

DATE: February 28, 2014

PROJECT: MT FWP Region 3 HQ Lighting Upgrades
FWP# 7099408
(Consulting Design Solutions, Inc. Project # 1322)

BID DATE: March 6, 2014
3:00 PM, MST
Montana Fish, Wildlife & Parks
Design and Construction Bureau
PO Box 200701, 1522 9th Avenue
Helena, Montana 59601

Bidders for the above project are hereby informed that the drawings and/or specifications are modified, corrected or supplemented as follows:

GENERAL CLARIFICATION ITEMS:

- I. Lamp and ballast disposal
 - a. Per General Note #1 on the Demolition Plans:
Documentation will be required from the contractor on how each ballast and lamp are disposed of. Lamps and ballasts need to be disposed of per local, state and federal requirements. Utilize a recycling company similar to Air Cycle Corporation.
- II. Replacement Ceiling Tiles
 - a. MT FWP does have a limited quantity of spare ceiling tiles to replace damaged tiles. A tile inspection will be performed during the pre-construction meeting to evaluate how many ceiling tiles will need to be replaced. Contractor will be responsible for compensating MT FWP for damaged ceiling tiles beyond the initial inspection.

DRAWINGS:

- I. E1.1 Main Building First Floor Lighting Remodel Plan (Alternate #1)
 - a. Additional Keynote.
 - i. Add Keynote #5 to the Northeast light fixture under the main entry canopy:
Re-route the existing EMT conduit from the ADA door opener to the ADA operator so it does not conflict with the location of the new surface mounted light fixture. Contractor shall disconnect cabling and provide new as required. ADA door operator shall be left in working condition.
- II. E2.1 Electrical Legend and Schedule(s)
 - a. Revise Light Fixture Type 'R2' Catalog Number.
 - i. LITON: LRALD6WWF-100-R25UE-B60
 - b. The following manufacturers may bid their light fixtures as prior approved equals, as submitted, for the respective light fixture type(s):

Type (A): LITHONIA
COLUMBIA
Type (AE): LITHONIA
COLUMBIA
Type (B): LITHONIA

Type (BE): COLUMBIA
LITHONIA
COLUMBIA

Type (C): COLUMBIA

Type (D): COLUMBIA

Type (DE): COLUMBIA

Type (F): COLUMBIA

Type (FE): COLUMBIA

Type (G): COLUMBIA

Type (GE): COLUMBIA

Type (H): COLUMBIA

Type (J): DAYBRITE
COLUMBIA

Type (M): DAYBRITE

Type (P): LITHONIA
COLUMBIA

Type (PE): LITHONIA
COLUMBIA

Type (R1): GOTHAM
PRESCOLITE

Type (R2): GOTHAM (RETROFIT VERSION)
PRESCOLITE (RETROFIT VERSION)

Type (T): KENALL
NEW STAR CUSTOM LIGHTING

Type (X1): LITHONIA
DUAL-LITE

- c. The following manufacturers may bid their lighting controls as prior approved equals, as submitted, for the respective light control type(s):

Type (\$os): SENSOR SWITCH
HUBBELL

Type (OS1): SENSOR SWITCH
HUBBELL (LINE VOLTAGE VERSION)

Type (OS2): SENSOR SWITCH
HUBBELL

Type (OS3): SENSOR SWITCH
HUBBELL (ULTRASONIC VERSION)

Type (OS4): SENSOR SWITCH
HUBBELL

Type (RC1): SENSOR SWITCH
HUBBELL

Type (RC2): SENSOR SWITCH
HUBBELL

Type (\$LV): SENSOR SWITCH
HUBBELL

Type (\$D1): SENSOR SWITCH
HUBBELL

Type (OS5): SENSOR SWITCH
HUBBELL

Type (LCP): LC&D
HUBBELL

Type (INVERTER): DUAL-LITE

SPECIFICATIONS:

- I. The following specification section have been added and attached to this addendum:
 - a. Specification Section 01100 SUMMARY
 - b. Specification Section 01200 PRICE AND PAYMENT PROCEDURES
 - c. Specification Section 01300 ADMINISTRATIVE REQUIREMENTS
 - d. Specification Section 01400 QUALITY REQUIREMENTS
 - e. Specification Section 01500 TEMPORARY FACILITIES AND CONTROLS
 - f. Specification Section 01600 PRODUCT REQUIREMENTS
 - g. Specification Section 01701 EXECUTION AND CLOSEOUT REQUIREMENTS
 - h. Specification Section 01732 SELECTIVE DEMOLITION

Scott T. Elders, PE, Consulting Design Solutions, Inc.

