DIVISION 01 – GENERAL REQUIREMENTS

SECTION 011000 - SUMMARY

- A. TYPE OF CONTRACT. Project will be constructed under a single prime contract in one phase.
- B. DEFINITIONS: Day refers to complete business days 8:00AM to 5:00 PM.
- C. SEPARATE CONTRACTORS: Coordinate the Work of this Contract with work performed under separate contracts.
- D. ACCESS TO SITE: Limit use of Project site to areas within the Contract limits indicated. Do not disturb portions of Project site beyond areas in which the Work is indicated.
 - DRIVEWAYS, WALKWAYS AND ENTRANCES: Keep driveways parking garage, loading areas, and entrances serving premises clear and available to Owner, Owner's employees, and emergency vehicles at all times. Do not use these areas for parking or storage of materials.
 - Schedule deliveries to minimize use of driveways and entrances by construction operations.
 - b. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.
- E. CONDITION OF EXISTING BUILDING: Maintain portions of existing building affected by construction operations in a weathertight condition throughout construction period. Repair damage caused by construction operations.
- F. PARTIAL OWNER OCCUPANCY: If Owner will occupy the premises during the entire construction period with the exception of areas under construction, cooperate with Owner during construction operations to minimize conflicts and facilitate Owner usage.
 - 1. Perform the Work so as not to interfere with Owner's operations. Maintain existing exits unless otherwise indicated.
 - 2. Maintain access to existing walkways, corridors, and other adjacent occupied or used facilities. Do not close or obstruct walkways, corridors, or other occupied or used facilities without written permission from Owner and authorities having jurisdiction.
 - 3. Provide not less than three business days hours' notice to Owner of activities that will affect Owner's operations.
- G. WORK RESTRICTIONS: Comply with restrictions on construction operations. Coordinate with the Building Owner Representative for restrictions on building security, access, use of water and power, waste disposal, cleaning, and other areas of work where coordination with the building functions is required.
 - Comply with limitations on use of public streets and with other requirements of authorities having jurisdiction.

- H. ON-SITE WORK HOURS: Limit work in the existing building to normal business hours unless approved by the Building Owner.
- I. EXISTING UTILITY INTERRUPTIONS AND DISRUPTIVE OPERATIONS: Do not interrupt utilities serving facilities occupied by Owner or others, or engage in disruptive operations, unless permitted under the following conditions and then only after providing temporary utility services according to requirements indicated:
 - 1. Notify Owner not less than 72 hours in advance of proposed utility interruptions or operations that may result in high levels of noise, vibration, and odors.
 - 2. Obtain Owner's written permission before proceeding with utility interruptions or disruptive operations
- J. Use of tobacco products and other controlled substances within the existing building is not permitted.

SECTION 012000 - DELEGATED DESIGN

- A. DEFINITION Delegated Design Work Items: Portions of the Work indicated as such in the Contract Documents, and identified as such in the Agreement, to be performed by the Contractor on a "Delegated Design" basis. The Contractor, rather than the Architect, is solely responsible for:
 - 1. The design of such systems:
 - 2. The coordination of the Delegated Design subcontractors, who shall be the engineers of record for such systems;
 - 3. The coordination of Delegated Design work with the Architect's design;
 - 4. The coordination with, and determination of, requirements by local jurisdiction;
 - 5. Submittal preparation and presentation to local jurisdiction for approval (permit process).

B. DELEGATED-DESIGN SERVICES:

- Where professional design services or certifications by a design professional are specifically required of Contractor by the Contract Documents, provide products and systems complying with specific performance and design criteria indicated.
- 2. If criteria indicated are not sufficient to perform services or certification required, submit a written request for additional information to Architect.
- 3. Delegated-Design Services Certification: In addition to Shop Drawings, Product Data, and other required submittals, submit calculations and shop drawings as applicable, signed and sealed by the responsible design professional, for each product and system specifically assigned to Contractor to be designed or certified by a design professional. Indicate that products and systems comply with performance and design criteria in the Contract Documents.

SECTION 012500 - SUBSTITUTION PROCEDURES

- A. SECTION INCLUDES: Administrative and procedural requirements for substitutions.
- B. DEFINITION SUBSTITUTIONS: Changes in products, materials, equipment, and methods of construction from those required by the Contract Documents and proposed by Contractor.
- C. SUBSTITUTION REQUESTS: Submit a completed RMW Substitution Request Form, signed and certified, in PDF format. Identify product or fabrication or installation method to be replaced. An electronic file of the RMW Substitution Request is available to the Contractor upon request.
 - Architect's Action: If necessary, Architect will request additional information or documentation for evaluation within three business days of receipt of a request for substitution. Architect will notify Contractor of acceptance or rejection of proposed substitution within three business days of receipt of request, or three business days of receipt of additional information or documentation, whichever is later.
 - a. Forms of Acceptance: Change Order or RMW Bulletin.
 - b. Use product specified if Architect does not issue a decision on use of a proposed substitution within time allocated.
- D. COMPATIBILITY OF SUBSTITUTIONS: Investigate and document compatibility of proposed substitution with related products and materials.
- E. Submit requests for substitution immediately on discovery of need for change, but not later than 10 business days prior to time required for preparation and review of related submittals.

END OF SECTION 012500

SECTION 012600 - CONTRACT MODIFICATION PROCEDURES

- A. SECTION INCLUDES: Administrative and procedural requirements for handling and processing Contract modifications.
- B. MINOR CHANGES IN THE WORK: Architect will issue supplemental instructions authorizing minor changes in the Work, not involving adjustment to the Contract Sum or the Contract Time, on an RMW Bulletin form.
- C. OWNER-INITIATED PROPOSAL REQUESTS: Architect will issue a detailed description of proposed changes in the Work that may require adjustment to the Contract Sum or the Contract Time in an RMW Bulletin form. If necessary, the description will include supplemental or revised Drawings and Specifications. These requests are not instructions either to stop work in progress or to execute the proposed change.
 - Within time specified in the RMW Bulletin after receipt of the Bulletin, submit a quotation estimating cost adjustments to the Contract Sum and the Contract Time necessary to execute the change.

- Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
- 3. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
- 4. Include costs of labor and supervision directly attributable to the change.
- Include an updated Contractor's construction schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
- 6. Quotation Form: Use forms acceptable to Architect.
- D. CONTRACTOR-INITIATED WORK CHANGE PROPOSALS: If latent or changed conditions require modifications to the Contract, Contractor may initiate a claim by submitting a request for a change to Architect.
 - Include a statement outlining reasons for the change and the effect of the change on the Work. Provide a complete description of the proposed change. Indicate the effect of the proposed change on the Contract Sum and the Contract Time.
 - 2. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
 - 3. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
 - 4. Include costs of labor and supervision directly attributable to the change.
 - Include an updated Contractor's construction schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
 - 6. Comply with requirements in Section 012500 "Substitution Procedures" if the proposed change requires substitution of one product or system for product or system specified.
 - 7. Work Change Proposal Request Form: Use form acceptable to Architect.
- E. On Owner's approval of a response to a Bulletin or a Work Changes Proposal Request, Architect will issue a Change Order for signatures of Owner and Contractor on AIA Document G701.
- F. Architect will instruct the Contractor to proceed with a change in the Work for subsequent inclusion in a Change Order using a RMW Bulletin.
 - The Bulletin contains a complete description of change in the Work. It also designates method to be followed to determine change in the Contract Sum or the Contract Time.
- G. DOCUMENTATION: Maintain detailed records on a time and material basis of work required by the Bulletin.
 - 1. After completion of change, submit an itemized account and supporting data necessary to substantiate cost and time adjustments to the Contract.

SECTION 012900 - PAYMENT PROCEDURES

- A. Coordinate procedures for applications for payment with the Owner's Representative.
- B. SECTION INCLUDES: Administrative and procedural requirements necessary to prepare and process Applications for Payment.
- C. SCHEDULE OF VALUES: Coordinate preparation of the schedule of values with preparation of Contractor's Construction Schedule.
 - Submit the Schedule of Values to Architect at earliest possible date but no later than five business days before the date scheduled for submittal of initial Applications for Payment.
- D. Each Application for Payment shall be consistent with previous applications and payments as certified by Architect and paid for by Owner. Use forms acceptable to Owner and Architect for Applications for Payment.
- E. TRANSMITTAL: Submit a signed electronic file of each Application for Payment to Architect. Include the waivers of lien and similar attachments if required.
 - 1. Include a transmittal form listing attachments and recording appropriate information about application.
- F. WAIVERS OF MECHANIC'S LIEN: With each Application for Payment, submit waivers of mechanic's lien from entities lawfully entitled to file a mechanic's lien arising out of the Contract and related to the Work covered by the payment. Comply with the Requirements of the California Department of Consumer Affairs, Contractors State License Board.
 - 1. Submit partial waivers on each item for amount requested in previous application, after deduction for retainage, on each item.
 - 2. When an application shows completion of an item, submit conditional final or full waivers.
 - Owner reserves the right to designate which entities involved in the Work must submit waivers.
 - 4. Waiver Forms: Submit executed waivers of lien on forms acceptable to Owner.

END OF SECTION 012900

SECTION 013100 - PROJECT MANAGEMENT AND COORDINATION

- A. SECTION INCLUDES: Administrative provisions for coordinating construction operations on the Project.
 - 1. Coordination drawings.
 - 2. Requests for Information (RFIs).
 - 3. Project meetings.

- B. Schedule construction operations in sequence required to obtain the best results where installation of one part of the Work depends on installation of other components, before or after its own installation.
 - 1. Coordinate installation of different components to ensure maximum performance and accessibility for required maintenance, service, and repair.
 - 2. Make adequate provisions to accommodate items scheduled for later installation.
- C. COORDINATION DRAWINGS: Prepare coordination drawings where installation is not completely shown on Shop Drawings, where limited space availability necessitates coordination, or if coordination is required to facilitate integration of products and materials fabricated or installed by more than one entity.
 - 1. Floor Plans and Reflected Ceiling Plans: Show architectural and structural elements, and mechanical, plumbing, fire-protection, fire-alarm, and electrical Work. Show locations of visible ceiling-mounted devices relative to acoustical ceiling grid.
 - 2. Submit other coordination drawings as needed, including plenum space, electrical, mechanical, and fire protection work.
 - Review: Architect will review coordination drawings to confirm that the Work is being coordinated, but not for the details of the coordination, which are Contractor's responsibility.
- D. RFI's: Immediately on discovery of the need for additional information or interpretation of the Contract Documents, prepare and submit an RFI in PDF format.
 - Architect will return RFIs submitted to Architect by other entities controlled by Contractor with no response.
 - a. Coordinate and submit RFIs in a prompt manner so as to avoid delays in Contractor's work or work of subcontractors.
 - Attachments: Include sketches, descriptions, measurements, photos, Product
 Data, Shop Drawings, coordination drawings, and other information necessary to
 fully describe items needing interpretation.
 - 2. RFI Forms: Software-generated form with the following information:
 - a. Project name and number; date.
 - b. Names of Contractor and Architect.
 - c. RFI number, numbered sequentially and RFI subject.
 - d. Specification Section number, title, and paragraph, or Drawing number and detail reference, as appropriate.
 - e. Field dimensions and conditions, as appropriate.
 - f. Contractor's suggested resolution. If Contractor's suggested resolution impacts the Contract Time or the Contract Sum, Contractor shall state impact in the RFI.
 - g. Contractor's signature.
 - h. Include other information necessary to fully describe items needing interpretation.

- 3. Architect's Action: Architect will review each RFI, determine action required, and respond. Allow five business days for Architect's response for each RFI. RFIs received by Architect after 1:00 p.m. will be considered as received the following working day.
 - a. The following RFIs will be returned without action:
 - 1) Requests for approval of submittals or for substitutions.
 - 2) Requests for information already indicated in the Contract Documents.
 - 3) Requests for adjustments in the Contract Time or the Contract Sum.
 - 4) Requests for interpretation of Architect's actions on submittals.
 - 5) Incomplete RFIs or inaccurately prepared RFIs.
 - b. Architect's action may include a request for additional information, in which case Architect's time for response will date from time of receipt of additional information.
 - c. Architect's action on RFIs that may result in a change to the Contract Time or the Contract Sum may be eligible for Contractor to submit Change Proposal according to Section 012600 "Contract Modification Procedures."
- If Contractor believes the RFI response warrants change in the Contract Time or the Contract Sum, notify Architect in writing within three business days of receipt of the RFI response.
- 5. RFI Log: Prepare, maintain, and submit a tabular log of RFIs organized by the RFI number. Submit log weekly.
- On receipt of Architect's action, update the RFI log and immediately distribute the RFI
 response to affected parties. Review response and notify Architect within three
 business days if Contractor disagrees with response.
- E. PROJECT MEETINGS: Schedule and conduct meetings at Project site unless otherwise indicated.
 - Schedule Preconstruction, Progress Meetings, and Pre-Installation Meetings.
 Determine list of participants and others involved, and date and time of each meeting.
 Notify Owner and Architect of scheduled meeting dates and times.
 - 2. Agenda: Prepare the meeting agenda. Distribute the agenda to all invited attendees.
 - Minutes: Entity responsible for conducting meeting will record significant discussions and agreements achieved. Distribute the meeting minutes to everyone concerned, including Owner and Architect, within three business days of the meeting.

