

| Section No. | Section Title | | | | | Description |
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| | | WWP | IWT | SCW | Comp | |
| DIVISION 00 - PROCUREMENT AND CONTRACTING REQUIREMENTS | | | | | | |
| 000000 | Procurement and Contracting Requirements | ● | ● | ● | ● | Outline Only: Single Document to specify procurement and Contract requirements. Includes topics covered in Division 00 Documents. |
| 001116 | Invitation to Bid | ● | ● | ● | ● | Private notice for selected bidders. |
| 002113 | Instructions to Bidders | ● | ● | ● | ● | Generic bid submission procedural requirements. |
| 002113.11 | Instructions to Bidders - AIA | ● | ● | ● | ● | Bid submission procedural requirements incorporating and supplementing AIA A701 used with AIA Contract forms. NOTE: SpecText files do not contain referenced AIA documents. |
| 002113.12 | Instructions to Bidders - EJCDC | ● | ● | ● | ● | Bid submission procedural requirements with EJCDC Contract forms. NOTE: SpecText files do not contain referenced EJCDC documents. |
| 003100 | Available Project Information | ● | ● | ● | ● | List and descriptions of geotechnical, topographic survey, existing conditions survey, and other reports. |
| 004113 | Bid Form - Stipulated Sum (Single-Prime Contract) | ● | ● | ● | ● | Generic lump-sum price Bid Form used with AIA, EJCDC, or other Contract forms. NOTE: SpecText files do not contain referenced AIA and EJCDC documents. |
| 004143 | Bid Form - Unit Price (Single-Prime Contract) | ● | ● | ● | ● | Generic unit price Bid Form used with AIA, EJCDC, or other Contract forms. NOTE: SpecText files do not contain referenced AIA and EJCDC documents. |
| 004300 | Procurement Form Supplements | ● | ● | ● | ● | Forms to be submitted with Bid for Contractor qualifications, Subcontractor list, pricing schedules, and other information. |
| 005213.11 | Agreement Form - AIA Stipulated Sum (Single-Prime Contract) | ● | ● | ● | ● | Incorporates AIA form as Contract agreement. NOTE: SpecText files do not contain referenced AIA documents. |
| 005213.12 | Agreement Form - EJCDC Stipulated Sum (Single-Prime Contract) | ● | ● | ● | ● | Incorporates EJCDC form as Contract agreement. NOTE: SpecText files do not contain referenced EJCDC documents. |
| 005223.11 | Agreement Form - AIA Construction Management (Single-Prime Contract) | ● | ● | ● | ● | Incorporates AIA construction management form as Contract agreement. NOTE: SpecText files do not contain referenced AIA documents. |
| 007213.11 | General Conditions - AIA Stipulated Sum (Single-Prime Contract) | ● | ● | ● | ● | Incorporates AIA form as General Conditions. NOTE: SpecText files do not contain referenced AIA documents. |
| 007213.12 | General Conditions - EJCDC Stipulated Sum (Single-Prime Contract) | ● | ● | ● | ● | Incorporates EJCDC form as General Conditions. NOTE: SpecText files do not contain referenced EJCDC documents. |
| 007223.11 | General Conditions - AIA Construction Management (Single-Prime Contract) | ● | ● | ● | ● | Incorporates AIA construction management form as General Conditions. NOTE: SpecText files do not contain referenced AIA documents. |
| 007313 | Supplementary Conditions - AIA | ● | ● | ● | ● | Supplements to AIA standard general conditions. NOTE: SpecText files do not contain referenced AIA documents. |
| 007314 | Supplementary Conditions - EJCDC | ● | ● | ● | ● | Supplements to EJCDC standard general conditions. NOTE: SpecText files do not contain referenced EJCDC documents. |
| 007315 | Supplementary Conditions - AIA (Construction Management) | ● | ● | ● | ● | Supplements to AIA standard construction management general conditions. NOTE: SpecText files do not contain referenced AIA documents. |
| 009113 | Addenda | ● | ● | ● | ● | Form for preparing addenda. |
| DIVISION 01 - GENERAL REQUIREMENTS | | | | | | |
| 010000 | General Requirements | ● | ● | ● | ● | Outline Only: Single section to specify general requirements. Includes topics covered in other Division 01 Sections. |
| 011000 | Summary | ● | ● | ● | ● | Basic Contract description, work by Owner or others, Owner-furnished products, use of Site, future work, work sequence, Owner occupancy, permits, and specification conventions. |
| 012000 | Price and Payment Procedures | ● | ● | ● | ● | Allowances, schedule of values, applications for payment, change procedures, defect assessment, unit prices, and alternates. |
| 012500 | Substitution Procedures | ● | ● | ● | ● | Product and installer substitution procedures. |
| 013000 | Administrative Requirements | ● | ● | ● | ● | Coordination, meetings, electrical characteristics, alterations, and special procedures. |

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| 013216 | Construction Progress Schedule | ● | ● | ● | ● | Critical path method (CPM) schedules, bar chart schedules, submittals, review and evaluation, updating, and distribution. |
| 013300 | Submittal Procedures | ● | ● | ● | ● | Administrative and procedural requirements, product list and data, CAD files, Shop Drawings, samples, design data, reports, certificates, instructions, photographs, and reviews. |
| 013546 | Indoor Air Quality Procedures | | ● | | ● | Construction indoor air quality management plan, HVAC air filters, building flush-out, and indoor air quality testing. |
| 014000 | Quality Requirements | ● | ● | ● | ● | Quality control, tolerances, references, labeling, mockups, testing and inspection, and manufacturer's field services. |
| 015000 | Temporary Facilities and Controls | ● | ● | ● | ● | Temporary utilities, construction facilities, and controls. |
| 016000 | Product Requirements | ● | ● | ● | ● | Product description, delivery, storage, handling, and product options. |
| 017000 | Execution and Closeout Requirements | ● | ● | ● | ● | Field engineering, startup, closeout, testing, adjusting, balancing, o&m, demonstrations and instructions, record documents, spare parts, warranties and bonds, examination, preparation, cutting & patching, and cleaning. |
| 017419 | Construction Waste Management and Disposal | ● | ● | ● | ● | Construction waste management plan, recycling, and adaptively reusing construction waste. |
| 018113 | Sustainable Design Requirements | ● | ● | ● | ● | Project goals, product requirements, and documentation to support LEED certification. |
| 019100 | Commissioning | ● | ● | ● | ● | Administrative and procedural requirements for commissioning selected systems. |

DIVISION 02 - EXISTING CONDITIONS

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| 024116 | Structure Demolition | | | | ● | Demolition and removal of entire buildings or portions of buildings. |
| 024119.13 | Selective Building Demolition | | | | ● | Demolition of selective interior and exterior building components for renovations, alterations or additions. |
| U 024300 | Structure Moving | | | ● | ● | Relocation of entire structures or portions of structures. Also includes disconnecting and reconnecting utilities. |
| U 025700 | Sinkhole Remediation | | | ● | ● | Excavation within and adjacent to sinkholes and natural subsurface openings; placement of concrete or grout in bedrock openings; and backfilling. |
| 026500 | Underground Storage Tank Removal | ● | | ● | ● | Excavation; testing; tank decommissioning; tank removal; and backfill. |
| 028213.33 | Asbestos Abatement for Utilities | ● | | ● | ● | Removal of piping with coatings of asbestos-containing material (ACM). |

DIVISION 03 - CONCRETE

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| 030100 | Maintenance of Concrete | ● | | ● | ● | Patching and repair of damaged or deteriorated concrete, using cementitious and epoxy repair materials. |
| 031000 | Concrete Forming and Accessories | | | ● | ● | Form materials, water stops and accessories, as required to form cast-in-place concrete. |
| 032000 | Concrete Reinforcing | | | ● | ● | Reinforcing steel and supports for cast-in-place concrete. |
| 033000 | Cast-in-Place Concrete | ● | ● | ● | ● | Cast-in-place or in situ concrete for structural building frames, slabs on fill or grade, and other concrete components associated with building. |
| 033500 | Concrete Finishing | | | | ● | Surface finishing of concrete floor slabs and toppings, including special finishing that may be required with slab finishing. |
| 033523 | Exposed Aggregate Concrete Finishing | ● | | ● | ● | Exposed architectural finishes on concrete surfaces, including final cleaning. |
| 033713 | Shotcrete | ● | | ● | ● | Pneumatically applied concrete for contoured earth surfaces or prepared forms. |
| 033800 | Post-Tensioned Concrete | | | ● | ● | On-Site post-tensioning of cast-in-place concrete structural building framing members and slabs. |
| 033900 | Concrete Curing | ● | | ● | ● | Procedures for curing horizontal and vertical concrete surfaces. |
| 034100 | Precast Structural Concrete | | | ● | ● | Plant precast and prestressed concrete members for building structural framing members; lifting, supporting, and connection devices; standard or stressing reinforcement; and minor surface finish options. |
| 034113 | Precast Concrete Hollow Core Planks | | | | ● | Precast prestressed concrete for building structural roof and floor planks, cored; and lifting, supporting, and connecting devices. |
| 034500 | Precast Architectural Concrete | | | | ● | Plant-cast architecturally finished concrete wall panels. |
| 034713 | Tilt-Up Concrete | | | ● | ● | Site-cast, load- or non-load-bearing, precast concrete wall panels, including panel insulation. |

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| 034900 | Glass-Fiber-Reinforced Concrete | | | | ● | Plant-cast, architecturally finished, glass-fiber-reinforced concrete wall units. |
| 035216 | Lightweight Insulating Concrete | | | | ● | Lightweight aggregate insulating concrete fill topping for sloped roof decks. |
| 035400 | Cast Underlayment | | | | ● | Liquid-applied, gypsum- or cementitious-base, self-leveling underlayment installed over interior wood or concrete subfloors. |
| 036000 | Grouting | ● | ● | ● | ● | Portland-cement grout, rapid-curing epoxy grout, and non-shrink cementitious grout. |

DIVISION 04 - MASONRY

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| 040100 | Maintenance of Masonry | | | | ● | Restoration of masonry surfaces of brick, stone, clay tile, terra cotta, and block by water, steam, sand blasting, or chemical cleaning. |
| 040513 | Masonry Mortaring | | | ● | ● | Mortar for masonry Work, specified by property method or by proportion method. |
| 040516 | Masonry Grouting | | | | ● | Grouting for masonry Work, specified by property method or by proportion method. |
| 042000 | Unit Masonry | | | | ● | Single-wythe, veneer, cavity, and reinforced, load or non-load bearing masonry units, CMU, brick, clay tile, and surface parging. |
| 042300 | Glass Unit Masonry | | | | ● | Glass block unit masonry, plain and decorative designs, reinforcement, joints, and accessories. |
| 042500 | Unit Masonry Panels | | | | ● | Shop fabricated masonry panels of face brick veneer structurally attached to steel framing. |
| 042600 | Single-Wythe Unit Masonry | | | | ● | Single wythe masonry construction using concrete masonry units, decorative and pre-faced units, face brick, clay tile units, and surface parging. |
| 042613 | Masonry Veneer | | | | ● | Masonry exterior or interior veneer walls using decorative and pre-faced masonry units. |
| 042723 | Cavity Wall Unit Masonry | | | | ● | Double-wythe cavity wall construction, load- and non-load-bearing, including related accessories. |
| 042900 | Engineered Unit Masonry | | | | ● | Steel reinforced, structural, and load-bearing masonry with grout- or concrete-filled cores. |
| 044213 | Masonry-Supported Stone Cladding | | | | ● | Natural stone, set in mortar, for veneer on exterior and interior walls, anchored to structural backup. |
| 044216 | Steel-Stud-Supported Stone Cladding | | | | ● | Cut stone veneer for exterior and interior walls, attached with metal anchors to structural backup. |
| 047200 | Cast Stone Masonry | | | | ● | Architectural cast stone fabricated by dry or wet casting methods to simulate natural cut stone, for use as veneer wall panels, window sills and lintels, copings, medallions, balustrades, cornices, and other decorative trim. |

DIVISION 05 - METALS

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| 051200 | Structural Steel Framing | | | | ● | Structural steel items including framing, anchor rods, base plates, structural frame accessories, and shop finishing. |
| 052100 | Steel Joist Framing | | | | ● | Open-web joists, long-span joists, deep long-span joists, joist girders, and anchorage and bearing plates. |
| 053113 | Steel Floor Decking | | | | ● | Shop-formed structural metal floor deck, cellular or non-cellular, and plain or ribbed. |
| 053123 | Steel Roof Decking | | | | ● | Structural metal roof deck; non-cellular, acoustic or non-acoustic types. |
| 054000 | Cold-Formed Metal Framing | | | | ● | Axially loaded steel studs, slotted channels, joists, purlin framing, and connections, including bracing, fasteners and accessories. |
| 055000 | Metal Fabrications | ● | ● | ● | ● | Shop fabricated metal items of steel and aluminum. |
| 055013 | Metal Service Platforms | | | | ● | Steel service platforms consisting of grating, ladders and stairs, handrails, and railings used for accessing and servicing equipment. |
| 055100 | Metal Stairs | | | ● | ● | Shop fabricated steel stairs with concrete filled pan, checkered plate, or open grating; pre-engineered or engineer designed, preassembled stair towers; including integral handrails and balusters. |
| 055200 | Metal Railings | | | ● | ● | Pipe or tube railing system; aluminum or steel materials; custom fabricated or proprietary design. |
| 055300 | Metal Gratings | ● | ● | ● | ● | Metal and FRP bar gratings and floor plates for pedestrian or light vehicle loads. |
| 057000 | Decorative Metal | | | | ● | Basic metal materials and fabrication for specially designed and fabricated metal products by Project. |
| 057113 | Fabricated Metal Spiral Stairs | | | | ● | Production or custom-manufactured spiral stairs, with or without vertical center columns. |

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| DIVISION 06 - WOOD, PLASTICS, AND COMPOSITES | | | | | | |
| 061000 | Rough Carpentry | | | | ● | Wood framing, with lumber or pre-engineered studs, and sheathing to form superstructure of wood-framed buildings. |
| 061053 | Miscellaneous Rough Carpentry | | | | ● | Rough wood blocking and curbing for miscellaneous locations including roof curbs, roof cants, blocking in wall or roof openings, parapet framing, furring, and grounds. |
| 061300 | Heavy Timber Construction | | | | ● | Structural timber wood framing with 5 inches (125 mm) minimum cross sectional dimension. |
| 061326 | Heavy Timber Trusses | | | | ● | Structural timber truss framing with bolted metal connector plates and split ring connections. |
| 061500 | Wood Decking | | | | ● | Structural wood decking of softwood lumber, plywood, or glued-laminated lumber; plain or preservative treated; and single or multiple span over structural supports. |
| 061733 | Wood I-Joists | | | | ● | Shop-fabricated structural joists of wood top and bottom chords with plywood or oriented strand board web; glued and nailed or bolted assembly; with bridging, bracing, and anchorage. |
| 061736 | Metal-Web Wood Joists | | | | ● | Shop-fabricated structural joists of wooden top and bottom chords, with tubular metal-web truss, attached steel pin, bridging, bracing, and anchoring. |
| 061753 | Shop-Fabricated Wood Trusses | | | | ● | Shop-fabricated wood trusses with wood or steel plate connectors; preservative treatment; bridging, bracing, and anchorage. |
| 061800 | Glued-Laminated Construction | | | | ● | Shop-fabricated, glued-laminated structural wood beams, purlins, and arches, with steel hardware and attachment brackets. |
| 062000 | Finish Carpentry | | | | ● | Finished carpentry and wood work items, interior and exterior locations, usually site fabricated. |
| 064100 | Architectural Wood Casework | | | | ● | Custom designed casework and countertops of wood, metal, or high pressure decorative laminate veneer, usually shop fabricated and finished. |
| 064214 | Stile and Rail Wood Paneling | | | | ● | High-quality, architectural, shop-prepared, shop-finished, and Site-installed wood-veneer paneling with solid wood trim and accessories. |
| 064216 | Flush Wood Paneling | | | | ● | High-quality, architectural, shop-prepared, shop-finished, and Site-installed wood-veneer paneling with solid wood trim and accessories. |
| 066113 | Simulated Stone Fabrications | | | | ● | Shop fabrication of custom-sized and -shaped cast quartz and resin components including washroom vanities with or without integral sink, countertops, shower stalls, contoured bathtubs, and many other building finishes or furnishing components. |
| 066116 | Solid Surfacing Fabrications | | | | ● | Shop fabricated, custom, cast plastic vanity tops, counter tops, window stools, bath tubs, and shower stalls. |
| 068000 | Composite Fabrications | ● | ● | ● | ● | Shop fabricated custom fiber reinforced epoxy or polyester resin components. |
| DIVISION 07 - THERMAL AND MOISTURE PROTECTION | | | | | | |
| 070150 | Maintenance of Membrane Roofing | | | | ● | Removal or partial removal of existing horizontal roof covering in preparation for replacing roof membrane system. |
| 071100 | Dampproofing | | | | ● | Hot- or cold-applied asphalt or hot-applied coal-tar bitumen dampproofing, applied in single or multiple coats at building foundation walls and at other subgrade surfaces. |
| 071200 | Built-Up Bituminous Waterproofing | | | ● | ● | Hot or cold applied asphalt or hot applied coal tar waterproofing, with integral fabric reinforcement for foundation walls, buried structures, and concealed horizontal slabs. |
| 071300 | Sheet Waterproofing | | | ● | ● | Sheet waterproofing membranes of various types used in vertical and horizontal applications. |
| 071400 | Fluid-Applied Waterproofing | | | ● | ● | Liquid rubber, elastomeric, or other waterproofing compounds, hot or cold applied, used in vertical and horizontal applications. |
| 071700 | Bentonite Waterproofing | | | ● | ● | Manufactured waterproofing panel containing bentonite clay for below grade vertical and horizontal surfaces. |
| 071800 | Traffic Coatings | | | | ● | Surface fluid-applied waterproofing, either elastomeric or composition membrane coating, to accommodate light foot, vehicle, or mechanical room traffic. |

