

Contract Routing Form

ROUTING: Routine

printed on: 07/09/2019

Contract between: Speedway Sand & Gravel, Inc.
and Dept. or Division: Engineering Division
Name/Phone Number:

Project: McKenna Boulevard Flood Mitigation

Contract No.: 9411
Enactment No.: RES-19-00505
Dollar Amount: 5,866,277.25

File No.: 56233
Enactment Date: 07/05/2019

(Please DATE before routing)

Signatures Required	Date Received	Date Signed
City Clerk	7/9/19	7/9/19
Director of Civil Rights	7/9/19	7/12/19
Risk Manager	7.12.19	7.12.19 mcl
Finance Director	7.12.19	7/12/19 mcl
City Attorney	835 7-12-19	7-15-19
Mayor	07.15.19	7.22.19

Please return signed Contracts to the City Clerk's Office
Room 103, City-County Building for filing.

Original + 2 Copies

07/09/2019 09:17:26 enjls - Matt Allie 266-4058

Dis Rights: OK / ~~N/A~~ Problem - Hold
 Prev Wage: AA / Agency / No
 Contract Value: _____
 AA Plan: Approved
 Amendment / Addendum # _____
 Type: POS / Dvlp / Sbdv / Gov't /
 Grant / ~~PW~~ / ~~Goal~~ / Loan / Agrmt



City of Madison

City of Madison
Madison, WI 53703
www.cityofmadison.com

Legislation Details (With Text)

File #: 56233 **Version:** 1 **Name:** Awarding Public Works Contract 9411, McKenna Boulevard Flood Mitigation, and amending the 2019 Engineering-Major Streets and Stormwater Utility Capital Budgets to provide funding for this work.

Type: Resolution **Status:** Passed

File created: 6/7/2019 **In control:** FINANCE COMMITTEE

On agenda: 7/2/2019 **Final action:** 7/2/2019

Enactment date: 7/5/2019 **Enactment #:** RES-19-00505

Title: Amending the 2019 capital budgets for Engineering-Major Streets and Stormwater Utility and Awarding Public Works Contract 9411, McKenna Boulevard Flood Mitigation (1st AD).

Sponsors: Barbara Harrington-McKinney

Indexes:

Code sections:

Attachments: 1. Contract 9411.pdf

Date	Ver.	Action By	Action	Result
7/2/2019	1	COMMON COUNCIL	Adopt - 15 Votes Required	Pass
6/24/2019	1	FINANCE COMMITTEE	RECOMMEND TO COUNCIL TO ADOPT (15 VOTES REQUIRED) - REPORT OF OFFICER	Pass
6/19/2019	1	BOARD OF PUBLIC WORKS	Return to Lead with the Recommendation for Approval	Pass
6/19/2019	1	FINANCE COMMITTEE	Referred	
6/18/2019	1	COMMON COUNCIL	Refer	Pass
6/18/2019	1	Engineering Division	Referred for Introduction	

The proposed resolution amends the adopted 2019 Major Streets Capital Budget by authorizing a net-neutral transfer of existing budget authority across major programs within the Engineering-Major Streets budget. \$1,000,000 of GO borrowing authority will be transferred from the various major programs to the McKenna/Park Edge Flood Mitigation project as follows: \$220,000 from McKee Rd; \$360,000 from Bridge Repair & Replacement; \$370,000 from Railroad Crossings & Quiet Zones; and \$50,000 from Reconstruction Streets.

Additionally, this resolution amends the adopted 2019 Stormwater Utility Capital Budget by authorizing a net-neutral transfer of existing budget authority across major programs within the Stormwater Utility budget. \$630,000 of GO borrowing authority will be transferred from Stormwater Quality System Improvements to the McKenna/Park Edge Flood Mitigation project.

(220,000) 10245-402-170
 (220,000) 10245-402-801
 (360,000) 11783-402-200
 (360,000) 11783-402-802
 (370,000) 12241-402-200
 (370,000) 12241-402-802
 (50,000) 12242-402-170

(50,000)	12242-402-801
1,000,000	12011-402-170
1,000,000	12011-402-801
(630,000)	12258-84-174
(630,000)	12258-84-801
630,000	12011-84-174
630,000	12011-84-801

Amending the 2019 capital budgets for Engineering-Major Streets and Stormwater Utility and Awarding Public Works Contract 9411, McKenna Boulevard Flood Mitigation (1st AD).
WHEREAS, on August 20, 2018 the Westside of the City of Madison experienced a very significant rain event with rainfall amounts ranging from 5 to 10 inches which fell in approximately 6 hours; and

WHEREAS, this rain event resulted in significant flash flooding damages to portions of the City including the McKenna Boulevard area; and

WHEREAS, City Engineering has been working on flood solutions to the McKenna Boulevard drainage problem with the neighborhood since approximately July of 2016 and;

WHEREAS, City Engineering has worked with the neighborhood to arrive at the flood relief public works improvement project represented and bid under Contract 9411; and

WHEREAS, City Engineering received three (3) competitive bids for construction of the design solution agreed to with the neighborhood; and

WHEREAS, the resulting bids were approximately 1 million over budget; and

WHEREAS, a significant amount of the costs to construct this improvement involve the construction of a bridge equivalent span of box culverts;

NOW, THEREFORE, BE IT RESOLVED that:

1. The following low bids for miscellaneous improvements be accepted and that the Mayor and City Clerk be and are hereby authorized and directed to enter into a contract with the low bidder contained herein, subject to the Contractor's compliance with Section 39.02 of the Madison General Ordinances concerning compliance with the Affirmative Action provisions **and subject to the Contractor's compliance with Section 33.07 of the Madison General Ordinances regarding Best Value Contracting.**
2. The funds be encumbered to cover the cost of the projects contained herein. See attached document (Contract No. 9411) for itemization of bids.
3. The 2019 Engineering-Major Streets and Stormwater Utility Capital Budgets are amended according to the fiscal note to cover the costs associated with infrastructure improvement necessary to implement the flood mitigation project known as the McKenna Boulevard Flood Mitigation and to transfer unused funds in the Stormwater Utility Water Quality budget to Citywide Flood Mitigation thus allowing remaining 2019 flood mitigation projects to be bid and constructed.

PROJECT

CONTRACTOR

AMOUNT OF BID

CONTRACT NO. 9411
MCKENNA BOULEVARD FLOOD MITIGATION

SPEEDWAY SAND & GRAVEL, INC.

\$5,866,227.25

Speedway Sand & Gravel, Inc.		12011-402-170	12011-402-171	12011-84-173	12011-84-179	12011-84-174
Price	Extension	\$248,894.00	\$1,740,120.00	\$122,124.20	\$105,763.95	\$3,649,325.10
Contingency - 5%	\$293,311.00	\$10,986.00	\$0.00	\$8,893.00	\$7,701.00	\$265,731.00
	<u>\$6,159,538.25</u>	<u>\$259,880.00</u>	<u>\$1,740,120.00</u>	<u>\$131,017.20</u>	<u>\$113,464.95</u>	<u>\$3,915,056.10</u>

Jurisdiction: Wisconsin

Demographics

Company Name: Fidelity and Deposit Company of Maryland
 SBS Company Number: 54210634
 Domicile Type: Foreign
 NAIC Group Number: 212 - ZURICH INS GRP
 Merger Flag: No

NAIC CoCode: 39306
 State of Domicile: Illinois
 Organization Type: Stock

Short Name:
 FEIN: 13-3046577
 Country of Domicile: United States
 Date of Incorporation: 03/18/1969

Address

Business Address
 1299 ZURICH WAY
 Schaumburg, IL 60196-1056
 United States

Mailing Address
 1299 ZURICH WAY
 Schaumburg, IL 60196-1056
 United States

Statutory Home Office Address
 1299 ZURICH WAY
 Schaumburg, IL 60196-1056
 United States

Main Administrative Office Address
 1299 ZURICH WAY
 Schaumburg, IL 60196-1056
 United States

Phone, Email, Website

Phone

Type	Number
Toll Free Phone	(800) 382-2150
Business Primary Phone	(847) 413-5048
Business Primary Phone	(847) 605-6000

Email

No results found.

Website

No results found.

Company Type

Company Type: Property and Casualty
 Status: Active
 Effective Date: 12/31/2018
 Issue Date: 01/01/1982
 Articles of Incorporation Received: No

Status Reason:
 Legacy State ID: 111700
 Approval Date:
 Article No:

Status Date: 01/01/1982
 Expiration Date:
 File Date:
 COA Number:

Appointments

Show 10 entries

Showing 1 to 2 of 1438 entries

stiling

Licensee Name	License Number	NPN	License Type	Line of Authority	Appointment Date	Effective Date	Expiration Date
NICOLE STILLINGS	6966174	6966174	Intermediary (Agent) Individual	Property	04/22/2019	04/22/2019	03/15/2020
NICOLE STILLINGS	6966174	6966174	Intermediary (Agent) Individual	Casualty	04/22/2019	04/22/2019	03/15/2020

First Previous 1 Next Last

Line Of Business

Line of Business	Citation Type	Effective Date
Aircraft	Aircraft	01/01/1982
Automobile	Automobile	01/01/1982
Credit Insurance	Credit Insurance	01/01/1982
Fidelity Insurance	Fidelity Insurance	01/01/1982
Fire, Inland Marine and Other Property Insurance	Fire, Inland Marine and Other Property Insurance	01/01/1982
Liability and Incidental Medical Expense Insurance (other than automobile)	Liability and Incidental Medical Expense Insurance (other than automobile)	01/01/1982
Miscellaneous	Miscellaneous	01/01/1982
Ocean Marine Insurance	Ocean Marine Insurance	01/01/1982
Surety Insurance	Surety Insurance	01/01/1982
Workers Compensation Insurance	Workers Compensation Insurance	01/01/1982

Contact

Contact Type	Preferred Name	Name	E-mail	Phone	Address
Registered Agent for Service of Process					Other CORPORATION SERVICE COMPANY 8040 EXCELSIOR DR STE 400 MADISON, WI United States County 53717

Company Merger

No results found.

Name Change History

Previous Name	New Name	Effective Date
	Fidelity and Deposit Company of Maryland	

\$5,866,227.25
FILE COPY

BID OF SPEEDWAY SAND & GRAVEL, INC.

2019

PROPOSAL, CONTRACT, BOND AND SPECIFICATIONS

FOR

MCKENNA BOULEVARD FLOOD MITIGATION

CONTRACT NO. 9411

MUNIS NO. 12011

IN

MADISON, DANE COUNTY, WISCONSIN

AWARDED BY THE COMMON COUNCIL
MADISON, WISCONSIN ON JULY 2, 2019

CITY ENGINEERING DIVISION
1600 EMIL STREET
MADISON, WISCONSIN 53713

<https://bidexpress.com/login>

**MCKENNA BOULEVARD FLOOD MITIGATION
CONTRACT NO. 9411**

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This Proposal, and Agreement have
been prepared by:

**CITY ENGINEERING DIVISION
CITY OF MADISON
MADISON, DANE COUNTY, WISCONSIN**



Robert F. Phillips, P.E., City Engineer

RFP: ma

SECTION A: ADVERTISEMENT FOR BIDS AND INSTRUCTIONS TO BIDDERS

REQUEST FOR BID FOR PUBLIC WORKS CONSTRUCTION CITY OF MADISON, WISCONSIN

A BEST VALUE CONTRACTING MUNICIPALITY

PROJECT NAME:	MCKENNA BOULEVARD FLOOD MITIGATION
CONTRACT NO.:	9411
SBE GOAL	7%
BID BOND	5%
SBE PRE BID MEETING (1:00 P.M.)	MAY 31, 2019
PREQUALIFICATION APPLICATION DUE (2:00 P.M.)	MAY 30, 2019
BID SUBMISSION (2:00 P.M.)	JUNE 6, 2019
BID OPEN (2:30 P.M.)	JUNE 6, 2019
PUBLISHED IN WSJ	MAY 23 & 30, 2019

SBE PRE BID MEETING: Representatives of the Affirmative Action Department will be present to discuss the Small Business Enterprise requirements at 1600 Emil Street, Madison Wisconsin.

PREQUALIFICATION APPLICATION: Forms are available on our website, www.cityofmadison.com/business/pw/forms.cfm. If not currently prequalified in the categories listed in Section A, an amendment to your Prequalification will need to be submitted prior to the same due date. Postmark is not applicable.

BIDS TO BE SUBMITTED by hand to 1600 EMIL ST., MADISON, WI 53713 or online at www.bidexpress.com.

THE BID OPENING is at 1600 EMIL ST., MADISON, WI 53713.

STANDARD SPECIFICATIONS

The City of Madison's Standard Specifications for Public Works Construction - 2019 Edition, as supplemented and amended from time to time, forms a part of these contract documents as if attached hereto.

These standard specifications are available on the City of Madison Public Works website, www.cityofmadison.com/Business/PW/specs.cfm.

The Contractor shall review these Specifications prior to preparation of proposals for the work to be done under this contract, with specific attention to Article 102, "BIDDING REQUIREMENTS AND CONDITIONS" and Article 103, "AWARD AND EXECUTION OF THE CONTRACT." For the convenience of the bidder, below are highlights of three subsections of the specifications.

SECTION 102.1: PRE-QUALIFICATION OF BIDDERS

In accordance with Wisconsin State Statutes 66.0901 (2) and (3), all bidders must submit to the Board of Public Works proof of responsibility on forms furnished by the City. The City requires that all bidders be qualified on a biennial basis.

Bidders must present satisfactory evidence that they have been regularly engaged in the type of work specified herein and they are fully prepared with necessary capital, materials, machinery and supervisory personnel to conduct the work to be contracted for to the satisfaction of the City. All bidders must be pre-qualified by the Board of Public Works for the type of construction on which they are bidding prior to the opening of the bid.

In accordance with Section 39.02(9)(a). of the General Ordinances, all bidders shall submit in writing to the Affirmative Action Division Manager of the City of Madison, a Certificate of Compliance or an Affirmative Action Plan at the same time or prior to the submission of the proof of responsibility forms.

The bidder shall be disqualified if the bidder fails to or refuses to, prior to opening of the bid, submit a Certificate of compliance, Affirmative Action Plan or Affirmative Action Data Update, as applicable, as defined by Section 39.02 of the General Ordinances (entitled Affirmative Action) and as required by Section 102.11 of the Standard Specifications.

SECTION 102.4 PROPOSAL

No bid will be accepted that does not contain an adequate or reasonable price for each and every item named in the Schedule of Unit Prices.

A lump sum bid for the work in accordance with the plans and specifications is required. The lump sum bid must be the same as the total amounts bid for the various items and it shall be inserted in the space provided.

All papers bound with or attached to the proposal form are considered a part thereof and must not be detached or altered when the proposal is submitted. The plans, specifications and other documents designated in the proposal form will be considered a part of the proposal whether attached or not.

A proposal submitted by an individual shall be signed by the bidder or by a duly authorized agent. A proposal submitted by a partnership shall be signed by a member/partner or by a duly authorized agent thereof. A proposal submitted by a corporation shall be signed by an authorized officer or duly authorized registered agent of such corporation, and the proposal shall show the name of the State under the laws of which such corporation was chartered. The required signatures shall in all cases appear in the space provided thereof on the proposal.

Each proposal shall be placed, together with the proposal guaranty, in a sealed envelope, so marked as to indicate name of project, the contract number or option to which it applies, and the name and address of the Contractor or submitted electronically through Bid Express (www.bidexpress.com). Proposals will be accepted at the location, the time and the date designated in the advertisement. Proposals received after the time and date designated will be returned to the bidder unopened.

SECTION 102.5: BID DEPOSIT (PROPOSAL GUARANTY)

All bids, sealed or electronic, must be accompanied with a Bid Bond (City of Madison form) equal to at least 5% of the bid or a Certificate of Annual/Biennial Bid Bond or certified check, payable to the City Treasurer. Bid deposit of the successful bidders shall be returned within forty-eight (48) hours following execution of the contract and bond as required.

MINOR DISCREPENCIES

Bidder is responsible for submitting all forms necessary for the City to determine compliance with State and City bidding requirements. Notwithstanding any language to the contrary contained herein, the City may exercise its discretion to allow bidders to correct or supplement submissions after bid opening, if the minor discrepancy, bid irregularity or omission is insignificant and not one related to price, quality, quantity, time of completion or performance of the contract.

Bidders for this Contract(s) must be Pre-Qualified for at least one of the following type(s) of construction denoted by an

Building Demolition

- 101 Asbestos Removal
 120 House Mover

- 110 Building Demolition

Street, Utility and Site Construction

- 201 Asphalt Paving
 205 Blasting
 210 Boring/Pipe Jacking
 215 Concrete Paving
 220 Con. Sidewalk/Curb & Gutter/Misc. Flat Work
 221 Concrete Bases and Other Concrete Work
 222 Concrete Removal
 225 Dredging
 230 Fencing
 235 Fiber Optic Cable/Conduit Installation
 240 Grading and Earthwork
 241 Horizontal Saw Cutting of Sidewalk
 242 Infrared Seamless Patching
 245 Landscaping, Maintenance
 246 Ecological Restoration
 250 Landscaping, Site and Street
 251 Parking Ramp Maintenance
 252 Pavement Marking
 255 Pavement Sealcoating and Crack Sealing
 260 Petroleum Above/Below Ground Storage Tank Removal/Installation
 262 Playground Installer

- 265 Retaining Walls, Precast Modular Units
 270 Retaining Walls, Reinforced Concrete
 275 Sanitary, Storm Sewer and Water Main Construction
 276 Sawcutting
 280 Sewer Lateral Drain Cleaning/Internal TV Insp.
 285 Sewer Lining
 290 Sewer Pipe Bursting
 295 Soil Borings
 300 Soil Nailing
 305 Storm & Sanitary Sewer Laterals & Water Svc.
 310 Street Construction
 315 Street Lighting
 318 Tennis Court Resurfacing
 320 Traffic Signals
 325 Traffic Signing & Marking
 332 Tree pruning/removal
 333 Tree, pesticide treatment of
 335 Trucking
 340 Utility Transmission Lines including Natural Gas, Electrical & Communications
 399 Other _____

Bridge Construction

- 501 Bridge Construction and/or Repair

Building Construction

- 401 Floor Covering (including carpet, ceramic tile installation, rubber, VCT)
 402 Building Automation Systems
 403 Concrete
 404 Doors and Windows
 405 Electrical - Power, Lighting & Communications
 410 Elevator - Lifts
 412 Fire Suppression
 413 Furnishings - Furniture and Window Treatments
 415 General Building Construction, Equal or Less than \$250,000
 420 General Building Construction, \$250,000 to \$1,500,000
 425 General Building Construction, Over \$1,500,000
 428 Glass and/or Glazing
 429 Hazardous Material Removal
 430 Heating, Ventilating and Air Conditioning (HVAC)
 433 Insulation - Thermal
 435 Masonry/Tuck pointing

- 437 Metals
 440 Painting and Wallcovering
 445 Plumbing
 450 Pump Repair
 455 Pump Systems
 460 Roofing and Moisture Protection
 464 Tower Crane Operator
 461 Solar Photovoltaic/Hot Water Systems
 465 Soil/Groundwater Remediation
 466 Warning Sirens
 470 Water Supply Elevated Tanks
 475 Water Supply Wells
 480 Wood, Plastics & Composites - Structural & Architectural
 499 Other _____

State of Wisconsin Certifications

- 1 Class 5 Blaster - Blasting Operations and Activities 2500 feet and closer to inhabited buildings for quarries, open pits and road cuts.
 2 Class 6 Blaster - Blasting Operations and Activities 2500 feet and closer to inhabited buildings for trenches, site excavations, basements, underwater demolition, underground excavations, or structures 15 feet or less in height.
 3 Class 7 Blaster - Blasting Operations and Activities for structures greater than 15' in height, bridges, towers, and any of the objects or purposes listed as "Class 5 Blaster or Class 6 Blaster".
 4 Petroleum Above/Below Ground Storage Tank Removal and Installation (Attach copies of State Certifications.)
 5 Hazardous Material Removal (Contractor to be certified for asbestos and lead abatement per the Wisconsin Department of Health Services, Asbestos and Lead Section (A&LS).) See the following link for application: www.dhs.wisconsin.gov/Asbestos/Cert. State of Wisconsin Performance of Asbestos Abatement Certificate must be attached.
 6 Certification number as a Certified Arborist or Certified Tree Worker as administered by the International Society of Arboriculture
 7 Pesticide application (Certification for Commercial Applicator For Hire with the certification in the category of turf and landscape (3.0) and possess a current license issued by the DATCP)
 8 State of Wisconsin Master Plumbers License.

SECTION B: PROPOSAL

Please refer to the
Bid Express Website
at <https://bidexpress.com>
look up contract number
and go to
Section B: Proposal Page

You can access all City of Madison bid solicitations for FREE at www.bidexpress.com

Click on the "Register for Free" button and follow the instructions to register your company and yourself. You will be asked for a payment subscription preference, since you may wish to bid online someday. Simply choose the method to pay on a 'per bid' basis. This requires no payment until / unless you actually bid online. You can also choose the monthly subscription plan at this time. You will, however, be asked to provide payment information. Remember, you can change your preference at anytime. You will then be able to complete your free registration and have full access to the site. Your free access does not require completion of the 'Digital ID' process, so you will have instant access for viewing and downloading. To be prepared in case you ever do wish to bid online, you may wish to establish your digital ID also, since you cannot bid without a Digital ID.

If you have any problems with the free registration process, you can call the bidexpress help team, toll free at 1-888-352-2439 (option 1, option1).

SECTION C: SMALL BUSINESS ENTERPRISE

Instructions to Bidders City of Madison SBE Program Information

2 Small Business Enterprise (SBE) Program Information

2.1 Policy and Goal

The City of Madison reaffirms its policy of nondiscrimination in the conduct of City business by maintaining a procurement process which remains open to all who have the potential and ability to sell goods and services to the City. It is the policy of the City of Madison to allow Small Business Enterprises (SBE) maximum feasible opportunity to participate in City of Madison contracting. The bidder acknowledges that its bid has been submitted in accordance with the SBE program and is for the public's protection and welfare.

Please refer to the "ADVERTISEMENT FOR BIDS" for the goal for the utilization of SBEs on this project. SBEs may participate as subcontractors, vendors and/or suppliers, which provide a commercially useful function. The dollar value for SBE suppliers or 'materials only' vendors shall be discounted to 60% for purposes of meeting SBE goals.

A bidder which achieves or exceeds the SBE goal will be in compliance with the SBE requirements of this project. In the event that the bidder is unable to achieve the SBE goal, the bidder must demonstrate that a good faith effort to do so was made. Failure to either achieve the goal or demonstrate a good faith effort to do so will be grounds for the bidder being deemed a non-responsible contractor ineligible for award of this contract.

A bidder may count towards its attainment of the SBE goal only those expenditures to SBEs that perform a commercially useful function. For purposes of evaluating a bidder's responsiveness to the attainment of the SBE goal, the contract participation by an SBE is based on the percentage of the total base bid proposed by the Contractor. The total base bid price is inclusive of all addenda.

Work performed by an SBE firm in a particular transaction can be counted toward the goal only if it involves a commercially useful function. That is, in light of industry practices and other relevant considerations, does the SBE firm have a necessary and useful role in the transaction, of a kind for which there is a market outside the context of the SBE Program, or is the firm's role a superfluous step added in an attempt to obtain credit towards goals? If, in the judgment of the Affirmative Action Division, the SBE firm will not perform a commercially useful function in the transaction, no credit towards goals will be awarded.

The question of whether a firm is performing a commercially useful function is completely separate from the question of whether the firm is an eligible SBE. A firm is eligible if it meets the definitional criteria and ownership and control requirements, as set forth in the City of Madison's SBE Program.

If the City of Madison determines that the SBE firm is performing a commercially useful function, then the City of Madison must then decide what that function is. If the commercially useful function is that of an SBE vendor / supplier that regularly transacts business with the respective product, then the City of Madison will count 60% of the value of the product supplied toward SBE goals.

To be counted, the SBE vendor / supplier must be engaged in selling the product in question to the public. This is important in distinguishing an SBE vendor / supplier, which has a regular trade with a variety of customers, from a firm which performs supplier-like functions on an ad hoc basis or for only one or two contractors with whom it has a special relationship.

A supplier of bulk goods may qualify as an eligible SBE vendor / supplier if it either maintains an inventory or owns or operates distribution equipment. With respect to the distribution equipment; e.g., a fleet of trucks, the term "operates" is intended to cover a situation in which the supplier leases the equipment on a regular basis for its entire business. It is not intended to cover a situation in which the firm simply provides drivers for trucks owned or leased by another party; e.g., a prime contractor, or leases such a party's trucks on an ad hoc basis for a specific job.

If the commercially useful function being performed is not that of a qualified SBE vendor / supplier, but rather that of delivery of products, obtaining bonding or insurance, procurement of personnel, acting as a broker or manufacturer's representative in the procurement of supplies, facilities, or materials, etc., only the fees or commissions will apply towards the goal.

For example, a business that simply transfers title of a product from manufacturer to ultimate purchaser; e. g., a sales representative who re-invoices a steel product from the steel company to the Contractor, or a firm that puts a product into a container for delivery would not be considered a qualified SBE vendor / supplier. The Contractor would not receive credit based on a percentage of the cost of the product for working with such firms.

Concerning the use of services that help the Contractor obtain needed supplies, personnel, materials or equipment to perform a contract: only the fee received by the service provider will be counted toward the goal. For example, use of a SBE sales representative or distributor for a steel company, if performing a commercially useful function at all, would entitle the Contractor receiving the steel to count only the fee paid to the representative or distributor toward the goal. This provision would also govern fees for professional and other services obtained expressly and solely to perform work relating to a specific contract.

Concerning transportation or delivery services: if an SBE trucking company picks up a product from a manufacturer or a qualified vendor / supplier and delivers the product to the Contractor, the commercially useful function it is performing is not that of a supplier, but simply that of a transporter of goods. Unless the trucking company is itself the manufacturer or a qualified vendor / supplier in the product, credit cannot be given based on a percentage of the cost of the product. Rather, credit would be allowed for the cost of the transportation service.

The City is aware that the rule's language does not explicitly mention every kind of business that may contribute work on this project. In administering these programs, the City would, on a case-by-case basis, determine the appropriate counting formula to apply in a particular situation.

