Incidental or Included Items

Items that are necessary to properly complete construction, including work and materials, and are not pay items. The following is a list of items in the SUDAS Specifications that are considered incidental to other work unless specified as a pay item on the plans or in the contract documents. Please note - this list is not all-inclusive.

Section 2010 - Earthwork, Subgrade, and Subbase

2010, 1.08, A, 3 Clearing and Grubbing (by units)
Placement of backfill in area where roots have been removed, and removal and disposal of all materials.

2010, 1.08, B, 3 Clearing and Grubbing (by area)
Removal and disposal of all materials and placement of backfill in area where roots have been removed.

2010, 1.08, D, 2, c Topsoil, Compost-amended
Furnishing and incorporating compost.

2010, 1.08, E, 3 Excavation, Class 10, Class 12, or Class 13
a. Site preparation for, and the construction of, embankment, fills, shoulder backfill, and backfill behind curbs.
b. Overhaul.
c. Finishing the soil surface, including roadways, shoulders, behind curbs, side ditches, slopes, and borrow pits.
d. Repair or replacement of any fences that have been unnecessarily damaged or removed.
e. Compaction testing, as specified in the contract documents.

2010, 1.08, F, 3 Below Grade Excavation (Core Out)
Equipment, tools, labor, disposal of unsuitable materials, dewatering, drying, furnishing, and placement of foundation materials as required by the Engineer, compaction and finishing of the excavated area, and all incidental work as may be required.

2010, 1.08, G, 3 Subgrade Preparation
Excavating, manipulating, replacing, compacting, and trimming to the proper grade.

2010, 1.08, H, 3 Subgrade Treatment
Furnishing, placing, and incorporating the subgrade treatment material (cement, asphalt, fly ash, lime, geogrid, or geotextiles).

2010, 1.08, I, 3 Subbase
Furnishing, placing, compacting, and trimming to the proper grade.
Chapter 1 - General Provisions

1D-3 - Incidental or Included Items

2010, 1.08, J, 1, c  Removal of Structures
Removal and disposal of structures.

2010, 1.08, J, 2, a, 3) Removal of Known Box Culverts
Removal and disposal of known box culverts.

2010, 1.08, J, 2, c, 3) Removal of Known Pipe Culverts
Removal and disposal of known pipe culverts.

2010, 1.08, J, 3, a, 3) Removal of Known Pipes and Conduits
Removal, disposal, and plugging, if specified, of pipes and conduits.

Section 3010 - Trench Excavation and Backfill

3010, 1.08, A  General
2. Removal and disposal of unsuitable backfill material encountered during standard trench excavation.
3. Removal of abandoned private utilities encountered during trench excavation.
4. Furnishing and placing granular bedding material.
5. Placing and compacting backfill material.
6. Dewatering including, but not limited to, all equipment such as generators, pumps, rock for sump pits, discharge piping, and any extra excavation needed to facilitate dewatering according to stormwater regulations, as applicable.
7. Sheeting, shoring, and bracing.
8. Adjusting the moisture content of excavated backfill material to the range specified for placement and compaction.

3010, 1.08, C, 3  Trench Foundation
Removal and disposal of over-excavated material required to stabilize trench foundation; and furnishing, hauling, and placing stabilization material.

3010, 1.08, D, 3  Replacement of Unsuitable Backfill Material
Furnishing, hauling, and placing backfill material.

3010, 1.08, E, 3  Special Pipe Embedment or Encasement
Furnishing and placing all required special pipe embedment or encasement materials.

Section 3020 - Trenchless Construction

3020, 1.08  All items of work contained in this section are incidental to the underground utility pipe being installed and will not be paid for separately.

Section 4010 - Sanitary Sewers

4010, 1.08, A, 1, c  Sanitary Sewer Gravity Main, Trenched
Trench excavation; dewatering; furnishing and installing pipe; pipe lining (if specified); furnishing, placing, and compacting bedding and backfill material; wyes and other fittings; pipe joints; pipe connections; testing; and inspection.
4010, 1.08, A, 2, c  **Sanitary Sewer Gravity Main, Trenchless**  Furnishing and installing pipe; pipe lining (if specified); trenchless installation materials and equipment; pit excavation; dewatering; placing and compacting backfill material; pipe connections; testing; and inspection.

4010, 1.08, B, 1, c  **Sanitary Sewer Gravity Main with Casing Pipe, Trenched**  Furnishing and installing both carrier pipe and casing pipe, pipe lining (if specified); trench excavation, dewatering, furnishing bedding material, placing bedding and backfill material, furnishing and installing annular space fill material, casing spacers, pipe connections, testing, and inspection.

4010, 1.08, B, 2, c  **Sanitary Sewer Gravity Main with Casing Pipe, Trenchless**  Furnishing and installing both carrier pipe and casing pipe; pipe lining (if specified); trenchless installation materials and equipment; pit excavation; dewatering; and placing and compacting backfill material; casing spacers; furnishing and installing annular space fill material; pipe connections; testing; and inspection.

4010, 1.08, C, 1, c  **Sanitary Sewer Force Main, Trenched**  Trench excavation; dewatering; furnishing and installing pipe; furnishing, placing, and compacting bedding and backfill; wyes and other fittings; pipe joints; testing; and inspection.

4010, 1.08, C, 2, c  **Sanitary Sewer Force Main, Trenchless**  Furnishing and installing pipe; trenchless installation materials and equipment; pit excavation; dewatering; placing and compacting backfill material; pipe connections; testing; and inspection.

4010, 1.08, D, 1, c  **Sanitary Sewer Force Main with Casing Pipe, Trenched**  Furnishing and installing both carrier pipe and casing pipe; trench excavation; dewatering; furnishing, placing, and compacting bedding and backfill material; furnishing and installing annular space fill material; casing spacers; pipe connections; testing; and inspection.

4010, 1.08, D, 2, c  **Sanitary Sewer Force Main with Casing Pipe, Trenchless**  Furnishing and installing both carrier pipe and casing pipe; trenchless installation materials and equipment; pit excavation; dewatering; placing and compacting backfill material; casing spacers; furnishing and installing annular space fill material; pipe connections; testing; and inspection.

4010, 1.08, E, 3  **Sanitary Sewer Service Stub**  Trench excavation; furnishing and installing pipe; furnishing, placing, and compacting bedding and backfill material; tap; fittings; testing; and inspection.

