SECTION 01 33 23 SHOP DRAWINGS, PRODUCT DATA AND SAMPLES

1. GENERAL
   1. REQUIREMENTS INCLUDED

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| For Design Build include paragraphs A, B and C   * + 1. Schedule of Submittals. Design Builder shall submit to University’s Representative a Submittal Schedule identifying all submittals requiring University review and approval for the current Phase within 30 days of Notice to Proceed for the applicable Phase.     2. Specific Requirements. Refer to other sections of the University Specifications for specific requirements of the Submittal Schedule.     3. Types of Submittals. Design Builder shall be required to submit to University’s Representative for review and approval, as appropriate, the following types of submittals, including others not listed as may be required by the University’s Representative or Scope of Work to properly review the Project.        1. Design Builder’s Workplan for the entire Work as required by the Agreement.        2. Design Development Drawings.        3. Construction Documents.        4. Coordination Plan        5. Shop Drawings including actual field measurements.        6. Product Data. One Submittal per Specification section.        7. Samples.        8. Test Reports.        9. Certifications.        10. Quality Control Plan |

* + 1. Shop Drawings, Product Data, and Samples shall be submitted to the University's Representative. Product Data and Samples for proposed substitutions shall be submitted to University's Representative in accordance with Section 01 25 00 Substitution Procedures. Contractor shall be responsible for obtaining copies of Shop Drawings, Product Data, and Samples as it may require for its own use.
  1. RELATED REQUIREMENTS
     1. Definitions
        1. The terms "Shop Drawings" and "Product Data" as used herein also include, but are not limited to fabrication, erection, layout and setting drawings, manufacturers' standard drawings, descriptive literature, catalogues, brochures, performance and test data, wiring and control diagrams. All other drawings and descriptive data pertaining to materials, equipment, piping, duct, conduit systems, and methods of construction as required to show that the materials, equipment, or systems and the positions thereof conform to the Contract Documents.
        2. As used herein, the term "manufactured" applies to standard units usually mass-produced. The term "fabricated" means items specifically assembled or made out of selected materials to meet individual design requirements. Shop Drawings shall establish the actual detail of all manufactured or fabricated items, indicate proper relationship to adjoining Work, and amplify design details of mechanical and electrical equipment in proper relationship to physical spaces in the structure.
     2. Manufacturer's Instructions
        1. Where any item of Work is required by the Contract Documents to be furnished, installed, or performed in accordance with a specified product manufacturer's instructions, Contractor shall procure and distribute the necessary copies of such instructions to the University's Representative and the Contractor shall furnish, install, or perform the Work in strict accordance therewith.
     3. Submittal Schedule
  2. SUBMISSION AND REVIEW
     1. Submit the required submittals to University’s Representative in a timely fashion to allow for adequate review and approval so that the Contract Schedule is not adversely impacted. [ADD FOR DESIGN BUILD: Design Professionals must review and stamp submittals prior to submitting to University’s Representative.]
  3. COORDINATION
     1. Coordinate Submittals with the proper sequencing of the Work so that the Contract Schedule can be maintained and University has reasonable time to review and comment.
        1. The Contractor shall submit a schedule for submission of Shop Drawings, Product Data, and Samples (the "Submittal Schedule"). The schedule shall include the Contractor's time to process the submittal(s), and the time required for review by the University's Representative and University's Design Professional**.** The schedule shall be agreed upon by the University's Representative, the University's Design Professional, and the Contractor in order that submittals will be available when needed by the construction process and so that each party can plan its workload in an orderly manner. All required submittals shall be initially submitted no later than [1 month] [2 months] [# months] after the Notice to Proceed.
        2. Contractor shall prepare the Submittal Schedule in the form contained in the Exhibits and coordinate it with the Contract Schedule. No submittals will be processed prior tothe approval of the Submittal Schedule, unless an exception is made by the University's Representative.
        3. Submit 2 copies of the Submittal Schedule after it is completed and each time it is updated by the Contractor.
        4. In preparing the Submittal Schedule, the Contractor must first determine from the Contract Schedule the date the particular item is needed for the Work. Working backwards, the Contractor will add the required number of days for shipment, time for fabrication, and similar items to determine the date of the first submittal. Contractor shall be responsible for the impact to the schedule resulting from submittals that do not conform to contract requirements. Contractor shall provide time in the Submittal Schedule for the re-submittal of items that do not conform to contract requirements.
        5. The Submittal Schedule shall be adjusted to meet the needs of the construction process and the Contract Schedule.
        6. Review Time: The minimum time required by the University's Representative and the University's Design Professional to review and process Shop Drawings, Product Data and Samples shall be at least 18 days after receipt, except the time to review submittals requiring review by State Fire Marshal (SFM), shall be at least 28 days.
        7. Resubmittal: After receipt, resubmittals shall require the same time for review as the initial submittals.
        8. Submit items in a group or sequence which allows for review and coordination.
        9. Submit submittals promptly in accordance with the Submittal Schedule to avoid delay in the Work or in the Work of any Separate Contractor.
  4. SHOP DRAWINGS
     1. Present information required on Shop Drawings in a clear and thorough manner. Identify details by reference to drawing and detail, schedule, room numbers shown and specified.
     2. Direct copies of the Contract Documents are not acceptable as a submittal from the Contractor.
  5. PRODUCT DATA
     1. Preparation
        1. Clearly mark each copy to identify pertinent products or models.
        2. Show performance characteristics and capacities.
        3. Show dimensions and clearances required.
        4. Show wiring or piping diagrams and controls.
     2. Manufacturer's standard schematic drawings and diagrams
        1. Modify the standard schematic drawings and other diagrams to delete information that is not applicable to the Work.
        2. Supplement standard information to provide information specifically applicable to the Work.
        3. Clearly indicate manufacturer's model or part number intended for Project.
     3. Material Safety Data Sheets
        1. Material Safety Data Sheets (MSDS) shall be submitted for all hazardous substances so defined by the State of California. MSDS shall also be provided for all substances furnished under this Contract that are not available to the general public from retail outlets, e.g., paints, coatings, lacquers, varnishes, sealers, removers, thinners, solvents, adhesives, cleaners, acids, putty, fillers, disinfectants, fungicides, pesticides, gases, oils, lubricants, treatments, liquid-applied flooring, etc.
     4. LEEDTM Product Data: Submit product data and information for documentation of credits for LEED certification. [ADD FOR DESIGN BUILD: Design Builder is responsible to submit for certification directly to USGBC.] Comply with ASTM E 2129 Standard Practice for Data Collection for Sustainability Assessment of Building Products, and Project requirements. Where information must be specially prepared for submittal because standard product documentation does not contain the information required, prepare written statements on manufacturer's letterhead certifying the required product attributes. Refer to Section 01 60 00 Product Requirements for additional information.
  6. SAMPLES
     1. Samples shall be of sufficient size and quality to clearly illustrate the following:
        1. Functional characteristics of the products with integrally related parts and attachment devices;
        2. Full ranges of color, texture, and pattern;
        3. Or as specified.
     2. Field Samples and mock-ups (if required)
        1. Erect at the Project site, at a location as directed by the University's Representative;
        2. Size: As specified;
        3. Fabricate each Sample and mock-up to be complete and fully finished;
        4. Remove mock-ups at conclusion of the Work;
        5. Or as specified.
     3. Samples: Submit new samples in resubmittals as required for initial submittal.
  7. CONTRACTOR'S REVIEW OF SUBMITTALS
     1. Review, edit as appropriate, stamp and sign the Shop Drawings, Product Data, and Samples prior to submission. The Contractor's stamp shall include the language that the submittal has been reviewed by the Contractor per the requirements of Section 3.12 of the General Conditions. Submittals that do not comply with this paragraph will not be reviewed.
     2. Determine and verify
        1. Field measurements.
        2. Field construction criteria.
        3. Catalog numbers and similar data.
        4. Conformance with Contract Documents.
     3. Coordinate each submittal with requirements of the Work and of the Contract Documents.
     4. Specifically identify in the GC Comment field of the transmittal form any deviations of the submitted item from the Contract Documents.
  8. SUBMITTAL REQUIREMENTS
     1. A separate submittal is required for each specification section. The submittal items identified in a specification section shall be consolidated into a single submittal unless otherwise noted. Incomplete submittals shall be returned without review for re-submittal.
     2. It is Contractor's responsibility to submit all submittals specified in each section of the specifications.
     3. Submittals identified for record purposes will not be returned to the Contractor.