2.2 Contract Compliance

Questions concerning the SBE Program shall be directed to the Contract Compliance Officer of the City of Madison Department of Civil Rights, Affirmative Action Division, 210 Martin Luther King, Jr. Blvd., Room 523, Madison, WI 53703; telephone (608) 266-4910.

2.3 Certification of SBE by City of Madison

The Affirmative Action Division maintains a directory of SBEs which are currently certified as such by the City of Madison. Contact the Contract Compliance Officer as indicated in Section 2.2 to receive a copy of the SBE Directory or you may access the SBE Directory online at www.cityofmadison.com/dcr/aaTBDir.cfm.

All contractors, subcontractors, vendors and suppliers seeking SBE status must complete and submit the **Targeted Business Certification Application** to the City of Madison Affirmative Action Division by the time and date established for receipt of bids. A copy of the Targeted Business Certification Application is available by contacting the Contract Compliance Officer at the address and telephone indicated in Section 2.2 or you may access the Targeted Business Certification Application online at www.cityofmadison.com/dcr/aaTBDir.cfm. Submittal of the Targeted Business Certification Application by the time specified does not guarantee that the applicant will be certified as a SBE eligible to be utilized towards meeting the SBE goal for this project.

2.4 Small Business Enterprise Compliance Report

2.4.1 Good Faith Efforts

Bidders shall take all necessary affirmative steps to assure that SBEs are utilized when possible and that the established SBE goal for this project is achieved. A contractor who self performs a portion of the work, and is pre-qualified to perform that category of work, may subcontract that portion of the work, but shall not be required to do so. When a bidder is unable to achieve the established SBE goal, the bidder must demonstrate that a good faith effort to do so was made. Such a good faith effort should include the following:

- 2.4.1.1 Attendance at the pre-bid meeting.
- 2.4.1.2 Using the City of Madison's directory of certified SBEs to identify SBEs from which to solicit bids.
- 2.4.1.3 Assuring that SBEs are solicited whenever they are potential sources.
- 2.4.1.4 Referring prospective SBEs to the City of Madison Affirmative Action Division for certification.
- 2.4.1.5 Dividing total project requirements into smaller tasks and/or quantities, where economically feasible, to permit maximum feasible SBE participation.
- 2.4.1.6 Establishing delivery schedules, where requirements permit, which will encourage participation by SBEs.
- 2.4.1.7 Providing SBEs with specific information regarding the work to be performed.
- 2.4.1.8 Contacting SBEs in advance of the deadline to allow such businesses sufficient time to prepare a bid.
- 2.4.1.9 Utilizing the bid of a qualified and competent SBE when the bid of such a business is deemed reasonable (i.e. 5% above the lowest bidder), although not necessarily low.
- 2.4.1.10 Contacting SBEs which submit a bid, to inquire about the details of the bid and confirm that the scope of the work was interpreted as intended.
- 2.4.1.11 Completion of Cover Page (page C-6), Summary Sheet (page C-7) and SBE Contact Reports (pages C-8 and C9) if applicable.

2.4.2 Reporting SBE Utilization and Good Faith Efforts

The Small Business Enterprise Compliance Report is to be submitted by the bidder with the bid: This report is due by the specified bid closing time and date. Bids submitted without a completed SBE Compliance Report as outlined below may be deemed non-responsible and the bidder ineligible for award of this contract. Notwithstanding any language to the contrary contained herein, the City may exercise its discretion to allow bidders to correct or supplement submissions after bid opening, if the minor discrepancy, bid irregularity or omission is insignificant and not one related to price, quality, quantity, time of completion, performance of the contract, or percentage of SBE utilization.

2.4.2.1 If the Bidder meets or exceeds the goal established for SBE utilization, the Small Business Enterprise Compliance Report shall consist of the following:

2.4.2.1.1 **Cover Page**, Page C-6; and

2.4.2.1.2 **Summary Sheet**, C-7.

2.4.2.2 If the bidder does not meet the goal established for SBE utilization, the Small Business Enterprise Compliance Report shall consist of the following:

2.4.2.2.1 **Cover Page**, Page C-6;

2.4.2.2.2 **Summary Sheet**, C-7; and

2.4.2.2.3 **SBE Contact Report**, C-8 and C-9. (A separate Contact Report must be completed for each applicable SBE which is not utilized.)

2.5 Appeal Procedure

A bidder which does not achieve the established goal and is found non-responsible for failure to demonstrate a good faith effort to achieve such goal and subsequently denied eligibility for award of contract may appeal that decision to the Small Business Enterprises Appeals Committee. All appeals shall be made in writing, and shall be delivered to and received by the City Engineer no later than 4:30 PM on the third business day following the bidder's receipt of the written notification of ineligibility by the Affirmative Action Division Manager. Postmark not acceptable. The notice of appeal shall state the basis for the appeal of the decision of the Affirmative Action Division Manager. The Appeal shall take place in accordance with Madison General Ordinance 33.54.

2.6 SBE Requirements After Award of the Contract

The successful bidder shall identify SBE subcontractors, suppliers and vendors on the subcontractor list in accordance with the specifications. The Contractor shall submit a detailed explanation of any variances between the listing of SBE subcontractors, vendors and/or suppliers on the subcontractor list and the Contractor's SBE Compliance Report for SBE participation.

No change in SBE subcontractors, vendors and/or suppliers from those SBEs indicated in the SBE Compliance Report will be allowed without prior approval from the Engineer and the Affirmative Action Division. The contractor shall submit in writing to the City of Madison Affirmative Action Division a request to change any SBE citing specific reasons which necessitate such a change. The Affirmative Action Division will use a general test of reasonableness in approving or rejecting the contractor's request for change. If the request is approved, the Contractor will make every effort to utilize another SBE if available.

The City will monitor the project to ensure that the actual percentage commitment to SBE firms is carried out.

2.7 SBE Definition and Eligibility Guidelines

A Small Business Enterprise is a business concern awarded certification by the City of Madison. For the purposes of this program a Small Business Enterprise is defined as:

- A. An independent business operated under a single management. The business may not be a subsidiary of any other business and the stock or ownership may not be held by any individual or any business operating in the same or a similar field. In determining whether an entity qualifies as a SBE, the City shall consider all factors relevant to being an independent business including, but not limited to, the date the business was established, adequacy of its resources for the work in which it proposes to involve itself, the degree to which financial, equipment leasing and other relationships exist with other ineligible firms in the same or similar lines of work. SBE owner(s) shall enjoy the customary incidents of ownership and shall share in the risks and profits commensurate with their enjoyment interests, as demonstrated by an examination of the substance rather than form or arrangements that may be reflected in its ownership documents.
- B. A business that has averaged no more than \$4.0 million in annual gross receipts over the prior three year period and the principal owner(s) do not have a personal net worth in excess of \$1.32 million.

Firm and/or individuals that submit fraudulent documents/testimony may be barred from doing business with the City and/or forfeit existing contracts.

SBE certification is valid for one (1) year unless revoked.

SECTION D: SPECIAL PROVISIONS

MCKENNA BOULEVARD FLOOD MITIGATION CONTRACT NO. 9411

It is the intent of these Special Provisions to set forth the final contractual intent as to the matter involved and shall prevail over the Standard Specifications and plans whenever in conflict therewith. In order that comparisons between the Special Provisions can be readily made, the numbering system for the Special Provisions is equivalent to that of the Specifications.

Whenever in these Specifications the term "Standard Specifications" appears, it shall be taken to refer to the City of Madison Standard Specifications for Public Works Construction and Supplements thereto.

SECTION 102.11 **BEST VALUE CONTRACTING**

This Contract shall be considered a Best Value Contract if the Contractor's bid is equal to or greater than \$62,500 for a single trade contract; or equal to or greater than \$306,000 for a multi-trade contract pursuant to MGO 33.07(7).

ARTICLE 103 **AWARD AND EXECUTION OF THE CONTRACT**

The awarded Contractor shall completely execute the signing of all contract documents and submit them to City Engineering (1600 Emil St) prior to **12:00pm on Monday, July 8, 2019**. Delays in turning in the required completed contract documents will not adjust the project completion date.

Payment and Performance Bonds shall be dated no sooner than Wednesday, July 3, 2019.

ARTICLE 104 **SCOPE OF WORK**

This flood mitigation project consists of the following: installing large box culverts under McKenna Boulevard; replacing concrete channel lining and expanding the greenway channel between Greentree Pond and McKenna Boulevard; installing box culverts at the outlet of Greentree Pond; storm sewer improvements; and water main and sanitary main replacement to allow installation of larger storm water infrastructure.

Work shall include, but is not limited to: clearing & grubbing, channel excavation, base course, installation of storm pipe and structures, installation of water main and appurtenances, installation of sanitary sewer main and structures, installation of concrete channel lining, installation of sheet pile retaining wall, grading, installation of electrical conduit, pavement marking and restoration.

SECTION 105.12 **COOPERATION BY THE CONTRACTOR**

The City of Madison is not aware of other projects taking place in the vicinity of this project.

Notify City Traffic Engineering, Troy Vant (395-1975), once conduit and bases are installed and cured. The Contractor shall coordinate their work with City crews as shown in the plans and defined in these special provisions. Traffic Engineering crews will need time to install all new lighting and traffic signals and temporary traffic signals. The Contractor shall provide time and space for Traffic Engineering to complete this work as the roadway cannot be re-opened until these items are fully installed. Contact Troy Vant prior to placement of any binder or surface layers of pavement to coordinate installation of traffic signal loops.

Existing Items to Remain

The Contractor shall use care around existing trees, plantings, walls, signs, utilities, traffic signals, street lights, pedestrian flashers and any other structures or amenities that are indicated on the plans to remain. The Contractor shall protect all items that are to remain and shall immediately clean off any residue from adjacent construction activities.

The existing Traffic Engineering electrical and fiber optic must remain in service throughout the duration of the project. The electrical conduit crossings that are to be replaced must remain operational until temporary signals and/or lighting are installed and are operational.

The Contractor shall use care around existing trees to remain and as shown on the plans as protected with construction fencing. No trees, other than those shown on the plan to be removed, shall be cut without the approval of the Engineer and the City Forester; the abutting property owners shall be notified in accordance with the City's Administrative Procedure Memorandum No. 6-2 prior to any removal. Several trees are noted on plans to follow the "No Root Cutting" procedures as identified in the standard specifications. The Contractor shall not store materials or equipment within in 6 ft. of any existing tree that is to remain.

All curb and gutter, except as indicated on the plan set, shall be protected on McKenna Blvd and in Elver Park. Damaged curb and gutter shall be replaced by Contractor incidental to contract.

Access to Properties

The Contractor shall maintain pedestrian access to all properties within the project limits and shall maintain vehicle access to all commercial driveways within the project limits, including Elver Park. All means necessary to maintain this access shall be considered incidental which may include but is not limited to high early strength concrete and temporary plating. Temporary cross walks shall be used as needed to maintain safe access through the project, and these will be paid under the appropriate bid item (Bid Item 90007 – Temporary Crosswalk Access).

Park Access and Coordination

Portions of this construction are located within Elver Park, which is a highly active community park in Madison. The Contractor shall note that the park will be opened to the public during the construction. An accessible pedestrian route will be required and an approved access plan shall be provided to the City prior to the start of construction. The construction site shall be fully opened to two-way access to the auxiliary (west) parking lot at the end of each work day and on weekends. The access drive shall be required to stay open at all times during work hours with either a flagger or an alternate lane of travel (e.g. gravel drive) for vehicles to access the westerly portion of the park or the auxiliary parking lot at all other times (i.e. during work hours). All trenches shall be backfilled to the existing grade or plated to allow vehicular traffic at the end of the work day.

The Contractor shall note that the access road is also used by Parks Operations staff to access material storage on the western side of the park. Heavy equipment may need access to this area during the span of this contract.

The Contractor may choose to close access to the westerly drive closest to the work area for the east parking lot closest to McKenna Blvd during work hours, however access shall be opened and any barricades removed during all non-work hours.

The Contractor shall be allowed to work in the park from 7am to 5pm Monday through Friday but no work will be allowed after 5pm or on weekends due to the amount of activities programmed in the park. No work shall be allowed within Elver Park on September 13, 2019 due to a previously scheduled event.

During the summer months and prior to Labor Day weekend, the Parks Division runs a splash park which requires specific water and electrical needs along with having facilities such as the shelters open to the public for general use or reservations. If any of the parks facilities are impacted or will require down time (water, electric, fiber, etc) the Contractor shall notify both Greg Genin, Parks Operations Manager and Laura Bauer, Parks West Area Supervisor a minimum of 48 hours in advance. Additional advance notice should be provided if possible to limit impacts to the facilities. Greg may be reached at 608-267-8804 or ggenin@cityofmadison.com. Laura may be reached at 608-334-8870 or lbauer@cityofmadison.com.

The existing signage at Elver Park will be removed prior to the start of construction by Parks Division Staff and installed upon completion of the work.

One light pole in Elver Park is to be relocated during construction (see plan sheet ST-4). The light pole to be relocated is on the end of the line (277 V) that feeds to the Athletics parking lot lighting from the Athletics building in Elver Park. All Athletics parking lot lights (including the pole to be relocated) are on one circuit. Lighting is controlled by a Leviton Panel in Athletics garage and power to circuit is not on during the day. There is a hand hole near the parking lot which one of the lot lights taps from. Circuit to light could be interrupted and conductors to pole could be pulled back to hand hole to accommodate the move. The Contractor shall coordinate with Paul Janes (608-267-1196 or pjanes@cityofmadison.com) to disconnect light circuit at hand hole prior to construction.

Work Near and Around Greentree Landfill

Portions of this construction are located adjacent to Greentree Landfill, a closed City of Madison landfill. The Contractor will not be permitted to drive heavy equipment, stage, or store materials or equipment within the limits of the landfill cap as shown on the plan sheets.

Coordination with Utilities

This project will require close coordination with private utility companies. There are several existing utilities located within the project limits that are to remain. Private utility companies will also need to relocate a number of facilities within the project limits. The Contractor will be responsible for coordination and providing work space for any conflict resolution work that will need to be performed by the private utility companies. The Contractor shall coordinate with all utilities for any structure adjustments. Provide a minimum of 1 week notice prior to needing structure adjustments.

The following utility conflicts have been identified and require coordination as follows:

Madison Gas & Electric Co (MG&E) has ground-mounted transformer along the private property line west of the greenway, near Sta. 17+75. The transformer supplies power to the landfill gas extraction system blower building to the northeast. The Contractor shall contact the utility minimum of 48 hours prior to any work in the vicinity of this equipment to obtain guidance from the utility on any safety precautions or special requirements for protection of or maintenance of utility access to the equipment. The contact for MG&E Electric is Mark Bohm at (608) 252-4730 or MBohm@mge.com.

Madison Gas & Electric Co (MG&E) has gas facilities within the project limits that will need to be relocated. The contact for MG&E Gas is Shaun Endres at 608-252-7224 or SEndres@mge.com.

The Contractor shall note that fiber optics lines have recently been installed within the McKenna Boulevard Right of way to serve the new employment center located at 1233 McKenna Boulevard. The proposed fiber optic line connects to a handhold at the northeast intersection of Gammon Ln. and McKenna Blvd. The contact for the City of Madison for the fiber optic line is Chris Lueder at 608-261-9646 or clueder@cityofmadison.com.

Madison Metropolitan Sewerage District (MMSD) has facilities within the project area. The contact for MMSD is Ray Schneider at (608) 347-3628 or RayS@madsewer.org.

The City of Madison Parks Division has electric facilities that will need to be relocated within the park. The contacts for the Parks Division facilities are Jon Landsverk and Greg Genin. Jon may be reached at 608-267-4937 or Jlandsverk@cityofmadison.com. Greg may be reached at 608-267-8804 or ggenin@cityofmadison.com.

The City of Madison owns the Greentree Landfill, which is immediately adjacent to this project. To accommodate the project gas probes and monitoring wells will have to be relocated before the start of work. This will be done under separate contract coordinate by the City. The Contractor shall be aware that the limits of waste and the gas extraction

system for the landfill are in close proximity to the construction site. The contact for the Greentree Landfill is Jack Brody at 608-267-9408 or jbrody2@cityofmadison.com

SECTION 107.1 PUBLIC CONVENIENCE AND SAFETY

Primary access to the site and hauling shall be via McKenna Boulevard and Elver Park. The Contractor shall be allowed to utilize a portion of the bike path within the Greentree landfill as approved by the Construction Engineer and as shown in the plans. Any damage to the landfill grounds or the existing bike path shall be incidental to this project and shall be at the Contract's expense. The Contractor is alerted that there is no other legal public street access to the site. No hauling shall take place on local streets without prior written approval of the Construction Engineer.

The project includes work adjacent to private properties owned by multiple residents and entities. The Contractor shall not disturb private property beyond the construction limits. Those limits shall be staked by a surveyor prior to beginning construction. Prior to sheet pile driving, foundation surveys will be conducted for all properties adjoining the proposed sheet pile retaining wall alignment (Bid Item 90031 – Crack and Damage Survey). Care shall also be taken to minimize nuisance to private property by vibration when driving sheet piling along the length of the retaining wall.

Contractor is alerted that little additional space is available within the project right of way or easement lines for a construction trailer, material storage or other use. If the Contractor identifies public property near the site which could be used for such purposes, they shall obtain advance approval from the Construction Engineer to occupy or disturb such area. If approval is not granted, the Contractor shall be required to obtain other staging locations and shall not be provided additional compensation for this effort. No staging or material storage shall be allowed in Greentree Landfill.

SECTION 107.7 MAINTENANCE OF TRAFFIC

All signing and barricading shall conform to Part VI of the Federal Highways Administrations "Manual on Uniform Traffic Control Devices" (MUTCD), the State of Wisconsin Standard Facilities Development Manual (including Chapter 16 – Standard Detail Drawings) and the City of Madison Standards for sidewalk and bikeway closures.

A traffic control plan is provided in the plan set. The traffic control plan is a schematic representation of the traffic control. It shall not be considered to scale. The contractor shall not use the traffic control plan to represent quantity of drums. Drums shall be spaced per M.U.T.C.D. The contractor shall maintain all lanes shown on the traffic control plan. Accomplish the construction sequence, including the associated traffic control as detailed in the traffic control section of the plans, and as described in this traffic article. Unless detailed in the plans, do not begin or continue any work that closes traffic lanes outside the allowed time periods specified in this article. Submit all traffic control change requests to the construction engineer at least 7 working days prior to an actual traffic control change. A request does not constitute approval.

The traffic control plan may need to be altered as conditions change in the field or as unexpected conditions occur. This may include relocating existing traffic control or providing additional traffic control. The Contractor shall install and maintain any necessary modifications or additions to the traffic control, as directed by the City Traffic Engineer, at no cost to the City.

Traffic Control shall be measured as a single lump sum for Traffic Control at all locations. Payment for the Traffic Control is full compensation for constructing, assembling, hauling, erecting, re-erecting, maintaining, restoring, and removing non-permanent traffic signs, drums, barricades, and similar control devices, including arrow boards, for providing, placing, and maintaining work zone. Maintaining shall include replacing damaged or stolen traffic control devices. Traffic control necessary to install temporary or permanent pavement markings shall be included in the Traffic Control Lump Sum Bid Item.

Tubular markers used to separate traffic in opposite directions shall be per WISDOT S.D.D. 15C-11. Tubular markers used to shift traffic and placed between traffic operating in the same direction shall be white in color with yellow reflective tape. Double yellow reflective pavement marking tape shall be used whenever tubular markers are being used to separate travel lanes. Yellow four (4) inch reflective pavement marking tape shall be used whenever tubular markers are used to separate a travel lane from a work zone.

McKenna Blvd

Follow the traffic control plan. The phases may be implemented in a non-sequential order. Two way traffic shall be maintained at all times with a lane of traffic in each direction at least 10 feet wide.

Bike Path

The bike path between McKenna Blvd and Schroeder Rd may be closed from McKenna Blvd up to where it splits to the north and east while work is occurring on the path. If closed, the detour plan shall be in place for as long as work is occurring here.

Construction equipment or materials shall not be stored in the roadway or street right-of-way that is open to traffic during non-working hours. Construction equipment and materials are not to be stored within the street right-of-way that is outside the project limits as shown on the approved plan.

The work areas shall be backfilled, plated, or protected by traffic control devices during non-working hours. If steel plates are used, the Contractor shall notify the City of Madison Streets Division, 266-4681, one working day prior to placement of the plates.

Contractor shall place portable changeable message boards at least one week in advance of the start of work, notifying the public of the start of construction. One portable changeable message board will be required for each direction of traffic. Contractor shall locate the portable changeable message boards as directed by the Engineer. One portable changeable message board shall also be placed for each direction of travel on the bike path one week prior to the closure of the bike path.

Maintain sidewalk on one side of the street at all times and both sides whenever possible. When sidewalk must be closed for construction purposes, Contractor shall ensure that sidewalk on opposite side of the street is open. Sidewalk closures shall be signed at the crosswalks prior to the closure. Sidewalk access to all businesses shall remain open from at least one end of a block at all times. Sidewalks shall be fully open during non-working hours except where necessary to enable sidewalk to cure. Maintaining Sidewalk is considered incidental to the contract.

Contractor shall notify the City of Madison Police Department, Fire Department, Madison Metro, and Traffic Engineering 48 hours in advance of all switchovers of traffic lanes and closures of streets. Notifications must be given by 4:00 P.M. on Thursday for any such work to be done on the following Monday. Notify Madison Metro one week prior to traffic switches, street closures, and reopening the road to through traffic for bus routing. Madison Metro contact is Tim Sobota (608) 261-4289.

Contractor is responsible for obtaining and installing temporary no parking signs to facilitate traffic control plan or as necessary to complete the work within the contract. The contractor shall contact John Villareal with the City of Madison Parking Utility (608-267-8756) at least 3 working days prior to needing the signs. Contractor shall post signs in accordance with the City of Madison Police Department Guidelines for temporary no parking restrictions for construction or special events. The guidelines can be found at the link listed below. This shall be considered incidental to the traffic control lump sum bid item.

http://www.cityofmadison.com/business/pw/documents/guidelines_temporarynoparkingrestrictions.pdf

Notify residents and businesses in writing at least 2 days (48 hours) prior to restricting access to any driveway. Notify residents and businesses in writing at least 3 days (72 hours) prior to closing any access to any driveway.

Provide emergency vehicles with adequate access to all properties along the project at all times.

Provide access for mail delivery to all properties.

The Contractor shall not remove traffic signs. For removal or replacement of traffic and parking signs, contact the City of Madison Traffic Engineering Field Operations, 1120 Sayle Street, 266-4767, 8:00 a.m. to 4:00 p.m., a minimum of 2 working days in advance of when any existing signs need to be removed. This service is provided free of charge. If the contractor removes the signs, the contractor will be billed for the reinstallation of, and any damage to, the signing equipment. The contractor shall notify The City of Madison Traffic Engineering Field Operations, 1120 Sayle Street, 266-4767 upon completion of final landscaping to have permanent signs reinstalled. The contractor shall expect a minimum of seven working days to have permanent signs reinstalled. The contractor shall leave in place all necessary traffic control until given notice by the construction engineer that permanent signing is in place and temporary traffic control may be removed.

Contact Jeremy Nash, Traffic Engineering Division, jnash@cityofmadison.com, 608-266-6585, with any questions concerning these traffic control specifications.

ARTICLE 108.2 PERMITS

The City of Madison has submitted a DNR Water Resources Application for Projects Permits (WRAPP) for the following:

- Individual Permit WDNR Numbers: IP-SC-2019-13-00650, IP-SC-2019-13-00651, IP-SC-2019-13-00652.

A City of Madison Erosion Control permit has been applied for and weekly inspections will be completed by City Staff. Contractor may be required to complete additional inspections following storm events, and this work will be paid for under the appropriate bid item. A copy of the permit is available at the City of Madison, Engineering Division office.

The Contractor shall meet the conditions of the permits by properly installing and maintaining the erosion control measures shown on the plans, specified in these Special Provisions, or as directed by the Construction Engineer or his designees. This work will be paid for under the appropriate contract bid items. If appropriate items are not included in the contract, they shall be considered Extra Work. A copy of the permit is available at the City of Madison, Engineering Division office.

Copies of these permits will be provided to Contractor prior to start of construction. The Contractor must keep a copy of each individual permit on site at all times throughout construction.

The City's obtaining of these permits is not intended to be exhaustive of all permits that may be required to be obtained by the Contractor for construction of this project. It shall be the responsibility of the Contractor to identify and obtain any other permits needed for construction. Contractor shall obtain a permit from MMSD for re-connection to MMSD facilities. Contractor is responsible for the associated permit fees.

SECTION 109.2 PROSECUTION OF WORK

The Contractor shall begin work on **JULY 29, 2019**. All work shall be completed on or prior to **APRIL 30, 2020**.

Work shall begin only after the start work letter is received. If it is desirable to begin work before or after the above-mentioned date, the Contractor shall establish a mutually acceptable date with the City Engineer, and the agreed upon date must be determined prior to the preconstruction meeting.

The Contractor shall limit workdays to 7:00 a.m. to 7:00 p.m. within the roadway or greenway unless approved by the Engineer in writing. The Contractor shall limit workdays to 7:00 a.m. to 5:00 p.m. Monday through Friday and no weekend work within Elver Park unless approved by the Engineer in writing.

City expects that all permits applied for by the City listed in Section 108.2 will be obtained prior to the named start date. If elements of work critical to the schedule are delayed beyond the agreed start date due solely to the City's failure to obtain the permits listed in Section 108.2, the Completion Date will be adjusted accordingly. However, such delays shall not be grounds for any compensation from the City or adjustment in unit prices.

This project includes interim completion dates at one location within the project limits. All work necessary to restore northbound traffic on McKenna Blvd. at Gammon Ln. shall be completed on or prior to **September 3, 2019.**

Several intersections within the project limits has a limited closure timeframe. Refer to the Maintenance of Traffic specifications for additional information on changes to traffic patterns.

All concrete work in the greenway channel and box culvert work in Elver Park must be completed by **December 31, 2019** or a date mutually agreed upon by the City and the Contractor.

Any work that is not completed prior to the end of the year shall be left overwinter in a condition approved by the Engineer. All areas must be stabilized and channel and stormwater flow shall not be impeded.

Any remaining paving or restoration work shall be completed no later than **April 30, 2020.**

Work shall begin only after the start work letter is received.

SECTION 107.13 TREE PROTECTION

The Contractor is advised to review Section 107.13 of the Standard Specifications for tree protection. Note that Sections 107.13(b) Curb Excavation and Installation, 107.13(c) Sidewalk Excavation and Installation, are not applicable to this project. Other sections are applicable except as provided below.

