



Contract Routing Form

ROUTING: Urgent Rush

printed on: 03/29/2021

Contract between: JANKE GENERAL CONTRACTORS INC
and Dept. or Division: Engineering Division
Name/Phone Number:

Project: GARVER PATH & STARKWEATHER DRIVE ASSESSMENT DISTRICT - 2021

Contract No.: 8572
Enactment No.: RES-21-00181
Dollar Amount: 2,619,451.45

File No.: 64347
Enactment Date: 03/22/2021

(Please DATE before routing)

Signatures Required	Date Received	Date Signed
City Clerk		
Director of Civil Rights	3/30/21	3/30/21 MG
Risk Manager	3/31/2021	4/8/2021 REN
Finance Director	4/8/2021	4/15/2021
City Attorney	4/15/21	4/16/21 AK
Mayor	4/16/21	4/16/21 (New. Original)
<i>To Finance for Scanning</i>	4/22/21	4/22/21

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

Original + 2 Copies

03/29/2021 09:25:35 enjls - Chris Petykowski cpetykowski@cityofmadison.com

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



Legislation Details (With Text)

File #: 64347 **Version:** 1 **Name:** Awarding Public Works Contract No. 8572, Garver Path & Starkweather Drive Assessment District - 2021.

Type: Resolution **Status:** Passed

File created: 2/23/2021 **In control:** Engineering Division

On agenda: 3/16/2021 **Final action:** 3/16/2021

Enactment date: 3/22/2021 **Enactment #:** RES-21-00181

Title: Awarding Public Works Contract No. 8572, Garver Path & Starkweather Drive Assessment District - 2021. (6th and 15th AD)

Sponsors: BOARD OF PUBLIC WORKS

Indexes:

Code sections:

Attachments: 1. 8572BidOpeningTab.pdf, 2. 8572 contract.pdf

Date	Ver.	Action By	Action	Result
3/16/2021	1	COMMON COUNCIL	Adopt Under Suspension of Rules 2.04, 2.05, 2.24, and 2.25	Pass
3/3/2021	1	BOARD OF PUBLIC WORKS	RECOMMEND TO COUNCIL TO ADOPT UNDER SUSPENSION OF RULES 2.04, 2.05, 2.24, & 2.25 - REPORT OF OFFICER	Pass
2/23/2021	1	Engineering Division	Refer	

The proposed resolution authorizes awarding the contract for Garver Path & Starkweather Drive Assessment District - 2021 at a total estimated cost of \$2,829,010, including contingency. Funding for the project is available in the Garver Path and Starkweather Drive Projects (Munis 10160 and 12952). No additional appropriation is required.

Awarding Public Works Contract No. 8572, Garver Path & Starkweather Drive Assessment District - 2021. (6th and 15th AD)

BE IT RESOLVED, that 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 and subject to the approval and authorization of Federal Funds by the State of Wisconsin Department of Transportation:**

BE IT FURTHER RESOLVED, that the funds be encumbered to cover the cost of the projects contained herein.

BE IT FURTHER RESOLVED, that the awarding of Contract No. 8572, Garver Path & Starkweather Drive Assessment District - 2021, will be contingent on the approval of a separate resolution by the Common Council to amend the 2021 Capital Budget in order to provide the necessary funding. In the event that the Common Council does not approve the budget amendment, the contract will not be awarded.

BE IT FURTHER RESOLVED, that the Mayor and City Clerk are hereby authorized to execute an amended

agreement with the State of Wisconsin Department of Transportation for construction, construction oversight and cost sharing for the Garver Path project.

See attached document (Contract No. 8572) for itemization of bids.

PROJECT

CONTRACTOR

AMOUNT OF BID

CONTRACT NO. 8572
GARVER PATH & STARKWEATHER DRIVE ASSESSMENT DISTRICT -2021

JANKE GENERAL CONTRACTORS, INC.