SECTION 013200 - CONSTRUCTION PROGRESS DOCUMENTATION

- A. SECTION INCLUDES: Administrative and procedural requirements for documenting the progress of construction during performance of the Work, including the following:
 - 1. Contractor's construction schedule.
 - 2. Construction schedule updating reports.

- 3. Site condition reports.
- B. FORMAT FOR SUBMITTALS: Submit required submittals in PDF electronic file.
- C. SITE CONDITION REPORTS: Submit at time of discovery of differing conditions.
- D. CONTRACTOR'S CONSTRUCTION SCHEDULE: Coordinate Contractor's construction schedule with the schedule of values, list of subcontracts, submittal schedule, progress reports, payment requests, and other required schedules and reports.
 - 1. TIME FRAME: Extend schedule from date established for the Notice to Proceed to date of Substantial Completion.
 - 2. Contractor's Construction Schedule type: Gantt chart.
- E. SITE CONDITION REPORTS: Immediately on discovery of a difference between site conditions and the Contract Documents, prepare and submit a detailed report. Submit with a Request for Information. Include a detailed description of the differing conditions, together with recommendations for changing the Contract Documents.
- F. Contractor's Construction Schedule Updating: At bi-weekly intervals, update schedule to reflect actual construction progress and activities. Issue schedule three business days before each regularly scheduled progress meeting.
 - Distribute copies of approved schedule to Owner, separate contractors, testing and inspecting agencies, and other parties identified by Contractor with a need-to-know schedule responsibility.
 - When revisions are made, distribute updated schedules to the same parties and post in the same locations. Delete parties from distribution when they have completed their assigned portion of the Work and are no longer involved in performance of construction activities.

SECTION 013300 - SUBMITTAL PROCEDURES

A. SECTION INCLUDES: Submittal Schedule requirements and administrative and procedural requirements for submittals.

B. DEFINITIONS:

- 1. Action Submittals: Written and graphic information and physical samples that require Architect's responsive action. Action submittals are those submittals indicated in individual Specification Sections as "action submittals."
- 2. Informational Submittals: Written and graphic information and physical samples that do not require Architect's responsive action. Submittals may be rejected for not complying with requirements. Informational submittals are those submittals indicated in individual Specification Sections as "informational submittals."

- C. SUBMITTAL SCHEDULE: Submit a schedule of submittals, arranged in chronological order by dates required by construction schedule.
- D. USE OF ARCHITECT'S ELECTRONIC FILES: If Architect provides electronic files of its Drawings for use by the Contractor to prepare submittals, Contractor shall execute a data licensing agreement in the form provided by Architect.
 - 1. Architect makes no representations as to the accuracy or completeness of digital data drawing files as they relate to the Contract Drawings.
- E. COORDINATION: Coordinate preparation and processing of submittals with performance of construction activities. Architect reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.
- F. PROCESSING TIME: Allow time for submittal review, including time for resubmittals, as follows. Time for review shall commence on Architect's receipt of submittal. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing, including resubmittals. Submittals received after 1:00 PM shall be considered as received the next day.
 - 1. INITIAL REVIEW: Allow five business days for initial review of each submittal. Allow additional time if coordination with subsequent submittals is required. Architect will advise Contractor when a submittal being processed must be delayed for coordination.
 - 2. RESUBMITTAL REVIEW: Allow five business days for review of each resubmittal.
- G. SUBMITTALS in PDF FORMAT: Prepare submittals as PDF package, incorporating complete information into each PDF file. Name PDF file with submittal number. Identify and incorporate information in each electronic submittal file as follows:
 - 1. Provide means for insertion to permanently record Contractor's review and approval markings and action taken by Architect.
 - 2. Options: Identify options requiring selection by Architect.
 - 3. Deviations: Identify deviations from the Contract Documents on submittals.
 - 4. Product Data: Submit with proposed options clearly mark on the manufacturer's literature.
 - Shop Drawings: Prepare Project-specific information, drawn accurately to scale. Do not submit reproductions of the Contract Documents or standard printed data by the manufacturer.
- H. SAMPLES: Submit Samples for review of kind, color, pattern, and texture for a check of these characteristics with other elements and for a comparison of these characteristics between submittal and actual component as delivered and installed.
 - 1. Transmit Samples that contain multiple, related components such as accessories together in one submittal package.
 - Maintain sets of approved Samples at Project site, available for quality-control
 comparisons throughout the course of construction activity. Sample sets may be used to
 determine final acceptance of construction associated with each set.

- 3. Submit full-size units or Samples of size indicated, prepared from same material to be used for the Work, cured and finished in manner specified, and physically identical with material or product proposed for use, and that show full range of color and texture variations expected. Samples include, but are not limited to, the following: partial sections of manufactured or fabricated components; small cuts or containers of materials; complete units of repetitively used materials; swatches showing color, texture, and pattern; color range sets; and components used for independent testing and inspection.
 - a. Number of Samples: Submit three sets of Samples. Architect will retain two Sample sets; remainder will be returned. Mark up and retain one returned Sample set as a project record sample.
 - b. If variation in color, pattern, texture, or other characteristic is inherent in material or product represented by a Sample, submit at least three sets of paired units that show approximate limits of variations.
- I. RESUBMITTALS: Make resubmittals in same form and number of copies as initial submittal.
- J. DISTRIBUTION: Furnish copies of final submittals to manufacturers, subcontractors, suppliers, fabricators, installers, authorities having jurisdiction, and others as necessary for performance of construction activities. Show distribution on transmittal forms.
- K. USE FOR CONSTRUCTION: Retain complete copies of submittals on Project site. Use only final action submittals that are marked with approval notation from Architect's action stamp.
- L. CONTRACTOR'S APPROVAL STAMP: Stamp each submittal with a uniform, approval stamp. Include Project name and location, submittal number, Specification Section title and number, name of reviewer, date of Contractor's approval, and statement certifying that submittal has been reviewed, checked, and approved for compliance with the Contract Documents.
- M. ARCHITECT'S ACTION: Architect will not review submittals that do not bear Contractor's approval stamp and will return them without action.
 - 1. Incomplete submittals are unacceptable, will be considered nonresponsive, and will be returned for resubmittal without review.
 - Submittals not required by the Contract Documents may not be reviewed and may be discarded.