4010, 1.08, F, 3  **Sanitary Sewer Service Relocation**  Removal of existing pipe, trench excavation, furnishing new pipe and bedding material, placing and compacting bedding and backfill material, connection back to existing service, compaction, testing, and inspection.

4010, 1.08, G, 3  **Sewage Air Release Valve and Pit**  Excavation; furnishing, placing, and compacting bedding and backfill material; and testing.
4010, 1.08, H, 3  Removal of Sanitary Sewer
Removal, disposal, and capping (if specified) of pipe; and furnishing, placing, and compacting backfill material.

4010, 1.08, I, 3  Sanitary Sewer Cleanout
Plug at the end of the main, fittings, riser pipe, cap with screw plug, casting, and concrete casting encasement.

4010, 1.08, K, 3  Sanitary Sewer Abandonment, Plug
Trench excavation (if necessary), cutting pipe (if required), furnishing and placing plug materials, and placing and compacting backfill material.

4010, 1.08, L, 3  Sanitary Sewer Abandonment, Fill and Plug
Trench excavation (if necessary), cutting pipe (if required), furnishing and placing pipe fill material, furnishing and placing plug materials, and placing and compacting backfill material.

Section 4020 - Storm Sewers

4020, 1.08, A, 1, c  Storm Sewer, Trenched
Trench excavation; dewatering; furnishing and installing pipe; furnishing, placing, and compacting bedding and backfill material; joint wrapping; wyes and other fittings; pipe joints; pipe connections; testing; and inspection.

4020, 1.08, A, 2, c  Storm Sewer, Trenchless
Furnishing and installing pipe; trenchless installation materials and equipment; pit excavation; dewatering; placing and compacting backfill material; pipe connections; testing; and inspection.

4020, 1.08, B, 1, c  Storm Sewer with Casing Pipe, Trenched
Furnishing and installing both carrier pipe and casing pipe; trench excavation; dewatering; furnishing, placing, and compacting bedding and backfill material; furnishing and installing annular space fill material; casing spacers; pipe connections; testing; and inspection.

4020, 1.08, B, 2, c  Storm Sewer with Casing Pipe, Trenchless
Furnishing and installing both carrier pipe and casing pipe; trenchless installation materials and equipment; pit excavation; dewatering; placing and compacting backfill material; casing spacers; furnishing and installing annular space fill material; pipe connections; testing; and inspection.

4020, 1.08, C, 3  Linear Trench Drain
Furnishing and installing the linear trench drain including all appurtenances; furnishing and placement of PCC transition; furnishing, excavation, and backfill of discharge pipe; connection to manhole or intake, if required; installation of apron, if required.

4020, 1.08, D, 3  Removal of Storm Sewer
Removal, disposal, and capping (if specified) of pipe; and furnishing, placing, and compacting backfill material.
**Chapter 1 - General Provisions**

4020, 1.08, F, 3  **Storm Sewer Abandonment, Plug**  
Trench excavation (if necessary), cutting pipe (if required), furnishing and placing plug materials, and placing and compacting backfill material.

4020, 1.08, G, 3  **Storm Sewer Abandonment, Fill and Plug**  
Trench excavation (if necessary), cutting pipe (if required), furnishing and placing pipe fill material, furnishing and placing plug materials, and placing and compacting backfill material.

**Section 4030 - Pipe Culverts**

4030, 1.08, A, 1, c  **Pipe Culvert, Trenched**  
Trench excavation; dewatering; furnishing and installing pipe; furnishing, placing, and compacting bedding and backfill material; connectors; testing; and inspection.

4030, 1.08, A, 2, c  **Pipe Culvert, Trenchless**  
Furnishing and installing pipe; trenchless installation materials and equipment; pit excavation, dewatering, and placing and compacting backfill material; pipe connections; testing; and inspection.

4030, 1.08, B, 3  **Pipe Apron**  
Trench excavation; dewatering; furnishing and installing pipe; furnishing, placing, and compacting bedding and backfill material; connectors; and other appurtenances.

4030, 1.08, C, 3  **Footings for Concrete Pipe Aprons**  
Excavation; dewatering; reinforcing steel; concrete; furnishing and installing apron; furnishing, placing and compacting bedding and backfill material.

**Section 4040 - Subdrains and Footing Drain Collectors**

4040, 1.08, A, 3  **Subdrain**  
Trench excavation, furnishing and placing bedding and backfill material, engineering fabric (when specified), connectors, and elbows and tees. The length of elbows and tees of the pipes installed will be included in the length of pipe measured.

4040, 1.08, B, 3  **Footing Drain Collector**  
Trench excavation, pipe, wyes, tap, fittings, and furnishing and placing bedding and backfill material.

4040, 1.08, D, 3  **Subdrain or Footing Drain Outlets and Connections**  
Pipe, non-shrink grout, coupling bands, and rodent guards for pipes 6 inches or smaller.

4040, 1.08, E, 3  **Storm Sewer Service Stub**  
Trench excavation, furnishing bedding material, placing bedding and backfill material, tap, fittings, and plugs.
Section 4050 - Pipe Rehabilitation

4050, 1.08, A, 1, c  Pre-Rehabilitation Cleaning and Inspection
Pre-cleaning CCTV inspection, light sewer cleaning, debris removal and transport, post cleaning CCTV inspection for Engineer review, and identification and logging of active service taps. If specified in the contract documents, unit price also includes disposal and associated costs for all debris removed from sewer.

4050, 1.08, A, 2, c  Additional Sewer Cleaning
Heavy sewer cleaning; root cutting; deposit cutting; and removing, transporting, disposing, paying associated costs for all debris removed from sewer, and post cleaning CCTV inspection for Engineer review.

4050, 1.08, B, 3  Remove Protruding Service Connections
Removal of protruding service connections and debris removal.

4050, 1.08, C, 1, c  CIPP Main Lining
Furnishing and installing the liner and appurtenances, CCTV inspection immediately prior to lining, bypass pumping unless otherwise specified, sliding foil, post-lining CCTV inspection, and all costs associated with the public information and notification program.

4050, 1.08, C, 2, c  Building Sanitary Sewer Service Reinstatement
Reinstating sanitary sewer service connections, removal of debris, and coordination with service owners.

4050, 1.08, C, 3, c  CIPP End Seal
End seal and installation.