SECTION 01100 - SUMMARY

PART 1 - GENERAL

1.1 SUMMARY OF WORK

- A. Project Name: Lab/Shop Lighting Upgrade, Region 3 HQ, Montana Fish Wildlife and Parks.
- B. Owner: State of Montana, Department of Fish Wildlife and Parks.
- C. Engineer: Consulting Design Solutions, Inc.
- D. The Work consists of lighting and lighting control upgrades in the Main Building and separate Lab/Shop building.
- E. Owner-Furnished Items: The following products will be furnished by Owner and shall be installed by Contractor as part of the Work:
 - 1. None at this time.
- F. Work Under Other Contracts:
 - 1. None at this time.

1.2 BASE BID AND ALTERNATE DESCRIPTIONS

- A. Refer to the Bid Proposal Form for the price break down of the base bid and alternated bids.
- B. Under the base bid provide all work in the Lab/Shop and External Storage Building(s) including:
 - 1. New interior lighting and all associated work.
 - 2. New exterior lighting and all associated work.
 - 3. New lighting controls and all associated work.
- C. Under Alternate Bid #1, provide all work in the Main Building including:
 - 1. New interior lighting and all associated work.
 - 2. New exterior lighting and all associated work.
 - 3. New lighting controls and all associated work.

1.3 WORK RESTRICTIONS

- A. Contractor's Use of Premises: During construction, Contractor will have limited use of site indicated. Contractor's use of premises is limited only by Owner's right to perform work or employ other contractors on portions of Project and as follows:
 - 1. Owner will occupy premises during construction. Perform construction only during normal working hours (8 AM to 5 PM Monday thru Friday, other than holidays), unless otherwise agreed to in advance by Owner.

2. Clean up work areas and return to a useable condition at the end of each work period. Sharp objects such as nails, glass, metal, etc. shall be removed from the work areas each day and more often if required by the owner.
3. Secure all tools, materials and equipment at the end of each work period.

1.4 RELATED DOCUMENTS

- A. Refer to Part 1 of the specifications for all forms and contract requirements.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION (Not Applicable)

END OF SECTION 01100

SECTION 01200 - PRICE AND PAYMENT PROCEDURES

PART 1 - GENERAL

1.1 CONTRACT MODIFICATION PROCEDURES

- A. On Owner's approval of a proposal from Contractor, Engineer will issue a Change Order on State of Montana Contract Change Order Form 104, for all changes to the Contract Sum or the Contract Time.
- B. When Owner and Contractor disagree on the terms of a proposal, Engineer may issue a Construction Change Directive on Form 109, instructing Contractor to proceed with the change, for subsequent inclusion in a Change Order. Construction Change Directive will contain a description of the change and designate the method to be followed to determine changes to the Contract Sum or the Contract Time.

1.2 PAYMENT PROCEDURES

- A. Submit a Schedule of Values (Form 100) at least 10 days before the initial Application for Payment. Break down the Contract Sum into at least one line item for each Specification Section in the Project Manual table of contents. Coordinate the Schedule of Values with Contractor's Construction Schedule.
 - 1. Round amounts to nearest whole dollar; total shall equal the Contract Sum.
 - 2. Provide separate line items in the Schedule of Values for initial cost of materials and for total installed value of that part of the Work.
- B. Submit 3 copies of each application for payment Form 101, according to the schedule established in Owner/Contractor Agreement.
 - 1. With each Application for Payment, submit waivers of mechanic's liens from subcontractors, sub-subcontractors, and suppliers for construction period covered by the previous application.
 - 2. Submit final Application for Payment after completion of Project closeout procedures with release of liens and supporting documentation.
 - a. Include consent of surety to final payment (Form 103) and insurance certificates.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION (Not Applicable)

END OF SECTION 01200

SECTION 01300 - ADMINISTRATIVE REQUIREMENTS

PART 1 - GENERAL

1.1 PROJECT MANAGEMENT AND COORDINATION

- A. Coordinate construction to ensure efficient and orderly installation of each part of the Work.
- B. Engineer will Schedule a pre-construction meeting after Notice of Award. Attendance is required by the following:
 - 1. Owner
 - 2. State of Montana Representatives
 - 3. Engineer
 - 4. Prime Electrical Contractor.
 - 5. General Subcontractor.
- C. Schedule and conduct progress meetings at Project site at biweekly intervals. Notify Owner and Engineer of meeting dates and times. Require attendance of each subcontractor or other entity concerned with current progress or involved with planning or coordination of future activities.
 - 1. Engineer will record minutes and distribute to everyone concerned, including Owner and Engineer.

