SECTION 071416 - COLD FLUID-APPLIED WATERPROOFING

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Polyurethane waterproofing.

1.2 ACTION SUBMITTALS

- A. Product Data: For each type of product.
 - 1. Include construction details, material descriptions, and tested physical and performance properties of waterproofing.
 - 2. Include manufacturer's written instructions for evaluating, preparing, and treating substrate.

B. Shop Drawings:

- 1. Indicate locations and extent of waterproofing.
- 2. Include details for substrate joints and cracks, sheet flashings, penetrations, inside and outside corners, tie-ins with adjoining waterproofing, and other termination conditions.

1.3 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For Installer.
- B. Field quality-control reports.
- C. Sample Warranties: For special warranties.

1.4 QUALITY ASSURANCE

A. Installer Qualifications: An entity that employs installers and supervisors who are trained and approved by waterproofing manufacturer.

1.5 FIELD CONDITIONS

- A. Environmental Limitations: Apply waterproofing within the range of ambient and substrate temperatures recommended in writing by waterproofing manufacturer.
 - 1. Do not apply waterproofing to a damp or wet substrate, when relative humidity exceeds 85 percent, or when temperatures are less than 5 deg F (3 deg C) above dew point.
 - 2. Do not apply waterproofing in snow, rain, fog or mist, or when such weather conditions are imminent during application and curing period.
- B. Maintain adequate ventilation during application and curing of waterproofing materials.

1.6 WARRANTY

- A. Manufacturer's Special Warranty: Manufacturer agrees to repair or replace waterproofing that fails in materials or workmanship within specified warranty period.
 - 1. Warranty Period: 10 years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 SOURCE LIMITATIONS

A. Obtain waterproofing materials from single source and from single manufacturer.

2.2 POLYURETHANE WATERPROOFING

- A. Provide one of the following:
- B. PUMA Waterproofing: Two-component, polyurethane-methacrylate; ASTM C1305; with the following properties measured in accordance with standard test methods referenced:
 - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Henry Company; a Carlisle company.
 - b. Tremco Incorporated.
 - 2. Tensile Strength: 900 psi (6.2 MPa) minimum; ASTM D638.
 - 3. Elongation at Break: 400 percent minimum; ASTM D638.
 - 4. Water Vapor Permeance: 0.003 perm (0.172 ng/Pa x s x sq. m), maximum, ASTM E96/E96M.
- C. STPE Waterproofing: Single-component, silyl-terminated polyether.
 - 1. Manufacturers: Subject to compliance with requirements, provide products by the following:
 - a. W. R. Meadows, Inc.
 - 2. Tensile Strength: 900 psi (6.2 MPa) minimum; ASTM D638.
 - 3. Elongation at Break: 400 percent minimum; ASTM D638.
 - 4. Water Vapor Permeance: 0.003 perm (0.172 ng/Pa x s x sq. m), maximum, ASTM E96/E96M.
 - 5. Hydrostatic-Head Resistance: 100 psi (690 kPa) average; ASTM D751.

2.3 AUXILIARY MATERIALS

- A. General: Provide auxiliary materials recommended in writing by waterproofing manufacturer for intended use and compatible with one another and with waterproofing.
 - 1. Furnish liquid-type auxiliary materials that comply with VOC limits of authorities having jurisdiction.
- B. Primer: Manufacturer's standard primer, sealer, or surface conditioner; factory-formulated.
- C. Sheet Flashing: 50-mil- (1.3-mm-) minimum, nonstaining, uncured sheet neoprene.
 - 1. Adhesive: Manufacturer's recommended contact adhesive.

- D. Membrane-Reinforcing Fabric: Manufacturer's recommended fiberglass mesh or polyester fabric, manufacturer's standard weight.
- E. Joint Reinforcing Strip: Manufacturer's recommended fiberglass mesh or polyester fabric.
- F. Joint Sealant: Multicomponent polyurethane sealant, compatible with waterproofing; and as recommended by manufacturer for substrate and joint conditions.
 - 1. Backer Rod: Closed-cell polyethylene foam.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements and other conditions affecting performance of the Work.
 - 1. Verify that concrete has cured and aged for minimum time period recommended in writing by waterproofing manufacturer.
 - 2. Verify that substrate is visibly dry and within the moisture limits recommended in writing by manufacturer. Test for capillary moisture by plastic sheet method in accordance with ASTM D4263.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Clean, prepare, and treat substrates in accordance with manufacturer's written instructions. Provide clean, dust-free, and dry substrates for waterproofing application.
- B. Mask off adjoining surfaces not receiving waterproofing to prevent spillage and overspray affecting other construction.
- C. Close off deck drains and other deck penetrations to prevent spillage and migration of waterproofing fluids.
- D. Remove grease, oil, bitumen, form-release agents, paints, curing compounds, acid residues, and other penetrating contaminants or film-forming coatings from concrete.
 - Abrasive blast clean concrete surfaces uniformly to expose top surface of fine aggregate in accordance with ASTM D4259 with a self-contained, recirculating, blast-cleaning apparatus. Remove material to provide a sound surface free of laitance, glaze, efflorescence, curing compounds, concrete hardeners, or form-release agents. Remove remaining loose material and clean surfaces in accordance with ASTM D4258.
- E. Remove fins, ridges, and other projections, and fill honeycomb, aggregate pockets, holes, and other voids.

3.3 PREPARATION AT TERMINATIONS, PENETRATIONS, AND CORNERS

- A. Prepare surfaces at terminations and penetrations through waterproofing and at expansion joints, drains, sleeves, and corners in accordance with waterproofing manufacturer's written instructions and to recommendations in ASTM C898/C898M and ASTM C1471/C1471M.
- B. Apply waterproofing in two separate applications, and embed a joint reinforcing strip in the first preparation coat when recommended by waterproofing manufacturer.

3.4 JOINT AND CRACK TREATMENT

A. Prepare, treat, rout, and fill joints and cracks in substrate in accordance with waterproofing manufacturer's written instructions and to recommendations in ASTM C898/C898M and ASTM C1471/C1471M. Before coating surfaces, remove dust and dirt from joints and cracks in accordance with ASTM D4258.

3.5 INSTALLATION OF WATERPROOFING

- A. Apply waterproofing in accordance with manufacturer's written instructions and to recommendations in ASTM C898/C898M and ASTM C1471/C1471M.
- B. Start installing waterproofing in presence of manufacturer's technical representative.
- C. Apply primer over prepared substrate unless otherwise instructed in writing by waterproofing manufacturer.
- D. Cure waterproofing, taking care to prevent contamination and damage during application and curing.

3.6 FIELD QUALITY CONTROL

- A. Manufacturer's Field Service: Engage a site representative qualified by waterproofing membrane manufacturer to inspect substrate conditions, surface preparation, membrane application, flashings, protection, and drainage components and to furnish daily reports to Architect.
- B. Waterproofing will be considered defective if it does not pass tests and inspections.
- C. Prepare test and inspection reports.

3.7 PROTECTION

- A. Do not permit foot or vehicular traffic on unprotected membrane.
- B. Protect waterproofing from damage and wear during remainder of construction period.
- C. Correct deficiencies in or remove waterproofing that does not comply with requirements; repair substrates, reapply waterproofing, and repair sheet flashings.

END OF SECTION 071416

SECTION 101426 - POST AND PANEL/PYLON SIGNAGE

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Internally illuminated monolith signs.

1.2 DEFINITIONS

A. Illuminated: Illuminated by lighting source integrally constructed as part of the sign unit.

1.3 COORDINATION

- A. Furnish templates and tolerance information for placement of sign-anchorage devices embedded in permanent construction by other installers.
- B. Furnish templates for placement of electrical service embedded in permanent construction by other installers.

1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Shop Drawings: For signage.
 - 1. Include fabrication and installation details and attachments to other work.
 - 2. Show sign mounting heights, locations of supplementary supports to be provided by other installers, and accessories.
 - 3. Show message list, typestyles, graphic elements, and layout for each sign at least half size.
 - 4. Show locations of electrical service connections.
 - 5. Include diagrams for power, signal, and control wiring.
- C. Samples for Initial Selection: For each type of sign assembly, exposed component, and exposed finish.
 - 1. Include representative Samples of available typestyles and graphic symbols.
- D. Samples for Verification: For each type of sign assembly, showing all components and with the required finish(es), in manufacturer's standard size unless otherwise indicated and as follows:
 - 1. Signs: Not less than 12 inches (300 mm) square, including corner and post.
- E. Delegated-Design Submittal: For signs indicated in "Performance Requirements" Article.
 - 1. Include structural analysis calculations for signs indicated to comply with design loads; signed and sealed by the qualified professional engineer responsible for their preparation.

1.5 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For Installer and manufacturer.
- B. Evaluation Reports: For post-installed anchors and power-actuated fasteners, from ICC-ES or other qualified testing agency acceptable to authorities having jurisdiction.
- C. Sample Warranty: For special warranty.

1.6 CLOSEOUT SUBMITTALS

A. Maintenance Data: For signs to include in maintenance manuals.

1.7 QUALITY ASSURANCE

A. Installer Qualifications: Manufacturer of products.

1.8 FIELD CONDITIONS

A. Field Measurements: Verify locations of anchorage devices and electrical service embedded in permanent construction by other installers by field measurements before fabrication, and indicate measurements on Shop Drawings.

1.9 WARRANTY

- A. Special Warranty: Manufacturer agrees to repair or replace components of signs that fail in materials or workmanship within specified warranty period.
 - 1. Failures include, but are not limited to, the following:
 - a. Deterioration of finishes beyond normal weathering.
 - b. Deterioration of embedded graphic image.
 - c. Separation or delamination of sheet materials and components.
 - 2. Warranty Period: Five years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Delegated Design: Engage a qualified professional engineer, as defined in Section 014000 "Quality Requirements," to design sign structure and anchorage of monolith signs according to structural performance requirements.
- B. Structural Performance: Signs and supporting elements shall withstand the effects of gravity and other loads within limits and under conditions indicated.
 - 1. Uniform Wind Load: As indicated on Drawings.
 - 2. Concentrated Horizontal Load: As indicated on Drawings.
 - 3. Other Design Load: As indicated on Drawings.

- 4. Uniform and concentrated loads need not be assumed to act concurrently.
- C. Thermal Movements: For exterior signs, allow for thermal movements from ambient and surface temperature changes.
 - 1. Temperature Change: 120 deg F (67 deg C), ambient; 180 deg F (100 deg C), material surfaces.
- D. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

2.2 MONOLITH SIGNS

- A. Monolith Sign: Sign of hollow-box configuration; with smooth, uniform surfaces and support assembly; with message and characters having uniform faces, sharp corners, and precisely formed lines and profiles; and as follows:
 - 1. Illuminated Sign: Backlighted construction with LED lighting including transformers, insulators, and other accessories for operability, with provision for servicing and concealing connections to building electrical system. Use tight or sealed joint construction to prevent unintentional light leakage. Space lamps apart from each other and away from sign surfaces as needed to illuminate evenly.
 - a. Weeps: Provide weep holes to drain water at lowest part of exterior signs. Equip weeps with permanent baffles to block light leakage without inhibiting drainage.
 - 2. Hollow-Box Sign Frame: Entire perimeter framed with formed-aluminum sheet or extruded-aluminum, hollow-box-type frame with vertical edges attached to supports with aluminum fittings. Close top and bottom edges of panels with manufacturer's standard welded seams or extrusions.

2.3 MATERIALS

- A. Aluminum Sheet and Plate: ASTM B209 (ASTM B209M), alloy and temper recommended by aluminum producer and finisher for type of use and finish indicated.
- B. Aluminum Extrusions: ASTM B221 (ASTM B221M), alloy and temper recommended by aluminum producer and finisher for type of use and finish indicated.
- C. Steel Materials:
 - 1. Metallic-Coated Steel Sheet: ASTM A653/A653M, G90 (Z275) coating, either commercial or forming steel.
 - 2. Steel Sheet: Uncoated, cold-rolled, ASTM A1008/A1008M, commercial steel, Type B, exposed or electrolytic zinc-coated, ASTM A879/A879M, Coating Designation 08Z (24G), with steel sheet substrate according to ASTM A1008/A1008M, commercial steel, exposed.
 - 3. Hot-Rolled, Structural-Steel Shapes: ASTM A36/A36M or ASTM A529/A529M.
 - 4. Steel Members Fabricated from Plate or Bar Stock: ASTM A529/A529M or ASTM A572/A572M, 42,000-psi (290-MPa) minimum yield strength.
 - 5. Steel Tubing or Pipe: ASTM A500/A500M, Grade B.
 - 6. Bolts for Steel Framing: ASTM A307 or ASTM F3125/F3125M, Grade A325 (Grade A325M) as necessary for design loads and connection details.

- 7. For steel exposed to view on completion, provide materials having flat, smooth surfaces without blemishes. Do not use materials whose surfaces exhibit pitting, seam marks, roller marks, rolled trade names, or roughness.
- D. Stainless-Steel Sheet: ASTM A240/A240M or ASTM A666, Type 316, stretcher-leveled standard of flatness.
- E. Acrylic Sheet: ASTM D4802, category as standard with manufacturer for each sign, Type UVF (UV filtering).
- F. Paints and Coatings for Sheet Materials: Inks, dyes, and paints that are recommended by manufacturer for optimum adherence to surface and are UV and water resistant for colors and exposure indicated.

2.4 ACCESSORIES

- A. Fasteners and Anchors: Manufacturer's standard as required for secure anchorage of signs, noncorrosive and compatible with each material joined, and complying with the following unless otherwise indicated:
 - 1. Use concealed fasteners and anchors unless indicated to be exposed.
 - 2. Inserts: Furnish inserts to be set by other installers into concrete or masonry work.
- B. Post-Installed Anchors: Fastener systems with bolts of same basic metal as fastened metal, if visible, unless otherwise indicated; with working capacity greater than or equal to the design load, according to an evaluation report acceptable to authorities having jurisdiction, based on ICC-ES AC01 or ICC-ES AC193 as appropriate for the substrate.
 - 1. Uses: Securing signs with imposed loads to structure.
 - 2. Material for Exterior or Interior Locations and Where Stainless Steel Is Indicated: Alloy Group 1 (A1) stainless-steel bolts, ASTM F593 (ASTM F738M), and nuts, ASTM F594 (ASTM F836M).
- C. Power-Actuated Anchors: Fastener systems with working capacity greater than or equal to the design load, according to an evaluation report acceptable to authorities having jurisdiction, based on ICC-ES AC70.
- D. Bituminous Paint: Cold-applied asphalt emulsion complying with ASTM D1187/D1187M.
- E. Anchoring Materials:
 - 1. Nonshrink, Nonmetallic Grout: Factory-packaged, nonstaining, noncorrosive, nongaseous grout complying with ASTM C1107/C1107M. Provide grout specifically recommended by manufacturer for interior and exterior applications.
 - 2. Anchoring Cement: Factory-packaged, nonshrink, nonstaining, hydraulic-controlled expansion cement formulation for mixing with water at Project site to create pourable anchoring, patching, and grouting compound.
 - a. Water-Resistant Product: At exterior locations, provide formulation that is resistant to erosion from water exposure without needing protection by a sealer or waterproof coating and that is recommended by manufacturer for exterior use.

2.5 FABRICATION

- A. General: Provide manufacturer's standard sign assemblies according to requirements indicated.
 - 1. Preassemble signs in the shop to greatest extent possible. Disassemble signs only as necessary for shipping and handling limitations. Clearly mark units for reassembly and installation, in locations concealed from view after final assembly.
 - 2. Mill joints to tight, hairline fit. Form assemblies and joints exposed to weather to resist water penetration and retention.
 - 3. Comply with AWS for recommended practices in welding and brazing. Provide welds and brazes behind finished surfaces without distorting or discoloring exposed side. Clean exposed welded and brazed joints of flux, and dress exposed and contact surfaces.
 - 4. Conceal fasteners and anchors unless indicated to be exposed; locate exposed fasteners where they will be inconspicuous.
 - 5. Internally brace signs for stability, to meet structural performance loading without oil-canning or other surface deformation, and for securing fasteners.

