

October 29, 2020

# **Wisconsin Department of Transportation**

Division of Transportation Systems Development

Bureau of Project Development 4822 Madison Yards Way, 4<sup>th</sup> Floor South Madison, WI 53705

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# NOTICE TO ALL CONTRACTORS:

Proposal #28: 6424-03-70, WISC 2020 556 C Waupaca, Main Street Badger Street to Granite Street Local Street Waupaca County 6424-03-80 C Waupaca, Main Street Badger Street to Granite Street Local Street Waupaca County

# Letting of November 10, 2020

This is Addendum No. 01, which provides for the following:

# Special Provisions:

Revised Special Provisions				
Article	Description			
No.				
69	Salvage Trolley Car Rail, SPV.0090.14			
73	Soil Cell System- Stage 1, SPV.105.02 and Soil Cell System- Stage 2, SPV.105.03			
No. 69 73	Salvage Trolley Car Rail, SPV.0090.14 Soil Cell System- Stage 1, SPV.105.02 and Soil Cell System- Stage 2, SPV.105.03			

Added Special Provisions			
Article No.	Description		
77	Item SPV.0060.37, Remove Existing Tree Grate and Frame		

# **Schedule of Items:**

Added Bid Item Quantities						
Rid Itom	Itom Description	Unit	Old	Revised	Proposal	
Did item	Item Description		Quantity	Quantity	Total	
465.0125	Asphaltic Surface Temporary		0	170	170	
608.3615	608.3615 Storm Sewer Pipe Class III-B 15-Inch		0	361	361	
608.3618	Storm Sewer Pipe Class III-B 18-Inch	LF	0	55	55	
608.3624	Storm Sewer Pipe Class III-B 24-Inch	LF	0	316	316	
608.3630	Storm Sewer Pipe Class III-B 30-Inch	LF	0	257	257	
608.3636	Storm Sewer Pipe Class III-B 36-Inch	LF	0	341	341	
SPV.0060.37	Remove Existing Tree Grate and Frame	EA	0	18	18	

Deleted Bid Item Quantities						
Bid Item	Item Description	Unit	Old Quantity	Revised Quantity	Proposal Total	
608.0315	Storm Sewer Pipe Reinforced Concrete Class III 15-Inch	LF	361	-361	0	
608.0318	Storm Sewer Pipe Reinforced Concrete Class III 18-Inch	LF	55	-55	0	
608.0324	Storm Sewer Pipe Reinforced Concrete Class III 24-Inch	LF	316	-316	0	
608.0330	Storm Sewer Pipe Reinforced Concrete Class III 30-Inch	LF	257	-257	0	
608.0336	Storm Sewer Pipe Reinforced Concrete Class III 36-Inch	LF	341	-341	0	

# Plan Sheets:

Revised Plan Sheets				
Plan Sheet	Plan Sheet Title (brief description of changes to sheet)			
45	Storm Sewer (changed storm sewer bid items for SSPRC Class III to SSP Class III-B)			
47	Storm Sewer (changed storm sewer bid items for SSPRC Class III to SSP Class III-B)			
48	Storm Sewer (changed storm sewer bid items for SSPRC Class III to SSP Class III-B)			
49	Storm Sewer (changed storm sewer bid items for SSPRC Class III to SSP Class III-B)			
50	Storm Sewer (changed storm sewer bid items for SSPRC Class III to SSP Class III-B)			
51	Storm Sewer (changed storm sewer bid items for SSPRC Class III to SSP Class III-B)			
94	Traffic Control - Stage 1A (added Asphaltic Surface Temporary (3 Inch)			
95	Traffic Control - Stage 1B (added Asphaltic Surface Temporary (3 Inch)			
104	Miscellaneous Quantities (added Item SPV.0060.37 Removing Existing Tree Grate and Frame)			
107	Miscellaneous Quantities (added Item 465.0125 Asphaltic Surface Temporary)			
109	Miscellaneous Quantities (removed storm sewer bid items for SSPRC Class III and changed to SSP Class III-B)			
123	Miscellaneous Quantities (added Item SPV.0105.03 Soil Cell System- Stage 2)			

Added Plan Sheets				
Plan Sheet	Plan Sheet Title (brief description of why sheet was added)			
159A	SDD – Urban Doweled Concrete Pavement			

The responsibility for notifying potential subcontractors and suppliers of these changes remains with the prime contractor.

Sincerely,

Mike Coleman

Proposal Development Specialist Proposal Management Section

#### ADDENDUM NO. 01 6424-03-70 and 6424-03-80 October 29, 2020

## **Special Provisions**

# 69. Salvaged Trolley Car Rail, Item SPV.0090.14.

Replace entire article language with the following:

### **A** Description

This special provision describes the salvage and return of trolley car rails and all metal parts to the City of Waupaca and disposing of all other associated materials.

### **B** (Vacant)

### **C** Construction

Separate the trolley car rails from the concrete pavement located beneath the asphaltic overlay. Return the rails and associated metal components to the City of Waupaca City of Public Works department at 111 S. Main Street, Waupaca, WI 54981. Contact Justin Berrens, Director of Public Works, to coordinate drop off of the above materials at 715.258.4420. All non-metal materials removed to become the property of the contractor.

#### **D** Measurement

The department will measure Salvaged Trolley Car Rail in length by the linear foot along the track centerline, acceptably completed.

### E Payment

 The department will pay for measured quantities at the contract unit price under the following bid item:

 ITEM NUMBER
 DESCRIPTION
 UNIT

 SPV.0090.14
 Salvaged Trolley Car Rail
 LF

 Payment is full compensation for removing, salvaging, and delivering Salvaged Trolley Car Rail and associated metal parts, removing and properly disposing of all wooden ties and non-metal debris, and for backfilling and compacting any depression left by the removal with acceptable material.

# 73. Soil Cell System- Stage 1, SPV.0105.02; Soil Cell System- Stage 2, SPV.0105.03.

Replace entire article language with the following:

#### **A** Description

This section includes the supply and installation of the urban tree planting system, related materials, components and activities. The urban tree planting system provides the necessary elements for growing trees to their full potential in dense urban environments.

Other materials include, but are not limited to, aggregate, geotextile, geogrid, PAVEMENT SUPPORT SYSTEM, root barriers, underground rootball anchoring, soil inspection portals, aeration/irrigation piping and surface inlets and planting soil.

All work is to be completed per the design requirements of the Consultant of record and to meet or exceed the manufacturer's design and installation requirements. The soil cell system must provide a minimum uncompacted planting soil volume of 375 cubic feet per tree.

#### **B** Materials

Furnish an urban tree planting system specifically designed for the purpose of providing large volumes of uncompacted soil for healthy tree growth and/or stormwater management (bioretention) under load-bearing pavement surfaces. At minimum, the urban tree planting system shall provide for uncompacted soil, soil and

rootball aeration/irrigation, management of tree roots, soil inspection, rootball anchoring and stormwater drainage.

Specific to the site requirements, the urban tree planting system shall have the flexibility to be assembled around existing structures, utilities and in tight constraints to achieve the specified soil and/or stormwater volume. The system shall allow for easy disassembly and reassembly to allow for utility repair and/or maintenance within and below the system.

The urban tree planting system shall be a complete system that at minimum includes, but is not limited to the following integral components: pavement support system, geogrid/geofabric, aeration/irrigation piping, fittings and surface inlets, root management products, underground rootball anchoring system and inspection portals.