SECTION 014000 - QUALITY REQUIREMENTS

- A. SECTION INCLUDES: Administrative and procedural requirements for quality assurance and quality control.
- B. DEFINITION EXPERIENCED: When used with an entity or individual, "experienced" means having successfully completed a minimum of five previous projects similar in nature, size, and

extent to this Project; being familiar with special requirements indicated; and having complied with requirements of authorities having jurisdiction.

C. CONFLICTING REQUIREMENTS

- Referenced Standards: If compliance with two or more standards is specified and the standards establish different or conflicting requirements for minimum quantities or quality levels, comply with the most stringent requirement. Refer conflicting requirements that are different, but apparently equal, to Architect for a decision before proceeding.
- 2. Minimum Quantity or Quality Levels: The quantity or quality level shown or specified shall be the minimum provided or performed. The actual installation may comply exactly with the minimum quantity or quality specified, or it may exceed the minimum within reasonable limits. To comply with these requirements, indicated numeric values are minimum or maximum, as appropriate, for the context of requirements. Refer uncertainties to Architect for a decision before proceeding.
- D. PERMITS, LICENSES, AND CERTIFICATES: For Owner's records, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, correspondence, records, and similar documents, established for compliance with standards and regulations bearing on performance of the Work.

E. QUALITY CONTROL:

- 1. Owner Responsibilities: Where quality-control services are indicated as Owner's responsibility, Owner will engage a qualified testing agency to perform these services.
- Contractor Responsibilities: Tests and inspections not explicitly assigned to Owner are Contractor's responsibility. Perform additional quality-control activities, whether specified or not, to verify and document that the Work complies with requirements.
- F. COORDINATION: Coordinate sequence of activities to accommodate required qualityassurance and -control services with a minimum of delay and to avoid necessity of removing and replacing construction to accommodate testing and inspecting.
 - 1. Schedule times for tests, inspections, obtaining samples, and similar activities.
- G. REPAIR AND PROTECTION: On completion of testing, inspecting, sample taking, and similar services, repair damaged construction and restore substrates and finishes.
 - Provide materials and comply with installation requirements specified in other Specification Sections or matching existing substrates and finishes. Restore patched areas and extend restoration into adjoining areas with durable seams that are as invisible as possible. Protect construction exposed by or for quality-control service activities.
- H. Repair and protection are Contractor's responsibility, regardless of the assignment of responsibility for quality-control services.

SECTION 014200 - REFERENCES

- A. Basic Contract definitions are included in the Conditions of the Contract and the Cover Sheet.
- B. INDUSTRY ORGANIZATIONS: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities indicated in Gale's "Encyclopedia of Associations: National Organizations of the U.S." or in Columbia Books' "National Trade & Professional Associations of the United States."
- C. INDUSTRY STANDARDS: Unless the Contract Documents include more stringent requirements, applicable construction industry standards have the same force and effect as if bound or copied directly into the Contract Documents to the extent referenced. Such standards are made a part of the Contract Documents by reference.
 - 1. Publication Dates: Comply with standards in effect as of date of the Contract Documents unless otherwise indicated.
 - 2. Copies of Standards: Each entity engaged in construction on Project should be familiar with industry standards applicable to its construction activity. Copies of applicable standards are not bound with the Contract Documents. Where copies of standards are needed to perform a required construction activity, obtain copies directly from publication source.

END OF SECTION 014200

SECTION 015000 - TEMPORARY FACILITIES AND CONTROLS

- A. SECTION INCLUDES: Requirements for temporary utilities, support facilities, and security and protection facilities.
- B. CHARGES: Installation and removal of and use charges for temporary facilities shall be included in the Contract Sum unless otherwise indicated. Allow other entities to use temporary services and facilities without cost, including, but not limited to, Architect, testing agencies, and authorities having jurisdiction.
- C. ELECTRIC SERVICE: Comply with NECA, NEMA, and UL standards and regulations for temporary electric service. Install service to comply with NFPA 70. Arrange for authorities having jurisdiction to test and inspect each temporary utility before use. Obtain required certifications and permits
 - 1. Provide temporary lighting with local switching that provides adequate illumination for construction operations, observations, inspections, and traffic conditions.
- D. ACCESSIBLE TEMPORARY EGRESS: Comply with applicable provisions in the U.S. Architectural & Transportation Barriers Compliance Board's ADA-ABA Accessibility Guidelines and other applicable requirements.

- E. PERMANENT HVAC SYSTEM: If Owner authorizes use of permanent HVAC system for temporary use during construction, provide filter with MERV of 8 at each return-air grille in system and remove at end of construction.
- F. SANITARY FACILITIES: Provide temporary toilets, wash facilities, and drinking water for use of construction personnel. Comply with requirements of authorities having jurisdiction for type, number, location, operation, and maintenance of fixtures and facilities.
 - If use of Owner's existing toilet facilities is permitted by the Building Owner Representative, use as long as facilities are cleaned and maintained in a condition acceptable to Owner. At Substantial Completion, restore these facilities to condition existing before initial use.
- G. WASTE DISPOSAL FACILITIES: Provide waste-collection containers in sizes adequate to handle waste from construction operations. Comply with requirements of authorities having jurisdiction.
- H. EXISTING ELEVATOR USE: If allowed by Building's Owner Representative, Owner's existing elevators use will be permitted, provided elevators are cleaned and maintained in a condition acceptable to Owner. At Substantial Completion, restore elevators to condition existing before initial use, including replacing worn cables, guide shoes, and similar items of limited life.
 - 1. Do not load elevators beyond their rated weight capacity.
 - 2. Provide protective coverings, barriers, devices, signs, or other procedures to protect elevator car and entrance doors and frame. If, despite such protection, elevators become damaged, engage elevator Installer to restore damaged work so no evidence remains of correction work. Return items that cannot be refinished in field to the shop, make required repairs and refinish entire unit, or provide new units as required.
- EXISTING STAIR USAGE: Use of Owner's existing stairs will be permitted, provided stairs are cleaned and maintained in a condition acceptable to Owner. At Substantial Completion, restore stairs to condition existing before initial use.
 - 1. Provide protective coverings, barriers, devices, signs, or other procedures to protect stairs and to maintain means of egress. If stairs become damaged, restore damaged areas so no evidence remains of correction work.
- J. PROTECTION OF EXISTING FACILITIES: Protect existing vegetation, equipment, structures, utilities, and other improvements at Project site and on adjacent properties, except those indicated to be removed or altered. Repair damage to existing facilities.
- K. ENVIRONMENTAL PROTECTION: Provide protection, operate temporary facilities, and conduct construction as required to comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects.
- L. BARRICADES, WARNING SIGNS, AND LIGHTS: Comply with requirements of authorities having jurisdiction for erecting structurally adequate barricades, including warning signs and lighting.

