

## SECTION 01330

### SUBMITTALS

#### PART 1 - GENERAL

##### 1.1 Summary

A. This Section includes definitions, descriptions, transmittal, and review of Submittals.

B. Related Work Specified Elsewhere:

Project Meetings, Schedules, and Reports .....	Section 01320
Construction Photographs .....	Section 01325
Equipment and Materials.....	Section 01600
Substitutions.....	Section 01631
Contract Closeout.....	Section 01780

##### 1.2 General Information

###### A. Definitions

1. Shop Drawings, product data, and Samples are technical Submittals prepared by Contractor, Subcontractor, manufacturer, or Supplier and submitted by Contractor to Engineer as a basis for approval of the use of Equipment and Materials proposed for incorporation in the Work or needed to describe installation, operation, maintenance, or technical properties.

a. Shop Drawings include custom-prepared data of all types including drawings, diagrams, performance curves, material schedules, templates, instructions, and similar information not in standard printed form applicable to other projects.

b. Product data includes standard printed information on materials, products, and systems; not custom-prepared for this Project, other than the designation of selections from available choices.



2. Documents submitted to Engineer that do not conform to specified requirements shall be subject to rejection by Engineer, and upon request by Engineer, Contractor shall resubmit conforming documents. If conforming Submittals cannot be obtained, such documents shall be retraced, redrawn, or photographically restored as may be necessary to meet such requirements. Contractor's (or his Subcontractor's) failure to initially satisfy the legibility quality requirements will not relieve Contractor (or his Subcontractors) from meeting the required schedule for Submittals.

**C. Language and Dimensions**

1. All words and dimensional units shall be in the English language.
2. Metric dimensional unit equivalents may be stated in addition to the English units. However, English units of measurement shall prevail.

**D. Submittal Completeness**

1. Submittals shall be complete with respect to dimensions, design criteria, materials of construction, and other information specified to enable Engineer to review the information effectively.
2. Where standard drawings are furnished which cover a number of variations of the general class of Equipment, each drawing shall be annotated to indicate exactly which parts of the drawing apply to the Equipment being furnished. Use hatch marks to indicate variations that do not apply to the Submittal. The use of "highlighting markers" will not be an acceptable means of annotating Submittals. Annotation shall also include proper identification of the Submittal permanently attached to the drawing.
3. Reproductions or copies of Contract Drawings or portions thereof will not be accepted as complete fabrication or erection drawings. Contractor may use a reproduction of Contract Drawings for erection drawings to indicate information on erection or to identify detail drawing references. Whenever the Drawings are revised to show this

additional Contractor information, Engineer's title block shall be replaced with a Contractor's title block, and Engineer's professional seal shall be removed from the drawing. The Contractor shall revise these erection drawings for subsequent Engineer revisions to the Contract Drawings.

### **1.3 Technical Submittals**

#### **A. Items shall include, but not be limited to, the following:**

1. Manufacturer's specifications.
2. Catalogs, or parts thereof, of manufactured Equipment.
3. Shop fabrication and erection drawings.
4. Instruction books and operating manuals.
5. Material lists or schedules.
6. Performance tests on Equipment by manufacturers.
7. Concrete mix design information.
8. All drawings, catalogs or parts thereof, manufacturer's specifications and data, samples, instructions, and other information specified or necessary:
  - a. For Engineer to determine that the Equipment and Materials conform with the design concept and comply with the intent of the Contract Documents.
9. Equipment List.
10. Hourly rate for equipment and labor.

#### **B. Schedule of Submittals**

1. Schedule all submittals required prior to fabrication, manufacture, or installation for submission within 14 calendar days of the Notice to Proceed. Prepare for Engineer's concurrence, a schedule for submission of all Submittals specified or necessary for Engineer's approval of the use of Equipment and Materials proposed for

incorporation in the Work or needed for proper installation, operation, or maintenance. Submit the schedule with the procurement schedule and construction progress schedule. Schedule submission of all Submittals to permit review, fabrication, and delivery in time so as to not cause a delay in the Work of Contractor or his Subcontractors or any other contractors as described herein.