1.2 SUBMITTAL PROCEDURES

- A. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
 - 1. 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 re-submittals.
 - 2. Submit 8 copies of each submittal. Two copies will be delivered to the Owner and State of Montana. Engineer will return 5 copies to the contractor. Retain two copies for the Operations and Maintenance manuals.
 - 3. Engineer will return submittals, without review received from sources other than Contractor.
- B. Place a permanent label or title block on each submittal for identification. Provide a space approximately 6 by 8 inches on label or beside title block to record Contractor's review and approval markings and action taken by Engineer. Include the following information on the label:
 - 1. Project name.
 - 2. Date.
 - 3. Name and address of Contractor.

4. Name and address of subcontractor or supplier.
 5. Number and title of appropriate Specification Section.
- C. Identify deviations from the Contract Documents on submittals.
- D. Contractor's Construction Schedule Submittal Procedure: Submit 2 copies of schedule within 10 days after date established for Commencement of the Work.

PART 2 - PRODUCTS

2.1 ACTION SUBMITTALS

- A. Product Data: Mark each copy to show applicable products and options. Include the following:
1. Manufacturer's written recommendations, product specifications, and installation instructions.
 2. Wiring diagrams showing factory-installed wiring.
 3. Printed performance curves and operational range diagrams.
 4. Testing by recognized testing agency.
 5. Compliance with specified standards and requirements.
- B. Shop Drawings: Prepare Project-specific information, drawn accurately to scale. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data. Submit on sheets at least 8-1/2 by 11 inches but no larger than 24 by 36 inches. Include the following:
1. Dimensions and identification of products.
 2. Fabrication and installation drawings and roughing-in and setting diagrams.
 3. Wiring diagrams showing field-installed wiring.
 4. Notation of coordination requirements.
 5. Notation of dimensions established by field measurement.
- C. Samples: Submit Samples for review of kind, color, pattern, and texture and for a comparison of these characteristics between submittal and actual component as delivered and installed. Include name of manufacturer and product name on label.

2.2 INFORMATION SUBMITTALS

- A. Qualification Data: Include lists of completed projects with project names and addresses, names and addresses of Engineers and owners, and other information specified.
- B. Product Certificates: Prepare written statements on manufacturer's letterhead certifying that product complies with requirements in the Contract Documents.

2.3 CONTRACTOR'S CONSTRUCTION SCHEDULE

- A. Gantt-Chart Schedule: Submit a comprehensive, fully developed, horizontal Gantt-chart-type schedule within 10 days of date established for the Notice of Award.
- B. Preparation: Indicate each significant construction activity separately. Identify first workday of each week with a continuous vertical line.

PART 3 - EXECUTION

3.1 SUBMITTAL REVIEW

- A. Review each submittal and check for coordination with other Work of the Contract and for compliance with the Contract Documents. Note corrections and field dimensions. Mark with approval stamp before submitting to Engineer.
- B. Engineer will review each action submittal, make marks to indicate corrections or modifications required, stamp and mark as appropriate to indicate action taken, and return copies less those retained.

3.2 CONTRACTOR'S CONSTRUCTION SCHEDULE

- A. Distribute copies of approved schedule to Owner, Engineer, subcontractors, testing and inspecting agencies, and parties identified by Contractor with a need-to-know schedule responsibility. When revisions are made, distribute updated schedules to the same parties.
- B. Updating: At monthly intervals, update schedule to reflect actual construction progress and activities. Issue schedule one week before each regularly scheduled progress meeting.
 - 1. As the Work progresses, indicate Actual Completion percentage for each activity.