- M. TEMPORARY EGRESS: Maintain temporary egress from existing occupied facilities as indicated and as required by authorities having jurisdiction.
- N. TEMPORARY ENCLOSURES: Provide temporary enclosures for protection of construction, in progress and completed, from exposure, foul weather, other construction operations, and similar activities. Provide temporary weather-tight enclosure for building exterior.
 - 1. Where heating or cooling is needed and permanent enclosure is not complete, insulate temporary enclosures.
- O. TEMPORARY PARTITIONS: Provide floor-to-ceiling dustproof partitions to limit dust and dirt migration and to separate areas occupied by Owner and tenants from fumes and noise.
 - 1. Construct dustproof partitions with gypsum wallboard with joints taped on occupied side, and fire-retardant-treated plywood on construction operations side.
 - 2. Where fire-resistance-rated temporary partitions are indicated or are required by authorities having jurisdiction, construct partitions according to the rated assemblies.
 - 3. Insulate partitions to control noise transmission to occupied areas.
 - 4. Seal joints and perimeter. Equip partitions with gasketed dustproof doors and security locks where openings are required.
 - 5. Protect air-handling equipment.
 - 6. Provide walk-off mats at each entrance through temporary partition.
- P. TEMPORARY FIRE PROTECTION: Install and maintain temporary fire-protection facilities of types needed to protect against reasonably predictable and controllable fire losses. Comply with NFPA 241; manage fire prevention program.
 - 1. Prohibit smoking in construction areas.
 - 2. Supervise welding operations, combustion-type temporary heating units, and similar sources of fire ignition according to requirements of authorities having jurisdiction.
 - 3. Develop and supervise an overall fire-prevention and -protection program for personnel at Project site. Review needs with local fire department and establish procedures to be followed. Instruct personnel in methods and procedures. Post warnings and information.
 - 4. Fire-Safety Program: Show compliance with requirements of NFPA 241 and authorities having jurisdiction. Select Contractor personnel responsible for management of fire-prevention program.
 - a. Fire Extinguishers: Portable, UL rated; with class and extinguishing agent as required by locations and classes of fire exposures.
- Q. TEMPORARY FACILITY CHANGEOVER: Do not change over from using temporary security and protection facilities to permanent facilities until Substantial Completion.
- R. TERMINATION AND REMOVAL: Remove each temporary facility when need for its service has ended, when it has been replaced by authorized use of a permanent facility, or no later than Substantial Completion. Complete or, if necessary, restore permanent construction that may have been delayed because of interference with temporary facility. Repair damaged Work, clean exposed surfaces, and replace construction that cannot be satisfactorily repaired.

SECTION 016000 - PRODUCT REQUIREMENTS

- A. SECTION INCLUDES: Administrative and procedural requirements for selection of products for use in Project; product delivery, storage, and handling; manufacturers' standard warranties on products and special warranties.
- B. BASIS-OF-DESIGN PRODUCT SPECIFICATION: A specification in which a single manufacturer's product is named and accompanied by the words "Basis-of-Design Product." The basis-of-design product description is given for purposes of evaluating comparable products of additional manufacturers named in the specification or products proposed for substitution.
- C. COMPARABLE PRODUCT: Product that is demonstrated and approved through submittal process to have the indicated qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics that equal or exceed those of the "Basis of Design Product".
- D. Deliver, store, and handle products using means and methods that will prevent damage, deterioration, and loss, including theft and vandalism. Comply with manufacturer's written instructions.
- E. Warranties specified in other Sections shall be in addition to, and run concurrent with, other warranties required by the Contract Documents. Manufacturer's disclaimers and limitations on product warranties do not relieve Contractor of obligations under requirements of the Contract Documents.
 - 1. Manufacturer's Warranty: Written warranty furnished by individual manufacturer for a particular product and specifically endorsed by manufacturer to Owner.
 - 2. Special Warranty: Written warranty required by the Contract Documents to provide specific rights for Owner.
- F. VISUAL SELECTION SPECIFICATION: Where Specifications include the phrase "as selected by Architect from manufacturer's full range" or similar phrase, select a product that complies with requirements. Architect will select color, gloss, pattern, density, or texture from manufacturer's product line that includes both standard and premium items.

END OF SECTION 016000

SECTION 017300 - EXECUTION

- A. SECTION INCLUDES: General administrative and procedural requirements governing execution of the Work:
 - 1. Cutting and patching.
 - 2. Coordination of Owner-installed products.