All trees shall be saved except those trees marked for removal on the plans, and with pink paint in the field. Because of the intent to save trees, there are trees to be saved that are inside the construction limits. It is recognized that grading operations and root cutting of these trees may need to occur within 5 feet of these trees in order to complete the work, but care must be taken in these areas. Roots shall be cut cleanly by using a saw, axe, lopping shears, chain saw, stump grinder, or other means which will produce a clean cut. Exposed roots shall be covered as soon as excavation is complete. The Contractor shall not rip or pull roots out towards the trunk of a tree while excavating with a backhoe. The use of a backhoe to cut roots is NOT acceptable. Grading within 5' of the trees within the construction area, if absolutely required, shall be minimized.

With regard to Section 107.13(f), pruning to accommodate construction equipment invading the tree crown may be done by the Contractor, with advance permission from the Construction Engineer. No pruning will be performed by City Forestry. All pruning shall be done according to ANSI A300 tree pruning specifications.

With regard to Section 107.14(g), no equipment or materials will be allowed to be parked on, or piled on areas within 5 feet of a tree. Construction traffic within 5 feet of a tree will be allowed only where necessary to complete grading operations, as described above, at the discretion of the Construction Engineer.

Where noted on the plan set, trees shall be protected. The Contractor shall mark these trees, or place temporary fencing between the work area and tree. Temporary fencing shall be paid separately under Bid Item 90010.

BID ITEM 20101 – EXCAVATION CUT

DESCRIPTION

The item of Excavation Cut shall apply to all excavation for channel within the project limits except for removal of concrete items and pipes, which are paid separately. This item also does not include trenching for water main, sanitary sewer or storm sewer pipes nor does it include any excavation for the channel restoration work. Excavation Cut shall be in accordance with Article 201 of the Standard Specifications except as provided below.

The plan quantity of excavation cut includes quantities for all work necessary to install new concrete cunette at plan elevations and for the over-excavated channel section (Sta. 111+25 – 114+40).

The plan quantity of excavation cut includes quantities for all work necessary to grade the streets to the subgrade for placement of new base course and pavement. In locations where only pavement is to be removed, the plan quantity includes the necessary excavation cut to remove the pavement to top of the base course.

In locations where the bike path elevation is changing or where the new path design will involve filling over existing turf areas, the plan quantity also includes excavation necessary to strip topsoil per the Standard Specifications. It is assumed that suitable fill material will be found from excavation areas within the limits of the project, and the Contractor shall use these materials as necessary to establish the grade in fill areas.

Suitable material, as determined by the Construction Engineer, from the cut shall be used on site to construct embankments as indicated on the plans. Placing, grading and compaction of excavated materials will be considered incidental to this bid item.

The Contractor shall be responsible for determining a suitable off-site disposal location for excess or unsuitable material. Contractor shall comply with all laws and permit conditions for off-site disposal and any off-site disposal costs or fees are considered incidental to this bid item.

METHOD OF MEASUREMENT

The quantity of Unclassified Excavation above the subgrade line as shown on the cross sections will not be measured in the field, but will be assumed to be the Plan Quantity as shown on the Plans. Excavation below Subgrade (EBS or undercut, including topsoil stripping), where required by the Construction Engineer, will be measured in the field. The pay quantity for the item of Excavation Cut shall be the sum of the plan quantity for Unclassified Excavation and the measured quantity of EBS.

BASIS OF PAYMENT

Excavation Cut, measured as provided above, will be paid at the contract unit price per Cubic Yard, which shall be full compensation for all excavation of asphalt, granular materials or soil, compaction of the subgrade where required, removal and disposal of all excess materials of all types, and all labor, tools, equipment, and incidentals necessary to complete this item of work.

BID ITEM 20109 – FINISH GRADING

Finish Grading shall include all work within Elver Park to restore the existing turf areas disturbed during construction. Contractor to note – the City of Madison Parks Division Construction Supervisor shall be called to inspect and approve the finish grade prior to seeding and mulching within the Park. Please contact Rich Bergman at 608-266-6289 for inspection.

BID ITEM 20217 – CLEAR STONE

Clear Stone shall meet the requirements for Gradation Number One (No. 1) of the Standard Specifications, commonly known as three-inch clear stone. The clear stone shall be utilized for a construction entrance and/or other purposes as directed by the Engineer.

BID ITEM 20221 – TOPSOIL

DESCRIPTION

Topsoil shall include furnishing, spreading, fine grading and raking the surface in preparation for seeding, in accordance with Section 202 of the Standard Specifications. Contractor may use salvaged topsoil obtained from excavation within the project limits for some or all of the topsoil required. If salvaged topsoil is used, this item includes any additional effort to strip the topsoil, stockpile it on site and prepare it to meet the material specifications. If off-site topsoil is required, no extra compensation will be allowed.

All areas within the limits of disturbance, except areas of hard surface, shall have topsoil placed to a minimum thickness of six (6) inches unless otherwise shown on plans.

METHOD OF MEASUREMENT

Topsoil will be measured by the square yard, in place.

BASIS OF PAYMENT

Topsoil will be paid at the contract price per square yard, which shall be full payment for segregating, stockpiling and preparing salvaged topsoil, furnishing additional topsoil from offsite if needed, placing, grading and raking finished surface, all materials, labor and incidentals necessary to complete the work as provided.

BID ITEM 20401 and 20403 – CLEARING AND GRUBBING

DESCRIPTION

Work under these items consists of the clearing and grubbing of individual trees shown on the plans for removal, and any additional trees removed at the direction of the Construction Engineer or City Forester.

Clearing and Grubbing shall be done in accordance with Article 204 of the Standard Specifications as modified in these Special Provisions.

CONSTRUCTION METHODS

Contractor shall mark the trees to be removed in the field and shall review the individual trees to be removed with the Construction Engineer or a City Forestry representative prior to removing them. The construction Engineer and/or Forester may designate certain trees near or within the intercepts to be saved or protected. Such trees shall be clearly marked in the field. Trees shown on the plans or designated by the Forestry representative to be protected require construction fencing and other measures to ensure that they are not damaged, in accordance with these Special Provisions under the item of Tree Protection.

METHOD OF MEASUREMENT

Clearing and Grubbing will be measured by Inch-Diameter as provided in the Standard Specifications. Only trees with a 3-inch or greater diameter, measured approximately 4.5 feet above ground level will be measured.

BASIS OF PAYMENT

Clearing and Grubbing, measured as provided above, will be paid at the contract price per Inch-Diameter, which shall be full payment for all work to complete this item in accordance with the Standard Specifications.

SECTION 210.1(D) CLEAR STONE BERM (DITCH CHECK)

The Contractor shall install ditch checks as shown on the plan set and in accordance with Section 210.1(d) of the Standard Specifications. The Contractor shall construct the ditch checks as shown on Sheet EC-3 of the plan set. Ditch checks may be relocated as necessary due to construction phasing and field conditions. Installation of ditch checks may be phased in accordance with construction progress. All materials necessary to construct, maintain, and remove the ditch checks shall be considered incidental to Bid Item 21014.

BID ITEM 21064 - EROSION MATTING, CLASS I, TYPE B - ORGANIC

DESCRIPTION

Work under this bid item shall consist of furnishing and installing Class I, Type B - Organic Erosion Control Revegetative Mat (ECRM) on all disturbed areas to be seeded, except those areas specifically shown on the plans or directed by the Construction Engineer to be matted with a different material. The ECRM shall be one of the products listed in the Wisconsin Department of Transportation Erosion Control Product Acceptability List (PAL), under the category "Erosion Mat, Class I, Type B – Organic."

METHOD OF MEASUREMENT

Erosion Matting, Class I, Type B – Organic shall be measured by the square yard in place, not including runoff in anchor trenches or overlap. No adjustment shall be made for slope.

BID ITEM 21073 – EROSION MATTING, CLASS II, TYPE C - ORGANIC

DESCRIPTION

Work under this bid item shall consist of furnishing and installing Class II, Type C - Organic Erosion Control Revegetative Mat (ECRM) on all disturbed areas to be seeded, except those areas specifically shown on the plans or directed by the Construction Engineer to be matted with a different material. The ECRM shall be one of the products listed in the Wisconsin Department of Transportation Erosion Control Product Acceptability List (PAL), under the category "Erosion Mat, Class II, Type C – Organic." On channel side slopes and banks, a double layer of Class II, Type C – Organic matting shall be installed, as shown in the plans.

METHOD OF MEASUREMENT

Erosion Matting, Class II, Type C - Organic shall be measured by the square yard in place, not including runoff in anchor trenches or overlap. No adjustment shall be made for slope.

BID ITEM 40311 – PULVERIZE AND SHAPE

This item is intended for use for the Greentree Landfill bike path and Elver Park access drive where pavement has been damaged by construction equipment. Quantities identified on the plan sheets will be

paid for under this bid item. Any additional damage outside the limits identified shall be restored at the Contractor's expense and shall be considered incidental to the project.

ARTICLE 501 SEWER AND SEWER STRUCTURES GENERAL

STORM SEWER GENERAL

The Storm Sewer Designer for this project is Matt Allie. He may be contacted at (608) 266-4058 or mallie@cityofmadison.com. Questions related to the box culvert and concrete channel may be directed to Matt Allie.

Reconnection of existing pipes at new or existing structures, or new pipes at new or existing structures, shall be considered to be part of the work required to construct the new structure or to construct the new sewer pipe and shall not be rewarded with additional compensation. However, if the structure being removed is larger than the new structure, thus requiring additional pipe, the new pipe shall be paid under the appropriate bid item and the connection of the old pipe to the new pipe shall be accomplished with a concrete collar.

Where a new structure is to be constructed at an existing pipe, it is expected that the contractor shall saw cut the existing pipe in the required location to accommodate the placement of the new structure. If the contractor for his or her convenience deems it more suitable to remove the existing pipe to a full joint, the additional pipe and concrete collar required to reconnect to the new structure shall be the contractor's responsibility and shall not be compensated.

Connection of new pipes to existing structures shall be accommodated with a Storm Sewer Tap – Bid Item 50792.

Precast structures are only allowed where field poured structures are not specifically called for, and no precast structures are allowed until ULOs are completed and approval of the design engineer has been received. Water ULO (ULO 8) shall be completed prior to construction in case it impacts design; ULOs along retaining wall shall occur at the time of driving sheet piling to avoid conflicts with underground utilities.

SANITARY SEWER GENERAL

The Sanitary Sewer Designer for this project is Matt Allie. He may be contacted at (608) 266-4058 or mallie@cityofmadison.com.

This project consists of the installation of 179' of 8" sewer main and 47' of 8" lateral. Sanitary sewer pipe shall be PVC Pressure Sanitary Sewer Pipe (AWWA C900) at the lengths and locations specified on the plan set and in accordance with the Standard Specifications.

All new sanitary sewer access structures shall include the Neenah R-1550-0054 with the new City of Madison casting detail (see S.D.D. 5.7.16 of the City of Madison Standard Specifications for Public Works Construction 2019 edition). All new sewer main connections may be factory cored and shall be included in the structure. All existing lateral and main connections shall be field cored to accommodate existing conditions and shall be compensated under BID ITEM 50791 SANITARY SEWER TAP. All sewer main and/or laterals not slated for replacement that are damaged during the installation of a structure shall be replaced by the Contractor and shall be considered incidental to the project. All benches and flowlines shall have a smooth trowel finish.

It is advised that the Contractor visit the site prior to bidding to determine the type of trench protection that will be necessary for the sanitary sewer main installation.

SECTION 701 PROVISIONS FOR WATER INSTALLATION AND ABANDONMENT

The water designer for this project is Kelly Miess. She may be contacted at (608) 261-9640 or

kmiess@madisonwater.org.

The project consists of furnishing and installing ductile iron water main and fittings at the intersection of McKenna Boulevard and Gammon Lane near Elver Park. The proposed water main is being relocated to accommodate proposed storm sewer improvements. The water main underneath the stormwater conveyance is to be installed in casing and reconnected to existing main on either side of the crossing.

The project also includes abandoning, and removing as required, existing water main. **Any required removal and disposal of existing main shall be incidental to the installation of new main.** Once the new systems have passed the pressure and water quality tests, cut off, extend as necessary, and reconnect the existing water service laterals to the new water mains unless the service is to be abandoned. All services that may require relocation due to conflicts with trees or any other issue must be authorized and the new location approved in advance by the Water Utility inspector. Any broken curb stops, buried curb boxes or otherwise dysfunctional service components must be approved for adjustment, removal and/or replacement by the Water Utility inspector in advance of any work being performed.

Water Services Outage to Elver Park – Restrictions and Notification

The McKenna Boulevard portion of the work will require one service outage to Elver Park (WN20). Meet the following requirements:

- Allow no more than one planned service outage to the Park.
- Perform the associated cut-in connection (WN20) prior to all other cut-ins
- **Provide a minimum of one calendar week notice** to City of Madison Parks
- Notify Jon Landsverk, Parks Facility Maintenance Supervisor, at (608) 617-9611 or jlandsverk@cityofmadison.com
- **Restrict the cut-in operation to Monday through Wednesday beginning at 7am.**
- The valve installed during the operation is intended to remain closed until the new main is in service.
- Maintain contact with the MWU Construction Inspector so the valve configuration can be altered to maintain service to the Park immediately after the cut-in operation is completed.
- The new cut-in valve is to remain temporarily closed to isolate the Gammon Lane main while the proposed water main is installed.

Take all necessary precautions to protect newly installed main as well as the existing Madison Water Utility system and ensure its proper functioning during construction.

View the sites prior to bidding and become familiar with existing conditions and utilities.

SECTION 702 MATERIALS

Furnish all materials, labor and equipment necessary to complete this project except the tapping sleeves, tapping valves and tapping valve boxes. Water Utility will furnish the tapping sleeves, tapping valves, tapping valve boxes, and the crew to perform the taps.

All proposed water main, not just the carrier pipe, shall be US Pipe TR-Flex or equivalent.

SECTION 703 CONSTRUCTION METHODS

Perform all work in accordance with these provisions and the City of Madison Standard Specifications, current edition. Keep all valves accessible and functioning throughout the duration of the work or as directed otherwise by the Water Utility representative.

Gammon Lane Main Isolation

The lateral to 1233 McKenna Boulevard is the only service off the Gammon Lane water main between McKenna Boulevard and Park Edge Drive. Provide temporary water service to this property per Bid Item 70110. After the temporary service is in place, install the cut-in valve (WN20) in Elver Park. Once both of

these items are completed, the main on Gammon Lane between Park Edge Drive and the new cut-in valve in Elver Park can be taken out of service during the remaining work in this area.

Bid Item 70110 Temporary Water Supply System

Provide temporary water service to 1233 McKenna Boulevard before causing any service disruptions to the property. The closest supply point is Hydrant H-2 at the intersection of Park Edge Drive and Gammon Lane. Schedule the setting of the RP Valve with the Madison Water Utility at (608) 266-4646.

Phasing Requirements for McKenna Boulevard/Elver Park Work

Sequence the water main work at McKenna Boulevard and in Elver Park as follows:

- Install the temporary water service system to 1233 McKenna Boulevard.
- Install the 16-in valve designated as cut-in connection WN20 in Elver Park. The valve is intended to remain closed during installation of the proposed water main. Elver Park will be served from an alternate direction by temporarily opening the adjacent boundary valve.
- Coordinate with the MWU Construction Inspector so valve reconfiguration takes place immediately after the valve installation is complete to minimize the service outage to Elver Park.
- When the main is tested and ready to be put in service: 1) coordinate with the MWU Construction Inspector to return the Elver Park valve configuration to normal operation and re-close the boundary valve and 2) Restore 1233 McKenna Boulevard to standard service and remove the temporary water supply system.

Be aware of traffic control requirements while performing any work that closes or partially closes any intersection. Refer to traffic control specifications and these special provisions for details.

WATER UTILITY GENERAL NOTES FOR SPECIFIC WORK:

WN1	Replace the existing lead service with a new copper service.
WN2	Extend and reconnect the existing copper service to the new water main.
WN3	Existing service to be abandoned when water main is cut-off.
WN4	Disconnect service from the old water main and reconnect the existing copper water service lateral to the new water main.
WN5	Relocate the existing fire hydrant.
WN6	Abandon water valve access structure.
WN7	Furnish and install the new top section for the water access structure.
WN8	Abandon the valve box.
WN9	Furnish the ditch, compaction and all materials and labor for the installation of new service lateral.
WN10	Remove and salvage existing hydrant.
WN11	Replace the existing copper service with a new copper service.
WN20+	See Water Impact Plan for connection point isolation and water shut-off notification information.

BID ITEM 90001 – TOPSOIL, 12”

DESCRIPTION

12” of topsoil shall be installed at the locations indicated on the plans and details per Section 202.2 of the Standard Specifications, except as described in this special provision.

In terrace and median locations where topsoil is to be placed, the Contractor shall install a minimum of 12” of topsoil. Any additional excavation necessary to place topsoil to the required depth shall be considered incidental to the bid item. In areas where topsoil is to be placed adjacent to curb, sidewalk, or bike paths, the topsoil shall be placed to a depth of 6” within 1 ft. of these items. All base and backfill materials within 1 ft. of these items shall be placed and compacted per the standard specifications.

METHOD OF MEASUREMENT

Topsoil, 12” shall be measured by the Square Yard at the top surface.

BASIS OF PAYMENT

Topsoil, 12” shall be measured as provided above, and payment shall be full compensation at the contract unit price for all materials, equipment, work, excavation, hauling, finish grading, and incidentals necessary to complete the work as described.

BID ITEM 90002 – 7” STAMPED & COLORED CONCRETE

DESCRIPTION

This work shall be in accordance with the requirements of Part 3 of the Standard Specifications, except as herein after amended.

A separate design mix shall be provided for all areas to receive integrally colored concrete. Integrally colored concrete mix(es) shall not contain fly ash. Consider admixture recommendations for concrete mix design, however, mix design must also conform to the standard specifications. Submit the concrete mix design to the City of Madison for review.

Contractor shall provide a 12”x12” sample of the colored concrete, which will be reviewed and approved by the City prior to final installation. Provide a minimum of 3 days notice to the Engineer in order to schedule review of the sample.

Excess concrete material from mockups can be used elsewhere per the Engineers approval if the mix design meets the standard requirements of the secondary use.

MATERIALS

Integral-mix colored admixture shall conform to the requirements of ACI 303.1, ASTM C979, ASTM C494 and ASSHTO M194. Admixture shall be a single-component, colored, water-reducing, set-controlling admixture containing no calcium chloride with coloring agents that are lime-proof and ultra-violet resistant. The admixture shall be factory formulated and packaged in cubic yard dosage increments, not multiple additives and pigments added separately into the mix.

The Color shall either be BASF Natural Bark (MC5002) or an approved equal.

All surfaces shall be cured uniformly. The concrete shall never be covered with plastic sheeting.

Curing compound shall comply with ASTM C309 and be of same manufacturer as colored admixture, for use with integrally colored concrete. All placing, finishing, curing, joint sealing, and patching shall be in accordance with the admixture manufacturer’s recommendations.

Imprinting Pattern: Use a 6" x 6" cobblestone pattern.

CONSTRUCTION

Add color pigment to concrete mixture according to manufacturer's written instructions and to result in hardened concrete color consistent with approved samples.

Protect all adjoining areas of concrete prior to pouring colored concrete. Perform any finishing work as necessary to prepare the colored concrete for stamping as recommended by the pattern manufacturer.

Set stamp pattern in accordance to the manufacturer's specified methods. Check all depths of imprints by tool-to-tool surface leveling. Perform tooling and finishing as stamping tools are removed after imprinting. Eliminate all squeeze joints between stamping tools, if any, with hand tools prior to concrete setting.

Joint the concrete in accordance with the standard specifications amended as follows: Saw joints such that the saw joint follows the concrete recess.

Apply curing compound per manufacturer's recommended coverage rate and to meet curing requirements of the City of Madison Standard Specifications.

7" Stamped & Colored Concrete shall match the visual appearance of the approved reference samples. Replace any not conforming to the reference samples at the Contractor expense.

METHOD OF MEASUREMENT

7" Stamped & Colored Concrete shall be measured by the square foot installed and accepted.

BASIS OF PAYMENT

7" Stamped & Colored Concrete, measured as stated above, is full compensation for providing all materials, including concrete, joint fillers, joint sealers, and expansion joints; for excavating and preparing the foundation; backfilling and disposing of surplus material; for placing, finishing, protecting, and curing; and restoring the work site.

BID ITEM 90003 – REINFORCED CONCRETE GUTTER

DESCRIPTION

Reinforced Concrete Gutter shall be constructed in accordance Part III of the standard specifications and shall be installed per the plan and detail drawings. This item includes the steel reinforcement as indicated on the detail drawings. The Reinforced Concrete Gutter shall be tied to the adjacent concrete pavement, and the tie bars are included with the concrete pavement item of work. All rebar shall be epoxy coated.

METHOD OF MEASUREMENT

Reinforced Concrete Gutter shall be measured by the linear foot acceptably completed, along the flow line.

BASIS OF PAYMENT

Reinforced Concrete Gutter, measured as provided and paid at the contract unit price, shall be full compensation for all material, formwork, finishing, equipment, labor and incidentals necessary to complete the work as set forth in the description.

BID ITEM 90004 – REMOVE BIKE PATH RAILING

DESCRIPTION

This item includes all work, equipment, hauling and incidentals necessary to remove the railings at the locations indicated on plan sheets P-2 and ST-1. All work shall be completed per Part II of the standard specifications and per the plans and details. The railings to be removed may be constructed with different materials and by different methods. All railings to be removed will be paid under this item regardless of size, detail or material. The Contractor shall remove all elements of the railings.

METHOD OF MEASUREMENT

Remove Bike Path Railing shall be measured by the Linear Foot acceptably removed.

BASIS OF PAYMENT

Remove Bike Path Railing, measured as stated above, shall be paid at the contract unit price which includes all equipment, work, hauling and incidentals necessary to complete the work as set forth in the description and as shown on the plans and details.

BID ITEM 90005 – BIKE PATH RAILING

DESCRIPTION

This Bid Item consists of providing and installing a steel railing at the locations indicated on plan sheets P-2 and ST-1 and as shown in detail "Railing Details" on sheet P-2. The Contractor shall provide shop drawings of the railing to the Engineer for approval prior to installation. Note that the details provided contain some flexibility in the dimensions such that the layout can be modified to meet the actual field conditions.

The railing posts shall be embedded to a minimum depth of 18", or to the top of the concrete pipe. Surround the embedded concrete posts with a minimum of 18" diameter of concrete. Leave a minimum of 4" above the concrete for placement of topsoil & seed (paid separately).

MATERIALS

Railing: All steel pipe railing material, shall be painted with a three-coat, zinc rich epoxy system consisting of an inorganic, zinc rich primer, intermediate high build epoxy paint coat, and protective shop coat of urethane paint. Prior to painting, all steel posts and rails shall be given a near-white blast cleaning. Painting and cleaning shall conform to Section 517 of the State Standard Specifications.

METHOD OF MEASUREMENT

Railing will be measured by linear foot, acceptably installed.

BASIS OF PAYMENT

Railing shall be paid per the above and shall include all materials, labor and equipment necessary to install the railing as set forth in the description.

BID ITEM 90006 – TEMPORARY PAVEMENT

DESCRIPTION

This work shall include all work, materials, labor and incidentals necessary to construct a temporary pavement which shall consist of either 3" minimum thick HMA pavement on 8" gradation no. 2 crushed aggregate base course or of 6" concrete pavement on 6" crushed aggregate base course.

Temporary pavement shall be placed at the locations indicated on the plans or as directed by the engineer to meet the requirements of the Maintenance of Traffic Specifications. This item is intended to be used in locations where a traffic crossover of a median is required. The Contractor shall remove miscellaneous structures as necessary, which may include curb and gutter, portions of driveways, etc. Removal of items shall be paid under the appropriate bid items.

The area to be placed with temporary pavement shall be excavated to the appropriate depth, which is included with this item of work. The Contractor shall then place the appropriate thickness of base course material per the standard specifications, and then place the pavement material to the required thickness as noted previously.

All materials, preparation and placement shall be in accordance with Part IV of the Standard Specifications. The Contractor shall place the temporary pavement such that it is even with the adjacent paved surfaces and will be suitable for use for a driving surface or for pedestrian use.

The outside edge of the pavement material shall be finished such that it conveys stormwater in manner similar to the existing curb and gutter. The edge of the temporary pavement shall provide a flowline that matches into the flowline of the existing curb and gutter that is being matched into, and the temporary pavement shall drain appropriate to existing inlets or drain and match into the downstream curb and gutter. The edge of the pavement shall be a minimum of 3" above the temporary flowline except where openings are required for driveways.

Removal of the temporary pavement is included with this bid item.

METHOD OF MEASUREMENT

Temporary Pavement shall be measured by the square yard acceptably installed.

BASIS OF PAYMENT

Temporary Pavement shall be measured as described above shall be full payment for all work, materials and incidentals required to complete the work in accordance with the description

BID ITEM 90007 – TEMPORARY CROSSWALK ACCESS

DESCRIPTION

This special provision describes maintaining accessible crosswalks crossing the construction zone. Maintaining accessible crosswalks consists of maintaining a crosswalk on existing pavement, new pavement, or temporary surface material. Depending on the contractor selected location of the temporary crosswalk, installation of a temporary ramp may be required to meet ADA guidelines, and shall be considered incidental to this bid item. If the temporary ramp crosses over existing curb and gutter, drainage through the gutter shall be maintained. Temporary Crosswalk Access shall be used to maintain pedestrian access as required under Maintenance of Traffic.

MATERIALS

Furnish a hard temporary surface material consisting of asphaltic surface, any grade of concrete, skid resistant steel plating, or alternative material as approved by the Engineer. Gravel or base course material is not acceptable.

CONSTRUCTION

Install, maintain, and remove temporary surface material at Temporary Crosswalk Access locations as shown on the plans or as directed by the Engineer. Level and compact the surface prior to placing temporary surface material. The temporary crosswalk shall have a minimum clear width of 5 feet, be located outside the immediate work area, as approved by the Engineer, and meet the requirements of the

current Americans with Disabilities Act Accessibility Guidelines (ADAAG). The Contractor shall maintain the Temporary Crosswalk Access when disturbed by construction operations or utility trenches or as necessary to keep the access in compliance with ADAAG. Depending on the amount of disturbance to the Temporary Crosswalk, maintaining that temporary access may require removing and relaying the material in the same location.

