follows:
    - a. With the meter located 3' - 0" from the nearest staff work station to the elevator lobby, the sound level shall not exceed 65 db.
    - b. With the meter located 3' - 0" from outside of each machine room door at floor level, the sound level shall not exceed 70 db.
- D. With the meter located 3' - 0" from any hoistway door at any level, the sound level shall not exceed 70 db. Types of noise generating work:
  - 1. All heavy demolition (concrete walls and floors).
  - 2. All grinding, chipping, pounding, sanding and cutting of holes and core drilling.

### 3.03 FIELD QUALITY CONTROL:

- A. Regulatory agencies inspection:
  - 1. Upon completion of elevators, Contractor shall provide instruments, weights and personnel to conduct test required by regulatory agencies. Contractor shall submit a complete report describing the results of the tests.
- B. Examination and testing:
  - 1. When installation is ready for final acceptance, notify and assist Owner's Representative in making a walk-through inspection of entire installation to assure workmanship and equipment complies with contract documents. Provide equipment to perform the following tests:
    - a. One-hour heat and run test with full load in car. Perform for one car of each duty.
      - 1) Stop car at each floor in each direction.
      - 2) Verify that temperatures do not exceed manufacturer's motor ratings.
      - 3) Performance and leveling tests shall be made before and after heat and run test.
    - b. Check and verify operation of all safety features and special operations.
      - 1) Measure horizontal acceleration.
      - 2) Measure acoustical output levels in machine room, lobbies and cars.
- C. Correction:
  - 1. Make corrections to defects or discrepancies at no cost. Should discrepancies be such that re-examination and retesting is required, Contractor shall pay for all costs including those of HKA

Elevator Consulting, Inc., fees.

D. Final acceptance:

1. Final acceptance of the installation will be made only after all corrections are complete, final submittals and certificates received and the Owner's Representative is satisfied and the installation is complete in all respects. Final payment will not be made until the above is completed.

3.04 INSTRUCTIONS:

- A. Instruct Owner's personnel in proper use of each system.

3.05 PROJECT RECORD DOCUMENTS:

A. As-built drawings:

1. Contractor shall maintain at the job site a separate and complete set of contract drawings which will be used solely for the purpose of recording changes made in any portion of the work during the course of construction, regardless of the reason for such change.
2. Changes, as they occur, will be marked on the record set of drawings on a daily basis.
3. The monthly payment will be withheld until the Owner's Representative has verified that "as-built" corrections are current. Before final payment is authorized, Contractor shall certify that all changes in the work are included on the drawings and will deliver such to the Owner's Representative.

B. Record drawings:

1. Contractor shall prepare "as-built" drawings in duplicate of any changes to electrical work on prints supplied by the Owner's Representative. During the course of construction, actual locations to scale shall be shown for all runs of mechanical and electrical work, installed in walls and floors or otherwise concealed. This shall cover all piping, electrical wiring; whether in conduit or cable, duct work, etc. shall be located, in addition, by dimension. All services shall be identified in ink on the prints.
2. In addition, Contractor shall keep a complete record copy of the plans and specifications for the use in preparing "as-built" plans and specifications at the end of the job. Contractor shall sign and date the prints and deliver them to the Owner's Representative.

3.06 MAINTENANCE:

A. General:

1. Provide complete continuing maintenance on entire elevator equipment during regular working hours on regular working days from award of contract, through construction and for a period of twelve (12) months after completion and acceptance of all elevators.

B. Maintenance data:

1. Submit three sets of complete and accurate maintenance data specific for each elevator at the midpoint of the project. Final acceptance and final payment will not be made until approved and received.
  - a. Manuals: Describe proper use and maintenance, inspection, and testing of equipment. All error codes and description of the codes will be part of the documents. It should also include lubrication points, types of lubricants used and frequency of lubricant application.
  - b. Provide information for all of the switches and functions that were installed.
  - c. Parts catalogs: Complete listing of all parts of equipment and components used in the installation.
  - d. Wiring diagrams: One laminated set mounted in machine room, one reproducible set and one set provided in a digital format, delivered to Owner's Representative. Wiring

diagrams shall be as built, specific for this installation, and reference identification on drawings shall match points identified on terminals of controllers.

