# **SECTION 01 00 10**

## BASIC REQUIREMENTS

# PART 1 GENERAL

#### 1.1 SECTION INCLUDES

- A. Summary:
  - 1. Contract description.
  - 2. Work by Owner.
  - 3. Contractor's use of premises.
  - 4. Specification conventions.
- B. Price and Payment Procedures:
  - 1. Schedule of values.
  - 2. Applications for payment.
  - 3. Change procedures.
- C. Administrative Requirements:
  - 1. Coordination.
  - 2. Pre-Construction Meeting
  - 3. Field engineering.
  - 4. Meetings.
  - 5. Progress meetings.
  - 6. Equipment electrical characteristics and components.
  - 7. Cutting and patching.

#### D. Submittals:

- 1. Submittal procedures.
- 2. Construction progress schedules.
- 3. Product data.
- 4. Shop drawings.
- 5. Samples.
- 6. Manufacturer's instructions.
- 7. Manufacturer's certificates.

# E. Quality Requirements:

- 1. Quality control.
- 2. Tolerances.
- 3. References.
- 4. Mock-ups.
- 5. Testing and inspection laboratory services.
- 6. Manufacturer's field services and reports.
- 7. Examination.
- 8. Preparation.
- F. Temporary Facilities and Controls:

- 1. Temporary electricity.
- 2. Temporary lighting for construction purposes.
- 3. Temporary heating and cooling.
- 4. Temporary ventilation.
- 5. Telephone and facsimile service.
- 6. Temporary water service.
- 7. Temporary sanitary facilities.
- 8. Field offices and sheds.
- 9. Access roads.
- 10. Parking.
- 11. Progress cleaning and waste removal.
- 12. Project identification.
- 13. Fire prevention facilities.
- 14. Barriers and fencing.
- 15. Enclosures.
- 16. Protection of installed work.
- 17. Security.
- 18. Water control.
- 19. Pollution and environmental control.
- 20. Removal of utilities, facilities, and controls.

# G. Product Requirements:

- 1. Products.
- 2. Delivery, handling, storage, and protection.
- 3. Product options.
- 4. Substitutions.

# H. Execution Requirements:

- 1. Closeout procedures.
- 2. Final cleaning.
- 3. Starting of systems.
- 4. Demonstration and instructions.
- 5. Testing, adjusting and balancing.
- 6. Protecting installed construction.
- 7. Project record documents.
- 8. Operation and maintenance data.
- 9. Spare parts and maintenance materials.
- 10. Warranties.

## 1.2 CONTRACT DESCRIPTION

- A. Work of the Project includes approximately 3,800 finished sq. ft. one story wood frame building, featuring classrooms and office suite.
- B. Perform Work of Contract under a stipulated sum contract with Owner in accordance with Conditions of Contract.

### 1.3 CONTRACTOR'S USE OF PREMISES

- A. Limit use of premises to allow:
  - 1. Work by others and work by Owner.
- B. Provide access to rear (east side) of parking lot for public. Access will be provided without exception on Sundays. It can be closed off during limited construction activities when scheduled and approved by Owner ahead of time.

#### 1.4 SPECIFICATION CONVENTIONS

A. These specifications are written in imperative mood and streamlined form. This imperative language is directed to the Contractor, unless specifically noted otherwise.

## 1.5 SCHEDULE OF VALUES

- A. Submit schedule on AIA Form G703.
- B. Submit Schedule of Values in duplicate within 15 days after date of Owner-Contractor Agreement.

#### 1.6 APPLICATIONS FOR PAYMENT

- A. Submit three copies of each application on AIA Form G702 and G703 or email the document to kevin.bowman@lddblueline.com.
- B. Content and Format: Utilize Schedule of Values for listing items in Application for Payment.
- C. Payment Period: Monthly. 5% retainage will be required.