END OF SECTION 01300

SECTION 01400 - QUALITY REQUIREMENTS

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

- A. See individual specification sections for specific testing requirements.
- B. Testing and inspecting services are required to verify compliance with requirements specified or indicated. These services do not relieve Contractor of responsibility for compliance with the Contract Document requirements.
 - 1. Testing and inspecting services are specified in other Sections of these Specifications or are required by authorities having jurisdiction and shall be performed by independent testing agencies.
 - 2. Where quality-control services are indicated as Contractor's responsibility, engage a qualified testing agency to perform these services.
 - 3. Contractor is responsible for scheduling times for tests, inspections, and obtaining samples and notifying testing agency.
 - 4. Retesting and Re-inspecting: Contractor shall pay for additional testing and inspecting required as a result of tests and inspections indicating noncompliance with requirements.
- C. Submittals: Testing agency shall submit a certified written report of each test and inspection to Contractor, Owner, Engineer, and to authorities having jurisdiction when they so direct. Reports of each inspection, test, or similar service shall include the following:
 - 1. Name, address, and telephone number of testing agency.
 - 2. Project title and number.
 - 3. Date of issue.
 - 4. Dates and locations of samples and tests or inspections.
 - 5. Record of temperature and weather conditions at time of sample taking and testing and inspecting.
 - 6. Names of individuals making tests and inspections.
 - 7. Description of the Work and test and inspection method.
 - 8. Complete test or inspection data, test and inspection results, an interpretation of test results, and comments or professional opinion on whether tested or inspected Work complies with the Contract Document requirements.
 - 9. Recommendations on retesting and re-inspecting.
 - 10. Name and signature of laboratory inspector.
- D. Testing Agency Qualifications: An independent agency with the experience and capability to conduct testing and inspecting indicated; and where required by authorities having jurisdiction, that is acceptable to authorities.

- E. Testing Agency Responsibilities: Testing agency shall cooperate with Engineer and Contractor in performing its duties and shall provide qualified personnel to perform inspections and tests.
 - 1. Agency shall promptly notify Engineer and Contractor of irregularities or deficiencies in the Work observed during performance of its services.
 - 2. Agency shall not release, revoke, alter, or increase requirements of the Contract Documents nor approve or accept any portion of the Work.
 - 3. Agency shall not perform any duties of Contractor.

- F. Auxiliary Services: Cooperate with testing agencies and provide auxiliary services as requested, including the following:
 - 1. Access to the Work.
 - 2. Incidental labor and facilities necessary to facilitate tests and inspections.
 - 3. Adequate quantities of materials for testing, and assistance in obtaining samples.
 - 4. Facilities for storage and field curing of test samples.
 - 5. Security and protection for samples and for testing and inspecting equipment.

- G. Special Tests and Inspections: Owner will engage a qualified testing agency to conduct special tests and inspections required by authorities having jurisdiction.

- H. 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.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION

3.1 DEFECT ASSESSMENT

- A. Replace Work or portions of the Work not conforming to specified requirements.

END OF SECTION 01400

SECTION 01500 - TEMPORARY FACILITIES AND CONTROLS

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

- A. Owner shall have access and use of all buildings during construction. It is the contractor's responsibility to maintain operation of existing heating systems, plumbing systems, communication systems and electrical systems during construction. Existing heating systems are not to be disabled until after the heating season is over and at a date and time agreed upon by the Owner. Provide temporary heat in all buildings where this is not possible. Plumbing systems are to remain operational until new systems are installed and operational. Switch-over between new and existing systems shall be coordinated to limit system down time to 8 hours maximum.
- B. Use natural gas, water and electric power from Owner's existing system without metering and without payment of use charges.
- C. Electrical Service: Comply with NEMA, NECA, and UL standards and regulations for temporary electric service. Install service to comply with NFPA 70.

PART 2 - PRODUCTS

2.1 EQUIPMENT

- A. Heating Equipment: Unless Owner authorizes use of permanent heating system, provide vented, self-contained heaters with thermostatic control.
 - 1. Use of gasoline-burning space heaters, open-flame heaters, or salamander-type heating units is prohibited.
 - 2. Heating Units: Listed and labeled, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.

PART 3 - EXECUTION

3.1 TEMPORARY UTILITIES

- A. General: Arrange with utility company, Owner, and existing users for time when service can be interrupted, if necessary, to make connections for temporary services. Provide 72 hours notice to the owner prior to power interruption.
- B. Sanitary Facilities: Use of Owner's existing toilet facilities will be permitted, 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.

- C. Heating: Provide temporary heating required for curing or drying of completed installations or for protecting installed construction from adverse effects of low temperatures or high humidity. Select equipment that will not have a harmful effect on completed installations or elements being installed.
- D. Provide temporary lighting with local switching that provides adequate illumination for construction operations, observations, inspections, and traffic conditions.