2.6 GENERAL FINISH REQUIREMENTS

- A. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.
- B. Appearance of Finished Work: Noticeable variations in same piece are not acceptable. Variations in appearance of adjoining components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.
- C. Directional Finishes: Run grain with long dimension of each piece and perpendicular to long dimension of finished trim or border surface unless otherwise indicated.
- D. Organic, Anodic, and Chemically Produced Finishes: Apply to formed metal after fabrication but before applying contrasting polished finishes on raised features unless otherwise indicated.

2.7 ALUMINUM FINISHES

A. Baked-Enamel or Powder-Coat Finish: AAMA 2603 except with a minimum dry film thickness of 1.5 mils (0.04 mm). Comply with coating manufacturer's written instructions for cleaning, conversion coating, and applying and baking finish.

2.8 METALLIC-COATED STEEL FINISHES

- A. Surface Preparation: Clean surfaces of oil and other contaminants. Use cleaning methods that do not leave residue. After cleaning, apply a conversion coating compatible with the organic coating to be applied over it. Clean welds, mechanical connections, and abraded areas and apply galvanizing repair paint, complying with SSPC-Paint 20, to comply with ASTM A780/A780M.
- B. Baked-Enamel or Powder-Coat Finish: After cleaning and pretreating, apply manufacturer's standard two-coat, baked-on finish consisting of prime coat and thermosetting topcoat to a minimum dry film thickness of 2 mils (0.05 mm).

2.9 STEEL FINISHES

- A. Surface Preparation: Remove mill scale and rust, if present, from uncoated steel, and prepare for coating according to coating manufacturer's written instructions.
 - 1. For Baked-Enamel or Powder-Coat Finish: After cleaning, apply a conversion coating compatible with the organic coating to be applied over it.
- B. Baked-Enamel or Powder-Coat Finish: After cleaning and pretreating, apply manufacturer's standard two-coat, baked-on finish consisting of prime coat and thermosetting topcoat to a minimum dry film thickness of 2 mils (0.05 mm).

2.10 STAINLESS-STEEL FINISHES

- A. Surface Preparation: Remove tool and die marks and stretch lines, or blend into finish.
- B. Polished Finishes: Grind and polish surfaces to produce uniform finish, free of cross scratches.
 - 1. Dull Satin Finish: No. 6.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.
- B. Verify that sign-support surfaces are within tolerances to accommodate signs.
- C. Verify that anchorage devices embedded in permanent construction are correctly sized and located to accommodate signs.
- D. Verify that electrical service is correctly sized and located to accommodate signs.
- E. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. General: Install signs using installation methods indicated and according to manufacturer's written instructions.
 - 1. Install signs level, plumb, and at locations and heights indicated, with sign surfaces free of distortion and other defects in appearance.
 - 2. Install signs so they do not protrude or obstruct according to the accessibility standard.
 - 3. Before installation, verify that sign components are clean and free of materials or debris that would impair installation.
 - 4. Corrosion Protection: Coat concealed surfaces of exterior aluminum in contact with grout, concrete, masonry, wood, or dissimilar metals, with a heavy coat of bituminous paint.

3.3 ADJUSTING AND CLEANING

- A. Remove and replace damaged or deformed signs and signs that do not comply with specified requirements. Replace signs with damaged or deteriorated finishes or components that cannot be successfully repaired by finish touchup or similar minor repair procedures.
- B. Remove temporary protective coverings and strippable films as signs are installed.
- C. On completion of installation, clean exposed surfaces of signs according to manufacturer's written instructions, and touch up minor nicks and abrasions in finish. Maintain signs in a clean condition during construction and protect from damage until acceptance by Owner.

END OF SECTION 101426

SECTION 321726 - TACTILE WARNING SURFACING

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Directional Texture Surfacing.
- B. Related Requirements:
 - 1. Refer to Bid Item 11-5 for Detectable Warning Field tiles.

1.2 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Samples for Verification: For each type of tactile warning surface, in manufacturer's standard sizes unless otherwise indicated, showing edge condition, truncated-dome pattern, texture, color, and cross section; with fasteners and anchors.

1.3 CLOSEOUT SUBMITTALS

A. Maintenance Data: For tactile warning surfacing, to include in maintenance manuals.

1.4 PREINSTALLATION MEETINGS

A. Preinstallation Conference: Conduct conference at Project site.

1.5 PROJECT CONDITIONS

- A. Cold-Weather Protection: Do not use frozen materials or materials mixed or coated with ice or frost. Do not build on frozen subgrade or setting beds. Remove and replace unit paver work damaged by frost or freezing.
- B. Weather Limitations for Adhesive Application:
 - 1. Apply adhesive only when ambient temperature is above 50 deg F (10 deg C) and when temperature has not been below 35 deg F (2 deg C) for 12 hours immediately before application. Do not apply when substrate is wet or contains excess moisture.

1.6 WARRANTY

- A. Special Warranty: Manufacturer agrees to repair or replace components of tactile warning surfaces that fail in materials or workmanship within specified warranty period.
 - 1. Failures include, but are not limited to, the following:

- a. Deterioration of finishes beyond normal weathering and wear.
- b. Separation or delamination of materials and components.
- 2. Warranty Period: Five years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 TACTILE WARNING SURFACING, GENERAL

- A. Accessibility Requirements: Comply with applicable provisions in the U.S. Architectural & Transportation Barriers Compliance Board's ADA-ABA Accessibility Guidelines for Buildings and Facilities and ICC A117.1 for tactile warning surfaces.
 - 1. For tactile warning surfaces composed of multiple units, provide units that when installed provide consistent side-to-side and end-to-end dome spacing that complies with requirements.
- B. Source Limitations: Obtain each type of tactile warning surfacing, and fastener from single source with resources to provide materials and products of consistent quality in appearance and physical properties.

2.2 DIRECTIONAL TEXTURE TILES

- A. Surface-Applied Directional Bar Tile / Way-Finding Tiles:
 - 1. Products: Subject to compliance with requirements, provide one of the following:
 - a. Armor-Tile Tactile Systems; Detectable Directional.
 - b. ADA Solutions Inc.; Wayfinding Surface.
- B. Material: Manufactured using a matte finish exterior grade homogeneous (uniform color throughout thickness of product) glass and carbon-reinforced, polyester-based Sheet Molding Compound (SMC) composite material. A matte finish will be required on the Directional Bar Tile for slip resistance performance. Use of Directional Bar Tile Products employing coatings or featuring layers of material with differing composition, performance, or color properties is prohibited.
- C. Color: Match adjacent detectable warning tiles.
- D. Geometry: Comply with CBC Figure 11B-705.2.
- E. Mounting: Semi-recessed with field set flush to adjacent finish surface adhered to pavement surface with adhesive and fastened with fasteners.

2.3 ACCESSORIES

- A. Fasteners and Anchors: Manufacturer's standard as required for secure anchorage of tactile warning surfaces, noncorrosive and compatible with each material joined, and complying with the following:
 - 1. Furnish Type 316 stainless-steel fasteners for exterior use.
 - 2. Fastener Heads: For nonstructural connections, use flathead or oval countersunk screws and bolts with tamper-resistant heads, colored to match tile.

B. Adhesive: As recommended by manufacturer for adhering tactile warning surfacing unit to pavement.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify that pavement is in suitable condition to begin installation according to manufacturer's written instructions. Verify that installation of tactile warning surfacing will comply with accessibility requirements upon completion.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION OF TACTILE WARNING SURFACING

- A. General: Prepare substrate and install tactile warning surfacing according to manufacturer's written instructions unless otherwise indicated.
- B. Place tactile warning surfacing units in dimensions and orientation indicated. Comply with location requirements of AASHTO MP 12.

3.3 CLEANING AND PROTECTION

- A. Remove and replace tactile warning surfacing that is broken or damaged or does not comply with requirements in this Section. Remove in complete sections from joint to joint unless otherwise approved by Architect. Replace using tactile warning surfacing installation methods acceptable to Architect.
- B. Protect tactile warning surfacing from damage and maintain free of stains, discoloration, dirt, and other foreign material.

END OF SECTION 321726

	DIATEORNA	PLATFORM LENGTH	PLATFORM WIDTH	PLATFORM HEIGHT		LONGITUDINAL	cpocc					COLAD
STATION PLATFORM LOCATION	PLATFORM DIRECTION	(FT)	(FT)	(IN)	CANOPY SIZE	LONGITUDINAL SLOPE	CROSS SLOPE	PLATFORM DETAIL DWG NO.	DISCHARGE TYPE	STAIR RISE	HANDRAIL	SOLAR PANELS
JUNCTION ROAD	END OF LINE	60	10	13.5	20'-5" x 9'-6"	0.8%	1.50%	CURBSIDE CHARGING STATION (A6)	GRASS AREA AND CONNECT TO SEWER			
JUNCTION ROAD	END OF LINE	60	10	13.5	20'-5" x 9'-6"	1.5%	1.50%	CURBSIDE CHARGING STATION (A6)				
MINERAL POINT ROAD AT HIGH POINT ROAD	EB/WB	60	12	13.5	60'-6" x 11'-0"	2.2%	1.50%	CENTER (B1)	DIRECT CONNECT TO SEWER			YES
MINERAL POINT ROAD AT WESTFIELD ROAD	EB/WB	60	12	13.5	60'-6" x 11'-0"	1.5%	1.7-1.5%	CENTER (B1)	GRASS AREA AND PLANTERS			YES
MINERAL POINT ROAD AT GRAND CANYON DRIVE	EB/WB	60	12	13.5	60'-6" x 11'-0"	3.0%	1.50%	CENTER (B1)	DIRECT CONNECT TO SEWER			YES
MINERAL POINT ROAD AT ISLAND DRIVE	EB/WB	60	12	13.5	60'-6" x 11'-0"	0.6%	1.50%	CENTER (B1)	GRASS AREA AND PLANTERS			YES
MINERAL POINT ROAD AT ROSA ROAD	EB/WB	60	12	13.5	60'-6" x 11'-0"	0.8%	1.50%	CENTER (B1)	GRASS AREA AND PLANTERS			YES
WHITNEY WAY AT MINERAL POINT ROAD	EB/WB	60	12	13.5	60'-6" x 11'-0"	2.6-4.9%	2.7-1.3%	CENTER (B1)	DIRECT CONNECT TO SEWER			YES
WHITNEY WAY AT REGENT STREET	EB/WB	50	12	13.5	23'-5" X 11'-0"	1.2%	1.50%	REDUCED CENTER (C)	NO STORM SEWER			
SHEBOYGAN AVENUE AT EAU CLAIRE AVENUE	EB/WB	60	12	13.5	60'-6" x 11'-0"	1.1%	1.50%	CENTER (B1)	NO STORM SEWER			YES
SHEBOYGAN AVENUE AT SEGOE ROAD	WB	60	10	13.5	60'-6" x 9'-6"	2.4%	1.50%	CURBSIDE - ISLAND (A1)	NO STORM SEWER - GRASS AREA			YES
SHEBOYGAN AVENUE AT SEGOE ROAD	EB	60	10	13.5	60'-6" x 9'-6"	2.7%	1.50%	CURBSIDE CENTER (A7)				YES
UNIVERSITY AVENUE AT MIDVALE BOULEVARD	EB/WB	60	12	13.5	60'-6" x 11'-0"	0.9%	1.50%	CENTER (B1)				
UNIVERSITY AVENUE AT SHOREWOOD BOULEVARD	EB/WB	60	12	13.5	60'-6" x 11'-0"	0.4%	1.40%	CENTER (B1)	DIRECT CONNECT TO SEWER			YES
UNIVERSITY AVENUE AT UNIVERSITY BAY DRIVE	EB/WB	60	12	13.5	60'-6" x 11'-0"	0.5%	1.50%	CENTER (B1)	DIRECT CONNECT TO SEWER			YES
UNIVERSITY AVENUE AT ORCHARD STREET	WB	60	10	13.5	60'-6" x 9'-6"	0.3%	1.50%	CURBSIDE (A2)	DIRECT CONNECT TO SEWER	1 RISER 7.0"	NO	YES
JOHNSON STREET AT ORCHARD STREET	EB	60	10	13.5	60'-6" x 9'-6"	0.5%	1.50%	CURBSIDE (A2)	DIRECT CONNECT TO SEWER	1 RISER 7.0"	NO	YES
UNIVERSITY AVENUE AT EAST CAMPUS MALL	WB	60	10	13.5	60'-6" x 9'-6"	0.5%	1.50%	CURBSIDE (A1)				YES
UNIVERSITY AVENUE AT EAST CAMPUS MALL	SB	60	10	13.5	N/A	0.3%	1.50%	NO CANOPY				
JOHNSON STREET AT EAST CAMPUS MALL	EB	60	10	13.5	60'-6" x 9'-6"	1.1%	1.50%	CURBSIDE (A1)	NO STORM SEWER			YES
STATE STREET - GORHAM STREET	WB	50	10	13.5	23'-5" X 9'-6"	(1.6-1.7%)	1.50%	REDUCED CURBSIDE (A4)	DISCHARGE TO FLOWLINE	1 RISERS 6"	NO	
STATE STREET - JOHNSON STREET	EB	50	10	13.5	23'-5" X 9'-6"	(2.3%)	1.50%	REDUCED CURBSIDE (A3)	DIRECT CONNECT TO INLET *	1 RISER 6"	NO	
CAPITOL SQUARE - MIFFLIN STREET AT WISCONSON AVENUE	WB	60	10	13.5	60'-6" x 9'-6"	1.0%	1.50%	CURBSIDE (A2)	DIRECT CONNECT TO INLET *	2 RISERS 5.67"	YES	YES
CAPITOL SQUARE - MAIN STREET AT MARTLIN LUTHER KING BOULEVARD	EB	60	10	13.5	60'-6" x 9'-6"	1.4%	1.50%	CURBSIDE (A2)	DIRECT CONNECT TO INLET *	2 RISERS 5.55"	YES	YES
EAST WASHINGTON AVENUE AT BLAIR STREET	EB/WB	60	14	13.5	60'-6" X 13'-0"	4.3%	1.30%	CENTER (B2)	DISCHARGE TO FLOWLINE			YES
EAST WASHINGTON AVENUE AT PATERSON STREET	EB/WB	60	14	13.5	60'-6" X 13'-0"	0.2-0.4%	1.5-0.5%	CENTER (B2)	DIRECT CONNECT TO INLET *			YES
EAST WASHINGTON AVENUE AT BALDWIN STREET	EB/WB	60	14	13.5	60'-6" X 13'-0"	0.5%	1.50%	CENTER (B2)	DIRECT CONNECT TO INLET *			YES
EAST WASHINGTON AVENUE AT FIRST STREET	EB/WB	60	12	13.5	60'-6" X 11'-0"	3.4-3.5%	(1.5-1.4%)	CENTER (B1)	DIRECT CONNECT TO INLET			YES
EAST WASHINGTON AVENUE AT FOURTH STREET	EB/WB	60	14	13.5	60'-6" X 13'-0"	0.8%	1.50%	CENTER (B2)	DIRECT CONNECT TO INLET			YES
EAST WASHINGTON AVENUE AT MILWAUKEE-NORTH STREET	WB	60	10	13.5	60'-6" X 9'-6"	0.4%	1.00%	CURBSIDE CENTER (A5)	DIRECT CONNECT TO INLET			YES
EAST WASHINGTON AVENUE AT MILWAUKEE-NORTH STREET	EB	60	10	13.5	60'-6" X 9'-6"	1.2%	0.80%	CURBSIDE CENTER (A5)	DIRECT CONNECT TO MANHOLE			YES
EAST WASHINGTON AVENUE AT MARQUETTE STREET	EB/WB	60	14	13.5	60'-6" X 13'-0"	0.4%	1.50%	CENTER (B2)	DIRECT CONNECT TO INLET *			YES
EAST WASHINGTON AVENUE AT MELVIN COURT-RETHKE AVENUE	EB/WB	60	14	13.5	60'-6" X 13'-0"	0.4%	1.5-1.3%	CENTER (B2)	DIRECT CONNECT TO INLET *			YES
EAST WASHINGTON AVENUE AT WRIGHT STREET - FAIR OAKS AVENUE	EB/WB	60	12	13.5	60'-6" x 11'-0"	1.6%	1.50%	CENTER (B1)	DIRECT CONNECT TO INLET			YES
WRIGHT STREET AT ANDERSON STREET	WB	60	10	13.5	60'-6" X 9'-6"	1.0%	1.50%	CURBSIDE - ISLAND (A2)	DISCHARGE TO FLOWLINE - NO TLE			YES
WRIGHT STREET AT ANDERSON STREET	EB	60	10	13.5	60'-6" X 9'-6"	1.1%	1.50%	CURBSIDE - ISLAND (A1)	DIRECT CONNECT TO INLET	1 RISER 6.5"	NO	YES
EAST WASHINGTON AVENUE AT MENDOTA STREET	WB	50	10	13.5	23'-5" X 9'-6"	0.5%	1.50%	REDUCED CURBSIDE (A4)	GRASS OUTLET ON SIDE OF PLATFORM	333333		
EAST WASHINGTON AVENUE AT MENDOTA STREET	EB	60	10	13.5	60'-6" X 9'-6"	0.6%	1.50%	CURBSIDE - ISLAND (A1)	DISCHARGE TO FLOWLINE	1 RISER 6.5"	NO	YES
EAST WASHINGTON AVENUE AT THIERER ROAD - PORTAGE AVENUE	WB	60	10	13.5	60'-6" X 9'-6"	0.4%	1.50%	CURBSIDE - ISLAND (A1)	DIRECT CONNECT TO INLET *			YES
EAST WASHINGTON AVENUE AT THIERER ROAD - PORTAGE AVENUE	EB	60	10	13.5	60'-6" X 9'-6"	0.4%	1.50%	CURBSIDE - ISLAND (A1)	DIRECT CONNECT TO INLET *			YES
EAST WASHINGTON AVENUE AT INDEPENDENCE LANE	WB	60	10	13.5	60'-6" X 9'-6"	1.1%	1.50%	CURBSIDE - ISLAND (A1)	DIRECT CONNECT TO INLET			YES
EAST WASHINGTON AVENUE AT INDEPENDENCE LANE	EB	60	10	13.5	60'-6" X 9'-6"	1.3%	1.50%	CURBSIDE - ISLAND (A1)	DIRECT CONNECT TO INLET			YES
EAST WASHINGTON AVENUE AT EAST SPRINGS DRIVE	WB	60	10	13.5	60'-6" X 9'-6"	2.9%	1.50%	CURBSIDE - ISLAND (A1)	GRASS OUTLET ON SIDE OF PLATFORM			YES
EAST WASHINGTON AVENUE AT EAST SPRINGS DRIVE	EB	60	10	13.5	60'-6" X 9'-6"	2.4%	1.50%	CURBSIDE - ISLAND (A2)	GRASS OUTLET ON SIDE OF PLATFORM			YES
HANSON ROAD TEST PLATFORM	EB/WB	60	12	13.5	N/A	0.3%	1.50%	NO CANOPY				
	1	I			1	I .	I	<u> </u>	I	l	1	

