

Section No.	Section Title	Section Description
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.

Section No.	Section Title	Section Description
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.
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		
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.
024300	Structure Moving	Relocation of entire structures or portions of structures. Also includes disconnecting and reconnecting utilities.
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		
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.

Section No.	Section Title	Section Description
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.
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

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.

Section No.	Section Title	Section Description
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

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.

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.

Section No.	Section Title	Section Description
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.
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.

Section No.	Section Title	Section Description
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.

Section No.	Section Title	Section Description
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
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 facias, 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

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.

Section No.	Section Title	Section Description
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.
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.

Section No.	Section Title	Section Description
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.

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.

Section No.	Section Title	Section Description
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.
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.

Section No.	Section Title	Section Description
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

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

111200	Parking Control Equipment	Parking gate arm and activator units, devices for ticket dispensing, vehicle detection activators, and card, coin, or remote controlled access.
--------	---------------------------	---

Section No.	Section Title	Section Description
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.
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.
134713	Cathodic Protection	Passive cathodic protection to buried metallic utility piping, buried metal structures, and buried metal tanks using sacrificial galvanic anodes.

Section No.	Section Title	Section Description
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.
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.

Section No.	Section Title	Section Description
220700	Plumbing Insulation	Insulation applied to plumbing equipment and piping systems.
221000	Plumbing Piping	Pipe materials and fittings normally encountered in plumbing piping systems and common to more than one section in this Division.
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.
221300	Facility Sanitary Sewerage	Pipe materials, fittings, equipment and pumps for sanitary piping systems.
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.
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.
225100	Swimming Pool Plumbing Systems	Piping and equipment for swimming pools.
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)

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.

Section No.	Section Title	Section Description
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.
231113	Facility Fuel-Oil Piping	Pipe materials, fittings, valves, and piping specialties normally encountered in fuel oil piping systems.
231116	Facility Gasoline Piping	Pipe materials, fittings, valves, and piping specialties normally encountered in gasoline piping systems.
231123	Facility Natural-Gas Piping	Pipe materials, fittings, valves, and piping specialties normally encountered in natural gas piping systems.
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.
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.
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.
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.

Section No.	Section Title	Section Description
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.
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

Section No.	Section Title	Section Description
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.
U 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.
260513	Medium-Voltage Cables	Medium voltage cable and accessories, for systems rated above 600 volts to 35,000 volts.

Section No.	Section Title	Section Description
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.

Section No.	Section Title	Section Description
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.
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.

Section No.	Section Title	Section Description
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.
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.

Section No.	Section Title	Section Description
U 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.
U 312316.13	Trenching	Trenching and backfilling for utilities outside of buildings, usually extending to utility service connections.
312316.26	Rock Removal	Removal of subsurface rock during excavation by mechanical or explosive methods.
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.
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.
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

Section No.	Section Title	Section Description
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.
320513	Soils for Exterior Improvements	Soil and subsoil materials referenced by other sections for fill and grading purposes.
320516	Aggregates for Exterior Improvements	Aggregate materials referenced by other exterior improvements sections for fill and grading purposes.
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.
328400	Planting Irrigation	Piped underground irrigation systems with piping, sprinkler heads, valves, and controls.
329113	Soil Preparation	Preparation of subsoil and topsoil placement.
329119	Landscape Grading	Placing, leveling, and compacting topsoil materials prior to final landscaping
329219	Seeding	Seeding of grassed areas. Also includes subsoil and topsoil preparation
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.

Section No.	Section Title	Section Description
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.
U 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.
331113	Potable Water Supply Wells	Water well drilling, casing and grouting, pump, and accessories used for small residential or commercial domestic water wells.

Section No.	Section Title	Section Description
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.
U 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.

Section No.	Section Title	Section Description
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.
335216	Gas Hydrocarbon Piping	Pipe materials, fittings, and valves used for Site-piped natural gas or propane gas distribution systems, from outside building to utility source or on-Site source.
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.

Section No.	Section Title	Section Description
400536	Fiberglass-Reinforced Plastic Process Pipe	Fiberglass reinforced plastic (FRP) pipe material Fiberglass-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.
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.

Section No.	Section Title	Section Description
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.
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.
U 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.

Section No.	Section Title	Section Description
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.
U 402419	Slurries Process Piping	Plant process piping systems transporting slurries in a water or wastewater treatment plant.
U 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.
U 402510	Liquid Acids Piping	Plant process piping systems transporting acids and acidic solutions in a water or wastewater treatment plant.
U 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.

Section No.	Section Title	Section Description
406700	Control System Equipment Panels and Racks	Pump control panel and accessories for a duplex wastewater lift station.
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.

Section No.	Section Title	Section Description
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.
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.
U 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.

Section No.	Section Title	Section Description
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.
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.
U 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.

Section No.	Section Title	Section Description
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.
U 462333	Aerated Grit Removal Equipment	Aerated grit removal equipment, including airlift pump and screw conveyor.
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.
U 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.

Section No.	Section Title	Section Description
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.
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.

Section No.	Section Title	Section Description
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.
U 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.
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.

Section No.	Section Title	Section Description
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.
U 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.

Section No.	Section Title	Section Description
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.
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.

MasterFormat® is produced jointly by The Construction Specifications Institute (CSI) and Construction Specifications Canada (CSC). U.S. copyright is held by CSI and Canadian copyright by CSC. All Rights Reserved. For more information on MasterFormat visit www.MasterFormat.com