- e. Maintenance tool and software manuals: Provide maintenance tools, dongles, and supporting software documentation required for the complete maintenance of the entire system including diagnostics, adjusting, and testing. Maintenance tool may be hand held or built into control system and shall be of the type not requiring recharging or reprogramming nor of the automatic destruct type. The tool and supporting software may be programmed to operate only with this project's identification serial numbering.
  - f. All documents shall be provided in digital format.
- C. Quotation: Base bid shall include cost of maintenance and materials as described above.
- D. Warranty Closeout:
1. Should Owner and/or Owner's representative be required to perform a second verification site visit because failure of completion of the Correction / Deficiency List, Contractor shall compensate Owner and/or Owner's Representative for any costs incurred by the second and any subsequent verification site visits, on a per site visit basis.
  2. Failure of Contractor to complete any items on the Correction / Deficiency List within the stated time shall be cause for the assessment of liquidated damages including Owner procuring services from another elevator contractor with costs to be reimbursed to Owner by Contractor.

END OF SECTION 14 22 10

## **APPENDIX A-RSCCD PROJECT FORMS**

- 1) Allowance Disbursement Authorization
- 2) Request for Information
- 3) Application for Payment / Schedule of Values
- 4) Change Order
- 5) Conditional Waiver and Release – Final Payment
- 6) Conditional Waiver and Release – Progress Payment
- 7) Immediate Change Directive
- 8) Unconditional Waiver and Release – Final Payment
- 9) Unconditional Waiver and Release – Progress Payment
- 10) Construction Waste Management Plan
- 11) Construction Waste Management Progress Report
- 12) Local Hire Local Business Forms
- 13) Certificate of Substantial Completion
- 14) Warranty Guarantee Form

**Rancho Santiago Community College District**

**CONTRACTOR ALLOWANCE  
DISBURSEMENT AUTHORIZATION**

College Name: \_\_\_\_\_

Initiation Date: \_\_\_\_\_

Project Name: \_\_\_\_\_

Allowance Disbursement No.: **1**

To: (District) \_\_\_\_\_

Project Agreement No/Bid #: \_\_\_\_\_

From: (Contractor) \_\_\_\_\_

Contract / PO Number: \_\_\_\_\_

**Description of Item(s) to be charged to Contractor Allowance is as follows:**

**Contractor Allowance Request Total: \$0.00**

A. Original Contractor Allowance Amount:	_____
B. Net Allowance Disbursements previously authorized:	_____
C. Charges to Contractor Allowance as a result of this authorization:	<u>\$0.00</u>
D. Current Contractor Allowance Balance including this authorization:	<u>\$0.00</u>

Acknowledgment:

\_\_\_\_\_  
District Project Manager Signature                      Name (Printed)                      Date

\_\_\_\_\_  
District Facilities Director Signature                      Name (Printed)                      Date

cc: Project File



# REQUEST FOR INFORMATION (RFI)

School Name: \_\_\_\_\_

RFI Number: \_\_\_\_\_

Project Name: \_\_\_\_\_

Date: \_\_\_\_\_

Contractor: \_\_\_\_\_

Project No.: \_\_\_\_\_

Date Issued To: \_\_\_\_\_  
(Architect)

DSA No.: \_\_\_\_\_

\_\_\_\_\_  
Drawing Number Detail

\_\_\_\_\_  
Drawing Page

\_\_\_\_\_  
Specification

### Information Requested:

### Suggested Course of Action:

Schedule Impact:  Yes  No

Cost Impact:  Yes  No

Request Issued by:

\_\_\_\_\_  
*Contractor's Signature*

\_\_\_\_\_  
*Name (Printed)*

\_\_\_\_\_  
*Date*

### Response:

Response Issued by:

\_\_\_\_\_  
*Signature*

\_\_\_\_\_  
*Name (Printed)*

\_\_\_\_\_  
*Date*

Response Reviewed by:

\_\_\_\_\_  
*Architect's Signature*

\_\_\_\_\_  
*Name (Printed)*

\_\_\_\_\_  
*Date*

*Proceeding with the Work in accordance with the above information indicates the Contractor's acknowledgement that there will be no change in the Contract Sum or Contract Time. If the Contractor considers that a change in Contract Sum or Contract Time is required, before proceeding with the work obtain authorization from the Owner by notifying the Owner and the Architect*