PLATFORM & CANOPY TYPE	TOTAL
CURBSIDE (A1)	2
CURBSIDE (A2)	4
CURBSIDE - ISLAND (A1)	8
CURBSIDE - ISLAND (A2)	2
REDUCED CURBSIDE (A3)	1
REDUCED CURBSIDE (A4)	2
CURBSIDE CENTER (A5)	2
CURBSIDE CHARGING STATION (A6)	2
CURBSIDE CENTER (A7)	1
CENTER (B1)	12
CENTER (B2)	6
REDUCED CENTER (C)	1
NO CANOPY	2

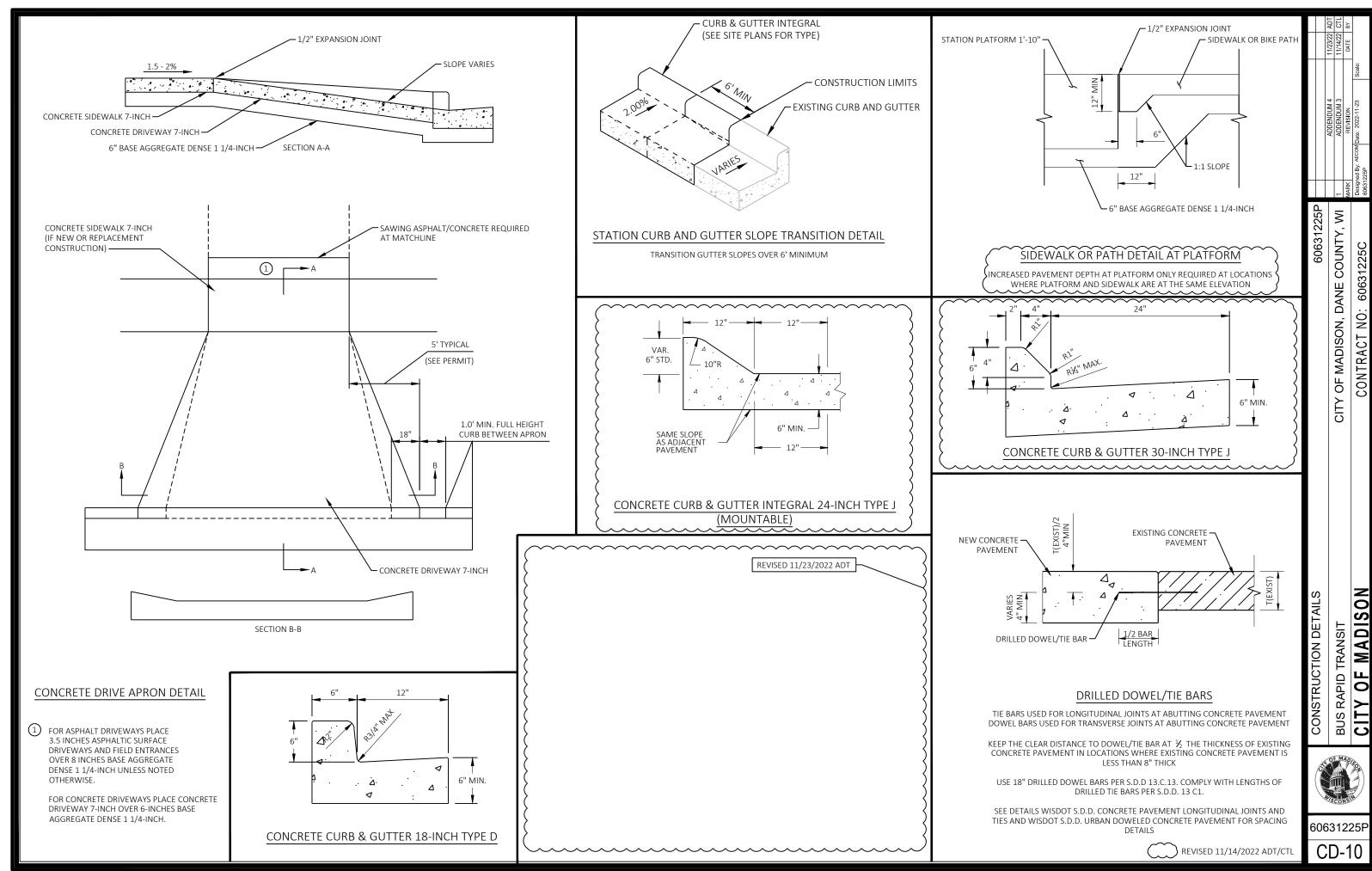
REVISED 11/22/22 MEM



PROJECT OVERVIEW

60631225P

REVISED 11/07/22 MEM 0-5

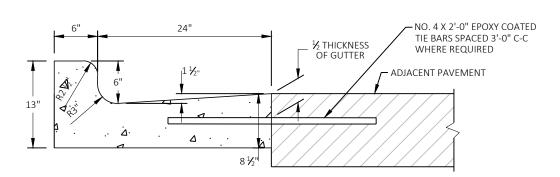


J.TIMCO@AECOM.COM\DMS86348\021000-CD.DWG

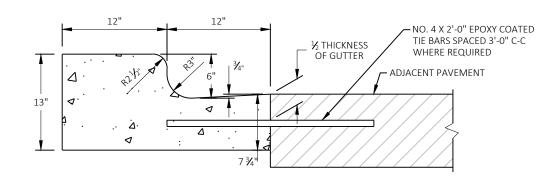
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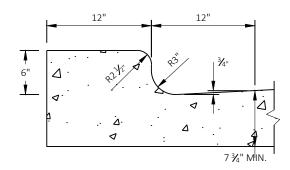
ILE NAME :



CONCRETE CURB & GUTTER 30-INCH TYPE A SPECIAL

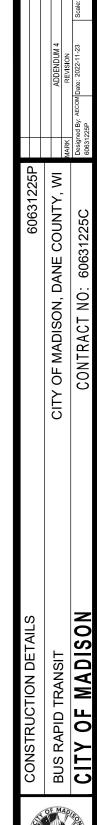


CONCRETE CURB & GUTTER 24-INCH TYPE H SPECIAL



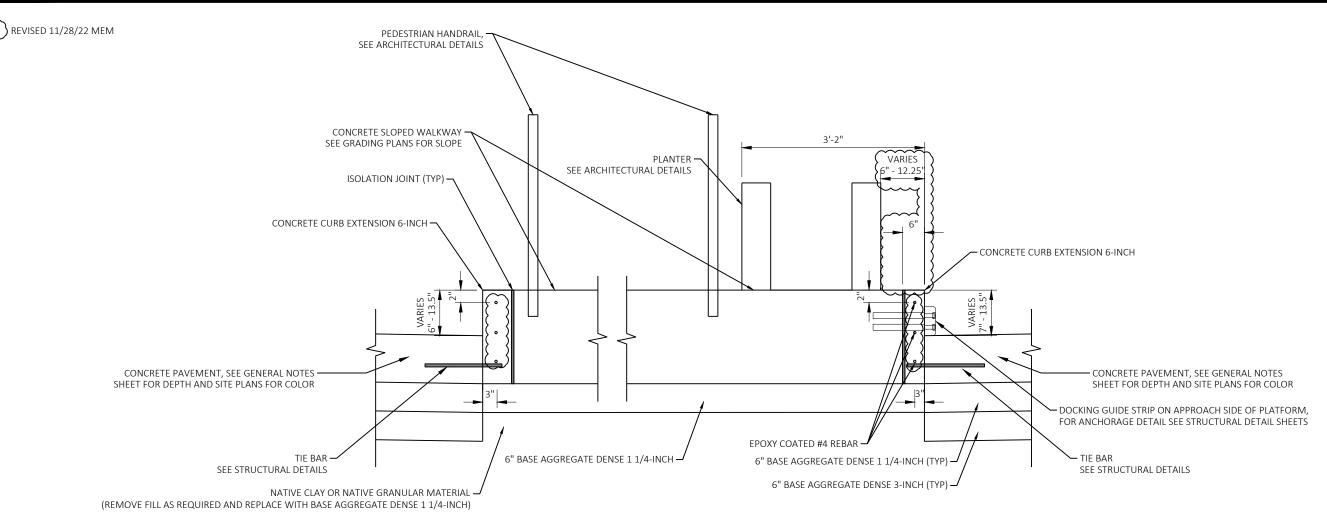
CONCRETE CURB & GUTTER INTEGRAL 24-INCH SPECIAL

CONCRETE CURB & GUTTER STANDARD DETAIL DRA REFERENCE TABLE	WING (SDD)
CONCRETE CURB & GUTTER 30-INCH TYPE A	WISDOT SDD 08D01
CONCRETE CURB & GUTTER 30-INCH TYPE D	WISDOT SDD 08D01
CONCRETE CURB & GUTTER INTEGRAL 30-INCH TYPE D	WISDOT SDD 08D01
CONCRETE CURB & GUTTER INTEGRAL 18-INCH SPECIAL	CITY OF MADISON SDD 3.08

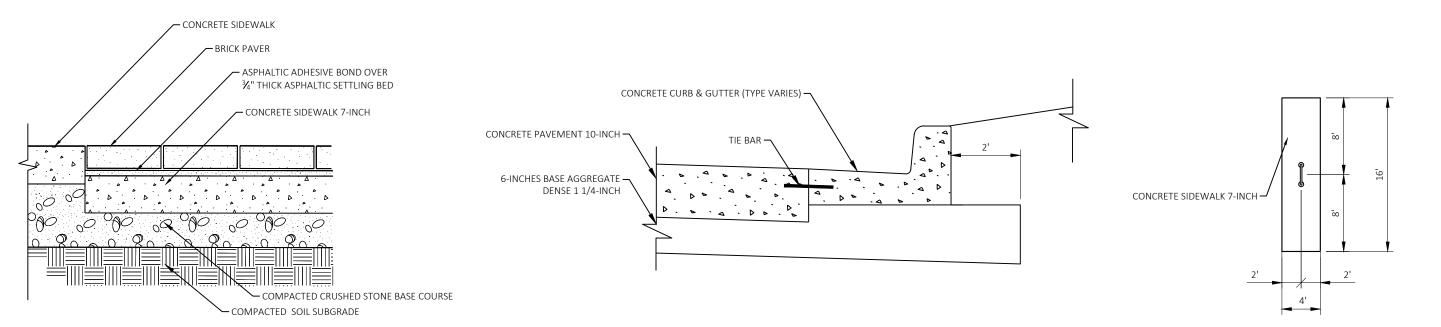












PAVER DETAIL

NOT TO SCALE

BASE AGGREGATE EXTENSION BEYOND CURB

TYPICAL ALL CURB AND GUTTER LOCATIONS

NOT T

BIKE RACK (MOUNTED TO CONCRETE)

