

SECTION NO.	SECTION TITLE	SUBMITTAL DESCRIPTION
033000	CIP Concrete	<p>Product Data: Submit data for proprietary materials and items including admixtures, patching compounds, waterstops, joint systems, curing compounds, finish materials, and others as requested by Architect/Engineer.</p> <p>Shop Drawings/Reinforcement: See ACI 301, Section 3.1. Detailing shall conform to the latest edition of ACI 315 "Details and Detailing of Concrete Reinforcement".</p> <p>Shop Drawings/Formwork: Submit shop drawings prepared by a Registered Engineer for concrete formwork indicating all shoring and reshoring, form construction, locations of form ties, form finishes, and other information as required by the Engineer. Design shall conform to following:</p> <ol style="list-style-type: none"> <li>1. "Specifications for Structural Concrete", ACI-301, latest edition, Section 2, Formwork.</li> <li>2. "Guide to Formwork for Concrete", ACI-347, latest edition, Chapter 2, Design.</li> </ol> <p>Mix Design: Submit mix designs for each concrete mix for the project per Chapter 5 of the latest edition of ACI 318. Mix designs shall include all back up material with compressive strength breaks based on field experience or breaks from a trial mix per Chapter 5.</p> <p>Construction Joint Layout: Indicate proposed construction joints required to construct the structure.</p> <ol style="list-style-type: none"> <li>1. Location of construction joints is subject to approval of the Architect and Engineer.</li> </ol> <p>Material Certificates: For each of the following, signed by manufacturers:</p> <ol style="list-style-type: none"> <li>1. Cementitious materials.</li> <li>2. Admixtures.</li> <li>3. Steel reinforcement and accessories.</li> <li>4. Waterstops.</li> <li>5. Curing compounds.</li> </ol> <p>Material Test Report: For the following, from a qualified testing agency, indicating compliance with requirements: Aggregates.</p>

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034100	Structural Precast Concrete	<p>Product Data: Submit manufacturer's specifications and instructions for manufactured materials and products. Include manufacturer's certifications and laboratory test reports as required.</p> <p>Shop Drawings:</p> <ol style="list-style-type: none"> <li>1. Submit shop drawings showing complete information for fabrication and installation of precast concrete units. Indicate member dimensions and cross-section; location, size and type of reinforcement, including special reinforcement and lifting devices necessary for handling and erection.</li> <li>2. Indicate layout, dimensions, and identification of each precast unit corresponding to sequence and procedure of installation. Indicate welded connections by AWS standard symbols. Detail inserts, connections and joints, including accessories and construction at openings in precast units.</li> <li>3. Include erection procedure for precast units and sequence of erection.</li> </ol> <p>Calculations: Provide complete design calculations prepared by a registered engineer, licensed in State where project is erected.</p>
034713	Tilt-Up Precast Concrete	<p>Shop Drawings: Indicating panel dimensions, openings, reinforcement and connection details, locations of items cast into panels, lifting devices, and other pertinent information. A. Clearly identify additional reinforcement provided for handling units.</p>
042000	Unit Masonry Assemblies	<p>Product Data: For each different masonry unit, accessory, and other manufactured product specified.</p> <p>Shop Drawings: Show fabrication and installation details for the following:</p> <ol style="list-style-type: none"> <li>1. Reinforcing Steel: Detail bending and placement of unit masonry reinforcing bars. Comply with ACI 315, "Details and Detailing of Concrete Reinforcement."</li> </ol>

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044313	Adhered Stone Masonry Veneer	<p>Product Data: Manufacturer's specification and data sheets for each product used, including:  Preparation instructions.  Storage and handling requirements and recommendations.  Installation guidelines.  Cleaning and maintenance methods.</p> <p>Shop Drawings: Submit elevations and cross-section details showing proper installation methods.</p> <p>Sample Selection:</p> <ol style="list-style-type: none"> <li>1. Standard sample board with selected stone profile and color should be submitted for each product specification.</li> <li>2. Selection of approved grout colors and styles (if applicable).</li> </ol> <p>Sample Verification: A field panel sample with the minimum size of 3' x 3' should be installed for every product selection showing: styles, colors, textures and grout colors.</p> <p>Manufacturer's Certificates: Certify products meet or exceed specified requirements.</p> <p>Closeout Submittals: Provide manufacturer's warranty and maintenance recommendations.</p>
051200	Structural Steel Framing	<p>Shop Drawings: Submit plans and details prior to commencing any fabrication of structural metal; show dimensions, connections with adjoining materials and construction, finishes, welds, bolts, and fasteners, anchoring all fabrication or erection accessories required; show field welds, cuts, holes and fasteners; verify all dimensions and correlate with adjoining construction and materials; indicate size, type and grade of all members.</p> <p>All steel connection design shall be completed by a design professional hired by the contractor, and satisfy the load requirements specified in the contract documents.</p>
052100	Steel Joists	<p>Product Data: For each type of joist, accessory, and product indicated.</p> <p>Shop Drawings: Show layout, designation, number, type, location, and spacings of joists. Include joining and anchorage details, bracing, bridging, joist accessories; splice and connection locations and details; and attachments to other construction.</p>
053100	Steel Decking	<p>Product Data: For each type of deck, accessory, and product indicated.</p> <p>Shop Drawings: Show layout and types of deck panels, anchorage details, reinforcing channels, pans, cut deck openings, special jointing, accessories, and attachments to other construction.</p>