# CONTINUATION SHEET

APPLICATION AND CERTIFICATION FOR PAYMENT, containing Contractor's signing Certification, is attached. In tabulation below, amounts are stated to the nearest dollar. Use Column 1 and Contract where variable retainage for line items may apply

Application No.: 0  
 Application Date: date  
 Period To: date

A ITEM NO.	B DESCRIPTION OF WORK	C			D		F MATERIALS PRESENTLY STORED (NOT IN D OR E)	G		H BALANCE TO FINISH (C-G)	I RETAINAGE (IF VARIABLE RATE)
		ORIGINAL CONTRACT AMOUNT	CHANGE ORDER AMOUNT	CURRENT CONTRACT AMOUNT	WORK COMPLETED			TOTAL COMPLETED AND STORED TO DATE (D+E+F)	% (G ÷ C)		
					FROM PREVIOUS APPLICATIONS (D + E)	THIS PERIOD					
	<b>GENERAL CONDITIONS</b>			\$ -				\$ -	#DIV/0!	\$ -	\$ -
				\$ -				\$ -	#DIV/0!	\$ -	\$ -
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	<b>SUBTOTAL GENERAL CONDITIONS</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	#DIV/0!	\$ -	\$ -
	<b>SUBCONTRACTORS</b>										
1				\$ -		\$ -		\$ -	#DIV/0!	\$ -	\$ -
2				\$ -		\$ -		\$ -	#DIV/0!	\$ -	\$ -
3				\$ -		\$ -		\$ -	#DIV/0!	\$ -	\$ -
4				\$ -		\$ -		\$ -	#DIV/0!	\$ -	\$ -
5				\$ -		\$ -		\$ -	#DIV/0!	\$ -	\$ -
6				\$ -		\$ -		\$ -	#DIV/0!	\$ -	\$ -
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8				\$ -		\$ -		\$ -	#DIV/0!	\$ -	\$ -
9				\$ -		\$ -		\$ -	#DIV/0!	\$ -	\$ -
10				\$ -		\$ -		\$ -	#DIV/0!	\$ -	\$ -
11				\$ -		\$ -		\$ -	#DIV/0!	\$ -	\$ -
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				\$ -		\$ -		\$ -	#DIV/0!	\$ -	\$ -
	<b>SUBTOTAL SUBCONTRACTORS</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	#DIV/0!	\$ -	\$ -
	<b>SUBTOTAL</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	#DIV/0!	\$ -	\$ -





4		0	#DIV/0! #DIV/0! #DIV/0! #DIV/0! #DIV/0! #DIV/0! #DIV/0! #DIV/0! #DIV/0! #DIV/0!	\$ -	\$ -	\$ -
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7		0	#DIV/0! #DIV/0! #DIV/0! #DIV/0! #DIV/0! #DIV/0! #DIV/0! #DIV/0! #DIV/0! #DIV/0!	\$ -	\$ -	\$ -
COMPLETED TO DATE (\$) \$ -						

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10		0	#DIV/0! #DIV/0! #DIV/0! #DIV/0! #DIV/0! #DIV/0! #DIV/0! #DIV/0! #DIV/0! #DIV/0!	\$ -	\$ -	\$ -
COMPLETED TO DATE (\$) \$ -						

Change Orders Total	<u>\$ -</u>	Matches SOV
Previous Period Total	<u>\$ -</u>	Matches SOV
This Period Total	<u>\$ -</u>	Matches SOV
Completed to Date Total	<u>\$ -</u>	Matches SOV





Facility Planning, District Construction & Support Services  
 2323 North Broadway, Rm 112  
 Santa Ana, CA 92706

Board Date: January 0, 1900

Project Name: 0  
 Contractor: 0  
 Contract #: 0

Project/Bid No. 0  
 Site: 0  
 Change Order (CO) No. : 0

Contract Schedule Summary					
Notice to Proceed Date	Original Contract Duration (Days)	Original Contract Completion Date	Previous Extension Days Approved	Proposed CO Days Requested	New Revised Completion Date
01/00/00	0	01/00/00	0	0	1/0/1900