3.2 TEMPORARY SUPPORT FACILITIES

- A. Provide field offices, storage and fabrication sheds, and other support facilities as necessary for construction operations.
- B. Provide waste-collection containers in sizes adequate to handle waste from construction operations. Collect waste daily and, when containers are full, legally dispose of waste off-site. Comply with requirements of authorities having jurisdiction.
 - 1. Recycle all light fixtures per State of Montana requirements.
- C. Install project identification and other signs in locations approved by Owner to inform the public and persons seeking entrance to Project.

3.3 TEMPORARY SECURITY AND PROTECTION FACILITIES

- A. Provide temporary environmental protection, operate temporary facilities, and conduct construction in ways and by methods that comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects.
- B. Provide measures to prevent soil erosion and discharge of soil-bearing water runoff and airborne dust to adjacent properties and walkways, according to requirements of authorities having jurisdiction.
- C. Provide temporary enclosures for protection of construction and workers from inclement weather and for containment of heat.
- D. 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.
- E. Comply with requirements of authorities having jurisdiction for erecting structurally adequate barricades, including warning signs and lighting.
- F. Furnish and install site enclosure fence in a manner that will prevent people and animals from easily entering site except by entrance gates.
- G. Install and maintain temporary fire-protection facilities. Comply with NFPA 241.

3.4 TERMINATION AND REMOVAL

- A. Temporary Utilities: At earliest feasible time, when acceptable to Owner, change over from use of temporary service to use of permanent service.
- B. Remove temporary facilities and controls no later than Substantial Completion. Personnel remaining after Substantial Completion will be permitted to use permanent facilities, under conditions acceptable to Owner.

END OF SECTION 01500

SECTION 01600 - PRODUCT REQUIREMENTS

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

- A. The term "product" includes the terms "material," "equipment," "system," and terms of similar intent.
- B. Product Substitutions: Substitutions include changes in products, materials, equipment, and methods of construction from those required by the Contract Documents and proposed by Contractor after award of the Contract.
 - 1. Submit 3 copies of each request for product substitution.
 - 2. Submit requests as noted in the Instructions to Bidders.
 - 3. Do not submit unapproved substitutions on Shop Drawings or other submittals.
 - 4. Identify product to be replaced and show compliance with requirements for substitutions. Include a detailed comparison of significant qualities of proposed substitution with those of the Work specified, a list of changes needed to other parts of the Work required to accommodate proposed substitution, and any proposed changes in the Contract Sum or the Contract Time should the substitution be accepted.
 - 5. Engineer will review the proposed substitution and notify Contractor of its acceptance or rejection.
- C. Comparable Product Requests:
 - 1. Submit 3 copies of each request for comparable product. Do not submit unapproved products on Shop Drawings or other submittals.
 - 2. Identify product to be replaced and show compliance with requirements for comparable product requests. Include a detailed comparison of significant qualities of proposed substitution with those of the Work specified.
 - 3. Engineer will review the proposed product and notify Contractor of its acceptance or rejection.
- D. Deliver, store, and handle products using means and methods that will prevent damage, deterioration, and loss, including theft. Comply with manufacturer's written instructions.
 - 1. Schedule delivery to minimize long-term storage at Project site and to prevent overcrowding of construction spaces.
 - 2. Deliver products to Project site in manufacturer's original sealed container or packaging, complete with labels and instructions for handling, storing, unpacking, protecting, and installing.
 - 3. Inspect products on delivery to ensure compliance with the Contract Documents and to ensure that products are undamaged and properly protected.
 - 4. Store materials in a manner that will not endanger Project structure.

5. Store products that are subject to damage by the elements, under cover in a weather tight enclosure above ground, with ventilation adequate to prevent condensation.
- 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.