#### 1.7 CHANGE PROCEDURES

- A. Stipulated Sum/Price Change Order: Based on Proposal Request and Contractor's fixed price quotation or Contractor's request for Change Order as approved by Architect/Engineer.
- B. Change Order Forms: AIA G701.
- C. Markup for labor and materials by contractor, sub-contractors, vendors not to exceed seven percent (7%)
- D. Provide backup itemizing material, labor and markups for each contractor and vendor included in Proposal Request

### 1.8 COORDINATION

- A. Coordinate scheduling, submittals, and Work of various sections of specifications to ensure efficient and orderly sequence of installation of interdependent construction elements.
- B. Verify utility requirement characteristics of operating equipment are compatible with building utilities.
- C. Coordinate space requirements and installation of mechanical and electrical work indicated diagrammatically on Drawings. Follow routing shown for pipes, ducts, and conduit, as closely as practical.
- D. In finished areas, conceal pipes, ducts, and wiring within construction.

#### 1.9 PRE-CONSTRUCTION MEETING

A. Pre-Construction meeting will be required.

#### 1.10 FIELD ENGINEERING

- A. Employ licensed Land Surveyor to locate reference datum and protect survey control and reference points.
- B. Establish elevations, lines, and levels and certify elevations and locations of the Work conform with Contract Documents.
- C. Verify field measurements are as indicated on shop drawings or as instructed by manufacturer.

#### 1.11 PREINSTALLATION MEETINGS

- A. When required in individual specification section, convene pre-installation meeting at Project site prior to commencing work of section.
- B. Have contract documents and relevant submittals present for pre-installation meeting
- C. Coordinate meeting time with Architect, Engineers and Owner's Project Manager
- D. Record minutes of discussion, actions taken and assignments. Distribute minutes within two days to Owner and those affected by decisions.

### 1.12 PROGRESS MEETINGS

- A. Schedule and administer meetings throughout progress of the Work at maximum bimonthly intervals.
- B. Preside at meetings, record minutes, and distribute copies within two days to those affected by decisions made.

# 1.13 EQUIPMENT ELECTRICAL CHARACTERISTICS AND COMPONENTS

- A. Motors: NEMA MG1 Type; specific motor type is specified in individual specification sections.
- B. Wiring Terminations: Terminal lugs to match branch circuit conductor; size terminal lugs to NFPA 70.
- C. Cord and Plug: Minimum 6 foot cord and plug including grounding connector; cord of longer length is specified in individual sections.

### 1.14 CUTTING AND PATCHING

- A. Employ skilled and experienced installer to perform cutting and patching new Work; restore Work with new Products.
- B. Submit written request in advance of cutting or altering structural or building enclosure elements.
- C. Execute cutting, fitting, and patching including excavation and fill, to complete Work, and to:
  - 1. Fit several parts together, to integrate with other Work.
  - 2. Uncover Work to install or correct ill-timed Work.
  - 3. Remove and replace defective and non-conforming Work.
  - 4. Remove samples of installed Work for testing.
  - 5. Provide openings in elements of Work for penetrations of mechanical and electrical Work.
- D. Cut masonry and concrete materials using masonry saw or core drill. Restore Work with new Products in accordance with requirements of Contract Documents.
- E. Fit Work tight to adjacent elements. Maintain integrity of wall, ceiling, or floor construction; completely seal voids.
- F. Fit Work tight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces.
- G. Refinish surfaces to match adjacent finishes.

### 1.15 SUBMITTAL PROCEDURES

- A. Submittal form to identify Project, Contractor, subcontractor or supplier; and pertinent Contract Document references.
- B. Apply Contractor's stamp, signed or initialed, certifying that review, verification of Products required, field dimensions, adjacent construction Work, and coordination of information is in accordance with requirements of the Work and Contract Documents.
- C. Identify variations from Contract Documents and Product or system limitations which may be detrimental to successful performance of completed Work.

- D. Revise and resubmit submittals as required; identify changes made since previous submittal.
- E. Electronic submittals are preferred.