Change Order Summary			
Description	Number	Amount	% of Contract
Original Contract Amount		\$0.00	
Previous Change Orders	0	\$0.00	#DIV/0!
<b>This Change Order</b>	<b>0</b>	<b>\$0.00</b>	<b>#DIV/0!</b>
<b>Total Change Order (s)</b>		<b>\$0.00</b>	<b>#DIV/0!</b>
<b>Revised Contract Amount</b>		<b>\$0.00</b>	

Items in Change Order							
Item No.	Description	Requester	Reason	Ext. Day	Credit	Add	Net
1	0	0	0	0	\$0.00	\$0.00	\$0.00
Subtotal					\$0.00	\$0.00	\$0.00
<b>Grand Total</b>							<b>\$0.00</b>

- 1- CODE REQUIREMENT
- 2 - FIELD CONDITION
- 3 - INSPECTION REQUIREMENT
- 4 - DESIGN REQUIREMENT
- 5 - OWNER REQUIREMENT





Project Name: \_\_\_\_\_

Project No.: \_\_\_\_\_ DSA Application No. \_\_\_\_\_

## Conditional Waiver and Release Upon Final Payment

### CALIFORNIA 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.

#### Identifying Information

Name of Claimant: \_\_\_\_\_

Name of Customer: \_\_\_\_\_

Job Location: \_\_\_\_\_

Owner: RANCHO SANTIAGO COMMUNITY COLLEGE DISTRICT

This document waives and releases lien, stop payment notice, and payment bond rights the claimant has for labor and service provided, and equipment and material delivered, to the customer on this job. Rights based upon labor or service provided, or equipment or material delivered, pursuant to a written change order that has been fully executed by the parties prior to the date that this document is signed by the claimant, are waived and released by this document, unless listed as an Exception below. This document is effective only on the claimant's receipt of payment from the financial institution on which the following check is drawn:

Maker of Check: \_\_\_\_\_

Amount of Check: \_\_\_\_\_

Check Payable To: \_\_\_\_\_

#### Exceptions

This document does not affect any of the following: Disputed claims for extras in the amount of \$ \_\_\_\_\_.

Date: \_\_\_\_\_  
\_\_\_\_\_  
(Company Name)

BY: \_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Title)



Project Name: \_\_\_\_\_

Project No.: \_\_\_\_\_ DSA Application No. \_\_\_\_\_

## Conditional Waiver and Release Upon Progress Payment

### CALIFORNIA 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.

#### Identifying Information

Name of Claimant: \_\_\_\_\_

Name of Customer: \_\_\_\_\_

Job Location: \_\_\_\_\_

Owner: RANCHO SANTIAGO COMMUNITY COLLEGE DISTRICT

Through Date: \_\_\_\_\_

This document waives and releases lien, stop payment notice, and payment bond rights the claimant has for labor and service provided, and equipment and material delivered, to the customer on this job through the Through Date of this document. Rights based upon labor or service provided, or equipment or material delivered, pursuant to a written change order that has been fully executed by the parties prior to the date that this document is signed by the claimant, are waived and released by this document, unless listed as an Exception below. This document is effective only on the claimant’s receipt of payment from the financial institution on which the following check is drawn:

Maker of Check: \_\_\_\_\_

Amount of Check: \_\_\_\_\_

Check Payable To: \_\_\_\_\_

#### Exceptions

This document does not affect any of the following: (1) Retentions; (2) Extras for which claimant has not received payment; (3) The following progress payments for which the claimant has previously provided a conditional waiver and release but has not received payment: Date(s) of waiver and release: \_\_\_\_\_, Amount(s) of unpaid progress payment(s): \$ \_\_\_\_\_; (4) Contract rights including: (A) a right based on rescission, abandonment, or breach of contract, and (B) the right to recover compensation for work not compensated by the payment.