PART 2 - PRODUCTS

2.1 PRODUCT OPTIONS

- A. Provide products that comply with the Contract Documents, are undamaged, and are new at the time of installation.
1. Provide products complete with accessories, trim, finish, and other devices and components needed for a complete installation and the intended use and effect.
 2. Descriptive, performance, and reference standard requirements in the Specifications establish "salient characteristics" of products.
- B. Product Selection Procedures:
1. Where Specifications name a single product or manufacturer, provide the item indicated that complies with requirements.
 2. Where Specifications include a list of names of products or manufacturers, provide one of the items indicated that complies with requirements.
 3. Where Specifications include a list of names of products or manufacturers, accompanied by the term "available products" or "available manufacturers," provide one of the named items that complies with requirements. Comply with provisions for "comparable product requests" for consideration of an unnamed product.
 4. Where Specifications name a product as the "basis-of-design" and include a list of manufacturers, provide the named product. Comply with provisions for "comparable product requests" for consideration of an unnamed product by the other named manufacturers.
 5. Where Specifications name a single product as the "basis-of-design" and no other manufacturers are named, provide the named product. Comply with provisions for "comparable product requests" for consideration of an unnamed product by another manufacturer.
- C. Unless otherwise indicated, Engineer will select color, pattern, and texture of each product from manufacturer's full range of options that includes both standard and premium items.

PART 3 - EXECUTION (Not Applicable)

END OF SECTION 01600

SECTION 01700 - EXECUTION AND CLOSEOUT REQUIREMENTS

PART 1 - GENERAL

1.1 CLOSEOUT SUBMITTALS

- A. Record Drawings: Maintain a set of prints of the Contract Drawings as Record Drawings. Mark to show actual installation where installation varies from that shown originally.
 - 1. Identify and date each Record Drawing; include the designation "PROJECT RECORD DRAWING" in a prominent location.
- B. Operation and Maintenance Data: Submit 2 copies of manual. Organize data into three-ring binders with identification on front and spine of each binder, and envelopes for folded drawings. Include the following:
 - 1. Directory listing names, addresses and telephone numbers of Engineer, Prime Contractor, Subcontractors and major suppliers.
 - 2. Manufacturer's operation and maintenance documentation.
 - 3. Maintenance and service schedules.
 - 4. Maintenance service contracts.
 - 5. Emergency instructions.
 - 6. Spare parts list.
 - 7. Wiring diagrams.
 - 8. Copies of warranties.
 - 9. Approved shop drawings.
 - 10. Certificates of testing.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION

3.1 PROJECT RECORD DOCUMENTS

- A. Maintain at the site one set of the following record documents; record actual revisions to the work:
 - 1. Drawings.
 - 2. Specifications.
 - 3. Addenda.
 - 4. Change Orders and other modifications to the contract.
 - 5. Reviewed shop drawings, product data and samples.
 - 6. Manufacturer's instructions for assembly, installation and adjusting.
- B. Ensure entries are complete and accurate for future reference.

- C. Store record documents separate from documents used for construction.
- D. Record information concurrent with construction progress.
- E. Specifications: Legibly mark and record at each product section description of actual products installed. Including the following:
 - 1. Manufacturer's name and product model and number.
 - 2. Changes made by addenda and modifications.
- F. Record Drawings and shop drawings: Legibly mark each item to record actual construction including:
 - 1. Field changes of dimension and detail.
 - 2. Details not on original Contract drawings.

3.2 EXAMINATION AND PREPARATION

- A. Examine substrates and conditions for compliance with manufacturer's written requirements including, but not limited to, surfaces that are sound, level, plumb, smooth, clean, and free of deleterious substances; substrates within installation tolerances; and application conditions within environmental limits. Proceed with installation only after unsatisfactory conditions have been corrected.
- B. Before proceeding to lay out the Work, verify layout information shown on Drawings, in relation to property survey and existing benchmarks.
- C. Take field measurements as required to fit the Work properly. Where fabricated products are to be fitted to other construction, verify dimensions by field measurement before fabrication and, when possible, allow for fitting and trimming during installation.

3.3 CUTTING AND PATCHING

- A. Do not cut structural members without prior written approval of Engineer.
- B. 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. Patch with durable seams that are as invisible as possible. Provide materials and comply with installation requirements specified in other Sections.

3.4 INSTALLATION

- A. Comply with manufacturer's written instructions for installation. Anchor each product securely in place, accurately located and aligned with other portions of the Work. Clean exposed surfaces and protect from damage.
- B. Clean Project site and work areas daily, including common areas.

3.5 FINAL CLEANING

- A. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion:
1. Remove labels that are not permanent.
 2. Clean transparent materials, including mirrors. Remove excess glazing compounds. Replace chipped or broken glass.
 3. Clean exposed finishes to a dust-free condition, free of stains, films, and foreign substances. Sweep concrete floors broom clean.
 4. Vacuum carpeted surfaces and wax resilient flooring.
 5. Wipe surfaces of mechanical and electrical equipment. Remove excess lubrication. Clean plumbing fixtures. Clean light fixtures, lamps, globes, and reflectors.
 6. Clean Project site, yard, and grounds, in areas disturbed by construction activities. Sweep paved areas; remove stains, spills, and foreign deposits. Rake grounds to a smooth, even-textured surface.