NOT TO SCALE

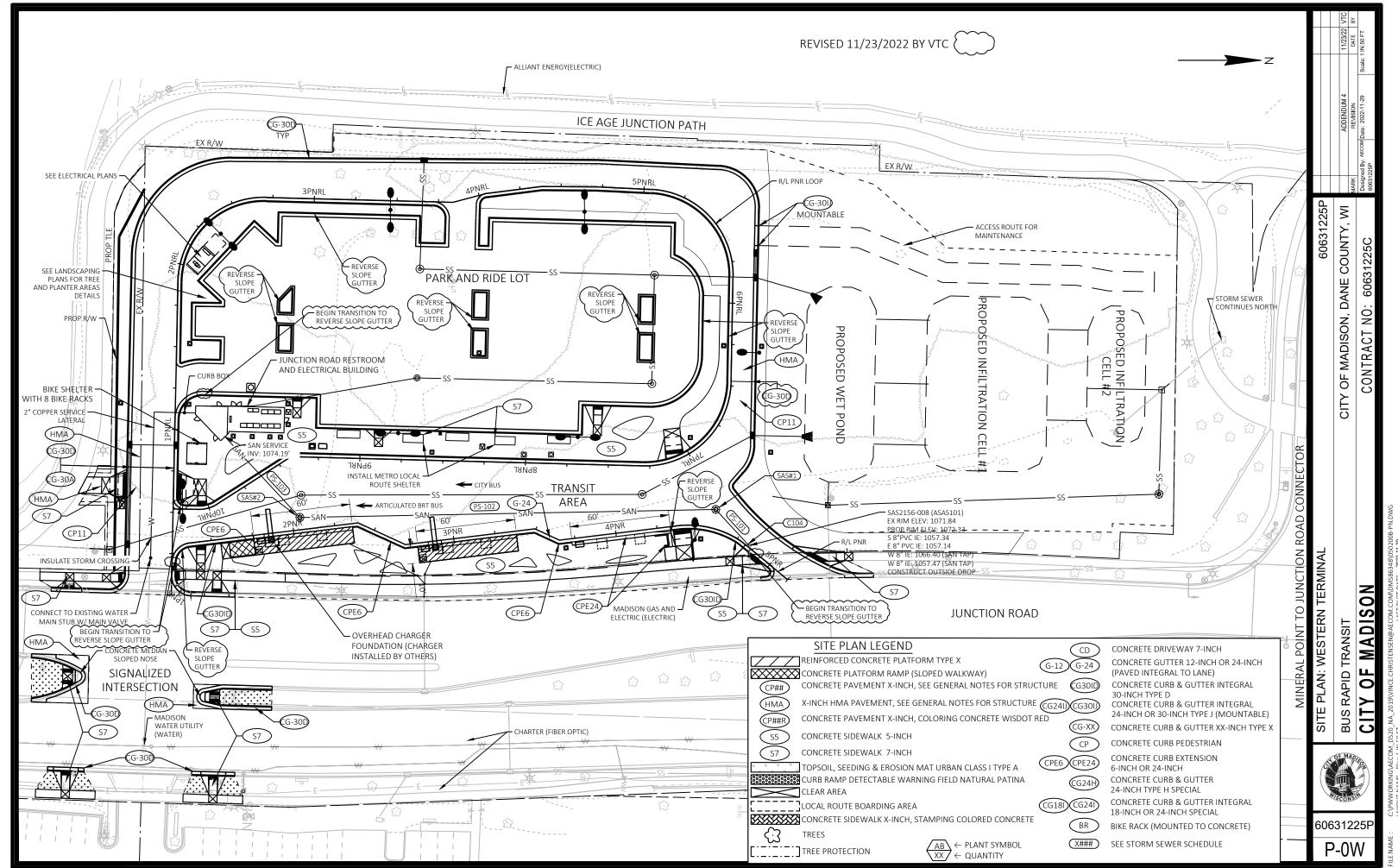
CONSTRUCTION DETAILS
BUS RAPID TRANSIT
CITY OF MADISON

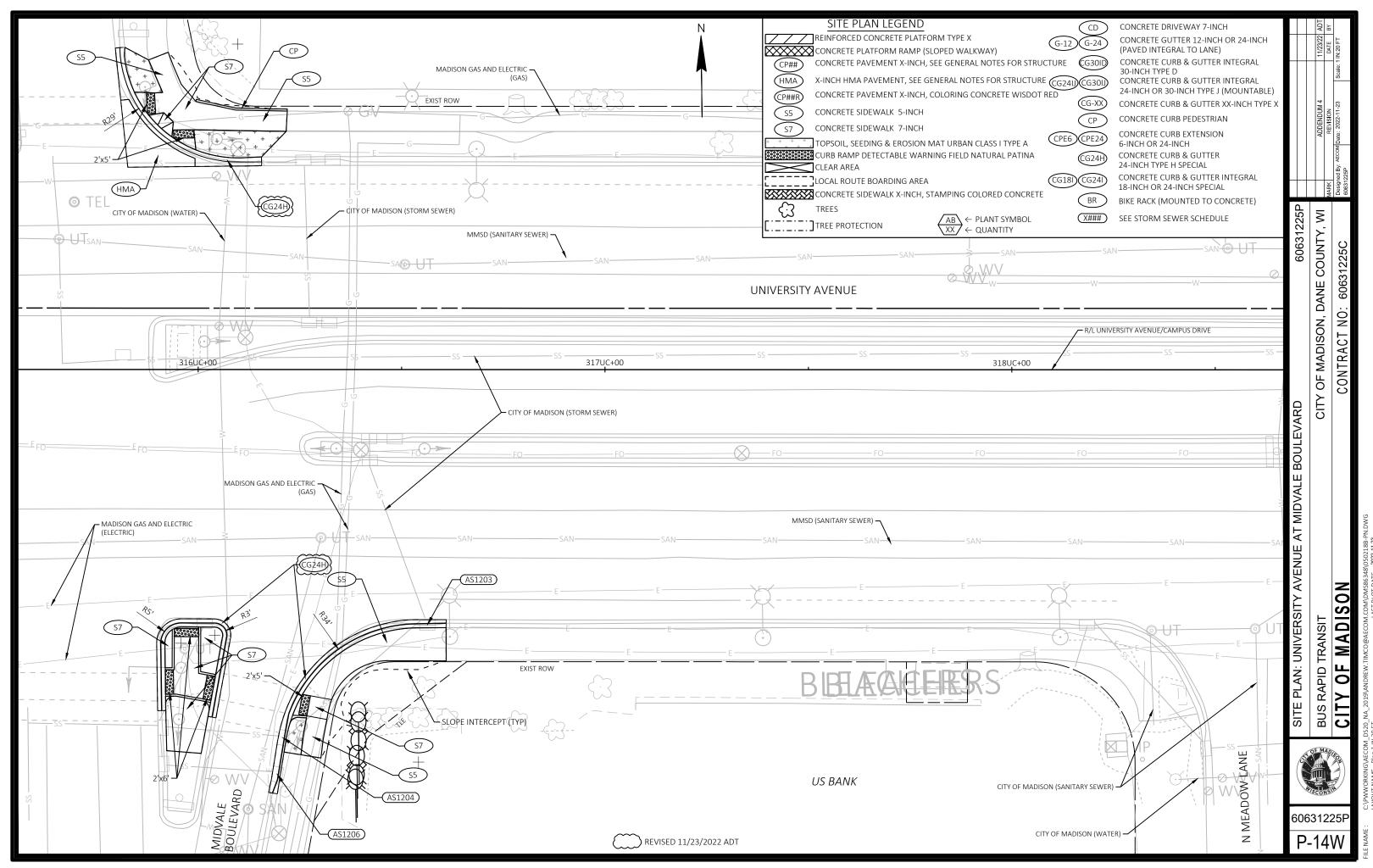
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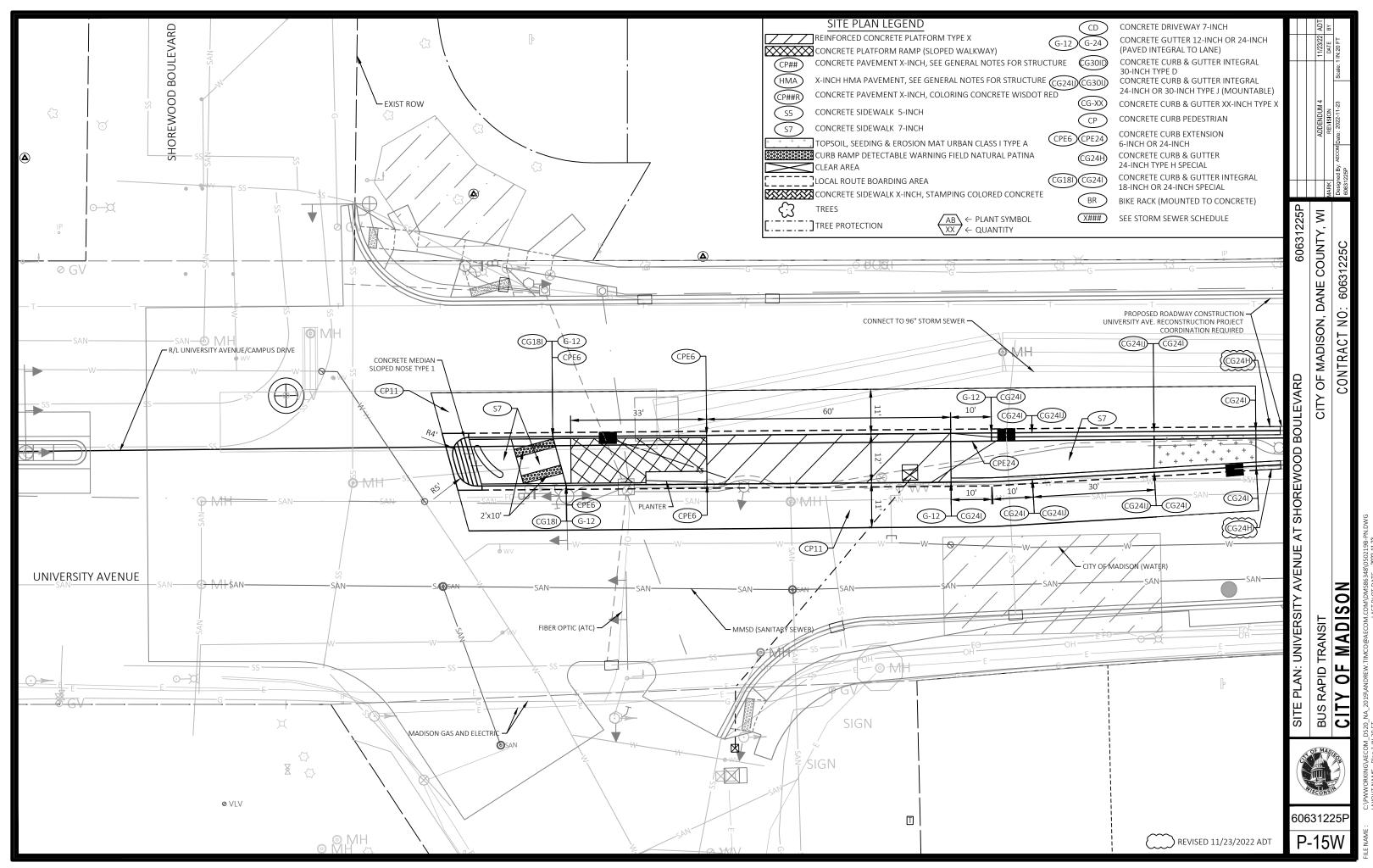
CITY OF MADISON, DANE COUNTY, WI

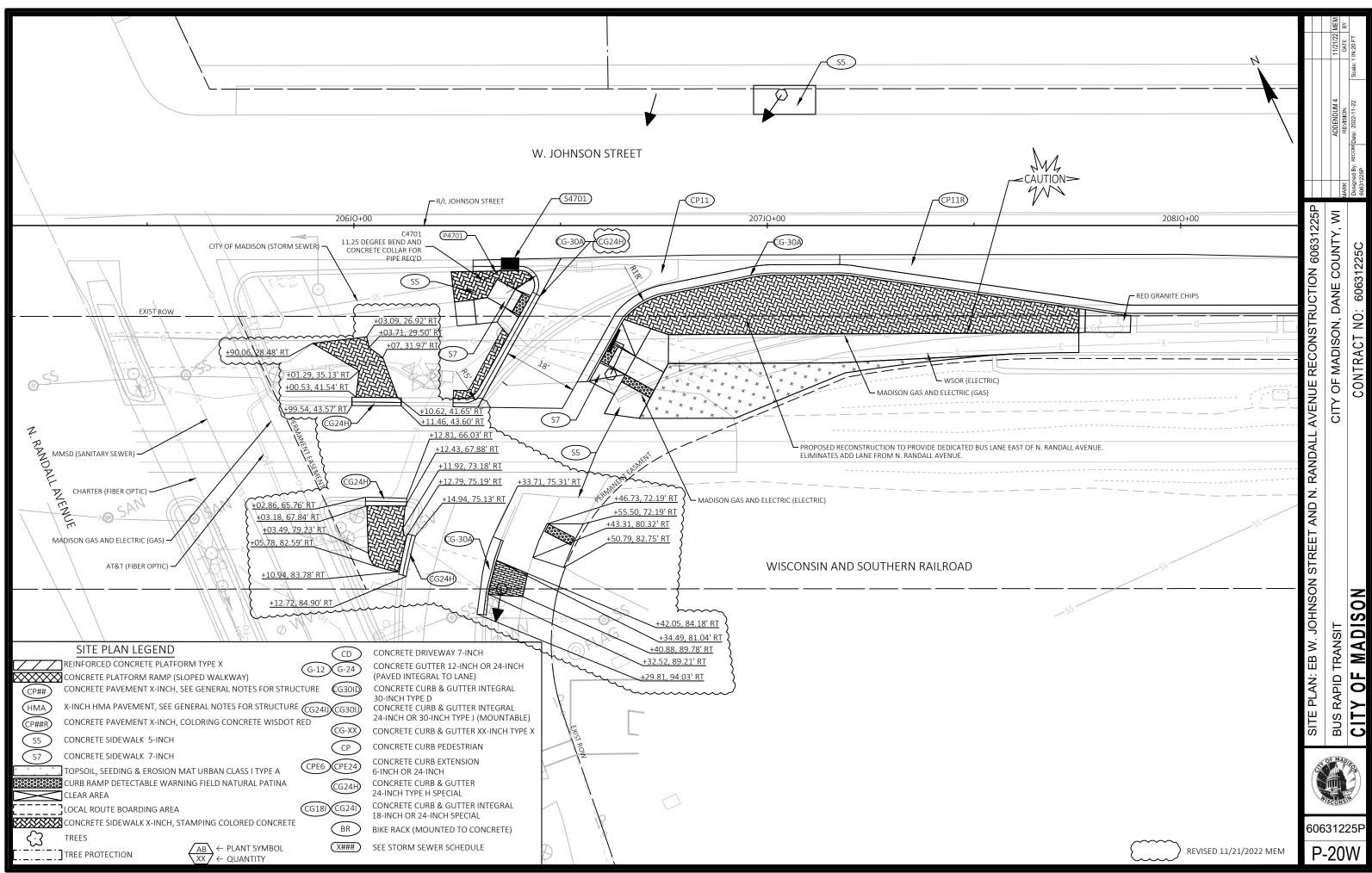
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CD-12