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| 071900 | Water Repellents | | | | ● | Water- or solvent-based liquid usually applied to clay brick, concrete masonry, concrete, porous stone, or stucco surfaces as penetrant sealer or coating to retard moisture absorption. |
| 072113 | Board Insulation | | | | ● | Board insulation of polystyrene, polyurethane, polyisocyanurate foam, cellular glass, or glass-fiber (rigid or semi-rigid), for use as a thermal barrier. |
| 072116 | Blanket Insulation | | | | ● | Glass-fiber or mineral wool batt insulation, in roll or blanket form, for use as thermal barriers. |
| 072119 | Foamed-In-Place Insulation | | | | ● | Site-applied plastic foam insulation by spray, frothing, or pouring. |
| 072123 | Loose-Fill Insulation | | | | ● | Pour-grade vermiculite or perlite granular insulation used in masonry cores or other hollow wall construction. |
| 072126 | Blown Insulation | | | | ● | Glass-fiber or cellulose-fiber insulation, manually or pneumatically placed, for use as a thermal barrier. |
| 072129 | Sprayed Insulation | | | | ● | Sprayed glass fiber or treated cellulose insulation for thermal or acoustic purposes. |
| 072400 | Exterior Insulation and Finish Systems | | | | ● | Composite wall cladding system (EIFS) of rigid board insulation, clad with reinforced plaster finish. |
| 072600 | Vapor Retarders | | | | ● | Vapor seal for the building enclosure and gaps between adjacent materials forming wall and roof openings. |
| 072700 | Air Barriers | | | | ● | Air seal for the building enclosure and seal between adjacent materials forming wall or roof openings. |
| 073113 | Asphalt Shingles | | | | ● | Organic mat or glass fiber felt asphalt composition shingles, mineral granule surfaced, over sloped nailable roof deck surface, with eave (ice dam) protection, flashings, and underlayment. |
| 073129 | Wood Shingles and Shakes | | | | ● | Wood shingles or shakes over nailable sloped plywood or wood roof deck surface, with ice dam membrane, flashings, and underlayment. |
| 073200 | Roof Tiles | | | | ● | Formed clay, concrete, or metal roofing tiles over sloped plywood or wood roof deck surface, with or without horizontal wood battens, with moisture shedding underlayment, ice dam membrane, and flashings. |
| 074113 | Metal Roof Panels | | | | ● | Factory formed structural and architectural sheet metal roofing and soffits with concealed or exposed fasteners. |
| 074213 | Metal Wall Panels | | | | ● | Profiled shop painted metal siding, site assembled, insulated, with or without metal backing sheet; horizontal or vertical profile; applied to a structural framing system. |
| 074243 | Composite Wall Panels | | | | ● | Preformed, prefinished metal panel system, shop assembled, with horizontal or vertical profile, insulated, and applied to a sub-girt framing system or building structural framing system. |
| 074616 | Aluminum Siding | | | | ● | Aluminum siding materials formed to flat board, bevel board, sheet, or other profile. |
| 074619 | Steel Siding | | | | ● | Steel siding materials formed to flat board, bevel board, sheet, or other profile. |
| 074623 | Wood Siding | | | | ● | Wood siding materials such as flat board, bevel board, plain or resin surfaced plywood, and hardboard. |
| 074633 | Plastic Siding | | | | ● | Plastic siding materials formed to flat board, bevel board, sheet, or other profile. |
| 074646 | Fiber-Cement Siding | | | | ● | Fiber-cement siding materials formed to flat board, bevel board, sheet, or other profile. |
| 075113 | Built-Up Asphalt Roofing | | | | ● | Multiple-ply roofing of felts and asphalt bitumen, including base flashings, primary flashings to roof protrusions and interruptions, and integral roofing control and expansion joints. |
| 075116 | Built-Up Coal Tar Roofing | | | | ● | Coal tar roofing materials for repairs to existing coal tar roofs. |
| 075200 | Modified Bituminous Membrane Roofing | | | | ● | Roofing of reinforced composite membrane of modified asphalt bitumen, heat-fused seams, substrate, base flashings, flashings for roof protrusions and penetrations, and expansion joints. |
| 075219 | Self-Adhering Modified Bituminous Membrane Roofing | | | | ● | Single ply rubberized asphalt bitumen factory bonded to polyethylene sheeting, adhered to substrate with a protective covering. |
| 075403 | Sheet Membrane Roofing - Fully Adhered | | | | ● | Single-sheet EPDM, PVC, neoprene, TPO, or other single or composite membrane roofing, fully bonded to substrate by various adhesives or bitumen, and exposed to view without ballast cover. System includes base flashings, primary flashings to roof protrusion |
| 075404 | Sheet Membrane Roofing - Loose Laid Ballasted | | | | ● | Single-sheet EPDM, PVC, neoprene, TPO, or other single- or composite-membrane roofing, loose laid over insulation surfaces, and with aggregate- or paver-ballast cover. The system includes base flashings, primary flashings to roof protrusions, and integral |

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| 075405 | Sheet Membrane Roofing - Mechanically Attached | | | | ● | Sheet EPDM, PVC, neoprene, TPO, or other single- or composite-membrane roofing, placed over insulation surfaces and mechanically attached, with optional aggregate or paver-ballast cover or color-coated finish. System includes base flashings, primary flash |
| 075551 | Built-Up Bituminous Protected Membrane Roofing | | | | ● | Roofing of felts and asphalt bitumen, base flashings, flashings to roof protrusions and interruptions, expansion joints, loose-laid insulation, and gravel, paver, or concrete ballast. |
| 075552 | Modified Bituminous Protected Membrane Roofing | | | | ● | Single or multiple ply roofing of reinforced composite membrane of modified asphalt bitumen, adhered over structural deck, loose laid insulation with gravel, paver, or concrete ballast and filter fabric over insulation. |
| 075553 | Elastomeric Protected Membrane Roofing | | | | ● | Single ply roof membranes of various types, over structural deck, loose laid insulation, with gravel, paver, or concrete ballast and filter fabric over. |
| 075700 | Coated Foamed Roofing | | | | ● | Spray applied foam insulation over a roof deck substrate, covered with a spray applied protective overcoat. |
| 076100 | Sheet Metal Roofing | | | | ● | Metal roofing, formed to flat, standing, or battened seams; metal gutters, downspouts, and eaves (ice dam) protection. |
| 076200 | Sheet Metal Flashing and Trim | | | | ● | Sheet metal, flashing, and trim associated with roofing and waterproofing membranes. |
| 077100 | Roof Specialties | | | | ● | Manufactured copings and fascias, gravel stops, roof expansion joints, snow guards, and attic vents. |
| 077123 | Manufactured Gutters and Downspouts | | | | ● | Metal or plastic rainwater gutters and downspouts. |
| 077233 | Roof Hatches | | | | ● | Shop-fabricated roof hatches and vents, with integral support curbs or for placement on Site-fabricated wood curbs. |
| 078100 | Applied Fireproofing | | | | ● | Cementitious and mineral fiber fireproofing, spray applied, and intumescent paint fireproofing to achieve fire protection. |
| 078400 | Firestopping | | | | ● | Products to maintain fire and smoke resistance ratings in fire-rated construction by closing openings and penetrations. |
| 079000 | Joint Protection | ● | ● | ● | ● | Gun-grade and pourable sealants, compressible foam sealers, and gaskets for sealing static joints, dynamic joints, and joints between differing materials and components. |
| 079500 | Expansion Control | | | | ● | Interior floor, wall, and ceiling expansion or control joint cover assemblies. |

DIVISION 08 - OPENINGS

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| 081163 | Metal Screen and Storm Doors and Frames | | | | ● | Modular sized, packaged, and glazed aluminum storm doors, frames, and operating hardware intended to be attached to wood-frame door openings. |
| 081213.13 | Standard Hollow Metal Frames | | | | ● | Standard shop fabricated steel frames, fire rated and non-rated types. |
| 081213.53 | Custom Hollow Metal Frames | | | | ● | Custom shop fabricated steel frames, fire rated and non-rated types. |
| 081313.13 | Standard Hollow Metal Doors | | | | ● | Standard shop fabricated steel doors, door panels, fire rated and non-rated types, flush face or stile and rail designs. |
| 081313.53 | Custom Hollow Metal Doors | | | | ● | Custom shop fabricated steel doors, door panels, fire rated and non-rated types, flush face or stile and rail designs. |
| 081376 | Bifolding Metal Doors | | | | ● | Residential-quality flush, raised panel, mirrored, and louvered hollow metal and metal-framed bifolding doors. |
| 081416 | Flush Wood Doors | | | | ● | Solid- and hollow-core flush wood doors with wood veneer, plastic laminate, or hardboard facing material, including flush or glazed design, and with or without louvers. |
| 081433 | Stile and Rail Wood Doors | | | | ● | Stile and rail wood doors of fire-rated and non-fire-rated types, and of wood-panel or glazed design. |
| 081476 | Bifolding Wood Doors | | | | ● | Residential-quality flush, raised and flat-panel, glazed, louvered, hollow- and solid-core, stile, and rail-wood doors. |
| 081713 | Integrated Metal Door Opening Assemblies | | | | ● | Flush, embossed, and decorative steel doors prehung in steel or wood frames, typically used as entry doors. |
| 083113 | Access Doors and Frames | | | | ● | Metal access doors and panels, with frames for walls, ceilings, and floors, with insulation, and with and without fire-resistance ratings. |
| 083213 | Sliding Aluminum-Framed Glass Doors | | | | ● | Sliding glass and aluminum doors. |
| 083216 | Sliding Plastic-Framed Glass Doors | | | | ● | Sliding glass and extruded plastic (PVC) doors. |
| 083219 | Sliding Wood-Framed Glass Doors | | | | ● | Sliding glass and wood doors, plastic or aluminum clad. |

| Section No. | Section Title | | | | | Description |
|-------------|---|-----|-----|-----|------|---|
| | | WWP | IWT | SCW | Comp | |
| 083323 | Overhead Coiling Doors | | | | ● | Horizontal steel or aluminum interlocking slat, rolling or coiling doors and shutters, industrial or commercial quality, manual or electrical operation, and fire-rated or non-fire-rated. |
| 083326 | Overhead Coiling Grilles | | | | ● | Rolling or coiling grilles, with manual or electric operation, single or multiple sections of horizontal steel, and aluminum or stainless steel members. |
| 083513 | Folding Doors | | | | ● | Accordion folding doors, acoustic or non-acoustic type, with vinyl coated fabric finish; manual operation, with overhead track and hardware. |
| 083613 | Sectional Doors | | | | ● | Wood, steel, and aluminum overhead sectional doors, with manual and electric operation. |
| 083813 | Flexible Strip Doors | | | | ● | Plastic hanging-strip doors to accommodate personnel and light traffic, with mounting frame and accessories. |
| 083816 | Flexible Traffic Doors | | | | ● | Plastic hanging-strip doors to accommodate vehicular and crane traffic, with mounting frame and accessories. |
| 083819 | Rigid Traffic Doors | | | | ● | Swinging, double-action, rigid doors to accommodate personnel and vehicular traffic, with mounting frame and accessories. |
| 084113 | Aluminum-Framed Entrances and Storefronts | | | | ● | Aluminum-framed storefronts for exterior and interior applications, including aluminum and glass doors, door frames, and glazed lights. |
| 084226 | All-Glass Entrances | | | | ● | Structural glass doors and sidelights, including rails, frames, and hardware, for exterior and interior applications. |
| 084229 | Automatic Entrances | | | | ● | Electrically powered horizontally sliding or swinging automatic entrance door systems, with electromechanical, pneumatic, or hydraulic operating equipment. |
| 084233 | Revolving Door Entrances | | | | ● | Revolving door unit of glass and metal construction, manual or motor assisted operation, and collapsing door wings for emergency egress. |
| 084413 | Glazed Aluminum Curtain Walls | | | | ● | Tubular aluminum exterior curtain wall system for multi-story cladding; site assembled or shop fabricated subassemblies; factory finished, vision glass, infill panels, louvers, and glazing. |
| 084426 | Structural Glass Curtain Walls | | | | ● | Interior aluminum frame supporting an exterior glazed wall, site assembled or shop fabricated subassemblies. |
| 084426.19 | Point Supported Structural Glass | | | | ● | This section includes a suspended tempered glass, single pane wall system, shop fabricated, including perimeter glazing frame, anchors, and glass joint plates. |
| 084433 | Sloped Glazing Assemblies | | | | ● | Exterior glazing in aluminum extruded sections, self supporting or supported by structural framing, shop fabricated, factory finished, vision glass or plastic glazing, single or double pane. |
| 084500 | Translucent Wall and Roof Assemblies | | | | ● | Factory-assembled panels of translucent skins bonded to aluminum grid core or extruded translucent plastic cellular panels, for vertical or sloped applications. |
| 085113 | Aluminum Windows | | | | ● | Residential, commercial, and light institutional factory-finished, extruded aluminum windows, with fixed or operable sash, glass and glazing, operating hardware, and insect screens. |
| 085123 | Steel Windows | | | | ● | Sheet metal steel windows, fixed or operable sash, with screens and hardware. |
| 085123.13 | Hot-Rolled Steel Windows | | | | ● | Hot-rolled steel sash, primed or factory finished, fixed or operable sash, with screens and hardware. |
| 085200 | Wood Windows | | | | ● | High-quality residential and commercial quality wood windows of production quality; Site finished or plastic- or metal clad-finished, with fixed or operable sash, glass and glazing, operating hardware, and insect screens. |
| 085300 | Plastic Windows | | | | ● | Extruded PVC windows with fixed or operable sash, screens, and hardware. |
| 086200 | Unit Skylights | | | | ● | Factory-fabricated skylights with plastic dome and aluminum frame and with or without support curb and counterflashings. |
| 086300 | Metal-Framed Skylights | | | | ● | Site-assembled, metal-framed skylight systems with glass or plastic glazing. |
| 087100 | Door Hardware | | | | ● | Door hardware, gaskets, and thresholds, written as a preamble to a door schedule. |
| 088000 | Glazing | | | | ● | An outline approach to the wide range of available glass and plastic glazing types, exterior and interior glazing materials, and methods. |
| 088300 | Mirrors | | | | ● | Custom glass and plastic mirror types, various attachment and glazing methods, site installed. |
| 089100 | Louvers | | | | ● | Fixed- and operable-blade wall louvers and frame, and blank-out sheeting. |

| Section No. | Section Title | | | | | Description |
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| | | WWP | IWT | SCW | Comp | |
| DIVISION 09 - FINISHES | | | | | | |
| 092116 | Gypsum Board Assemblies | | | | ● | Metal-channel and stud framing, with paper- or vinyl-faced gypsum board; for walls, ceilings, soffits, furred space enclosures, and shaftwall systems; includes taped-joint or batten-joint closures. |
| 092213 | Metal Furring | | | | ● | Metal furring usually associated with gypsum or cement plaster finish. |
| 092216 | Non-Structural Metal Framing | | | | ● | Lightweight, non-axial load bearing metal stud framing and bracing. |
| 092236 | Lath | | | | ● | Framing and lathing, usually associated with gypsum or cement plaster finish. |
| 092300 | Gypsum Plastering | | | | ● | Gypsum plaster for interior finish; two coat application over solid surfaces, or a three coat application over metal lath. |
| 092400 | Cement Plastering | | | | ● | Portland cement plaster for an interior or exterior finish; two coat application over solid surfaces; or a three coat application over metal lath. Sometimes referred to as stucco. |
| 092613 | Gypsum Veneer Plastering | | | | ● | Interior gypsum veneer plaster in one or two coats applied to various substrates and over electric radiant heating cable. |
| 092713 | Glass-Fiber-Reinforced Gypsum Fabrications | | | | ● | Glass-fiber, reinforced gypsum fabrications and attachment accessories for interior applications. |
| 093000 | Tiling | | | | ● | Ceramic, quarry, and paver tile for floor, wall, base, and stair tread applications. |
| 095113 | Acoustical Panel Ceilings | | | | ● | Acoustic ceiling systems, consisting of suspension system, metal grid, and drop-in acoustic tile or panels, fire or non-fire rated. |
| 095123 | Acoustical Tile Ceilings | | | | ● | Acoustic tile ceiling finish, adhesive applied to substrate surface. |
| 095416 | Luminous Ceilings | | | | ● | Luminous ceilings comprised of a translucent finished ceiling element suspended below an illuminated ceiling cavity. |
| 095423 | Linear Metal Ceilings | | | | ● | Suspended, pre-finished ceiling or soffit system; of formed steel or aluminum. |
| 095800 | Integrated Ceiling Assemblies | | | | ● | Integrated ceiling system, flat or vaulted acoustic panels, integral light fixtures, air handling devices, accommodation for fire sprinkler heads, audio speakers and perimeter trim. |
| 096313 | Brick Flooring | | | | ● | Decorative fired brick flooring; set in Portland cement bedding mortar with Portland cement or chemical-resistant grout jointing |
| 096340 | Stone Flooring | | | | ● | Thin stone floor units bases, thresholds, stair treads and risers, set in bedding mortar or thinset with mortar jointing. |
| 096423 | Wood Parquet Flooring | | | | ● | Hardwood parquet flooring, glued to substrate surface. |
| 096429 | Wood Strip and Plank Flooring | | | | ● | Hardwood strip or plank flooring with vapor barrier, sleepers, and plywood subfloor. |
| 096500 | Resilient Flooring | | | | ● | Vinyl, vinyl composition, rubber, and composite materials for sheet and tile flooring, perimeter bases, stair treads, and stair risers. |
| 096613 | Portland Cement Terrazzo Flooring | | | | ● | Portland cement terrazzo flooring, base, border and curbs with monolithic underbed, sand cushion underbed, and bonded terrazzo application methods. |
| 096623 | Resinous Matrix Terrazzo Flooring | | | | ● | Terrazzo composed of epoxy, polyacrylate/portland cement, or polyester matrix for flooring, base, and border; bonded to subfloor. |
| 096700 | Fluid-Applied Flooring | | | | ● | Fluid-applied flooring of any type, except plastic matrix terrazzo. |
| 096713 | Elastomeric Liquid Flooring | | | | ● | Resilient, fluid applied, polyurethane elastomeric, self leveling flooring of various thicknesses. |
| 096813 | Tile Carpeting | | | | ● | Carpet tile, fully adhered to substrate or loose laid with edges and selected rows adhered. |
| 096816 | Sheet Carpeting | | | | ● | Carpet laid on cushion, power stretched, with trim accessories and carpet adhered to subfloor with contact adhesive, with trim accessories. |
| 096900 | Access Flooring | | | | ● | Access flooring, elevated above a structural floor with removable floor panels. |
| 097200 | Wall Coverings | | | | ● | Vinyl-coated fabric wall covering, adhesive-bonded to substrate, including prime painting. |
| 097713 | Stretched-Fabric Wall Systems | | | | ● | Stretched-fabric acoustic panels, Site-fabricated with track, core, and fabric face. |