Depending on the selected location for the temporary cross walk, the Contractor may also be required to provide a temporary ramp, which shall be included with this item.

METHOD OF MEASUREMENT

Temporary Crosswalk Access will be measured as Each Temporary Crosswalk Access acceptably installed, maintained and removed in a single location.

BASIS OF PAYMENT

This item, measured as provided above, will be paid for at the contract unit price which is full compensation for furnishing, loading, hauling material; for preparing the foundation; for furnishing, placing, maintaining, and removing temporary surface material; for reconstructing or relaying the temporary surface material; and for furnishing all labor, tools, equipment, and incidentals necessary to complete the work.

BID ITEM 90008 – TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS

DESCRIPTION

This bid item includes all work, materials, equipment and labor necessary to install Traffic Control Flexible Tubular Marker Posts. All work under this bid item shall be in accordance with Section 633 of the current edition of the WISDOT standard specs.

METHOD OF MEASUREMENT

Traffic Control Flexible Tubular Marker Posts shall be measured as set forth in Section 633.4 of the Wisconsin DOT Standard Specifications, which shall be measured on a per unit basis acceptably installed.

BASIS OF PAYMENT

Traffic Control Flexible Tubular Marker posts will be paid at the contract unit price, which shall be full compensation for all work as provided in the description.

BID ITEM 90009 – TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER BASES

DESCRIPTION

This bid item includes all work, materials, equipment and labor necessary to install Traffic Control Flexible Tubular Marker Bases. All work under this bid item shall be in accordance with Section 633 of the current edition of the WISDOT standard specs.

METHOD OF MEASUREMENT

Traffic Control Flexible Tubular Marker Bases shall be measured as set forth in Section 633.4 of the Wisconsin DOT Standard Specifications, which shall be measured on a per unit basis acceptably installed.

BASIS OF PAYMENT

Traffic Control Flexible Tubular Marker posts will be paid at the contract unit price, which shall be full compensation for all work as provided in the description.

BID ITEM 90010 - CONSTRUCTION FENCE (PLASTIC)

DESCRIPTION

Work under this item shall include all work, materials, labor and incidentals necessary for the Contractor to provide, install, maintain and remove construction fence from the project site as shown on the plans. Fencing may be used to delineate areas for tree protection, as shown in the plans or as directed in the field.

Construction fencing shall be installed to discourage access to the construction area by the general public during the course of the project. Fencing shall be maintained throughout construction and adjusted or removed at the request of the Engineer.

This fence shall be highly visible (orange), constructed of a plastic web, and able to withstand the expected amount of use it shall receive on a construction site. Relocation of fencing may be required as the work progresses. No extra payment shall be made for temporarily opening and re-closing the fence, or relocation of the fencing as needed to perform the work. Fencing shall be left in place until construction operations are complete.

Construction fencing shall be International Orange color, high-density polyethylene mesh conforming to the following:

- Mesh opening: 1 inch minimum to 3 inch maximum
- Height: 4 feet
- Ultimate tensile strength: Avg 3000 lb per 4' width (ASTM D638)

METHOD OF MEASUREMENT

Construction Fence (Plastic) shall be measured by the linear foot quantity.

BASIS OF PAYMENT

Construction Fence (Plastic) shall be measured as described above and shall be paid for at the contract unit price which shall be full compensation for all work, materials, labor, tools, equipment, disposal, and incidentals required to complete the work as set forth in the description.

BID ITEM 90030 – STORM CONTROL PLAN AND IMPLEMENTATION

DESCRIPTION

Work under this item shall include all labor, materials, and incidentals required to prepare a storm control plan and to implement the approved plan. The storm control plan shall include dry weather, wet weather and backwater flow control contingencies. The Contractor shall submit to the project engineer a plan that details how storm flows will be managed and/or diverted during placement of the new four-cell (2-5'x10', 2-5'x12') box culvert, new concrete channel lining and retaining wall, and associated grading and restoration. At a minimum, the pre-construction cross-sectional area and conveyance capacity of both the open channel upstream of McKenna Blvd and the culvert channel under McKenna Blvd must be maintained throughout construction. The approved methodology shall be installed prior to any storm sewer work. Any work, materials, and incidentals necessary to repair and restore the site due to the Storm Control Plan and Implementation shall be considered incidental to this bid item.

If phasing will be required to properly control the storm flows on site during project construction, this shall be defined and detailed in the Storm Control Plan. The Contractor shall provide appropriate storm control measures during the entire duration of the project. Removal of all equipment and materials used for storm control shall be considered incidental to this bid item.

METHOD OF MEASUREMENT

Storm Control Plan and Implementation shall be measured as a lump sum bid item.

BASIS OF PAYMENT

Storm Control Plan and Implementation, as measured above, shall be paid at the contract price and be considered full compensation for all work, materials, and incidentals required to complete the work as described above.

BID ITEM 90031 - CRACK AND DAMAGE SURVEY

DESCRIPTION

This special provision describes conducting a crack and damage survey at 9/11 Falmouth Ct, 10/12 Falmouth Ct, 9/11 Edgartown Ct, 10/12 Edgartown Ct, 9/11 Connecticut Ct, 10/12 Connecticut Ct, 9/11 Georgetown Ct and 14/16 Georgetown Ct.

The survey shall consist of two parts. The first part, performed prior to construction activities, shall include a visual inspection, photographs, and a written report describing the existing defects in the building(s) being inspected. The second part, performed after the construction activities, shall also include a visual inspection, photographs, and written report describing any change in the building's condition.

CONSTRUCTION METHODS

Prior to any construction activities, the Contractor shall provide notice to residents of work to be completed and thoroughly inspect the building structures for existing defects, including interior and exterior walls. Submit a written report of the inspector's name, date of inspection, descriptions and locations of defects, and photographs. The intent of the written report and photographs is to procure a record of the general physical condition of the building's interior and exterior walls and foundation. The report shall be submitted as a pdf document on USB flash drive.

The photographs shall be taken producing sharp, grain free, high-contrast colored pictures with good shadow details. The photographs shall be digital photographs with photograph time and date stamp details on each picture. Photographs shall be submitted with reports.

Prior to the start of any construction activities pertinent to this survey, submit a copy of the written report and photographs to the engineer.

After the construction activities are complete, conduct another survey in the same manner, take photographs, and submit another written report to the engineer.

In lieu of photographs, a video may be used provided it produces the clarity required to perform this work. Videos shall be provided on the USB flash drive with the reports.

MEASUREMENT

Crack and Damage Survey will be measured by the unit, each, for accepted reports.

BASIS OF PAYMENT

Payment is full compensation for providing the before and after written reports, photographs or videotapes; and for furnishing all labor, tools, equipment, and incidentals necessary to complete the contract work.

BID ITEM 90032 – REMOVE EXISTING CUNETTE

DESCRIPTION

Work under this item shall include all work, material and incidentals necessary to remove the existing reinforced concrete cunette between Greentree Pond and McKenna Blvd, within the limits shown on the plans. The existing concrete cunette has an estimated thickness of 12". This item includes but is not limited to all required sawcutting of the existing cunette, removal of the cunette, stockpiling as needed, hauling away of reinforced concrete and disposal of the reinforced concrete. Contractor shall be responsible for determining a suitable off-site disposal location and paying all fees associated with disposal.

Removal of the concrete embankment northeast of 11 Falmouth Ct shall be considered incidental to this bid item.

METHOD OF MEASUREMENT

Remove Existing Cunette shall be paid by the square yard of reinforced concrete removed.

BASIS OF PAYMENT

Remove Existing Cunette, measured as described above, will be paid at the contract price and shall be considered full compensation for all work, materials and incidentals to complete the work as explained in the description above.

BID ITEM 90033 – REMOVE EXISTING 43"X68" HERCP HEADWALL

DESCRIPTION

Work under this item shall include all work, material and incidentals necessary to remove the headwall structures at the inlet and outfall of the three existing 43"x68" HERCP under McKenna Blvd to the Upper Elver Park Pond, within the limits shown on the plans. This item includes but is not limited to all required sawcutting of the existing headwall structures, removal of the structures, stockpiling as needed, hauling away of reinforced concrete and disposal of the reinforced concrete. Contractor shall be responsible for determining a suitable off-site disposal location and paying all fees associated with disposal.

METHOD OF MEASUREMENT

Remove Existing 43"x68" HERCP Headwall shall be paid by the headwall structure removed.

BASIS OF PAYMENT

Remove Existing 43"x68" HERCP Headwall, measured as described above, will be paid at the contract price and shall be considered full compensation for all work, materials and incidentals to complete the work as explained in the description above.

BID ITEM 90034 – REMOVE EXISTING 43”X68” HERCP CONCRETE SLAB

DESCRIPTION

Work under this item shall include all work, material and incidentals necessary to remove the reinforced concrete slab at the outfall of the three existing 43”x68” HERCP under McKenna Blvd to the Upper Elver Park Pond, within the limits shown on the plans. This item includes but is not limited to all required sawcutting of the existing structure, removal of the apron material, stockpiling as needed, hauling away of reinforced concrete and disposal of the reinforced concrete. Contractor shall be responsible for determining a suitable off-site disposal location and paying all fees associated with disposal.

METHOD OF MEASUREMENT

Remove Existing 43”x68” HERCP Wingwall Slab shall be paid by the square yard of reinforced concrete removed.

BASIS OF PAYMENT

Remove Existing 43”x68” HERCP Wingwall Slab, measured as described above, will be paid at the contract price and shall be considered full compensation for all work, materials and incidentals to complete the work as explained in the description above.

BID ITEM 90035 – REMOVE AND REPLACE PRIVATE BLOCK WALL AND DRAINAGE SYSTEM

DESCRIPTION

Work under this item shall include all work, material, equipment and incidentals necessary to remove a portion of a modular block retaining wall (located at 10/12 Edgartown Ct) where it conflicts with the proposed sheet pile retaining wall, and reconstruct the modular block wall closer to the structure at 10/12 Edgartown Ct, as shown on plan sheets ST-1 and SD-1. This item includes but is not limited to removal and salvage of one course of modular blocks from the existing top of the wall, removal of the tree shown in plan sheets ST-1 and SD-1, and removal, salvage and replacement of modular retaining wall blocks as necessary to relocate the wall as shown on the plans. A minimum of 12” of bedding materials and clear stone shall be placed under the new alignment to create a stable base for the blocks. The Contractor shall salvage and replace the catchbasin and hand hole near the existing wall corner, cut and re-route the underground drainage pipes to drain through the relocated catchbasin and hand hole, install drainage pipe from the relocated catchbasin and hand hole under the new modular wall alignment and through the sheet pile retaining wall, remove, salvage and replace backflow preventors on the new drainage lines, and grade between the new modular wall alignment and the sheet pile retaining wall. All material necessary to reconstruct the modular wall in the location shown in sheet SD-1 in excess of salvaged material shall be paid for under this bid item. If salvaged material exceeds quantities needed for replacement of the wall, Contractor shall be responsible for determining a suitable off-site disposal location and paying all fees associated with disposal. Contractor shall verify with Engineer whether the City would like to claim any excess modular retaining wall blocks prior to disposal of those blocks.

The private drainage pipes draining the catchbasin and hand hole shall be punched through the sheet pile retaining wall as shown and noted on sheet R-1. This work shall be incidental to this bid item.

Work included under Remove and Replace Private Block Wall and Drainage System shall take place on private (non-City owned) property and shall require a Right of Entry signed by the homeowner. The City shall be responsible for obtaining the signed Right of Entry from the homeowner prior to the Contractor beginning work included with this bid item.

METHOD OF MEASUREMENT

Remove and Replace Private Block Wall and Drainage System shall be paid by the linear foot of modular block wall satisfactorily removed and satisfactorily constructed.

BASIS OF PAYMENT

Remove and Replace Private Block Wall and Drainage System, measured as described above, will be paid at the contract price and shall be considered full compensation for all work, materials and incidentals to complete the work as explained in the description above.

BID ITEM 90036 – ADJUST MMSD SANITARY ACCESS STRUCTURE AND CASTING

DESCRIPTION

Work under this item shall include all work, materials, and incidentals necessary to adjust the castings on MMSD sanitary access structures from their existing elevations to the proposed finished grade elevations. This applies to the six (6) structures called out for adjustment on the plan sheets and in the sanitary sewer schedule.

The Contractor shall notify Ray Schneider of MMSD at (608) 347-3628 or RayS@madsewer.org five (5) days prior to adjusting sanitary access structures and casting elevations.

CONSTRUCTION METHODS

The required casting elevations shall not be achieved by saw cutting the concrete chimney of the structure. Rather, whole barrel sections (6' diameter) shall be removed and replaced with shorter barrel sections. The nine inch casting will then be installed with new adjusting rings to reach the proposed casting elevation. Care shall be taken to minimize adjusting ring height and total adjusting ring height must be between 3" and 9". Castings with bolt down covers (R-1550 Bolted Gasket Lid and Frame) shall be installed and cast into the surrounding concrete. Should any of the castings require replacement, the Contractor shall be responsible for the cost of each new casting. During construction, any external joints between existing chimney sections and new chimney sections shall be properly sealed and coated.

METHOD OF MEASUREMENT

Adjust MMSD Sanitary Access Structure and Casting will be measured by the number of MMSD access structures that have casting elevations adjusted, as required for work on this project along the Greentree South Section of greenway.

BASIS OF PAYMENT

Adjust MMSD Sanitary Access Structure and Casting, measured as provided above, will be paid at the contract price per structure that has its casting elevation adjusted, which shall be full payment for all work to complete this item in accordance with the Standard Specifications.

BID ITEM 90037 – 21 INCH PIPE GRATE

DESCRIPTION

Work under this item shall include all necessary work, materials, and incidentals necessary to construct and install a pipe gate at the outfall of P-1A (T-1). The gate shall be constructed as shown in City of Madison Standard Detail Drawing (SDD) 5.6.3, but sized to completely cover the outfall of a 21" reinforced concrete pipe. Bar and hinge spacing shall be as shown in SDD 5.6.3. In addition to hinges along the top of the opening, identical hinges shall be installed at the same interval along the bottom of the gate to prevent opening of the gate.

METHOD OF MEASUREMENT

21 Inch Pipe Gate shall be measured by each unit completed in place and satisfactorily installed.

BASIS OF PAYMENT

21 Inch Pipe Grate shall be measured as described above which shall be full compensation for all work, materials and incidentals to complete the work as explained in the description above.

BID ITEM 90038 – PRECAST REINFORCED CONCRETE BOX CULVERTS - 4' RISE X 8' SPAN

DESCRIPTION

This item shall include all work and coordination necessary to provide and install the 4'x8' box culverts as shown on the plan set, and as detailed here. This includes all joint material, bedding and backfill as described. The box shall meet ASTM C-1433 Table #1 for HS-20 loading. The box shall be manufactured, provided and installed with the appropriate amount of reinforcing steel based on the depth of cover provided along the profile of the box. If the box steel is varied along the length of box installation the Manufacturer and the Contractor shall provide a plan to the Construction Engineer to assure that the appropriate box sections are installed in the appropriate locations along the box run.

This item includes all necessary removal and disposal of, off site at a location to be provided by the Contractor, excess trench excavation. Further, the work under this item includes stockpiling and reuse of trench spoils for backfill of the trench.

The Contractor shall be responsible for coordinating delivery of the box culvert sections, unloading and other incidentals associated with the installation.

Removal of the existing corrugated metal pipes at the outlet of Greentree Pond shall be incidental to this bid item.

The Contractor shall abide by the following guidelines when installing the box culverts:

- 1) The subgrade for the boxes shall have filter fabric (paid under **BID ITEM 20233 - RIPRAP FILTER FABRIC, TYPE HR**) placed on all exposed subgrade areas prior to placement of the bedding stone for the boxes.
- 2) One (1) foot of three (3) inch clear stone shall then be placed on the geotextile as bedding stone. Three (3) inch clear stone for box culvert bedding is included in the price of box culvert installation.
- 3) Those portions of the box culvert under the pavement structure backfill shall be in accordance with SDD 5.2.1 & SDD 5.2.2. Provision and placement of backfill is included in the price of this bid item.
- 4) The joints between box culvert sections shall be sealed with a rubberized waterproof membrane. Materials and construction methods for the membrane shall be in accordance with Sections 516.2 and 516.3 of the State of Wisconsin Standard Specifications for Highway and Structure Construction, Current Edition. Joint sealing with rubberized waterproof membrane shall be included in the price of this bid item.

METHOD OF MEASUREMENT

Precast Reinforced Concrete Box Culverts - 4' rise x 8' span shall be measured by the linear foot for box culvert provided and installed.

BASIS OF PAYMENT

Precast Reinforced Concrete Box Culverts - 4' rise x 8' span, as measured above, shall be paid at the contract price and be considered full compensation for all work, materials, and incidentals required to complete the work as described above.

BID ITEM 90039 – 4' RISE X 8' SPAN BOX CULVERT WINGWALL

DESCRIPTION

Work under this item shall include all work, materials, and incidentals necessary to construct and install a full cast-in-place concrete box culvert wingwall per the City of Madison's Standard Detail Drawing 5.5.1. Excavation and clear stone bedding shall be installed as shown in S.D.D. 5.5.1 and shall be paid for under this bid item.

METHOD OF MEASUREMENT

4' Rise x 8' Span Box Culvert Wingwall shall be measured by each unit completed in place and satisfactorily installed.

BASIS OF PAYMENT

4' Rise x 8' Span Box Culvert Wingwall, as measured above, shall be paid at contract price and be considered full compensation for all work, materials and incidentals to complete the work as explained in the description above.

BID ITEM 90040 – FOUR CELL BOX CULVERT WINGWALL

DESCRIPTION

Work under this item shall include all work, materials, and incidentals necessary to construct and install a full cast-in-place wingwall at the inlet and outlet of the parallel dual cell 5'x10' reinforced concrete box culvert and dual cell 5'x12' reinforced concrete box culverts. This item includes but is not limited to all concrete (materials and construction in accordance with Sections 504.2 and 504.3 of the State of Wisconsin Standard Specifications for Highway and Structure Construction, Current Edition), reinforcement, and joint sealer needed to construct and install the inlet and outlet wingwalls as shown on plan sheets ST-4; and S-4 through S-6. Where called for in the plan set, rubberized waterproofing membrane (materials and construction in accordance with Sections 516.2 and 516.3 of the State of Wisconsin Standard Specifications for Highway and Structure Construction, Current Edition) shall be installed and included in the price of this bid item. Excavation to install the wingwall is considered incidental to this bid item. Clear stone bedding and geotextile fabric shall be installed as shown in plan sheet S-6 and shall be paid for under this bid item.

METHOD OF MEASUREMENT

Four Cell Box Culvert Wingwall shall be measured by each unit completed in place and satisfactorily installed.

BASIS OF PAYMENT

Four Cell Span Box Culvert Wingwall, as measured above, shall be paid at contract price and be considered full compensation for all work, materials and incidentals to complete the work as explained in the description above.

BID ITEM 90041 – FOUR CELL BOX CULVERT WINGWALL SLAB

DESCRIPTION

Work under this item shall include all work, materials, and incidentals necessary to construct and install a full cast-in-place reinforced concrete slab downstream of the outlet of the parallel dual cell 5'x10' reinforced concrete box culvert and dual cell 5'x12' reinforced concrete box culverts. This item includes but is not limited to all concrete (materials and construction in accordance with Sections 504.2 and 504.3 of the State of Wisconsin Standard Specifications for Highway and Structure Construction, Current Edition), reinforcement, and joint sealer needed to construct and install outlet reinforced concrete slab outside of the boundaries of the outlet wingwall, as shown on plan sheets ST-4, S-5 and S-6. Where called for in the plan set, rubberized waterproofing membrane (materials and construction in accordance with Sections 516.2 and 516.3 of the State of Wisconsin Standard Specifications for Highway and Structure Construction, Current Edition) shall be installed and included in the price of this bid item. Excavation to install the wingwall is considered incidental to this bid item. Clear stone bedding and geotextile fabric shall be installed as shown in plan sheet S-6 and shall be paid for under this bid item.

METHOD OF MEASUREMENT

Four Cell Box Culvert Wingwall Slab shall be measured by the cubic yard completed in place and satisfactorily installed.

BASIS OF PAYMENT

Four Cell Span Box Culvert Wingwall Slab, as measured above, shall be paid at contract price and be considered full compensation for all work, materials and incidentals to complete the work as explained in the description above.

BID ITEM 90042 – DUAL CELL 5'X10' REINFORCED CONCRETE BOX CULVERT

DESCRIPTION

Work under this item shall include all work, materials, and incidentals to construct a dual cell reinforced concrete box culvert with 5' rise by 10' span cells, as shown on plan sheets ST-4, ST-5, S-1 and S-2 and specified in the General Notes on plan sheet S-1. Dual Cell 5'x10' Reinforced Concrete Box Culvert shall be tied together with Dual Cell 5'x12' Reinforced Concrete Box Culvert (Bid Item 90043) with Type A Slurry as shown on plan sheet S-2.

This item includes all excavation required for installation of the box culvert, and all necessary removal and disposal of, off site at a location to be provided by the Contractor, excess excavated material. Further, the work under this item includes stockpiling and reuse of excavation spoils for backfill of the dual cell box culvert trench.

The Contractor shall be responsible for coordinating delivery of the box culvert sections, unloading and other incidentals associated with the installation.

The Contractor shall abide by the following guidelines when installing the box culverts:

- 1) The subgrade for the boxes shall have filter fabric (paid under **BID ITEM 20233 - RIPRAP FILTER FABRIC, TYPE HR**) placed on all exposed subgrade areas prior to placement of the bedding stone for the boxes.
- 2) One (1) foot of three (3) inch clear stone shall then be placed on the geotextile as bedding stone. Three (3) inch clear stone for box culvert bedding is included in the price of box culvert installation.
- 3) Provision and placement of backfill is included in the price of this bid item.
- 4) The joints between box culvert sections shall be sealed with a rubberized waterproof membrane. Materials and construction methods for the membrane shall be in accordance

with Sections 516.2 and 516.3 of the State of Wisconsin Standard Specifications for Highway and Structure Construction, Current Edition. Joint sealing with rubberized waterproof membrane shall be included in the price of this bid item.

METHOD OF MEASUREMENT

Dual Cell 5'x10' Reinforced Concrete Box Culvert is measured per linear foot of reinforced concrete box culvert delivered, installed and accepted in the field.

BASIS OF PAYMENT

Dual Cell 5'x10' Reinforced Concrete Box Culvert, measured as described above, will be paid at the contract price per linear foot and shall be considered full compensation for all work, materials and incidentals to complete the work as explained in the description above.

BID ITEM 90043 – DUAL CELL 5'X12' REINFORCED CONCRETE BOX CULVERT

DESCRIPTION

Work under this item shall include all work, materials, and incidentals to construct a dual cell reinforced concrete box culvert with 5' rise by 12' span cells, as shown on plan sheets ST-4, ST-5, S-1 and S-2 and specified in the General Notes on plan sheet S-1. Dual Cell 5'x12' Reinforced Concrete Box Culvert shall be tied together with Dual Cell 5'x10' Reinforced Concrete Box Culvert (Bid Item 90042) with Type A Slurry as shown on plan sheet S-2.

This item includes all excavation required for installation of the box culvert, and all necessary removal and disposal of, off site at a location to be provided by the Contractor, excess excavated material. Further, the work under this item includes stockpiling and reuse of excavation spoils for backfill of the dual cell box culvert trench.

The Contractor shall be responsible for coordinating delivery of the box culvert sections, unloading and other incidentals associated with the installation.

The Contractor shall abide by the following guidelines when installing the box culverts:

- 1) The subgrade for the boxes shall have filter fabric (paid under **BID ITEM 20233 - RIPRAP FILTER FABRIC, TYPE HR**) placed on all exposed subgrade areas prior to placement of the bedding stone for the boxes.
- 2) One (1) foot of three (3) inch clear stone shall then be placed on the geotextile as bedding stone. Three (3) inch clear stone for box culvert bedding is included in the price of box culvert installation.
- 3) Provision and placement of backfill is included in the price of this bid item.
- 4) The joints between box culvert sections shall be sealed with a rubberized waterproof membrane. Materials and construction methods for the membrane shall be in accordance with Sections 516.2 and 516.3 of the State of Wisconsin Standard Specifications for Highway and Structure Construction, Current Edition. Joint sealing with rubberized waterproof membrane shall be included in the price of this bid item.

METHOD OF MEASUREMENT

Dual Cell 5'x12' Reinforced Concrete Box Culvert is measured per linear foot of reinforced concrete box culvert delivered, installed and accepted in the field.

BASIS OF PAYMENT

Dual Cell 5'x12' Reinforced Concrete Box Culvert, measured as described above, will be paid at the contract price per linear foot and shall be considered full compensation for all work, materials and incidentals to complete the work as explained in the description above.

BID ITEM 90044 – RETAINING WALL AND CONCRETE MASONRY CUNETTE

DESCRIPTION

Work under this item shall include all work, materials, and incidentals to construct a sheet pile retaining wall with concrete facing and architectural surface treatment, concrete channel lining, and concrete slab, as shown on plan sheets R-1 through R-6. Work shall be completed in accordance with the City of Madison Standard Specifications for Public Works Construction and the attached Technical Specifications for Retaining Wall.

METHOD OF MEASUREMENT

Retaining Wall and Concrete Masonry Cunette, is measured by the Lump Sum for satisfactory completion of the sheet piling; concrete facing; concrete slab; concrete channel lining; placing, finishing, and curing the concrete; furnishing and installing all tie bars and reinforcement; producing the proposed architectural surface treatment, including preparing the foundation, finishing and protecting the surface treatment, properly disposing of surplus material, for furnishing and applying the two coat system of stain, preparing the concrete surface, and for preparing the sample panels.

BASIS OF PAYMENT

Retaining Wall and Concrete Masonry Cunette, measured as described above, will be paid at the contract price lump sum and shall be considered full compensation for all work, materials and incidentals to complete the work as explained in the description above.

BID ITEM 90045 – RETAINING WALL RAILING TUBULAR SCREENING

DESCRIPTION

Work under this item shall include all work, materials, and incidentals to install galvanized steel railing pipe and tubular screening along the top edge of the sheet pile retaining wall as shown in the plans, sheet R-1 to R-6. Materials and construction shall be in accordance with Section 513.2 and 513.3 of the State of Wisconsin Standard Specifications for Highway and Structure Construction, Current Edition.