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054000	Cold-formed Metal Framing	<p>Product Data: For each type of product and accessory indicated.</p> <p>Shop Drawings: Show layout, spacings, sizes, thicknesses, and types of cold-formed metal framing; fabrication; and fastening and anchorage details, including mechanical fasteners.1. For cold-formed metal framing indicated to comply with design loads, include structural analysis data signed and sealed by the qualified professional engineer responsible for their preparation.</p>
055000	Metal Fabrications	<p>Shop Drawings: Detail fabrication and erection of each metal fabrication indicated. Include plans, elevations, sections, and details of metal fabrications and their connections. Show anchorage and accessory items. Provide templates for anchors and bolts specified for installation under other Sections.</p> <p>Railing shop drawings and calculations designed and engineered by a registered Engineer.</p> <p>Welding certificates.</p>
055119	Metal Grating Stairs	<p>Shop Drawings: Include plans, elevations, sections, details, and attachments to other work.</p> <p>Include structural analysis data signed and sealed by the qualified professional engineer responsible for their preparation.</p>
055213	Pipe and Tube Railings	<p>Shop Drawings: Show fabrication and installation of handrails and railings. Include plans, elevations, sections, component details, and attachments to other Work.</p>
064020	Interior Architectural Woodwork	<p>Shop Drawings: Show location of each item, dimensioned plans and elevations, large-scale details, attachment devices, and other components.1. Show details full size.2. Show locations and sizes of furring, blocking, and hanging strips, including concealed blocking and reinforcement specified in other Sections.3. Show locations and sizes of cutouts and holes for installed in architectural woodwork.</p>
072100	Thermal Insulation	<p>Product Data: For each type of product indicated.</p> <p>If "Thermax-Light Duty" is NOT utilized, samples shall be required.</p>
074200	Aluminum Composite Panels	<p>Manufacturer's literature certifying that material meets specifications.</p> <p>Shop Drawings: Submit shop drawings showing project layout and elevations; fastening and anchoring methods; detail and location of joints, sealants and gaskets, including joints necessary to accommodate thermal movement; trim; flashing; and all necessary accessories.</p> <p>Samples: Panel assembly: Two samples of each type of assembly, 304 mm (12") x 304 mm (12") minimum.</p> <p>Two samples of each color or finish selected, 76 mm (3") x 102 mm (4") minimum.</p>
075423	TPO Roofing	<p>Product Data: For each type of product indicated.</p>
077200	Roof Accessories	<p>Product Data: For each type of product indicated.</p>

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081113	Hollow Metal Doors and Frames	Shop Drawings: Show fabrication and installation of steel doors and frames. Include details of each frame type, elevations of door design types, conditions at openings, details of construction, location and installation requirements of door and frame hardware and reinforcements, and details of joints and connections. Show anchorage and accessory items. Reference the Architect's Door numbers from Door Schedule.
081416	Flush Wood Doors	Shop Drawings: Indicate location, size, and hand of each door; elevation of each kind of door; construction details not covered in Product Data; location and extent of hardware blocking; and other pertinent data. 1. Indicate dimensions and locations of mortises and holes for hardware. 2. Indicate dimensions and locations of cutouts. 3. Indicate fire ratings for fire doors. 4. Reference the Architect's Door numbers from Door Schedule.
084113	Aluminum-Framed Storefronts	Product Data: For each type of product indicated.  Shop Drawings: For aluminum-framed systems. Include plans, elevations, sections, details, and attachments to other work.  Delegated-Design Submittal: For aluminum-framed systems indicated to comply with performance requirements and design criteria, including analysis data signed and sealed by the qualified professional engineer responsible for their preparation.
084413	Glazed Aluminum Curtain Walls	Product Data: For each type of product indicated.  Shop Drawings: For glazed aluminum curtain walls. Include plans, elevations, sections, full-size details, and attachments to other work.
085113	Aluminum Windows	Shop Drawings: Include plans, elevations, sections, details, and attachments to other work.
087100	Door Hardware	Product Data: For each type of product indicated. Include construction and installation details, material descriptions, dimensions of individual components and profiles, and finishes.  Door Hardware Schedule: Prepared by or under the supervision of Installer, detailing fabrication and assembly of door hardware, as well as installation procedures and diagrams. Coordinate final door hardware schedule with doors, frames, and related work to ensure proper size, thickness, hand, function, and finish of door hardware.
088000	Glazing	Product Data for each type of glazing used.
088720	Arch Window Film	Product Data for each type of product specified. Samples of films for Architect and Owner approval
092216	Non-Load-Bearing Steel Framing	Calculations, design loads, and list or table for headers above openings.  For spans that exceed limitations: see section 05 40 00 Cold-formed Metal Framing.