| Section No. | Section Title | | | | | Description |
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| | | WWP | IWT | SCW | Comp | |
| 099000 | Painting and Coating | ● | ● | ● | ● | Preparing, priming, painting, staining, and applying finishes to scheduled surfaces, including mechanical, electrical, and equipment finishing. |
| 099400 | Decorative Finishing | | | | ● | Spray- or trowel-applied decorative aggregate surfacing set into an epoxy or cementitious bed. |
| 099600 | High-Performance Coatings | ● | ● | ● | ● | Fluid-applied coatings intended for applications requiring improved scrubability and durability, increased chemical resistance, or increased corrosion protection. |
| 099635 | Chemical-Resistant Coatings | ● | ● | ● | ● | Coating to surfaces requiring protection from process chemicals. |
| 099713.24 | Steel Water Storage Tank Painting | ● | | ● | ● | Preparing, priming, and painting of steel elevated water storage tanks for potable water use. |
| 099723.24 | Concrete Water Storage Tank Painting | ● | | ● | ● | Preparing and painting of concrete water storage tanks for potable water use. |

DIVISION 10 - SPECIALTIES

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|-----------|---|---|---|---|---|--|
| 101100 | Visual Display Units | | | | ● | Chalkboards, marker boards, and tack boards with aluminum frames, wood frames, or frameless types, and accessories. |
| 101400 | Signage | ● | ● | | ● | Plastic plaque-style door and wall signs with engraved, raised, individually mounted, silk-screened, or sand-blasted characters. |
| 102113 | Toilet Compartments | | | | ● | Baked enamel and plastic laminate toilet compartments and accessories; floor, wall, or ceiling mounted. |
| 102113.16 | Plastic-Laminate-Clad Toilet Compartments | | | | ● | Shop-fabricated plastic laminate clad toilet compartments and accessories; floor, wall, and ceiling mounted. |
| 102113.19 | Plastic Toilet Compartments | | | | ● | Shop-fabricated solid plastic toilet compartments and accessories; floor, wall, and ceiling mounted. |
| 102123 | Cubicle Curtains and Tracks | | | | ● | Curtains and overhead track used for privacy screening in medical facilities. |
| 102213 | Wire Mesh Partitions | | | | ● | Woven or expanded metal wire mesh partitions; steel or aluminum frame; hinged doors or access panel; operating hardware, and accessories. |
| 102219 | Demountable Partitions | | | | ● | Demountable interior gypsum board partitions, reusable components, modular sized framing, framed openings; concealed or exposed jointing methods. |
| 102223.23 | Movable Panel Systems | | | | ● | Operable panel partitions of various types, floor to ceiling acoustic type. |
| 102233 | Accordion Folding Partitions | | | | ● | Accordion folding partitions, acoustic or non-acoustic type, with vinyl coated fabric finish; manual and electric operation, with overhead track and hardware. |
| 102600 | Wall and Door Protection | | | | ● | Manufactured wall and corner guard devices for the protection of interior wall surfaces and corners. |
| 102800 | Toilet, Bath, and Laundry Accessories | | | | ● | This section is intended to cover any type of toilet, bath, shower, washroom and utility room accessories. |
| 103100 | Manufactured Fireplaces | | | | ● | Manufactured steel cabinet fireplaces with chimney, optional doors or face screen, and accessories. |
| 104400 | Fire Protection Specialties | | | | ● | Fire extinguishers, cabinets, mounting hardware, and fire blankets. |
| 105113 | Metal Lockers | | | | ● | Metal wardrobe lockers, shop fabricated, with locker benches and accessories. |
| 105513 | Central Mail Delivery Boxes | | | | ● | Multiple mail boxes often used in office, apartment, and multiple tenant buildings. |
| 105591 | Mail Chutes | | | | ● | Vertical mail chutes for multi-story buildings, including receiving box at chute bottom. |
| 107313 | Awnings | | | | ● | Fixed awnings of special or custom shape, constructed of a plastic or synthetic fabric covering over a formed-pipe or tube-framing structure. |
| 107500 | Flagpoles | ● | | ● | ● | Metal and glass-fiber flagpoles, primed for Site painting or prefinished, ground or building mounted, and with manual or electric operation. |

DIVISION 11 - EQUIPMENT

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|--------|---------------------------|--|--|--|---|--|
| 111200 | Parking Control Equipment | | | | ● | Parking gate arm and activator units, devices for ticket dispensing, vehicle detection activators, and card, coin, or remote controlled access. |
| 111313 | Loading Dock Bumpers | | | | ● | Nylon or polyester, reinforced, molded rubber bumpers, or fabric-reinforced laminated rubber bumpers for loading docks, with steel frame, rod joiners, and anchor bolts. |

| Section No. | Section Title | | | | | Description |
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| | | WWP | IWT | SCW | Comp | |
| 111316 | Loading Dock Seals and Shelters | | | | ● | Loading dock seals and shelters for vehicular truck traffic. |
| 111319 | Stationary Loading Dock Equipment | | | | ● | Loading dock levelers, with manual, hydraulic, or spring-torsion operation and limited travel distance to accommodate most truck bed heights. |
| 113013 | Residential Appliances | | | | ● | Residential equipment such as refrigerator, range, microwave oven, dishwasher, food disposal, waste compactor, washer and dryer. |
| 114000 | Foodservice Equipment | | | | ● | Outline of specification statements supplementing a food service equipment list or schedule. |
| 115213 | Projection Screens | | | | ● | Electrically and manually operated projection screens. |
| 115300 | Laboratory Equipment | ● | ● | | ● | General requirements to precede a detailed laboratory equipment schedule, including laboratory equipment, connections to utilities, service fittings, and outlets. |
| 116623.13 | Basketball Equipment | | | | ● | Indoor and outdoor basketball backstops including masts, backboards, goals and nets. |
| 118213 | Solid Waste Bins | | | | ● | Indoor, outdoor, and roll-off containers for the collection of recyclables or trash and other solid waste. |
| 118226 | Facility Waste Compactors | | | | ● | Commercial waste compactors. |
| DIVISION 12 - FURNISHINGS | | | | | | |
| 122113.13 | Metal Horizontal Louver Blinds | | | | ● | Interior horizontal slat window blinds of steel or aluminum, with lifting cord and cord or wand for tilting slats. |
| 122113.23 | Wood Horizontal Louver Blinds | | | | ● | Interior horizontal slat window blinds of wood, with lifting cord and cord or wand for tilting slats. |
| 122216 | Drapery Track and Accessories | | | | ● | Drapery track with manual or electric operation, including metal channel, single or double track, supports, and nylon carriers. |
| 123100 | Manufactured Metal Casework | | | | ● | Shop fabricated metal casework, usually modular dimension, including a common range of counter top types and laboratory service fittings. |
| 123530 | Residential Casework | | | | ● | Shop-fabricated and modular-size, residential-quality casework, of proprietary manufacture. |
| 124813 | Entrance Floor Mats and Frames | | | | ● | Surface or recessed entry floor mats, carpet, vinyl link, rubber link, or cocoa types; with or without custom design inlay. |
| DIVISION 13 - SPECIAL CONSTRUCTION | | | | | | |
| 131100 | Swimming Pools | | | | ● | Site fabricated shotcrete swimming pool and shop fabricated, site assembled swimming pool and pool accessories. |
| 131713 | Hot Tubs | | | | ● | Shop fabricated and site assembled or site constructed hot tub or spa, decking, and equipment. |
| 132126 | Cold Storage Rooms | | | | ● | Shop fabricated and site assembled, modular sized insulated panels for cold room walls and ceilings including an integral or remote refrigeration unit. |
| 132416 | Saunas | | | | ● | Shop fabricated site assembled or site constructed sauna room enclosure and equipment. |
| 132426 | Steam Baths | | | | ● | Shop fabricated site assembled or site constructed steam room enclosure and equipment. |
| 133419 | Metal Building Systems | | | | ● | Packaged, pre-engineered steel building frame, with metal walls and roof. |
| U 134713 | Cathodic Protection | ● | | ● | ● | Passive cathodic protection to buried metallic utility piping, buried metal structures, and buried metal tanks using sacrificial galvanic anodes. |
| 134900 | Radiation Protection | | | | ● | X-ray radiation protection achieved by lead sheet and lead sheet laminated products including view windows and film transfer cabinets. |
| DIVISION 14 - CONVEYING EQUIPMENT | | | | | | |
| 141000 | Dumbwaiters | | | | ● | Standard manufactured electrically operated dumbwaiters, drum or traction drive. |
| 142113 | Electric Traction Freight Elevators | | | | ● | Electric freight elevator systems, with one or multiple cars and common options. |
| 142123 | Electric Traction Passenger Elevators | | | | ● | Electric passenger elevator systems, with one or multiple cars and common options. |
| 142413 | Hydraulic Freight Elevators | | | | ● | Hydraulic freight elevator systems, with one or multiple cars and common options. |

| Section No. | Section Title | | | | | Description |
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| | | WWP | IWT | SCW | Comp | |
| 142423 | Hydraulic Passenger Elevators | | | | ● | Hydraulic passenger elevator systems, with one or multiple cars and common options. |
| 143100 | Escalators | | | | ● | Standard packaged escalators, with glass or solid balustrades, including common available options. |
| 144200 | Wheelchair Lifts | | | | ● | Electrically operated vertical platform, wheelchair lifts. |
| DIVISION 21 - FIRE SUPPRESSION | | | | | | |
| 210500 | Common Work Results for Fire Suppression | | | | ● | Pipe materials, fittings, valves, equipment for wet-pipe sprinkler system, wet or dry standpipe, fire hose cabinet and hose, fire department connections for building fire protection systems, and fire pumps. |
| 210513 | Common Motor Requirements for Fire-Suppression Equipment | | | | ● | Electric motors and their accessories normally supplied as part of equipment assemblies. |
| 210516 | Expansion Fittings and Loops for Fire-Suppression Piping | | | | ● | Fittings and practices used to compensate for thermal expansion and other movements in fire suppression piping systems. |
| 210548 | Vibration and Seismic Controls for Fire-Suppression Piping and Equipment | | | | ● | Inertia bases and vibration isolation equipment used for vibration and seismic control of fire suppression equipment. |
| 211200 | Fire-Suppression Standpipes | | | | ● | Standpipes, fire department connections, piping, and other components including fire-hose connections and cabinets. |
| 211313 | Wet-Pipe Sprinkler Systems | | | | ● | Automatic wet-pipe fire-suppression sprinkler system. |
| 211316 | Dry-Pipe Sprinkler Systems | | | | ● | Automatic dry-pipe fire-suppression sprinkler system. |
| 211326 | Deluge Fire-Suppression Sprinkler Systems | | | | ● | Automatic deluge fire-suppression sprinkler system. |
| 213000 | Fire Pumps | | | | ● | Fire pumps and drivers, with either electric motors or diesel engines, and electrically driven jockey pumps and related controls. Systems assembled from individual components or factory packaged. |
| DIVISION 22 - PLUMBING | | | | | | |
| 220513 | Common Motor Requirements for Plumbing Equipment | | | | ● | Electric motors and their accessories normally supplied as part of equipment assemblies. |
| 220516 | Expansion Fittings and Loops for Plumbing Piping | | | | ● | Fittings and practices used to compensate for thermal expansion and other movements in plumbing piping systems. |
| 220523 | General-Duty Valves for Plumbing Piping | | | | ● | Ball, butterfly, check, gate, and globe valves used in plumbing piping systems. |
| 220529 | Hangers and Supports for Plumbing Piping and Equipment | | | | ● | Supports, hangers, anchors, sleeves and sealing of work to adjacent construction for plumbing systems |
| 220548 | Vibration and Seismic Controls for Plumbing Piping and Equipment | | | | ● | Inertia bases and vibration isolation equipment used for vibration and seismic control of plumbing equipment. |
| 220553 | Identification for Plumbing Piping and Equipment | ● | | ● | ● | Nameplates, labeling, and identification methods for plumbing equipment and components. |
| 220700 | Plumbing Insulation | ● | | ● | ● | Insulation applied to plumbing equipment and piping systems. |
| U 221000 | Plumbing Piping | | | | ● | Pipe materials and fittings normally encountered in plumbing piping systems and common to more than one section in this Division. |
| U 221100 | Facility Water Distribution | | | | ● | Domestic water piping systems with pipe, valves, piping specialties, pumps and other components. |
| 221200 | Facility Potable-Water Storage Tanks | | | | ● | Potable water storage tanks for hot, cold domestic water. |
| U 221300 | Facility Sanitary Sewerage | | | | ● | Pipe materials, fittings, equipment and pumps for sanitary piping systems. |
| U 221400 | Facility Storm Drainage | | | | ● | Pipe, pipe fittings, connections, equipment and pumps for storm water piping systems. |
| 221429 | Sump Pumps | | | ● | ● | Sump pumps for installation in sumps to pump effluent or drain water from structures and facilities. |
| 221429.16 | Submersible Sump Pumps | ● | | ● | ● | Submersible and non-submersible sump pumps used to lift and transport wastewater from plant sumps. |
| 221513 | General Service Compressed-Air Piping | | | | ● | Piping for compressed-air systems in plant applications, including pipe, fittings, and accessories. |
| 221516 | General Service Compressed-Air Valves | | | | ● | Valves and accessories for compressed air systems in plant or process applications. |