Date: \_\_\_\_\_ (Company Name)

BY: \_\_\_\_\_ (Signature)

\_\_\_\_\_  
(Title)



Facility Planning, District Construction & Support Services
2323 North Broadway, Suite 112
Santa Ana, CA 92706-1640

Immediate Change Directive (ICD)

Date:
Project Name:
Project No.:
Architect:
Contractor:

ICD No.:
Use of Allowance Dollars? <YES or NO>
Reference RFI No.:
Reference COR No.:

Initiated By:
[ ] District
[ ] Architect
[ ] Contractor
[ ] Other:

WORK REQUIRED:

REASON FOR CHANGE DIRECTIVE:

STATUS OF WORK/CONSTRUCTION ACTIVITIES AFFECTED:

CONTRACTOR IS AUTHORIZED TO PROCEED WITH THE WORK PURSUANT TO THE CONSTRUCTION SERVICES AGREEMENT IN THE FOLLOWING MANNER:

- [ ] Time & Materials (T&M), Not-to-Exceed
[ ] Lump Sum
[ ] Directed to Proceed, Submit Pricing

Additional Days Required:
Days beyond Approved Contract Completion Date

Schedule Activity Nos. Affected:

Pursuant to Article 7.3.1.2 an Immediate Change Directive is a written order to the Contractor prepared by the Architect and signed by the District (and CM if there is a CM on the Project) and the Architect, directing a change in the Work and stating a proposed basis for adjustment, if any, in the Contract Sum or Contract Time, or both. The District may by ICD, without invalidating the Contract, direct immediate changes in the Work within the general scope of the Contract consisting of additions, deletions, or other revisions within. If applicable, the Contract Sum and Contract Time will be adjusted accordingly. CONTRACTOR SHALL PROCEED WITH WORK SET FORTH IN THIS ICD IMMEDIATELY UPON RECEIPT OR THE DISTRICT MAY EITHER HOLD THE CONTRACTOR IN EITHER PARTIAL DEFAULT PURSUANT TO ARTICLE 2.2 OR TOTAL DEFAULT PURSUANT TO ARTICLE 14.

CONTRACTOR:
Approved By:
Date:
CM:
Approved By:
Date:
DISTRICT: Rancho Santiago Community College
District
Approved By:
Date:
ARCHITECT:
Approved By:
Date:



Project Name: \_\_\_\_\_

Project No.: \_\_\_\_\_ DSA Application No. \_\_\_\_\_

## Unconditional Waiver and Release Upon Final Payment

### CALIFORNIA 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.

#### **Identifying Information**

Name of Claimant: \_\_\_\_\_

Name of Customer: \_\_\_\_\_

Job Location: \_\_\_\_\_

Owner: RANCHO SANTIAGO COMMUNITY COLLEGE DISTRICT

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 \$ \_\_\_\_\_.

Date: \_\_\_\_\_  
\_\_\_\_\_ (Company Name)

BY: \_\_\_\_\_  
\_\_\_\_\_ (Signature)

\_\_\_\_\_ (Title)



Project Name: \_\_\_\_\_

Project No.: \_\_\_\_\_ DSA Application No. \_\_\_\_\_

**Unconditional Waiver and Release  
Upon Progress Payment  
CALIFORNIA 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.

**Identifying Information**

Name of Claimant: \_\_\_\_\_

Name of Customer: \_\_\_\_\_

Job Location: \_\_\_\_\_

Owner: RANCHO SANTIAGO COMMUNITY COLLEGE DISTRICT

Through Date: \_\_\_\_\_

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 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.

Date: \_\_\_\_\_  
\_\_\_\_\_  
(Company Name)

BY: \_\_\_\_\_  
\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Title)



**Instructions regarding Form:**

1. General:
  - a. Attach proposed Recycling and Waste Bin Location Plan.
  - b. Attach name and contact data for each recycling or disposal destination to be used.
2. Column 1: "Material Types" – Enter types of materials targeted for recycling, reuse, and/or salvage, either on or off-site, and include a category for waste materials requiring disposal.
3. Columns 2 – 4: "Estimated Generation" – Enter estimated quantities (tons) of recyclable, reusable, or salvageable waste materials anticipated to be generated and state number of salvageable items.
4. Column 5: "Estimated Landfill" – Enter quantities (tons) of materials to be disposed in landfill.
5. Column 6: "Disposal Location" – Enter end-destination of recycled, salvaged, and disposed materials.