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| Use paragraphs D.1 through 3 if University's Design Professional is responsible for submittal review. This option is used on Major Cap projects and is optional for Minor Cap. Select only 1 of the following 3 options. |

* + 1. Number of Submittals Required
       1. Shop Drawings:
          1. Submit 3 copies of Shop Drawings to the University's Design Professional.
          2. Submit 3 copies to the University's Representative.
          3. The University's Design Professional shall return 1 copy with review comments to the Contractor.
       2. Product Data and Non-Reproducible Submittals:
          1. Submit 3 copies to the University's Design Professional and 3 copies to the University's Representative.
          2. The University's Design Professional shall return 1 copy with review comments to the Contractor.
       3. Samples and Non-reproducible Submittals:
          1. Submit the number as specified in individual Specification Section(s) to the University's Design Professional.
          2. Submit 1 copy to the University's Representative.

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| OR instead of the above, select the following for ELECTRONIC OPTION FOR SUBMITTALS |

* + 1. Number of Submittals Required
       1. Shop Drawings, Product Data and other submittals that can be converted into electronic format:
          1. Send electronic copies in .PDF format to the University’s Representative and the University’s Design Professional.
          2. 2 hard copies to the University's Representative and 1 hard copy to the University’s Design Professional.
          3. The University's Representative shall return 1 electronic copy with the review comments to the Contractor.
       2. Samples and Non-reproducible Submittals:
          1. 3 hard copies to the University's Design Professional and 3 hard copies to the University's Representative.
          2. The University's Representative shall return 1 hard copy with review comments to the Contractor.