- 3. Progress cleaning.
- 4. Starting and adjusting.
- Protection of installed construction.
- B. CUTTING AND PATCHING: Comply with requirements for and limitations on cutting and patching of construction elements.
 - STRUCTURAL ELEMENTS: When cutting and patching structural elements, notify
 Architect of locations and details of cutting and await directions from Architect before
 proceeding. Shore, brace, and support structural element during cutting and patching.
 Do not cut and patch structural elements in a manner that could change their loadcarrying capacity or increase deflection
 - 2. OPERATIONAL ELEMENTS: Do not cut and patch operating elements and related components in a manner that results in reducing their capacity to perform as intended or that results in increased maintenance or decreased operational life or safety.
 - OTHER CONSTRUCTION ELEMENTS: Do not cut and patch other construction elements or components in a manner that could change their load-carrying capacity, that results in reducing their capacity to perform as intended, or that results in increased maintenance or decreased operational life or safety.
 - 4. VISUAL ELEMENTS: Do not cut and patch construction in a manner that results in visual evidence of cutting and patching. Do not cut and patch exposed construction in a manner that would, in Architect's opinion, reduce the building's aesthetic qualities. Remove and replace construction that has been cut and patched in a visually unsatisfactory manner.
 - IN-PLACE MATERIALS: Use materials for patching identical to in-place materials. For exposed surfaces, use materials that visually match in-place adjacent surfaces to the fullest extent possible.
 - a. If identical materials are unavailable or cannot be used, use materials that, when installed, will provide a match acceptable to Architect for the visual and functional performance of in-place materials.
 - b. Employ skilled workers to perform cutting and patching. Proceed with cutting and patching at the earliest feasible time, and complete without delay.
 - Cut in-place construction to provide for installation of other components or performance
 of other construction, and subsequently patch as required to restore surfaces to their
 original condition.
 - 7. EXISTING WARRANTIES: Remove, replace, patch, and repair materials and surfaces cut or damaged during installation or cutting and patching operations, by methods and with materials so as not to void existing warranties.
 - 8. TEMPORARY SUPPORT: Provide temporary support of work to be cut.
 - 9. PROTECTION: Protect in-place construction during cutting and patching to prevent damage. Provide protection from adverse weather conditions for portions of Project that might be exposed during cutting and patching operations.
 - 10. ADJACENT OCCUPIED AREAS: Avoid interference with use of adjoining areas or interruption of free passage to adjoining areas.

- 11. EXISTING UTILITY SERVICES AND MECHANICAL/ELECTRICAL SYSTEMS: Where existing services/systems are required to be removed, relocated, or abandoned, bypass such services/systems before cutting to prevent interruption to occupied areas.
- C. CUTTING: Cut in-place construction by sawing, drilling, breaking, chipping, grinding, and similar operations, including excavation, using methods least likely to damage elements retained or adjoining construction. If possible, review proposed procedures with original Installer; comply with original Installer's written recommendations.
 - 1. Finished Surfaces: Cut or drill from the exposed or finished side into concealed surfaces.
 - 2. Concrete and Masonry: Cut using a cutting machine, such as an abrasive saw or a diamond-core drill.
 - Mechanical and Electrical Services: Cut off pipe or conduit in walls or partitions to be removed. Cap, valve, or plug and seal remaining portion of pipe or conduit to prevent entrance of moisture or other foreign matter after cutting.
- D. PATCHING: Proceed with patching after construction operations requiring cutting are complete. Patch construction by filling, repairing, refinishing, closing up, and similar operations following performance of other work. Patch with durable seams that are as invisible as practicable. Provide materials and comply with installation requirements specified in other Sections, where applicable.
 - 1. Inspection: Where feasible, test and inspect patched areas after completion to demonstrate physical integrity of installation.
 - 2. Exposed Finishes: Restore exposed finishes of patched areas and extend finish restoration into retained adjoining construction in a manner that will minimize evidence of patching and refinishing.
 - a. Floors and Walls: Where walls or partitions that are removed extend one finished area into another, patch and repair floor and wall surfaces in the new space. Provide an even surface of uniform finish, color, texture, and appearance. Remove in-place floor and wall coverings and replace with new materials, if necessary, to achieve uniform color and appearance. If patching walls, paint the entire wall, not only the patched area.
 - b. Ceilings: Patch, repair, or rehang in-place ceilings as necessary to provide an even-plane surface of uniform appearance.
 - Exterior Building Enclosure: Patch components in a manner that restores
 enclosure to a weathertight condition and ensures thermal and moisture integrity
 of building enclosure.
 - 3. Clean areas and spaces where cutting and patching are performed. Remove paint, mortar, oils, putty, and similar materials from adjacent finished surfaces.
- E. EXAMINATION AND ACCEPTANCE OF CONDITIONS: Before proceeding with each component of the Work, examine substrates, areas, and conditions, with Installer or Applicator present where indicated, for compliance with requirements for installation tolerances and other conditions affecting performance. Record observations.

- 1. Examine roughing-in for mechanical and electrical systems to verify actual locations of connections before equipment and fixture installation.
- 2. Examine walls, floors, and roofs for suitable conditions where products and systems are to be installed.
- 3. Verify compatibility with and suitability of substrates, including compatibility with existing finishes or primers.
- F. Proceed with installation only after unsatisfactory conditions have been corrected. Proceeding with the Work indicates acceptance of surfaces and conditions.
- G. FIELD MEASUREMENTS: Take field measurements as required to fit the Work properly. Recheck measurements before installing each product. Where portions of the Work are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication. Coordinate fabrication schedule with construction progress to avoid delaying the Work.
- H. SPACE REQUIREMENTS: Verify space requirements and dimensions of items shown diagrammatically on Drawings.
- I. REVIEW OF CONTRACT DOCUMENTS AND FIELD CONDITIONS: Immediately on discovery of the need for clarification of the Contract Documents caused by differing field conditions outside the control of Contractor, submit a request for information to Architect.
- J. INSTALLATION: Locate the Work and components of the Work accurately, in correct alignment and elevation, as indicated.
 - 1. Make vertical work plumb and make horizontal work level.
 - 2. Where space is limited, install components to maximize space available for maintenance and ease of removal for replacement.
 - 3. Conceal pipes, ducts, and wiring in finished areas unless otherwise indicated.
- K. Comply with manufacturer's written instructions and recommendations for installing products in applications indicated.
- L. Install products at the time and under conditions that will ensure the best possible results.

 Maintain conditions required for product performance until Substantial Completion.
- M. Conduct construction operations so no part of the Work is subjected to damaging operations or loading in excess of that expected during normal conditions of occupancy.
- N. Sequence the Work and allow adequate clearances to accommodate movement of construction items on site and placement in permanent locations.
 - Templates: Obtain and distribute to the parties involved templates for work specified to be factory prepared and field installed. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing products to comply with indicated requirements.