**(DELETE TEXT BOX BEFORE PROVIDING TO DISTRICT REPRESENTATIVE)**

**CONSTRUCTION WASTE MANAGEMENT PLAN**

PROJECT NAME: \_\_\_\_\_

PROJECT SITE ADDRESS: \_\_\_\_\_

PROJECT NO: \_\_\_\_\_

NAME OF COMPANY: \_\_\_\_\_

CONTACT PERSON: \_\_\_\_\_

TELEPHONE: \_\_\_\_\_

PROJECT TYPE:  NEW CONSTRUCTION  DEMOLITION  
 RENOVATION / ALTERATION PROJECTS

PROJECT SIZE (SQ. FT.): \_\_\_\_\_

DATE & ESTIMATED PERIOD: \_\_\_\_\_

(1) Material Type	(2) Tons Estimated Recycle	(3) Tons Estimated Reuse	(4) Tons Estimated Salvage	(5) Tons Estimated Landfill	(6) Proposed Disposal or Recycling Facility (e.g., Onsite, Name of Facility)
<b>Total</b>					
<b>Diversion Rate: Columns [(2)+(3)+(4)] / [(2)+(3)+(4)+(5)]</b>					=

Signature	Title	Date
-----------	-------	------



**Instructions regarding Form:**

1. General:
  - a. Attach proposed Recycling and Waste Bin Location Plan.
  - b. Attach name and contact data for each recycling or disposal destination to be used.
2. Column 1: "Material Types" – Enter types of materials targeted for recycling, reuse, and/or salvage, either on or off-site, and include a category for waste materials requiring disposal.
3. Columns 2 – 4: "Estimated Generation" – Enter estimated quantities (tons) of recyclable, reusable, or salvageable waste materials anticipated to be generated and state number of salvageable items.
4. Column 5: "Estimated Landfill" – Enter quantities (tons) of materials to be disposed in landfill.
5. Column 6: "Disposal Location" – Enter end-destination of recycled, salvaged, and disposed materials.

**(DELETE TEXT BOX BEFORE PROVIDING TO DISTRICT REPRESENTATIVE)**

**CONSTRUCTION WASTE MANAGEMENT PROGRESS REPORT**

PROJECT NAME: \_\_\_\_\_

PROJECT SITE ADDRESS: \_\_\_\_\_

PROJECT NO: \_\_\_\_\_

NAME OF COMPANY: \_\_\_\_\_

CONTACT PERSON: \_\_\_\_\_

TELEPHONE: \_\_\_\_\_

PROJECT TYPE:  NEW CONSTRUCTION     DEMOLITION  
 RENOVATION / ALTERATION PROJECTS

PROJECT SIZE (SQ. FT.): \_\_\_\_\_

PERIOD: \_\_\_\_\_

(1) Material Type	(2) Tons Actual Recycle	(3) Tons Actual Reuse	(4) Tons Actual Salvage	(5) Tons Actual Landfill	(6) Disposal or Recycling Facility (e.g., Onsite, Name of Facility)
<b>Total</b>					
<b>Diversion Rate: Columns [(2)+(3)+(4)] / [(2)+(3)+(4)+(5)]</b>					=

Signature	Title	Date
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**LOCAL HIRE AND LOCAL BUSINESS CONTRACTOR CLOSE-OUT CERTIFICATION**

*(To be Submitted Upon Completion of the Project and as a Precondition to Final Payment)*

Project Name: \_\_\_\_\_

Contractor: \_\_\_\_\_

The Contractor shall complete this form for purposes of reporting participation by Local Hires and Local Businesses on the Project. At the end of the Project and as a precondition for receipt of Final Payment, the Contractor shall provide a final written analysis and evaluation of the final percentage of Local Hires and Local Businesses on the entire Project.

The percentage for Local Hire participation shall be calculated by taking the ratio of the total number of workers performing work on the Project that are Local Hires as defined above, compared against the total number of all workers performing work on the Project.

The percentage for Local Business participation shall be calculated by taking the ratio of the total number of businesses providing any labor, materials or services for the Project authorized by the Contractor or its subcontractors that are Local Businesses as defined above, compared against the total number of all businesses providing any labor, materials or services for the Project authorized by the Contractor or its subcontractors.