# Pavement Support System / Soil Cell System

The pavement support system / soil cell system is a plastic modular, pavement support system comprising of interlocking vertical uprights, infill panels and a top deck that allows for air movement above the soil profile. This system is designed to be filled with planting soil for tree rooting; bioretention soil for tree rooting and stormwater attenuation and pollutant removal; or left empty and used for stormwater infiltration, detention or retention. It is an engineered, load-bearing system that is designed to be used sub-surface under pedestrian and/or vehicle rated pavement surfaces.

For ease of installation and for future utility repair and/or maintenance, the pavement support system shall consist of two main components, an upright and a top deck. An optional interlocking side infill panel shall be available and installed where additional lateral strength is required, per the consultants design requirements.

The pavement support system shall have the ability to be uniformly stacked to increase the cubic volume of soil per area of installation, and to work around existing below ground infrastructure. At minimum the following depth configurations shall be available: ~24".

The assembled pavement support system shall have a minimum accessible soil volume of 97% and be continuously open in both length and width.

The assembled pavement support system shall have the capability of accommodating utilities up to  $\sim$ 16" (400 mm) within the system.

As assembled, the pavement support system uprights shall interlock in both the vertical and horizontal axis, and the top deck shall interlock with the uprights. The pavement support system shall be designed to be assembled to form an interlocked soil cell matrix, or specific to site requirements, the pavement support system may be installed as independent or groups of soil cells. Spacing between the pavement support system soil cells shall be determined by the consultant based on pavement design and load requirements. The layout of the pavement support system shall have the ability to be field adjusted to meet specific site requirements.

The pavement support system shall have a minimum load bearing strength of 6,260 pounds per square foot / 30,564 kilograms per square meter, as tested by a third-party laboratory. The assembled pavement support system shall at minimum, be capable of supporting vehicle loads in accordance with AASHTO h-20/hs-20, including a safety factor of 1.5, when used in conjunction with approved vehicle rated pavement profiles.

The pavement support system shall meet the minimum load bearing strength of 6,260 pounds per square foot / 30,564 kilograms per square meter when installed on slopes up to 5%. For slopes greater than 5%, and less than 10%, please contact the manufacturer for design assistance.

The pavement support system shall be designed to be filled with planting soil, with the top deck either on or off, and without the use of strong backs to hold the uprights in position during soil installation.

The pavement support system components shall be manufactured using 100% recycled plastic to the following sizes and specifications: sufficient samples of granite shall be submitted to the design professional through the general contractor.

Upright: Injection molded, polypropylene or polyethylene, with minimum nominal dimensions as follows: 24"/600mm SOIL CELL UPRIGHT:  $\sim$ 20"x  $\sim$ 24" x  $\sim$ 4" (500 x 600 x 100 mm).

Top Deck / AirFlow<sup>™</sup> QR (Quick Release): Injection molded, polypropylene or polyethylene deck with nominal dimensions as follows: SOIL CELL TOP DECK: ~20" x ~20" x ~3" (500 x 500 x 75 mm).

Side Infill Panel: Injection molded, polypropylene or polyethylene with nominal dimensions as follows: 24"/600mm SOIL CELL SIDE INFILL PANEL: ~13" x ~20.5" x ~1.5" (330 x 520 x 38 mm). Products meeting this specification: RootSpace® 600 (24") Pavement Support System (GreenBlue Urban / 1-866-282-2743 / www.greenblue.com); DeepRoot Silva Cell (DeepRoot / 1-800-458-7668 / deeproot.com) **Ribbed Root Barrier** 

A linear ribbed root barrier with vertical integral root training ribs. This product is used to redirect roots vertically, usually near the tree trunk and at the soil surface.

The ribbed root barrier shall be designed to redirect tree roots down and away from pavement surfaces. Ribbed root barrier shall be installed vertically at specified locations, usually near the tree trunk and at the soil surface. Ribbed root barrier shall be manufactured to meet the following requirements:

Material shall be 100% recycled plastic. Minimum Thickness: 0.04" (1.00 mm). Form: Linear rolls with vertical integral root training ribs. Depth: 12" (300 mm), as required per plan detail. Roll Length: 100' (30 m) Color: Black Seams shall be overlapped  $\sim 8^{\circ}$  (200 mm) and sealed on both sides with joining tape. Products meeting this specification: ReRoot™ Ribbed Root Barrier (GreenBlue Urban / 1-866-282-2743 / www.greenblue.com), DeepRoot Tree Root Barrier (DeepRoot / 1-800-458-7668 / deeproot.com)

# **Root & Moisture Barrier**

The root & moisture barrier is a linear membrane to prevent root and moisture penetration into surrounding areas. This product is used to redirect roots laterally.

The root & moisture barrier shall be designed as a linear membrane that is installed to prevent tree root growth and moisture intrusion in building foundations and underground utilities. The root & moisture barrier may be installed vertically or horizontally, as specified on the plans. The root & moisture barrier shall be manufactured to meet the following requirements:

Material shall be 100% recycled plastic. Minimum Thickness: 0.04" (1.00 mm). Form: Linear rolls with a smooth surface. Depth: 24" (600 mm), as specified on the plans. Roll Length: 100' (30 m) Color: Black Seams shall be overlapped  $\sim 8^{\circ}$  (200 mm) and sealed on both sides with joining tape. Products meeting this specification: RootStop™ Root & Moisture Barrier (GreenBlue Urban / 1-866-282-2743 /www.greenblue.com), DeepRoot Water Barrier Geomembrane, (DeepRoot / 1-800-458-7668 / deeproot.com)

# **Rootball Aeration/Irrigation System**

The Rootball aeration/irrigation piping system consists of small perforated piping that is placed around the tree rootball, and within the pavement support system and has inlets at finished grade. This system is used to provide a means of getting air and water into the soil and rootzone, and a means of allowing organic gases, from the decay of organic matter within the soil, to escape. Manual or automatic irrigation can be incorporated into this system.

The rootball aeration/irrigation system shall be designed to provide a means of getting air and water into the soil and rootzone, and a means of allowing organic gases from the decay of organic matter within the soil to escape. The rootball aeration/irrigation system components shall be manufactured to meet the following requirements.

Aeration/Irrigation Pipe Material shall be 100% recycled plastic. Diameter: 2.375" (60 mm), as required per plan detail. Form: Slit perforated pipe in rolls. Connectors: Molded connectors (coupling, tee) to effect proper jointing. Roll Length: 100' (30 m)

Color: Black

Aeration/Irrigation Inlet

Body: Cast aluminum/bronze

Grate: Cast aluminum/Bronze

Grate walking surface shall meet ADA requirements.

Products meeting this specification: RootRain™ Civic™ Pipe & Fittings (GreenBlue Urban / 1-866-282-2743 / www.greenblue.com), Silva Cell - Water and Air System (DeepRoot / 1-800-458-7668 / deeproot.com)

# Soil Aeration/Irrigation System

The soil aeration/irrigation system shall be designed to provide a means of getting air and water into the soil a means of allowing organic gases, from the decay of organic matter within the soil, to escape. The soil aeration/irrigation system components shall be manufactured to meet the following requirements: Pipe

Material shall be 100% recycled plastic. Diameter: 4" (100 mm).

Form: Precut non-perforated pipe.

Length: ~20" (.5 m)

Color: Black

Aeration/Irrigation Inlet

Body: Stainless Steel

Grate: Stainless Steel

Grate walking surface shall meet ADA requirements.