#### 1.16 CONSTRUCTION PROGRESS SCHEDULES

- A. Submit initial progress schedule in duplicate within 15 days after date of Owner-Contractor Agreement for Architect/Engineer review.
- B. Submit revised schedules with each Application for Payment, identifying changes since previous version. Indicate estimated percentage of completion for each item of Work at each submission.
- C. Submit horizontal bar chart with separate line for each section of Work, identifying first work day of each week.

#### 1.17 PRODUCT DATA

- A. Product Data:
  - 1. Submitted to Architect/Engineer for review for limited purpose of checking for conformance with information given and design concept expressed in Contract Documents.
  - 2. After review, provide copies and distribute in accordance with SUBMITTAL PROCEDURES article and for record documents purposes as specified.
- B. Submit number of copies which Contractor requires, plus electronic version to be emailed to Architect/Engineer.
- C. Mark each copy to identify applicable products, models, options, and other data.

  Supplement manufacturer's standard data to provide information unique to this project.

### 1.18 SHOP DRAWINGS

- A. Shop Drawings:
  - 1. Submitted to Architect/Engineer for review for limited purpose of checking for conformance with information given and design concept expressed in Contract Documents.
  - 2. After review, provide copies and distribute in accordance with SUBMITTAL PROCEDURES article and for record documents purposes as specified.
- B. When required by individual specification sections, provide shop drawings signed and sealed by professional engineer responsible for designing components shown on shop drawings.
  - 1. Include signed and sealed calculations to support design.
  - 2. Submit drawings and calculations in form suitable for submission to and approval by authorities having jurisdiction.
  - 3. Make revisions and provide additional information when required by authorities having jurisdiction.

C. Submit number of opaque reproductions Contractor requires, plus email an electronic version to Architect/Engineer.

#### 1.19 SAMPLES

- A. Samples for Review:
  - 1. Submitted to Architect/Engineer for review for limited purpose of checking for conformance with information given and design concept expressed in Contract Documents.
  - 2. After review, provide copies and distribute in accordance with SUBMITTAL PROCEDURES article and for record documents purposes as specified.
- B. Samples For Selection:
  - 1. Submitted to Architect/Engineer for aesthetic, color, or finish selection.
  - 2. Submit samples of finishes from full range of manufacturer's standard colors, textures, and patterns for Architect/Engineer selection.
  - 3. After review, provide copies and distribute in accordance with SUBMITTAL PROCEDURES article and for record documents purposes as specified.
- C. Submit samples to illustrate functional and aesthetic characteristics of Product.

### 1.20 MANUFACTURER'S INSTRUCTIONS

A. When specified in individual specification sections, submit manufacturer printed instructions for delivery, storage, assembly, installation, start-up, adjusting, and finishing, in quantities specified for Product Data.

### 1.21 MANUFACTURER'S CERTIFICATES

- A. When specified in individual specification sections, submit certifications by manufacturer to Architect/Engineer, in quantities specified for Product Data.
- B. Indicate material or Product conforms to or exceeds specified requirements. Submit supporting reference data, affidavits, and certifications as appropriate.

### 1.22 QUALITY CONTROL

- A. Monitor quality control over suppliers, manufacturers, Products, services, site conditions, and workmanship, to produce Work of specified quality.
- B. Comply with manufacturer's instructions.
- C. Comply with specified standards as minimum quality for the Work except when more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.

### 1.23 TOLERANCES

- A. Monitor fabrication and installation tolerance control of installed Products over suppliers, manufacturers, Products, site conditions, and workmanship, to produce acceptable Work. Do not permit tolerances to accumulate.
- B. Comply fully with manufacturer's tolerances.

#### 1.24 REFERENCES

- A. Conform to reference standards by date of issue current as of date for receiving bids.
- B. When specified reference standard conflict with Contract Documents, request clarification from Architect/Engineer before proceeding.

#### 1.25 MOCK-UPS

- A. Tests will be performed under provisions identified in this section and identified in respective product specification sections.
- B. Accepted mock-ups are representative of quality required for the Work.
- C. Where mock-up has been accepted by Architect/Engineer and is specified in product specification sections to be removed; remove mock-up and clear area when directed to do so.