METHOD OF MEASUREMENT

Retaining Wall Railing and Tubular Screening is measured per linear foot acceptably completed.

BASIS OF PAYMENT

Retaining Wall Railing and Tubular Screening shall be measured as described above and shall be paid for at the contract unit price which shall be full compensation for all work, materials, labor, painting, tools, equipment, disposal, and incidentals required to complete the work as set forth in the description.

BID ITEM 90046 – SIDEWALK RAILING PIPE

DESCRIPTION

Work under this item shall include all work, materials, and incidentals to install galvanized steel railing pipe and tubular screening along the top edge of the sheet pile retaining wall as shown in the plans, sheets S-1 and S-7. Materials and construction shall be in accordance with Section 513.2 and 513.3 of the State of Wisconsin Standard Specifications for Highway and Structure Construction, Current Edition.

METHOD OF MEASUREMENT

Sidewalk Railing Pipe is measured per linear foot acceptably completed.

BASIS OF PAYMENT

Sidewalk Railing Pipe shall be measured as described above and shall be paid for at the contract unit price which shall be full compensation for all work, materials, labor, painting, tools, equipment, disposal, and incidentals required to complete the work as set forth in the description.

BID ITEM 90047 –TEMPORARY SHORING

DESCRIPTION

Work under this item shall include all work, materials, and incidentals to install temporary shoring as necessary to complete dual-cell reinforced concrete box culvert construction. A suggested staging plan, including temporary shoring locations, is included in sheet S-3. Materials and construction methods shall be in accordance with Sections 511.2 and 511.3 of the State of Wisconsin Standard Specifications for Highway and Structure Construction, Current Edition.

METHOD OF MEASUREMENT

Temporary Shoring is measured by the square yard acceptably completed, at locations the plans show, as the area of exposed face in the plane of the shoring from the ground line in front of the shoring to a maximum of one foot above the retained grade. Shoring used for staged construction in multiple configurations without removal and reinstallation will be measured once based on the configuration with the largest area of exposed face.

BASIS OF PAYMENT

Temporary Shoring will be paid for at the contract unit price. Payment is full compensation for designing and providing shoring; for providing a signed and sealed copy of the design; for removal or additional work required to leave in place; and for backfilling.

BID ITEM 90048 – SLOPE PROTECTION TREATMENT

DESCRIPTION

This work shall consist of furnishing and placing the Flexamat, or similar approved tied concrete block erosion control mat, system in accordance with this specification and conforming with the lines, grades, design, and dimensions shown on the plans.

MATERIALS

Flexamat is manufactured from individual concrete blocks tied together with high strength polypropylene bi-axial geogrid. Each block is tapered, beveled and interlocked and includes connections that prevent lateral displacement of the blocks within the mats when they are lifted for placement.

Tied Concrete Block Mats shall be Flexamat, manufactured by Motz Enterprises, Inc. or approved equal (See Section 3, Alternative Products).

Blocks. Furnish blocks manufactured with concrete conforming to the cement requirements of ASTM C150 and to the aggregate requirements of ASTM C33. Meet a minimum compressive strength of 5,000 psi at 28 days. Furnish blocks that have a minimum weight of 3 lb. per block. Blocks shall be placed no further than 2 in. apart. Exterior of the blocks shall have a coarse, non-slip surface, with no noticeable protrusions or bumps.

Polypropylene Bi-Axial Geogrid. Provide revetment mat that is constructed of a high tenacity, low elongating, and continuous filament polypropylene fibers that is securely cast into and embedded within the base of the concrete blocks and obtains connection strength greater than that of the geogrid. Ensure the geogrid meets the requirements of Table 1:

Table 1
Polypropylene Bi-Axial Geogrid

Description	Requirement
UV Stabilization	2% Carbon Black
Ultimate Tensile Strength	2055 lb./lf

Leno Weave Five-Pick Netting

GSM	g/m ²	
		118 (-3 ~ +3)
Density	Picks/10cm	62 x 24 (+/- 2)
Warp Strength	N/5cm	>350
Warp Elongation	%	20-50
Weft Strength	N/5cm	>280
Weft Elongation	%	20 - 50
Warp Shrinkage	%	≤7
Weft Shrinkage	%	≤9

Underlayment Materials – Three backing options:

- Standard Flexamat – Includes Curlex® II backing
- Flexamat Plus – Includes both Curlex® II and Recyclax TRM-V
- Flexamat with Filter Fabric – Includes non-woven filter fabric backing.

The backing material shall be packaged within roll of Flexamat.

Curlex® II:

Curlex II erosion control blanket (ECB) consists of a specific cut of naturally seed free Great Lakes Aspen curled wood excelsior with 80% six-inch fibers or greater fiber length. It is of consistent thickness with fibers evenly distributed throughout the entire area of the blanket. The top and bottom of each blanket is covered with degradable polypropylene netting.

Index Property	Test Method	Value
Thickness	ASTM D 6525	0.418 in (10.62 mm)
Light Penetration	ASTM D 6567	34.6%
Resiliency	ASTM D 6524	64%
Mass per Unit Area	ASTM D 6475	0.57 lb/yd ² (309 g/m ²)
MD-Tensile Strength Max.	ASTM D 6818	127.0 lb/ft (1.9 kN/m)
TD-Tensile Strength Max.	ASTM D 6818	50.9 lb/ft (0.7 kN/m)
MD-Elongation	ASTM D 6818	28.64%
TD-Elongation	ASTM D 6818	29.84%
Swell	ECTC Procedure	89%
Water Absorption	ASTM D 1117/ECTC	199%
Bench-Scale Rain Splash	ECTC Method 2	SLR = 6.84 @ 2 in/hr ^{2,3}
Bench-Scale Rain Splash	ECTC Method 2	SLR = 7.19 @ 4 in/hr ^{2,3}
Bench-Scale Rain Splash	ECTC Method 2	SLR = 7.56 @ 6 in/hr ^{2,3}
Bench-Scale Shear	ECTC Method 3	2.6 lb/ft ² @ 0.5 in soil loss ³
Germination Improvement	ECTC Method 4	645%

¹ Weight is based on a dry fiber weight basis at time of manufacture. Baseline moisture content of Great Lakes Aspen excelsior is 22%.

² SLR is the Soil Loss Ratio, as reported by NTPEP/AASHTO. ³ Bench-scale index values should not be used for design purposes.

Recyclex® TRM:

Recyclex TRM – V is a permanent non-degradable Turf Reinforcement Mat (TRM), consists of 100% post-consumer recycled polyester (green or brown bottles) with 80% five-inch fibers or greater fiber length. It is of consistent thickness with fibers evenly distributed throughout the entire area of the TRM. The top and bottom of each TRM is covered with heavy duty polypropylene net. Fibers are tightly crimped and curled to allow fiber interlock, and to retain 95% memory of the original shape after loading by hydraulic events. Fibers have a specific gravity greater than 1.0; therefore, the blanket will not float during hydraulic events. Recyclex TRM – V meets Federal Government Executive Order initiatives for use of products made from, or incorporating, recycled materials. Recyclex TRM – V shall be manufactured in the U.S.A. and the fibers shall be made from 100a% recycled post-consumer goods.

Index Property	Test Method	Value
Thickness	ASTM D 6525	0.294 in (7.47 mm)
Light Penetration	ASTM D 6567	57%
Resiliency	ASTM D 6524	86%
Mass per Unit Area	ASTM D 6566	0.50 lb/yd ² (271 g/m ²)
MD-Tensile Strength Max.	ASTM D 6818	295.2 lb/ft (4.32 kN/m)
TD-Tensile Strength Max.	ASTM D 6818	194.4 lb/ft (2.85 kN/m)
MD-Elongation	ASTM D 6818	32.2%
TD-Elongation	ASTM D 6818	40.8%
Swell	ECTC Procedure	8%
Water Absorption	ASTM D 1117/ECTC	33.8%
Specific Gravity	ASTM D 792	1.21
UV Stability	ASTM D 4355 (1,000 hr)	80% minimum
Porosity	Calculated	97.5%
Bench-Scale Rain Splash	ECTC Method 2	SLR = 4.13 @ 2 in/hr ^{1,2}
Bench-Scale Rain Splash	ECTC Method 2	SLR = 4.97 @ 4 in/hr ^{1,2}
Bench-Scale Rain Splash	ECTC Method 2	SLR = 5.99 @ 6 in/hr ^{1,2}
Bench-Scale Shear	ECTC Method 3	2.40 lb/ft ² @ 0.5 in soil loss ²
Germination Improvement	ECTC Method 4	353%

¹ SLR is the Soil Loss Ratio, as reported by NTPEP/AASHTO. ² Bench-scale index values should not be used for design purposes

10oz non-woven filter fabric:

The underlayment material shall be packaged in roll of Flexamat and shall meet the following characteristics:

Property	Test Method	English	Metric
Weight - Typical	ASTM D-5261	10 oz/sy	339 g/sm
Tensile Strength	ASTM D-4632	250 lbs	1,112 N
Elongation @ Break	ASTM D-4632	50%	50%
Mullen Burst*	ASTM D-3786*	500 psi	3,447 kPa
Puncture Strength*	ASTM D-4833*	155 lbs	690 N
CBR Puncture	ASTM D-6241	700 lbs	3,115 N
Trapezoidal Tear	ASTM D-4533	100 lbs	444 N
Apparent Opening Size	ASTM D-4751	100 US Sieve	0.150 mm
Permittivity	ASTM D-4491	1.20 Sec-1	1.20 Sec-1
Water Flow Rate	ASTM D-4491	80 g/min/sf	3,251 l/min/sm
UV Resistance @ 500 Hours	ASTM D-4355	70%	70%

Cover the mat or otherwise protect it during long periods of storage to protect against degradation of the backing material as recommended by the manufacturer.

Mats will be rolled for shipment and are packaged with handling straps. These handling straps shall only be used for lifting below 2 ft. to place heavy duty lifting straps under rolls. Upon delivery, rolls may be left exposed for up to 30 days. If exposure will exceed 30 days, cover or tarp the rolls to minimize UV exposure.

All mats to be inspected upon delivery. Assure that all units are sound and free of defects that would interfere with the proper placing of the unit or impair the strength or permanence of the construction.

Chipping or missing concrete resulting in a weight loss exceeding 15% of the average weight of a concrete unit is grounds for rejection by the engineer. Replace, repair or patch the damaged areas per the manufacturer's recommendations.

Alternative products may be considered if composition matches the materials detailed in Section 2. Such products must be pre-approved in writing by the Engineer prior to bid date. Alternative product packages must be submitted to the Engineer a minimum of fifteen (15) days prior to bid date. Submittal packages for alternate products must include, as a minimum, the following:

- a. Product Properties – Composition of materials, stating product is comprised of the following components:
 - i. Concrete Blocks - minimum compressive strength of 5,000 psi at 28 days. Furnish blocks that have a minimum weight of 3 lb. per block. Blocks shall be placed no further than 2 in. apart.
 - ii. Polypropylene Bi-Axial Geogrid – minimum tensile strength of 2055lbs
 - iii. Leno Weave Five-Pick Netting – packaged within roll, between concrete blocks and the underlayment.
 - iv. Underlayment - Minimum of a double-net excelsior (wood fiber) blanket, plus additional turf reinforcement or filter fabric as specified by design engineer. Underlayment must be packaged within the Tied Concrete Block Mat rolls.
- b. Full-Scale laboratory testing performed by an independent 3rd party testing facility with associated engineered calculations certifying the hydraulic capacity of the proposed Tied-Concrete Block Erosion Control Mat meets the performance requirements listed in Section 3 of this specification.
- c. A list of 15 comparable projects in terms of project size, application and material dimensions in the United States, where the results of the specific alternative material's use can be verified and reviewed for system integrity and sustained after a minimum of 10 years of service life.

The Engineer for this project is Matt Allie, who may be reached at 608-266-4058 or mallie@cityofmadison.com.

CONSTRUCTION

Prior to installing Flexamat, prepare the subgrade as detailed in the plans. All subgrade surfaces to be smooth and free of all rocks, stones, sticks, roots, and other protrusions or debris of any kind that would result in an individual block being raised more than 3/4 in. above the adjoining blocks. When seeding is shown on the plans, provide subgrade material that can sustain growth.

Ensure the prepared subgrade provides a smooth, firm, and unyielding foundation for the mats. The subgrade shall be graded into a parabolic or trapezoidal shape to concentrate flow to middle of mat or mats.

When vegetation is required, distribute seed on the prepared topsoil subgrade before installation of the concrete mats in accordance with the specifications.

Install mats to the line and grade shown on the plans and per the manufacturer's guidelines. The manufacturer or authorized representative will provide technical assistance during the slope preparation and installation of the concrete block mats as needed.

Provide a minimum 18 in. deep concrete mat embedment toe trench at all edges exposed to concentrated flows. Recess exterior edges subject to sheet flow a minimum of 3 in. When needed, provide fastening or anchoring as recommended by the manufacturer or engineer for the site conditions.

For seams parallel to the flow line in ditch or channel applications, center a minimum 3 ft. wide strip of soil retention blanket under the seam. Fasten along the seam at 5 ft. maximum spacing. Parallel seams in the center of the ditch shall be avoided when possible.

Shingle seams perpendicular to the flow line with the downstream mat recessed a minimum of 2 blocks under the upstream mat and fastened together along the seam at 2 ft. maximum spacing if required by manufacturer or engineer.

MEASUREMENT

This Item will be measured by the square yard, as shown on the plans, complete in place.

BASIS OF PAYMENT

The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid for "Flexamat". This price is full compensation for loading and transporting, placing concrete block mats; excavation and disposal; furnishing topsoil and bedding; and equipment, labor, materials, tools, and incidentals.

BID ITEM 90049 – REMOVE AND REPLACE LIGHT POLE

DESCRIPTION

Work under this item shall include all work, materials, and incidentals to remove and salvage an existing light pole in Elver Park, construct a new light pole base, install the salvaged light pole on the new base along the conduit line, and reinstall existing conductors, pole and fixture as shown on plan sheet ST-4.

The light pole to be relocated is on the end of the line (277 V) that feeds to the Athletics parking lot lighting from the Athletics building in Elver Park. All Athletics parking lot lights (including the pole to be relocated) are on one circuit. Lighting is controlled by a Leviton Panel in Athletics garage and power to circuit is not on during the day. There is a hand hole near the parking lot which one of the lot lights taps from. Circuit to light could be interrupted and conductors to pole could be pulled back to hand hole to accommodate the move. The Contractor shall coordinate with Paul Janes (608-267-1196 or pjanes@cityofmadison.com) to disconnect light circuit at hand hole prior to construction.

The Contractor shall contact Jon Landsverk at 608-267-4937 or jlandsverk@cityofmadison.com prior to performing any work under this bid item.

METHOD OF MEASUREMENT

Remove and Replace Light Pole, is measured by the Lump Sum for satisfactory installation of the light pole.

BASIS OF PAYMENT

Remove and Replace Light Pole, measured as described above, will be paid at the contract price lump sum and shall be considered full compensation for all work, materials and incidentals to complete the work as explained in the description above.

BID ITEM 90070 – RESTRAIN EXISTING PUSH-ON WATER MAIN JOINT

DESCRIPTION

Provide all labor, equipment and incidentals required to restrain existing push-on water main joints within specified distances of upper vertical bends on water main offsets. The scope of work shall include exposing and restraining the joint, and backfilling the excavation. Landscape restoration, where required, shall be paid under Bid Item 70102 Landscape Restoration for Water Main.

Materials

EBAA Iron 1100HD Split MEGALUG Restraint Harness or approved equal. Alternatively, friction clamps and threaded rod may be used per Standard Specifications. Polywrap, bedding and backfill materials per Standard Specifications.

Construction

Identify the approximate location of push-on joints and excavate the joint. Undermine the joint the minimum amount required and install the restraint. Repair and/or replace removed or damaged polywrap and tape securely. If there is no existing polywrap, install new polywrap on the length of the exposed pipe. Restore pipe bedding and cover per Standard Specifications. Backfill and compact the excavation per Standard Specifications.

METHOD OF MEASUREMENT

Measured by each acceptably completed unit.

BASIS OF PAYMENT

Paid by each acceptably completed unit at the contract bid price.

TECHNICAL SPECIFICATIONS FOR RETAINING WALL

RETAINING WALL SPECIFICATION 1.0 – WELDED STUD SHEAR CONNECTORS 3/4X3-INCH

- A. **Description.** This special provision describes fabricating, furnishing and placing welded stud shear connectors.
- B. **Materials.** Materials shall be in accordance with Section 506.2.7 of the State of Wisconsin Standard Specifications for Highway and Structure Construction, Current Edition.
- C. **Construction Methods.** Construction methods shall be in accordance with Section 506.3.20 of the State of Wisconsin Standard Specifications for Highway and Structure Construction, Current Edition.

RETAINING WALL SPECIFICATION 2.0 – ARCHITECTURAL SURFACE TREATMENT R-13-337

- A. **Description.** This special provision describes providing a concrete masonry architectural surface treatment on the exposed concrete surfaces of structures as the plan details show.
- B. **Materials.** Use form liners that attach easily to the forming system, and do not compress more than 1/4 inch when poured at a rate of 10 vertical feet/hour.

Use a release agent that is compatible with the form liner and coloring materials.

Wall ties shall have set "break-backs" at a minimum of 3/4 inches from the finished concrete surface.

C. **Construction.**

C.1 Equipment. Equipment and tools necessary for performing all parts of the work shall be satisfactory as to design, capacity, and mechanical condition for the purposes intended. Repair, improve, replace, or supplement all equipment that is not maintained in full working order, or which is proven inadequate to obtain the results prescribed.

C.2 Form Liner Preparation. Clean the form liner before each pour and ensure that it is free of any build-up. Visually inspect each liner for blemishes or tears, and repair if necessary per manufacturer's recommendations.

Apply form release per manufacturer's recommendations.

C.3 Form Liner Attachment. Place adjacent liners less than 1/4 inch from each other, attach liner securely to forms according to the manufacturer's recommendations, and coordinate wall ties with form liner and form manufacturer, e.g., diameter, size, and frequency.

C.4. Surface Finishing. Ensure that the textured surface is free of laitance; sandblasting is not permitted.

Grind or fill pouring blemishes.

RETAINING WALL SPECIFICATION 3.0 – CONCRETE STAINING R-13-337

Apply the concrete stain when the temperature of the concrete surface is 45° F or higher, or as given by the manufacturer.

The color of the stain shall be as given on the plan. Tint the base coat to match the finish coat; the two coats shall be compatible with each other.

Do not begin staining the structure until earthwork operations are completed to a point where this work can begin without receiving damage. Where this work is adjacent to exposed soil or pavement areas, provide temporary covering protection from overspray or splatter.

C.4 Test Areas. Before applying stain to the structure, apply the stain to sample panels measuring a minimum of 48 inches x 48 inches and constructed to demonstrate workmanship in the use of the form liner specified on the structure if applicable. Match or exceed the stain manufacturer's minimum recommended curing time of the concrete or 28 days, whichever is greater, before staining. Prepare the concrete surfaces of the sample panels and apply stain using the same materials and in the same manner as proposed for the structure, including staining of the joints between the stones produced by the form liner if applicable. Do not apply stain to the structure until the department approves the test panels.

C.5 Surfaces to be Coated. Apply concrete stain to the surfaces according to the plan.

RETAINING WALL SPECIFICATION 4.0 – PZ22 SHEET PILE DELIVERED

- A. Description.** This special provision describes providing permanent steel sheet piling.
- B. Materials.** Materials shall be in accordance with standard spec 512.2.1 of the State of Wisconsin Standard Specifications for Highway and Structure Construction, Current Edition.
- C. Construction.** Construction methods for sheet piling shall be in accordance with Section 512.3 of the State of Wisconsin Standard Specifications for Highway and Structure Construction, Current Edition.

RETAINING WALL SPECIFICATION 5.0 – PZ22 SHEET PILE DRIVEN

- A. Description.** This special provision describes providing permanent steel sheet piling.
- B. Materials.** Materials shall be in accordance with standard spec 512.2.1 of the State of Wisconsin Standard Specifications for Highway and Structure Construction, Current Edition.
- C. Construction.** Construction methods for sheet piling shall be in accordance with Section 512.3 of the State of Wisconsin Standard Specifications for Highway and Structure Construction, Current Edition.

RETAINING WALL SPECIFICATION 6.0 – CONCRETE MASONRY CUNETTE

- A. Description.** This special provision describes constructing concrete for the cunette.
- B. Materials.** Concrete and concrete materials shall comply with Articles 415 and 416 of the State of Wisconsin Standard Specifications for Highway and Structure Construction, Current Edition. Concrete shall be DOT Grade A-FA and shall be reinforced in accordance with Section 415.2.2 of

the State of Wisconsin Standard Specifications for Highway and Structure Construction, Current Edition.

- C. **Construction.** Construction methods shall be in accordance with Section 304 of the City of Madison Standard Specifications for Public Works Construction.

APPENDIX B

**SOIL BORING LOCATION PLAN
LOGS OF TEST BORINGS (10)
LOG OF TEST BORING – GENERAL NOTES
UNIFIED SOIL CLASSIFICATION SYSTEM**



Legend

⊕ Denotes Boring Location

Notes

1. Boring locations are approximate
2. Soil borings performed by Soil Essentials in January 2019

Scale: Reduced.

Date:

1/2019

Job No.

C18051-20



Soil Boring Location Plan
Greentree Channel Expansion-Geotech
Madison, WI



LOG OF TEST BORING

Project Greentree Channel Expansion Geotech
 Location Madison, WI

Boring No. 1
 Surface Elevation (ft) 1010±
 Job No. C18051-20
 Sheet 1 of 1

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7897

SAMPLE					VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES				
No.	Rec (in.)	Moist	N	Depth (ft)		c_u (qa) (tsf)	W	LL	PL	LI
					FILL: Dark Brown to Black Silty Topsoil to 1 ft					
1	11	M	18		Medium Dense Dark Gray Silt with Clay to 3 ft					
					Medium Stiff Brown Clay with Sand to 5.5 ft					
2	11	M	5		Stiff to Soft, Brown Lean CLAY (CL)	(0.75)	24.3			
3	13	M	4			(1.25)	28.7			
4	16	M/W	2			(0.5)				
					Medium Dense, Brown Fine to Coarse SAND, Some Gravel, Little to Some Silt (SP-SM/SM)					
5	11	M	27		End Boring at 15 ft Backfilled with Bentonite Chips					

WATER LEVEL OBSERVATIONS	GENERAL NOTES
While Drilling <input checked="" type="checkbox"/> NW Upon Completion of Drilling _____ Time After Drilling _____ Depth to Water _____ Depth to Cave in _____	Start <u>1/15/19</u> End <u>1/15/19</u> Driller <u>SE</u> Chief <u>DSC</u> Rig <u>7822-DT</u> Logger <u>J</u> Editor <u>ESF</u> Drill Method <u>2 1/4" HSA, Autohammer</u>
The stratification lines represent the approximate boundary between soil types and the transition may be gradual.	