Products meeting this specification: RootRain<sup>™</sup> ArborVent<sup>™</sup> 150 (GreenBlue Urban / 1-866-282-2743 / www.greenblue.com), DeepRoot, Silva Cell – Water and Air System (DeepRoot / 1-800-458-7668 / deeproot.com)

# Soil Inspection Portal

The soil inspection portal is a plastic pipe extending from the pavement surface down into the top of the pavement support system. This port is used for the sampling and inspection of the soil within the pavement support system and can be used as a means adding nutrients to the soil.

The soil inspection portal shall be designed to allow for the sampling and inspection of the soil and/or water levels within the pavement support system and can be used as a means adding nutrients to the soil. The soil inspection portal components shall be manufactured to meet the following requirements:

Material shall be polyvinyl chloride (PVC) pipe.

Diameter: 4" (100 mm), as required per plan detail.

Cap: Flush cap installed flush with pavement surface.

Products meeting this specification: ArborSystem® Inspection Portal (GreenBlue Urban / 1-866-282-2743 / www.greenblue.com) or equivalent provided by DeepRoot Silva Cell (DeepRoot / 1-800-458-7668 / deeproot.com)

# Geogrid with integrated non-woven geotextile:

Geocomposite / geogrid with integrated non-woven geotextile is a high strength geogrid comprised of stretched monolithic polypropylene flat bars with welded junctions and a mechanically bonded filter geotextile welded within the geogrid structure. Used for reinforcement of aggregate pavement base.

A geogrid with integrated non-woven geotextile meeting the following meeting the following requirements shall be placed on top of the pavement support system and beneath the aggregate pavement base course.

The geogrid with integrated non-woven geotextile is a high strength geogrid comprised of stretched monolithic polypropylene flat bars with welded junctions and a mechanically bonded filter geotextile welded within the geogrid structure. It is used for reinforcement of granular pavement base. The geogrid with integrated non-woven geotextile shall be manufactured to meet the following requirements:

<b>Geogrid Physical Properties</b>	s
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PROPERTY	UNITS	VALUE
Mass per unit area	g/m3	250
Max tensile strength		
(machine direction/cross machine direction)	kN/m	≥ 40 / ≥ 40

#### Geotextile Properties

PROPERTY	UNITS	VALUE
Mass per unit area	g/m3	150
Max tensile strength		
(machine direction/cross machine direction)	kN/m	7.5 / 11
Elongation at nominal strength		
(machine direction/cross machine direction)	%	40 / 30
Puncture Force (x-s)	Ν	1,670

Products meeting this specification: CombiGrid (GreenBlue Urban / 1-866-282-2743 / <u>www.greenblue.com</u>) or equivalent provided by DeepRoot Silva Cell (DeepRoot / 1-800-458-7668 / <u>deeproot.com</u>)

#### **Rootball Anchoring System**

The rootball anchoring system is a below grade system comprised of cables, spearhead, deadman or plate anchors and web strap used for anchoring a rootball into the ground. The rootball anchoring system shall be manufactured to meet the following requirements:

Material shall be as follows: stainless or galvanized steel cables, biodegradable web strapping, and plated steel tensioner

Anchorhead Type/Material: Plate or Zinc Plated-Steel

Products meeting this specification: ArborGuy® AnchorPlate Rootball Anchoring System (GreenBlue Urban / 1-866-282-2743 / <u>www.greenblue.com</u>)

#### Alternative Rootball Anchoring System

An above-ground rootball anchoring system utilizing webbed ties and stakes may be substituted if recommended by soil support system manufacturer. Install according to manufacturer recommendations. Products meeting this specification: DeepRoot Arbortie & anchoring kit as recommended by manufacturer. (DeepRoot / 1-800-458-7668 / deeproot.com)

### Aggregate sub-base course (specified as a drainage layer)

Aggregate sub-base course is aggregate material between the bottom of the pavement support system and the compacted sub-grade below, designed to distribute loads from the pavement support system to the subgrade. The aggregate sub-base may also be used for drainage of the planting or bioretention soil. Coarse aggregate shall meet the following requirements:

Material shall be as follows: stainless or galvanized steel cables, biodegradable web strapping, and plated steel tensioner

Aggregate shall be an open-graded, self-compacting, angular stone produced from 100% crushed material. All aggregate shall be clean and washed.

Unless otherwise approved by the specifying engineer, coarse aggregate for the aggregate sub-base course shall be uniformly graded as defined below:

Sieve	#56	#57	#6	#67	#68		
Sleve	Percent Passing						
1 1⁄2"	100	100	-	-	-		
1"	95-100	95-100	100	100	100		
3/"	-	-	90-100	90-100	90-100		
1/2"	25-80	25-80	20-55	-	-		
3/8"	-	-	0-15	20-55	30-65		
No 4	0-10	0-10	0-5	0-10	5-25		
No 8	0-5	0-5	-	0-5	0-10		
No 16	-	-	-	-	0-5		
No 50	-	-	-	-	-		

# AGGREGATE SUB-BASE COURSE Physical Properties (AASHTO #56, 57, 6, 67, 68)

Sand shall not be an acceptable substitute for coarse aggregate.

# Planting Soil (Installed within the pavement support system

Provide planting soil as specified in the Furnishing and Planting Plant Materials special provision.

#### Backfill material (installed around the perimeter of the pavement support system)

Provide backfill material that is placed around the outside perimeter of the pavement support system and the vertical walls of the excavation. It is installed in lifts and compacted to support the pavement surface above. These materials are typically open-graded, self-compacting, <sup>3</sup>/<sub>8</sub>" (9 mm) to <sup>3</sup>/<sub>4</sub>" (19 mm) angular crushed stone, or a clean, native excavated material, that is free from organic matter, frozen materials, stones larger than 3" (75mm) in diameter, trash, other debris and other toxic substances injurious to plant material. The backfill material shall meet one of the following specifications:

Open-graded, self-compacting, 3/8" (9 mm) to 3/4" (19 mm) angular crushed stone.

Clean, compactable, native excavated material (structural fill), that is free from organic matter, frozen materials, stones larger than 3" (75mm) in diameter, trash, other debris and other toxic substances injurious to plant material.

Clean, compactable, coarse grained soil, meeting the following requirements of the Unified Soil Classification system for soil type GW, GP, GC with less than 30% fines, SW, and SC with less than 30% fines.

# C Construction

# General conditions

Coordinate the installation with the product manufacturer, as specified in the administrative requirements, to have the manufacturer on-site during product installation.

Locate underground utilities before proceeding with excavation.

Review manufacturer's installation procedures and coordinate urban tree planting system installation with other work affected, such as grading, excavation, utilities, construction access, erosion control, etc.

Tree pit layout: The tree pit is the excavated space filled with appropriate soil media for tree planting. Layout tree pit locations and dimensions using string lines, survey pegs and marking paint. Obtain consultant's approval of layout before proceeding with excavation.

Tree pit depths: confirm excavation depths with reference to finished pavement elevations. Allow for granular base course layer and, where applicable, drainage layer.

The assembled pavement support system may be walked on, but vehicular traffic is prohibited until properly backfilled and covered per manufacturer's recommendations. Protect personnel and the installation against damage with highly visible construction tape, fencing, or other means until construction is complete.

# Administrative requirements

Manufacturer

The manufacturer shall be responsible for coordinating the delivery of the urban tree planting system to the contractor. The system includes all components necessary for the assembly of the tree planting system as required per the drawings.

As required, the manufacturer shall provide a minimum of 4 hours on-site training and support during the system installation. This may be coordinated with the pre-installation meeting.

Pre-installation meeting

Prior to the installation of the urban tree planting system and associated work, meet with the consultant(s), the contractor, the urban tree planting system installer and project manager, the manufacturer's representative, the owner at their discretion and other parties concerned with the system installation and performance.