| Section No. | Section Title | | | | | Description |
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| | | WWP | IWT | SCW | Comp | |
| 221519 | General Service Packaged Air Compressors and Receivers | | | | ● | Components for compressed air systems in plant or process applications, including air compressors, after coolers, air dryers, and air receivers. |
| 223100 | Domestic Water Softeners | | | | ● | Water softeners. |
| 223300 | Electric Domestic Water Heaters | | | | ● | Electric water heaters for domestic water systems. |
| 223400 | Fuel-Fired Domestic Water Heaters | | | | ● | Fuel fired water heaters for domestic water systems. |
| 223500 | Domestic Water Heat Exchangers | | | | ● | Heat exchangers for domestic water systems. |
| 224000 | Plumbing Fixtures | | | | ● | Plumbing fixtures and trim. |
| U 225100 | Swimming Pool Plumbing Systems | | | | ● | Piping and equipment for swimming pools. |
| U 226000 | Gas and Vacuum Systems for Laboratory and Healthcare Facilities | | | | ● | Common systems including pipe and pipe fittings, specialties, outlets, and equipment. |
| DIVISION 23 - HEATING, VENTILATING, AND AIR CONDITIONING (HVAC) | | | | | | |
| U 230503 | Pipes and Tubes for HVAC Piping and Equipment | | | | ● | Pipe materials and fittings normally encountered in HVAC piping systems and common to more than one section in this Division. |
| 230513 | Common Motor Requirements for HVAC Equipment | | | | ● | Electric motors and their accessories normally supplied as part of equipment assemblies. |
| 230516 | Expansion Fittings and Loops for HVAC Piping | | | | ● | Fittings and practices used to compensate for thermal expansion and other movements in piping systems for HVAC piping systems such as hot water, chilled water, steam, and refrigerant systems. |
| 230523 | General-Duty Valves for HVAC Piping | | | | ● | Ball, butterfly, check, gate, and globe valves used in HVAC piping systems. |
| 230529 | Hangers and Supports for HVAC Piping and Equipment | | | | ● | Supports, hangers, anchors, sleeves and sealing of Work to adjacent construction, applicable to HVAC systems. |
| 230548 | Vibration and Seismic Controls for HVAC | | | | ● | Inertia bases and vibration isolation equipment used for attenuation of air-borne sound of HVAC equipment including duct silencers, cross-talk silencers, acoustic housings, ductwork lagging, acoustical louvers. |
| 230553 | Identification for HVAC Piping and Equipment | | | | ● | Nameplates, labeling, and identification methods for HVAC equipment and components. |
| 230593 | Testing, Adjusting, and Balancing for HVAC | | | | ● | Testing, adjusting, and balancing of heating, ventilating, and air conditioning systems. |
| 230700 | HVAC Insulation | | | | ● | Insulation applied to HVAC ductwork, equipment and piping systems. |
| 230800 | Commissioning of HVAC | | | | ● | Responsibilities and tasks for HVAC system commissioning. |
| 230900 | Instrumentation and Control for HVAC | | | | ● | Components and input and output devices for pneumatic, digital, and electric control systems, software description for digital control systems, and sequence of operation for mechanical systems. |
| 230923 | Direct-Digital Control System for HVAC | | | | ● | Components and software for a direct digital control system. |
| 230953 | Pneumatic and Electric Control System for HVAC | | | | ● | Equipment and devices for a pneumatic control system. |
| 230993 | Sequence of Operations for HVAC Controls | | | | ● | Sequence of operation for mechanical systems and system components. |
| U 231113 | Facility Fuel-Oil Piping | | | | ● | Pipe materials, fittings, valves, and piping specialties normally encountered in fuel oil piping systems. |
| U 231116 | Facility Gasoline Piping | | | | ● | Pipe materials, fittings, valves, and piping specialties normally encountered in gasoline piping systems. |
| U 231123 | Facility Natural-Gas Piping | | | | ● | Pipe materials, fittings, valves, and piping specialties normally encountered in natural gas piping systems. |
| U 231126 | Facility Liquefied-Petroleum Gas Piping | | | | ● | Pipe materials, fittings, valves, and piping specialties normally encountered in liquid petroleum gas piping systems. |
| 231213 | Facility Fuel-Oil Pumps | | | | ● | Pumps normally encountered in fuel oil piping systems. |
| 231216 | Facility Gasoline Dispensing Pumps | | | | ● | Gasoline dispensers, including pumps and accessories, for transfer of gasoline (or other vehicle fuels) from storage tank to vehicle or portable container. |
| 231300 | Facility Fuel-Storage Tanks | | | | ● | Underground tanks, aboveground tanks, and leak detection system normally encountered in fuel oil systems. |
| U 232113 | Hydronic Piping | | | | ● | Pipe materials, fittings, and valves normally encountered in HVAC hydronic piping systems used for heating, cooling, glycol, chilled water, and condenser water within buildings. |

| Section No. | Section Title | | | | | Description |
|-------------|---|-----|-----|-----|------|---|
| | | WWP | IWT | SCW | Comp | |
| 232116 | Hydronic Piping Specialties | | | | ● | Piping specialties associated with hydronic piping systems. |
| 232123 | Hydronic Pumps | | | | ● | Centrifugal pumps and related accessories normally used in hydronic systems. |
| 232213 | Steam and Condensate Heating Piping | | | | ● | Pipe materials, fittings, and valves normally encountered in steam and steam condensate piping systems used within buildings. |
| 232216 | Steam and Condensate Heating Piping Specialties | | | | ● | Piping specialties associated with steam and steam condensate piping systems. |
| 232223 | Steam Condensate Pumps | | | | ● | Condensate and boiler feed pumps normally used in steam and steam condensate return systems. |
| U 232300 | Refrigerant Piping | | | | ● | Pipe materials, fittings, valves, and piping specialties normally encountered in refrigerant piping systems used for air conditioning systems within buildings. |
| 232416 | Internal-Combustion Engine Exhaust Piping | | | | ● | Pipe materials, fittings, and valves normally encountered in engine exhaust piping systems. |
| 232500 | HVAC Water Treatment | | | | ● | Equipment and materials for cleaning and treating HVAC, hydronic and steam systems. |
| 233100 | HVAC Ducts and Casings | | | | ● | Ductwork materials, construction, supports, and cleaning. |
| 233300 | Air Duct Accessories | | | | ● | Ductwork accessory items. |
| 233400 | HVAC Fans | | | | ● | Fans, roof ventilators, and energy recovery ventilators. |
| 233600 | Air Terminal Units | | | | ● | Constant and variable-air volume terminal units for duct systems. |
| 233700 | Air Outlets and Inlets | | | | ● | Roof, wall, and floor diffusers, registers, and grilles, and louvers, louvered penthouses, and roof hoods. |
| 234000 | HVAC Air Cleaning Devices | | | | ● | Air filters and air cleaning devices. |
| 235100 | Breechings, Chimneys, and Stacks | | | | ● | Breeching, chimneys, and stacks for venting flue gases from fuel fired appliances. |
| 235213 | Electric Boilers | | | | ● | Packaged electric heating boilers, with controls and accessories, for steam or hot-water systems. |
| 235223 | Cast-Iron Boilers | | | | ● | Packaged cast-iron heating boilers, with controls and accessories, for steam or hot-water systems. |
| 235233.13 | Finned Water-Tube Boilers | | | | ● | Packaged finned water-tube boilers, with burners, controls, and accessories, for hot-water systems. |
| 235233.14 | Flexible Water-Tube Boilers | | | | ● | Steel water-tube boilers, with burners, controls, and accessories, for steam or hot-water systems and fired by natural gas, propane, or fuel oil. |
| 235233.16 | Steel Water-Tube Boilers | | | | ● | Steel water-tube boilers, with burners, controls, and accessories, for steam or hot-water systems, and fired by natural gas, propane, or fuel oil. |
| 235239 | Fire-Tube Boilers | | | | ● | Steel water-tube boilers, with burners, controls, and accessories, for steam or hot-water systems, and fired by natural gas, propane, or fuel oil. |
| 235300 | Heating Boiler Feedwater Equipment | | | | ● | Boiler feedwater pumps, feedwater equipment, and deaerators. |
| 235400 | Furnaces | | | | ● | Gas, oil, or electric forced-air furnaces in most common arrangements, with standard accessories including humidification and air cleaning. |
| 235500 | Fuel-Fired Heaters | | | | ● | Indirect fired, gas or oil fired unit heaters, industrial heaters, duct furnaces, gas fired infrared heaters, and fuel fired packaged air units. |
| 235613 | Heating Solar Collectors | | | | ● | Flat plate solar collectors, controls, pipe materials, fittings, valves, tanks, pumps. |
| 235700 | Heat Exchangers for HVAC | | | | ● | Shell and tube, and plate type heat exchangers and accessories. |
| 236100 | Refrigerant Compressors | | | | ● | Refrigeration compressors for refrigeration systems, with controls and motor starters. |
| 236313 | Air-Cooled Refrigerant Condensers | | | | ● | Indoor or outdoor, air-cooled refrigerant condensers including air coils, condenser fans, controls, and accessories. |
| 236333 | Evaporative Refrigerant Condensers | | | | ● | Packaged liquid coolers with forced air circulation, for evaporative cooling, including a circulating pump, and accessories. |
| 236413 | Absorption Water Chillers | | | | ● | Absorption water chillers using lithium bromide or ammonia, with water, steam, natural gas or fuel oil heat sources. |
| 236416 | Centrifugal Water Chillers | | | | ● | Packaged water chillers using centrifugal compressors and water-cooled condensers. |
| 236419 | Reciprocating Water Chillers | | | | ● | Packaged water chillers using reciprocating compressors. Chillers include either water- or air-cooled condensers. |

| Section No. | Section Title | | | | | Description |
|-------------|---|-----|-----|-----|------|---|
| | | WWP | IWT | SCW | Comp | |
| 236423 | Scroll Water Chillers | | | | ● | Packaged water chillers using scroll compressors. Chillers include either water- or air-cooled condensers. |
| 236426 | Rotary-Screw Water Chillers | | | | ● | Packaged water chillers using rotary-screw compressors. Chillers include either water- or air-cooled condensers. |
| 236500 | Cooling Towers | | | | ● | Factory packaged forced draft and induced draft, cooling towers, accessories, and controls. |
| 236523 | Field-Erected Cooling Towers | | | | ● | Field erected induced draft, cooling towers, accessories and controls. |
| 237300 | Indoor Central-Station Air-Handling Units | | | | ● | Air-handling units with coils, mixing boxes, filters, dampers, dehumidifier, and humidifier. |
| 237413 | Packaged, Outdoor, Central-Station Air-Handling Units | | | | ● | Air handling units packaged by manufacturer in modular form for use in exterior roof mounted applications. |
| 237416.11 | Packaged, Small-Capacity, Rooftop Air Conditioning Units | | | | ● | Roof-mounted self-contained units with electric cooling; gas-fired, electric, or hot water heating; and controls; up to 25 tons (88 kW) capacity |
| 237416.12 | Packaged, Intermediate-Capacity, Rooftop Air Conditioning Units | | | | ● | Roof-mounted self-contained units with electric cooling; gas-fired, electric, or hot water heating; and controls; 25 tons (88 kW) to 65 tons (229 kW) capacity |
| 237416.13 | Packaged, Large-Capacity, Rooftop Air Conditioning Units | | | | ● | Roof-mounted air conditioning units with electric cooling; gas-fired, electric, hot water, or steam heating; and controls; 75 tons (264 kW) to 130 tons (457 kW) capacity. |
| 238113 | Packaged Terminal Air-Conditioners | | | | ● | Packaged terminal air conditioning and heat pump units with electric, hot water, steam, or gas heating; accessories; and controls |
| 238119 | Self-Contained Air-Conditioners | | | | ● | Self contained air conditioning units with refrigerant compressors, controls, and accessories for indoor installation, with water-cooled condensing units or connections for externally mounted air-cooled condensers |
| 238123 | Computer Room Air-Conditioners | | | | ● | Floor mounted air conditioning units and ceiling mounted unitary air conditioning units for computer rooms. |
| 238126 | Split-System Air-Conditioners | | | | ● | Units consisting of air handling unit and condensing unit with electric cooling; electric heating, hot water heating or steam heating; and controls. |
| 238143 | Air-Source Unitary Heat Pumps | | | | ● | Roof-mounted self-contained heat pumps, packaged free standing or through-the-wall terminal heat pump units, and packaged heat pump units with remote condenser/evaporators. |
| 238146 | Water-Source Unitary Heat Pumps | | | | ● | Heat pumps of the following types: horizontal, vertical, rooftop, console, and vertically stacked with water cooled condensers for use in water source or geothermal heat pump systems. |
| 238200 | Convection Heating and Cooling Units | | | | ● | Heat transfer coils utilizing piped heat transfer media, electric resistance heating coils, room terminal units used in hydronic and steam heating systems, and electric heaters. |
| 238300 | Radiant Heating Units | | | | ● | Electric heating cables, as units and assembled into mats. This section combines information previously included in sections 15750 and 16855. |
| 238400 | Humidity Control Equipment | | | | ● | Wetted media humidifiers or evaporative coolers for air handling units or equipment and packaged sprayed coil dehumidifiers for central air handling units. Humidifiers using steam or electricity for heat source. |

DIVISION 25 - INTEGRATED AUTOMATION

| | | | | | | |
|--------|---|--|--|--|---|---|
| 253100 | Integrated Automation Instrumentation and Terminal Devices for Facility Equipment | | | | ● | Electric control switches, pushbuttons, relays, time-delay relays, timers, counters, control power transformers, and control panels. |
| 253613 | Integrated Automation Power Meters | | | | ● | Instrument transformers, switches, relays, transducers, and meters for sensing and measuring electrical energy in buildings, facilities, and processes. |
| 253619 | Integrated Automation Current Sensors | | | | ● | Packaged peak load controllers to sense electric power demand and to initiate alarms or automatic load shedding. |
| 253626 | Integrated Automation Lighting Relays | | | | ● | Hard wired, low voltage relay lighting control system. |
| 255000 | Integrated Automation Facility Controls | | | | ● | Central building management system to supervise temperature control, energy management, fire and smoke alarm system, and other building systems. |

DIVISION 26 - ELECTRICAL

| | | | | | | |
|----------|-------------------------------------|--|--|--|---|--|
| 260505 | Selective Demolition for Electrical | | | | ● | Basic methods for demolition and repair of disrupted existing electrical work. |
| U 260513 | Medium-Voltage Cables | | | | ● | Medium voltage cable and accessories, for systems rated above 600 volts to 35,000 volts. |

| Section No. | Section Title | | | | | Description |
|-------------|---|-----|-----|-----|------|--|
| | | WWP | IWT | SCW | Comp | |
| U 260519 | Low-Voltage Electrical Power Conductors and Cables | | | | ● | Building wire and cable, raceway, boxes, and wiring devices. |
| 260519.13 | Undercarpet Electrical Power Cables | | | | ● | Flat conductor cable and fittings for power, communications, and data circuits, for installation on concrete slab under carpet tile. |
| 260519.23 | Manufactured Wiring Assemblies | | | | ● | Prefabricated flexible wiring assemblies for branch circuit distribution to convenience outlets and luminaires. |
| 260526 | Grounding and Bonding for Electrical Systems | ● | | ● | ● | Grounding grids, loops, and other related grounding components for grounding systems associated with buildings. |
| 260529 | Hangers and Supports for Electrical Systems | | | | ● | Basic materials and methods for fastening and supporting electrical products and equipment. |
| 260533 | Raceway and Boxes for Electrical Systems | | | | ● | Raceway and boxes for electrical power and control wiring. |
| 260533.16 | Boxes for Electrical Systems | | | | ● | Floor boxes, access floor boxes, poke-through fittings, and service fittings. |
| 260536 | Cable Trays for Electrical Systems | | | | ● | Metal and fiber glass cable trays. |
| 260539 | Underfloor Raceways for Electrical Systems | | | | ● | Underfloor raceway for power and communications circuits, including fittings, accessories, and installation of wire and cable. |
| 260548 | Vibration and Seismic Controls for Electrical Systems | | | | ● | Inertia bases and vibration isolation equipment used for vibration isolation and seismic control, for equipment specified for electrical facilities. |
| 260553 | Identification for Electrical Systems | ● | ● | ● | ● | Identification methods for electrical equipment and components. |
| 260573 | Power System Studies | | | | ● | Requirements for short circuit and protective device coordination study. |
| 260583 | Wiring Connections | ● | ● | ● | ● | Wiring connections to equipment included in other sections. |
| 260919 | Enclosed Contactors | | | | ● | Enclosed contactors for controlling feeders and branch circuits for lighting, heating, and general purpose loads. |
| 260923 | Lighting Control Devices | | | | ● | Remote control switching of 120 and 277 volt lighting and general purpose branch circuits using low voltage control power. |
| 260943 | Network Lighting Controls | | | | ● | Lighting control system using network wiring. |
| 261116 | Secondary Unit Substations | | | | ● | Secondary unit substations with medium voltage primaries and low voltage secondaries. |
| 261200 | Medium-Voltage Transformers | | | | ● | Liquid-filled and dry-type pad-mounted distribution transformers. |
| 261313 | Medium-Voltage Circuit Breaker Switchgear | | | | ● | Medium-voltage switchgear with air-magnetic or vacuum interrupter circuit breakers. |
| 261316 | Medium-Voltage Fusible Interrupter Switchgear | | | | ● | Air-break interrupter switches for medium voltage applications. |
| 261839 | Medium-Voltage Motor Controllers | | | | ● | Medium-voltage motor controllers with fuses to interrupt currents in excess of operating overloads. |
| 262200 | Low-Voltage Transformers | | | | ● | Enclosed dry type transformers for lighting and power loads. |
| 262217 | Low-Voltage Transformers for Nonlinear Loads | | | | ● | Enclosed dry type transformers for nonlinear power loads, such as computers and other electronic power supplies. |
| 262218 | Low-Voltage Transformers for Load Centers | | | | ● | Small dry type transformers with integral circuit breaker load center. |
| 262413 | Switchboards | | | | ● | Enclosed dead-front enclosed switchboards. |
| 262416 | Panelboards | | | | ● | Enclosed fusible switch and circuit breaker panelboards for feeders, and circuit breaker type lighting and appliance branch circuit panelboards. |
| 262419 | Motor-Control Centers | | | | ● | Motor control centers. |
| 262500 | Low-Voltage Enclosed Bus Assemblies | | | | ● | Feeder and plug-in busway. |
| 262716 | Electrical Cabinets and Enclosures | | | | ● | Metal cabinets and enclosures for enclosing terminal blocks and electrical devices. |
| 262723 | Indoor Service Poles | | | | ● | Freestanding indoor utility columns providing power receptacle, telephone, and data communication outlets at locations away from walls. |
| 262726 | Wiring Devices | | | | ● | Wiring devices including receptacles, wall switches, and unit dimmers |
| 262733 | Power Distribution Units | | | | ● | Unit power conditioning equipment for electronic data processing installations including surge suppression, filters, isolation, voltage regulation, monitoring, and branch circuit protection. |