4050, 1.08, D, 3  CIPP Point Repair
Furnishing and placing point repair liner, bypass pumping unless otherwise specified, sewer cleaning, removal of obstructions, debris removal, pipe preparation, and pre and post repair CCTV inspection.

4050, 1.08, E, 1, c  CIPP Service Pipe, Connection
Furnishing and placing service connection liner, bypass pumping unless otherwise specified, documentation, and all costs associated with the public information and notification program.

4050, 1.08, E, 2, c  CIPP Service Repair, Partial Pipe
Furnishing and installing service repair liner, bypass pumping unless otherwise specified, documentation, and all costs associated with the public information and notification program.

4050, 1.08, F, 1, c  Pressure Testing of Mainline Sewer Joints
Bypass pumping unless otherwise specified, control testing, and documentation.

4050, 1.08, F, 2, c  Injection Grouting of Mainline Sewer Joints
Bypass pumping unless otherwise specified, material testing, pressure testing after grouting, re-grouting of failed joints, and documentation. Unit price does not include the quantity of chemical grout used.
Chapter 1 - General Provisions

4050, 1.08, F, 3, c  **Pressure Testing of Service Connections**
Bypass pumping unless otherwise specified, and documentation.

4050, 1.08, F, 4, c  **Injection Grouting of Service Connections**
Bypass pumping unless otherwise specified, material testing, pressure testing after grouting, and documentation. Unit price does not include the quantity of chemical grout used.

4050, 1.08, F, 5, c  **Chemical Grout**
Grout additives; root inhibitor; and supplying, mixing, and measurement of chemical grout.

4050, 1.08, G, 3  **Bypass Pumping**
Development and submittal of the bypassing plan, all staffing, equipment, and appurtenances necessary to accomplish the approved bypassing plan, including reserve equipment.

4050, 1.08, H, 1, c  **Spot Repairs (by Pipe Replacement)**
Uncovering and removing existing pipe and furnishing and placing bedding and backfill material for replacement pipe.

4050, 1.08, H, 2, c  **Spot Repairs (by Linear Foot)**
Furnishing and installing replacement pipe and connections.

Section 4060 - Cleaning, Inspection, and Testing of Sewers

4060, 1.08  Cleaning, inspecting, and testing sanitary sewers, storm sewers, pipe culverts, and rehabilitated pipes (including video inspection) are incidental to other project costs and will not be paid for separately.

Section 5010 - Pipe and Fittings

5010, 1.08, A, 1, c  **Water Main, Trenched**
Trench excavation; dewatering; furnishing and installing pipe; furnishing, placing, and compacting bedding and backfill material; tracer system; testing; disinfection; and polyethylene wrap for ductile iron pipe and for fittings.

5010, 1.08, A, 2, c  **Water Main, Trenchless**
Furnishing and installing pipe; trenchless installation materials and equipment; pit excavation; dewatering; placing and compacting backfill material; tracer system; testing; and disinfection.

5010, 1.08, B, 1, c  **Water Main with Casing Pipe, Trenched**
Furnishing and installing both carrier pipe and casing pipe; trench excavation; dewatering; furnishing and installing pipe; furnishing, placing, and compacting bedding and backfill material; casing spacers; furnishing and installing annular space fill material; tracer system; testing; and disinfection.

5010, 1.08, B, 2, c  **Water Main with Casing Pipe, Trenchless**
Furnishing and installing both carrier pipe and casing pipe; trenchless installation materials and equipment; pit excavation; dewatering; placing and compacting backfill material; casing spacers; furnishing and installing annular space fill material; tracer system; testing; and disinfection.
Chapter 1 - General Provisions

5010, 1.08, C, 1, c  Fitting (by count)
Restrained joints and thrust blocks.

5010, 1.08, C, 2, c  Fitting (by weight)
Restrained joints and thrust blocks.

5010, 1.08, D, 3  Water Service Stub (by each)
Water service corporation; service pipe; curb stop; stop box; trench excavation;
dewatering; furnishing and installing pipe; furnishing, placing, and compacting
bedding and backfill material; and installation of tracer wire system for non-
metallic service pipe.

5010, 1.08, E, 1, c  Water Service Stub (by length), Water Service Pipe
Trench excavation; dewatering; furnishing and installing pipe; furnishing,
placing, and compacting bedding and backfill material; and installation of tracer
wire system for non-metallic service pipe.

Section 5020 - Valves, Fire Hydrants, and Appurtenances

5020, 1.08, A, 3  Valve (Butterfly or Gate)
All components attached to the valve or required for its complete installation,
including underground or above ground operator, square valve operating nut,
valve box and cover, valve box extension, and valve stem extension.

5020, 1.08, B, 3  Tapping Valve Assembly
Tapping sleeve, tapping valve, the tap, valve box and cover, valve box extension,
and valve stem extension.

5020, 1.08, C, 3  Fire Hydrant Assembly
The fire hydrant, barrel extensions sufficient to achieve proper bury depth of
anchoring pipe and height of fire hydrant above finished grade, and components
to connect the fire hydrant to the water main, including anchoring pipe, fittings,
thrust blocks, pea gravel or porous backfill material, and fire hydrant gate valve
and appurtenances, except tapping valve assembly if used.

5020, 1.08, E  Measurement and payment for minor adjustment of an existing valve box by
raising or lowering the adjustable valve box is incidental.

5020, 1.08, G, 3  Valve Box Replacement
Removal of existing valve box; excavation; furnishing and installing new valve
box; backfill; compaction; and all other necessary appurtenances.

5020, 1.08, H, 3  Fire Hydrant Adjustment
Removal and reinstallation of the existing fire hydrant; furnishing and installing
the extension barrel section and stem; and all other necessary appurtenances.

5020, 1.08, I, 3  Fire Hydrant Assembly Removal
Excavation, removal of the fire hydrant, hydrant valve, thrust block, delivery of
the fire hydrant assembly to the Contracting Authority (if specified), capping of
the pipe, backfill, compaction, and surface restoration to match the surrounding
area.
Chapter 1 - General Provisions

1D-3 - Incidental or Included Items

5020, 1.08, J, 3  **Valve Removal**
Excavation, removal of each valve, replacing the removed valve with pipe and connections if required or capping the former valve connection, delivery of the valve to the Contracting Authority (if specified), backfill, compaction, and surface restoration to match the surrounding area.