Provide at least 72 hours advance notice to all participants attending the pre-installation meeting.

The pre-installation meeting agenda will include, but is not limited to:

The review of required submittals.

Coordination and sequence of installation with other trades and the construction schedule.

Review of materials, system details and methods of installation.

Site specific considerations (ie: geotechnical, hydrology).

System layout and installation procedures.

Mock-up of the urban tree planting system.

Contractor

The Contractor shall be responsible for preparing the site for the system installation including, but not limited to, excavation, temporary shoring, system installation, compaction, backfilling and all labor, tools and materials required.

The Contractor shall be responsible for preparing a schedule and coordinating work under this section with other trades and disciplines impacting this work.

**Testing Agency Services** 

Provide and pay for the services of an independent testing agency to perform the testing activities specified in this section. Testing agency shall be acceptable to Consultant.

Test work in accordance with specified standards. In the absence of a specified standard, comply with the relevant ASTM standard.

Test Reports: Testing agency shall prepare test reports for all tests performed. Submit copies of test reports to Consultant immediately upon their becoming available.

#### Submittals

Action Submittals: Provide submittals to the Consultant for review and acceptance not less than 7 days prior to start of installation of materials and products specified in this Section.

Product Data: For each type of product, the manufacturer's product literature shall be submitted with technical data sufficient to demonstrate that the product meets these specifications.

Test and Evaluation Reports: For soils and aggregates provide testing agency laboratory analysis. Shop Drawings: Drawings shall show all information needed to install the pavement support system. Qualification Data: The work shall be performed by an experienced installer with a minimum of 2 years of experience, with a successful track record in performing work of the same scope and quality as required by these specifications.

Substitutions: Manufacturers seeking approval of their products are required to comply with the Owner's Instructions to Bidders, generally contained in the Project Manual. If such instructions are not included in the other portions of the project manual or the WI DOT standard specifications, submit requests as specified herein.

Submit proposed substitutions to the Consultant not less than 7 days prior to the date for receipt of Bids Closeout Submittals: Provide manufacturer's warranty documentation.

# **Quality Assurance**

Comply with applicable requirements of the laws, codes, ordinances and regulations of Federal, State and Local authorities having jurisdiction. Obtain necessary permits/approvals from these authorities. Manufacturer qualifications

The urban tree planting system manufacturer must have at least 20 years' experience in the design, manufacture of and installation of urban tree planting systems.

A manufacturer whose product is manufactured in an ISO/TS 16949 and ISO 9001 certified facility. Materials:

All materials, methods of construction, and workmanship shall conform to applicable requirements of ASTM and AASHTO Standards, unless otherwise specified.

The quality of material and the finished components shall be subject to inspection by the Consultant. Such inspection may be made on-site upon delivery or at any point thereafter. The components shall be subject to

rejection at any time if material fails to meet any of the specification requirements, even though sample components may have been accepted as satisfactory. Components rejected after delivery to the site shall be marked for identification and shall be removed from the site at once.

Inspection:

All components shall be inspected for general appearance, dimensions, soundness, etc.

Upon completion of relevant excavation work, and prior to placement of geotextile and aggregate, the subbase soil shall be inspected by the Consultant or authorized representative and be signed off on by the Consultant as acceptable and meeting manufacturer's recommendations.

Upon completion of the placement of the pavement support system (as specified) and geotextile, and prior to backfilling, the structure shall be inspected by specifying engineer or authorized representative and signed off on by the consultant as acceptable and meeting manufacturer's recommendations. Defects:

Products with structural defects shall be immediately removed and replaced with acceptable parts. The Specifying Engineer, before final acceptance, shall carefully inspect repairs/replacements.

# Delivery, Storage and Handling

Components shall be unloaded, handled and stored in an area protected from traffic and in a manner to prevent damage. Inspect materials to ensure that specified materials have been received.

Plastic components may become brittle at cold temperatures. Use caution when handling plastic components below 15°F (-10°C).

Store all material on pallets, with pallet wrap intact until required for installation. Unwrap pallets carefully ensuring unstable sections don't collapse dangerously. Store units to avoid damage from other construction activities.

Protect geogrids and geofabrics from physical damage and from temperatures in excess of 150°F (65°C). Do not expose geogrids and geofabrics to direct sunlight for more than 7 days.

Ensure that all unrelated construction traffic be kept away from the limits of excavation until project is complete and final surface materials are in place.

### **Site Conditions**

Do not proceed with installation when subgrades, soils and planting soils are in a wet, muddy or frozen condition.

Before commencing work on site examine available documentation pertaining to site and determine nature and location of above ground and underground utilities.

Before proceeding with full scale excavation work, confirm nature of existing soil conditions and the drainage characteristics of existing soil.

Abandoned utilities encountered during excavation shall be removed and their ends plugged.

Active utilities encountered during excavation and not indicated in Contract Documents shall be reported immediately to Consultant and utility owner who shall determine measures necessary to repair (if damaged), relocate, remove or work around the utility.

#### Warranty

Provide manufacturer's standard warranty against defects in materials and workmanship.

Products will be free from defects in components and workmanship for a period of thirty (30) years from date of manufacture.

# **Excavation Below Grade**

Excavation required for the installation of all pipes and structures shall be made to the depths and widths indicated on the drawings (a minimum of 12" (300 mm) beyond all sides of at the base of the pavement support system is required for proper backfill). The contractor shall ensure that the bottom of the excavation is firm and dry and, in all respects, acceptable to the consultant.

All objectionable material encountered within the limits indicated shall be removed and disposed of by the Contractor.

In excavation faces, all loose or protruding rocks shall be secured or otherwise removed to finished grade. All cut slopes shall be uniformly dressed to the slope, cross-section and alignment shown on the Drawings or as directed by the Consultant or authorized representative.

Furnish, install, monitor and maintain excavation support (e.g., shoring, sheeting, bracing, trench boxes, etc.) as required by Federal, State and Local Laws, Ordinances, Regulations and Safety Requirements. Support the sides of excavation, to prevent any movement which could in any way reduce the width of the excavation below that necessary for proper construction and protect adjacent structures from undermining, settlement or other damage.

#### **Sub-Grade Preparation and Grading**

The sub-grade shall be unfrozen, level, and free of lumps or debris with no standing water, mud or muck. Do not use frozen materials or materials mixed or coated with ice or frost. Unless otherwise specified by the consultant, a minimum 2,000 pounds per square foot bearing capacity is required.

If contractor fails to maintain the sub-grade properly, the contractor shall remove the unsuitable material. If the bottom of any portion of the excavation is removed below the limits shown on the drawings, it shall be restored per the consultant to the elevation shown in the drawings. Compacted native earthen fill is not acceptable.

If in the opinion of consultant or authorized representative, the sub-grade, at or below the normal grade of the excavation as indicated on the drawings, is unsuitable for construction; it shall be removed to such depth and width as the consultant may direct and be replaced with suitable material as directed by the consultant or authorized representative.

# **Sub-Base Course Preparation / Installation**

Install a 4" (100 mm) minimum thickness, leveling bed of aggregate sub-base course, across the bottom of the excavation. The aggregate sub-base course shall when possible, extend 6" (150 mm) beyond the base of the pavement support system in all directions. The aggregate sub-base course shall be flat surface, free from lumps, debris or any other sharp materials. Base may have up to a 5% slope.

The aggregate sub-base course (specified as a drainage layer) shall be compacted using a vibratory plate or compaction equipment to sufficiently settle and orient the individual stone facets, or as specified by the consultant.