LOG OF TEST BORING

Project Greentree Channel Expansion Geotech
 Location Madison, WI

Boring No. 2
 Surface Elevation (ft) 1011±
 Job No. C18051-20
 Sheet 1 of 1

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

SAMPLE					VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES				
No.	Roc (in.)	Moist	N	Depth (ft)		q _u (qa) (tsf)	W	LL	PL	LI
					FILL: Dark Brown Topsoil to 1.3 ft					
1	13	M	12		Medium Dense Light Brown Sand with Gravel to 3 ft					
2	10	M	5	5	Stiff, Brown-Gray (Mottled) Lean CLAY, Trace Sand (CL - Possible Fill)	(1.25)	26.9			
3	14	M/W	3		Very Loose, Stratified Silty Fine SAND and Sandy Silt, Trace to Little Clay (SM/ML - Possible Fill)		21.5			
4	18	M/W	3	10	Very Soft, Brown-Gray (Mottled) Lean CLAY, Trace Sand (CL)	(<0.2)				
5	15	M/W	10	15	Mixed with Sand and Gravel Near 14.5 ft	(<0.2)				
				15	End Boring at 15 ft Backfilled with Bentonite Chips					
				20						

WATER LEVEL OBSERVATIONS

While Drilling NW Upon Completion of Drilling _____
 Time After Drilling _____
 Depth to Water _____
 Depth to Cave in _____

GENERAL NOTES

Start 1/15/19 End 1/15/19
 Driller SE Chief DSC Rig 7822-DT
 Logger J Editor ESF
 Drill Method 2 1/4" HSA, Autohammer

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



LOG OF TEST BORING

Project Greentree Channel Expansion Geotech

Location Madison, WI

Boring No. 3
 Surface Elevation (ft) 1009±
 Job No. C18051-20
 Sheet 1 of 1

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

SAMPLE					VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES				
No.	Rec (in.)	Moist	N	Depth (ft)		qu (qa) (tsf)	W	LL	PL	LI
1	12	M	11	0.7	FILL: Dark Brown Silty Topsoil to 0.7 ft Medium Dense Brown Sand Mixed with Medium Stiff Clay to 3 ft	(0.75)	12.6			
2	17	M	6	6	Medium Stiff to Stiff, Brown-Gray (Mottled) Lean CLAY, Trace Sand (CL)	(1.0)	34.1			
3	17	M/W	2	11	Soft to Very Soft, Brown-Gray Lean CLAY, Trace Sand, Occasional Thin (<1/2 in) Seams of Silty Fine Sand (CL)	(0.25)				
4	12	M	18	18	Medium Dense, Brown Fine to Coarse SAND, Some Silt and Gravel (SM)					
5	10	M	20	20	Medium Dense, Brown Fine to Coarse SAND, Some Gravel, Little to Some Silt (SP-SM/SM)					
					End Boring at 15 ft					
					Backfilled with Bentonite Chips					

WATER LEVEL OBSERVATIONS

While Drilling NW Upon Completion of Drilling _____
 Time After Drilling _____
 Depth to Water _____
 Depth to Cave in _____

GENERAL NOTES

Start 1/15/19 End 1/15/19
 Driller SE Chief DSC Rig 7822-DI
 Logger J Editor ESF
 Drill Method 2 1/4" HSA, Autohammer

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



LOG OF TEST BORING

Project Greentree Channel Expansion Geotech
 Location Madison, WI

Boring No. 4
 Surface Elevation (ft) 1008±
 Job No. C18051-20
 Sheet 1 of 1

2921 Ferry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

SAMPLE					VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES				
No.	Rec (in.)	Moist	N	Depth (ft)		q _u (tsf) (qa)	W	LL	PL	LI
1	9	M/W	7	0 - 0.5	FILL: Dark Brown Clayey Topsoil to 0.5 ft Loose Brown Sand and Gravel with Silt to 4 ft					
2	12	M	7	0.5 - 6		Very Stiff Gray Clay with Sand to 6 ft	(2.5-3.5)	21.2		
3	10	M	94	6 - 9.4	Very Dense, Brown Fine to Coarse Sand and Gravel, Some Silt, Scattered Cobbles (SM/GM - Possible Fill)					
4	13	M	34	9.4 - 13	Dense to Medium Dense, Brown Fine to Coarse SAND, Some Gravel, Little to Some Silt (SP-SM/SM)					
5	11	M	23	13 - 15	End Boring at 15 ft Backfilled with Bentonite Chips					

WATER LEVEL OBSERVATIONS

While Drilling NW Upon Completion of Drilling _____
 Time After Drilling _____
 Depth to Water _____
 Depth to Cave in _____

GENERAL NOTES

Start 1/14/19 End 1/14/19
 Driller SE Chief DSC Rig 7822-DT
 Logger J Editor ESF
 Drill Method 2 1/4" HSA, Autohammer

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



LOG OF TEST BORING

Project Greentree Channel Expansion Geotech
 Location Madison, WI

Boring No. 5
 Surface Elevation (ft) 1008±
 Job No. C18051-20
 Sheet 1 of 1

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

SAMPLE					VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES				
No.	Rec (in.)	Moist	N	Depth (ft)		q_u (qs) (tsf)	W	LL	PL	LI
					FILL: Dark Brown Silty Topsoil to 0.5 ft Loose Light Brown Silty Fine Sand to 2.0 ft					
1	11	M	8		Stiff to Soft, Brown-Gray (Mottled) Lean CLAY, Trace Sand (CL)	(1.5)				
2	10	M	7			(0.5-0.75)	28.2			
3	3	M/W	5		Loose, Brown and Dark Brown Stratified Silty Fine SAND and Clayey Fine Sand (SM/SC)					
4	12	M	5		Loose, Brown Fine to Coarse SAND, Some Gravel, Little to Some Silt (SP-SM/SM)					
5	14	M	4		Loose to Very Loose, Brown Fine to Medium SAND, Trace to Little Silt and Gravel (SP/SP-SM)					
				15	End Boring at 15 ft Backfilled with Bentonite Chips					
				20						

WATER LEVEL OBSERVATIONS

GENERAL NOTES

While Drilling NW Upon Completion of Drilling _____
 Time After Drilling _____
 Depth to Water _____
 Depth to Cave in _____

Start 1/14/19 End 1/14/19
 Driller SE Chief DSC Rig 7822-DT
 Logger J Editor ESF
 Drill Method 2 1/4" HSA, Autohammer

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



LOG OF TEST BORING

Project Greentree Channel Expansion Geotech
 Location Madison, WI

Boring No. 6
 Surface Elevation (ft) 1008±
 Job No. C18051-20
 Sheet 1 of 1

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

SAMPLE					VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES				
No.	Rec (in.)	Moist	N	Depth (ft)		qu (qa) (tsf)	w	LL	PL	LI
					FILL: Dark Brown Silty Topsoil to 2.5 ft					
1	11	M	4			(0.75)				
					Medium Stiff Brown Clay to 5 ft					
2	12	M	3			(0.75)	42.9			
					Dark Brown Fine to Coarse Sand with Silt and Gravel to 7.5 ft					
3	15	M	2							
					Medium Dense, Brown Fine SAND, Trace to Little Silt and Gravel (SP/SP-SM)					
4	10	M	29							
5	10	M	11							
					End Boring at 15 ft					
					Backfilled with Bentonite Chips					

WATER LEVEL OBSERVATIONS

While Drilling NW Upon Completion of Drilling _____
 Time After Drilling _____
 Depth to Water _____
 Depth to Cave in _____

GENERAL NOTES

Start 1/14/19 End 1/14/19
 Driller SE Chief DSC Rig 7822-DT
 Logger J Editor ESF
 Drill Method 2 1/4" HSA, Autohammer

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



LOG OF TEST BORING

Project Greentree Channel Expansion Geotech
 Location Madison, WI

Boring No. 7
 Surface Elevation (ft) 1008±
 Job No. C18051-20
 Sheet 1 of 1

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

SAMPLE					VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES				
No.	Rec (in.)	Moist	N	Depth (ft)		q_u (qa) (tsf)	W	LL	PL	LI
1	11	M	26	0.5	FILL: Dark Brown Topsoil to 0.5 ft Medium Dense Silty Sand with Clay and Gravel to 3 ft					
				3						
2	9	M	14	6	Stiff to Very Stiff Brown Clay with Gravel to 6 ft					
3	9	M	11	8	Medium Dense Sand and Gravel with Silt and Clay to 8 ft					
4	10	M	50	10	Dense to Very Dense, Brown Fine to Coarse SAND, Some Silt and Gravel, Scattered Cobbles (SM)					
5	9	M	100/12"	15	End Boring at 15 ft					
				15	Backfilled with Bentonite Chips					

WATER LEVEL OBSERVATIONS					GENERAL NOTES				
While Drilling	<input checked="" type="checkbox"/>	NW	Upon Completion of Drilling	_____	Start	1/14/19	End	1/14/19	
Time After Drilling	_____			_____	Driller	SE	Chief	DSC	Rig 7822-DT
Depth to Water	_____			_____	Logger	J	Editor	ESF	
Depth to Cave in	_____			_____	Drill Method	2 1/4" HSA, Autohammer			
The stratification lines represent the approximate boundary between soil types and the transition may be gradual.									



LOG OF TEST BORING

Project Greentree Channel Expansion Geotech

Location Madison, WI

Boring No. 8
 Surface Elevation (ft) 1007±
 Job No. C18051-20
 Sheet 1 of 1

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

SAMPLE					VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES				
No.	Rec (in.)	Moist	N	Depth (ft)		q _u (qa) (tsf)	W	LL	PL	LI
					FILL: Dark Brown Clayey Topsoil to 1 ft					
1	11	M	5		Stiff to Very Stiff Brown Clay with Sand and Gravel to 3 ft	(1.5-2.5)	24.5			
2	14	M	4		Soft to Medium Stiff, Brown-Gray (Mottled) Lean CLAY, Trace Sand (CL)	(0.3)				
3	16	M	4			(0.75)				
4	12	M	4			(0.5)				
5	14	M	20		Medium Dense, Brown Fine to Coarse SAND, Some Silt and Gravel (SM)					
6	14	M	47		Dense, Brown Fine to Coarse SAND, Some Gravel, Little to Some Silt (SP-SM/SM)					
					End Boring at 15 ft					
					Backfilled with Bentonite Chips					

WATER LEVEL OBSERVATIONS

While Drilling NW Upon Completion of Drilling _____
 Time After Drilling _____
 Depth to Water _____
 Depth to Cave in _____

GENERAL NOTES

Start 1/14/19 End 1/14/19
 Driller SE Chief DSC Rig 7822-DT
 Logger J Editor ESF
 Drill Method 2 1/4" HSA, Autohammer

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



LOG OF TEST BORING

Project Greentree Channel Expansion Geotech
 Location Madison, WI

Boring No. 9
 Surface Elevation (ft) 1009±
 Job No. C18051-20
 Sheet 1 of 1

2921 Parry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

SAMPLE					VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES				
No.	REMARKS	Rec (in.)	Moist	N		Depth (ft)	q _u (qa) (tsf)	W	LL	PL
					FILL: Dark Brown Silty Topsoil to 0.9 ft					
1		4	M	11	Very Stiff Brown Clay with Sand to 3 ft	(3.0)	24.0			
2		8	M	6	Stiff to Medium Stiff, Brown-Gray (Mottled) Lean CLAY, Trace Sand (CL)	(1.25)	30.8			
3		4	M	5		(0.75)				
4		7	M	11	Medium Dense, Brown Fine to Coarse SAND, Some Silt and Gravel, Trace Clay (SM)					
					Medium Dense, Stratified Silty Fine SAND and Clayey Fine SAND (SM/SC)					
5		8	M	21						
					End Boring at 15 ft					
					Backfilled with Bentonite Chips					

WATER LEVEL OBSERVATIONS

While Drilling NW Upon Completion of Drilling _____
 Time After Drilling _____
 Depth to Water _____
 Depth to Cave in _____

GENERAL NOTES

Start 1/14/19 End 1/14/19
 Driller SE Chief DSC Rig 7822-DT
 Logger J Editor ESF
 Drill Method 2 1/4" HSA, Autohammer

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



LOG OF TEST BORING

Project Greentree Channel Expansion Geotech
 Location Madison, WI

Boring No. 10
 Surface Elevation (ft) 1007±
 Job No. C18051-20
 Sheet 1 of 1

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

SAMPLE					VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES				
No.	Rec (in.)	Moist	N	Depth (ft)		qu (qa) (tsf)	W	LL	PL	LI
					Dark Brown Silty TOPSOIL (Fill)					
1	4	M	13		Hard, Brown Lean CLAY (CL - Possible Fill to 1.5 ft)	(4.5±)	23.2			
2	8	M	29		Medium Dense to Dense, Brown Fine to Coarse SAND, Some Silt and Gravel, Scattered Cobbles (SM)					
3	4	M	44							
4	7	M	38							
5	8	M	26							
					End Boring at 15 ft Backfilled with Bentonite Chips					

WATER LEVEL OBSERVATIONS

While Drilling NW Upon Completion of Drilling _____
 Time After Drilling _____
 Depth to Water _____
 Depth to Cave in _____

GENERAL NOTES

Start 1/14/19 End 1/14/19
 Driller SE Chief DSC Rig 7822-D1
 Logger J Editor ESF
 Drill Method 2 1/4" HSA, Autohammer

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.

CGC, Inc.

LOG OF TEST BORING
General Notes

DESCRIPTIVE SOIL CLASSIFICATION

Grain Size Terminology

Soil Fraction	Particle Size	U.S. Standard Sieve Size
Boulders.....	Larger than 12".....	Larger than 12"
Cobbles.....	3" to 12".....	3" to 12"
Gravel: Coarse.....	¾" to 3".....	¾" to 3"
Fine.....	4.76 mm to ¾".....	#4 to ¾"
Sand: Coarse.....	2.00 mm to 4.76 mm.....	#10 to #4
Medium.....	0.42 to mm to 2.00 mm.....	#40 to #10
Fine.....	0.074 mm to 0.42 mm.....	#200 to #40
Silt.....	0.005 mm to 0.074 mm.....	Smaller than #200
Clay.....	Smaller than 0.005 mm.....	Smaller than #200

Plasticity characteristics differentiate between silt and clay.

General Terminology

- Physical Characteristics**
Color, moisture, grain shape, fineness, etc.
- Major Constituents**
Clay, silt, sand, gravel
- Structure**
Laminated, varved, fibrous, stratified, cemented, fissured, etc.
- Geologic Origin**
Glacial, alluvial, eolian, residual, etc.

Relative Density

Term	"N" Value
Very Loose.....	0 - 4
Loose.....	4 - 10
Medium Dense.....	10 - 30
Dense.....	30 - 50
Very Dense.....	Over 50

Relative Proportions Of Cohesionless Soils

Proportional Term	Defining Range by Percentage of Weight
Trace.....	0% - 5%
Little.....	5% - 12%
Some.....	12% - 35%
And.....	35% - 50%

Consistency

Term	q _r -tons/sq. ft
Very Soft.....	0.0 to 0.25
Soft.....	0.25 to 0.50
Medium.....	0.50 to 1.0
Stiff.....	1.0 to 2.0
Very Stiff.....	2.0 to 4.0
Hard.....	Over 4.0

Organic Content by Combustion Method

Soil Description	Loss on Ignition
Non Organic.....	Less than 4%
Organic Silt/Clay.....	4 - 12%
Sedimentary Peat.....	12% - 50%
Fibrous and Woody Peat...	More than 50%

Plasticity

Term	Plastic Index
None to Slight.....	0 - 4
Slight.....	5 - 7
Medium.....	8 - 22
High to Very High ..	Over 22

The penetration resistance, N, is the summation of the number of blows required to effect two successive 6" penetrations of the 2" split-barrel sampler. The sampler is driven with a 140 lb. weight falling 30" and is seated to a depth of 5" before commencing the standard penetration test.

SYMBOLS

Drilling and Sampling

- CS - Continuous Sampling
- RC - Rock Coring: Size AW, BW, NW, 2"W
- RQD - Rock Quality Designation
- RB - Rock Bit/Roller Bit
- FT - Fish Tail
- DC - Drove Casing
- C - Casing: Size 2 ½", NW, 4", HW
- CW - Clear Water
- DM - Drilling Mud
- HSA - Hollow Stem Auger
- FA - Flight Auger
- HA - Hand Auger
- COA - Clean-Out Auger
- SS - 2" Dia. Split-Barrel Sample
- 2ST - 2" Dia. Thin-Walled Tube Sample
- 3ST - 3" Dia. Thin-Walled Tube Sample
- PT - 3" Dia. Piston Tube Sample
- AS - Auger Sample
- WS - Wash Sample
- PTS - Peat Sample
- PS - Pitcher Sample
- NR - No Recovery
- S - Sounding
- PMT - Borehole Pressuremeter Test
- VS - Vane Shear Test
- WPT - Water Pressure Test

Laboratory Tests

- q_a - Penetrometer Reading, tons/sq ft
- q_u - Unconfined Strength, tons/sq ft
- W - Moisture Content, %
- LL - Liquid Limit, %
- PL - Plastic Limit, %
- SL - Shrinkage Limit, %
- LI - Loss on Ignition
- D - Dry Unit Weight, lbs/cu ft
- pH - Measure of Soil Alkalinity or Acidity
- FS - Free Swell, %

Water Level Measurement

- ▽ - Water Level at Time Shown
- NW - No Water Encountered
- WD - While Drilling
- BCR - Before Casing Removal
- ACR - After Casing Removal
- CW - Cave and Wet
- CM - Caved and Moist

Note: Water level measurements shown on the boring logs represent conditions at the time indicated and may not reflect static levels, especially in cohesive soils.

CGC, Inc.

Madison - Milwaukee

Unified Soil Classification System

UNIFIED SOIL CLASSIFICATION AND SYMBOL CHART

COARSE-GRAINED SOILS

(more than 50% of material is larger than No. 200 sieve size)

Clean Gravels (Less than 5% fines)



GW

Well-graded gravels, gravel-sand mixtures, little or no fines



GP

Poorly-graded gravels, gravel-sand mixtures, little or no fines

GRAVELS
More than 50% of coarse fraction larger than No. 4 sieve size

Gravels with fines (More than 12% fines)



GM

Silty gravels, gravel-sand-silt mixtures



GC

Clayey gravels, gravel-sand-clay mixtures

Clean Sands (Less than 5% fines)



SW

Well-graded sands, gravelly sands, little or no fines



SP

Poorly graded sands, gravelly sands, little or no fines

SANDS
50% or more of coarse fraction smaller than No. 4 sieve size

Sands with fines (More than 12% fines)



SM

Silty sands, sand-silt mixtures



SC

Clayey sands, sand-clay mixtures

FINE-GRAINED SOILS

(50% or more of material is smaller than No. 200 sieve size.)

SILTS AND CLAYS

Liquid limit less than 50%



ML

Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity



CL

Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays



OL

Organic silts and organic silty clays of low plasticity

SILTS AND CLAYS

Liquid limit 50% or greater



MH

Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts



CH

Inorganic clays of high plasticity, fat clays



OH

Organic clays of medium to high plasticity, organic silts

HIGHLY ORGANIC SOILS



PT

Peat and other highly organic soils

LABORATORY CLASSIFICATION CRITERIA

GW $C_u = \frac{D_{60}}{D_{10}}$ greater than 4; $C_c = \frac{D_{30}}{D_{10} \times D_{60}}$ between 1 and 3

GP Not meeting all gradation requirements for GW

GM Atterberg limits below "A" line or P.I. less than 4

Above "A" line with P.I. between 4 and 7 are borderline cases requiring use of dual symbols

GC Atterberg limits above "A" line or P.I. greater than 7

SW $C_u = \frac{D_{60}}{D_{10}}$ greater than 4; $C_c = \frac{D_{30}}{D_{10} \times D_{60}}$ between 1 and 3

SP Not meeting all gradation requirements for GW

SM Atterberg limits below "A" line or P.I. less than 4

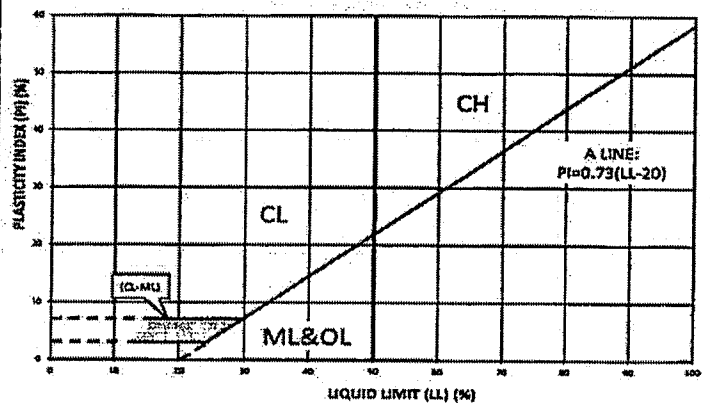
Limits plotting in shaded zone with P.I. between 4 and 7 are borderline cases requiring use of dual symbols

SC Atterberg limits above "A" line with P.I. greater than 7

Determine percentages of sand and gravel from grain-size curve. Depending on percentage of fines (fraction smaller than No. 200 sieve size), coarse-grained soils are classified as follows:

Less than 5 percent GW, GP, SW, SP
More than 12 percent GM, GC, SM, SC
5 to 12 percent Borderline cases requiring dual symbols

PLASTICITY CHART





Department of Public Works
Engineering Division

Robert F. Phillips, P.E., City Engineer

City-County Building, Room 115
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Kathleen M. Cryan

Principal Engineer 2
Christopher J. Petykowski, P.E.
John S. Fahmey, P.E.

Principal Engineer 1
Christina M. Bachmann, P.E.
Mark D. Moder, P.E.
Janet Schmidt, P.E.

Facilities & Sustainability
Jeanne E. Hoffman, Manager
Bryan Cooper, Principal Architect

Mapping Section Manager
Eric T. Pederson, P.S.

Financial Manager
Steven B. Danner-Rivers

June 3, 2019

NOTICE OF ADDENDUM
ADDENDUM NO. 1
CONTRACT NO. 9411

McKenna Flood Mitigation

Revise and amend the contract documents for the above project as stated in this addendum, otherwise, the original document shall remain in effect.

REMOVE:
SECTION 109.2

REPLACE SECTION 109.2 WITH THE FOLLOWING:

SECTION 109.2 PROSECUTION OF WORK

The Contractor shall begin work on JULY 29, 2019. All work shall be completed on or prior to May 31, 2020.

Work shall begin only after the start work letter is received. If it is desirable to begin work before or after the above-mentioned date, the Contractor shall establish a mutually acceptable date with the City Engineer, and the agreed upon date must be determined prior to the preconstruction meeting.

The Contractor shall limit workdays to 7:00 a.m. to 5:00 p.m. Monday through Friday within Elver Park, with no weekend work in the park, unless approved by the Engineer in writing.

This project includes interim completion dates at two locations within the project limits. All work necessary to restore north bound traffic on McKenna Blvd. at Gammon Ln. shall be completed on or prior to September 3, 2019. Restoring north bound traffic shall entail opening all northbound lanes and providing access to the pullout on the north side of McKenna Blvd. If temporary pavement is required to meet this deadline, it shall be paid for under BID ITEM 90006 – TEMPORARY PAVEMENT.

Several intersections within the project limits have a limited closure timeframe. Refer to the Maintenance of Traffic specifications for additional information on changes to traffic patterns.

All concrete work in the greenway channel and box culvert work in Elver Park must be completed by December 31,

2019 or a date mutually agreed upon by the City and the Contractor.

Any work that is not completed prior to the end of the year shall be left overwinter in a condition approved by the Engineer. All areas must be stabilized and channel and stormwater flow shall not be impeded.

Any remaining paving or restoration work shall be completed no later than May 31, 2020.

Work shall begin only after the start work letter is received.

SPECIAL PROVISIONS:

INSERT SENTENCE TO BID ITEM 90002 – 7” STAMPED & COLORED CONCRETE

DESCRIPTION

Cold weather protection, if used for installation of the concrete, shall be included with this item.

INSERT SENTENCE TO BID ITEM 90042 – DUAL CELL 5’X10’ REINFORCED CONCRETE BOX CULVERT

DESCRIPTION

If two single cell 5’x10’ Reinforced Box Culverts are proposed, it shall be approved by the Engineer prior to fabrication.

INSERT SENTENCE TO BID ITEM 90043 – DUAL CELL 5’X12’ REINFORCED CONCRETE BOX CULVERT

DESCRIPTION

If two single cell 5’x12’ Reinforced Box Culverts are proposed, it shall be approved by the Engineer prior to fabrication.

REMOVE: all text under **BID ITEM 90044 – RETAINING WALL AND CONCRETE MASONRY CUNETTE**, and

REPLACE WITH THE FOLLOWING:

BID ITEM 90044 – RETAINING WALL AND CONCRETE MASONRY CUNETTE

DESCRIPTION

Work under this item shall include all work, materials, and incidentals to construct a sheet pile retaining wall with concrete facing and architectural surface treatment, concrete channel lining, and concrete slab, as shown on plan sheets R-1 through R-6. Work shall be completed in accordance with the City of Madison Standard Specifications for Public Works Construction and the attached Technical Specifications for Retaining Wall (see original contract). The sheet pile steel shall be PZ 22, as shown on the plans, or an approved equivalent. Cold weather protection, if used for installation of the concrete, shall be included with this item.

METHOD OF MEASUREMENT

Retaining Wall and Concrete Masonry Cunette, is measured by the Lump Sum for satisfactory completion of the sheet piling; concrete facing; concrete slab; concrete channel lining; placing, finishing, and curing the concrete; furnishing and installing all tie bars and reinforcement; producing the proposed architectural surface treatment, including preparing the foundation, finishing and protecting the surface treatment, properly disposing of surplus material, for furnishing and applying the two coat system of stain, preparing the concrete surface, and for preparing the sample panels.

BASIS OF PAYMENT

Retaining Wall and Concrete Masonry Cunette, measured as described above, will be paid at the contract price lump sum and shall be considered full compensation for all work, materials and incidentals to complete the work as explained in the description above.

Please acknowledge this addendum on page E1 of the contract documents and/or in Section E: Bidder's Acknowledgement on Bid Express.

Electronic version of these documents can be found on the Bid Express web site at:

<http://www.bidexpress.com>

If you are unable to download plan revisions associated with the addendum, please contact the Engineering office at 608-266-4751 receive the material by another route.



Robert F. Phillips, P.E., City Engineer

RFP:maa



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Engineering Division
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Facilities & Sustainability
 Jeanne E. Hoffman, Manager
 Bryan Cooper, Principal Architect
Mapping Section Manager
 Eric T. Pederson, P.S.
Financial Manager
 Steven B. Danner-Rivers

June 5, 2019

NOTICE OF ADDENDUM
 ADDENDUM NO. 2
 CONTRACT NO. 9411

McKenna Flood Mitigation

Revise and amend the contract documents for the above project as stated in this addendum, otherwise, the original document shall remain in effect.

REMOVE:
 Page A-1

REPLACE Page A-1 WITH THE FOLLOWING:

SECTION A: ADVERTISEMENT FOR BIDS AND INSTRUCTIONS TO BIDDERS

**REQUEST FOR BID FOR PUBLIC WORKS CONSTRUCTION
 CITY OF MADISON, WISCONSIN**

A BEST VALUE CONTRACTING MUNICIPALITY

PROJECT NAME:	MCKENNA BOULEVARD FLOOD MITIGATION
CONTRACT NO.:	9411
SBE GOAL	7%
BID BOND	5%
SBE PRE BID MEETING (1:00 P.M.)	MAY 31, 2019
PREQUALIFICATION APPLICATION DUE (2:00 P.M.)	MAY 30, 2019
BID SUBMISSION (2:00 P.M.)	JUNE 13, 2019
BID OPEN (2:30 P.M.)	JUNE 13, 2019
PUBLISHED IN WSJ	MAY 23 & 30, 2019

SBE PRE BID MEETING: Representatives of the Affirmative Action Department will be present to discuss the Small Business Enterprise requirements at 1600 Emil Street, Madison Wisconsin.

PREQUALIFICATION APPLICATION: Forms are available on our website, www.cityofmadison.com/business/pw/forms.cfm. If not currently prequalified in the categories listed in Section A, an amendment to your Prequalification will need to be submitted prior to the same due date. Postmark is not applicable.

BIDS TO BE SUBMITTED by hand to 1600 EMIL ST., MADISON, WI 53713 or online at www.bidexpress.com.

THE BID OPENING is at 1600 EMIL ST., MADISON, WI 53713.

STANDARD SPECIFICATIONS

The City of Madison's Standard Specifications for Public Works Construction - 2019 Edition, as supplemented and amended from time to time, forms a part of these contract documents as if attached hereto.

These standard specifications are available on the City of Madison Public Works website, www.cityofmadison.com/Business/PW/specs.cfm.

The Contractor shall review these Specifications prior to preparation of proposals for the work to be done under this contract, with specific attention to Article 102, "BIDDING REQUIREMENTS AND CONDITIONS" and Article 103, "AWARD AND EXECUTION OF THE CONTRACT." For the convenience of the bidder, below are highlights of three subsections of the specifications.

SECTION 102.1: PRE-QUALIFICATION OF BIDDERS

In accordance with Wisconsin State Statutes 66.0901 (2) and (3), all bidders must submit to the Board of Public Works proof of responsibility on forms furnished by the City. The City requires that all bidders be qualified on a biennial basis.

Bidders must present satisfactory evidence that they have been regularly engaged in the type of work specified herein and they are fully prepared with necessary capital, materials, machinery and supervisory personnel to conduct the work to be contracted for to the satisfaction of the City. All bidders must be pre-qualified by the Board of Public Works for the type of construction on which they are bidding prior to the opening of the bid.