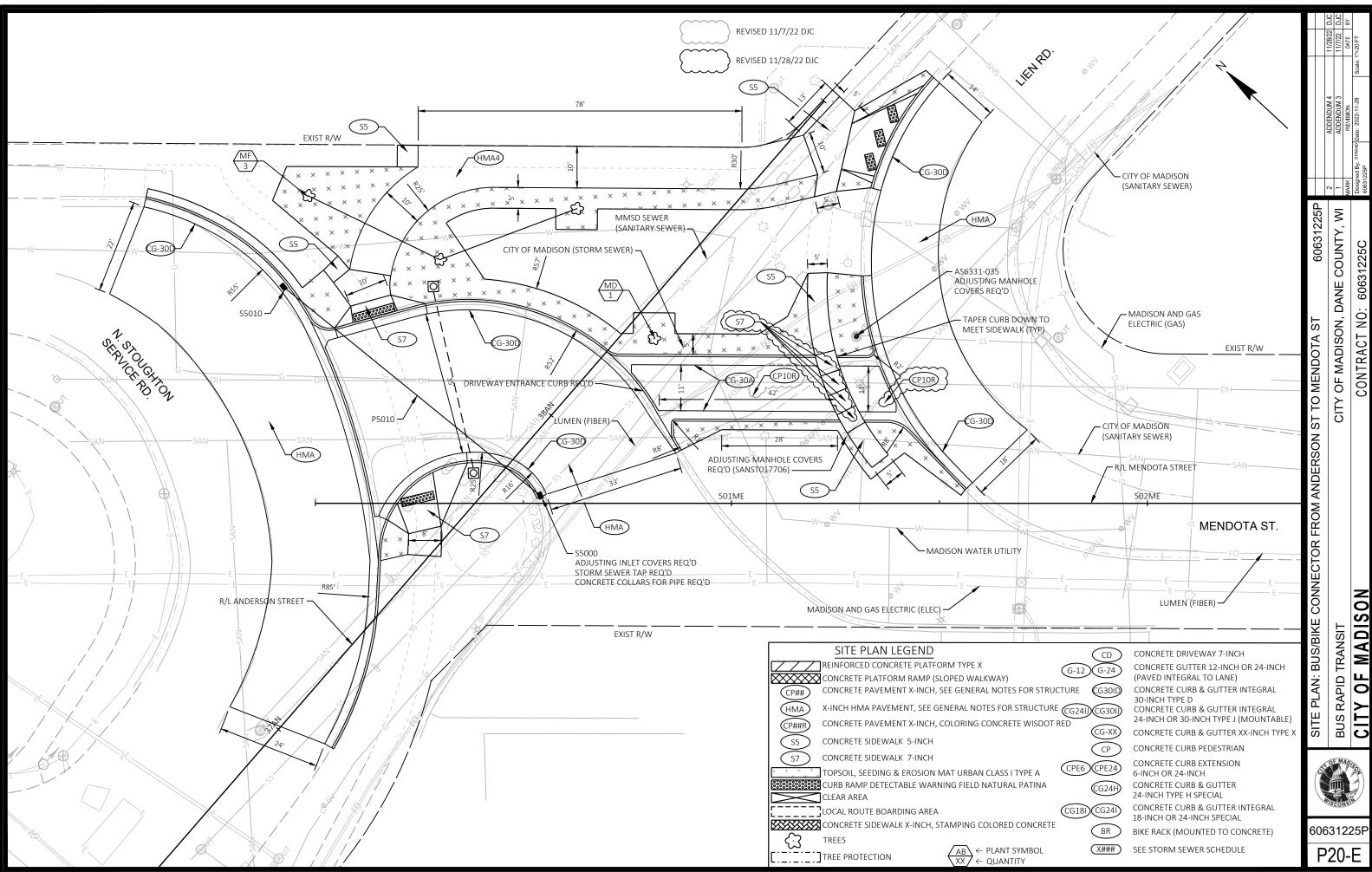


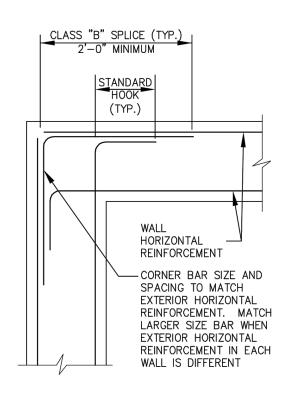


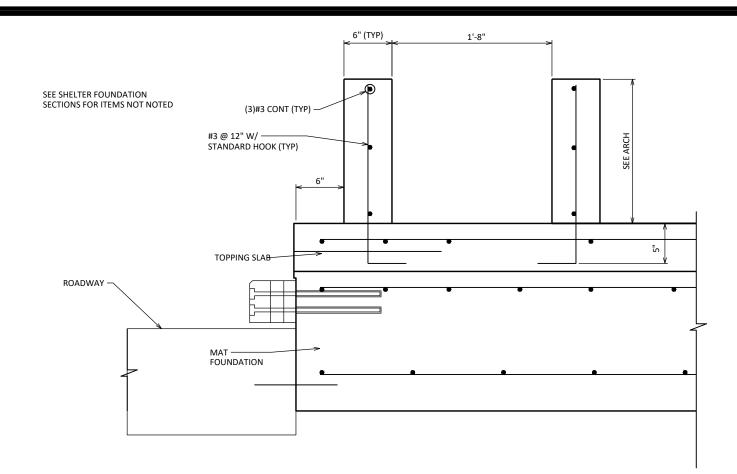
20_NA_2019\/MEGHAN.MCCARTHY@AECOM.COM\DMS86348\050229B-PN.DWG

VWORKING\AECOM_DS20_NA_2019\MEGHAN.MCCARTHY@AE! UT NAME - Plan 1 IN 50 FT

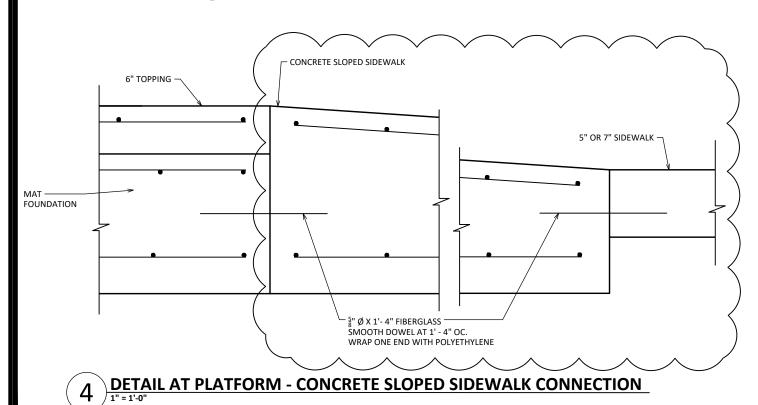
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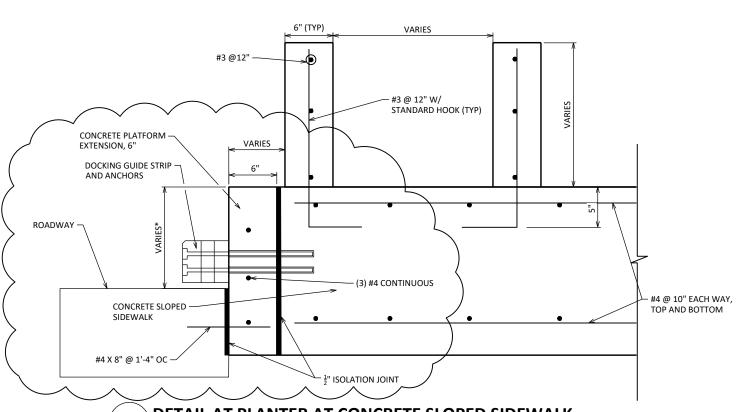






3 WALL CORNER REINFORCEMENT





DETAIL AT PLANTER AT PLATFORM

1" = 1'-0"

DETAIL AT PLANTER AT CONCRETE SLOPED SIDEWALK

*VARIABLE HEIGHT TO MATCH INTO INLET CURB BOX WHERE INLET IS INDICATED ON SITE PLAN AND TO MAINTAIN 6" HEIGHT AT END OF CONCRETE SLOPED SIDEWALK.

REVISED 11/28/22 CLL

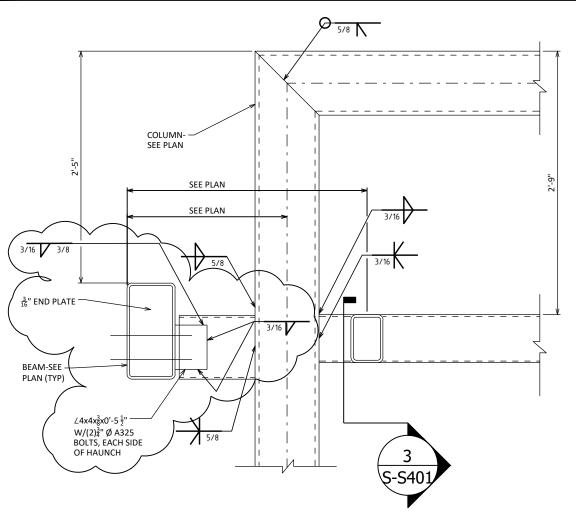
MADISON

BUS RAPID TRANSIT CITY OF MADIS

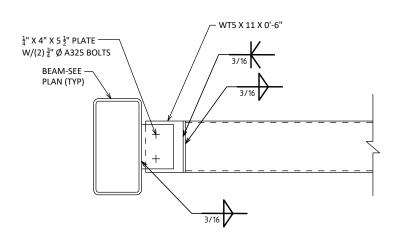
60631225P

CITY OF MADISON, DANE COUNTY, WI

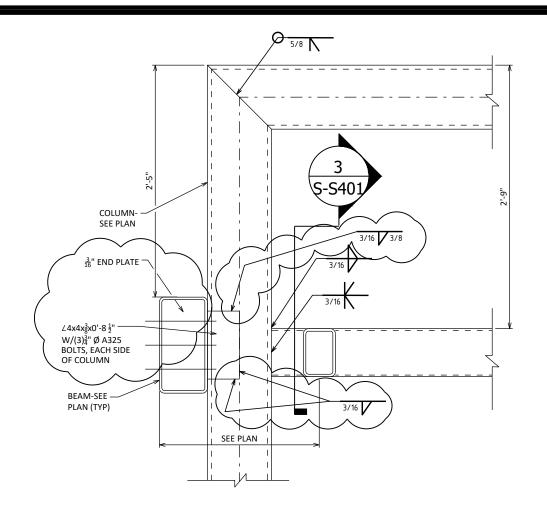
60631225F S-S301



DETAIL AT PORTAL FRAME

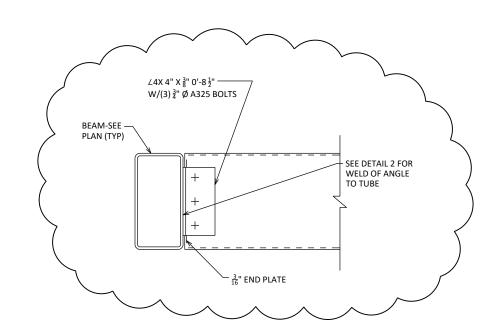


3 CONNECTION DETAIL



DETAIL AT PORTAL FRAME

1" = 1'-0"



CONNECTION DETAIL

1" = 1'-0"



BUS RAPID TRANSIT
CITY OF MADISON

60631225P

CITY OF MADISON, DANE COUNTY, WI

60631225F

S-S401 REVISED 11/28/22 CLL

WHITNEY WAY AT REGENT STREET

SCC Code	ITEM NUMBER	DESCRIPTION	UNITS	QUANTITY
40.01	201.0105	Clearing	STA	2.00
40.01	201.0120	Clearing	ID	37.00
40.01	201.0205	Grubbing	STA	2.00
40.01	201.0220	Grubbing	ID	37.00
40.01	204.0150	Removing Curb & Gutter	LF	860.00
40.01	204.0155	Removing Concrete Sidewalk	SY	150.00
40.02	204.0220	Removing Inlets	EACH	1.00
40.01	205.0100	Excavation Common	СҮ	430.00
10.02	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	100.00
20.01	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	22.00
40.06	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	24.00
40.07	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	220.00
10.02	305.0130	Base Aggregate Dense 3-Inch	TON	110.00
20.01	305.0130	Base Aggregate Dense 3-Inch	TON	24.00
40.07	305.0130	Base Aggregate Dense 3-Inch	TON	210.00
10.02	405.0100	Coloring Concrete WisDOT Red	CY	85.00
10.02	415.0100	Concrete Pavement 10-Inch	SY	306.00
40.07	415.0100	Concrete Pavement 10-Inch	SY	159.00
40.07	415.4100	Concrete Pavement Joint Filling	SY	675.00
40.06	455.0605	Tack Coat	GAL	13.00
40.06	460.2000	Incentive Density HMA Pavement	DOL	20.00
40.06	460.5224	HMA Pavement 4 LT 58-28 S	TON	21.00
40.06	460.6224	HMA Pavement 4 MT 58-28 S	TON	3.00
40.02	520.8000	Concrete Collars for Pipe	EACH	1.00
10.02	601.0205	Concrete Gutter 24-Inch	LF	160.00
40.07	601.0409	Concrete Curb & Gutter 30-Inch Type A	LF	380.00
40.07	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	190.00
40.07	601.0454	Concrete Curb & Gutter Integral 30-Inch Type J	LF	60.00
40.06	602.0410	Concrete Sidewalk 5-Inch	SF	1960.00
40.06	602.0420	Concrete Sidewalk 7-Inch	SF	820.00
40.06	602.0515	Curb Ramp Detectable Warning Field Natural Patina	SF	210.00
40.02	611.3230	Inlets 2x3-FT	EACH	1.00
40.02	611.8110	Adjusting Manhole Covers	EACH	1.00
40.02	611.8115	Adjusting Inlet Covers	EACH	8.00
40.02	611.9710	Salvaged Inlet Covers	EACH	1.00
40.07	620.0300	Concrete Median Sloped Nose	SF	498.00
10.02	624.0100	Water	MGAL	4.30
40.07	624.0100	Water	MGAL	10.20
40.06	625.0100	Topsoil	SY	300.00
40.06	628.2006	Erosion Mat Urban Class I Type A	SY	300.00
40.06	628.6505	Soil Stabilizer Type A	ACRE	0.06
40.02	628.7020	Inlet Protection Type D	EACH	15.00
40.06	629.0210	Fertilizer Type B	CWT	0.17
40.06	630.0500	Seed Water	MGAL	6.70
40.02	650.4000	Construction Staking Storm Sewer	EACH	9.00
40.07	650.5000	Construction Staking Base	LF	50.00

Scale: NTS	Designed By: AECOM Date: Sc	Designe	CONTRACT NO: 60631225C	SITY OF MADISON
DAT	REVISION	Mark		
11/2	ADDENDUM 4		IW YENTOO HAAO NOSIOAM HO YETO	BUS RAPID TRANSIT
			8 50031225	MISCELLANEOUS QUANTITIES
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60631225P MQ-16

SCC Code	ITEM NUMBER	DESCRIPTION	UNITS	QUANTITY
40.01	204.0115	Removing Asphaltic Surface Butt Joints	SY	14.00
40.01	204.0120	Removing Asphaltic Surface Milling	SY	180.00
40.01	204.0150	Removing Curb & Gutter	LF	370.00
40.01	204.0155	Removing Concrete Sidewalk	SY	170.00
40.02	204.0220	Removing Inlets	EACH	3.00
40.02	204.0245.01	Removing Storm Sewer - 12 inch or less	LF	57.00
40.01	205.0100	Excavation Common	CY	120.00
40.06	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	10.00
40.07	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	95.00
40.07	305.0130	Base Aggregate Dense 3-Inch	TON	78.00
40.06	415.4100	Concrete Pavement Joint Filling	SY	£98.003
40.06	455.0605	Tack Coat	GAL	33.00
40.06	460.2000	Incentive Density HMA Pavement	DOL	28.00
40.07	460.6224	HMA Pavement 4 MT 58-28 S	TON	44.00
40.02	520.8000	Concrete Collars for Pipe	EACH	1.00
40.07	601.0409	Concrete Curb & Gutter 30-Inch Type A	LF	350.00
40.06	602.0410	Concrete Sidewalk 5-Inch	SF	780.00
40.06	602.0420	Concrete Sidewalk 7-Inch	SF	640.00
40.06	602.0515	Curb Ramp Detectable Warning Field Natural Patina	SF	108.00
40.02	608.0312	Storm Sewer Pipe Reinforced Concrete Class III 12-Inch	LF	66.00
40.02	611.3230	Inlets 2x3-FT	EACH	3.00
40.02	611.9710	Salvaged Inlet Covers	EACH	3.00
40.07	620.0300	Concrete Median Sloped Nose	SF	84.00
40.07	624.0100	Water	MGAL	3.70
40.06	625.0100	Topsoil	SY	210.00
40.06	628.2006	Erosion Mat Urban Class I Type A	SY	210.00
40.06	628.6505	Soil Stabilizer Type A	ACRE	0.04
40.06	629.0210	Fertilizer Type B	CWT	0.12
40.06	630.0500	Seed Water	MGAL	4.70
40.02	650.4000	Construction Staking Storm Sewer	EACH	3.00
40.07	650.5000	Construction Staking Base	LF	61.00
40.07	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	350.00
40.06	650.9000	Construction Staking Curb Ramps	EACH	8.00
40.01	690.0150	Sawing Asphalt	LF	160.00
40.01	690.0250	Sawing Concrete	LF	330.00
40.02	SPV.0060.619	Adjust Manhole Cover Special	EACH	2.00
40.02	SPV.0060.631	Furnish & Install Insulation	EACH	1.00
40.06	SPV.0085.501	Seeding	LB	3.80

				Scale: NT
		ADDENDUM 4	Mark	Designed By: AECOM Date:
	60631225P	IW YTNICO HNACINOSICIAM FO YLIC		CONTDACT NO. 606342260
	SCELLANEOUS QUANTITIES	S RAPID TRANSIT		