The aggregate sub-base course (not specified as a drainage layer) be compacted shall be compacted using a vibratory plate or compaction equipment to a minimum of 95% of the standard proctor density, or as specified by the consultant.

Place the geogrid reinforcement for soil on top of the aggregate sub-base course. The geogrid reinforcement for soil shall extend 6" (150 mm) beyond the base of the pavement support system in all directions. Overlap the geogrid reinforcement for soil a minimum 12" (300 mm) or as recommended by the manufacturer.

# Pavement Support System Installation

Installation procedure, as follows, shall be followed by the contractor. The contractor shall also reference the manufacturer's installation guidelines, and where any discrepancy exists the consultant reserves the right to contact the manufacturer's representative prior to continuation. Installation constitutes acceptance of existing conditions and responsibility for satisfactory performance.

Use a soluble paint, chalk, or string to mark the footprint of the pavement support system. Prior to the installation of pavement support system uprights, confirm tree pit dimensions and mark location of trees. Rectify discrepancies and errors. Ensure squareness prior to pavement support system placement. Install pavement support system uprights in strict accordance with manufacturer's written instructions and

installation diagrams. Prior to placement, check each upright for damage. Reject cracked, chipped and otherwise damaged components. Ensure that uprights in contact with the aggregate sub-base course are firmly seated, with no rocking. Ensure that uprights are mechanically interconnected both horizontally and, in multiple layers, vertically.

Upon completion of the pavement support system, wrap the sides of the system with root & moisture barrier, or geogrid to prevent backfill material migration into the pavement support system. Take great care to avoid damage to the root & moisture barrier or geogrid during placement. If damage occurs, repair that portion per manufacturer specifications.

The pavement support system should not be left exposed to extreme temperatures, high wind conditions, snow, ice or copious amounts of rainfall.

#### Accommodating Utilities within the Pavement Support System

Utilities within the pavement support system should meet specifications as required by utility company's standards. This may require special treatments, barriers and details to achieve this.

#### Installation of Planting Soil

Obtain consultant's approval prior to filling the pavement support system with planting soil. Install planting soil after the installation of the sub-drainage piping / under drain (as required), pavement support system uprights, root and moisture barriers and backfill material is in place.

Except as shown otherwise on drawings completely fill all void spaces with planting soil. Place planting soil using an excavator bucket and spread with rakes or shovels

Keep outside perimeter of the pavement support system free of planting soil.

Planting soil shall be placed in lifts of 8" (200 mm) to 12" (300mm) and foot compacted by walking through the planting soil. In no case shall the planting soil be compacted greater than foot compaction, after installation within the pavement support system. Note: the top deck is also an aeration layer allowing soil to be filled to top of the uprights.

## Installation of Aeration/Irrigation Piping and Inspection Portal

Lateral aeration/irrigation piping: install piping within top layer of pavement support system uprights in a complete connected circuit, within 12" (600mm) of outer edge of matrix. Fit junctions and risers at maximum spacing of 12' (3.6 meters).

Vertical soil inspection portal: place vertical piping within central opening of pavement support system lid. Trim vertical pipes to 6" (150mm) above finished pavement and support in vertical position by temporary staking. Seal open ends of pipes.

### Installation of Root Barriers and Root and Moisture Barriers

Install ribbed root barriers and/or root & moisture barriers as shown on drawings. Overlap barrier joints 8" (200mm) and tape both sides of joint. Top edge of barriers shall be level with adjacent construction. Ensure that earth surfaces in contact with barriers are flat and free of sharp debris and stones to avoid puncturing barriers. Install ribbed root barriers facing towards the tree.

#### **Backfilling the Perimeter**

Place backfill material evenly around the perimeter of the pavement support system in 8" (200 mm) to 10" (250 mm) lifts and compact as specified below.

For compactable materials, each lift shall be compacted shall be compacted using a vibratory plate or compaction equipment to a minimum of 95% of the standard proctor density. For self-compacting stone materials, each lift shall be compacted using a vibratory plate or compaction equipment to sufficiently settle and orient the individual stone facets, or as specified by the consultant.

Take care to ensure that the compaction equipment doesn't damage the root & moisture barriers, geogrid or pavement support system.

Continue backfilling the perimeter until it is backfilled within 10" (250 mm) to 12" (300 mm) of the top of the pavement support system uprights. No aggregate base course shall be placed on the top of the support system until the side backfill has been placed and compacted.

#### Installation of the Geogrid with Integrated Non-Woven Geotextile

Place the geogrid with integrated non-woven geotextile horizontally on top of the pavement support system allowing it to extend 12" (300 mm) vertically down the sides of the pavement support system and 12" (300 mm) horizontally away from the pavement support system. For seams, overlap geogrid with integrated non-woven geotextile a minimum 8" (200 mm).

## Installation of Aggregate Base Course for Pavement

Continue backfilling the perimeter and top of the pavement support system in 4" (100 mm) lifts, until specified depth is reached.

For compactable materials, each lift shall be compacted shall be compacted using a vibratory plate or compaction equipment to a minimum of 95% of the standard proctor density. For self-compacting stone materials, each lift shall be compacted using a vibratory plate or compaction equipment to sufficiently settle and orient the individual stone facets, or as specified by the consultant.

Only low-pressure tire or track vehicles shall be operated over the pavement support system during construction. No machinery should drive on top of the pavement support system until a minimum backfill and compaction is achieved. Dump trucks and heavy equipment shall not be operated within the pavement support system limits of excavation at any time. Where necessary the heavy equipment should unload in an area adjacent to the pavement support system and the material should be moved over the system with low-pressure tire or track equipment.

Ensure that all unrelated construction traffic is kept away from the limits of excavation until the project is complete and final surface materials are in place. No non-installation related loading should be allowed over the support system until the final design section has been constructed (including pavement).

Place surfacing or paving materials over the pavement support system with care to avoid displacement of cover fill and damage to surrounding areas.

#### Site Quality Control

Compaction Tests: Testing agency shall perform compaction testing on sub-grade and on each layer of fill to determine compliance with specified compaction. Determine method and frequency of testing in consultation with Consultant and WI DOT Standards.

Installation of Concrete Curbs at Tree Openings

Confirm exact location of tree pit openings. Cut geocomposite layer and fold back to expose tree pit opening. If specified, position the pre-formed root management system in the tree pit opening.

Form and pour concrete curbs along planting areas and tree pit openings as shown on the drawings to prevent the aggregate base course from migrating into the planting soil.

#### Installation of Root Barrier within the Tree Pit Openings

Place the ribbed root barrier around the inside of the tree pit opening with ribs facing toward the tree. Extend ribbed root barrier down to top of the pavement support system and up to level of planting soil within the tree pit. Lap root barrier joints 8" (200mm) and tape both sides of joint.

### **Cleaning & Protection**

Perform clean up during installation and upon completion of each phase of the work. Maintain the site free of soil, sediment, trash and debris. Remove excess soil materials, debris, and equipment from the site following completion of each phase of the work.

Repair damage to adjacent materials and surfaces resulting from installation of this work using mechanics skilled in remedial work of the construction type and trades affected.

### **Closeout Activities**

Provide manufacturer's warranty.

#### **D** Measurement

The department will measure the Soil Cell System as a lump sum, acceptably completed.