| Section No. | Section Title | | | | | Description |
|-------------------------------------|---|-----|-----|-----|------|--|
| | | WWP | IWT | SCW | Comp | |
| 262813 | Fuses | | | | ● | Fuses for use in low voltage power distribution circuits. |
| 262816.13 | Enclosed Circuit Breakers | | | | ● | Enclosed circuit breakers of the molded case and insulated case types. |
| 262816.16 | Enclosed Switches | | | | ● | Enclosed switches for disconnects in service and distribution systems rated 600 volts and less. |
| 262913 | Enclosed Controllers | | | | ● | Enclosed manual and automatic controllers for AC induction motors. |
| 262923 | Variable-Frequency Motor Controllers | ● | ● | ● | ● | Three-phase variable frequency motor controllers of the pulse-width-modulated design, for fan and pump motors. |
| 263213 | Engine Generators | | | | ● | Packaged engine generator set for emergency and standby power. |
| 263229 | Rotary Converters | | | | ● | Rotary converters for converting from AC to DC, changing frequency on an AC system, or for obtaining three phase output from a single phase source. |
| 263233 | Rotary Uninterruptible Power Units | | | | ● | Rotary converters with energy storage for uninterruptible power supply for data processing and similar applications. |
| 263300 | Battery Equipment | | | | ● | Small emergency power supplies with integral battery and inverter, to power lighting, small motors, unit equipment, and control systems. |
| 263353 | Static Uninterruptible Power Supply | | | | ● | Static uninterruptible power supply equipment. |
| 263513 | Capacitors | | | | ● | Unit capacitors for power factor correction. |
| 263533 | Power Factor Correction Equipment | | | | ● | Automatic power factor controllers. |
| 263553 | Voltage Regulators | | | | ● | Transient voltage surge suppressors |
| 263613 | Enclosed Transfer Switches | | | | ● | Automatic and manual transfer switches and bypass/isolation switches for systems rated 600 volts and less. |
| 264100 | Facility Lightning Protection | | | | ● | Lightning protection systems for buildings and facilities, including air terminals, down conductors, grounding, and bonding. |
| 265100 | Interior Lighting | | | | ● | Interior luminaires, ballasts, lamps, and accessories. |
| 265200 | Safety Lighting | | | | ● | Emergency lighting units and exit signs. |
| 265536 | Obstruction Lighting | | | | ● | Obstruction lighting for marking buildings for airline flight safety and landing lights for helicopter pads. |
| 265561 | Theatrical Lighting | | | | ● | Theatrical lighting, dimming, and control equipment and accessories. |
| 265600 | Exterior Lighting | | | ● | ● | Exterior luminaires, poles, and accessories. |
| DIVISION 27 - COMMUNICATIONS | | | | | | |
| 270513.43 | Cable Services | | | | ● | Master antenna (MATV), satellite master antenna (SMATV), television service entrance, and premises wiring for cable television or community antenna television (CATV). |
| 270526 | Grounding and Bonding for Communications Systems | | | | ● | Wire, connections, and other related grounding components for grounding associated with communication systems. |
| 270529 | Hangers and Supports for Communications Systems | | | | ● | Basic materials and methods for fastening and supporting communications products and equipment. |
| 270533 | Conduits and Backboxes for Communications Systems | | | | ● | Conduit and backboxes for communication wiring. |
| 270536 | Cable Trays for Communications Systems | | | | ● | Metal cable trays of types and sizes included in NEMA VE 1, and fiberglass cable trays of types and sizes included in NEMA FG 1. |
| 270553 | Identification for Communications Systems | | | | ● | Identification methods for communications equipment and components. |
| 271343 | Communications Services Cabling | | | | ● | Telecommunications services, pathways, equipment facilities, and cabling for voice and data communications. |
| 271343.43 | Cable Services Cabling | | | | ● | Cables and accessories for sound and video signal circuits. |
| 275116 | Public Address Systems | | | | ● | Public address system components, including microphone and music system equipment. |
| 275123 | Intercommunications and Program Systems | | | | ● | Intercom equipment for interoffice private conversations. |
| 275223 | Nurse Call/Code Blue Systems | | | | ● | Annunciator and intercom equipment for nurse call systems. |

| Section No. | Section Title | | | | | Description |
|---|---|-----|-----|-----|------|--|
| | | WWP | IWT | SCW | Comp | |
| 275313 | Clock Systems | | | | ● | Clock and program equipment for systems that announce and record time intervals, or that use time-based signals for control purposes. |
| DIVISION 28 - ELECTRONIC SAFETY AND SECURITY | | | | | | |
| 280528.29 | Hangers and Supports for Electronic Safety and Security | | | | ● | Basic materials and methods for fastening and supporting safety and security products and equipment. |
| 280528.33 | Conduits and Backboxes for Electronic Safety and Security | | | | ● | Conduit and backboxes for electronic safety and security wiring. |
| 280528.36 | Cable Trays for Electronic Safety and Security | | | | ● | Metal cable trays of types and sizes included in NEMA VE 1, and fiberglass cable trays of types and sizes included in NEMA FG 1. |
| 280553 | Identification for Electronic Safety and Security | | | | ● | Identification methods for safety and security equipment and components. |
| 281000 | Access Control | | | | ● | Equipment for recording and controlling access to buildings. |
| 282000 | Video Surveillance | | | | ● | Fixed position closed circuit television equipment and accessories for video surveillance of building sites and premises. |
| 283100 | Intrusion Detection | | | | ● | Detectors and alarm devices and systems to detect intrusion into a building. |
| 283900 | Mass Notification Systems | | | | ● | Emergency public address system components, to be used in the event of emergency or alarm situations. |
| 284600 | Fire Detection and Alarm | | | | ● | Manual and automatic fire alarm and smoke detection equipment for local, auxiliary, and remote station protective systems. |
| 284700 | Mass Notification | | | | ● | Emergency public address system components used in the event of emergency or alarm situations. |
| DIVISION 31 - EARTHWORK | | | | | | |
| 310513 | Soils for Earthwork | ● | | ● | ● | Soil and subsoil materials intended to be referenced by other Sections, generally for fill and grading purposes. |
| 310516 | Aggregates for Earthwork | ● | | ● | ● | Coarse- and fine-aggregate materials intended to be referenced by other Sections, generally for fill and grading purposes. |
| 310519.13 | Geotextiles for Earthwork | ● | | ● | ● | Turf reinforcement mats (woven geotextiles) and nonwoven geotextiles materials. |
| 310813 | Pile Load Testing | | | ● | ● | Pile load-testing requirements intended to supplement piling Sections where testing is a project requirement. |
| 311000 | Site Clearing | | | ● | ● | Removal of paving and curbs, debris, grass, and plant life and rough grading of soil, in preparation for site or building excavation work. |
| 312113 | Radon Mitigation | ● | | ● | ● | Passive system to collect radon gas under basements and slabs-on-grade, and vent through roof to atmosphere. |
| U 312213 | Rough Grading | | | ● | ● | Removal of topsoil, rough grading, filling, and compacting to contour the site in preparation for building excavation and other site work. |
| 312316 | Excavation | ● | | ● | ● | Excavating for building foundations, site structures, slabs-on-grade, pavement, and utilities within the building. |
| 312316.13 | Trenching | ● | | ● | ● | Trenching and backfilling for utilities outside of buildings, usually extending to utility service connections. |
| U 312316.26 | Rock Removal | ● | | ● | ● | Removal of subsurface rock during excavation by mechanical or explosive methods. |
| U 312319 | Dewatering | ● | | ● | ● | Temporary dewatering and surface water control systems for open excavations, trenches, tunnels, and drilled shafts. |
| 312323 | Fill | ● | | ● | ● | Backfilling for building foundations, site structures, slabs-on-grade, pavement, and utilities within the building. |
| U 312323.33 | Flowable Fill | ● | | ● | ● | Lean concrete mix for backfill, bedding and subgrade site work. |
| 312500 | Erosion and Sedimentation Controls | ● | | ● | ● | Erosion and sedimentation control devices |
| 313116 | Termite Control | | | ● | ● | Chemical soil treatment to control subterranean termites and other insects. |
| U 313213.16 | Cement Soil Stabilization | | | ● | ● | Treating existing site subsoil with cement, aggregate, and other additives for physical stability to support subsequent construction. |
| U 313213.19 | Lime Soil Stabilization | | | ● | ● | Treating existing site subsoil with lime, aggregate, and other additives for physical stability to support subsequent construction. |

| Section No. | Section Title | | | | | Description |
|-------------|-----------------------------------|-----|-----|-----|------|---|
| | | WWP | IWT | SCW | Comp | |
| 313600 | Gabions | ● | | ● | ● | Wire-mesh, stone-filled gabions and mattresses for earth retention or channel lining, including filters. |
| 313716.13 | Rubble-Stone Riprap | ● | | ● | ● | Riprap and rock lining placed loose for soil stabilization and slope protection. |
| 313716.19 | Sacked Sand-Cement Riprap | ● | | ● | ● | Riprap and rock lining used for soil stabilization and slope protection, placed in closed-jute or geotextile-fabric sacks for concealed or exposed-to-view locations. |
| 314116 | Sheet Piling | ● | | ● | ● | Sheet piling for retaining walls, weirs, caissons, cofferdams, and bulkheads. |
| 316213.23 | Prestressed Concrete Piles | ● | | ● | ● | Driven prestressed precast concrete piles, with or without steel points. |
| 316216 | Steel Piles | | | ● | ● | Driven H-section steel piles, with protective coating. |
| 316219 | Timber Piles | | | ● | ● | Driven timber piles, with or without preservative treatment. |
| 316223 | Composite Piles | | | ● | ● | Cast-in-place concrete filled steel pipe piles, end bearing type. |
| 316300 | Bored Piles | | | ● | ● | Cast-in-place concrete footings, compacted to form an expanded bulbular base, with or without shaft liner, end bearing type. |
| 316316 | Auger Cast Grout Piles | | | ● | ● | Hollow auger bored shaft with cast-in-place concrete grout pressure injected, end bearing type. |
| 316329 | Drilled Concrete Piers and Shafts | | | ● | ● | Cast-in-place concrete piers in bored shafts, with or without shaft liner, bells, rock socket, shear ring, or reinforcing steel; end bearing and friction type. Sometimes referred to as caissons or drilled piers. |
| 316616 | Special Foundation Walls | | | ● | ● | Mechanically stabilized earth walls for earth retaining structures |

DIVISION 32 - EXTERIOR IMPROVEMENTS

| | | | | | | |
|----------|--------------------------------------|---|--|---|---|---|
| 320116 | Flexible Paving Rehabilitation | | | ● | ● | Milling, or heating and removing, reciting, and replacing existing asphaltic concrete, with or without a top seal coat. |
| 320126 | Rigid Paving Rehabilitation | | | ● | ● | Preparation of existing concrete pavement surfaces for subsequent asphalt or concrete pavements. |
| U 320513 | Soils for Exterior Improvements | | | ● | ● | Soil and subsoil materials referenced by other sections for fill and grading purposes. |
| U 320516 | Aggregates for Exterior Improvements | | | ● | ● | Aggregate materials referenced by other exterior improvements sections for fill and grading purposes. |
| U 321123 | Aggregate Base Courses | | | ● | ● | Aggregate subbase and base course for placement under asphalt or concrete pavement, or placed and left exposed. |
| 321216 | Asphalt Paving | | | ● | ● | Conventional (Marshall) and superpave asphalt paving for roads, parking areas, or sidewalks. |
| 321313 | Concrete Paving | | | ● | ● | Concrete pavement for roads, parking areas, sidewalks, median barriers, integral curbs, gutters. |
| 321413 | Precast Concrete Unit Paving | | | ● | ● | Precast concrete paver units of interlocking or butt edge design, laid dry on sand bed. |
| 321416 | Brick Unit Paving | | | ● | ● | Clay brick pavers set into sand, bituminous or mortar bed, on an aggregate or paved base. |
| 321423 | Asphalt Unit Paving | | | ● | ● | Manufactured fibered asphalt block or plank pavers, on a paved base. |
| 321440 | Stone Paving | | | ● | ● | Marble, granite, or slate stone pavers, laid dry on sand or placed on mortar bed. |
| 321623 | Sidewalks | ● | | ● | ● | Concrete paving for sidewalks. |
| 321713 | Parking Bumpers | | | ● | ● | Precast concrete or timber parking bumpers |
| 321723 | Pavement Markings | ● | | ● | ● | Painted pavement markings, lines, and legends for bituminous concrete and portland cement concrete roads and parking areas. |
| 321726 | Tactile Warning Surfacing | | | ● | ● | ADA-compliant tactile warning surfacing, suitable for surface or cast-in-place installation in concrete and asphalt. |
| 323113 | Chain Link Fences and Gates | | | ● | ● | Chain link fences of zinc coated steel, aluminum coated steel, and vinyl coated steel. |
| 323223 | Segmental Retaining Walls | | | ● | ● | Manufactured modular wall for landscaping, erosion control, and other transportation, site or waterfront applications. |
| 323243 | Soldier-Beam Retaining Walls | | | ● | ● | Soldier beam walls for earth retention |
| 323313 | Site Bicycle Racks | ● | | ● | ● | Bicycle racks and simple shelters. |
| 323314 | Bicycle Lockers | ● | | ● | ● | Secure bicycle shelters for storage of bicycles. |

| Section No. | Section Title | | | | | Description |
|--------------------------------|---|-----|-----|-----|------|---|
| | | WWP | IWT | SCW | Comp | |
| U 328400 | Planting Irrigation | | | ● | ● | Piped underground irrigation systems with piping, sprinkler heads, valves, and controls. |
| U 329113 | Soil Preparation | | | ● | ● | Preparation of subsoil and topsoil placement. |
| U 329119 | Landscape Grading | | | ● | ● | Placing, leveling, and compacting topsoil materials prior to final landscaping |
| U 329219 | Seeding | | | ● | ● | Seeding of grassed areas. Also includes subsoil and topsoil preparation |
| U 329223 | Sodding | ● | | ● | ● | Installation of sod and maintenance until acceptance, including preparation of subsoil and topsoil placement. |
| 329300 | Plants | | | ● | ● | Interior and exterior landscaping including trees, plants, and ground cover. Also includes subsoil and topsoil preparation. |
| DIVISION 33 - UTILITIES | | | | | | |
| 330110.58 | Disinfection of Water Utility Piping Systems | ● | | ● | ● | Disinfection of domestic water services associated with site services and utility supply systems. |
| 330110.59 | Disinfection of Water Utility Storage Tanks | ● | | ● | ● | Methods of disinfecting water storage tanks for potable water. |
| 330130.11 | Television Inspection of Sewers | ● | | ● | ● | Television inspection of pipeline and associated preparatory Work. |
| 330130.61 | Packer Injection Grouting | ● | | ● | ● | Grout sealing of sewer pipe joints and cleaning, plugging, and grout sealing of defective manholes. |
| 330130.72 | Cured-in-Place Pipe Lining | ● | | ● | ● | Relining of sanitary sewer piping and associated preparatory work. |
| 330130.79 | Fold-and-Form Pipe Lining | ● | | ● | ● | Relining of sanitary sewer piping and associated preparatory work. |
| 330130.86 | Manhole Rim Adjustment | ● | | ● | ● | Manhole cover grade adjustment and cover replacement. |
| 330150.56 | Cleaning of Hydrocarbon Storage Tanks | ● | | ● | ● | Methods of cleaning fuel-storage tanks to remove residual fuels, sludge, and scale. |
| 330505.31 | Hydrostatic Testing | ● | | ● | ● | Hydrostatic testing of pressurized piping and connected appurtenances such as valves. |
| 330505.33 | Infiltration and Exfiltration Testing | ● | | ● | ● | Infiltration and exfiltration testing of gravity sewer piping and manholes. |
| 330505.36 | Vacuum Testing | ● | | ● | ● | Vacuum testing of gravity sewer manholes. |
| 330505.41 | Air Testing | ● | | ● | ● | Low-pressure air testing of gravity sewer piping. |
| 330505.43 | Mandrel Testing | ● | | ● | ● | Mandrel testing of plastic gravity sewer piping. |
| 330507 | Trenchless Installation of Utility Piping | ● | | ● | ● | Pipe jacking and tunnel excavation, casing pipes and tunnel liners, secondary inverts, carrier pipes, and ducts for installation of distribution facilities. |
| 330507.13 | Utility Directional Drilling | ● | | ● | ● | Horizontal directional drilling for installation of distribution facilities. |
| 330507.36 | Microtunneling | ● | | ● | ● | Provisions for microtunnel systems to install casing or product pipe immediately behind controlled, steerable, articulated Microtunnel Boring Machine (MTBM). |
| 330509.33 | Thrust Restraint for Utility Piping | ● | | ● | ● | Tied joint restraint systems used to anchor and resist forces developed in underground closed pipeline systems. |
| 330548 | Vibration and Seismic Controls for Utilities Piping and Equipment | ● | | ● | ● | Vibration isolation and seismic control equipment for utilities piping, valves, and pumps. |
| 330553 | Identification for Utilities Piping and Equipment | ● | | ● | ● | Nameplates, labeling, and identification methods for site utilities piping, valves, equipment, and accessories. |
| 330561 | Concrete Manholes | ● | | ● | ● | Cast-in-place precast concrete and masonry manholes to access subsurface drainage and sewerage piping. |
| 330563 | Concrete Vaults and Chambers | ● | | ● | ● | Precast concrete utility vaults and chambers, with frames and covers, used for subsurface drainage collection, sewage collection, and water distribution systems. |
| 330573 | Polyethylene Manholes | ● | | ● | ● | PE manholes, rims, and covers used in gravity piping systems used to transport corrosive wastewater or chemicals. |
| 330576 | Fiberglass Manholes | ● | | ● | ● | Fiberglass manholes, rims, and covers used in gravity piping systems to transport corrosive wastewater or chemicals. |
| 330577 | Fiberglass Metering Manholes | ● | | ● | ● | Packaged fiberglass metering manholes used for installation of flumes. |
| 330597 | Identification and Signage for Utilities | | | ● | ● | Pipeline marker posts, metal and plastic utility markers, marking flags, plastic ribbon tape, and trace wire. |
| 331100 | Groundwater Sources | ● | | ● | ● | Drilling of public supply water wells, including casing and grouting, pump, and accessories. |