2. In establishing schedule for Submittals, allow 20 calendar days in Engineer's office for reviewing original Submittals and 5 calendar days in Engineer's office for reviewing resubmittals.
3. The schedule shall indicate the anticipated dates of original submission for each item and Engineer's approval thereof, and shall be based upon at least one resubmission of each item.
4. Schedule all Submittals required prior to fabrication or manufacture for submission within 45 calendar days of the Notice to Proceed. Schedule Submittals pertaining to storage, installation, and operation at the Site for Engineer's approval prior to delivery of the Equipment and Materials.
5. Resubmit Submittals the number of times required for Engineer's "Submittal Approved." However, any need for resubmittals in excess of the number set forth in the accepted schedule, or any other delay in obtaining approval of Submittals, will not be grounds for extension of the Contract Times, provided Engineer completes his reviews within the times specified.

**C. Transmittal of Submittals**

1. All Submittals for Equipment and Materials furnished by Contractor, Subcontractors, manufacturers, and Suppliers shall be submitted to Engineer by Contractor.
2. After checking and verifying all field measurements, transmit all Submittals to Engineer for approval as follows:
  - a. **Submittal Information Block:**

- (1)** Affix to all paper copies whether Submittal is prepared by Contractor, Subcontractor, or Supplier. Use transparent decal type Submittal Information Blocks for Shop Drawings and use gummed paper type for product data Submittals. All Submittal Information Blocks needed for this Contract will be furnished to Contractor at no charge at the initial coordination conference.
  - (2)** An example of the Submittal Information Block is included as an appendix to this Section.
- b.** Mark each Submittal by Project name and number, Contract title and number, and the applicable Specification Section and Article number. Include in the letter of transmittal the Drawing number and title, sheet number (if applicable), revision number, and electronic filename (if applicable). Unidentifiable Submittals will be returned for proper identification.
  - c.** Check and include Contractor's approval for Submittals of Subcontractors, Suppliers, and manufacturers prior to transmitting them to Engineer. Contractor's approval shall constitute a representation to Owner and Engineer that Contractor has either determined and verified all quantities, dimensions, field construction criteria, materials, catalog numbers, and similar data, or Contractor assumes full responsibility for doing so, and that Contractor has coordinated each Submittal with the requirements of the Work and the Contract Documents.
  - d.** At the time of each submission, call to the attention of Engineer in the letter of transmittal any deviations from the requirements of the Contract Documents.
  - e.** Make all modifications noted or indicated by Engineer and return revised Submittals until approved. Direct specific attention in writing, or on revised Submittals, to changes other than the modifications called for by Engineer on previous

Submittals. After paper copy Submittals have been approved, submit copies thereof for final distribution. Previously approved Submittals transmitted for final distribution will not be further reviewed and are not to be revised. If errors are discovered during manufacture or fabrication, correct the Submittal and resubmit for review.

- f. Following completion of the Work and prior to final payment, furnish record documents and approved Samples and Shop Drawings necessary to indicate "as constructed" conditions, including field modifications, in the number of copies specified. Furnish additional copies for insertion in Equipment instruction books and operating manuals as required. All such copies shall be clearly marked "PROJECT RECORD."
- g. Keep a copy or sample of each Submittal in good order at the Site.

### 3. Quantity Requirements:

- a. Except as otherwise specified, transmit all Shop Drawings in the following quantities:
  - (1) **Initial Submittal:** Seven copies to Engineer. Two copies will be returned to Contractor.
  - (2) **Resubmittals:** Seven copies to Engineer. Two copies will be returned to Contractor.
  - (3) **Submittal for final distribution:** Seven copies plus the number required by Contractor, to Engineer.
  - (4) **As-constructed documents:** Four copies to Engineer.
- b. Transmit Submittals of product data as follows:
  - (1) **Initial Submittal:** Seven copies to Engineer. Two copies will be returned to Contractor.
  - (2) **Resubmittals:** Seven copies to Engineer. Two copies will be returned to Contractor.
  - (3) **Submittal for final distribution:** Seven copies plus the number of copies required by

Contractor, to Engineer, including O&M Manuals.