E Payment

for measured quantities at the contract unit price unc	ler the following bid item:
DESCRIPTION	UNIT
Soil Cell System- Stage 1	LS
Soil Cell System- Stage 2	LS
,	ofor measured quantities at the contract unit price und DESCRIPTION Soil Cell System- Stage 1 Soil Cell System- Stage 2

Payment is full compensation for all excavation, grading, shaping and compacting: and for furnishing and installing soil cell items as described in this special provision at the locations indicated on the plan drawings, including any touch-up and repairs.

# 77. Remove Existing Tree Grate and Frame, Item SPV.0060.37.

### A Description

This special provision describes removing Existing Tree Grates and Frames according to the pertinent provisions of standard spec 204 and as hereinafter provided. Specific removal items and their locations are noted in the plans.

# B (Vacant)

# **C** Construction

Remove the existing tree grates and frames. All materials to become property of the contractor.

# **D** Measurement

The department will measure Remove Existing Tree Grate and Frame as each individual existing tree grate and frame, acceptably completed.

# E Payment

The department will pay	for measured quantities at the contract unit price under the following bid	item:
ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.37	Remove Existing Tree Grate and Frame	EA

Payment is full compensation for removing all materials, backfilling and compacting any depression left by the removal with acceptable material, and for properly disposing of all materials.

#### Schedule of Items

Attached, dated October 29, 2020, are the revised Schedule of Items Pages 1 – 13.

# **Plan Sheets**

The following  $8\frac{1}{2} \times 11$ -inch sheets are attached and made part of the plans for this proposal: Revised: 45, 47, 48, 49, 50, 51, 94, 95, 104, 107, 109 and 123. Added: 159A

END OF ADDENDUM



















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	Proposal Schedule of Items	Page 1 of 13
Proposal ID: 2020111	0028 Project(s): 6424-03-70, 6424-03-80	
	Federal ID(s): WISC 2020556, N/A	
SECTION: 0001	Contract Items	
Alt Set ID:	Alt Mbr ID:	

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0002	201.0120 Clearing	190.000 ID		
0004	201.0220 Grubbing	190.000 ID	. <u> </u>	
0006	204.0100 Removing Concrete Pavement	10,790.000 SY	. <u></u>	. <u></u>
0008	204.0130 Removing Curb	25.000 LF	. <u></u>	
0010	204.0150 Removing Curb & Gutter	696.000 LF	. <u></u>	. <u></u>
0012	204.0155 Removing Concrete Sidewalk	3,470.000 SY	. <u></u>	
0014	204.0195 Removing Concrete Bases	29.000 EACH	. <u></u>	. <u></u>
0016	204.0210 Removing Manholes	22.000 EACH	. <u></u>	
0018	204.0220 Removing Inlets	15.000 EACH		
0020	204.0245 Removing Storm Sewer (size) 01. 8-Inch	242.000 LF		
0022	204.0245 Removing Storm Sewer (size) 02. 10- Inch	217.000 LF	·	
0024	204.0245 Removing Storm Sewer (size) 03. 12- Inch	1,255.000 LF	·	·
0026	204.0245 Removing Storm Sewer (size) 04. 15- Inch	33.000 LF	·	
0028	204.0245 Removing Storm Sewer (size) 05. 18- Inch	10.000 LF	·	
0030	204.0245 Removing Storm Sewer (size) 06. 48- Inch	38.000 LF		



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SECTION: 0001	Contract Items	

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0032	204.0245 Removing Storm Sewer (size) 07. 48x76- Inch	7.000 LF		. <u></u>
0034	204.9105.S Removing (item description) 01. Traffic Signals Main Street & Badger Street	LS	LUMP SUM	
0036	204.9105.S Removing (item description) 02. Traffic Signals Main Street & Fulton Street	LS	LUMP SUM	
0038	205.0100 Excavation Common	6,445.000 CY		
0040	213.0100 Finishing Roadway (project) 01. 6424- 03-70	1.000 EACH	·	
0042	305.0120 Base Aggregate Dense 1 1/4-Inch	4,140.000 TON	. <u></u>	
0044	405.0200 Coloring Concrete Custom	303.100 CY	i	. <u></u>
0046	415.0070 Concrete Pavement 7-Inch	7,904.000 SY		. <u></u>
0048	415.4100 Concrete Pavement Joint Filling	8,420.000 SY	i	. <u></u>
0050	415.5110.S Concrete Pavement Joint Layout	1.000 LS		. <u></u>
0052	416.0170 Concrete Driveway 7-Inch	38.000 SY		. <u></u>
0054	455.0605 Tack Coat	80.200 GAL	i	
0056	460.2000 Incentive Density HMA Pavement	260.000 DOL	1.00000	260.00
0058	460.6224 HMA Pavement 4 MT 58-28 S	400.000 TON		
0060	465.0120 Asphaltic Surface Driveways and Field Entrances	10.000 TON		



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SECTION: 0001	Contract Items	
Alt Set ID:	Alt Mbr ID:	

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0062	601.0409 Concrete Curb & Gutter 30-Inch Type A	3,057.000 LF		·
0064	601.0411 Concrete Curb & Gutter 30-Inch Type D	644.000 LF		
0066	601.0600 Concrete Curb Pedestrian	15.000 LF		
0068	602.0410 Concrete Sidewalk 5-Inch	42,700.000 SF		<u> </u>
0070	602.0515 Curb Ramp Detectable Warning Field Natural Patina	400.000 SF	·	·
0082	608.0412 Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch	754.000 LF	. <u></u>	
0084	608.0415 Storm Sewer Pipe Reinforced Concrete Class IV 15-Inch	153.000 LF		
0086	608.0418 Storm Sewer Pipe Reinforced Concrete Class IV 18-Inch	14.000 LF		
0088	608.0424 Storm Sewer Pipe Reinforced Concrete Class IV 24-Inch	164.000 LF		. <u> </u>
0090	608.0460 Storm Sewer Pipe Reinforced Concrete Class IV 60-Inch	44.000 LF	. <u></u>	
0092	611.0420 Reconstructing Manholes	1.000 EACH	. <u></u>	
0094	611.0530 Manhole Covers Type J	11.000 EACH	. <u></u>	
0096	611.0624 Inlet Covers Type H	13.000 EACH		<u>.</u>
0098	611.0639 Inlet Covers Type H-S	24.000 EACH		
0100	611.2004 Manholes 4-FT Diameter	5.000 EACH		

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SECTION: 0001	Contract Items	
Alt Set ID:	Alt Mbr ID:	

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0102	611.2005 Manholes 5-FT Diameter	2.000 EACH		·
0104	611.2006 Manholes 6-FT Diameter	3.000 EACH		·
0106	611.2008 Manholes 8-FT Diameter	1.000 EACH		
0108	611.3004 Inlets 4-FT Diameter	13.000 EACH		·
0110	611.3230 Inlets 2x3-FT	21.000 EACH		
0112	611.8120.S Cover Plates Temporary	7.000 EACH	. <u></u> .	
0114	612.0902.S Insulation Board Polystyrene (inch) 01. 2-inch	290.000 SY	·	
0116	618.0100 Maintenance And Repair of Haul Roads (project) 01. 6424-03-80	1.000 EACH	·	
0118	619.1000 Mobilization	1.000 EACH		
0120	624.0100 Water	41.000 MGAL		<u>.</u>
0122	625.0100 Topsoil	350.000 SY		
0124	628.1504 Silt Fence	188.000 LF		·
0126	628.1520 Silt Fence Maintenance	188.000 LF		
0128	628.1905 Mobilizations Erosion Control	4.000 EACH		
0130	628.1910 Mobilizations Emergency Erosion Control	4.000 EACH		
0132	628.2006 Erosion Mat Urban Class I Type A	350.000 SY	. <u></u>	