5020, 1.08, K, 3  **Valve Box Removal**
Excavation, removal of each valve box, delivery of the valve box to the Contracting Authority (if specified), backfill, compaction, and surface restoration to match the surrounding area.

Section 5030 - Testing and Disinfection

5030, 1.08  Testing and disinfection of water systems is incidental to the construction of pipe and fittings.

Section 6010 - Structures for Sanitary and Storm Sewers

6010, 1.08, A, 3  **Manhole**
Excavation; furnishing and installing pipe; lining (if specified); furnishing, placing, and compacting bedding and backfill material; base; structural concrete; reinforcing steel; precast units (if used); concrete fillets; pipe connections; infiltration barriers (sanitary sewer manholes only); castings; and adjustment rings.

6010, 1.08, B, 3  **Intake**
Excavation; furnishing and installing pipe; furnishing, placing, and compacting bedding and backfill material; base; structural concrete; reinforcing steel; precast units (if used); concrete fillets; pipe connections; castings; and adjustment rings.

6010, 1.08, C, 1, c  **Internal Drop Connection**
Cutting the hole and installing a flexible watertight connector, providing and installing the receiving bowl, flexible coupler between the bowl and the drop pipe, the PVC drop pipe, pipe brackets and bolts, the bottom elbow, repair of fillet if required, and a splash guard if required.

6010, 1.08, C, 2, c  **External Drop Connection**
The connection to the manhole and all pipe; fittings; concrete encasement; and furnishing, placing, and compacting bedding and backfill material.

6010, 1.08, E, 3  **Manhole or Intake Adjustment, Minor**
Removing existing casting and existing adjustment rings, furnishing and installing adjustment rings, furnishing and installing new casting, and installing new infiltration barrier (sanitary sewer manholes only).

6010, 1.08, F, 3  **Manhole or Intake Adjustment, Major**
Removal of existing casting, adjustment rings, top sections, and risers; excavation; concrete and reinforcing steel or precast sections; furnishing and installing new casting; installing new infiltration barrier (sanitary sewer manholes only); placing backfill material; and compaction.
Connection to Existing Manhole or Intake
Coring or cutting into the existing manhole or intake, pipe connectors, grout, and waterstop (when required).

Remove Manhole or Intake
Removal of casting, concrete, and reinforcement; plugging pipes; filling remaining structure with flowable mortar; and placing compacted fill over structure to finished grade.

Section 6020 - Rehabilitation of Existing Manholes

Infiltration Barrier, Rubber Chimney Seal
All necessary compression or expansion bands and extension sleeves as necessary to complete chimney seal.

Infiltration Barrier, Molded Shield Sealant.

In-situ Manhole Replacement, Cast-in-place Concrete
Handling of sewer flows as required to properly complete the installation, invert overlay as recommended by the manufacturer, replacement of existing casting with a new casting, and testing the manhole upon completion.

In-situ Manhole Replacement, Cast-in-place Concrete with Plastic Liner
Handling of sewer flows as required to properly complete the installation, invert overlay as recommended by the manufacturer, replacement of existing casting with a new casting, sealing at the frame and cover, sealing pipe penetrations as recommended by the manufacturer, and testing the manhole upon completion.

Manhole Lining with Centrifugally Cast Cementitious Mortar Liner with Epoxy Seal
Handling of sewer flows during lining operations as required to properly complete the installation, and replacement of the existing casting with a new casting.

Section 6030 - Cleaning, Inspection, and Testing of Structures

Cleaning, inspection, and testing of structures are incidental to construction of structures and will not be paid for separately.

Section 7010 - Portland Cement Concrete Pavement

Pavement, PCC
Final trimming of subgrade or subbase, integral curb, bars and reinforcement, joints and sealing, surface curing and pavement protection, safety fencing, concrete for rigid headers, boxouts for fixtures, and pavement smoothness testing.

Curb and Gutter
Final subgrade/subbase preparation, bars and reinforcement, joints and sealing, surface curing and pavement protection, and boxouts for fixtures.
Chapter 1 - General Provisions

7010, 1.08, F, 3  Beam Curb
Final subgrade/subbase preparation, bars and reinforcement, joints and sealing, surface curing and pavement protection, and boxouts for fixtures.

7010, 1.08, G, 3  Concrete Median
Final subgrade/subbase preparation, bars and reinforcement, joints and sealing, surface curing and pavement protection, and boxouts for fixtures.

7010, 1.08, H, 3  PCC Railroad Crossing Approach
Excavation for modified subbase and subdrain, furnishing and installing subdrain, furnishing and installing subdrain outlet or connection to storm sewer, furnishing and installing porous backfill material, furnishing and installing fiber board barrier, furnishing and placing modified subbase material, furnishing and installing reinforcing steel and tie bars, furnishing and placing concrete, furnishing, placing, and compacting HMA.

Section 7011 - Portland Cement Concrete Overlays

7011, 1.08, A, 1, c  PCC Overlay, Furnish Only
Furnishing the concrete mixture and delivery to the project site.

7011, 1.08, A, 2, c  PCC Overlay, Place Only
Integral curb, bars and reinforcement, joints and sealing, finishing and texturing, surface curing and pavement protection, safety fencing, concrete for rigid headers, boxouts for fixtures, and pavement smoothness testing.

7011, 1.08, A, 3, c  Surface Preparation for Bonded PCC Overlay
Sandblasting, shot blasting, scarification, and surface cleaning.

7011, 1.08, A, 4, c  Surface Preparation for Unbonded PCC Overlay
Scarification and surface cleaning.

7011, 1.08, A, 5, c  HMA Separation Layer for Unbonded PCC Overlay
HMA mix, including asphalt binder.

7011, 1.08, A, 6, c  Geotextile Fabric Separation Layer for Unbonded PCC Overlay
Cleaning surface and furnishing, placing, and securing the geotextile fabric separation layer.
Section 7020 - Hot Mix Asphalt Pavement

7020, 1.08, A, 3  Pavement, HMA (by ton)
Asphalt mix with asphalt binder, tack coats between layers, construction zone protection, and quality control.

7020, 1.08, B, 3  Pavement, HMA (by square yard)
Asphalt mix with asphalt binder, tack coats between layers, construction zone protection, and quality control.

7020, 1.08, C, 3  HMA Base Widening (by ton)
Asphalt mix with asphalt binder, tack coats between layers, construction zone protection, and quality control.