#### 1.26 TESTING AND INSPECTION LABORATORY SERVICES

- A. Owner will appoint, employ, and pay for specified services of independent firm to perform testing and inspection
- B. Independent firm will perform tests, inspections, and other services as required.
- C. Cooperate with independent firm; furnish samples as requested.
- D. Re-testing required because of non-conformance to specified requirements will be charged to Contractor.

### 1.27 MANUFACTURER'S FIELD SERVICES AND REPORTS

- A. When specified in individual specification sections, require material or Product suppliers or manufacturers to furnish qualified staff personnel to observe site conditions and to initiate instructions when necessary.
- B. Report observations and site decisions or instructions that are supplemental or contrary to manufacturer's written instructions.

### 1.28 EXAMINATION

- A. Verify existing site conditions and substrate surfaces are acceptable for subsequent Work. Beginning new Work means acceptance of existing conditions.
- B. Verify utility services are available, of correct characteristics, and in correct location.

#### 1.29 PREPARATION

- A. Clean substrate surfaces prior to applying next material or substance.
- B. Apply manufacturer required or recommended substrate primer, sealer, or conditioner prior to applying new material or substance in contact or bond.

### 1.30 TEMPORARY ELECTRICITY

A. Provide temporary electricity and power outlets for construction operations, connections, branch wiring, distribution boxes, and flexible power cords as required.

#### 1.31 TEMPORARY LIGHTING FOR CONSTRUCTION PURPOSES

- A. Provide and maintain temporary lighting for construction operations.
- B. Provide branch wiring from power source to distribution boxes with lighting conductors, pigtails, and lamps as required.
- C. Permanent building lighting may be utilized during construction. Repair, clean, and replace lamps at end of construction.

#### 1.32 TEMPORARY HEATING AND COOLING

- A. Provide heating and cooling devices and heat and cool as needed to maintain specified conditions for construction operations.
- B. Pay cost of temporary heat.
- C. Provide and pay for operation, maintenance, and regular replacement of filters and worn or consumed parts.
- D. Upon completing and insulating building enclosure, maintain minimum ambient temperature of 50 degrees F in areas where construction is in progress, unless indicated otherwise in specifications.

#### 1.33 TEMPORARY VENTILATION

A. Ventilate enclosed areas to assist cure of materials, to dissipate humidity, and to prevent accumulation of dust, fumes, vapors, or gases.

### 1.34 TELEPHONE AND FACSIMILE SERVICE

A. Provide, maintain and pay for telephone and telephone facsimile service to field office at time of project mobilization.

#### 1.35 TEMPORARY WATER SERVICE

A. Provide, maintain and pay for suitable quality water service required

### 1.36 TEMPORARY SANITARY FACILITIES

- A. Provide and maintain required facilities and enclosures. New facilities may not be used.
- B. Maintain in clean and sanitary condition.

## 1.37 FIELD OFFICES AND SHEDS

- A. Office: Weather tight, with lighting, electrical outlets, heating, cooling and ventilating equipment, and equipped with sturdy furniture and drawing display table.
- B. Progress meetings can be conducted in Architect's office

#### 1.38 ACCESS ROADS

- A. Construct and maintain temporary roads accessing public thoroughfares to serve construction area.
- B. Protect temporary and permanent storm water management facilities

### 1.39 PARKING

A. Arrange with Owner for temporary parking areas to accommodate construction personnel.

### 1.40 PROGRESS CLEANING AND WASTE REMOVAL

A. Collect and maintain areas free of waste materials, debris, and rubbish. Maintain site in clean and orderly condition.

#### 1.41 PROJECT IDENTIFICATION

- A. Provide 8 foot wide x 4 foot high project sign of exterior grade plywood and wood frame construction, painted, to Architect/Engineer's design and colors.
- B. Erect on site at location established by Architect/Engineer.