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SECTION: 0001	Contract Items	
Alt Set ID:	Alt Mbr ID:	

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0134	628.7005 Inlet Protection Type A	39.000 EACH		
0136	628.7015 Inlet Protection Type C	11.000 EACH		
0138	628.7020 Inlet Protection Type D	28.000 EACH		
0140	628.7560 Tracking Pads	2.000 EACH		
0142	629.0210 Fertilizer Type B	0.240 CWT	. <u></u>	
0144	630.0140 Seeding Mixture No. 40	6.400 LB		
0146	630.0500 Seed Water	7.800 MGAL	·	
0148	632.0101 Trees (species) (size) (root) 01. Celtis Occidentalis 2-Inch B&B	2.000 EACH		
0150	632.0101 Trees (species) (size) (root) 02. Ginko Biloba Princeton Sentry 2-Inch B&B	16.000 EACH	·	·
0152	632.0101 Trees (species) (size) (root) 03. Gleditsia Triacanthos Skyline 2-Inch B&B	3.000 EACH	<u>.</u>	
0154	632.0101 Trees (species) (size) (root) 04. Gymnocladus Dioica Espresso 3-Inch B&B	4.000 EACH		·
0156	632.0101 Trees (species) (size) (root) 05. Ulmus Americana New Harmony 2-Inch B&B	4.000 EACH	<u>.</u>	
0158	632.9101 Landscape Planting Surveillance and Care Cycles	6.000 EACH		
0160	634.0814 Posts Tubular Steel 2x2-Inch X 14-FT	16.000 EACH	. <u></u>	
0162	637.2210 Signs Type II Reflective H	97.740 SF		. <u></u>

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SECTION: 0001	Contract Items	
Alt Set ID:	Alt Mbr ID:	

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0164	638.2602 Removing Signs Type II	83.000 EACH		
0166	638.3000 Removing Small Sign Supports	14.000 EACH		<u>.</u>
0168	642.5001 Field Office Type B	1.000 EACH	. <u></u>	. <u></u>
0170	643.0300 Traffic Control Drums	4,855.000 DAY	. <u> </u>	. <u></u>
0172	643.0410 Traffic Control Barricades Type II	2,265.000 DAY		
0174	643.0420 Traffic Control Barricades Type III	4,342.000 DAY	. <u> </u>	. <u></u>
0176	643.0705 Traffic Control Warning Lights Type A	3,942.000 DAY	. <u></u>	. <u></u>
0178	643.0900 Traffic Control Signs	4,872.000 DAY	. <u></u>	. <u></u>
0180	643.5000 Traffic Control	1.000 EACH	<u>.</u>	. <u></u>
0182	644.1410 Temporary Pedestrian Surface Asphalt	3,190.000 SF	. <u> </u>	. <u></u>
0184	644.1601 Temporary Pedestrian Curb Ramp	246.000 DAY	. <u></u>	. <u></u>
0186	646.1020 Marking Line Epoxy 4-Inch	3,260.000 LF	<u>.</u>	
0188	646.3020 Marking Line Epoxy 8-Inch	30.000 LF	. <u></u>	. <u></u>
0190	646.5220 Marking Symbol Epoxy	4.000 EACH	. <u></u>	. <u></u>
0192	646.6020 Marking Stop Line Epoxy 12-Inch	230.000 LF		. <u></u>
0194	646.7420 Marking Crosswalk Epoxy Transverse Line 6-Inch	1,247.000 LF		

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SECTION: 0001	Contract Items	
Alt Set ID:	Alt Mbr ID:	

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0196	646.8320 Marking Parking Stall Epoxy	2,976.000 LF	. <u></u>	·
0198	650.4000 Construction Staking Storm Sewer	56.000 EACH		·
0200	650.4500 Construction Staking Subgrade	2,300.000 LF		
0202	650.5000 Construction Staking Base	426.000 LF	<u>.</u>	
0204	650.5500 Construction Staking Curb Gutter and Curb & Gutter	725.000 LF		
0206	650.7000 Construction Staking Concrete Pavement	1,887.000 LF		
0208	650.8500 Construction Staking Electrical Installations (project) 01. 6424-03-70	LS	LUMP SUM	
0210	650.9000 Construction Staking Curb Ramps	38.000 EACH		i
0212	650.9910 Construction Staking Supplemental Control (project) 01. 6424-03-70	LS	LUMP SUM	
0214	650.9920 Construction Staking Slope Stakes	2,300.000 LF		i
0216	652.0205 Conduit Rigid Nonmetallic Schedule 40 3/4-Inch	631.000 LF		
0218	652.0225 Conduit Rigid Nonmetallic Schedule 40 2-Inch	6,053.000 LF	. <u></u>	
0220	652.0235 Conduit Rigid Nonmetallic Schedule 40 3-Inch	846.000 LF	. <u></u>	
0222	653.0164 Pull Boxes Non-Conductive 24x42-Inch	31.000 EACH		·
0224	653.0905 Removing Pull Boxes	8.000 EACH		

	Proposal Schedule of Items	Page 8 of 13
Proposal ID: 2020111	0028 Project(s): 6424-03-70, 6424-03-80	
	Federal ID(s): WISC 2020556, N/A	
SECTION: 0001	Contract Items	
Alt Set ID:	Alt Mbr ID:	

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0226	655.0610 Electrical Wire Lighting 12 AWG	5,593.000 LF	·	
0228	655.0615 Electrical Wire Lighting 10 AWG	2,763.000 LF	i	
0230	655.0625 Electrical Wire Lighting 6 AWG	18,930.000 LF	i	. <u></u>
0232	655.0630 Electrical Wire Lighting 4 AWG	22,185.000 LF	<u>.</u>	
0234	656.0400 Electrical Service Main Lugs Only Meter Pedestal (location) 01. STA 499+52 22.3' RT	LS	LUMP SUM	
0236	690.0150 Sawing Asphalt	610.000 LF		
0238	690.0250 Sawing Concrete	9,727.000 LF	ii	
0240	715.0415 Incentive Strength Concrete Pavement	2,900.000 DOL	1.00000	2,900.00
0242	715.0710 Optimized Aggregate Gradation Incentive	5,928.000 DOL	1.00000	5,928.00
0244	740.0440 Incentive IRI Ride	1,200.000 DOL	1.00000	1,200.00
0246	999.1500.S Crack and Damage Survey	LS	LUMP SUM	
0248	ASP.1T0A On-the-Job Training Apprentice at \$5.00/HR	2,000.000 HRS	5.00000	10,000.00
0250	ASP.1T0G On-the-Job Training Graduate at \$5.00/HR	1,260.000 HRS	5.00000	6,300.00
0252	SPV.0060 Special 01. Inlet Covers Type H-D	2.000 EACH		
0254	SPV.0060 Special 02. Residential Manholes	6.000 EACH	<u>.</u>	



	Proposal Schedule of Items	Page 9 of 13
Proposal ID: 2020111	0028 Project(s): 6424-03-70, 6424-03-80	
	Federal ID(s): WISC 2020556, N/A	
SECTION: 0001	Contract Items	
Alt Set ID:	Alt Mbr ID:	