7020, 1.08, D, 3  HMA Base Widening (by square yard)
Asphalt mix with asphalt binder, tack coats between layers, construction zone protection, and quality control.

7020, 1.08, E, 3  HMA Railroad Crossing Approach
Excavation for modified subbase and subdrain, furnishing and installing subdrain, furnishing and installing subdrain outlet, furnishing and installing porous backfill material, furnishing and installing fiber board barrier, furnishing and placing modified subbase material, furnishing and applying tack coat, furnishing, placing, and compacting HMA.

7020, 1.08, I, 3  HMA Pavement Samples and Testing
Certified plant inspection, pavement thickness cores, density analysis, profilograph pavement smoothness measurement (when required by the contract documents), and air void testing.

Section 7021 - Hot Mix Asphalt Overlays

7021, 1.08, A, 3  HMA Overlay (by ton)
Asphalt mix with asphalt binder, tack coats between layers, construction zone protection, and quality control.

7021, 1.08, B, 3  HMA Overlay (by square yard)
Asphalt mix with asphalt binder, tack coat, construction zone protection, and quality control.

Section 7030 - Sidewalks, Shared Use Paths, and Driveways

7030, 1.08, A, 3  Removal of Sidewalk, Shared Use Path, or Driveway
Sawing, hauling, and disposal of materials removed.

7030, 1.08, B, 3  Removal of Curb
Hauling and disposal of materials removed.

7030, 1.08, C, 3  Shared Use Paths
Subgrade preparation, jointing, sampling, smoothness testing and correction, and testing.
Chapter 1 - General Provisions

1D-3 - Incidental or Included Items

7030, 1.08, D, 3  Special Subgrade Preparation for Shared Use Paths
Water required to bring subgrade moisture content to within the required limits.

7030, 1.08, E, 3  Sidewalk, PCC
Minor grade adjustments at driveways and other intersections, subgrade preparation, formwork, additional thickness at thickened edges, jointing, sampling, smoothness testing and correction, and testing.

7030, 1.08, F, 3  Brick/Paver Sidewalk with Pavement Base
Subgrade preparation, pavement base, setting bed, neoprene asphalt adhesive for asphalt setting bed, setting the bricks/pavers, installing weep holes and associated materials, and sand/cement joint filler.

7030, 1.08, G, 3  Detectable Warning
Steel bar supports and manufactured detectable warning panels.

7030, 1.08, H, 1, c  Driveway, Paved
Excavation, subgrade preparation, jointing, sampling, and testing.

7030, 1.08, H, 2, c  Driveway, Granular
Excavation and preparation of subgrade.

Section 7040 - Pavement Rehabilitation

7040, 1.08, A, 3  Full Depth Patches
Sawing, removing, and disposing of existing pavement and reinforcing; restoring the subgrade; furnishing and installing tie bars and dowel bars; furnishing and placing the patch material, including the asphalt binder and tack coat; forming and constructing integral curb; surface curing and pavement protection; joint sawing and filling; and placing backfill and restoring disturbed surfaces.

7040, 1.08, B, 3  Subbase Over-exavation
Removal of existing subbase or subgrade, disposal of materials removed, furnishing and placing subbase material, and any additional excavation required for subbase placement.

7040, 1.08, C, 3  Partial Depth Patches
Sawing, removing, and disposing of existing pavement; furnishing tack coat or bonding agent; furnishing and placing the patch material; curing; joint filling (PCC patches only); placing backfill; and restoring disturbed surfaces.

7040, 1.08, D, 3  Crack and Joint Cleaning and Filling, Hot Pour
Furnishing crack and joint filler material and routing, sawing, cleaning, and filling joints or cracks.

7040, 1.08, E, 1, c  Crack Cleaning and Filling, Emulsion
Furnishing emulsified crack filler material, cleaning cracks, placing soil sterilant, and filling cracks.

7040, 1.08, E, 2, c  Hot Mix Asphalt for Crack Filling
Cleaning, applying tack coat, and furnishing and placing HMA for crack filling.
Chapter 1 - General Provisions

**Section 7040 - Diamond Grinding**
7040, 1.08, F, 3
Diamond grinding pavement, testing for smoothness according to the contract documents, and removal of slurry and residue from the project site.

**Section 7040 - Milling**
7040, 1.08, G, 3
Milling pavement; furnishing water; and salvaging, stockpiling, and removing cuttings and debris.

**Section 7040 - Pavement Removal**
7040, 1.08, H, 3
Sawing, breaking, removing, and disposing of existing pavement and reinforcing steel.

**Section 7040 - Curb and Gutter Removal**
7040, 1.08, I, 3
Sawing, breaking, removing, and disposing of existing curb and gutter.

**Section 7040 - Dowel Bar Retrofit**
7040, 1.08, J, 3
Cutting the slots, preparing the slots, placing and grouting the bars, and curing the surface.

**Section 7040 - Core Hole Cutting and Replacement**
7040, 1.08, K
Cutting the core hole, vacuum excavation, furnishing and placing backfill material and pavement, or replacing the pavement core using waterproof bonding material, if specified.

**Section 7040 - Required Sampling and Testing**
7040, 1.08, L
Required sampling and testing for pavement repair and rehabilitation work is incidental to other project costs and will not be paid for separately.

**Section 7050 - Asphalt Stabilization**
7050, 1.08, A, 3
Asphalt Stabilization
Furnishing and spreading imported material, applying and incorporating asphalt stabilization, blending of the materials, grading and compacting the blended materials, and final clean up.

**Section 7060 - Bituminous Seal Coat**
7060, 1.08, A, 3
Bituminous Seal Coat (by area)
Surface preparation including protection of street fixtures; furnishing and placing of materials, including fillets at intersecting streets, driveways, and turnouts; and final clean up.

7060, 1.08, B, 1, c
Bituminous Seal Coat (by units), Cover Aggregate
Surface preparation including protection of street fixtures; furnishing and placing of materials, including fillets at intersecting streets, driveways, and turnouts; and final clean up.

7060, 1.08, B, 2, c
Bituminous Seal Coat (by units), Binder Bitumen
Furnishing and placing of materials, including fillets at intersecting streets, driveways, and turnouts; and final clean up.
Section 7070 - Emulsified Asphalt Slurry Seal

7070, 1.08, A, 3  Emulsified Asphalt Slurry Seal (by area)
Surface preparation and furnishing and placing of materials, including fillets at intersecting streets, driveways, and turnouts.