### 1.42 FIRE PREVENTION FACILITIES

- A. Prohibit smoking with buildings under construction and demolition. Designate area on site where smoking is permitted. Provide approved ashtrays in designated smoking areas.
- B. Establish fire watch for cutting and welding and other hazardous operations capable of starting fires. Maintain fire watch before, during, and after hazardous operations until threat of fire does not exist.
- C. Portable Fire Extinguishers: NFPA 10; 10 pound capacity, 4A-60B: C UL rating.
  - 1. Provide one fire extinguisher at each stair on each floor of buildings under construction.
  - 2. Provide minimum one fire extinguisher in every construction trailer and storage shed
  - 3. Provide minimum one fire extinguisher on roof during roofing operations using heat producing equipment.

### 1.43 BARRIERS AND FENCING

- A. Provide fencing to prevent unauthorized entry to construction areas and to protect existing facilities and adjacent properties from damage.
- B. Construction: Commercial grade chain link fence.
- C. Provide 6 foot high fence around construction site; equip with vehicular and pedestrian gates with locks.

### 1.44 ENCLOSURES

- A. Provide temporary insulated weather tight closures to exterior openings to permit acceptable working conditions and protection of the Work.
- B. Provide temporary roofing as needed to protect Work.

### 1.45 PROTECTION OF INSTALLED WORK

- A. Protect installed Work and provide special protection where specified in individual specification sections.
- B. Prohibit traffic or storage upon waterproofed or roofed surfaces.

### 1.46 SECURITY

A. Provide security and facilities to protect Work and existing facilities, and Owner's operations from unauthorized entry, vandalism, or theft.

### 1.47 WATER CONTROL

A. Maintain excavations free of water. Provide, operate, and maintain pumping equipment.

B. Provide erosion control.

#### 1.48 POLLUTION AND ENVIRONMENTAL CONTROL

- A. Provide methods, means, and facilities to prevent contamination of soil, water, and atmosphere from discharge of noxious, toxic substances, and pollutants produced by construction operations.
- B. Provide dust control, erosion and sediment control, noise control, pest control and rodent control to allow for proper execution of the Work.
- C. Smoking and use of tobacco product is not permitted within thirty (30) feet of the building.

### 1.49 REMOVAL OF UTILITIES, FACILITIES, AND CONTROLS

- A. Remove temporary utilities, equipment, facilities, materials, prior to Substantial Completion.
- B. Remove underground installations to minimum depth of 2 feet. Grade site as indicated on Drawings.
- C. Clean and repair damage caused by installation or use of temporary work.
- D. Restore permanent facilities used during construction to specified condition.

#### 1.50 PRODUCTS

A. Products: Means new material, machinery, components, equipment, fixtures, and systems forming the Work, but does not include machinery and equipment used for preparation, fabrication, conveying and erection of the Work

# 1.51 DELIVERY, HANDLING, STORAGE, AND PROTECTION

A. Deliver, handle, store, and protect Products in accordance with manufacturer's instructions.

#### 1.52 PRODUCT OPTIONS

- A. Products Specified by Reference Standards or by Description Only: Any Product meeting those standards or description.
- B. Products Specified by Naming One or More Manufacturers with Provision for Substitutions: Submit request for substitution for manufacturers not named.

### 1.53 SUBSTITUTIONS

A. Instructions to Bidders specify time for submitting requests for Substitutions during bidding period to requirements specified in this section.

- B. Document each request with complete data substantiating compliance of proposed Substitution with Contract Documents.
- C. Submit electronic version of request for Substitution for consideration. Limit each request to one proposed Substitution.

#### 1.54 CLOSEOUT PROCEDURES

- A. Submit written certification Contract Documents have been reviewed, Work has been inspected, and Work is complete in accordance with Contract Documents and ready for Architect/Engineer's inspection.
- B. Submit final Application for Payment identifying total adjusted Contract Sum/Price, previous payments, and amount remaining due.