- O. ATTACHMENT: Provide blocking and attachment plates and anchors and fasteners of adequate size and number to securely anchor each component in place, accurately located and aligned with other portions of the Work. Where size and type of attachments are not indicated, verify size and type required for load conditions.
 - 1. Mounting Heights: Where mounting heights are not indicated, mount components at heights directed by Architect.
 - 2. Allow for building movement, including thermal expansion and contraction.
 - Coordinate installation of anchorages. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors, that are to be embedded in concrete or masonry.
 Deliver such items to Project site in time for installation.
- P. JOINTS: Make joints of uniform width. Where joint locations in exposed work are not indicated, arrange joints for the best visual effect. Fit exposed connections together to form hairline joints.
- Q. HAZARDOUS MATERIALS: Use products, cleaners, and installation materials that are not considered hazardous.
- R. PROGRESS CLEANING: Clean Project site and work areas daily, including common areas. Enforce requirements strictly. Dispose of materials lawfully.
 - 1. Comply with requirements in NFPA 241 for removal of combustible waste materials and debris.
 - 2. Do not hold waste materials more than seven days during normal weather or three days if the temperature is expected to rise above 80 deg F.
 - 3. Containerize hazardous and unsanitary waste materials separately from other waste. Mark containers appropriately and dispose of legally, according to regulations.
- S. Maintain Project site free of waste materials and debris.
- T. Clean areas where work is in progress to the level of cleanliness necessary for proper execution of the Work.
 - 1. Remove liquid spills promptly.
 - 2. Where dust would impair proper execution of the Work, broom-clean or vacuum the entire work area, as appropriate.
- U. INSTALLED WORK: Keep installed work clean. Clean installed surfaces according to written instructions of manufacturer or fabricator of product installed, using only cleaning materials specifically recommended. If specific cleaning materials are not recommended, use cleaning materials that are not hazardous to health or property and that will not damage exposed surfaces.
- V. CONCEALED SPACES: Remove debris from concealed spaces before enclosing the space.
- W. EXPOSED SURFACES IN FINISHED AREAS: Clean exposed surfaces and protect as necessary to ensure freedom from damage and deterioration at time of Substantial Completion.

- 1. During handling and installation, clean and protect construction in progress and adjoining materials already in place. Apply protective covering where required to ensure protection from damage or deterioration at Substantial Completion.
- 2. Clean and provide maintenance on completed construction as frequently as necessary through the remainder of the construction period. Adjust and lubricate operable components to ensure operability without damaging effects.
- X. STARTING AND ADJUSTING: Start equipment and operating components to confirm proper operation. Remove malfunctioning units, replace with new units, and retest.
 - 1. Adjust equipment for proper operation. Adjust operating components for proper operation without binding.
 - 2. Test each piece of equipment to verify proper operation. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.
- Y. FINAL PROTECTION: Provide final protection and maintain conditions that ensure installed Work is without damage or deterioration at time of Substantial Completion.
 - 1. Comply with manufacturer's written instructions for temperature and relative humidity.

SECTION 017419 - CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL

- A. SECTION INCLUDES: Administrative and procedural requirements for non-hazardous construction waste.
- B. GENERAL: Achieve end-of-Project rates waste percentages by weight required by authorities having jurisdiction and CALGreen for salvage/recycling.
- C. SALVAGED ITEMS FOR REUSE IN THE WORK: Clean salvaged items.
 - 1. Pack or crate items after cleaning. Identify contents of containers.
 - 2. Store items in a secure area until installation.
 - 3. Protect items from damage during transport and storage.
 - 4. Install salvaged items to comply with installation requirements for new materials and equipment. Provide connections, supports, and miscellaneous materials necessary to make items functional for use indicated.
- D. SALVAGED ITEMS FOR SALE AND DONATION: Not permitted on Project site, unless authorized by Building Owner Representative.
- E. SALVAGED ITEMS FOR OWNER'S USE: Clean salvaged items.
 - 1. Pack or crate items after cleaning. Identify contents of containers.
 - 2. Store items in a secure area until delivery to Owner.
 - 3. Transport items to Owner's storage area off-site.

- 4. Protect items from damage during transport and storage.
- F. Separate recyclable waste from other waste materials, trash, and debris. Separate recyclable waste by type at Project site to the maximum extent practical according to approved construction waste management plan.
 - Provide appropriately marked containers or bins for controlling recyclable waste until
 they are removed from Project site. Include list of acceptable and unacceptable
 materials at each container and bin.
 - Inspect containers and bins for contamination and remove contaminated materials if found.
 - 3. Stockpile processed materials on-site without intermixing with other materials. Place, grade, and shape stockpiles to drain surface water. Cover to prevent windblown dust.
 - 4. Stockpile materials away from construction area. Do not store within drip line of remaining trees.
 - 5. Store components off the ground and protect from the weather.
 - 6. Remove recyclable waste from Owner's property and transport to recycling receiver or processor.

SECTION 017700 - CLOSEOUT PROCEDURES

- A. SECTION INCLUDES: Administrative and procedural requirements for contract closeout, including, but not limited to, the following:
 - 1. Substantial Completion procedures.
 - 2. Final completion procedures.
 - 3. Warranties.
 - 4. Final cleaning.
 - 5. Repair of the Work.

B. SUBMITTALS:

- 1. Contractor's List of Incomplete Items (PUNCH LIST): Initial submittal at Substantial Completion.
- 2. Certified List of Incomplete Items: Final submittal at Final Completion.
- 3. Certificates of Release: From authorities having jurisdiction.
- 4. Certificate of Insurance: For continuing coverage.
- C. SUBSTANTIAL COMPLETION PROCEDURES: Contractor's List of Incomplete Items: Prepare and submit a list of items to be completed and corrected (Contractor's punch list), indicating the value of each item on the list and reasons why the Work is incomplete.
- D. SUBMITTALS PRIOR TO SUBSTANTIAL COMPLETION: Complete the following a minimum of FIVE BUSINESS DAYS prior to requesting inspection for determining date of Substantial Completion. List items below that are incomplete at time of request.