7070, 1.08, B, 1, c  Emulsified Asphalt Slurry Seal (by units), Aggregate
Surface preparation and furnishing and placing of materials, including fillets at intersecting streets, driveways, and turnouts.

7070, 1.08, B, 2, c  Emulsified Asphalt Slurry Seal (by units), Asphalt Emulsion
Surface preparation and furnishing and placing of materials, including fillets at intersecting streets, driveways, and turnouts.

Section 7080 - Permeable Interlocking Pavers

7080, 1.08, B, 3  Engineering Fabric
Placing and securing filter fabric and any overlapped areas.

7080, 1.08, C, 3  Underdrain
Furnishing and placing pipe, cleanouts, observation wells, and pipe fittings.

7080, 1.08, D, 3  Storage Aggregate
Furnishing, hauling, placing, and compacting storage aggregate.

7080, 1.08, E, 3  Filter Aggregate
Furnishing, hauling, placing filter, and compacting aggregate.

7080, 1.08, F, 3  Permeable Interlocking Pavers
Testing, furnishing and placing bedding course, furnishing and installing permeable interlocking pavers, furnishing and placing joint/opening fill material, refilling joint after 6 months, and pavement protection.

7080, 1.08, G, 3  PCC Edge Restraint
Final trimming of subgrade or subbase, bars and reinforcement, joints and sealing, surface curing and pavement protection, safety fencing, and boxouts for fixtures.

Section 7090 - Cold-in-Place Pavement Recycling

7090, 1.08, A, 3  Cold-in-Place Recycling
Milling and sizing of existing asphalt layers; protecting street fixtures; development of a job mix formula; adding and mixing recycling agents and additives, if required; supplying and incorporating water; compacting the reclaimed mix; shaping of the mix; completing secondary compaction, if required; removing any loose or excess material; and final clean up.

7090, 1.08, B, 3  Bituminous Recycling Agents
Furnishing and placing of materials and mixing the agent into the recycled mix.

7090, 1.08, C, 3  Chemical Recycling Additives
Furnishing and placing of materials and mixing the agent into the recycled mix.
Section 7091 - Full Depth Reclamation

7091, 1.08, A, 3  **Full Depth Reclamation**  
Pulverizing and sizing of existing asphalt layers; incorporating and mixing of existing underlying materials; protecting street fixtures; development of a job mix formula; adding and mixing stabilizing agents and additives, if required; compacting the reclaimed mix; shaping of the mix; removing any loose or excess material; curing; and final clean up.

7091, 1.08, B, 3  **Mechanical Stabilization Agents**  
Furnishing and placing of aggregate and blending of the aggregates.

7091, 1.08, C, 3  **Bituminous Stabilization Agents**  
Furnishing and placing of materials and mixing the agent into the reclaimed mix.

7091, 1.08, D, 3  **Chemical Stabilization Agents**  
Furnishing and placing of materials and mixing the agent into the reclaimed mix.

7091, 1.08, F, 3  **Interlayer for Cement Stabilized Base**  
Surface cleaning, furnishing, and placing of the specified interlayer.

Section 8010 - Traffic Signals

8010, 1.08, B, 3  **Temporary Traffic Signal**  
Furnishing, installing, maintaining, and removing poles; wiring; traffic signal control equipment including pedestrian equipment if specified; all modifications of signal timing due to changes in construction staging; relocation of trailer mounted temporary traffic signal systems; placement in another physical location to address changes in construction staging; and all appurtenances.

Section 8020 - Pavement Markings

8020, 1.08, B, 3  **Painted Pavement Markings, Solvent/Waterborne**  
Reflectorizing spheres, layout, surface preparation, and application of marking paint.

8020, 1.08, C, 3  **Painted Pavement Markings, Durable**  
Layout, surface preparation, and application of marking paint.

8020, 1.08, D, 3  **Painted Pavement Markings, High-Build**  
Layout, surface preparation, and application of marking paint.

8020, 1.08, E, 3  **Permanent Tape Markings**  
Layout, surface preparation, and application of marking tape.

8020, 1.08, F, 3  **Wet, Retroreflective Removable Tape Markings**  
Layout, surface preparation, application, and removal.

8020, 1.08, G, 3  **Painted Symbols and Legends**  
Layout, surface preparation, and application of each symbol and legend.
Chapter 1 - General Provisions

8020, 1.08, H, 3  Precut Symbols and Legends
Layout, surface preparation, and application of each symbol and legend.

8020, 1.08, I, 3  Temporary Delineators
Installation and removal of delineators.

8020, 1.08, J, 3  Raised Pavement Markers
Installation and removal of pavement markers.

8020, 1.08, K, 3  Pavement Markings Removed
Pavement marking removal and waste material collection, removal, and disposal.

8020, 1.08, L, 3  Symbols and Legends Removed
Symbol and legend marking removal and waste material collection, removal, and disposal.

8020, 1.08, M, 3  Grooves Cut for Pavement Markings
Layout, cutting grooves, collection and disposal of removed material, and additional groove width and transition length beyond the pavement marking dimensions.

8020, 1.08, N, 3  Grooves Cut for Symbols and Legends
Layout, cutting grooves, and collection and disposal of removed material.

Section 8030 - Temporary Traffic Control

8030, 1.08, A, 3  Temporary Traffic Control
Installation, maintenance, and removal of temporary traffic control; total roadway closures with installation and removal of detour signing as shown in the contract documents; removal and reinstallation or covering of permanent traffic control devices that conflict with the temporary traffic control plan; monitoring and documenting traffic control conditions; and flaggers. When required in the contract documents, the following are also included in traffic control unless a separate bid item is provided: portable dynamic message signs, temporary barrier rail, temporary flood lighting, and pilot cars.

Section 9010 - Seeding

9010, 1.08, A, 1, c  Conventional Seeding, Seeding
Removal of rock and other debris from the area; repairing rills and washes; preparing the seedbed; furnishing and placing seed, including any treatment required; furnishing and placing fertilizer and mulch; and furnishing water and other care during the care period, unless these items are bid separately.