- c. **Transmit Submittals for reference only:** Four copies to Engineer.
  - d. Owner may copy and use for internal operations and staff training purposes any and all document Submittals required by this Contract and approved for final distribution, whether or not such documents are copyrighted, at no additional cost to Owner. If permission to copy any such Submittal for the purposes stated is unreasonably withheld from Owner by Contractor or any Subcontractor, manufacturer, or Supplier, Contractor shall provide to Engineer 50 copies plus the number of copies required by Contractor at each final distribution issue.
4. **Information to Manufacturer's District Office:** Contractor shall arrange for manufacturers and Suppliers of Equipment and Materials to furnish copies of all agreements, drawings, specifications, operating instructions, correspondence, and other matters associated with this Contract to the manufacturer's district office servicing the Owner. Insofar as practicable, all business matters relative to Equipment and Materials included in this Contract shall be conducted through such local district offices.

**D. Engineer's Review**

- 1. Engineer will review and take appropriate action on Submittals in accordance with the accepted schedule of Submittals. Engineer's review and approval will be only to determine if the items of Equipment and Materials covered by the Submittals will, after installation or incorporation into the Work, conform to information given in the Contract Documents and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.
- 2. Engineer's review and approval will not extend to design data reflected in Submittals, which is peculiarly within the special expertise of Contractor or Contractor's

Subcontractors or Suppliers. Review and approval of a component item as such will not indicate approval of the assembly in which the item functions.

3. Engineer's review and approval of Shop Drawings, product data, or Samples will not relieve Contractor of responsibility for any deviation from requirements of the Contract Documents unless Contractor has in writing called Engineer's attention to such deviation at the time of submission, and Engineer has given written approval of the specific deviation. Approval by Engineer shall not relieve Contractor from responsibility for errors or omissions in Submittals.

#### **E. Submittal Action Stamp**

1. Engineer's review action stamp, appropriately completed, will appear on all Submittals of Contractor when returned by Engineer. Review status designations listed on Engineer's action stamp are defined as follows:

A - SUBMITTAL APPROVED: Signifies Equipment or Material represented by the Submittal conforms with the design concept and complies with the intent of the Contract Documents and is approved for incorporation in the Work. Contractor is to proceed with fabrication or procurement of the items and with related Work. Copies of the Submittal are to be transmitted to Engineer for final distribution.

B - SUBMITTAL APPROVED AS NOTED (RESUBMIT): Signifies Equipment and Material represented by the Submittal conforms with the design concept and complies with the intent of the Contract Documents and is approved for incorporation in the Work in accordance with Engineer's notations. Contractor is to proceed with fabrication or procurement of the items and with related Work in accordance with Engineer's notations and is to submit a revised Submittal responsive to notations marked on the returned Submittal or written in the letter of transmittal.

C - SUBMITTAL RETURNED FOR REVISION (RESUBMIT): Signifies Equipment and Material represented by the Submittal appears to conform with the design concept

and comply with the intent of the Contract Documents but information is either insufficient in detail or contains discrepancies which prevent Engineer from completing his review. Contractor is to resubmit revised information responsive to Engineer's annotations on the returned Submittal or written in the letter of transmittal. Fabrication or procurement of items represented by the Submittal and related Work is not to proceed until the Submittal is approved.

D - SUBMITTAL NOT APPROVED (SUBMIT ANEW): Signifies Equipment and Material represented by the Submittal does not conform with the design concept or comply with the intent of the Contract Documents and is disapproved for use in the Work. Contractor is to provide Submittals responsive to the Contract Documents.

E - PRELIMINARY SUBMITTAL: Signifies Submittals of such preliminary nature that a determination of conformance with the design concept or compliance with the intent of the Contract Documents must be deferred until additional information is furnished. Contractor is to submit such additional information to permit layout and related activities to proceed.

F - FOR REFERENCE, NO APPROVAL REQUIRED: Signifies Submittals which are for supplementary information only; pamphlets, general information sheets, catalog cuts, standard sheets, bulletins and similar data, all of which are useful to Engineer or Owner in design, operation, or maintenance, but which by their nature do not constitute a basis for determining that items represented thereby conform with the design concept or comply with the intent of the Contract Documents. Engineer reviews such Submittals for general content but not for basic details.

G - DISTRIBUTION COPY (PREVIOUSLY APPROVED): Signifies Submittals which have been previously approved and are being distributed to Contractor, Owner, Resident Project Representative, and others for coordination and construction purposes.