\$2,619,451.45

Acct. No. 10160-403-172: 54440 (91226)	\$ 857,201.35
Contingency 8%±	<u>68,578.65</u>
Sub-Total	\$ 925,780.00
Acct. No. 10160-403-174: 54445 (91345)	\$ 46,901.20
Contingency 8%±	<u>3,748.80</u>
Sub-Total	\$ 50,650.00
Acct. No. 10160-403-177: 54435 (91232)	\$ 60,703.75
Contingency 8%±	<u>4,856.25</u>
Sub-Total	\$ 65,560.00
Acct. No. 10160-403-171: 54420 (91313)	\$1,095,121.40
Contingency 8%±	<u>87,608.60</u>
Sub-Total	\$1,182,730.00
Acct. No. 12952-402-170: 54410 (91350)	\$ 178,491.25
Contingency 8%±	<u>14,278.75</u>
Sub-Total	\$ 192,770.00
Acct. No. 12952-402-174: 54445 (91345)	\$ 72,598.00
Contingency 8%±	<u>5,812.00</u>
Sub-Total	\$ 78,410.00
Acct. No. 12952-83-173: 54445 (91345)	\$ 272,042.00
Contingency 8%±	<u>21,768.00</u>
Sub-Total	\$ 293,810.00
Acct. No. 12952-84-174: 54445 (91345)	\$ 36,392.50
Contingency 8%±	<u>2,907.50</u>
Sub-Total	\$ 39,300.00
 GRAND TOTAL	 <u>\$2,829,010.00</u>



Demographics

Company Name: Selective Insurance Company of America
 SBS Company Number: 54218065
 Domicile Type: Foreign
 NAIC Group Number: 242 - SELECTIVE INS GRP
 Merger Flag: No

NAIC CoCode: 12572
 State of Domicile: New Jersey
 Organization Type: Stock

Short Name:
 FEIN: 22-1272390
 Country of Domicile: United States
 Date of Incorporation: 11/26/1925

Address

Business Address
 40 WANTAGE AVE
 BRANCHVILLE, NJ 07890
 United States

Mailing Address
 40 WANTAGE AVE
 BRANCHVILLE, NJ 07890
 United States

Statutory Home Office Address
 40 WANTAGE AVE
 BRANCHVILLE, NJ 07890
 United States

Main Administrative Office Address
 40 WANTAGE AVE
 BRANCHVILLE, NJ 07890
 United States

Phone, Email, Website

Phone

Type	Number
Business Primary Phone	(973) 948-3000

Email

No results found.

Website

No results found.

Company Type

Company Type: Property and Casualty
 Status: Active
 Effective Date: 08/29/1997
 Issue Date: 08/29/1997
 Articles of Incorporation Received: No

Status Reason:
 Legacy State ID: 111031
 Approval Date:
 Article No:

Status Date: 08/29/1997
 Expiration Date:
 File Date:
 COA Number:

Appointments

Show 10 entries

Showing 1 to 8 of 2593 entries

Search: conn

Licensee Name	License Number	NPN	License Type	Line of Authority	Appointment Date	Effective Date	Expiration Date
CONNIE SMITH	16492915	16492915	Intermediary (Agent) Individual	Casualty	03/09/2021	03/09/2021	03/15/2022
THOMAS CONNOR	327573	327573	Intermediary (Agent) Individual	Casualty	03/29/2005	02/23/2021	03/15/2022
CONNIE EASLAND	6504657	6504657	Intermediary (Agent) Individual	Casualty	10/30/2012	02/23/2021	03/15/2022
CONNOR FAUPEL	18660566	18660566	Intermediary (Agent) Individual	Casualty	05/21/2019	02/23/2021	03/15/2022
CONNIE SMITH	16492915	16492915	Intermediary (Agent) Individual	Property	03/09/2021	03/09/2021	03/15/2022
THOMAS CONNOR	327573	327573	Intermediary (Agent) Individual	Property	03/29/2005	02/23/2021	03/15/2022
CONNIE EASLAND	6504657	6504657	Intermediary (Agent) Individual	Property	10/30/2012	02/23/2021	03/15/2022
CONNOR FAUPEL	18660566	18660566	Intermediary (Agent) Individual	Property	05/21/2019	02/23/2021	03/15/2022

First Previous 1 Next Last

Line Of Business

Line of Business	Citation Type	Effective Date
Aircraft	Aircraft	08/29/1997
Automobile	Automobile	08/29/1997
Fidelity Insurance	Fidelity Insurance	08/29/1997
Fire, Inland Marine and Other Property Insurance	Fire, Inland Marine and Other Property Insurance	08/29/1997
Legal Expense Insurance	Legal Expense Insurance	08/29/1997
Liability and Incidental Medical Expense Insurance (other than automobile)	Liability and Incidental Medical Expense Insurance (other than automobile)	08/29/1997
Miscellaneous	Miscellaneous	08/29/1997
Ocean Marine Insurance	Ocean Marine Insurance	08/29/1997
Surety Insurance	Surety Insurance	08/29/1997

Contact

Contact Type	Preferred Name	Name	E-mail	Phone	Address
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\$2,619,451.45
ORIGINAL

BID OF JANKE GENERAL CONTRACTORS, INC.