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099113	Exterior Painting	<p>Product Data for each type of product specified.</p> <p>Color Samples: If other paints (manufacturers and their related colors) are used, which are not listed on the drawings, but listed in Section 2 of this Specification, the Contractor shall submit the color samples to the Architect for approval, a minimum of 3 weeks prior to the beginning of the painting work to avoid any delays in the Work.</p>
099123	Interior Painting	<p>Product Data for each type of product specified.</p> <p>Color Samples: If other paints (manufacturers and their related colors) are used, which are not listed on the drawings, but listed in Section 2 of this Specification, the Contractor shall submit the color samples to the Architect for approval, a minimum of 3 weeks prior to the beginning of the painting work to avoid any delays in the Work.</p>
10211 and 102800	Metal Toilet Compartments and Accessories	<p>Shop Drawings: Include plans, elevations, sections, details, and attachments to other work.</p> <ol style="list-style-type: none"> <li>1. Show locations of cutouts for compartment-mounted toilet accessories.</li> <li>2. Show locations of reinforcements for compartment-mounted grab bars.</li> <li>3. Color choices for panels.</li> <li>4. Cut sheets for all accessories listed.</li> </ol>
108213	Roof Top Equipment Screens	<p>Product Data: Submit manufacturer's catalog data, detail sheets, specification and other data sufficient to indicate compliance with these specifications.</p> <p>Shop Drawings: Indicate layouts heights, component connection details, and details of interface with adjacent construction.</p> <p>Samples: Materials: painted metal; color as specified</p> <p>Certification: Manufacturer's Certificate of Compliance certifying that thermoplastic panels supplied meet or exceed requirements specified.</p> <p>Closeout Submittals: Warranty documents, issued and executed by manufacturer, countersigned by Contractor.</p>

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316329	Drilled Piers	<ol style="list-style-type: none"> <li>1. Product Data: For each type of product.</li> <li>2. Design Mixtures: For each concrete mixture. Submit alternative design mixtures when characteristics of materials, Project conditions, weather, test results, or other circumstances warrant adjustments.</li> <li>3. Indicate amounts of mixing water to be withheld for later addition at Project site.</li> <li>4. Retain "Shop Drawings" Paragraph below if drilled piers are reinforced.</li> <li>5. Shop Drawings: For concrete reinforcement, detailing fabricating, bending, supporting, and placing.</li> <li>6. Coordinate "Qualification Data" Paragraph below with qualification requirements in Section 01400 "Quality Requirements" and as may be supplemented in "Quality Assurance" Article.</li> <li>7. Qualification Data: For Installer.</li> <li>8. Retain "Welding certificates" Paragraph below if retaining "Welding Qualifications" Paragraph in "Quality Assurance" Article.</li> <li>9. Welding certificates.</li> <li>10. Retain "Material Certificates" Paragraph below to require submittal of material certificates from manufacturers.</li> <li>11. Material Certificates: From manufacturer, for the following: <ol style="list-style-type: none"> <li>a. Cementitious materials.</li> <li>b. Admixtures.</li> <li>c. Steel reinforcement and accessories.</li> </ol> </li> <li>12.</li> <li>13. Retain "Material Test Reports" Paragraph below for material test reports that are Contractor's responsibility.</li> <li>14. Material Test Reports: For aggregates, by a qualified testing agency:</li> <li>15. Retain option in "Aggregates" Subparagraph below if retaining service record data with "Normal-Weight Aggregate" Paragraph in "Concrete Materials" Article.</li> <li>16. Retain "Field quality-control reports" Paragraph below if Contractor is responsible for field quality-control testing and inspecting.</li> <li>17. Field quality-control reports.</li> <li>18. Coordinate this article with Section 01770 "Closeout Procedures" and with Section 01781 "Project Record Documents."</li> <li>19. Provide record drawings for close-out.</li> </ol>
323113	Chain-Link Fences and Gates	Shop Drawings: Include plans, elevations, sections, details, and attachments to other work.
323119	Site Screening Devices	<p>Shop Drawings: Indicate layouts heights, component connection details, and details of interface with adjacent construction.</p> <p>Samples: Samples of Materials: Thermoplastic panels, Plankwall™, color selection: As specified</p> <p>Closeout Submittals: Warranty documents, issued and executed by manufacturer, countersigned by Contractor.</p>