| Section No. | Section Title | | | | | Description |
|-------------|--|-----|-----|-----|------|---|
| | | WWP | IWT | SCW | Comp | |
| 331413 | Public Water Utility Distribution Piping | ● | | ● | ● | Pipe materials, fittings, valves, and meters normally encountered with public water distribution systems, including potable water and fire water systems within public rights-of-way. |
| 331416 | Site Water Utility Distribution Piping | ● | | ● | ● | Pipe materials, fittings, and valves for domestic water, and fire water systems from the building to the utility source. |
| 331417 | Site Water Service Utility Laterals | ● | | ● | ● | Pipe materials, fittings, valves, meters, and backflow preventers used for water-service connections to small commercial and light industrial buildings and residential homes. |
| 331419 | Valves and Hydrants for Water Utility Service | ● | | ● | ● | Fire hydrants and valves used for installation in water mains. |
| 331616 | Multi-Column Elevated Steel Water Storage Tanks | ● | | ● | ● | Design, fabrication, and erection of welded steel elevated water tank. |
| 331636 | Ground-Level Reinforced Concrete Water Storage Tanks | ● | | ● | ● | Design, fabrication, and erection of site precast, prestressed concrete water storage tanks. |
| 331900 | Water Utility Metering Equipment | ● | | ● | ● | Meters and appurtenances commonly used in water distribution systems, including positive displacement meters, propeller flow meters, magnetic flow meters, ultrasonic flow meters, venturi flow meters, transmitters, indicators, recorders, and integrators. |
| 332313 | Geothermal Energy Exchange Wells | | | ● | ● | Drilling, grouting, excavation, backfill, piping, valves, and accessories for wells used in geothermal heat pump systems. |
| 333100 | Sanitary Sewerage Piping | ● | | ● | ● | Pipe materials and accessories used for gravity sanitary building piping from outside building to connection with municipal sewers or other discharge method. |
| 333111 | Public Sanitary Sewerage Gravity Piping | ● | | ● | ● | Pipe materials, manholes, and accessories for public gravity sanitary sewers. |
| 333123 | Sanitary Sewerage Force Main Piping | ● | | ● | ● | Pipe materials and accessories used for municipal sanitary sewerage force mains. |
| 333126 | Sanitary Pressure Sewer Piping | ● | | ● | ● | Pipe materials and accessories used for low-pressure sanitary sewage collection systems where on-lot grinder pumps are used to convey domestic sewage. |
| 333211 | Field-Erected Wastewater Pumping Stations | ● | | ● | ● | Excavation, submersible pump basin, pumps, control panel, and accessories for small public sewage pumping stations for residential, commercial, industrial, or institutional use. |
| 333213 | Packaged Wastewater Pumping Stations | ● | | ● | ● | Excavation, submersible pump basin, pumps, control panel, and accessories for packaged sewage pumping stations for residential, commercial, industrial, or institutional use. |
| 333216 | Packaged Wastewater Grinder Pump Assemblies | ● | | ● | ● | On-lot, submersible, centrifugal and progressing-cavity sewage grinder pumping units. |
| 333219 | Septic Tank Effluent Pumps | ● | | ● | ● | Septic tank effluent pump units for low-pressure septic tank effluent pumping (STEP) systems. |
| 333413.13 | Concrete Septic Tanks | ● | | ● | ● | Materials and installation requirements for concrete septic tanks. |
| 333413.23 | Fiberglass Septic Tanks | ● | | ● | ● | Materials and installation requirements for fiberglass (FRP) septic tanks. |
| 333413.33 | Polyethylene Septic Tanks | ● | | ● | ● | Materials and installation requirements for high-density polyethylene (HDPE) septic tanks. |
| 333451 | Drainage Field System | ● | | ● | ● | Materials and installation requirements for drainage fields (leach fields) used to further treat effluent from septic tanks. |
| 333453 | Distribution Chambers | ● | | ● | ● | Materials and installation requirements for distribution chambers used to divert septic tank effluent to drainage fields. |
| 334113 | Foundation Drainage | | | ● | ● | Weep tile drainage system including piping, aggregate and filter fabric for building perimeter. |
| 334119 | Underslab Drainage | | | ● | ● | Weep tile drainage system including piping, aggregate and filter fabric for under slabs-on-grade. |
| 334200 | Stormwater Conveyance | | | ● | ● | Gravity storm drain piping from building to municipal utility or other discharge system, and gravity storm drainage of paved and landscaped Site areas. |
| 334213 | Stormwater Culverts | | | ● | ● | Corrugated-steel, aluminum, concrete, PE, PVC pipe culverts, and concrete box sections. |
| 334213.13 | Public Pipe Culverts | ● | | ● | ● | Corrugated steel, aluminum, polyethylene, and concrete pipe culverts, including accessories, excavating, bedding, and backfilling. |
| 334236 | Stormwater Trench Drains | | | ● | ● | Trench drains and accessories. |
| 334713 | Pond and Reservoir Liners | ● | | ● | ● | Impermeable geomembrane liners for ponds and reservoirs. |
| 335213 | Liquid Hydrocarbon Piping | | | ● | ● | Factory-insulated piping for use with oil distribution systems in below-ground applications. |

| Section No. | Section Title | | | | | Description |
|---|---|-----|-----|-----|------|---|
| | | WWP | IWT | SCW | Comp | |
| 336100 | Hydronic Energy Distribution | | | ● | ● | Factory-insulated piping for use with hydronic distribution systems in below-ground applications. |
| 336300 | Steam Energy Distribution | | | ● | ● | Factory-insulated piping for use with steam distribution systems in below-ground applications. |
| 337116 | Electrical Poles | | | | ● | Wood poles and accessories for overhead electrical and communications circuits on Site. |
| 337119 | Electrical Underground Ducts, Ductbanks, and Manholes | | | | ● | Concrete-encased conduit and duct, and concrete manholes and handholes. |
| 337126 | Transmission and Distribution Equipment | | | | ● | Line conductors and accessories for overhead Site power distribution. |
| 337173 | Electrical Utility Services | | | | ● | Arrangements for electric utility service to building and related metering equipment. |
| 337900 | Site Grounding | | | | ● | Grounding grids, loops, and other Site components for grounding of buildings and facilities. |
| DIVISION 34 - TRANSPORTATION | | | | | | |
| 347113 | Vehicle Barriers | | | ● | ● | Formed steel guard rail on steel or timber posts for vehicular traffic control. |
| DIVISION 40 - PROCESS INTERCONNECTIONS | | | | | | |
| 400506 | Couplings, Adapters, and Specials for Process Piping | ● | ● | ● | ● | Pipe penetrations, restrained joints, flexible connections, expansion joints and loops, and sleeve-type couplings. |
| 400507 | Hangers and Supports for Process Piping | ● | ● | | ● | Hangers, supports, anchors, guides, and equipment bases for process piping systems. |
| 400512 | Brass Process Pipe | ● | ● | ● | ● | Brass piping and tubing normally encountered in plant process piping systems, including common fittings. |
| 400517 | Copper Process Pipe and Tubing | ● | ● | ● | ● | Copper piping and tubing normally encountered in plant process piping systems, including common fittings. |
| 400519 | Ductile Iron Process Pipe | ● | ● | | ● | Ductile-iron piping normally encountered in plant process piping systems, including ductile-iron, malleable-iron, and cast-iron fittings and joints. |
| 400523 | Stainless Steel Process Pipe and Tubing | ● | ● | | ● | Stainless steel piping normally encountered in plant process piping systems, including common fittings and joints. |
| 400524 | Steel Process Pipe | ● | ● | ● | ● | Steel pipe materials used for plant process piping systems, including common fittings and joints; cement-mortar-lined steel pipe and fittings; plastic-lined steel pipe and fittings; glass-lined steel pipe and fittings; and rubber-lined steel pipe. |
| 400531 | Thermoplastic Process Pipe | ● | ● | ● | ● | Plastic piping normally encountered in plant process piping systems, including common fittings and joints. |
| 400536 | Fiberglass-Reinforced Plastic Process Pipe | ● | ● | ● | ● | Fiberglass reinforced plastic (FRP) pipe materiaFiberglass-reinforced plastic (FRP) piping normally encountered in plant process piping systems, including common fittings and joints. |
| 400539.13 | Concrete Pressure Water Pipe | ● | ● | ● | ● | Concrete pipe materials and appurtenances normally encountered with pressurized-water piping in a water-treatment plant. |
| 400539.23 | Concrete Gravity and Drainage Process Pipe | ● | ● | ● | ● | Pipe materials and appurtenances normally encountered with gravity process and drainage piping in a water- and wastewater-treatment plant. |
| 400551 | Common Requirements for Process Valves | ● | ● | | ● | Basic materials and methods related to valves commonly used for process systems, including operators, actuators, handwheels, chainwheels, extension stems, floor stands, end connections, and other accessories. |
| 400553 | Identification for Process Piping | ● | ● | | ● | Labeling and identification methods for water and wastewater process equipment and accessories, including nameplates, tags, stencils, labels, and lockout devices. |
| 400557 | Actuators for Process Valves and Gates | ● | ● | ● | ● | Manual, pneumatic, and electric motor actuators. |
| 400559.21 | Aluminum Slide Gates | ● | ● | ● | ● | Self-contained and non-self-contained aluminum slide gates for water and wastewater treatment facilities. |
| 400559.23 | Stainless Steel Slide Gates | ● | ● | ● | ● | Self-contained and non-self-contained stainless steel slide gates for water and wastewater treatment facilities. |
| 400559.26 | Fiberglass-Reinforced Plastic Slide Gates | ● | ● | ● | ● | Self-contained and non-self-contained fiberglass-reinforced plastic (FRP) slide gates for water and wastewater treatment facilities. |
| 400559.33 | Cast Iron Slide Gates | ● | ● | ● | ● | Self-contained and non-self-contained cast-iron slide gates for water and wastewater treatment facilities. |
| 400561 | Gate Valves | ● | ● | ● | ● | Resilient-seated, solid-wedge, general-duty, and plastic gate valves for use in water- and wastewater-treatment plants. |
| 400561.43 | Knife Gate Valves | ● | ● | | ● | Knife gate valves for use in water and wastewater treatment plants. |

| Section No. | Section Title | | | | | Description |
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| | | WWP | IWT | SCW | Comp | |
| 400562 | Plug Valves | ● | ● | ● | ● | Eccentric plug valves for use in water- and wastewater-treatment plants. |
| 400563 | Ball Valves | ● | ● | ● | ● | Rubber-seated and plastic ball valves for use in water and wastewater treatment plants. |
| 400564 | Butterfly Valves | ● | ● | ● | ● | Rubber-seated and plastic butterfly valves for use in water- and wastewater-treatment plants. |
| 400565.11 | Angle Valves | ● | ● | | ● | Angle valves for throttling service in water- and wastewater-treatment plants. |
| 400565.13 | Cone Valves | ● | ● | | ● | Cone valves for throttling service or pump discharge control. |
| 400565.16 | Globe Valves | ● | ● | ● | ● | Globe valves for use in water and wastewater treatment plants. |
| 400565.23 | Swing Check Valves | ● | ● | ● | ● | Swing check valves 3 inches (76 mm) and larger, for use in water and wastewater treatment plants. |
| 400565.26 | Tilting Disc Check Valves | ● | ● | | ● | Tilting (or slanting) disc check valves 2 inches (50 mm) through 60 inches (1 500 mm), for use in water and wastewater treatment plants. |
| 400565.29 | Double-Disk Check Valves | ● | ● | | ● | Double-disc swing check valves 2 inches (50 mm) through 52 inches (1 300 mm), for use in water and wastewater treatment plants. |
| 400567 | Specialized Pressure and Flow-Control Valves | ● | ● | ● | ● | Pressure-reducing valves (PRV) and pressure-sustaining valves for use in water and wastewater treatment plants. |
| 400567.13 | Reduced-Pressure Zone Backflow Preventers for Process Service | ● | ● | | ● | Reduced-pressure zone backflow preventers and accessories. |
| 400567.16 | Double Check Valve Assembly Backflow Preventers for Process Service | ● | ● | | ● | Double check valve assembly backflow preventers and accessories. |
| 400567.23 | Pressure Vacuum Breaker Backflow Preventers | ● | ● | | ● | Pressure vacuum breaker backflow preventers. |
| 400567.26 | Atmospheric Vacuum Breaker Backflow Preventers | ● | ● | | ● | Atmospheric vacuum breaker backflow preventers. |
| 400567.29 | Hose Connection Vacuum Breaker Backflow Preventers | ● | ● | ● | ● | Hose connection vacuum breaker backflow preventers and accessories. |
| 400567.36 | Pressure-Regulating Valves | ● | ● | | ● | Pressure-reducing and pressure-sustaining valves and accessories. |
| 400567.39 | Pressure-Relief Valves | ● | ● | | ● | Hydrostatic pressure-relief valves in pressurized and gravity tanks for water and wastewater treatment facilities. |
| 400571.16 | Flap Gates | ● | | ● | ● | Flexible and heavy-duty flap gates for use in wastewater treatment plants. |
| 400571.23 | Mud Valves | ● | ● | | ● | Mud valves for use in water and wastewater treatment plants. |
| 400571.33 | Telescoping Valves | ● | ● | | ● | Telescoping valves for use in water and wastewater treatment plants. |
| 400574.13 | Diaphragm Valves | ● | ● | | ● | Metallic and plastic diaphragm valves for use in water and wastewater treatment plants. |
| 400574.23 | Pinch Valves | ● | ● | | ● | Pinch valves for use in water and wastewater treatment plants. |
| 400578.11 | Air Release Valves for Water Service | ● | | ● | ● | Air release valves for process water service. |
| 400578.13 | Air/Vacuum Valves for Water Service | ● | | ● | ● | Air release/vacuum breaker valves for use in piping systems in water treatment facilities. |
| 400578.19 | Combination Air Valves for Water Service | ● | | ● | ● | Combination air valves for use in piping systems in water treatment facilities. |
| 400578.21 | Air Release Valves for Wastewater Service | ● | ● | ● | ● | Air release valves for process wastewater service. |
| 400578.23 | Air/Vacuum Valves for Wastewater Service | ● | | ● | ● | Air release/vacuum breaker valves for use in piping systems in wastewater treatment facilities. |
| 400578.29 | Combination Air Valves for Wastewater Service | ● | ● | ● | ● | Combination air valves for use in piping systems in wastewater treatment facilities. |
| 400581.26 | Freeze-Proof Yard Hydrants | ● | | ● | ● | Non-freeze yard hydrant (also referred to as post hydrant) assemblies for installation in irrigation and potable-water systems. |
| 400582 | Solenoid Valves for Process Service | ● | ● | | ● | Solenoid valves for use in water and wastewater treatment plants for non-instrumentation applications. |
| 400589.13 | Basket Strainers for Process Service | ● | ● | | ● | Basket-type strainers and accessories. |
| 400593 | Common Motor Requirements for Process Equipment | ● | ● | | ● | Electric motors and accessories normally supplied as part of equipment assemblies. |
| 400596 | Vibration and Seismic Controls for Process Equipment | ● | ● | | ● | Inertia bases and vibration isolation equipment used for vibration isolation and seismic control, for equipment specified for water- and wastewater treatment plants. |