Total Number of Workers on Project	Total Number of Local Hires on Project	Total Number of Businesses on Project	Total Number of Local Businesses on Project
Percentage of Local Hires: _____ %		Percentage of Local Businesses: _____ %	

In submitting this form, the Contractor certifies that it has independently verified that all Local Hires and Local Businesses noted in this form meet the definitions for Local Hires and Local Businesses as set forth in the Local Hires and Local Businesses Participation Statement. The District may request Contractor to provide additional information or documents to support the numbers listed above. Contractor agrees to provide all additional information or documents requested by the District. Failure to provide any requested information may result in the District delaying Final Payment to the Contractor and Contractor agrees that it shall have no claim for additional costs or days resulting from or in any way related to providing the information in this form.

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

Name: \_\_\_\_\_

Signature: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_





**WARRANTY GUARANTEE FORM**

Project Name: \_\_\_\_\_

The following is a warranty and guarantee by the undersigned for warranty of the work completed at Building D Elevators at Santiago Canyon College. Capitalized terms not defined herein shall have the meanings assigned to them in the Contract Documents applicable to the Warranted Work at the time it was furnished and installed at the Project.

The undersigned hereby warrants and guarantees that: 1) the Warranted Work (including, without limitation, all pieces and parts thereof that are incorporated into the Warranted Work), unless otherwise expressly permitted or required by the Contract Documents, is of first-class quality and new; and 2) the Warranted Work conforms with the requirements of the Contract Documents and Applicable Laws; and 3) the Contractor agrees to repair or replace all of the Work that may prove to be defective in workmanship or material and any other adjacent Work that may be displaced in connection with such replacement within a period of **two (2) years** from the date of Final Completion as defined in the Contract, ordinary wear and tear and unusual abuse or neglect excepted.

The date of Final Completion is \_\_\_\_\_, 20\_\_\_\_.

SYSTEM OR ITEM	WARRANTY DURATION (YEARS)

In the event the Contractor fails to comply with the above-mentioned conditions within a reasonable period of time, as determined by the District, but not later than seven (7) calendar days after being notified in writing by the District, the Contractor authorizes the District to proceed to repair or replace the defective Work at the expense of the Contractor. The Contractor shall pay the costs and charges therefor upon demand.

Warranties shall provide by written endorsement that if warranted Work fails and is replaced, removed or substantially rebuilt, that the original warranty on such Work shall be renewed, whereas the full warranty periods starts over again, commencing from when Work covered by warranty was corrected.

The responsibility of the undersigned under this warranty includes, without limitation, replacement, removal and repair not only of the Warranted Work, but also of related or adjoining portions of work, equipment, materials or property as necessary to provide access for correction of the Warranted Work, as well as any other loss or damage (including, without limitation, economic loss) resulting directly or indirectly to the District from the failure of the Warranted Work to comply with the terms of this warranty. All costs, expenses, damages and other losses to the District due to the failure of the Warranted Work to comply with the terms of this warranty shall be deemed to be expenses of undersigned and shall be paid by the undersigned to the District upon demand.

\_\_\_\_\_  
 Print Name

\_\_\_\_\_  
 Print Name

\_\_\_\_\_  
 Print Name

\_\_\_\_\_  
 Print Name

\_\_\_\_\_  
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 Print Name

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 Print Name

\_\_\_\_\_  
 Print Name

\_\_\_\_\_  
 Print Name

\_\_\_\_\_  
 Signature of Subcontractor or Supplier      Date

\_\_\_\_\_  
 Signature of Subcontractor or Supplier      Date

\_\_\_\_\_  
 Signature of Subcontractor or Supplier      Date

\_\_\_\_\_  
 Signature of Subcontractor or Supplier      Date

\_\_\_\_\_  
 Signature of Subcontractor or Supplier      Date

\_\_\_\_\_  
 Signature of Subcontractor or Supplier      Date

\_\_\_\_\_  
 Signature of Subcontractor or Supplier      Date

\_\_\_\_\_  
 Signature of Subcontractor or Supplier      Date

\_\_\_\_\_  
 Signature of General Contractor      Date

Representative to be contacted for Service Subject to the Terms of Contract:		
Name:	Phone #	Email
For After Hours Emergency Contact		
Name	Phone#	Email

Representative to be contacted for Service Subject to the Terms of Contract:		
Name:	Phone #	Email
For After Hours Emergency Contact		
Name	Phone#	Email

END OF DOCUMENT