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| OR instead of the above, use the following paragraphs 1 through 3 if University's Representative is responsible for submittal review. This option can be used on Minor CAP. Major Cap has elected not to use these paragraphs |

* + 1. Number of Submittals Required
       1. Shop Drawings: Submit 1 reproducible transparency and 2 opaque reproductions of shop drawings to the University's Representative. The University's Representative shall return 1 reproducible transparency with review comments to the Contractor.
       2. Project Data and Non-Reproducible Submittals: Submit 4 copies of the University's Representative. The University's Representative shall return 1 copy with review comments to the Contractor.
       3. Samples and Non-Reproducible Submittals: Submit number as specified in individual Specification Section(s) to University's Design Professional. Submit 1 copy to the University's Representative.
    2. Some specification sections may require submittals to be submitted electronically on CD-ROM in most current version of AutoCAD.
    3. Submittals shall contain
       1. Date of submission and dates of any previous submissions.
       2. Project name and number.
       3. Contract identification.
       4. The names of
          1. Contractor.
          2. Subcontractor.
          3. Supplier.
          4. Manufacturer.
       5. Identification of the product with the Specification Section number.
       6. Field dimensions clearly identified as such.
       7. Relation to adjacent or critical features of the Work or materials.
       8. Reference standards such as American Society for Testing and Materials (ASTM) or Federal Specification (FS) numbers.
       9. Identification of changes from requirements of the Contract Documents.
       10. Identification of revisions on resubmittals. Note any departures from the Contract Documents or changes in previously reviewed submittals that were not commented upon.
       11. An 8 by 3 inch blank space for review stamps.
       12. Contractor's stamp, initialed or signed, certifying to the review of the submittal; verification of materials field measurements and conditions; and compliance of the information within the submittal with requirements of the Work and of the Contract Documents.

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| Major Cap has elected not to use the paragraph regarding material submittal approval form. Using the next paragraph eliminates stamping and signing each submittal (used by the federal government). If this paragraph is used, you must make sure that Exhibit 16 is included in the exhibits. |

* + - 1. Material Submittal Approval Form (MSAF): Contractor shall fill out and attach Material Submittal Approval Form (Refer to Exhibits) for shop drawings or products data to be reviewed by [University's Representative]. Submittals received without properly completed Material Submittal Approval Form will be returned without action to the Contractor.

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* + - 1. Contractor shall submit submittal(s) with transmittal provided by the University's Representative.
    1. Resubmission Requirements
       1. Shop Drawings and Product Data
          1. Note any departures from the Contract Documents or changes in previously reviewed submittals that were not commented upon by the [University's Representative] [University's Design Professional].
          2. [University's Representative] [University's Design Professional] will review a total of 2 submittals for the same item at no cost to the Contractor. The cost for the review of more than 2 submittals of the same item shall be deducted from the Contract Sum.
    2. Distribution
       1. Reproduce and distribute copies of Shop Drawings and Product Data, that have been accepted by the University to the following locations:
          1. Contractor's Project site file.
          2. Record documents file maintained by the Contractor.
          3. Subcontractors.
          4. Supplier, manufacturer or fabricator.
       2. Distribute Samples that have been accepted by the University to Subcontractors or suppliers that need samples for quality control and coordination.
    3. University's Representative [and University's Design Professional's Professional(s)] will review Contractor's submittals, such as Shop Drawings, Product Data and Samples, for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents. Review of such submittals is not conducted for the purpose of determining the accuracy and completeness of other details such as dimensions and quantities, or for substantiating instructions for installation or performance of equipment or systems, all of which remain the responsibility of the Contractor as required by the Contract Documents.

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| For Minor Cap projects only |

* + 1. Contractor shall submit data, including but not necessarily limited to, the Sections identified in Table of Submittals. It is Contractor's responsibility to submit all submittals specified in each section of the specifications.

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| For Minor Cap projects only. Add additional rows to table of submittals for technical sections and their requirements |

| TABLE OF SUBMITTALS | | | | | | | | | |
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| Section | Shop Drawings | Data/List of  Materials | MSDS | Color and/or  Samples | Guarantee Over  1 Year | Mock-ups | Tests | Certifications | Other |
| 013200 Construction Progress Documentation |  | X | X |  |  |  |  |  |  |
| 013323 Shop Drawings, Product Data and Samples | X | X | X | X |  |  |  |  |  |
| 017329 Cutting and Patching | X |  |  | X |  |  |  |  |  |
| 017323 Bracing and Anchoring | X |  |  |  |  |  |  |  |  |
| 017400 Cleaning and Waste Management |  | X |  |  |  |  |  |  |  |
| 017800 Close-Out Submittals |  | X | X |  |  |  |  |  |  |

1. PRODUCTS (NOT USED)
2. EXECUTION (NOT USED)

END OF SECTION 01 33 23