- Certificates of Release: Obtain and submit releases from authorities having jurisdiction permitting Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
- Submit closeout submittals specified in individual Sections, project record documents, operation and maintenance manuals, specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.
- 3. Submit maintenance material submittals specified in individual Sections, including tools, spare parts, extra materials, and similar items, and deliver to location designated by Owner. Label with manufacturer's name and model number where applicable.
- 4. Submit test/adjust/balance records.
- 5. Submit changeover information related to Owner's occupancy, use, operation, and maintenance.
- E. PROCEDURES PRIOR TO SUBSTANTIAL COMPLETION: Complete the following a minimum OF FIVE BUSINESS DAYS prior to requesting inspection for determining date of Substantial Completion. List items below that are incomplete at time of request.
 - 1. Advise Owner of pending insurance changeover requirements.
 - 2. Make final changeover of permanent locks and deliver keys to Owner. Advise Owner's personnel of changeover in security provisions.
 - 3. Complete startup and testing of systems and equipment.
 - 4. Perform preventive maintenance on equipment used prior to Substantial Completion.
 - 5. Instruct Owner's personnel in operation, adjustment, and maintenance of products, equipment, and systems.
 - 6. Advise Owner of changeover in heat and other utilities.
 - 7. Participate with Owner in conducting inspection and walkthrough with local emergency responders, IF APPLICABLE.
 - 8. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.
 - 9. Complete final cleaning requirements, including touchup painting.
 - 10. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.
- F. SUBSTANTIAL COMPLETION INSPECTION: Submit a written request for inspection to determine Substantial Completion a minimum of FIVE BUSINESS DAYS prior to date the work will be completed and ready for final inspection and tests. On receipt of request, Architect will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect will prepare the Certificate of Substantial Completion after inspection or will notify Contractor of items, either on Contractor's list or additional items identified by Architect, that must be completed or corrected before certificate will be issued.
 - 1. Re-inspection: Request re-inspection when the Work identified in previous inspections as incomplete is completed or corrected.
 - 2. Results of completed inspection will form the basis of requirements for final completion.
- G. FINAL COMPLETION PROCEDURES: Before requesting final inspection for determining final completion, complete the following:
 - 1. Submit a final Application for Payment.

- Certified List of Incomplete Items: Submit certified copy of Architect's Substantial
 Completion inspection list of items to be completed or corrected (punch list), endorsed
 and dated by Architect. Certified copy of the list shall state that each item has been
 completed or otherwise resolved for acceptance.
- 3. Certificate of Insurance: Submit evidence of final, continuing insurance coverage complying with insurance requirements.
- 4. Instruct Owner's personnel in operation, adjustment, and maintenance of products, equipment, and systems.
- H. FINAL COMPLETION INSPECTION: Submit a written request for final inspection to determine acceptance. On receipt of request, Architect will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect will prepare a final Certificate for Payment after inspection or will notify Contractor of construction that must be completed or corrected before certificate will be issued.
 - 1. Re-inspection: Request re-inspection when the Work identified in previous inspections as incomplete is completed or corrected.
- I. LIST OF INCOMPLETE ITEMS (PUNCH LIST) ORGANIZATION OF LIST: Include name and identification of each space and area affected by construction operations for incomplete items and items needing correction including, if necessary, areas disturbed by Contractor that are outside the limits of construction. Use RMW Form.
 - 1. Organize list of spaces in sequential order, proceeding from lowest floor to highest floor.
 - 2. Organize items applying to each space by major element, including categories for ceiling, individual walls, floors, equipment, and building systems.
 - 3. Submit list of incomplete items in PDF format or another format approved by Architect.
- J. PROJECT WARRANTIES: Submit written warranties on request of Architect for designated portions of the Work where commencement of warranties other than date of Substantial Completion is indicated, or when delay in submittal of warranties might limit Owner's rights under warranty.
 - 1. Organize warranty documents into an orderly sequence based on the table of contents of the Project Manual.
 - Warranty Electronic File: Scan warranties and bonds and assemble complete warranty
 and bond submittal package into a single indexed electronic PDF file with links enabling
 navigation to each item. Provide bookmarked table of contents at beginning of
 document.
- K. Submit operation and maintenance manuals in PDF format or paper.
- L. CLEANING AGENTS: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces. Use products that comply with the California Code of Regulations maximum allowable VOC levels.

- M. FINAL CLEANING: Perform final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations.
 - Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program. Comply with manufacturer's written instructions.
 - 2. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion for entire Project or for a designated portion of Project:
 - 3. Leave Project clean and ready for occupancy.
- N. REPAIR OF THE WORK: Complete repair and restoration operations before requesting inspection for determination of Substantial Completion.
 - Repair or remove and replace defective construction. Repairing includes replacing
 defective parts, refinishing damaged surfaces, touching up with matching materials, and
 properly adjusting operating equipment. Where damaged or worn items cannot be
 repaired or restored, provide replacements. Remove and replace operating components
 that cannot be repaired. Restore damaged construction and permanent facilities used
 during construction to specified condition.
 - 2. Touch up and otherwise repair and restore marred or exposed finishes and surfaces. Replace finishes and surfaces that that already show evidence of repair or restoration.
 - a. Do not paint over "UL" and other required labels and identification, including mechanical and electrical nameplates. Remove paint applied to required labels and identification.
 - 3. Replace parts subject to operating conditions during construction that may impede operation or reduce longevity.
 - Replace burned-out bulbs, bulbs noticeably dimmed by hours of use, and defective and noisy starters in fluorescent and mercury vapor fixtures to comply with requirements for new fixtures.

SECTION 017839 - PROJECT RECORD DOCUMENTS

- A. SECTION INCLUDES: Administrative and procedural requirements for project record drawings.
- B. RECORD PRINTS: Maintain one set of marked-up paper copies of the Contract Drawings and Shop Drawings, incorporating new and revised Drawings as modifications are issued.
 - Mark the Contract Drawings and Shop Drawings completely and accurately. Note Bulletin numbers, alternate numbers, Change Order numbers, and similar identification, where applicable.

- C. RECORDING: Maintain one copy of each submittal during the construction period for project record document purposes. Post changes and revisions to project record documents as they occur; do not wait until end of Project.
- D. Record Digital Data Files: Immediately before inspection for Certificate of Substantial Completion, review marked-up record prints with Architect. When authorized, prepare a full set of corrected digital data files of the Contract Drawings, as follows:
 - 1. Format: Annotated PDF electronic file with comment function enabled.
 - 2. Incorporate changes and additional information previously marked on record prints. Delete, redraw, and add details and notations where applicable.
 - 3. Refer instances of uncertainty to Architect for resolution.
 - 4. Architect will furnish Contractor with one set of digital data files of the Contract Drawings for use in recording information.
 - a. See Section 013100 "Project Management and Coordination" for requirements related to use of Architect's digital data files.
- E. MAINTENANCE OF RECORD DOCUMENTS AND SAMPLES: Store record documents and Samples in the field office apart from the Contract Documents used for construction. Don't use project record documents for construction purposes. Maintain record documents in good order and in a clean, dry, legible condition, protected from deterioration and loss. Provide access to project record documents for Architect's reference during normal working hours.

END OF SECTION 017839

END OF DIVISION 01