## **F. Instruction Books and Operating Manuals**

- 1.** Equipment instruction books and operating manuals prepared by the manufacturer shall include the following:
  - a.** Index and tabs.
  - b.** Instructions for installation, start-up, operation, inspection, maintenance, parts lists and recommended spare parts, and data sheets showing model numbers.
  - c.** Applicable drawings.
  - d.** Warranties and guarantees.
  - e.** Address of nearest manufacturer-authorized service facility.
  - f.** All additional data specified.
  
- 2.** Information listed above shall be bound into hard-back binders of three-ring type. Sheet size shall be 8-1/2 x 11. Binder color shall be white. Capacity shall be a minimum of 1-1/2-inches, but sufficient to contain and use sheets with ease.
  - a.** Provide with following accessories:
    - (1)** Label holder.
    - (2)** Business card holder.
    - (3)** Sheet lifters.
    - (4)** Horizontal pockets.
  
  - b.** The following information shall be imprinted, inserted or affixed by label on the binder front cover:
    - (1)** Equipment name.
    - (2)** Manufacturer's name.
    - (3)** Project name.
    - (4)** Contract name and number.
  
  - c.** The following information shall be imprinted, inserted, or affixed by label on the binder spine:

- (1) Equipment name.
- (2) Manufacturer's name.
- (3) Volume number (if applicable).

## **G. Samples**

### **1. Office Samples shall be of sufficient size and quantity to clearly illustrate the following:**

- a. Functional characteristics of the product, with integrally related parts and attachment devices.
- b. Full range of color, texture, and pattern.

### **2. Field Samples and Mock-ups:**

- a. Contractor shall erect field Samples and mock-ups at the Project Site and at a location acceptable to Engineer.
- b. Size or area shall be as specified in the respective Specification Section.
- c. Fabricate each Sample and mock-up complete and finished.
- d. Remove mock-ups at conclusion of Work or when acceptable to the Engineer if not a permanent part of construction.

## **1.4 Information Submittals**

**A.** Informational Submittals are comprised of technical reports, administrative Submittals, and guarantees, which relate to the Work, but do not require Engineer approval prior to proceeding with the Work. Informational Submittals include:

1. Welder qualification tests.
2. Welding procedure qualification tests.
3. X-ray and radiographic reports.

4. Hydrostatic testing of pipes.
5. Field test reports.
6. Concrete cylinder test reports.
7. ASME pressure vessel test reports.
8. Certification on Materials:
  - a. Steel mill tests.
  - b. Brick and concrete masonry unit lab tests.
9. Soil test reports.
10. Piping stress analysis.
11. Warranties and guarantees.

**B. Transmittal of Informational Submittals**

1. All informational Submittals furnished by Subcontractors, manufacturers, and Suppliers shall be submitted to Engineer by Contractor unless otherwise specified.
  - a. Identify each informational Submittal by Project name and number, Contract title and number, and the Specification Section and Article number marked thereon or in the letter of transmittal. Unidentifiable Submittals will be returned for proper identification.
  - b. At the time of each submission, call to the attention of Engineer in the letter of transmittal any deviations from the requirements of the Contract Documents.
2. **Quantity Requirements:**
  - a. Technical reports and administrative Submittals except as otherwise specified:
    - (1) Engineer: Two copies.
  - b. Written Certificates and Guarantees:

(1) Engineer: Two copies.

**3. Test Reports:**

- a. Responsibilities of Contractor, Owner, and Engineer regarding tests and inspections of Equipment and Materials and completed Work are set forth elsewhere in these Contract Documents.
- b. The party specified responsible for testing or inspection shall in each case, unless otherwise specified, arrange for the testing laboratory or reporting agency to distribute test reports as follows:

- (1) Owner: Two copies.
- (2) Engineer: One copy.
- (3) Resident Project Representative: One copy.
- (4) Contractor: Two copies.
- (5) Manufacturer or Supplier: One copy.

**C. Engineer's Review**

- 1. Engineer will review informational Submittals for indications of Work or Material deficiencies.
- 2. Engineer will respond to Contractor on those informational Submittals, which indicate Work or Material deficiency.

**PART 2 - PRODUCTS - Not Applicable.**

**PART 3 - EXECUTION – Not Applicable.**

**PART 4 - MEASUREMENT AND PAYMENT - Not Applicable**

**\*\* END OF SECTION 01330 \*\***