3.6 CLOSEOUT PROCEDURES

- A. Substantial Completion: Before requesting Substantial Completion inspection, complete the following:
1. Prepare a list of items to be completed and corrected (punch list), the value of items on the list, and reasons why the Work is not complete.
 2. Advise Owner of pending insurance changeover requirements.
 3. Submit specific warranties, maintenance service agreements, and similar documents.
 4. Obtain and submit releases permitting Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
 5. Submit Record Drawings, operation and maintenance manuals and similar final record information.
 6. Deliver tools, spare parts, extra materials, and similar items.
 7. Make final changeover of permanent locks and deliver keys to Owner.
 8. Complete startup testing of systems.
 9. Remove temporary facilities and controls.
 10. Submit changeover information related to Owner's occupancy, use, operation, and maintenance.
 11. Complete final cleaning requirements, including touchup painting.
 12. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.
- B. Submit a written request for inspection for Substantial Completion. On receipt of request, Engineer will proceed with inspection or advise Contractor of unfulfilled requirements. Engineer will prepare the Certificate of Substantial Completion after inspection or will advise Contractor of items that must be completed or corrected before certificate will be issued.
- C. Request inspection for Final Completion, once the following are complete:

1. Submit a copy of Substantial Completion inspection list stating that each item has been completed or otherwise resolved for acceptance.
 2. Instruct Owner's personnel in operation, adjustment, and maintenance of products, equipment, and systems.
- D. Request re-inspection when the Work identified in previous inspections as incomplete is completed or corrected.
- E. Submit a written request for final inspection for acceptance. On receipt of request, Engineer will proceed with inspection or advise Contractor of unfulfilled requirements. Engineer will prepare final Certificate for Payment after inspection or will advise Contractor of items that must be completed or corrected before certificate will be issued.

3.7 DEMONSTRATION AND TRAINING

- A. Engage qualified instructors to instruct Owner's personnel to adjust, operate, and maintain systems, subsystems, and equipment not part of a system. Include a detailed review of the following:
1. Include instruction for operational requirements, review of documentation, emergency procedures, operations, adjustments, troubleshooting, maintenance, and repairs.

END OF SECTION 01700

SECTION 01732 - SELECTIVE DEMOLITION

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

- A. Items indicated to be removed and salvaged remain Owner's property. Remove, clean, and deliver to Owner's designated storage area.
- B. Comply with EPA regulations and hauling and disposal regulations of authorities having jurisdiction.
- C. Comply with State of Montana recycling requirements.
- D. Owner will occupy portions of building immediately adjacent to selective demolition area. Conduct selective demolition so Owner's operations will not be disrupted.
- E. It is not expected that hazardous materials will be encountered in the Work. If materials suspected of containing hazardous materials are encountered, do not disturb; immediately notify Engineer and Owner. Owner will remove hazardous materials under a separate contract.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION

3.1 DEMOLITION

- A. Maintain services/systems indicated to remain and protect them against damage during selective demolition operations. Before proceeding with demolition, provide temporary services/systems that bypass area of selective demolition and that maintain continuity of services/systems to other parts of the building.
- B. Locate, identify, shut off, disconnect, and cap off utility services and mechanical/electrical systems serving areas to be selectively demolished.
- C. Provide temporary barricades and other protection required to prevent injury to people and damage to adjacent buildings and facilities to remain.
- D. Provide and maintain shoring, bracing, and structural supports as required to preserve stability and prevent movement, settlement, or collapse of construction and finishes to remain or construction being demolished.
- E. Provide temporary weather protection to prevent water leakage and damage to structure and interior areas.

- F. Protect walls, ceilings, floors, and other existing finish work that are to remain. Erect and maintain dustproof partitions. Cover and protect furniture, furnishings, and equipment that have not been removed.
- G. Neatly cut openings and holes plumb, square, and true to dimensions required. Use cutting methods least likely to damage construction to remain or adjoining construction.
- H. Promptly remove demolished materials from Owner's property and legally dispose of them. Do not burn demolished materials.

END OF SECTION 01732