SHEBOYGAN AVENUE AT EAU CLAIRE AVENUE

SCC Code	ITEM NUMBER	DESCRIPTION	UNITS	QUANTITY
40.01	201.0105	Clearing	STA	2.00
40.01	201.0120	Clearing	ID	78.00
40.01	201.0205	Grubbing	STA	2.00
40.01	201.0220	Grubbing	ID	78.00
40.01	204.0150	Removing Curb & Gutter	LF	650.00
40.01	204.0155	Removing Concrete Sidewalk	SY	380.00
40.01	205.0100	Excavation Common	CY	730.00
10.02	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	110.00
20.01	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	30.00
40.06	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	30.00
40.07	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	350.00
10.02	305.0130	Base Aggregate Dense 3-Inch	TON	120.00
20.01	305.0130	Base Aggregate Dense 3-Inch	TON	30.00
40.07	305.0130	Base Aggregate Dense 3-Inch	TON	320.00
10.02	415.0110	Concrete Pavement 11-Inch	SY	320.00
10.02	415.4100	Concrete Pavement Joint Filling	SY	(588.00)
40.06	455.0605	Tack Coat	GAL	60.00
40.06	460.2000	Incentive Density HMA Pavement	DOL	86.00
40.06	460.6224	HMA Pavement 4 MT 58-28 S	TON	130.00
10.02	601.0205	Concrete Gutter 24-Inch	LF	190.00
40.07	601.0409	Concrete Curb & Gutter 30-Inch Type A	LF	670.00
40.07	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	70.00
40.07	601.0454	Concrete Curb & Gutter Integral 30-Inch Type J	LF	70.00
40.06	601.0600	Concrete Curb Pedestrian	LF	25.00
40.06	602.0410	Concrete Sidewalk 5-Inch	SF	2390.00
40.06	602.0420	Concrete Sidewalk 7-Inch	SF	1590.00
40.06	602.0515	Curb Ramp Detectable Warning Field Natural Patina	SF	140.00
40.07	620.0300	Concrete Median Sloped Nose	SF	260.00
10.02	624.0100	Water	MGAL	4.50
40.07	624.0100	Water	MGAL	15.10
40.06	625.0100	Topsoil	SY	470.00
40.06	628.2006	Erosion Mat Urban Class I Type A	SY	470.00
40.06	628.6505	Soil Stabilizer Type A		0.10
40.06	629.0210	Fertilizer Type B	CWT	0.26
40.06	630.0500	Seed Water	MGAL	11.00
40.07	650.5000	Construction Staking Base	LF	212.00
40.07	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	670.00
40.07	650.7000	Construction Staking Concrete Pavement	LF	185.00
40.06	650.9000	Construction Staking Curb Ramps	EACH	8.00
20.01	652.0615	Conduit Special 3-Inch	LF	35.00
20.01	656.0200.308	Electrical Service Meter Breaker Pedestal (Eau Claire)	LS	1.00
40.01	690.0150	Sawing Asphalt	LF	350.00
40.01	690.0250	Sawing Concrete	LF	180.00
40.07	715.0720	Incentive Compressive Strength Concrete Pavement	DOL	100.00
20.01	SPV.0060.301	Platform Electrical Cabinet	EACH	1.00
20.01	SPV.0060.302	Platform Communication Cabinet	EACH	1.00

Scale: NTS	gned By: AECOM	CONTRACT NO: 60631225C	CITY OF MADISON
	Aark REVISION	٤	
11	ADDENDUM 4	IN YENIOO HAADISON DANE COLLY WI	3US RAPID TRANSIT
		90631225	IISCELLANEOUS QUANIIIIES

SHEBOYGAN AVENUE AT SEGOE ROAD WB

SCC Code	ITEM NUMBER	DESCRIPTION	UNITS	QUANTITY
40.01	204.0150	Removing Curb & Gutter	LF	440.00
40.01	204.0155	Removing Concrete Sidewalk	SY	240.00
40.01	205.0100	Excavation Common	CY	800.00
10.03	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	69.00
20.01	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	30.00
40.07	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	290.00
10.03	305.0130	Base Aggregate Dense 3-Inch	TON	76.00
20.01	305.0130	Base Aggregate Dense 3-Inch	TON	30.00
40.07	305.0130	Base Aggregate Dense 3-Inch	TON	197.00
10.03	415.0110	Concrete Pavement 11-Inch	SY	210.00
10.03	415.4100	Concrete Pavement Joint Filling	SY	(331.00)
40.07	455.0605	Tack Coat	GAL	50.00
40.07	460.2000	Incentive Density HMA Pavement	DOL	70.00
40.07	460.6224	HMA Pavement 4 MT 58-28 S	TON	110.00
10.03	601.0205	Concrete Gutter 24-Inch	LF	95.00
40.07	601.0409	Concrete Curb & Gutter 30-Inch Type A	LF	300.00
40.07	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	76.00
40.06	601.0600	Concrete Curb Pedestrian	LF	62.00
40.06	602.0410	Concrete Sidewalk 5-Inch	SF	2360.00
40.06	602.0420	Concrete Sidewalk 7-Inch	SF	1700.00
40.06	602.0515	Curb Ramp Detectable Warning Field Natural Patina	SF	83.00
10.03	624.0100	Water	MGAL	2.90
40.07	624.0100	Water	MGAL	11.00
40.06	625.0100	Topsoil	SY	230.00
40.06	628.2006	Erosion Mat Urban Class I Type A	SY	230.00
40.06	628.6505	Soil Stabilizer Type A	ACRE	0.05
40.06	629.0210	Fertilizer Type B	CWT	0.13
40.06	630.0500	Seed Water	MGAL	5.20
40.07	650.5000	Construction Staking Base	LF	157.00
40.07	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	300.00
40.07	650.7000	Construction Staking Concrete Pavement	LF	170.00
40.06	650.9000	Construction Staking Curb Ramps	EACH	7.00
20.01	652.0235	Conduit Rigid Nonmetallic Schedule 40 3-Inch	LF	133.00
20.01	652.0615	Conduit Special 3-Inch	LF	36.00
40.01	690.0150	Sawing Asphalt	LF	420.00
40.01	690.0250	Sawing Concrete	LF	93.00
40.07	715.0720	Incentive Compressive Strength Concrete Pavement	DOL	60.00
20.01	SPV.0060.201	Install Electrical Pull Box Type I	EACH	2.00
20.01	SPV.0060.301	Platform Electrical Cabinet	EACH	1.00
20.01	SPV.0060.302	Platform Communication Cabinet	EACH	1.00
20.01	SPV.0060.303	Snow Melt System Shelter Type A1	EACH	1.00
20.01	SPV.0060.316	Shelter Photovoltaic System	EACH	1.00
20.01	SPV.0060.401	Reinforced Concrete Platform Type A1	EACH	1.00
20.01	SPV.0060.417	Platform Shelter Type A1	EACH	1.00
40.06	SPV.0060.504.01	Trees (Early Glow Buckeye, B&B, 2-IN)	EACH	2.00
40.06	SPV.0060.504.18	Trees (Japanese Tree Lilac, B&B, 2-IN)	EACH	1.00

Scale: NTS	Designed By: AECOM Date:	CONTRACT NO: 60631225C	NOSIGAM BO YELD
	Mark		
l l	ADDENDUM 4	IV YENTOO HARD NORTON HO YETO	BUS RAPID TRANSIT
		J62215000	MISCELLANEOUS QUAN III IES
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SHEBOYGAN AVENUE AT SEGOE ROAD EB

SCC Code	ITEM NUMBER	DESCRIPTION	UNITS	QUANTITY
40.01	204.0150	Removing Curb & Gutter	LF	390.00
40.01	204.0155	Removing Concrete Sidewalk	SY	45.00
40.01	205.0100	Excavation Common	CY	190.00
10.02	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	80.00
20.01	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	30.00
40.06	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	3.00
40.07	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	90.00
10.02	305.0130	Base Aggregate Dense 3-Inch	TON	90.00
20.01	305.0130	Base Aggregate Dense 3-Inch	TON	30.00
40.07	305.0130	Base Aggregate Dense 3-Inch	TON	80.00
10.02	415.0110	Concrete Pavement 11-Inch	SY	230.00
10.02	415.4100	Concrete Pavement Joint Filling	SY	(288.00)
40.06	455.0605	Tack Coat	GAL	15.00
40.06	460.2000	Incentive Density HMA Pavement	DOL	21.00
40.06	460.6224	HMA Pavement 4 MT 58-28 S	TON	30.00
10.02	601.0205	Concrete Gutter 24-Inch	LF	98.00
40.07	601.0409	Concrete Curb & Gutter 30-Inch Type A	LF	91.00
40.07	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	30.00
40.06	601.0600	Concrete Curb Pedestrian	LF	24.00
40.06	602.0410	Concrete Sidewalk 5-Inch	SF	280.00
40.06	602.0420	Concrete Sidewalk 7-Inch	SF	660.00
40.07	602.0515	Curb Ramp Detectable Warning Field Natural Patina	SF	70.00
40.07	620.0300	Concrete Median Sloped Nose	SF	147.00
10.02	624.0100	Water	MGAL	3.30
40.07	624.0100	Water	MGAL	4.50
40.06	625.0100	Topsoil	SY	200.00
40.06	628.2006	Erosion Mat Urban Class I Type A	SY	200.00
40.06	628.6505	Soil Stabilizer Type A	ACRE	0.04
40.06	629.0210	Fertilizer Type B	CWT	0.11
40.06	630.0500	Seed Water	MGAL	4.50
40.07	650.5000	Construction Staking Base	LF	55.00
40.07	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	91.00
40.07	650.7000	Construction Staking Concrete Pavement	LF	143.00
40.06	650.9000	Construction Staking Curb Ramps	EACH	3.00
40.01	690.0150	Sawing Asphalt	LF	220.00
40.01	690.0250	Sawing Concrete	LF	75.00
40.07	715.0720	Incentive Compressive Strength Concrete Pavement	DOL	70.00
40.07	SPV.0060.003	Bike Rack	EACH	1.00
20.01	SPV.0060.301	Platform Electrical Cabinet	EACH	1.00
20.01	SPV.0060.302	Platform Communication Cabinet	EACH	1.00
20.01	SPV.0060.309	Snow Melt System Shelter Type A7	EACH	1.00



UNIVERSITY AVENUE AT MIDVALE BOULEVARD

SCC Code	ITEM NUMBER	DESCRIPTION	UNITS	QUANTITY
40.01	204.0150	Removing Curb & Gutter	LF	1210.00
40.01	204.0155	Removing Concrete Sidewalk	SY	230.00
40.02	204.0220	Removing Inlets	EACH	11.00
40.02	204.0245.01	Removing Storm Sewer - 12 inch or less	LF	84.00
40.02	204.0291.S	Abandoning Sewer	СҮ	2.00
40.01	205.0100	Excavation Common	СҮ	760.00
10.02	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	190.00
20.01	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	30.00
40.06	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	10.00
40.07	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	310.00
10.02	305.0130	Base Aggregate Dense 3-Inch	TON	210.00
20.01	305.0130	Base Aggregate Dense 3-Inch	TON	30.00
40.07	305.0130	Base Aggregate Dense 3-Inch	TON	280.00
10.02	405.0100	Coloring Concrete WisDOT Red	СҮ	57.00
10.02	415.0110	Concrete Pavement 11-Inch	SY	561.00
10.02	415.4100	Concrete Pavement Joint Filling	SY	<i>707.00</i> ←
10.02	416.0610	Drilled Tie Bars	EACH	100.00
40.07	416.0610	Drilled Tie Bars	EACH	137.00
10.02	416.0620	Drilled Dowel Bars	EACH	55.00
40.06	455.0605	Tack Coat	GAL	78.00
40.06	460.2000	Incentive Density HMA Pavement	DOL	110.00
40.06	460.6224	HMA Pavement 4 MT 58-28 S	TON	172.00
40.02	520.8000	Concrete Collars for Pipe	EACH	$\{4.00\}$
40.06	601.0600	Concrete Curb Pedestrian	LF	23.00
40.06	602.0410	Concrete Sidewalk 5-Inch	SF	1040.00
40.06	602.0420	Concrete Sidewalk 7-Inch	SF	1640.00
40.07	602.0515	Curb Ramp Detectable Warning Field Natural Patina	SF	164.00
40.02	608.0312	Storm Sewer Pipe Reinforced Concrete Class III 12-Inch	LF	242.00
40.02	611.0535	Manhole Covers Type J-Special	EACH	(2.00)
40.02	611.0639	Inlet Covers Type H-S	EACH	4.00
40.02	611.3230	Inlets 2x3-FT	EACH	5.00
40.02	611.8110	Adjusting Manhole Covers	EACH	2 <u>.00</u>
40.02	611.8115	Adjusting Inlet Covers	EACH	(9.00)
40.02	611.9710	Salvaged Inlet Covers	EACH	5.00
40.07	620.0300	Concrete Median Sloped Nose	SF	84.00
10.02	624.0100	Water	MGAL	7.90
40.07	624.0100	Water	MGAL	13.20
40.06	625.0100	Topsoil	SY	89.00
40.06	628.2006	Erosion Mat Urban Class I Type A	SY	89.00
40.06	628.6505	Soil Stabilizer Type A	ACRE	0.02
40.02	628.7020	Inlet Protection Type D	EACH	27.00
40.06	629.0210	Fertilizer Type B	CWT	0.05
40.06	630.0500	Seed Water	MGAL	2.00
40.07	650.5000	Construction Staking Base	LF	224.00
40.07	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	357.00
40.07	650.7000	Construction Staking Concrete Pavement	LF	220.00

REVISED 11/28/22 ALM

MISCELLANEOUS QUANTITIES
BUS RAPID TRANSIT
CITY OF MADISON

CITY OF MADISON, DANE COUNTY, WI CONTRACT NO: 60631225C

REVISED 11/11/22 ALM



MQ-25

UNIVERSITY AVENUE AT MIDVALE BOULEVARD

SCC Code	ITEM NUMBER	DESCRIPTION	UNITS	QUANTITY
40.06	650.9000	Construction Staking Curb Ramps	EACH	11.00
20.01	652.0615	Conduit Special 3-Inch	LF	89.00
20.01	656.0200.310	Electrical Service Meter Breaker Pedestal (Midvale)	LS	1.00
40.01	690.0150	Sawing Asphalt	LF	680.00
40.01	690.0250	Sawing Concrete	LF	420.00
40.07	715.0720	Incentive Compressive Strength Concrete Pavement	DOL	170.00
40.07	SPV.0060.003	Bike Rack	EACH	1.00
20.01	SPV.0060.301	Platform Electrical Cabinet	EACH	1.00
20.01	SPV.0060.302	Platform Communication Cabinet	EACH	1.00
20.01	SPV.0060.311	Snow Melt System Shelter Type B1	EACH	1.00
20.01	SPV.0060.409	Reinforced Concrete Platform Type B1	EACH	1.00
20.01	SPV.0060.425	Platform Shelter Type B1	EACH	1.00
40.02	SPV.0060.601	Saddled Inlet Type I	EACH	Ω
40.02	SPV.0060.602	Inlets 2x3-FT, Special	EACH	2.00
40.02	SPV.0060.603	Field Pour Storm Structure	EACH	2.00
40.02	SPV.0060.606	Storm Sewer Tap	EACH	<u> </u>
40.02	SPV.0060.609	Relocate Hydrant	EACH	1.00
40.02	SPV.0060.613	Adjust Water Valve	EACH	1.00
40.02	SPV.0060.631	Furnish & Install Insulation	EACH	1.00
40.06	SPV.0085.501	Seeding	LB	1.60
40.07	SPV.0090.003	Concrete Curb & Gutter 24-Inch Type H Special	LF	(357.00)←
40.07	SPV.0090.004	Concrete Curb & Gutter Integral 24-Inch Special	LF	130.00
40.06	SPV.0090.006	Concrete Curb Extension 6-Inch	LF	47.00
40.06	SPV.0090.007	Concrete Curb Extension 24-Inch	LF	24.00
40.07	SPV.0090.011	Docking Guide Strip	LF	154.00
10.02	SPV.0090.014	Concrete Gutter 12-Inch	LF	180.00
40.07	SPV.0090.016	Concrete Curb & Gutter Integral 24-Inch Type J (Mountable)	LF	50.00
40.07	SPV.0090.017	Concrete Curb & Gutter Integral 18-Inch Special	LF	39.00
20.01	SPV.0090.301	Electrical Wire Lighting 3/0 AWG	LF	424.00
40.06	SPV.0090.401	Pedestrian Handrail	LF	53.00
40.06	SPV.0165.401	Concrete Sloped Walkway	SF	220.00