| Section No. | Section Title | | | | | Description |
|-------------|--|-----|-----|-----|------|---|
| | | WWP | IWT | SCW | Comp | |
| 401113 | Low-Pressure Steam Process Piping | | ● | | ● | Pipe materials, fittings, and valves for aboveground steam piping systems. |
| 401116 | Intermediate-Pressure Steam Process Piping | | ● | | ● | Pipe materials, fittings, and valves for aboveground steam piping systems. |
| 401119 | High-Pressure Steam Process Piping | | ● | | ● | Pipe materials, fittings, and valves for aboveground steam piping systems. |
| 401123 | Condensate Process Piping for Process Applications | | ● | | ● | Pipe materials and fittings for aboveground steam condensate piping systems. |
| 401649 | Sulfur Dioxide Gas Piping | ● | | | ● | Aboveground process piping systems for dry sulfur dioxide applications in a water or wastewater treatment plant. |
| 401813 | Low-Vacuum Systems Process Piping | ● | ● | | ● | Aboveground process piping systems for low-vacuum applications in a water or wastewater treatment plant. |
| 402319 | Non-Potable Plant Water Process Piping | ● | ● | | ● | Process piping systems transporting plant (non-potable) water in a water- or wastewater-treatment plant. |
| 402323 | Potable Water Process Piping | ● | | | ● | Process piping systems transporting potable water in a water-treatment plant. |
| 402329 | Recirculated Water Process Piping | ● | ● | | ● | Requirements for plant process piping systems transporting recirculated water in a water- or wastewater-treatment plant, including pipes, tubes, and valves. |
| 402340 | Sanitary Wastewater Process Piping | ● | ● | | ● | Process piping systems transporting wastewater in a wastewater-treatment plant. |
| 402341 | Grit Process Piping | ● | ● | | ● | Requirements for plant process piping systems transporting grit in a wastewater treatment plant, including ductile-iron pipe and fittings, plastic-lined steel pipe and fittings, valves, and pipe hangers and supports. |
| 402343 | Scum and Floatables Process Piping | ● | ● | | ● | Requirements for plant process piping systems transporting scum, floatables, or froth spray in a wastewater treatment plant, including PVC pipe and fittings, glass-lined steel pipe and fittings, valves, and pipe hangers and supports. |
| 402344 | Primary Sludge Process Piping | ● | ● | | ● | Requirements for plant process piping systems transporting primary (raw) sludge in a wastewater treatment plant, including ductile-iron pipe and fittings, glass-lined steel pipe and fittings, valves, and pipe hangers and supports. |
| 402346 | Waste Sludge Process Piping | ● | ● | | ● | Requirements for plant process piping systems transporting waste sludge in a wastewater treatment plant, including ductile-iron pipe and fittings, valves, and pipe hangers and supports. |
| 402414 | Liquid Chlorine and Sodium Hypochlorite Piping | ● | ● | | ● | Process piping and tubing for chlorine solution and sodium hypochlorite solution in a water- or wastewater-treatment plant. |
| 402419 | Slurries Process Piping | ● | ● | | ● | Plant process piping systems transporting slurries in a water or wastewater treatment plant. |
| 402423 | Thixotropic Liquid Piping | ● | ● | | ● | Requirements for process piping systems transporting sludge (or other thixotropic substances) in a water-treatment plant or a wastewater-treatment plant. |
| 402510 | Liquid Acids Piping | ● | ● | | ● | Plant process piping systems transporting acids and acidic solutions in a water or wastewater treatment plant. |
| 402550 | Liquid Bases Piping | ● | ● | | ● | Plant process piping systems transporting bases and basic solutions in a water or wastewater treatment plant. |
| 402600 | Liquid Polymer Piping | ● | ● | | ● | Process piping systems transporting polymer in a water- or wastewater-treatment plant. |
| 403250 | Nonabrasive Materials Piping and Chutes | | | | ● | Conveyance of nonabrasive bulk material solids from storage bins or silos via pipes, chutes, or hoses. |
| 403326 | Diverter Bulk Materials Valves | | | | ● | Diverter valve assemblies for regulating flow of bulk material solids from storage bins or silos, including orifice gates, roller gates, wye lines, flex tubes, iris valves, and slide gates. |
| 404113.13 | Process Piping Electrical Resistance Heat Tracing | ● | ● | | ● | Electric heat-tracing systems for freeze protection of process piping, fittings, valves, and accessories, including self-regulating cables and heat-tracing controls. |
| 404113.26 | Process Piping Thermal Fluids Heat Tracing | ● | ● | | ● | Ethylene or propylene glycol heat-tracing systems for freeze protection of process piping, fittings, and valves. |
| 404123.26 | Process Equipment Thermal Fluids Heat Tracing | ● | ● | | ● | Glycol heat-tracing systems for freeze protection of process equipment. |
| 404213 | Process Piping Insulation | ● | ● | | ● | Insulation applied to process piping systems. |
| 404223 | Process Equipment Insulation | ● | ● | | ● | Insulation applied to process equipment, including equipment insulation, jacketing, and accessories. |
| 404642 | Cathodic Process Corrosion Protection | ● | ● | ● | ● | Passive cathodic protection for buried metallic process piping, buried metal structures, and buried metal tanks using sacrificial galvanic anodes. |
| 406343 | Programmable Logic Controllers | ● | ● | | ● | Programmable controllers for either stand-alone or networked applications. |
| 406700 | Control System Equipment Panels and Racks | ● | ● | | ● | Pump control panel and accessories for a duplex wastewater lift station. |

| Section No. | Section Title | | | | | Description |
|-------------|---|-----|-----|-----|------|---|
| | | WWP | IWT | SCW | Comp | |
| 407113 | Magnetic Flow Meters | ● | ● | | ● | Magnetic flow meters, including transmitters, indicators, recorders, and integrators. |
| 407123.13 | Venturi Flow Meters | ● | ● | | ● | Venturi flow meters, including transmitters, indicators, recorders, and integrators. |
| 407123.23 | Orifice Plate Flow Meters | ● | ● | | ● | Orifice plate flow meters, including transmitters, indicators, recorders, and integrators. |
| 407123.36 | Pitot Tube and Averaging Pitot Tube Flow Meters | ● | | | ● | Pitot tube flow meters, including transmitters, indicators, recorders, and integrators. |
| 407133 | Propeller Flow Meters | ● | ● | | ● | Propeller flow meters, including transmitters, indicators, recorders, and integrators. |
| 407143 | Variable Area Flow Meters | ● | ● | | ● | Rotameters. |
| 407166 | Transit Time Flow Meters | ● | ● | | ● | Ultrasonic flow meters, including transmitters, indicators, recorders, and integrators. |
| 407169 | Open Channel Flow Meters | ● | ● | | ● | Weirs and Parshall flumes, including transmitters, indicators, recorders, and integrators. |
| 407179 | Flow Switches | ● | ● | | ● | Primary process flow switches. |
| 407213 | Ultrasonic Level Meters (Continuous and Point Type) | ● | ● | | ● | Ultrasonic level measurement devices and transmitters for use in water and wastewater treatment facilities. |
| 407223 | Radar Level Meters | ● | ● | | ● | Radar level measurement devices and transmitters for use in water and wastewater treatment facilities. |
| 407233 | Capacitance Type Level Meters (Continuous and Point Type) | ● | ● | | ● | Capacitance-type level measurement devices and transmitters for use in water and wastewater treatment facilities. |
| 407243 | Pressure and Differential Pressure Type Level Meters | ● | ● | | ● | Hydrostatic level measurement devices and transmitters for use in water and wastewater treatment facilities. |
| 407276 | Level Switches | ● | ● | | ● | Primary process level switches of the displacement and mercury types. |
| 407313 | Pressure and Differential Pressure Gauges | ● | ● | | ● | Process pressure gages of the differential, compound, and digital types. |
| 407326 | Gauge-Pressure Transmitters | ● | ● | | ● | Gage-pressure transmitters for use in water and wastewater treatment facilities. |
| 407336 | Pressure and Differential Pressure Switches | ● | ● | | ● | Primary process pressure and differential pressure switches. |
| 407363 | Diaphragm Seals | ● | ● | | ● | Diaphragm seals for isolation of pressure gages or other devices. |
| 407413 | Resistance Temperature Devices | ● | ● | | ● | Thin-film resistance temperature detectors (RTDs) and thermowells, transmitters, indicators and recorders. |
| 407416 | Thermocouples | ● | ● | | ● | Thermocouples for use as temperature detectors, and thermowells, transmitters, indicators and recorders. |
| 407513 | pH/ORP Analyzers | ● | ● | ● | ● | pH/ORP sensors, analyzers, transmitters, and displays for use in a water or wastewater treatment plant. Testers and field, laboratory, and portable analyzers are included. |
| 407556 | Suspended Solids/Sludge Density Analyzers | ● | ● | | ● | Continuous and portable devices for measurement of suspended solids and sludge density in a wastewater treatment plant. |
| 407636 | Sulfur Dioxide Analyzers | ● | | | ● | Sulfur dioxide analyzing and monitoring equipment. |

DIVISION 41 - MATERIAL PROCESSING AND HANDLING EQUIPMENT

| | | | | | | |
|-----------|----------------------------------|--|--|--|---|---|
| 411213.19 | Belt Bulk Material Conveyors | | | | ● | Conveyance of bulk material solids using belt-type conveyors. |
| 411213.29 | Hopper Bulk Material Conveyors | | | | ● | Conveyance of bulk material solids to hoppers using belt-type and screw-type conveyors. |
| 411213.36 | Screw Bulk Material Conveyors | | | | ● | Conveyance of bulk material solids using screw-type conveyors. |
| 411216 | Bucket Elevators | | | | ● | Conveyance of bulk material solids to hoppers using bucket-type conveyors. |
| 411323 | Feeders | | | | ● | Bulk material feeding equipment, including volumetric bulk material feeders, bulk bag fillers, and bag dump stations. |
| 411429 | Drum-Handling Batching Equipment | | | | ● | Mobile drum dumpers, leak-containment pallets, and drum lifters. |
| 412213.13 | Bridge Cranes | | | | ● | Top- or under-running, single- or double-girder crane systems, including rails, bridge, trolley, hoist, power and control circuits, safety and control mechanisms, and accessories. |
| 412213.16 | Gantry Cranes | | | | ● | Single- or multiple-girder gantry-type crane systems, including rails, bridge, trolley, hoist, power and control circuits, safety and control mechanisms, and accessories. |
| 412213.19 | Jib Cranes | | | | ● | Free-standing, base plate-mounted jib crane, equipped with motorized boom, trolley, and chain hoist. |

| Section No. | Section Title | | | | | Description |
|--|---|-----|-----|-----|------|---|
| | | WWP | IWT | SCW | Comp | |
| 412223.13 | Fixed Hoists | | | | ● | Non-trolley fixed hoists for mounting in locations as required by Project, including motors and controls for electrically operated hoists, and components. |
| 412223.16 | Portable Hoists | | | | ● | Non-trolley portable hoists for mounting in locations as required by Project, including motors and controls for electrically operated hoists, and components. |
| 412223.19 | Monorail Hoists | | | | ● | Monorail hoisting equipment, including track, trolley, hoists motor, and controls; trolley and hoist manually or motor operated. |
| 415213 | Bins and Hoppers | | | | ● | Bulk storage systems for powders and dry granular materials to be used in process industries; accessories include agitators and level detectors. |
| 415323 | Storage Racks | | | | ● | Racks and shelving for storage of materials used in operation and maintenance of water and wastewater treatment facilities, including bulk storage racks, pipe racks, gas cylinder racks, pallet racks, bin shelving, free-standing shelving, and wall-mounted shelving |
| DIVISION 43 - PROCESS GAS AND LIQUID HANDLING, PURIFICATION AND STORAGE EQUIPMENT | | | | | | |
| 430510 | Common Work Results for Gas Handling Equipment | ● | ● | | ● | Basic materials and methods for fans, blowers, and compressors. |
| 430520 | Common Work Results for Liquid Handling Equipment | ● | ● | | ● | Basic materials and methods for process pumps. |
| 430540 | Common Work Results for Gas and Liquid Storage | ● | ● | | ● | Common materials and construction requirements for gas and liquid storage tanks. |
| 430548 | Vibration and Seismic Controls for Process Gas and Liquid Handling Equipment | ● | | | ● | Vibration isolation and seismic control equipment for pumps, fans, blowers, compressors, and other gas- and liquid-handling equipment. |
| 430553 | Identification for Process Gas and Liquid Handling Equipment | ● | | | ● | Labeling and identification methods for process fans, blowers, compressors, pumps, and accessories, including nameplates, tags, stencils, labels, and lockout devices. |
| 431111 | Direct Drive Single Stage Centrifugal Blowers | ● | ● | | ● | Centrifugal blowers and drives. |
| 431119 | Centrifugal Fans | ● | ● | | ● | Centrifugal fans and drives. |
| 431123 | Axial Blowers | ● | ● | | ● | Axial blowers, drives, and accessories. |
| 431126 | Axial Fans | ● | ● | | ● | Axial fans, drives, and accessories. |
| 431133 | Rotary Lobe Blowers | ● | ● | | ● | Rotary lobe blowers and drives. |
| 431211 | Centrifugal Compressors | ● | ● | | ● | Low-pressure centrifugal air compressors and components for compressed-air systems in plant or process applications, including pipe and pipe fittings, valves, piping accessories, aftercoolers, air dryers, air receivers, and pressure-reducing stations. |
| 431216 | Axial-Flow Compressors | ● | ● | | ● | Axial-flow air compressors and components for compressed-air systems used in plant or process applications, including pipe and pipe fittings, valves, piping accessories, aftercooler, air dryers, air receiver, and pressure-reducing stations. |
| 431233 | Single-Acting Reciprocating Compressors | ● | ● | | ● | Single-acting centrifugal air compressors for minor-duty compressed-air systems in plant or process applications, including air receiver and accessories. |
| 431234 | Double-Acting Reciprocating Compressors | ● | ● | | ● | Double-acting centrifugal air compressors for minor-duty compressed-air systems in plant or process applications, including air receiver and accessories. |
| 431251 | Rotary Screw Compressors | ● | ● | | ● | Rotary-screw air compressors and components for compressed-air systems used in plant or process applications, including pipe and pipe fittings, valves, piping accessories, aftercooler, air dryers, air receiver, and pressure-reducing stations. |
| 432313.27 | Overhung Close-Coupled Horizontal Centrifugal Pumps | ● | ● | | ● | Horizontal end-suction, non-clog, and recessed-impeller centrifugal pumps for use in water and wastewater treatment plants. |
| 432321.13 | Between-Bearings Impeller, One- and Two-Stage Axially Split Centrifugal Pumps | ● | ● | | ● | Axially split centrifugal pumps for use in water and wastewater treatment plants. |
| 432331.23 | Overhung Close-Coupled Vertical End Suction Pumps | ● | ● | | ● | Vertical non-clog centrifugal pumps for use in water and wastewater treatment plants. |
| 432356 | Gear Pumps | ● | ● | | ● | Positive-displacement, external gear pumps with electric motors, used to transfer chemicals and other liquids. |

| Section No. | Section Title | | | | | Description |
|-------------|--|-----|-----|-----|------|---|
| | | WWP | IWT | SCW | Comp | |
| 432357 | Progressing Cavity Pumps | ● | ● | | ● | Progressing cavity pumps for transporting thickened solutions such as sludge at water and wastewater treatment plants. |
| 432358 | Lobe Pumps | ● | ● | | ● | Positive-displacement lobe liquid pumps with electric motors, as used to transfer chemicals and other liquids. |
| 432359 | Screw Pumps | ● | ● | | ● | Screw centrifugal pumps for use in water and wastewater treatment plants. |
| 432376.21 | Power Horizontal Single-Acting Plunger Simplex Reciprocating Pumps | ● | ● | | ● | Plunger pumps for transporting thickened solutions such as sludge at water and wastewater treatment plants. |
| 432513 | Overhung Close-Coupled Submersible Centrifugal Pumps | ● | ● | | ● | Submersible sludge pumps and accessories for pumping return-activated sludge and waste-activated sludge from sumps in domestic wastewater-treatment plants. |
| 434111 | Bolted Steel Tanks | ● | ● | ● | ● | Factory-coated bolted-steel tanks for liquid storage. |
| 434113 | Welded Steel Tanks | ● | ● | | ● | Welded steel tanks for liquid storage. |
| 434145 | Fiberglass Reinforced Plastic Tanks | ● | ● | | ● | Fiberglass-reinforced plastic tanks for chemical storage. |
| 434221 | Welded Steel Pressure Tanks | ● | ● | | ● | Welded steel pressure tanks for storage of liquids under low and moderate pressures. |

DIVISION 44 - POLLUTION AND WASTE CONTROL EQUIPMENT

| | | | | | | |
|--------|-------------------------------------|---|---|--|---|--|
| 441116 | Fugitive Dust Barrier Systems | | | | ● | Equipment and accessories for a dust collection system for use in small commercial projects. |
| 443121 | Odor Control Biofilters | ● | ● | | ● | Active and passive biofilters and components for odor control. |
| 443133 | Odor Control Bioscrubbing Equipment | ● | ● | | ● | Wet scrubbers of the packed tower design for odor control at a wastewater treatment plant. |