9010, 1.08, B, 3  Hydraulic Seeding, Seeding, Fertilizing, and Mulching
Removal of rock and other debris from the area; repairing rills and washes; preparing the seedbed; furnishing and placing seed, including any treatment required; furnishing and placing fertilizer and mulch; and furnishing water and other care during the care period, unless these items are bid separately.
Chapter 1 - General Provisions

Pneumatic Seeding, Seeding, Fertilizing, and Mulching
Removal of rock and other debris from the area; repairing rills and washes; preparing the seedbed; furnishing and placing seed, including any treatment required; furnishing and placing fertilizer and mulch; and furnishing water and other care during the care period, unless these items are bid separately.

Watering
Water, pumps, meters, equipment, water tanker/container, transportation, hoses, and sprinklers.

Warranty
All work required to correct any defects in the original placement of the seeding for the period of time designated.

Section 9020 - Sodding

Sod
Preparation of sod and sodbed, stakes, fertilizing, watering, maintenance, and clean-up. Also includes any necessary sod replacements during maintenance period.

Section 9030 - Plant Material and Planting

Plants (by count)
Delivery, excavation, installation, watering, placing backfill material, mulching, wrapping, staking or guyng, herbicide, maintenance during the establishment period, and replacements.

Plants (by count), With Warranty
Delivery, excavation, installation, watering, placing backfill material, mulching, wrapping, staking or guyng, herbicide, maintenance during the establishment and warranty periods, and replacements.

Plants (by lump sum)
Delivery, excavation, installation, watering, placing backfill material, mulching, wrapping, staking or guyng, herbicide, maintenance during the establishment period, and replacements.

Plants (by lump sum), With Warranty
Delivery, excavation, installation, watering, placing backfill material, mulching, wrapping, staking or guyng, herbicide, maintenance during the establishment and warranty period, and replacements.

Tree Drainage Wells
Excavation, furnishing and placing rock, engineering fabric, and placing backfill material.
Section 9040 - Erosion and Sediment Control

9040, 1.07, C When applicable, conduct all operations in compliance with the Iowa DNR NPDES General Permit No. 2. Labor, equipment, or materials not included as a bid item, but necessary to prevent stormwater contamination from construction related sources, are considered incidental. Incidental work related to compliance with the permit may include, but is not limited to: hazardous materials protection, fuel containment, waste disposal, and providing employee sanitary facilities.

9040, 1.08, A, 1, c SWPPP Preparation Development of a SWPPP by the Contractor meeting local and state agency requirements, filing the required public notices, filing a Notice of Intent for coverage of the project under the Iowa DNR NPDES General Permit No. 2, and payment of associated NPDES permit fees.

9040, 1.08, A, 2, c SWPPP Management All work required to comply with the administrative provisions of the Iowa DNR NPDES General Permit No. 2; including record keeping, documentation, updating the SWPPP, filing the Notice of Discontinuation, etc. Item also includes weekly inspections required to satisfy the provisions of General Permit No. 2, unless otherwise specified in the contract documents.

9040, 1.08, D, 1, c Filter Socks, Installation Anchoring stakes.

9040, 1.08, D, 2, c Filter Socks, Removal Restoration of the area to finished grade and off-site disposal of filter socks and accumulated sediment.

9040, 1.08, E, 3 Temporary RECP Excavation, staples, anchoring devices, and material for anchoring slots.

9040, 1.08, F, 1, c Wattles, Installation Anchoring stakes.

9040, 1.08, F, 2, c Wattles, Removal Restoration of the area to finished grade and off-site disposal of wattle and accumulated sediment.

9040, 1.08, G, 1, c Check Dams, Rock Engineering fabric.

9040, 1.08, G, 2, a, 3) Check Dams, Manufactured, Installation Anchoring stakes.

9040, 1.08, G, 2, b, 3) Check Dams, Manufactured, Removal Restoration of the area to finished grade and off-site disposal of manufactured check dam and accumulated sediment.

9040, 1.08, H, 3 Temporary Earth Diversion Structures Removal of the structure upon completion of the project.
9040, 1.08, I, 3  Level Spreaders
Maintaining the spreader during the period of construction and removal upon completion of the project, unless otherwise specified in the contract documents.

9040, 1.08, J, 3  Rip Rap
Engineering fabric.

9040, 1.08, K, 3  Temporary Pipe Slope Drains
Excavation, furnishing and installing pipe and pipe aprons, grading, and removal of the slope drain upon completion of the project.

9040, 1.08, L, 1, c  Sediment Basin, Outlet Structure
Concrete base, dewatering device, anti-vortex device, outlet pipe, and anti-seep collars (if specified).

9040, 1.08, L, 2, c  Sediment Basin, Removal of Sediment
Dewatering and removal and off-site disposal of accumulated sediment.

9040, 1.08, L, 3, c  Sediment Basin, Removal of Outlet Structure
Dewatering and off-site disposal of the outlet structure, concrete base, emergency spillway, and accumulated sediment.

9040, 1.08, M, 1, c  Sediment Trap Outlet, Installation
Engineering fabric.

9040, 1.08, M, 2, c  Sediment Trap Outlet, Removal of Sediment
Dewatering and removal and off-site disposal of accumulated sediment.

9040, 1.08, M, 3, c  Sediment Trap Outlet, Removal of Device
Dewatering and off-site disposal of sediment trap outlet and accumulated sediment.

9040, 1.08, N, 1, c  Silt Fence or Silt Fence Ditch Check, Installation
Anchoring posts.

9040, 1.08, N, 2, c  Silt Fence or Silt Fence Ditch Check, Removal of Sediment
Anchoring posts.

9040, 1.08, N, 3, c  Silt Fence or Silt Fence Ditch Check, Removal of Device
Restoration of the area to finished grade and off-site disposal of fence, posts, and accumulated sediment.

9040, 1.08, O, 1, c  Stabilized Construction Entrance (by Square Yard)
Subgrade stabilization fabric.

9040, 1.08, O, 2, c  Stabilized Construction Entrance (by Ton)
Subgrade stabilization fabric.

9040, 1.08, P, 1, c  Dust Control, Water
Furnishing, transporting, and distributing water to the haul road.

9040, 1.08, R, 3  Turf Reinforcement Mats (TRM)
Excavation, staples, anchoring devices, and material for anchoring slots.
Chapter 1 - General Provisions

9040, 1.08, T, 1, c  Inlet Protection Device, Installation
Removal of the device upon completion of the project.

9040, 1.08, T, 2, c  Inlet Protection Device, Maintenance
Removal and off-site disposal of accumulated sediment.

9040, 1.08, U, 3  Flow Transition Mat
Anchoring devices.