REVISED 11/28/22 ALM

MISCELLANEOUS QUANTITIES
BUS RAPID TRANSIT
CITY OF MADISON

CITY OF MADISON, DANE COUNTY, WI CONTRACT NO: 60631225C

UNIVERSITY AVENUE AT SHOREWOOD BOULEVARD

SCC Code	ITEM NUMBER	DESCRIPTION	UNITS	QUANTITY
40.01	204.0150	Removing Curb & Gutter	LF	420.00
40.01	205.0100	Excavation Common	CY	400.00
10.02	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	150.00
20.01	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	27.00
40.07	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	66.00
10.02	305.0130	Base Aggregate Dense 3-Inch	TON	160.00
20.01	305.0130	Base Aggregate Dense 3-Inch	TON	29.00
40.07	305.0130	Base Aggregate Dense 3-Inch	TON	44.00
10.02	415.0110	Concrete Pavement 11-Inch	SY	441.00
10.02	415.4100	Concrete Pavement Joint Filling	SY	(504.00)
10.02	416.0610	Drilled Tie Bars	EACH	156.00
10.02	416.0620	Drilled Dowel Bars	EACH	45.00
40.06	602.0420	Concrete Sidewalk 7-Inch	SF	710.00
40.06	602.0515	Curb Ramp Detectable Warning Field Natural Patina	SF	41.00
40.07	620.0300	Concrete Median Sloped Nose	SF	87.00
10.02	624.0100	Water	MGAL	6.20
40.07	624.0100	Water	MGAL	2.20
40.06	625.0100	Topsoil	SY	20.00
40.06	628.2006	Erosion Mat Urban Class I Type A	SY	20.00
40.06	628.6505	Soil Stabilizer Type A	ACRE	0.01
40.06	629.0210	Fertilizer Type B	CWT	0.01
40.06	630.0500	Seed Water	MGAL	0.50
40.07	650.7000	Construction Staking Concrete Pavement	LF	200.00
40.06	650.9000	Construction Staking Curb Ramps	EACH	1.00
20.01	652.0615	Conduit Special 3-Inch	LF	84.00
20.01	656.0200.311	Electrical Service Meter Breaker Pedestal (Shorewood)	LS	1.00
40.01	690.0150	Sawing Asphalt	LF	450.00
40.01	690.0250	Sawing Concrete	LF	16.00
40.07	715.0720	Incentive Compressive Strength Concrete Pavement	DOL	130.00
20.01	SPV.0060.301	Platform Electrical Cabinet	EACH	1.00
20.01	SPV.0060.302	Platform Communication Cabinet	EACH	1.00
20.01	SPV.0060.311	Snow Melt System Shelter Type B1	EACH	1.00
20.01	SPV.0060.316	Shelter Photovoltaic System	EACH	1.00
20.01	SPV.0060.409	Reinforced Concrete Platform Type B1	EACH	1.00
20.01	SPV.0060.425	Platform Shelter Type B1	EACH	1.00
40.06	SPV.0060.507.01	Perennials & Native Grasses (Butterfly Milkweed, Potted, 1 GAL)	EACH	3.00
40.06	SPV.0060.507.02	Perennials & Native Grasses (Sand Coreopsis, Potted, 1 GAL)	EACH	2.00
40.06	SPV.0060.507.03	Perennials & Native Grasses (Purple Prairie Clover, Potted, 1 GAL)	EACH	4.00
40.06	SPV.0060.507.04	Perennials & Native Grasses (Purple Coneflower, Potted, 1 GAL)	EACH	3.00
40.06	SPV.0060.507.05	Perennials & Native Grasses (Blazing Star, Potted, 1 GAL)	EACH	4.00
40.06	SPV.0060.507.08	Perennials & Native Grasses (Black-eyed Susan, Potted, 1 GAL)	EACH	4.00
40.06	SPV.0060.507.11	Perennials & Native Grasses (Prairie Dropseed, Potted, 1 GAL)	EACH	2.00
40.06	SPV.0060.507.12	Perennials & Native Grasses (Canada Anemone, Potted, 1 GAL)	EACH	4.00
40.06	SPV.0060.507.14	Perennials & Native Grasses (Prairie Smoke, Potted, 1 GAL)	EACH	5.00
40.06	SPV.0060.507.15	Perennials & Native Grasses (June Grass, Potted, 1 GAL)	EACH	3.00
40.06	SPV.0060.507.16	Perennials & Native Grasses (Jacob's Ladder, Potted, 1 GAL)	EACH	5.00
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Designed By: AECOM Date: Scale: Scale:	CONTRACT NO: 60631225C	SITY OF MADISON
REVISION	Mark	
ADDENDUM 4	W YENDOO BURD NOON DANS	BUS RAPID TRANSIT
	H22212200	MISCELLANEOUS QUANITIES

UNIVERSITY AVENUE AT SHOREWOOD BOULEVARD

SCC Code	ITEM NUMBER	DESCRIPTION	UNITS	QUANTITY
40.02	SPV.0060.606	Storm Sewer Tap	EACH	2.00
40.02	SPV.0060.624	Adjust Inlets 2x3-FT, Special	EACH	2.00
40.06	SPV.0085.501	Seeding	LB	0.40
40.07	SPV.0090.003	Concrete Curb & Gutter 24-Inch Type H Special	LF	(12.00)
40.07	SPV.0090.004	Concrete Curb & Gutter Integral 24-Inch Special	LF	50.00
40.06	SPV.0090.006	Concrete Curb Extension 6-Inch	LF	67.00
40.06	SPV.0090.007	Concrete Curb Extension 24-Inch	LF	10.00
40.07	SPV.0090.011	Docking Guide Strip	LF	163.00
10.02	SPV.0090.014	Concrete Gutter 12-Inch	LF	200.00
40.07	SPV.0090.016	Concrete Curb & Gutter Integral 24-Inch Type J (Mountable)	LF	90.00
40.07	SPV.0090.017	Concrete Curb & Gutter Integral 18-Inch Special	LF	41.00
20.01	SPV.0090.301	Electrical Wire Lighting 3/0 AWG	LF	404.00
40.06	SPV.0090.401	Pedestrian Handrail	LF	73.00
40.02	SPV.0090.602	PVC Pipe 8-inch	LF	2.00
40.06	SPV.0165.401	Concrete Sloped Walkway	SF	330.00

CITY OF MADISON, DANE COUNTY, WI
CONTRACT NO: 60631225C

CONTRACT NO: 60631225C

CONTRACT NO: 60631225C

MISCELLANEOUS QUANTITIES
BUS RAPID TRANSIT
CITY OF MADISON



UNIVERSITY AVENUE AT UNIVERSITY BAY DRIVE

SCC Code	ITEM NUMBER	DESCRIPTION	UNITS	QUANTITY
40.01	204.0150	Removing Curb & Gutter	LF	360.00
40.01	204.0155	Removing Concrete Sidewalk	SY	31.00
40.01	205.0100	Excavation Common	CY	360.00
10.02	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	130.00
20.01	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	27.00
40.07	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	£3.003
10.02	305.0130	Base Aggregate Dense 3-Inch	TON	150.00
20.01	305.0130	Base Aggregate Dense 3-Inch	TON	29.00
40.07	305.0130	Base Aggregate Dense 3-Inch	TON	36.00
10.02	405.0100	Coloring Concrete WisDOT Red	CY	92.00
10.02	415.0110	Concrete Pavement 11-Inch	SY	400.00
10.02	415.4100	Concrete Pavement Joint Filling	SY	(450.00)
40.06	602.0420	Concrete Sidewalk 7-Inch	SF	(830.00)
40.06	602.0515	Curb Ramp Detectable Warning Field Natural Patina	SF	40.00
40.07	620.0300	Concrete Median Sloped Nose	SF	71.00
10.02 40.07	624.0100 624.0100	Water	MGAL MGAL	5.60 3.10
40.07	625.0100	Topsoil	SY	6.00
40.06	628.2006	Erosion Mat Urban Class I Type A	SY	6.00
40.06	628.6505	Soil Stabilizer Type A	ACRE	0.00
40.06	629.0210	Fertilizer Type B	CWT	0.01
40.06	630.0500	Seed Water	MGAL	0.10
40.07	650.7000	Construction Staking Concrete Pavement	LF	180.00
40.06	650.9000	Construction Staking Curb Ramps	EACH	1.00
20.01	652.0615	Conduit Special 3-Inch	LF	48.00
20.01	656.0200.312	Electrical Service Meter Breaker Pedestal (University Bay)	LS	1.00
40.01	690.0150	Sawing Asphalt	LF	410.00
40.01	690.0250	Sawing Concrete	LF	4.00
40.07	715.0720	Incentive Compressive Strength Concrete Pavement	DOL	120.00
20.01	SPV.0060.301	Platform Electrical Cabinet	EACH	1.00
20.01	SPV.0060.302	Platform Communication Cabinet	EACH	1.00
20.01	SPV.0060.311	Snow Melt System Shelter Type B1	EACH	1.00
20.01	SPV.0060.316	Shelter Photovoltaic System	EACH	1.00
20.01	SPV.0060.409	Reinforced Concrete Platform Type B1	EACH	1.00
20.01	SPV.0060.425	Platform Shelter Type B1	EACH	1.00
40.06	SPV.0060.507.01	Perennials & Native Grasses (Butterfly Milkweed, Potted, 1 GAL)	EACH	3.00
40.06	SPV.0060.507.02	Perennials & Native Grasses (Sand Coreopsis, Potted, 1 GAL)	EACH	2.00
40.06	SPV.0060.507.03	Perennials & Native Grasses (Purple Prairie Clover, Potted, 1 GAL)	EACH	4.00
40.06	SPV.0060.507.04	Perennials & Native Grasses (Purple Coneflower, Potted, 1 GAL)	EACH	3.00
40.06	SPV.0060.507.05	Perennials & Native Grasses (Blazing Star, Potted, 1 GAL)	EACH	4.00
40.06	SPV.0060.507.08	Perennials & Native Grasses (Black-eyed Susan, Potted, 1 GAL)	EACH	4.00
40.06	SPV.0060.507.11	Perennials & Native Grasses (Prairie Dropseed, Potted, 1 GAL)	EACH	2.00
40.06	SPV.0060.507.12 SPV.0060.507.14	Perennials & Native Grasses (Canada Anemone, Potted, 1 GAL) Perennials & Native Grasses (Prairie Smoke, Potted, 1 GAL)	EACH EACH	4.00
40.06	SPV.0060.507.14 SPV.0060.507.15	Perennials & Native Grasses (Prairie Smoke, Potted, 1 GAL) Perennials & Native Grasses (June Grass, Potted, 1 GAL)	EACH	5.00 3.00
40.06	SPV.0060.507.15	Perennials & Native Grasses (Jacob's Ladder, Potted, 1 GAL)	EACH	5.00
40.00	JF V.0000.307.10	i ereninais & ivative Grasses pacous Lauder, Futteu, TUAL)	LACH	5.00

REVISED 11/28/22 ALM

CITY OF MADISON, DANE COUNTY, WI CONTRACT NO: 60631225C MISCELLANEOUS QUANTITIES
BUS RAPID TRANSIT
CITY OF MADISON

60631225P

MQ-29

CAMPUS DRIVE EB ROADWAY WORK

SCC Code	ITEM NUMBER	DESCRIPTION	UNITS	QUANTITY
40.01	204.0115	Removing Asphaltic Surface Butt Joints	SY	9.00
40.01	204.0120	Removing Asphaltic Surface Milling	SY	1940.00
40.01	204.0150	Removing Curb & Gutter	LF	750.00
40.01	205.0100	Excavation Common	СҮ	1510.00
40.07	210.1100	Backfill Structure Type A	СҮ	38.00
10.02	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	570.00
40.07	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	220.00
10.02	305.0130	Base Aggregate Dense 3-Inch	TON	620.00
40.07	305.0130	Base Aggregate Dense 3-Inch	TON	361.00
40.07	415.4100	Concrete Pavement Joint Filling	SY	(170.00)
40.06	455.0605	Tack Coat	GAL	1340.00
40.06	460.2000	Incentive Density HMA Pavement	DOL	380.00
10.02	460.7223	HMA Pavement 3 HT 58-28 S	TON	286.00
10.02	460.7422	HMA Pavement 2 HT 58-28 H	TON	95.00
40.07	460.7424	HMA Pavement 4 HT 58-28 H	TON	217.00
40.02	465.0125	Asphaltic Surface Temporary	TON	3.00
40.02	520.8000	Concrete Collars for Pipe	EACH	3.00
40.07	601.0409	Concrete Curb & Gutter 30-Inch Type A	LF	85.00
40.05	603.1436	Concrete Barrier Type S36C	LF	183.00
40.05	603.1442	Concrete Barrier Type S42C	LF	123.00
40.07	603.3535	Concrete Barrier Transition Type S36 to S42	EACH	1.00
40.02	608.0312	Storm Sewer Pipe Reinforced Concrete Class III 12-Inch	LF	8.00
40.02	611.0606	Inlet Covers Type B	EACH	1.00
40.02	611.3220	Inlets 2x2-FT	EACH	1.00
40.02	611.3230	Inlets 2x3-FT	EACH	1.00
40.02	611.8110	Adjusting Manhole Covers	EACH	2.00
40.02	611.8115	Adjusting Inlet Covers	EACH	1.00
40.02	611.9710	Salvaged Inlet Covers	EACH	4.00
10.02	624.0100	Water	MGAL	24.00
40.07	624.0100	Water	MGAL	11.60
40.06	625.0100	Topsoil	SY	400.00
40.06	628.2006	Erosion Mat Urban Class I Type A	SY	400.00
40.06	628.6505	Soil Stabilizer Type A	ACRE	0.08
40.02	628.7020	Inlet Protection Type D	EACH	5.00
40.06	629.0210	Fertilizer Type B	CWT	0.23
40.06	630.0500	Seed Water	MGAL	9.00
40.02	650.4000	Construction Staking Storm Sewer	EACH	7.00
40.07	650.5000	Construction Staking Base	LF	750.00
40.07	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	750.00
40.05	650.7500	Construction Staking Concrete Barrier	LF	336.00
40.07	650.9920	Construction Staking Slope Stakes	LF	777.00
		Sawing Asphalt	LF	780.00