**REMOVE:
SECTION 109.2**

REPLACE SECTION 109.2 WITH THE FOLLOWING:

SECTION 109.2 PROSECUTION OF WORK

The Contractor shall begin work on JULY 29, 2019. All work shall be completed on or prior to May 31, 2020.

Work shall begin only after the start work letter is received. If it is desirable to begin work before or after the above-mentioned date, the Contractor shall establish a mutually acceptable date with the City Engineer, and the agreed upon date must be determined prior to the preconstruction meeting.

The Contractor shall limit workdays to 7:00 a.m. to 5:00 p.m. Monday through Friday within Elver Park, with no weekend work in the park, unless approved by the Engineer in writing.

This project includes interim completion dates at two locations within the project limits. All work necessary to restore north bound traffic on McKenna Blvd. at Gammon Ln. shall be completed on or prior to October 18, 2019, or a date mutually agreed to by the Engineer. Restoring north bound traffic shall entail opening all northbound lanes

and providing access to the pullout on the north side of McKenna Blvd.

Several intersections within the project limits have a limited closure timeframe. Refer to the Maintenance of Traffic specifications for additional information on changes to traffic patterns.

All concrete work in the greenway channel and box culvert work in Elver Park must be completed by **December 31, 2019** or a date mutually agreed upon by the City and the Contractor.

Any work that is not completed prior to the end of the year shall be left overwinter in a condition approved by the Engineer. All areas must be stabilized and channel and stormwater flow shall not be impeded.

Any remaining paving or restoration work shall be completed no later than **May 31, 2020**.


Work shall begin only after the start work letter is received.

Please acknowledge this addendum on page E1 of the contract documents and/or in Section E: Bidder's Acknowledgement on Bid Express.

Electronic version of these documents can be found on the Bid Express web site at:

<http://www.bidexpress.com>

If you are unable to download plan revisions associated with the addendum, please contact the Engineering office at 608-266-4751 receive the material by another route.



FOR Robert F. Phillips, P.E., City Engineer

RFP:maa

SECTION E: BIDDERS ACKNOWLEDGEMENT

MCKENNA BOULEVARD FLOOD MITIGATION
CONTRACT NO. 9411

Bidder must state a Unit Price and Total Bid for each item. The Total Bid for each item must be the product of quantity, by Unit Price. The Grand Total must be the sum of the Total Bids for the various items. In case of multiplication errors or addition errors, the Grand Total with corrected multiplication and/or addition shall determine the Grand Total bid for each contract. The Unit Price and Total Bid must be entered numerically in the spaces provided. All words and numbers shall be written in ink.

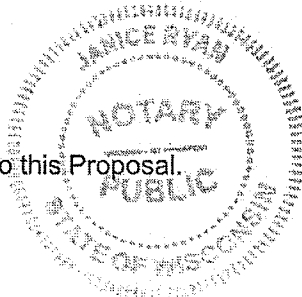
- The undersigned having familiarized himself/herself with the Contract documents, including Advertisement for Bids, Instructions to Bidders, Form of Proposal, City of Madison Standard Specifications for Public Works Construction - 2019 Edition thereto, Form of Agreement, Form of Bond, and Addenda issued and attached to the plans and specifications on file in the office of the City Engineer, hereby proposes to provide and furnish all the labor, materials, tools, and expendable equipment necessary to perform and complete in a workmanlike manner the specified construction on this project for the City of Madison; all in accordance with the plans and specifications as prepared by the City Engineer, including Addenda Nos. 1 through 2 to the Contract, at the prices for said work as contained in this proposal. (Electronic bids submittals shall acknowledge addendum under Section E and shall not acknowledge here)
- If awarded the Contract, we will initiate action within seven (7) days after notification or in accordance with the date specified in the contract to begin work and will proceed with diligence to bring the project to full completion within the number of work days allowed in the Contract or by the calendar date stated in the Contract.
- The undersigned Bidder or Contractor certifies that he/she is not a party to any contract, combination in form of trust or otherwise, or conspiracy in restraint of trade or commerce or any other violation of the anti-trust laws of the State of Wisconsin or of the United States, with respect to this bid or contract or otherwise.
- I hereby certify that I have met the Bid Bond Requirements as specified in Section 102.5. (IF BID BOND IS USED, IT SHALL BE SUBMITTED ON THE FORMS PROVIDED BY THE CITY. FAILURE TO DO SO MAY RESULT IN REJECTION OF THE BID).
- I hereby certify that all statements herein are made on behalf of Speedway Sand + Gravel (name of corporation, partnership, or person submitting bid) a corporation organized and existing under the laws of the State of WI a partnership consisting of _____; an individual trading as _____; of the City of _____ State of _____; that I have examined and carefully prepared this Proposal, from the plans and specifications and have checked the same in detail before submitting this Proposal; that I have fully authority to make such statements and submit this Proposal in (its, their) behalf; and that the said statements are true and correct.

[Signature]
 SIGNATURE
President +
 TITLE, IF ANY

Sworn and subscribed to before me this
13 day of June, 2019.

[Signature]
 (Notary Public or other officer authorized to administer oaths)
 My Commission Expires 10-21-21

Bidders shall not add any conditions or qualifying statements to this Proposal.



Contract 9411 – Speedway Sand & Gravel, Inc.

Section F: Best Value Contracting (BVC)

This section is a required document for the bid to be considered complete. There are two methods for completing the Best Value Contracting (BVC) form. Method one: The form can be filled out online and submitted to this site to be included with your electronic bid. Method two: The form can be downloaded from the site and submitted by hand to the City of Madison.

Method of Submittal for BVC (click in box below to choose) *

I will submit Bid Express fillable online form (BVC).

Best Value Contracting

1. The Contractor shall indicate the non-apprenticeable trades used on this contract.

2. Madison General Ordinance (M.G.O.), 33.07(7), does provide for some exemptions from the active apprentice requirement. Apprenticeable trades are those trades considered apprenticeable by the State of Wisconsin. Please check applicable box if you are seeking an exemption.

- Contractor has a total skilled workforce of four or less individuals in all apprenticeable trades combined.
- No available trade training program; The Contractor has been rejected by the only available trade training program, or there is no trade training program within 90 miles.
- Contractor is not using an apprentice due to having a journey worker on layoff status, provided the journey worker was employed by the contractor in the past six months.
- First time contractor on City of Madison Public Works contract requests a onetime exemption but intends to comply on all future contracts and is taking steps typical of a "good faith" effort.
- Contractor has been in business less than one year.
- Contractor doesn't have enough journeyman trade workers to qualify for a trade training program in that respective trade.
- An exemption is granted in accordance with a time period of a "Documented Depression" as defined by the State of Wisconsin.

3. The Contractor shall indicate on the following section which apprenticeable trades are to be used on this contract. Compliance with active apprenticeship, to the extent required by M.G.O. 33.07(7), shall be satisfied by documentation from an applicable trade training body; an apprenticeship contract with the Wisconsin Department of Workforce Development or a similar agency in another state; or the U.S Department of Labor. This documentation is required prior to the Contractor beginning work on the project site.

- The Contractor has reviewed the list and shall not use any apprenticeable trades on this project.

LIST APPRENTICABLE TRADES (check all that apply to your work to be performed on this contract)

- BRICKLAYER
- CARPENTER
- CEMENT MASON / CONCRETE FINISHER
- CEMENT MASON (HEAVY HIGHWAY)
- CONSTRUCTION CRAFT LABORER
- DATA COMMUNICATION INSTALLER
- ELECTRICIAN
- ENVIRONMENTAL SYSTEMS TECHNICIAN / HVAC SERVICE TECH/HVAC INSTALL / SERVICE
- GLAZIER
- HEAVY EQUIPMENT OPERATOR / OPERATING ENGINEER
- INSULATION WORKER (HEAT and FROST)
- IRON WORKER
- IRON WORKER (ASSEMBLER, METAL BLDGS)
- PAINTER and DECORATOR
- PLASTERER
- PLUMBER
- RESIDENTIAL ELECTRICIAN
- ROOFER and WATER PROOFER
- SHEET METAL WORKER
- SPRINKLER FITTER
- STEAMFITTER
- STEAMFITTER (REFRIGERATION)
- STEAMFITTER (SERVICE)
- TAPER and FINISHER
- TELECOMMUNICATIONS (VOICE, DATA and VIDEO) INSTALLER-TECHNICIAN
- TILE SETTER

MCKENNA BOULEVARD FLOOD MITIGATION
CONTRACT NO. 9411

Small Business Enterprise Compliance Report

This information may be submitted electronically through
Bid Express or submitted with bid in sealed envelope.

Cover Sheet

Prime Bidder Information

Company: SPEEDWAY SAND & GRAVEL, INC.

8500 GREEN HAY BLVD. SUITE 202

Address: MIDDLETON, WI 53562

Telephone Number: 608 836 1071 Fax Number: 608 836 7485

Contact Person/Title: Dustin Bittner

Prime Bidder Certification

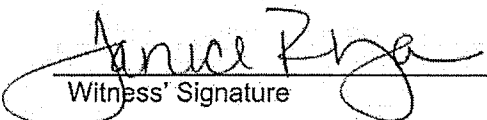
I, Dustin Bittner, PM of


Name

Title

Speedway Sand & Gravel certify that the information
Company

contained in this SBE Compliance Report is true and correct to the best of my knowledge and belief.


Witness' Signature


Bidder's Signature

6-13-2019
Date

MCKENNA BOULEVARD FLOOD MITIGATION

CONTRACT NO. 9411
 DATE: 6/6/19

**Speedway Sand & Gravel,
 Inc.**

Item	Quantity	Price	Extension
Section B: Proposal Page			
10701 - TRAFFIC CONTROL - LUMP SUM	1.00	\$9,400.00	\$9,400.00
10702 - TRAFFIC CONTROL FOR STORM SEWER INSTALLATION - LUMP SUM	1.00	\$2,000.00	\$2,000.00
10704 - TRAFFIC CONTROL FOR SANITARY SEWER INSTALLATION - LUMP SUM	1.00	\$2,000.00	\$2,000.00
10720 - TRAFFIC CONTROL SIGN - PORTABLE ARROW BOARD - DAYS	240.00	\$19.00	\$4,560.00
10721 - TRAFFIC CONTROL SIGN - PORTABLE CHANGEABLE MESSAGE - DAYS	28.00	\$65.00	\$1,820.00
10912 - MOBILIZATION FOR STORM SEWER INSTALLATION - LUMP SUM	1.00	\$514,900.00	\$514,900.00
20101 - EXCAVATION CUT - C.Y.	21675.00	\$28.00	\$606,900.00
20109 - FINISH GRADING - L.S.	1.00	\$500.00	\$500.00
20217 - CLEAR STONE - TON	400.00	\$35.00	\$14,000.00
20221 - TOPSOIL - S.Y.	16400.00	\$0.10	\$1,640.00
20230 - HEAVY RIPRAP - TON	1050.00	\$80.00	\$84,000.00
20233 - RIPRAP FILTER FABRIC, TYPE HR - S.Y.	2120.00	\$2.50	\$5,300.00
20303 - SAWCUT ASPHALT PAVEMENT - L.F.	245.00	\$5.00	\$1,225.00
20314 - REMOVE PIPE - L.F.	131.00	\$20.00	\$2,620.00
20322 - REMOVE CONCRETE CURB & GUTTER - L.F.	570.00	\$5.00	\$2,850.00
20323 - REMOVE CONCRETE SIDEWALK & DRIVE - S.F.	2350.00	\$1.00	\$2,350.00
20336 - PIPE PLUG - EACH	3.00	\$300.00	\$900.00
20401 - CLEARING - I.D.	250.00	\$22.00	\$5,500.00
20402 - GRUBBING - I.D.	250.00	\$50.00	\$12,500.00
20701 - TERRACE SEEDING - S.Y.	16600.00	\$0.86	\$14,276.00
21002 - EROSION CONTROL INSPECTION - EACH	12.00	\$500.00	\$6,000.00
21011 - CONSTRUCTION ENTRANCE - EACH	2.00	\$1,500.00	\$3,000.00
21013 - STREET SWEEPING - LUMP SUM	1.00	\$12,000.00	\$12,000.00
21015 - STREET CONSTRUCTION STONE BERM - EACH	11.00	\$300.00	\$3,300.00
21018 - SILT SOCK (8 INCH) - PROVIDE, INSTALL & MAINTAIN - L.F.	600.00	\$7.00	\$4,200.00
21019 - SILT SOCK (8 INCH) - REMOVE & RESTORE - L.F.	600.00	\$1.00	\$600.00
21022 - SILT FENCE - PROVIDE, INSTALL & MAINTAIN (UNDISTRIBUTED) - L.F.	500.00	\$3.00	\$1,500.00
21023 - SILT FENCE - REMOVE & RESTORE (UNDISTRIBUTED) - L.F.	500.00	\$1.00	\$500.00
21032 - INLET PROTECTION TYPE C - PROVIDE & INSTALL - EACH	5.00	\$100.00	\$500.00
21033 - INLET PROTECTION TYPE C - MAINTAIN - EACH	5.00	\$65.00	\$325.00
21034 - INLET PROTECTION TYPE C - REMOVE - EACH	5.00	\$25.00	\$125.00
21042 - INLET PROTECTION TYPE D - PROVIDE & INSTALL - EACH	40.00	\$25.00	\$1,000.00
21043 - INLET PROTECTION TYPE D - MAINTAIN - EACH	40.00	\$25.00	\$1,000.00
21044 - INLET PROTECTION TYPE D - REMOVE - EACH	40.00	\$25.00	\$1,000.00
21063 - EROSION MATTING, CLASS I, TYPE A - ORGANIC - S.Y.	600.00	\$3.00	\$1,800.00
21064 - EROSION MATTING, CLASS I, TYPE B - ORGANIC - S.Y.	16000.00	\$0.40	\$6,400.00
21073 - EROSION MATTING, CLASS II, TYPE C - ORGANIC - S.Y.	720.00	\$5.00	\$3,600.00
30201 - TYPE 'A' CONCRETE CURB & GUTTER - L.F.	260.00	\$32.00	\$8,320.00
30207 - TYPE 'H' CONCRETE CURB & GUTTER - L.F.	310.00	\$34.00	\$10,540.00
30301 - 5" CONCRETE SIDEWALK - S.F.	2000.00	\$6.00	\$12,000.00
30302 - 7" CONCRETE SIDEWALK AND DRIVE - S.F.	200.00	\$6.50	\$1,300.00
30311 - CONCRETE MOUNTABLE MEDIAN ISLAND NOSE - S.F.	160.00	\$12.00	\$1,920.00

MCKENNA BOULEVARD FLOOD MITIGATION

CONTRACT NO. 9411

DATE: 6/6/19

**Speedway Sand & Gravel,
Inc.**

Item	Quantity	Price	Extension
30340 - CURB RAMP DETECTABLE WARNING FIELD - S.F.	40.00	\$40.00	\$1,600.00
40101 - CRUSHED AGGREGATE BASE COURSE GRADATION NO. 1 - TON	560.00	\$18.50	\$10,360.00
40102 - CRUSHED AGGREGATE BASE COURSE GRADATION NO. 2 - TON	1025.00	\$20.00	\$20,500.00
40202 - HMA PAVEMENT 4 LT 58-28 S - TON	40.00	\$122.00	\$4,880.00
40203 - HMA PAVEMENT 3 MT 58-28 S - TON	370.00	\$81.60	\$30,192.00
40204 - HMA PAVEMENT 4 MT 58-28 S - TON	395.00	\$84.10	\$33,219.50
40218 - TACK COAT - GAL	50.00	\$3.00	\$150.00
40311 - PULVERIZE AND SHAPE - S.Y.	1600.00	\$8.00	\$12,800.00
40402 - 9" CONCRETE PAVEMENT - S.Y.	70.00	\$85.00	\$5,950.00
50202 - DEWATERING TYPE II (UNDISTRIBUTED) - LUMP SUM	1.00	\$500.00	\$500.00
50211 - SELECT BACKFILL FOR STORM SEWER - T.F.	34.00	\$1.00	\$34.00
50212 - SELECT BACKFILL SANITARY SEWER - T.F.	226.00	\$1.00	\$226.00
50227 - UTILITY TRENCH PATCH TYPE IV - S.Y.	60.00	\$15.00	\$900.00
50321 - 8 INCH PVC PRESSURE SANITARY SEWER PIPE - L.F.	226.00	\$345.70	\$78,128.20
50361 - WASTEWATER CONTROL - LUMP SUM	1.00	\$10,000.00	\$10,000.00
50390 - SEWER ELECTRONIC MARKERS - EACH	10.00	\$40.00	\$400.00
50403 - 18 INCH TYPE I RCP STORM SEWER PIPE - L.F.	5.00	\$254.50	\$1,272.50
50404 - 21 INCH TYPE I RCP STORM SEWER PIPE - L.F.	12.00	\$142.90	\$1,714.80
50409 - 36 INCH TYPE I RCP STORM SEWER PIPE - L.F.	17.00	\$193.40	\$3,287.80
50499 - CONCRETE COLLAR - EACH	2.00	\$800.00	\$1,600.00
50701 - 4' DIA SAS - EACH	3.00	\$8,340.00	\$25,020.00
50771 - INTERNAL CHIMNEY SEAL - EACH	3.00	\$450.00	\$1,350.00
50791 - SANITARY SEWER TAP - EACH	5.00	\$1,000.00	\$5,000.00
50792 - STORM SEWER TAP - EACH	4.00	\$3,000.00	\$12,000.00
50801 - UTILITY LINE OPENING - EACH	8.00	\$1,300.00	\$10,400.00
60802 - PAVEMENT MARKING EPOXY, LINE, 6-INCH - L.F.	1800.00	\$4.30	\$7,740.00
60803 - PAVEMENT MARKING EPOXY, LINE, 8-INCH - L.F.	95.00	\$6.00	\$570.00
60812 - PAVEMENT MARKING EPOXY, CROSSWALK, 6-INCH - L.F.	100.00	\$15.00	\$1,500.00
60814 - PAVEMENT MARKING EPOXY, CROSSWALK, 12-INCH - L.F.	250.00	\$19.00	\$4,750.00
60818 - PAVEMENT MARKING EPOXY, STOP LINE, 24-INCH - L.F.	50.00	\$22.00	\$1,100.00
60823 - PAVEMENT MARKING EPOXY, SYMBOL, BIKE LANE - EACH	2.00	\$250.00	\$500.00
60886 - PAVEMENT MARKING REMOVAL, 4" DOUBLE LINE - L.F.	500.00	\$2.20	\$1,100.00
60941 - TEMPORARY PAVEMENT MARKING TAPE, REMOVABLE, REFLECTIVE, DOUBLE LINE, 4-INCH - L.F.	4000.00	\$1.00	\$4,000.00
70002 - FURNISH AND INSTALL 6 INCH PIPE & FITTINGS - L.F.	10.00	\$96.45	\$964.50
70006 - FURNISH AND INSTALL 16 INCH PIPE & FITTINGS - L.F.	100.00	\$219.60	\$21,960.00
70023 - FURNISH AND INSTALL 30 INCH CASING - L.F.	67.00	\$290.35	\$19,453.45
70031 - FURNISH AND INSTALL 6-INCH WATER VALVE - EACH	1.00	\$2,670.00	\$2,670.00
70035 - FURNISH AND INSTALL 16-INCH WATER VALVE - EACH	2.00	\$4,870.00	\$9,740.00
70040 - FURNISH, INSTALL AND SALVAGE HYDRANT - EACH	1.00	\$6,400.00	\$6,400.00
70080 - CUT-IN OR CONNECT TO EXISTING WATER SYSTEM - EACH	3.00	\$6,140.00	\$18,420.00
70101 - FURNISH AND INSTALL STYROFOAM - L.F.	168.00	\$17.00	\$2,856.00
70102 - LANDSCAPE RESTORATION FOR WATER MAIN - L.F.	125.00	\$10.00	\$1,250.00
70104 - ADJUST WATER VALVE BOX SECTIONS (UNDISTRIBUTED) - EACH	2.00	\$350.00	\$700.00
70110 - TEMPORARY WATER SUPPLY SYSTEM - EACH	1.00	\$9,500.00	\$9,500.00
90001 - TOPSOIL, 12" - S.Y.	200.00	\$10.00	\$2,000.00
90002 - 7" STAMPED & COLORED CONCRETE - S.F.	30.00	\$28.00	\$840.00

MCKENNA BOULEVARD FLOOD MITIGATION

CONTRACT NO. 9411

DATE: 6/6/19

**Speedway Sand & Gravel,
Inc.**

Item	Quantity	Price	Extension
90003 - REINFORCED CONCRETE GUTTER - L.F.	165.00	\$35.00	\$5,775.00
90004 - REMOVE BIKE PATH RAILING - L.F.	55.00	\$4.00	\$220.00
90005 - BIKE PATH RAILING - L.F.	90.00	\$159.00	\$14,310.00
90006 - TEMPORARY PAVEMENT - S.Y.	200.00	\$70.00	\$14,000.00
90007 - TEMPORARY CROSSWALK ACCESS - EACH	3.00	\$4,000.00	\$12,000.00
90008 - TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS - EACH	275.00	\$17.00	\$4,675.00
90009 - TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER BASES - EACH	275.00	\$4.50	\$1,237.50
90010 - CONSTRUCTION FENCE (PLASTIC) - L.F.	1450.00	\$4.00	\$5,800.00
90030 - STORM CONTROL PLAN & IMPLEMENTATION - L.S.	1.00	\$500.00	\$500.00
90031 - CRACK AND DAMAGE SURVEY - EACH	8.00	\$1,000.00	\$8,000.00
90032 - REMOVE EXISTING CUNETTE - S.Y.	2080.00	\$14.00	\$29,120.00
90033 - REMOVE EXISTING 43"X68" HERCP HEADWALL - EACH	2.00	\$3,000.00	\$6,000.00
90034 - REMOVE EXISTING 43"X68" HERCP CONCRETE SLAB - S.Y.	175.00	\$10.00	\$1,750.00
90035 - REMOVE AND REPLACE PRIVATE BLOCK WALL AND DRAINAGE SYSTEM - L.F.	78.00	\$185.00	\$14,430.00
90036 - ADJUST MMSD SANITARY ACCESS STRUCTURE AND CASTING - EACH	6.00	\$2,998.00	\$17,988.00
90037 - 21 INCH PIPE GRATE - EACH	1.00	\$960.00	\$960.00
90038 - PRECAST REINFORCED CONCRETE BOX CULVERTS - 4' RISE X 8' SPAN - L.F.	96.00	\$749.00	\$71,904.00
90039 - 4' RISE X 8' SPAN BOX CULVERT WINGWALL - EACH	2.00	\$33,000.00	\$66,000.00
90040 - FOUR CELL BOX CULVERT WINGWALL - EACH	2.00	\$55,000.00	\$110,000.00
90041 - FOUR CELL BOX CULVERT WINGWALL SLAB - C.Y.	70.00	\$700.00	\$49,000.00
90042 - DUAL CELL 5'X10' REINFORCED CONCRETE BOX CULVERT - L.F.	408.00	\$1,934.00	\$789,072.00
90043 - DUAL CELL 5'X12' REINFORCED CONCRETE BOX CULVERT - L.F.	408.00	\$2,331.00	\$951,048.00
90044 - RETAINING WALL AND CONCRETE MASONRY CUNETTE - L.S.	1.00	\$1,613,618.00	\$1,613,618.00
90045 - RETAINING WALL RAILING TUBULAR SCREENING - L.F.	942.00	\$150.00	\$141,300.00
90046 - SIDEWALK RAILING PIPE - L.F.	170.00	\$160.00	\$27,200.00
90047 - TEMPORARY SHORING - S.Y.	140.00	\$570.00	\$79,800.00
90048 - SLOPE PROTECTION TREATMENT - S.Y.	240.00	\$225.00	\$54,000.00
90049 - REMOVE AND REPLACE LIGHT POLE - L.S.	1.00	\$5,000.00	\$5,000.00
90070 - RESTRAIN EXISTING PUSH-ON WATER MAIN JOINT - EACH	5.00	\$2,370.00	\$11,850.00
117 Items	Totals		\$5,866,227.25



Department of Public Works
Engineering Division
Robert F. Phillips, P.E., City Engineer

City-County Building, Room 115
210 Martin Luther King, Jr. Boulevard
Madison, Wisconsin 53703
Phone: (608) 266-4751
Fax: (608) 264-9275
engineering@cityofmadison.com
www.cityofmadison.com/engineering

Assistant City Engineer
Michael R. Dalley, P.E.

Principal Engineer 2
Gregory T. Fries, P.E.
Christopher J. Petykowski, P.E.

Principal Engineer 1
Christina M. Bachmann, P.E.
Eric L. Dundee, P.E.
John S. Fahmey, P.E.

Facilities & Sustainability
Jeanne E. Hoffman, Manager

Operations Manager
Kathleen M. Cryan

Mapping Section Manager
Eric T. Pederson, P.S.

Financial Manager
Steven B. Danner-Rivers

BIENNIAL BID BOND

Speedway Sand & Gravel, Inc.

(a corporation of the State of Wisconsin)
(individual), (partnership), (hereinafter referred to as the "Principal") and
Fidelity and Deposit Company of Maryland

a corporation of the State of Maryland (hereinafter referred to as the "Surety") and licensed to do business in the State of Wisconsin, are held and firmly bound unto the City of Madison, Wisconsin (hereinafter referred to as the "City"), in the sum equal to the individual proposal guaranty amounts of the total bid or bids of the Principal herein accepted by the City, for the payment of which the Principal and the Surety hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors and assigns.

The condition of this obligation is that the Principal has submitted to the City certain bids for projects from the time period of February 1, 2018 through January 31, 2020.

If the Principal is awarded the contract(s) by the City and, within the time and manner required by law after the prescribed forms are presented for its signature, the Principal enters into (a) written contract(s) in accordance with the bid(s), and files with the City its bond(s) guaranteeing faithful performance and payment for all labor and materials, as required by law, or if the City rejects all bids for the work described, then this obligation shall be null and void; otherwise, it shall remain in full force and effect.

In the event the Principal shall fail to execute and deliver the contract(s) or the performance and payment bond(s), all within the time specified or any extension thereof, the Principal and Surety agree jointly and severally to pay to the City within ten (10) calendar days of written demand a total equal to the sum of the individual proposal guaranty amounts of the total bid(s) as liquidated damages.

The Surety, for value received, hereby agrees that the obligations of it and its bond shall be in no way impaired or affected by any extension of time within which the City may accept a bid, and the Surety does hereby waive notice of any such extension.