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0256	SPV.0060 Special 03. Manholes 10-FT Diameter	1.000 EACH		
0258	SPV.0060 Special 04. Inlets 5-FT Diameter	4.000 EACH		
0260	SPV.0060 Special 05. Inlets 6-FT Diameter	1.000 EACH		. <u></u>
0262	SPV.0060 Special 06. Decorative Paver	16.000 EACH	. <u></u>	
0264	SPV.0060 Special 07. Sanitary Sewer Manhole 4- FT Diameter w/Casting	4.000 EACH	<u>.</u>	·
0266	SPV.0060 Special 08. Sanitary Sewer Manhole 5- FT Diameter w/Casting and Outside Drop	1.000 EACH	·	
0268	SPV.0060 Special 09. Connect to Existing Sanitary Sewer Main	5.000 EACH	·	·
0270	SPV.0060 Special 10. Connect to Existing Sanitary Sewer Manhole	1.000 EACH	;	
0272	SPV.0060 Special 11. Connect to Existing Sanitary Force Main	1.000 EACH	·	·
0274	SPV.0060 Special 12. Connect to Existing Sanitary Temporary Manhole Connection	3.000 EACH		·
0276	SPV.0060 Special 13. Connect to Existing Sanitary Sewer Service	60.000 EACH	·	·
0278	SPV.0060 Special 14. Sanitary Sewer Wye, 10-inch x 6-inch	60.000 EACH		
0280	SPV.0060 Special 15. Exploratory Excavation	10.000 EACH	. <u></u>	. <u></u>
0282	SPV.0060 Special 16. Reconstruct Sanitary Manhole	3.000 EACH	·	·

	Proposal Schedule of Items	Page 10 of 13
Proposal ID: 2020111	0028 Project(s): 6424-03-70, 6424-03-80	
	Federal ID(s): WISC 2020556, N/A	
SECTION: 0001	Contract Items	
Alt Set ID:	Alt Mbr ID:	

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0284	SPV.0060	12.000		
	Repair	EACH	<u>-</u>	·
0286	SPV.0060	10.000 EACH		
	and Box	LACIT		
0288	SPV.0060	6.000		
	Special 19. Remove Existing Hydrant and Lead	EACH	·	<u> </u>
0290	SPV.0060	11.000		
	Special 20. Cut Into and Connect to Existing Water Main	EACH	·	
0292	SPV.0060	1.000		
	Special 21. Connect to Existing Water Main	EACH	·	
0294	SPV.0060	4.000		
	Special 22. Lower Water Main	EACH	·	
0296	SPV.0060	5.000		
	Special 23. Gate Valve and Box 6-Inch	EACH	·	·
0298	SPV.0060	7.000		
	Special 24. Gate Valve and Box 8-Inch	EACH		
0300	SPV.0060	11.000		
	Special 25. Gate valve and Box 12-Inch	EACH	÷	·
0302	SPV.0060 Special 26. Hydrant 8.5-FT Bury Depth	5.000 EACH	<u> </u>	
0304	SPV.0060	50.000		
	Special 27. Connect to Existing Water Service	EACH	·	·
0306	SPV.0060	50.000		
	Special 28. Corporation Stop 1-inch	EACH	·	·
0308	SPV.0060	50.000		
	Special 29. Curb Stop and Box 1-inch	EACH		
0310	SPV.0060	29.000		
	Special 30. Concrete Bases Type Special	EACH	·	
0312	SPV.0060	1.000		
	Special 31. Concrete Control Cabinet Bases Type Special	EACH		·



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	Federal ID(s): WISC 2020556, N/A
SECTION: 0001	Contract Items
Alt Set ID:	Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0314	SPV.0060 Special 32. Lighting Control Cabinet Type Special	1.000 EACH	·	
0316	SPV.0060 Special 33. Removing Lighting Control Cabinet	1.000 EACH	·	. <u> </u>
0318	SPV.0060 Special 34. Remove Bollard	29.000 EACH		
0320	SPV.0060 Special 35. Lighting Unit Type Special	29.000 EACH		. <u></u>
0322	SPV.0060 Special 36. Receptical Stanchion	29.000 EACH		
0324	SPV.0085 Special 01. Water Main Fittings	2,608.000 LB		
0326	SPV.0090 Special 01. Railing	52.000 LF		<u> </u>
0328	SPV.0090 Special 02. Concrete Curb & Gutter 24- Inch Type D	81.000 LF		
0330	SPV.0090 Special 03. Sanitary Force Main 2-inch SDR 21 PVC	74.000 LF	·	. <u> </u>
0332	SPV.0090 Special 04. Sanitary Sewer Service 6- inch PVC	2,640.000 LF		
0334	SPV.0090 Special 05. Sanitary Sewer Main 8-inch	119.000 LF		. <u></u>
0336	SPV.0090 Special 06. Sanitary Sewer Main 10-inch	1,386.000 LF		<u>.</u>
0338	SPV.0090 Special 07. Sanitary Sewer Main 15-inch	91.000 LF		
0340	SPV.0090 Special 08. Televise Sanitary Sewer	1,574.000 LF		·
0342	SPV.0090 Special 09. Remove Existing Sanitary Sewer Main	1,460.000 LF		

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Proposal ID: 2020111	10028 Project(s): 6424-03-70, 6424-03-80	
	Federal ID(s): WISC 2020556, N/A	
SECTION: 0001	Contract Items	
Alt Set ID:	Alt Mbr ID:	

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0344	SPV.0090 Special 10. Water Main C900 6-inch	99.000 LF		
0346	SPV.0090 Special 11. Water Main C900 8-inch	374.000 LF		i
0348	SPV.0090 Special 12. Water Main C900 12-inch	1,559.000 LF		i
0350	SPV.0090 Special 13. Water Service 1-inch	2,420.000 LF	i	i
0352	SPV.0090 Special 14. Salvage Trolly Car Rail	1,294.000 LF	<u>.</u>	<u>.</u>
0354	SPV.0090 Special 15. Storm Sewer Pipe PVC 6- Inch	129.000 LF		
0356	SPV.0090 Special 16. Removing Cables & Conduit	2,433.000 LF	i	
0358	SPV.0105 Special 01. Maintain Water Service During Construction	LS	LUMP SUM	. <u></u>
0360	SPV.0105 Special 02. Soil Cell System - Stage 1	LS	LUMP SUM	
0362	SPV.0105 Special 03. Soil Cell System - Stage 2	LS	LUMP SUM	
0364	SPV.0165 Special 01. Salvaged Brick Pavers	130.000 SF		i
0366	SPV.0180 Special 01. Concrete Pavement HES 7- Inch	516.000 SY	·	
0368	SPV.0200 Special 01. Sanitary Manhole Excess Depth 4-FT Diameter	7.600 VF		
0370	SPV.0200 Special 02. Sanitary Manhole Excess Depth 5-FT Diameter	9.900 VF	·	
0372	465.0125 Asphaltic Surface Temporary	170.000 TON		

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Proposal ID: 2020111	0028 Project(s): 6424-03-70, 6424-03-80	
	Federal ID(s): WISC 2020556, N/A	
SECTION: 0001	Contract Items	
Alt Set ID:	Alt Mbr ID:	

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0374	608.3615 Storm Sewer Pipe Class III-B 15-Inch	361.000 LF		
0376	608.3618 Storm Sewer Pipe Class III-B 18-Inch	55.000 LF		
0378	608.3624 Storm Sewer Pipe Class III-B 24-Inch	316.000 LF	<u>_</u>	
0380	608.3630 Storm Sewer Pipe Class III-B 30-Inch	257.000 LF	<u>_</u>	<u>_</u>
0382	608.3636 Storm Sewer Pipe Class III-B 36-Inch	341.000 LF	<u>_</u>	
0384	SPV.0060 Special 37. Remove Existing Tree Grate and Frame	18.000 EACH		
	Section: 000	1	Total:	
			Total Bid:	