JOHNSON STREET AT ORCHARD STREET EB

SCC Code	ITEM NUMBER	DESCRIPTION	UNITS	QUANTITY
40.01	201.0105	Clearing	STA	1.00
40.01	201.0120	Clearing	ID	4.00
40.01	201.0205	Grubbing	STA	1.00
40.01	201.0220	Grubbing	ID	4.00
40.01	204.0100	Removing Concrete Pavement	SY	600.00
40.01	204.0150	Removing Curb & Gutter	LF	57.00
40.01	204.0155	Removing Concrete Sidewalk	SY	430.00
40.02	204.0220	Removing Inlets	EACH	1.00
40.01	205.0100	Excavation Common	CY	170.00
10.02	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	82.00
20.01	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	25.00
40.07	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	[155.00]
10.02	305.0130	Base Aggregate Dense 3-Inch	TON	90.00
20.01	305.0130	Base Aggregate Dense 3-Inch	TON	27.00
40.07	305.0130	Base Aggregate Dense 3-Inch	TON	(96.00)
10.02	405.0100	Coloring Concrete WisDOT Red	CY	86.00
40.07	405.1000	Stamping Colored Concrete	CY	27.00
10.02	415.0110	Concrete Pavement 11-Inch	SY	246.00
40.07	415.0110	Concrete Pavement 11-Inch	SY	107.00
40.07	415.4100	Concrete Pavement Joint Filling	SY	(373.00)
10.02	416.0610	Drilled Tie Bars	EACH	91.00
40.07	416.0610	Drilled Tie Bars	EACH	49.00
10.02	416.0620	Drilled Dowel Bars	EACH	12.00
40.02	520.8000	Concrete Collars for Pipe	EACH	1.00
10.02	601.0205	Concrete Gutter 24-Inch	LF	80.00
40.07	601.0452	Concrete Curb & Gutter Integral 30-Inch Type D	LF	30.00
40.07	601.0600	Concrete Curb Pedestrian	LF	110.00
40.06	602.0410	Concrete Sidewalk 5-Inch	SF	4530.00
40.06	602.0420	Concrete Sidewalk 7-Inch	SF	290.00
40.06	602.0515	Curb Ramp Detectable Warning Field Natural Patina	SF	40.00
40.02	608.0312	Storm Sewer Pipe Reinforced Concrete Class III 12-Inch	LF	(104.00)
40.02	611.0624	Inlet Covers Type H	EACH	(1,00)
40.02	611.3230	Inlets 2x3-FT	EACH	2.00
40.02	611.8110	Adjusting Manhole Covers	EACH	1.00
40.02	611.8115	Adjusting Inlet Covers	EACH	1.00
40.02	611.9710	Salvaged Inlet Covers	EACH	1.00
10.02	624.0100	Water	MGAL	3.50
40.07	624.0100	Water	MGAL	6.00
40.06	625.0100	Topsoil	SY	100.00
40.06	628.2006	Erosion Mat Urban Class I Type A	SY	100.00
40.06	628.6505	Soil Stabilizer Type A	ACRE	0.02
40.02	628.7020	Inlet Protection Type D	EACH	3.00
40.06	629.0210	Fertilizer Type B	CWT	0.06
40.06	630.0500	Seed Water	MGAL	2.30
40.02	650.4000	Construction Staking Storm Sewer	EACH	2.00
40.07	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	100.00

MISCELLANEOUS QUANTITIES	60631225P			
BUS RAPID TRANSIT	IN YTHIOU DANE COLLAND WILL	ADDENDUM 4	JM 4	11
		Mark	NC	
CITY OF MADISON	CONTRACT NO: 60631225C	Designed By: AECOM Date: 60631225P 11/23/2022		Scale: NTS

60631225P MQ-35

CITY OF MADISON, DANE COUNTY, WI CONTRACT NO: 60631225C MISCELLANEOUS QUANTITIES BUS RAPID TRANSIT CITY OF MADISON

60631225P

MQ-36

JOHNSON STREET AT ORCHARD STREET EB

SCC Code	ITEM NUMBER	DESCRIPTION	UNITS	QUANTITY
40.07	650.7000	Construction Staking Concrete Pavement	LF	290.00
40.06	650.9000	Construction Staking Curb Ramps	EACH	4.00
20.01	652.0235	Conduit Rigid Nonmetallic Schedule 40 3-Inch	LF	47.00
20.01	656.0200.314	Electrical Service Meter Breaker Pedestal (Orchard EB)	LS	1.00
40.01	690.0250	Sawing Concrete	LF	730.00
40.07	715.0720	Incentive Compressive Strength Concrete Pavement	DOL	60.00
40.06	SPV.0035.003	Red Granite Chips	CY	1.00
20.01	SPV.0060.301	Platform Electrical Cabinet	EACH	1.00
20.01	SPV.0060.302	Platform Communication Cabinet	EACH	1.00
20.01	SPV.0060.304	Snow Melt System Shelter Type A2	EACH	1.00
20.01	SPV.0060.316	Shelter Photovoltaic System	EACH	1.00
20.01	SPV.0060.402	Reinforced Concrete Platform Type A2	EACH	1.00
20.01	SPV.0060.418	Platform Shelter Type A2	EACH	1.00
40.06	SPV.0060.507.01	Perennials & Native Grasses (Butterfly Milkweed, Potted, 1 GAL)	EACH	3.00
40.06	SPV.0060.507.02	Perennials & Native Grasses (Sand Coreopsis, Potted, 1 GAL)	EACH	3.00
40.06	SPV.0060.507.03	Perennials & Native Grasses (Purple Prairie Clover, Potted, 1 GAL)	EACH	4.00
40.06	SPV.0060.507.04	Perennials & Native Grasses (Purple Coneflower, Potted, 1 GAL)	EACH	3.00
40.06	SPV.0060.507.05	Perennials & Native Grasses (Blazing Star, Potted, 1 GAL)	EACH	7.00
40.06	SPV.0060.507.08	Perennials & Native Grasses (Black-eyed Susan, Potted, 1 GAL)	EACH	6.00
40.06	SPV.0060.507.11	Perennials & Native Grasses (Prairie Dropseed, Potted, 1 GAL)	EACH	2.00
40.06	SPV.0060.507.12	Perennials & Native Grasses (Canada Anemone, Potted, 1 GAL)	EACH	3.00
40.06	SPV.0060.507.13	Perennials & Native Grasses (Sky Blue Aster, Potted, 1 GAL)	EACH	3.00
40.06	SPV.0060.507.14	Perennials & Native Grasses (Prairie Smoke, Potted, 1 GAL)	EACH	6.00
40.06	SPV.0060.507.15	Perennials & Native Grasses (June Grass, Potted, 1 GAL)	EACH	4.00
40.06	SPV.0060.507.16	Perennials & Native Grasses (Jacob's Ladder, Potted, 1 GAL)	EACH	6.00
40.06	SPV.0085.501	Seeding	LB	1.80
40.07	SPV.0090.001	Concrete Curb & Gutter 30-Inch Type A Special	LF	(310.00)
40.07	SPV.0090.003	Concrete Curb & Gutter 24-Inch Type H Special	LF	(70.00)
40.06	SPV.0090.006	Concrete Curb Extension 6-Inch	LF	15.00
40.06	SPV.0090.007	Concrete Curb Extension 24-Inch	LF	10.00
40.07	SPV.0090.011	Docking Guide Strip	LF	70.00
20.01	SPV.0090.301	Electrical Wire Lighting 3/0 AWG	LF	256.00
40.06	SPV.0090.401	Pedestrian Handrail	LF	44.00
40.07	SPV.0165.002	Brick Pavers on Concrete Base	SF	320.00
40.06	SPV.0165.401	Concrete Sloped Walkway	SF	(140.00)

STATION LOCATION: FAST WASHINGTON AVENUE AT MENDOTA STREET WR CONTINUED.

SCC CODE	ITEM NUMBER	DESCRIPTION	UNITS	QUANTITY
40.01	204.0100	Removing Concrete Pavement	SY	410
40.01	204.0110	Removing Asphaltic Surface	SY	81
40.01	204.0115	Removing Asphaltic Surface Butt Joints	SY	7
40.01	204.0155	Removing Concrete Sidewalk	SY	120
40.01	204.0195	Removing Concrete Bases	EACH	1
40.02	204.0291.S	Abandoning Sewer	CY	1
40.01	205.0100	Excavation Common	CY	87
40.01	208.0100	Borrow	CY	11
10.03	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	3
20.01	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	19
40.06	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	69
10.03	305.0130	Base Aggregate Dense 3-Inch	TON	8
10.03	415.0100	Concrete Pavement 10-Inch	SY	270
10.03	415.4100	Concrete Pavement Joint Filling	SY	320
40.07	416.0170	Concrete Driveway 7-Inch	SY	25
10.03	416.0610	Drilled Tie Bars	EACH	88
10.03	416.0620	Drilled Dowel Bars	EACH	46
40.07	455.0605	Tack Coat	GAL	6
40.02	460.2000	Incentive Density HMA Pavement	DOL	8
40.07	460.5224	HMA Pavement 4 LT 58-28 S	TON	10
40.07	601.0205	Concrete Gutter 24-Inch	LF	65
40.07	601.0452	Concrete Curb & Gutter Integral 30-Inch Type D	LF	110
40.06	602.0410	Concrete Sidewalk 5-Inch	SF	890
40.06	602.0420	Concrete Sidewalk 7-Inch	SF	1260
40.06	602.0605	Curb Ramp Detectable Warning Field Radial Yellow	SF	50
40.02	611.0535	Manhole Covers Type J-Special	EACH	1
20.01	624.0100	Water	MGAL	0.4
40.06	624.0100	Water	MGAL	1
40.06	625.0105	Topsoil	CY	7
40.08	628.1905	Mobilizations Erosion Control	EACH	1
40.08	628.1910	Mobilizations Emergency Erosion Control	EACH	1
40.06	628.2006	Erosion Mat Urban Class I Type A	SY	130
40.06	628.6505	Soil Stabilizer Type A	ACRE	0.03
40.02	628.7015	Inlet Protection Type C	EACH	2
40.06	629.0210	Fertilizer Type B	CWT	0.1
40.06	630.0500	Seed Water	MGAL	3
40.07	650.7000	Construction Staking Concrete Pavement	LF	240

SCC CODE	ITEM NUMBER	DESCRIPTION	UNITS	QUANTITY
20.01	652.0615	Conduit Special 3-Inch	LF	56
20.01	656.0200.333	Electrical Service Meter Breaker Pedestal (Mendota WB)	LS	1
40.01	690.0250	Sawing Concrete	LF	290
40.06	SPV.0060.001	Construction Staking Sidewalk	EACH	1
40.06	SPV.0060.002	Concrete Curb & Gutter Bike Ramp Special	EACH	1
40.01	SPV.0060.243	Removing Street Lighting Assembly	EACH	1
20.01	SPV.0060.301	Platform Electrical Cabinet	EACH	1
20.01	SPV.0060.302	Platform Communication Cabinet	EACH	1
20.01	SPV.0060.306	Snow Melt System Shelter Type A4	EACH	1
20.01	SPV.0060.404	Reinforced Concrete Platform Type A4	EACH	1
20.01	SPV.0060.420	Platform Shelter Type A4	EACH	1
40.06	SPV.0060.505	Tree Trimming	EACH	2
40.06	SPV.0060.507.01	Perennials & Native Grasses (Butterfly Milkweed, Potted, 1 GAL)	EACH	3
40.06	SPV.0060.507.02	Perennials & Native Grasses (Sand Coreopsis, Potted, 1 GAL)	EACH	2
40.06	SPV.0060.507.03	Perennials & Native Grasses (Purple Prairie Clover, Potted, 1 GAL)	EACH	4
40.06	SPV.0060.507.04	Perennials & Native Grasses (Purple Coneflower, Potted, 1 GAL)	EACH	3
40.06	SPV.0060.507.05	Perennials & Native Grasses (Blazing Star, Potted, 1 GAL)	EACH	4
40.06	SPV.0060.507.08	Perennials & Native Grasses (Black-eyed Susan, Potted, 1 GAL)	EACH	4
40.06	SPV.0060.507.11	Perennials & Native Grasses (Prairie Dropseed, Potted, 1 GAL)	EACH	2
40.06	SPV.0060.507.12	Perennials & Native Grasses (Canada Anemone, Potted, 1 GAL)	EACH	4
40.06	SPV.0060.507.14	Perennials & Native Grasses (Prairie Smoke, Potted, 1 GAL)	EACH	5
40.06	SPV.0060.507.15	Perennials & Native Grasses (June Grass, Potted, 1 GAL)	EACH	3
40.06	SPV.0060.507.16	Perennials & Native Grasses (Jacob's Ladder, Potted, 1 GAL)	EACH	5
40.02	SPV.0060.609	Relocate Hydrant	EACH	1
40.02	SPV.0060.613	Adjust Water Valve	EACH	2
40.02	SPV.0060.617	Sanitary Sewer Internal Chimney Seal	EACH	1
40.02	SPV.0060.626	5' Dia. Sanitary Sewer Access Structure (SAS)	EACH	1
40.02	SPV.0060.628	Lateral Cleanout	EACH	1
40.02	SPV.0060.629	Remove Sanitary Sewer Access Structure	EACH	1
40.02	SPV.0060.630	Wastewater Control	EACH	1
40.06	SPV.0085.501	Seeding	LB	2
40.07	SPV.0090.006	Concrete Curb Extension 6-Inch	LF	15
40.07	SPV.0090.011	Docking Guide Strip	LF	70
20.01	SPV.0090.301	Electrical Wire Lighting 3/0 AWG	LF	292
40.06	SPV.0090.401	Pedestrian Handrail	LF	24
40.02	SPV.0090.604	8-Inch Sanitary Sewer Pipe	LF	5
40.02	SPV.0090.611	6-Inch Sanitary Sewer Lateral	LF	36
40.06	SPV.0165.401	Concrete Sloped Walkway	SF	91



SUN PRAIRIE PARK AND RIDE

SCC Code	ITEM NUMBER	DESCRIPTION	UNITS	QUANTITY
40.01	201.0105	Clearing	STA	1.00
40.01	201.0120	Clearing	ID	3.00
40.01	201.0205	Grubbing	STA	1.00
40.01	201.0220	Grubbing	ID	3.00
40.01	204.0150	Removing Curb & Gutter	LF	(89.00)
40.01	204.0155	Removing Concrete Sidewalk	SY	(53,00)
40.01	205.0100	Excavation Common	CY	(82.00)
40.06	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	14.00
40.07	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	(61.00)
40.07	305.0130	Base Aggregate Dense 3-Inch	TON	(68,60)
40.07	415.0100	Concrete Pavement 10-Inch	SY	(132.00)
40.07	415.4100	Concrete Pavement Joint Filling	SY	(143.00)
40.07	455.0605	Tack Coat	GAL	10.00
40.06	460.2000	Incentive Density HMA Pavement	DOL	10.00
40.07	460.6224	HMA Pavement 4 MT 58-28 S	TON	10.00
40.06	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	40.00
40.06	602.0410	Concrete Sidewalk 5-Inch	SF	1110.00
40.06	624.0100	Water	MGAL	{2.90}
40.06	625.0100	Topsoil	SY	(112,00)
40.06	628.2006	Erosion Mat Urban Class I Type A	SY	(112.00)
40.06	628.6505	Soil Stabilizer Type A	ACRE	(0.02)
40.06	629.0210	Fertilizer Type B	CWT	(0,06)
40.06	630.0500	Seed Water	MGAL	(2.50)
40.07	650.7000	Construction Staking Concrete Pavement	LF	80.00
40.01	690.0150	Sawing Asphalt	LF	(219.00)
40.01	690.0250	Sawing Concrete	LF	(14.00)
40.07	715.0720	Incentive Compressive Strength Concrete Pavement	DOL	(40.00)
30.01	SPV.0060.416	Overhead Charger Foundation	EACH	(1.00)
30.01	SPV.0060.449	Sun Prairie Restroom and Electrical Building	EACH	1.00
40.02	SPV.0060.610	4' Dia. Sanitary Sewer Access Structure (SAS)	EACH	1.00
40.02	SPV.0060.632	Furnish & Install 2-Inch Service Lateral	EACH	1.00
40.06	SPV.0085.501	Seeding	LB	2.003
40.02	SPV.0090.603	4-Inch Sanitary Sewer Lateral	LF	141.00
40.02	SPV.0090.610	Select Fill for Sanitary Sewer	LF	141.00
20.01	SPV.0105.303	Sun Prairie PNR Site Electrical	LS	1.00
20.01	SPV.0105.308	Sun Prairie PNR Electrical Service	LS	1.00

REVISED 11/28/22 ALM

MISCELLANEOUS QUANTITIES
BUS RAPID TRANSIT
CITY OF MADISON

CITY OF MADISON, DANE COUNTY, WI CONTRACT NO: 60631225C