2021

PROPOSAL, CONTRACT, BOND AND SPECIFICATIONS

FOR

GARVER PATH & STARKWEATHER DRIVE ASSESSMENT DISTRICT-2021

CONTRACT NO. 8572

PROJECT NO. 10160 & 12952

STATE ID 5992-10-41

GARVER PATH (SUGAR AVENUE-MILWAUKEE STREET)

IN

MADISON, DANE COUNTY, WISCONSIN

AWARDED BY THE COMMON COUNCIL
MADISON, WISCONSIN ON MARCH 16, 2021

CITY ENGINEERING DIVISION
1600 EMIL STREET
MADISON, WISCONSIN 53713

<https://bidexpress.com/login>

**THIS PROJECT IS FEDERALLY FUNDED
DBE GOAL 5%**

**GARVER PATH & STARKWEATHER DRIVE ASSESSMENT DISTRICT-2021
CONTRACT NO. 8572**

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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

SECTION A: ADVERTISEMENT FOR BIDS AND INSTRUCTIONS TO BIDDERS

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

**PROJECT NAME: GARVER PATH & STARKWEATHER DRIVE ASSESSMENT
DISTRICT-2021**

CONTRACT NUMBER: 8572

DBE GOAL: 5%

Note: This Project is FEDERALLY FUNDED

Plans and Specifications are available starting January 28, 2021 at <https://bidexpress.com/login>.

Prequalifications: Bidders who have not been prequalified by the City Engineer and Affirmative Action Director must submit their application on or before 2:00 p.m., February 11, 2021. Forms are available on our website at <http://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.

Bidders must be prequalified by the City in at least one of the following Type(s) of Construction: Street Construction (310) or Bridge Construction (501).

The Prime Contractor will perform at least 30 percent of the original contract amount with the contractor's own organization as per Section 108.1.2 of the current edition of the WisDOT Standard Specifications for Highway and Structure Construction.

Submittal: Bidders must submit proposals no later than **2:00 P.M.** local time, **Thursday, February 18, 2021**. Bids to be submitted by hand shall be in a sealed envelope to 1600 Emil Street, Madison, WI 53713. Bids may be submitted online at www.bidexpress.com.

Bids will be opened at **2:30 P.M. on Thursday, February 18, 2021** at 1600 Emil Street, Madison, WI.

Proposal Guaranty: The bidder must submit with its sealed bid a properly executed bid bond or certified check in an amount equal to five percent (5%) of the total bid or certificate of Annual Bid Bond. In case the successful bidder fails to submit an executed contract and payment and performance bond, the amount of the bid bond shall be forfeited to the City as liquidated damages.

Hours of Labor and Minimum Wage Rate: Pursuant to regulations provided by applicable federal and/or state Laws, the hours of labor and minimum wage rates are set forth in the bidding proposals.

Disadvantaged Business Enterprise (DBE): It is the policy for this project that disadvantaged business enterprises, as defined by 49 CFR Part 23, shall have the maximum opportunity to participate in the performance of this contract. This project has an assigned goal of 5% Disadvantaged Business Enterprise (DBE). Bidders must demonstrate a good faith effort to meet this goal.

Affirmative Action: The City will affirmatively insure that disadvantaged business enterprises will be afforded full opportunity to submit bids in response to this invitation, and they will not be discriminated against on the grounds of race, color, sex, or national origin in consideration for an award.

Affidavit of Non-Collusion: This project requires that an affidavit of non-collusion be incorporated as part of the proposal requirements provided to each prospective bidder. Failure to complete the sworn statement will make the bid non-responsive and not eligible for award considerations.

Bid Rejection: The City of Madison reserves the right to reject any or all bids, to waive irregularities, or to accept such bids, as in the opinion of the City of Madison, will be in its best interest.