DIVISION 46 - WATER AND WASTEWATER EQUIPMENT

| | | | | | | |
|--------|---|---|---|--|---|---|
| 460548 | Vibration and Seismic Controls for Water and Wastewater Equipment | ● | | | ● | Vibration isolation and seismic control equipment for water- and wastewater-treatment plant facilities. |
| 460553 | Identification for Water and Wastewater Equipment | ● | | | ● | Labeling and identification methods for water and wastewater process equipment and accessories, including nameplates, tags, stencils, labels, and lockout devices. |
| 460713 | Packaged Water Treatment Equipment | ● | | | ● | Packaged water treatment plants with capacity range of 100 to 1,500 gpm (378 to 5 680 L/min), with gravity or pressure filters for suspended solids, iron, and manganese removal, and disinfection. |
| 460753 | Packaged Wastewater Treatment Equipment | ● | ● | | ● | Packaged wastewater treatment equipment based on a plant using the extended aeration process, capacity range 3,000 to 150,000 gal. per day (11 to 568 cu. m per day). |
| 462113 | Chain-and-Rake Bar Screens | ● | ● | | ● | Channel-mounted, mechanically cleaned, chain-and-rake type bar screens for collection and removal of coarse solids from wastewater. |
| 462133 | Rotary Drum Screens | ● | ● | | ● | Rotary drum screens for use in a wastewater-treatment plant. |
| 462156 | Wedge Wire Screens | ● | ● | | ● | Wedge-wire screens for liquid/solid separation, straining and filtering, water collection and distribution, and surface water intakes. |
| 462171 | Trash Raking Equipment | ● | ● | | ● | Grab-style trash raking equipment and accessories. |
| 462173 | Screenings Washing and Compacting Equipment | ● | ● | | ● | Wastewater screenings washer/compactors and accessories. |
| 462179 | Screenings Storage Containers | ● | ● | | ● | Dewatering containers for the collection, storage, dewatering, and transport of wastewater screenings. |
| 462183 | Septage Receiving Equipment | ● | | | ● | Self-contained receiving stations for treating wastewater received from septage haulers. |
| 462313 | Chain-and-Bucket Grit Removal Equipment | ● | ● | | ● | Chain-and-bucket grit removal equipment and accessories. |
| 462316 | Chain-and-Flight Grit Removal Equipment | ● | ● | | ● | Chain-and-flight ("chain-and-scraper") grit removal equipment and accessories. |
| 462323 | Vortex Grit Removal Equipment | ● | ● | | ● | Vortex grit removal equipment and accessories. |
| 462327 | Cyclone Degritters | ● | ● | | ● | Cyclone degritter (hydrocyclone) equipment and grit slurry feed pump. |
| 462333 | Aerated Grit Removal Equipment | ● | ● | | ● | Aerated grit removal equipment, including airlift pump and screw conveyor. |

| Section No. | Section Title | | | | | Description |
|-------------|--|-----|-----|-----|------|--|
| | | WWP | IWT | SCW | Comp | |
| 462363 | Grit Classifying and Washing Equipment | ● | ● | | ● | Grit classifiers, washers, and accessories. |
| 462366 | Grit Storage Containers | ● | ● | | ● | Dewatering containers for the collection, storage, dewatering, and transport of wastewater grit. |
| 462413 | Macerators | ● | ● | | ● | Macerators for use in a wastewater treatment plant. |
| 462416 | Comminutors | ● | ● | | ● | Comminutors for use in a wastewater-treatment plant, including rotating-drum type, rotating-disc type, conical type, and oscillating type. |
| 462423 | Inline Grinders | ● | ● | | ● | Inline grinders for use in a wastewater-treatment plant. |
| 462433 | Open-Channel Grinders | ● | ● | | ● | Inline grinders for use in a wastewater-treatment plant. |
| 462436 | Modular Grinding, Screening, and Compacting Equipment | ● | ● | | ● | Modular equipment that combines an open-channel grinder with a conveyor that moves reduced-size solids through screening, washing, and compacting processes. |
| 462513 | Coalescing Oil-Water Separators | ● | ● | | ● | Underground, coalescing-type, fiberglass oil-water separators of capacity from 600 gal. to 30,000 gal. (2 300 L to 113 500 L). |
| 462516 | API Oil-Water Separators | ● | ● | | ● | Oil-water separators, designed under API standards, to separate gross amounts of oil and suspended solids from wastewater effluents. |
| 462523 | Grease Traps | ● | ● | | ● | Grease traps (also referred to as "grease interceptors"). |
| 462543 | Tipping Trough Scum Skimming and Removal Equipment | ● | ● | | ● | Tipping (rotating) trough scum skimmers for use in primary and secondary clarifiers at wastewater treatment plants. |
| 463111 | Chlorine Gas Feed Equipment | ● | ● | | ● | Vacuum-regulated; solution or gas feed; automatic or manual switchover; programmable, fully automatic, semi-automatic, or manual chlorination controls. |
| 463113 | Sulfur Dioxide Gas Feed Equipment | ● | | | ● | Sulfur dioxide feed equipment for water and wastewater systems using sulfur dioxide gas in high-pressure cylinders. |
| 463116 | Ammonia Gas Feed Equipment | ● | ● | | ● | Vacuum-regulated feed equipment, using ammonia gas in high-pressure cylinders. |
| 463143 | Carbon Dioxide Gas Feed Equipment | ● | ● | | ● | Vacuum-regulated feed equipment, using carbon dioxide in high-pressure cylinders. |
| 463153 | Ozone Generating and Feed Equipment | ● | ● | | ● | Ozone generating and feed equipment for disinfection at a water or wastewater treatment plant. |
| 463156 | Liquid Oxygen Storage and Feed Equipment | ● | ● | | ● | Liquid oxygen tanks, atmospheric vaporizers, and accessories for field applications. |
| 463159 | Cleaning Requirements for Oxygen Equipment | ● | ● | | ● | Guidelines for cleaning of liquid oxygen tanks and high-pressure gaseous oxygen containers. |
| 463183 | Gas Chemical Feed Accessories and Safety Equipment | ● | ● | | ● | Control panels, personal protective equipment, emergency showers and eye and face washers, warning signs, self-contained breathing apparatus, and emergency retrieval equipment. |
| 463313 | Sodium Hypochlorite Generating Equipment | ● | ● | | ● | Self-contained sodium hypochlorite generators and accessories. |
| 463333 | Polymer Blending and Feed Equipment | ● | ● | | ● | Self-contained units to supply blended liquid polymer to supply process equipment. Included are blending unit and feed system, booster and metering pumps, skid-mounted supports, valves and piping, flow meters, and control panel. |
| 463341 | Liquid Chemical Feed System Coordination and Integration | ● | ● | | ● | Descriptions and integration of control schemes for integration of liquid chemical feed systems as specified in other Sections, including special submittals and data sheets; control panels; and installation requirements. |
| 463342 | Diaphragm-Type Metering Pumps | ● | ● | | ● | Electronically controlled, solenoid-actuated-diaphragm-type chemical feed pumps and accessories. |
| 463344 | Peristaltic Metering Pumps | ● | ● | | ● | Peristaltic feed pumps for feeding various chemical solutions. |
| 463346 | Progressing Cavity Metering Pumps | ● | ● | | ● | Progressing-cavity-type chemical feed pumps and accessories. |
| 463348 | Lobe Metering Pumps | ● | ● | | ● | Lobe-type chemical feed pumps and accessories. |
| 463353 | Drum Pumps | ● | ● | | ● | Positive-displacement drum pumps with electric or air motors, used to transfer chemicals and other liquids from drums and barrels. |
| 463373 | Liquid Chemical Diffusers | ● | ● | | ● | Diffusers and injectors for discharging liquid chemicals into an open channel or into a pipe. |
| 463383 | Liquid Chemical Feed Accessories and Safety Equipment | ● | ● | | ● | Basic materials and equipment for liquid chemical feed equipment, including control panels; personal protective equipment; emergency showers; emergency eye and face washers; emergency combination showers with eye and face washers; and equipment supports. |

| Section No. | Section Title | | | | | Description |
|-------------|--|-----|-----|-----|------|---|
| | | WWP | IWT | SCW | Comp | |
| 463613 | Storage Silos | ● | ● | | ● | Bolted or field-welded steel storage silos for the bulk storage of dry chemicals to be used in water and wastewater treatment processes. |
| 463623 | Dry Chemical Weighing Equipment | ● | ● | | ● | Scales for the weighing of bulk dry chemicals for use in water and wastewater treatment processes. |
| 463633 | Volumetric Feed Equipment | ● | ● | | ● | Equipment for volumetrically feeding dry chemicals to be used in water and wastewater treatment processes. |
| 463636 | Gravimetric Feed Equipment | ● | ● | | ● | Equipment for feeding dry chemicals by gravity that will be used in water and wastewater treatment processes. |
| 463643 | Lime Slaking Equipment | ● | ● | | ● | Lime slaking equipment for conversion of calcium oxide to calcium hydroxide for use in neutralization and pH control at a water or wastewater treatment plant. |
| 463653 | Chemical Tablet Feeding Equipment | ● | ● | | ● | Chemical tablet feeding equipment for chlorination and dechlorination systems used in water and wastewater treatment plants. |
| 463683 | Dry Chemical Feed Accessories and Safety Equipment | ● | ● | | ● | Basic materials and equipment for dry chemical feed equipment, including control panels; personal protective equipment; emergency showers; emergency eye and face washers; emergency combination showers with eye and face washers; and equipment supports. |
| 464111 | Rapid Mixers | ● | ● | | ● | Rapid mixers for mixing chemicals in the process flow stream. |
| 464117 | Inline Static Mixers | ● | ● | | ● | Inline static mixers for mixing chemicals in the process flow stream. |
| 464121 | Jet Mixer Equipment | ● | ● | | ● | Jet mixers for mixing chemicals within a tank. |
| 464123 | Submersible Mixers | ● | ● | | ● | Propeller-type submersible mixers for mixing tank contents. |
| 464126 | Floating Mechanical Mixers | ● | ● | | ● | Floating-type mechanical mixers and accessories for wastewater treatment facility aeration chambers, ponds, or lagoons. |
| 464127 | Paddle Mixers | ● | ● | | ● | Paddle mixers for use as dry chemical mixers, sludge neutralization, and conditioning of powders and ash. |
| 464131 | Vertical Reel Flocculation Equipment | ● | | | ● | Vertical reel flocculator equipment and accessories for water treatment systems. |
| 464133 | Horizontal Reel Flocculation Equipment | ● | | | ● | Horizontal reel flocculator equipment and accessories for water treatment systems. |
| 464134 | Vertical Turbine Flocculation Equipment | ● | | | ● | Vertical turbine flocculators for water treatment systems. |
| 464146 | Portable Tank Mixers | ● | ● | | ● | Portable mixers and accessories for mixing of liquids in field applications. |
| 464311 | Chain-and-Flight Clarifier Equipment | ● | ● | | ● | Chain-and-flight ("chain-and-scraper") clarifier equipment and accessories. |
| 464314 | Traveling Bridge Clarifier Equipment | ● | ● | | ● | Traveling bridge clarifier equipment and accessories, including clarifier mechanism, sludge collector assembly, effluent trough and weir assembly, weirs and baffles, and scum removal system. |
| 464321 | Circular Clarifier Equipment | ● | ● | | ● | Peripheral- or center-feed circular clarifier equipment, including access platform, troughs and weirs, weirs and baffles, and influent channel and feedwell. |
| 464363 | Dissolved Air Flotation Equipment for Water and Wastewater Treatment | ● | ● | | ● | Dissolved air flotation (DAF) equipment and accessories for water treatment facilities. |
| 464373 | Tube Settlers | ● | ● | | ● | Tube-type settlers and accessories for water or wastewater treatment facilities. |
| 464376 | Inclined Plate Settlers | ● | ● | | ● | Inclined-plate-type settlers and accessories for water or wastewater treatment facilities. |
| 465111 | Fixed Mechanical Aerators | ● | ● | | ● | Mechanical surface aerators permanently attached within a tank or basin. |
| 465113 | Floating Mechanical Aerators | ● | ● | | ● | Mechanical surface aerators harnessed or moored and floating in a basin or lagoon. |
| 465117 | Jet Aeration Equipment | ● | ● | | ● | Jet aerators for use in a water or wastewater treatment plant to transfer oxygen to a liquid or sludge by injecting process liquid and air through one or more nozzles (venturis). |
| 465121 | Coarse Bubble Diffusers | ● | ● | | ● | Coarse-bubble, ceramic, aeration diffusers for use in water and wastewater treatment plants. |
| 465123 | Swing-Type Channel Aeration Equipment | ● | ● | | ● | Retrievable channel aeration equipment and lifting mechanisms for use in water and wastewater treatment plants. |
| 465131 | Flexible Membrane Tube Diffusers | ● | ● | | ● | Membrane tube diffusers (also called "candle aerators") for use in water and wastewater treatment plants. |
| 465133 | Flexible Membrane Disc Diffusers | ● | ● | | ● | Membrane disc diffusers for use in water and wastewater treatment plants. |

| Section No. | Section Title | | | | | Description |
|-------------|---|-----|-----|-----|------|---|
| | | WWP | IWT | SCW | Comp | |
| 465136 | Ceramic Disc Fine Bubble Diffusers | ● | ● | | ● | Ceramic disc-type, fine-bubble diffusers for use in water and wastewater treatment plants, including supporting grid. |
| 465146 | Membrane Diffusers | ● | ● | | ● | Membrane aeration diffusers for use in water and wastewater treatment plants. |
| 465323 | Trickling Filter Rotary Distributor Equipment | ● | ● | | ● | Trickling filter rotary distributor arms and accessories for wastewater treatment facilities. Equipment distributes sewage over the filter bed by rotating only from the reaction thrust of sewage flowing through jets or nozzles in the distributor arms. |
| 465324 | Trickling Filter Media | ● | ● | | ● | Trickling filter media for wastewater treatment facilities. Both stone and plastic media are included. |
| 465341 | Intermittent Sand Filters for Wastewater Treatment | ● | ● | | ● | Intermittent sand filters, including media, piping, and accessories. |
| 465349 | Membrane Biological Reactors | ● | ● | | ● | Internal membrane biological reactors serving as a solids separation process. |
| 466121 | Pressure Filters | ● | | | ● | Pressure filters and accessories for water filtration. |
| 466123 | Gravity Filters | ● | | | ● | High-rate (mixed media) gravity filters, continuous backwash (sand) filters, and accessories. |
| 466133 | Microfiltration and Ultrafiltration Membrane Equipment | ● | ● | | ● | Components for microfiltration and ultrafiltration systems. |
| 466141 | Disc Cloth Filters | ● | ● | | ● | Disc cloth filters and accessories for use in wastewater treatment facilities. |
| 466143 | Rotary Drum Cloth Filters | ● | ● | | ● | Cloth filters and accessories for rotary drum vacuum filters used in wastewater treatment facilities. |
| 466146 | Automatic Backwash Cloth Filter Equipment | ● | ● | | ● | Automatic backwash cloth filters and accessories for water or wastewater filtration. Canister-type filter units are included, as well as larger filters that incorporate a modular set of cloth disks on a rotating assembly. |
| 466153 | Cartridge Filters | ● | ● | | ● | Cartridge filters and accessories for water or wastewater filtration. |
| 466163 | Bag Filters | ● | ● | | ● | Bag filters and accessories for water or wastewater filtration. |
| 466173 | Automatic Straining Equipment | ● | ● | | ● | Automatic self-cleaning straining equipment for continuous debris removal from piping systems that require uninterrupted flow. |
| 466323 | Reverse-Osmosis and Nanofiltration Membrane Equipment | ● | ● | | ● | Components for nanofiltration and reverse-osmosis systems. |
| 466613 | Closed-Vessel Low-Pressure/Low-Intensity Ultraviolet Treatment Equipment | ● | ● | | ● | Closed-vessel, low-pressure, low-intensity ultraviolet treatment equipment, including lamp assemblies, controls, and accessories. |
| 466616 | Closed-Vessel Low-Pressure/High-Intensity Ultraviolet Treatment Equipment | ● | ● | | ● | Closed-vessel, low-pressure, high-intensity ultraviolet treatment equipment, including lamp assemblies, controls, and accessories. |
| 466623 | Closed-Vessel Medium-Pressure Ultraviolet Treatment Equipment | ● | ● | | ● | Closed-vessel, medium-pressure ultraviolet treatment equipment, including lamp assemblies, controls, and accessories. |
| 466653 | Open-Channel Low-Pressure/Low-Intensity Ultraviolet Treatment Equipment | ● | ● | | ● | Open-channel, low-pressure, low-intensity ultraviolet treatment equipment, including lamp assemblies, controls, and accessories. |
| 466656 | Open-Channel Low-Pressure/High-Intensity Ultraviolet Treatment Equipment | ● | ● | | ● | Open-channel, low-pressure, high-intensity ultraviolet treatment equipment, including lamp assemblies, controls, and accessories. |
| 466663 | Open-Channel Medium-Pressure Ultraviolet Treatment Equipment | ● | ● | | ● | Open-channel, medium-pressure ultraviolet treatment equipment, including lamp assemblies, controls, and accessories. |
| 467113 | Circular Gravity Thickeners | ● | ● | | ● | Circular gravity-thickener equipment and accessories, including thickener drive mechanism, walkway, scraper arms and solids collectors, and influent well. |
| 467116 | Gravity Belt Thickeners | ● | ● | | ● | Gravity belt thickeners used to reduce the volume of sludge by producing a concentrate for subsequent dewatering, treatment, or transport. |
| 467133 | Rotary Drum Thickening Equipment | ● | ● | | ● | Rotary drum thickeners used for thickening sludge in wastewater treatment facilities. |
| 467146 | Thickening Screw Press | ● | ● | | ● | Thickening screw presses and components for processing wastewater residuals. |
| 467319 | Digester Appurtenances | ● | | | ● | Common work requirements for anaerobic digesters used in wastewater residuals stabilization processes. |
| 467321 | Aerobic Digester Aeration Equipment | ● | | | ● | Requirements for aerobic digesters used in wastewater residuals stabilization processes. |
| 467341 | Digester Heating Equipment | ● | | | ● | Heating equipment to maintain a desired operating temperature in anaerobic digesters used in wastewater residuals stabilization processes. |

| Section No. | Section Title | | | | | Description |
|-------------|--------------------------------|-----|-----|-----|------|---|
| | | WWP | IWT | SCW | Comp | |
| 467621 | Belt Filter Presses | ● | ● | | ● | Belt filter presses and accessories. |
| 467623 | Plate-and-Frame Filter Presses | ● | ● | | ● | Plate-and-frame type filter presses with appurtenances and accessories. |

Legend:

WWP = Water/Wastewater Equipment & Utilities Library

IWT = Industrial Wastewater Treatment Library

SCW = Site Civil & Water/Wastewater Utilities Library

Comp = Comprehensive Library

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