This bond may be terminated by the Surety upon giving thirty (30) days written notice to the City of its intent to terminate this bond and to be released and discharged therefrom, but such termination shall not operate to relieve or discharge the Surety from any liability already accrued or which shall accrue before the expiration of such thirty (30) day period.

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, on the day and year set forth below.

PRINCIPAL

Speedway Sand & Gravel, Inc.
COMPANY NAME AFFIX SEAL

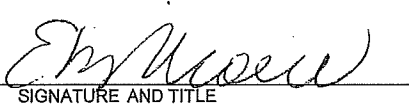
11-16-2017
DATE

By:  V.P.
SIGNATURE AND TITLE

SURETY

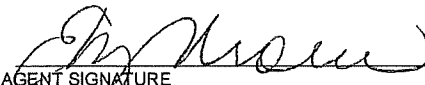
Fidelity and Deposit Company of Maryland
COMPANY NAME AFFIX SEAL

11-16-2017
DATE

By: 
SIGNATURE AND TITLE
Elizabeth Mosca, Attorney-in-Fact

This certifies that I have been duly licensed as an agent for the Surety in Wisconsin under National Provider No. 12305256 for the year 2018 and appointed as attorney in fact with authority to execute this bid bond, which power of attorney has not been revoked.

11-16-2017
DATE


AGENT SIGNATURE

PO Box 259408
ADDRESS

Madison, WI 53725-9408
CITY, STATE AND ZIP CODE

608-252-9674
TELEPHONE NUMBER

Note to Surety and Principal: Any bid submitted which this bond guarantees may be rejected if the Power of Attorney form showing that the Agent of Surety is currently authorized to execute bonds on behalf of Surety is not attached to this bond.

**ZURICH AMERICAN INSURANCE COMPANY
COLONIAL AMERICAN CASUALTY AND SURETY COMPANY
FIDELITY AND DEPOSIT COMPANY OF MARYLAND
POWER OF ATTORNEY**

KNOW ALL MEN BY THESE PRESENTS: That the ZURICH AMERICAN INSURANCE COMPANY, a corporation of the State of New York, the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, a corporation of the State of Maryland, and the FIDELITY AND DEPOSIT COMPANY OF MARYLAND a corporation of the State of Maryland (herein collectively called the "Companies"), by **GERALD F. HALEY, Vice President**, in pursuance of authority granted by Article V, Section 8, of the By-Laws of said Companies, which are set forth on the reverse side hereof and are hereby certified to be in full force and effect on the date hereof, do hereby nominate, constitute, and appoint **Judith A. WALKER, Timothy HAUSMANN, Patrick A. MCKENNA, Brooke L. PARKER and Elizabeth MOSCA, all of Madison, Wisconsin, EACH** its true and lawful agent and Attorney-in-Fact, to make, execute, seal and deliver, for, and on its behalf as surety, and as its act and deed: **any and all bonds and undertakings**, and the execution of such bonds or undertakings in pursuance of these presents, shall be as binding upon said Companies, as fully and amply, to all intents and purposes, as if they had been duly executed and acknowledged by the regularly elected officers of the ZURICH AMERICAN INSURANCE COMPANY at its office in New York, New York., the regularly elected officers of the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY at its office in Owings Mills, Maryland., and the regularly elected officers of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND at its office in Owings Mills, Maryland., in their own proper persons.

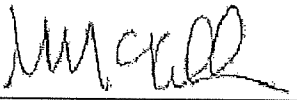
The said Vice President does hereby certify that the extract set forth on the reverse side hereof is a true copy of Article V, Section 8, of the By-Laws of said Companies, and is now in force.

IN WITNESS WHEREOF, the said Vice-President has hereunto subscribed his/her names and affixed the Corporate Seals of the said ZURICH AMERICAN INSURANCE COMPANY, COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, and FIDELITY AND DEPOSIT COMPANY OF MARYLAND, this 11th day of April, A.D. 2017.

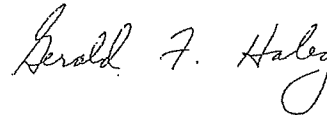
ATTEST:

**ZURICH AMERICAN INSURANCE COMPANY
COLONIAL AMERICAN CASUALTY AND SURETY COMPANY
FIDELITY AND DEPOSIT COMPANY OF MARYLAND**



By: 

*Secretary
Michael McKibben*



*Vice President
Gerald F. Haley*

State of Maryland
County of Baltimore

On this 11th day of April, A.D. 2017, before the subscriber, a Notary Public of the State of Maryland, duly commissioned and qualified, **GERALD F. HALEY, Vice President, and MICHAEL MCKIBBEN, Secretary**, of the Companies, to me personally known to be the individuals and officers described in and who executed the preceding instrument, and acknowledged the execution of same, and being by me duly sworn, deposeth and saith, that he/she is the said officer of the Company aforesaid, and that the seals affixed to the preceding instrument are the Corporate Seals of said Companies, and that the said Corporate Seals and the signature as such officer were duly affixed and subscribed to the said instrument by the authority and direction of the said Corporations.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my Official Seal the day and year first above written.



*Constance A. Dunn, Notary Public
My Commission Expires: July 9, 2019*



EXTRACT FROM BY-LAWS OF THE COMPANIES

"Article V, Section 8, Attorneys-in-Fact. The Chief Executive Officer, the President, or any Executive Vice President or Vice President may, by written instrument under the attested corporate seal, appoint attorneys-in-fact with authority to execute bonds, policies, recognizances, stipulations, undertakings, or other like instruments on behalf of the Company, and may authorize any officer or any such attorney-in-fact to affix the corporate seal thereto; and may with or without cause modify or revoke any such appointment or authority at any time."

CERTIFICATE

I, the undersigned, Vice President of the ZURICH AMERICAN INSURANCE COMPANY, the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, and the FIDELITY AND DEPOSIT COMPANY OF MARYLAND, do hereby certify that the foregoing Power of Attorney is still in full force and effect on the date of this certificate; and I do further certify that Article V, Section 8, of the By-Laws of the Companies is still in force.

This Power of Attorney and Certificate may be signed by facsimile under and by authority of the following resolution of the Board of Directors of the ZURICH AMERICAN INSURANCE COMPANY at a meeting duly called and held on the 15th day of December 1998.

RESOLVED: "That the signature of the President or a Vice President and the attesting signature of a Secretary or an Assistant Secretary and the Seal of the Company may be affixed by facsimile on any Power of Attorney...Any such Power or any certificate thereof bearing such facsimile signature and seal shall be valid and binding on the Company."

This Power of Attorney and Certificate may be signed by facsimile under and by authority of the following resolution of the Board of Directors of the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY at a meeting duly called and held on the 5th day of May, 1994, and the following resolution of the Board of Directors of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND at a meeting duly called and held on the 10th day of May, 1990.

RESOLVED: "That the facsimile or mechanically reproduced seal of the company and facsimile or mechanically reproduced signature of any Vice-President, Secretary, or Assistant Secretary of the Company, whether made heretofore or hereafter, wherever appearing upon a certified copy of any power of attorney issued by the Company, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed the corporate seals of the said Companies, this 16 day of November, 2017.



Michael Bond, Vice President

TO REPORT A CLAIM WITH REGARD TO A SURETY BOND, PLEASE SUBMIT ALL REQUIRED INFORMATION TO:

Zurich American Insurance Co.
Attn: Surety Claims
1299 Zurich Way
Schaumburg, IL 60196-1056

SECTION H: AGREEMENT

THIS AGREEMENT made this 3rd day of July in the year Two Thousand and Nineteen between **SPEEDWAY SAND & GRAVEL, INC.** hereinafter called the Contractor, and the City of Madison, Wisconsin, hereinafter called the City.

WHEREAS, the Common Council of the said City of Madison under the provisions of a resolution adopted JULY 2, 2019, and by virtue of authority vested in the said Council, has awarded to the Contractor the work of performing certain construction.

NOW, THEREFORE, the Contractor and the City, for the consideration hereinafter named, agree as follows:

1. **Scope of Work.** The Contractor shall, perform the construction, execution and completion of the following listed complete work or improvement in full compliance with the Plans, Specifications, Standard Specifications, Supplemental Specifications, Special Provisions and contract; perform all items of work covered or stipulated in the proposal; perform all altered or extra work; and shall furnish, unless otherwise provided in the contract, all materials, implements, machinery, equipment, tools, supplies, transportation, and labor necessary to the prosecution and completion of the work or improvements:

MCKENNA BOULEVARD FLOOD MITIGATION CONTRACT NO. 9411

2. **Completion Date/Contract Time.** Construction work must begin within seven (7) calendar days after the date appearing on mailed written notice to do so shall have been sent to the Contractor and shall be carried on at a rate so as to secure full completion SEE SPECIAL PROVISIONS, the rate of progress and the time of completion being essential conditions of this Agreement.
3. **Contract Price.** The City shall pay to the Contractor at the times, in the manner and on the conditions set forth in said specifications, the sum of **FIVE MILLION EIGHT HUNDRED SIXTY-SIX THOUSAND TWO HUNDRED TWENTY-SEVEN AND 25/100 (\$5,866,227.25)** Dollars being the amount bid by such Contractor and which was awarded to him/her as provided by law.
4. **Affirmative Action.** In the performance of the services under this Agreement the Contractor agrees not to discriminate against any employee or applicant because of race, religion, marital status, age, color, sex, disability, national origin or ancestry, income level or source of income, arrest record or conviction record, less than honorable discharge, physical appearance, sexual orientation, gender identity, political beliefs, or student status. The Contractor further agrees not to discriminate against any subcontractor or person who offers to subcontract on this contract because of race, religion, color, age, disability, sex, sexual orientation, gender identity or national origin.

The Contractor agrees that within thirty (30) days after the effective date of this agreement, the Contractor will provide to the City Affirmative Action Division certain workforce utilization statistics, using a form to be furnished by the City.

If the contract is still in effect, or if the City enters into a new agreement with the Contractor, within one year after the date on which the form was required to be provided, the Contractor will provide updated workforce information using a second form, also to be furnished by the City. The second form will be submitted to the City Affirmative Action Division no later than one year after the date on which the first form was required to be provided.

The Contractor further agrees that, for at least twelve (12) months after the effective date of this contract, it will notify the City Affirmative Action Division of each of its job openings at facilities in Dane County for which applicants not already employees of the Contractor are to be considered. The notice will include a job description, classification, qualifications and application procedures

and deadlines. The Contractor agrees to interview and consider candidates referred by the Affirmative Action Division if the candidate meets the minimum qualification standards established by the Contractor, and if the referral is timely. A referral is timely if it is received by the Contractor on or before the date started in the notice.

Articles of Agreement Article I

The Contractor shall take affirmative action in accordance with the provisions of this contract to insure that applicants are employed, and that employees are treated during employment without regard to race, religion, color, age, marital status, disability, sex, sexual orientation, gender identity or national origin and that the employer shall provide harassment free work environment for the realization of the potential of each employee. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation and selection for training including apprenticeship insofar as it is within the control of the Contractor. The Contractor agrees to post in conspicuous places available to employees and applicants notices to be provided by the City setting out the provisions of the nondiscrimination clauses in this contract.

Article II

The Contractor shall in all solicitations or advertisements for employees placed by or on behalf of the Contractor state that all qualified or qualifiable applicants will be employed without regard to race, religion, color, age, marital status, disability, sex, sexual orientation, gender identity or national origin.

Article III

The Contractor shall send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding a notice to be provided by the City advising the labor union or worker's representative of the Contractor's equal employment opportunity and affirmative action commitments. Such notices shall be posted in conspicuous places available to employees and applicants for employment.

Article V

The Contractor agrees that it will comply with all provisions of the Affirmative Action Ordinance of the City of Madison, including the contract compliance requirements. The Contractor agrees to submit the model affirmative action plan for public works contractors in a form approved by the Affirmative Action Division Manager.

Article VI

The Contractor will maintain records as required by Section 39.02(9)(f) of the Madison General Ordinances and will provide the City Affirmative Action Division with access to such records and to persons who have relevant and necessary information, as provided in Section 39.02(9)(f). The City agrees to keep all such records confidential, except to the extent that public inspection is required by law.

Article VII

In the event of the Contractor's or subcontractor's failure to comply with the Equal Employment Opportunity and Affirmative Action Provisions of this contract or Section 39.03 and 39.02 of the Madison General Ordinances, it is agreed that the City at its option may do any or all of the following:

1. Cancel, terminate or suspend this Contract in whole or in part.

2. Declare the Contractor ineligible for further City contracts until the Affirmative Action requirements are met.
3. Recover on behalf of the City from the prime Contractor 0.5 percent of the contract award price for each week that such party fails or refuses to comply, in the nature of liquidated damages, but not to exceed a total of five percent (5%) of the contract price, or ten thousand dollars (\$10,000), whichever is less. Under public works contracts, if a subcontractor is in noncompliance, the City may recover liquidated damages from the prime Contractor in the manner described above. The preceding sentence shall not be construed to prohibit a prime Contractor from recovering the amount of such damage from the non-complying subcontractor.

Article VIII

The Contractor shall include the above provisions of this contract in every subcontract so that such provisions will be binding upon each subcontractor. The Contractor shall take such action with respect to any subcontractor as necessary to enforce such provisions, including sanctions provided for noncompliance.

Article IX

The Contractor shall allow the maximum feasible opportunity to small business enterprises to compete for any subcontracts entered into pursuant to this contract. (In federally funded contracts the terms "DBE, MBE and WBE" shall be substituted for the term "small business" in this Article.)

5. Substance Abuse Prevention Program Required. Prior to commencing work on the Contract, the Contractor, and any Subcontractor, shall have in place a written program for the prevention of substance abuse among its employees as required under Wis. Stat. Sec. 103.503.
6. **Contractor Hiring Practices.**

Ban the Box - Arrest and Criminal Background Checks. (Sec. 39.08, MGO)

This provision applies to all prime contractors on contracts entered into on or after January 1, 2016, and all subcontractors who are required to meet prequalification requirements under MGO 33.07(7)(I), MGO as of the first time they seek or renew pre-qualification status on or after January 1, 2016. The City will monitor compliance of subcontractors through the pre-qualification process.

- a. **Definitions.** For purposes of this section, "Arrest and Conviction Record" includes, but is not limited to, information indicating that a person has been questioned, apprehended, taken into custody or detention, held for investigation, arrested, charged with, indicted or tried for any felony, misdemeanor or other offense pursuant to any law enforcement or military authority.

"Conviction record" includes, but is not limited to, information indicating that a person has been convicted of a felony, misdemeanor or other offense, placed on probation, fined, imprisoned or paroled pursuant to any law enforcement or military authority.

"Background Check" means the process of checking an applicant's arrest and conviction record, through any means.

- b. **Requirements.** For the duration of this Contract, the Contractor shall:
 1. Remove from all job application forms any questions, check boxes, or other inquiries regarding an applicant's arrest and conviction record, as defined herein.

2. Refrain from asking an applicant in any manner about their arrest or conviction record until after conditional offer of employment is made to the applicant in question.
3. Refrain from conducting a formal or informal background check or making any other inquiry using any privately or publicly available means of obtaining the arrest or conviction record of an applicant until after a conditional offer of employment is made to the applicant in question.
4. Make information about this ordinance available to applicants and existing employees, and post notices in prominent locations at the workplace with information about the ordinance and complaint procedure using language provided by the City.
5. Comply with all other provisions of Sec. 39.08, MGO.

c. Exemptions: This section shall not apply when:

1. Hiring for a position where certain convictions or violations are a bar to employment in that position under applicable law, or
2. Hiring a position for which information about criminal or arrest record, or a background check is required by law to be performed at a time or in a manner that would otherwise be prohibited by this ordinance, including a licensed trade or profession where the licensing authority explicitly authorizes or requires the inquiry in question.

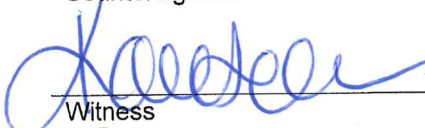
To be exempt, Contractor has the burden of demonstrating that there is an applicable law or regulation that requires the hiring practice in question, if so, the contractor is exempt from all of the requirements of this ordinance for the position(s) in question.


**MCKENNA BOULEVARD FLOOD MITIGATION
CONTRACT NO. 9411**

IN WITNESS WHEREOF, the Contractor has hereunto set his/her hand and seal and the City has caused this contract to be sealed with its corporate seal and to be executed by its Mayor and City Clerk on the dates written below.

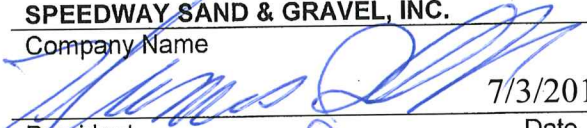
Countersigned:

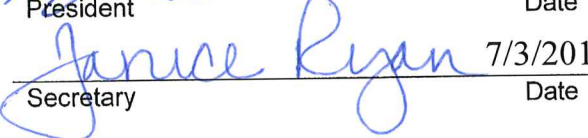
SPEEDWAY SAND & GRAVEL, INC.

 7/3/2019
 Witness Date

 7/3/2019
 Witness Date

SPEEDWAY SAND & GRAVEL, INC.
 Company Name

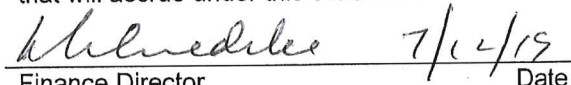
 7/3/2019
 President Date


 7/3/2019
 Secretary Date

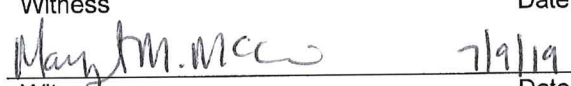
CITY OF MADISON, WISCONSIN

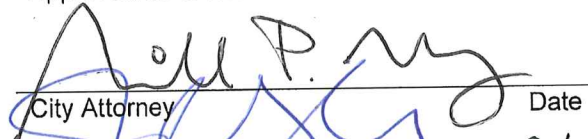
Provisions have been made to pay the liability that will accrue under this contract.


Approved as to form:


 7/14/19
 Finance Director Date

 22 Jul 2019
 Witness Date

 7/9/19
 Witness Date

 Date
 City Attorney

 22 Jul 2019
 Mayor Date

 for 7-9-19
 City Clerk Date

SECTION I: PAYMENT AND PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS, that we SPEEDWAY SAND & GRAVEL, INC. as principal, and Fidelity and Deposit Company of Maryland Company of Schaumburg, IL as surety, are held and firmly bound unto the City of Madison, Wisconsin, in the sum of FIVE MILLION EIGHT HUNDRED SIXTY-SIX THOUSAND TWO HUNDRED TWENTY-SEVEN AND 25/100 (\$5,866,227.25) Dollars, lawful money of the United States, for the payment of which sum to the City of Madison, we hereby bind ourselves and our respective executors and administrators firmly by these presents.

The condition of this Bond is such that if the above bounden shall on his/her part fully and faithfully perform all of the terms of the Contract entered into between him/herself and the City of Madison for the construction of:

**MCKENNA BOULEVARD FLOOD MITIGATION
CONTRACT NO. 9411**

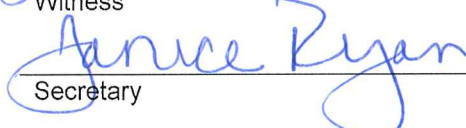
in Madison, Wisconsin, and shall pay all claims for labor performed and material furnished in the prosecution of said work, and save the City harmless from all claims for damages because of negligence in the prosecution of said work, and shall save harmless the said City from all claims for compensation (under Chapter 102, Wisconsin Statutes) of employees and employees of subcontractor, then this Bond is to be void, otherwise of full force, virtue and effect.

Signed and sealed this 3rd day of July, 2019

Countersigned:

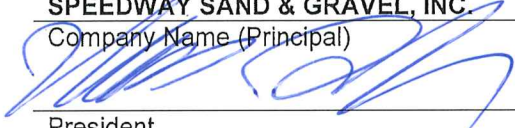


Witness




Secretary

SPEEDWAY SAND & GRAVEL, INC.
Company Name (Principal)



President Seal NA

Approved as to form:



City Attorney

Fidelity and Deposit Company of Maryland
Surety Seal

Salary Employee Commission

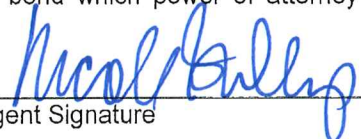
By 

Attorney-in-Fact Nicole Stilling

This certifies that I have been duly licensed as an agent for the above company in Wisconsin under National Producer Number 6966174 for the year 2019, and appointed as attorney-in-fact with authority to execute this payment and performance bond which power of attorney has not been revoked.

July 3, 2019

Date



Agent Signature

**ZURICH AMERICAN INSURANCE COMPANY
COLONIAL AMERICAN CASUALTY AND SURETY COMPANY
FIDELITY AND DEPOSIT COMPANY OF MARYLAND
POWER OF ATTORNEY**

KNOW ALL MEN BY THESE PRESENTS: That the ZURICH AMERICAN INSURANCE COMPANY, a corporation of the State of New York, the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, a corporation of the State of Illinois, and the FIDELITY AND DEPOSIT COMPANY OF MARYLAND a corporation of the State of Illinois (herein collectively called the "Companies"), by **Robert D. Murray, Vice President**, in pursuance of authority granted by Article V, Section 8, of the By-Laws of said Companies, which are set forth on the reverse side hereof and are hereby certified to be in full force and effect on the date hereof, do hereby nominate, constitute, and appoint **Melinda C. BLODGETT, Colby D. WHITE, Jerome T. OUIOMET, Nicole STILLINGS, John E. TAUER, Joshua R. LOFTIS, Kurt C. LUNDBLAD, Ted JORGENSEN, R. C. BOWMAN, and Brian J. OESTREICH, all of Minneapolis, Minnesota, EACH**, its true and lawful agent and Attorney-in-Fact, to make, execute, seal and deliver, for, and on its behalf as surety, and as its act and deed: **any and all bonds and undertakings**, and the execution of such bonds or undertakings in pursuance of these presents, shall be as binding upon said Companies, as fully and amply, to all intents and purposes, as if they had been duly executed and acknowledged by the regularly elected officers of the ZURICH AMERICAN INSURANCE COMPANY at its office in New York, New York., the regularly elected officers of the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY at its office in Owings Mills, Maryland., and the regularly elected officers of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND at its office in Owings Mills, Maryland., in their own proper persons.

The said Vice President does hereby certify that the extract set forth on the reverse side hereof is a true copy of Article V, Section 8, of the By-Laws of said Companies, and is now in force.

IN WITNESS WHEREOF, the said Vice-President has hereunto subscribed his/her names and affixed the Corporate Seals of the said **ZURICH AMERICAN INSURANCE COMPANY, COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, and FIDELITY AND DEPOSIT COMPANY OF MARYLAND**, this 9th day of April, A.D. 2019.



**ATTEST:
ZURICH AMERICAN INSURANCE COMPANY
COLONIAL AMERICAN CASUALTY AND SURETY COMPANY
FIDELITY AND DEPOSIT COMPANY OF MARYLAND**

By: *Robert D. Murray*
Vice President

By: *Dawn E. Brown*
Secretary

**State of Maryland
County of Baltimore**

On this 9th day of April A.D. 2019, before the subscriber, a Notary Public of the State of Maryland, duly commissioned and qualified, **Robert D. Murray, Vice President and Dawn E. Brown, Secretary** of the Companies, to me personally known to be the individuals and officers described in and who executed the preceding instrument, and acknowledged the execution of same, and being by me duly sworn, deposeth and saith, that he/she is the said officer of the Company aforesaid, and that the seals affixed to the preceding instrument are the Corporate Seals of said Companies, and that the said Corporate Seals and the signature as such officer were duly affixed and subscribed to the said instrument by the authority and direction of the said Corporations.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my Official Seal the day and year first above written.



Constance A. Dunn, Notary Public
My Commission Expires: July 9, 2019

EXTRACT FROM BY-LAWS OF THE COMPANIES

"Article V, Section 8, Attorneys-in-Fact. The Chief Executive Officer, the President, or any Executive Vice President or Vice President may, by written instrument under the attested corporate seal, appoint attorneys-in-fact with authority to execute bonds, policies, recognizances, stipulations, undertakings, or other like instruments on behalf of the Company, and may authorize any officer or any such attorney-in-fact to affix the corporate seal thereto; and may with or without cause modify or revoke any such appointment or authority at any time."

CERTIFICATE

I, the undersigned, Secretary of the ZURICH AMERICAN INSURANCE COMPANY, the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, and the FIDELITY AND DEPOSIT COMPANY OF MARYLAND, do hereby certify that the foregoing Power of Attorney is still in full force and effect on the date of this certificate; and I do further certify that Article V, Section 8, of the By-Laws of the Companies is still in force.

This Power of Attorney and Certificate may be signed by facsimile under and by authority of the following resolution of the Board of Directors of the ZURICH AMERICAN INSURANCE COMPANY at a meeting duly called and held on the 15th day of December 1998.

RESOLVED: "That the signature of the President or a Vice President and the attesting signature of a Secretary or an Assistant Secretary and the Seal of the Company may be affixed by facsimile on any Power of Attorney...Any such Power or any certificate thereof bearing such facsimile signature and seal shall be valid and binding on the Company."

This Power of Attorney and Certificate may be signed by facsimile under and by authority of the following resolution of the Board of Directors of the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY at a meeting duly called and held on the 5th day of May, 1994, and the following resolution of the Board of Directors of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND at a meeting duly called and held on the 10th day of May, 1990.

RESOLVED: "That the facsimile or mechanically reproduced seal of the company and facsimile or mechanically reproduced signature of any Vice-President, Secretary, or Assistant Secretary of the Company, whether made heretofore or hereafter, wherever appearing upon a certified copy of any power of attorney issued by the Company, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed the corporate seals of the said Companies, this 3rd day of July, 2019.



Brian M. Hodges

By: Brian M. Hodges
Vice President

TO REPORT A CLAIM WITH REGARD TO A SURETY BOND, PLEASE SUBMIT A COMPLETE DESCRIPTION OF THE CLAIM INCLUDING THE PRINCIPAL ON THE BOND, THE BOND NUMBER, AND YOUR CONTACT INFORMATION TO:

Zurich Surety Claims
1299 Zurich Way
Schaumburg, IL 60196-1056
www.reportsfclaims@zurichna.com
800-626-4577