Section 9050 - Gabions and Revet Mattresses

9050, 1.08, A, 3  Gabions
Furnishing and assembling wire mesh baskets, PVC coating (if specified in the contract documents), fasteners, furnishing and placing gabion stone, engineering fabric, and anchor stakes.

9050, 1.08, B, 3  Revet Mattresses
Furnishing and assembling wire mesh baskets, PVC coating (if specified in the contract documents), fasteners, furnishing and placing mattress stone, engineering fabric, and anchor stakes.

Section 9060 - Chain Link Fence

9060, 1.08, A, 3  Chain Link Fence
Posts, fabric, rails, braces, truss rods, ties, tension wire, tension bands, tension bars, grounds, fittings, PVC coating (if specified in the contract documents), excavation of post holes, and concrete encasement of posts.

9060, 1.08, B, 3  Gates
Gate rails, fabric, stretcher bars, braces, vertical stay, hinges, latches, keepers, drop bar lock, center gate stop, and barbed wire (if specified).

9060, 1.08, C, 3  Barbed Wire
Furnishing and installing all necessary strands of barbed wire, anchors, and barbed wire supporting arms.

9060, 1.08, D, 3  Removal and Reinstallation of Existing Fence
Removing vegetation; removing all fence fabric, appurtenances, posts, and gates; removal of concrete encasement from posts; storage of the removed fencing materials to prevent damage; reinstallation of the posts, gates, and fabric, including all appurtenances; and replacement of any fence parts that are not able to be salvaged and reinstalled. Replace items damaged from Contractor’s operations with new materials, at no additional cost to the Contracting Authority.

9060, 1.08, E, 3  Removal of Fence
Off-site disposal of fence (including posts, concrete encasement of posts, gates, grounds, and barbed wire) and placing and compacting backfill material in post holes.

9060, 1.08, F, 3  Temporary Fence
Furnishing, installing, and removing posts, fabric, ties, and fittings.
Section 9070 - Landscape Retaining Walls

9070, 1.08, A, 3  Modular Block Retaining Wall
Excavation, foundation preparation, furnishing and placing wall units, geogrid (if necessary), leveling pad, subdrain, porous backfill material for subdrain, engineering fabric for subdrain, granular backfill material, suitable backfill material, and shoring as necessary.

9070, 1.08, B, 3  Limestone Retaining Wall
Excavation, foundation preparation, furnishing and placing leveling pad, limestone, subdrain, porous backfill material for subdrain, engineering fabric for subdrain, suitable backfill material, and shoring as necessary.

9070, 1.08, C, 3  Landscape Timbers
Excavation, foundation preparation, furnishing and placing leveling pad, landscape timbers, spikes, reinforcing bar, subdrain, porous backfill material for subdrain, engineering fabric for subdrain, suitable backfill material, and shoring as necessary.

Section 9071 - Segmental Block Retaining Walls

9071, 1.08, A, 3  Segmented Block Retaining Wall
Design by a Licensed Professional Engineer in the State of Iowa, excavation, foundation preparation, furnishing and placing wall units, geogrid, leveling pad, subdrain, porous backfill material for subdrain, engineering fabric for subdrain, suitable backfill material, and shoring as necessary.

9071, 1.08, C, 3  Granular Backfill Material
Furnishing, transporting, placing, and compacting material.

Section 9072 - Combined Concrete Sidewalk and Retaining Walls

9072, 1.08, A, 3  Combined Concrete Sidewalk and Retaining Wall
Excavation; foundation preparation; furnishing and placing concrete and reinforcing steel; joint material; subdrain; porous backfill material; suitable backfill material; finishing disturbed areas; and shoring as necessary.

Section 9080 - Concrete Steps, Handrails, and Safety Rail

9080, 1.08, A, 3  Concrete Steps
Reinforcement, expansion joint material, and preparation of subgrade.

9080, 1.08, B, 3  Handrail
Posts, mounting hardware or concrete grout, and finishing (painted, galvanized, or powder coated).

9080, 1.08, C, 3  Safety Rail
Posts, pickets, mounting hardware, epoxy grout, and finishing (painted, galvanized, or powder coated).
Section 10,010 - Demolition
10,010, 1.08, A, 3
Demolition Work
Removal of trees, brush, vegetation, buildings, building materials, contents of buildings, appliances, trash, rubbish, basement walls, foundations, sidewalks, steps, and driveways from the site; disconnection of utilities; furnishing and compaction of backfill material; furnishing and placing topsoil; finish grading of disturbed areas; placing and removing safety fencing; removal of fuel and septic tanks and cisterns; seeding; and payment of any permit or disposal fees.

10,010, 1.08, B, 3
Plug or Abandon Well
Obtaining all permits; plug or abandon private wells according to local, state, and federal regulations.

Section 11,010 - Construction Survey
11,010, 1.08, A, 3
Construction Survey
The costs of resetting project control points, re-staking, and any additional staking requested beyond the requirements of this section.

11,010, 1.08, B, 3
Monument Preservation and Replacement
Property research and documentation, locating monuments prior to construction, replacement of disturbed monuments, and preparation and filing of the monument preservation certificate.

Section 11,020 - Mobilization
11,020, 1.07, B
When the proposal form does not include a bid item for mobilization, all costs incurred by the contractor for mobilization are incidental to other work and no separate payment will be made.

11,020, 1.08, A, 3
Mobilization
The movement of personnel, equipment, and supplies to the project site; the establishment of offices, buildings, and other facilities necessary for the project; and bonding, permits, and other expenses incurred prior to construction.

Section 11,040 - Temporary Sidewalk Access
11,040, 1.08, A, 3
Temporary Pedestrian Residential Access
Supplying and placing granular material, continuous maintenance of granular surface, removal of temporary granular sidewalk, and restoring disturbed surfaces to a condition equal to that which existed prior to construction.

11,040, 1.08, B, 3
Temporary Granular Sidewalk
Excavation, grading, timber edging, supplying and placing granular material, continuous maintenance of granular surface, removal of temporary granular sidewalk, and restoring disturbed surfaces to a condition equal to that which existed prior to construction.

11,040, 1.08, C, 3
Temporary Longitudinal Channelizing Device
Construction, placement, maintenance, and removal of the device.
Section 11,050 - Concrete Washout

11,050, 1.08, A, 3  Concrete Washout
Providing concrete washwater containment, collection, and disposal.