#### 1.55 FINAL CLEANING

- A. Execute final cleaning prior to final inspection.
- B. Clean interior and exterior surfaces exposed to view. Vacuum carpeted and soft surfaces.
- C. Clean debris from site, roofs, gutters, downspouts, and drainage systems.
- D. Clean Replace filters of operating equipment.
- E. Remove waste and surplus materials, rubbish, and construction facilities from site.

#### 1.56 STARTING OF SYSTEMS

- A. Provide seven days notification prior to start-up of each item.
- B. Ensure each piece of equipment or system is ready for operation.
- C. Execute start-up under supervision of responsible persons in accordance with manufacturer's instructions.
- D. Submit written report stating equipment or system has been properly installed and is functioning correctly.

#### 1.57 DEMONSTRATION AND INSTRUCTIONS

- A. Demonstrate operation and maintenance of Products to Owner's personnel two weeks prior to date of Substantial Completion.
- B. For equipment or systems requiring seasonal operation, perform demonstration for other season within six months.

C. Demonstrate start-up, operation, control, adjustment, trouble-shooting, servicing, maintenance, and shutdown of each item of equipment at scheduled agreed-upon times, at equipment designated location.

# 1.58 TESTING, ADJUSTING, AND BALANCING

- A. Adjust operating products and equipment to ensure smooth and unhindered operation.
- B. Contractor will employ, and pay for services of independent firm to perform testing, adjusting, and balancing.
- C. Reports will be submitted by independent firm to Architect/Engineer indicating observations and results of tests and indicating compliance or non-compliance with specified requirements and with requirements of Contract Documents.
- D. Cooperate with independent firm; furnish assistance as requested.
- E. Re-testing required because of non-conformance to specified requirements will be charged to Contractor.

### 1.59 PROTECTING INSTALLED CONSTRUCTION

- A. Provide temporary and removable protection for installed products. Control activity in immediate work area to prevent damage.
- B. Protect finished floors and other surfaces from traffic, dirt, wear, damage, or movement of heavy objects, by protecting with durable sheet materials.
- C. Prohibit traffic or storage upon waterproofed or roofed surfaces. When traffic or activity is necessary, obtain recommendations for protection from waterproofing or roofing material manufacturer.
- D. Prohibit traffic from landscaped areas.

# 1.60 PROJECT RECORD DOCUMENTS

- A. Maintain on site one set of Contract Documents to be utilized for record documents.
- B. Record actual revisions to the Work. Record information concurrent with construction progress.
- C. Specifications: Legibly mark and record at each Product section description of actual Products installed.
- D. Record Documents and Shop Drawings: Legibly mark each item to record actual construction.
- E. Submit documents to Architect/Engineer with claim for final Application for Payment.

### 1.61 OPERATION AND MAINTENANCE DATA

- A. Submit two sets prior to final inspection, bound in 8-1/2 x 11 inch text pages, three D side ring capacity expansion binders with durable plastic cloth covers.
- B. Prepare binder cover with printed title "OPERATION AND MAINTENANCE INSTRUCTIONS" and title of project.
- C. Internally subdivide binder contents with permanent page dividers, logically organized, with tab titles legibly printed under reinforced laminated plastic tabs.

#### D. Contents:

- 1. Part 1: Directory, listing names, addresses, and telephone numbers of Architect/Engineer, Contractor, subcontractors, and major equipment suppliers.
- 2. Part 2: Operation and maintenance instructions, arranged by system.
- 3. Part 3: Project documents and certificates.

#### 1.62 SPARE PARTS AND MAINTENANCE MATERIALS

- A. Provide Products, spare parts, maintenance, and extra materials in quantities specified in individual specification sections.
- B. Deliver to Project site and place in location as directed by Architect/Engineer Owner; obtain receipt prior to final payment.

# 1.63 WARRANTIES

- A. Provide duplicate notarized copies.
- B. Execute and assemble transferable warranty documents from subcontractors, suppliers, and manufacturers.
- C. Submit prior to final Application for Payment.

END OF SECTION