General Construction: Construction of Garver Path from Sugar Avenue to Milwaukee Street, City of Madison, State project number is 5992-10-41 (City project number is 10160) and Starkweather Drive Assessment District – 2021 (City project number 12952). The project includes constructing a paved shared use path, three prefabricated pedestrian bridges, and roadway reconstruction of a portion of Starkweather Drive.

For further information contact Chris Petykowski (608) 267-8678.

Contract Completion Date: June 1, 2022

Wisconsin State Journal: January 28, February 4 & 11, 2021

INSTRUCTIONS TO BIDDERS

DBE PRE BID MEETING: DBE Pre-Bid Meetings are not being held in person at this time. Contractors can schedule one-on-one phone calls with Juan Pablo Torres Meza in Affirmative Action to count towards good faith efforts. Juan Pablo can be reached at 608-261-9162 or by email, jtorresmeza@cityofmdison.com.

BID SUBMITAL AND OPENING

The process for submission of bids has not changed. Bids may be submitted on line through Bid Express or in person at 1600 Emil St. Please note that the doors at 1600 Emil St. are locked, but there is a sign with phone numbers on the door. Please call one of the numbers and staff will come to the door to get your bid. Until further notice, the bid openings will be closed to the public to support the guidance of social distancing as the City responds to responsively to COVID-19 impacts to services. The bids will be posted on line after the bid opening. If you have any questions, please call Alane Boutelle at 608-267-1197, or John Fahrney at 608-266-9091.

STANDARD SPECIFICATIONS

The City of Madison's Standard Specifications for Public Works Construction - 2020 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.

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).

ADDITIONAL SPECIAL PROVISION 3

DISADVANTAGED BUSINESS ENTERPRISE (DBE) PROGRAM IMPLEMENTATION

Authority

Wisconsin Department of Transportation (WisDOT) is a recipient of funds from the US Department of Transportation's Federal Highway Administration. The DBE program is a federal program applicable on all contracts administered by WisDOT that include federal-aid highway funds. The authority for the DBE program is the Transportation Bill as approved by Congress periodically. DBE program guidance and requirements are outlined in the Code of Federal Regulations at 49 CFR Part 26. This contract is subject to DBE provisions because it is financed with federal-aid-highway funds. Additionally, this contract is subject to the *State of Wisconsin Standard Specifications for Highway and Structure Construction* and all applicable contract documents.

Requirements

Pursuant to the federal DBE program regulation at 49 CFR Part 26, a contractor's failure to comply with any provision of the DBE program regulatory provisions will be considered a material breach of contract. This is nonnegotiable.

If a contractor fails to carry out the DBE program requirements and/or the Required Contract Provisions for Federal Aid Contracts (FHWA 1273) referenced in this document, sanctions will be assessed depending upon the facts, reasoning, severity, and remedial efforts of the contractor that may include: termination of contract, withholding payment, assessment of monetary sanctions, and/or suspension/debarment proceedings that could result in the disqualification of the contractor from bidding for a designated period of time.

- (1) At time of bid, ALL prime contractors must submit Form DT1506 (Commitment to Subcontract to DBE), and quotes from all DBEs included on the Commitment. Signed Attachments A from DBEs included on the Commitment must be submitted to the DBE Alert email box within 24-hours of the bid closing. If the assigned DBE contract goal is not met, Form DT1202 (Documentation of Good Faith Effort) is due at time of bid. Supplemental DT1202 documentation is due within 24-hours of bid closing submitted to the DBE Alert email box. Any change to DBE commitments thereafter must follow Modification of DBE Subcontracting Commitment (Section 9).
- (2) The Department requires this list of DBE subcontractors from all bidders at time of bid to ensure the lowest possible cost to taxpayers and fairness to other bidders and subcontractors. Bid Shopping is prohibited.
- (3) The contractor must utilize the specific DBE firms listed on the approved Form, DT1506, to perform the work and/or supply the materials for which the DBE firm is listed unless the contractor obtains written consent from WisDOT. The contractor will not be entitled to payment for any work or materials on the approved DT1506 that is not performed or supplied by the listed DBE without WisDOT's written consent.

Description

The Wisconsin Department of Transportation is committed to the compliant administration of the DBE Program. The DBE provisions work in tandem with FHWA 1273 and WisDOT's Standard Specifications and Construction Materials Manual. The WisDOT Secretary is signatory to assurances of department-wide compliance.

The Department assigns the contract DBE goal as a percentage of work items that could be performed by certified DBE firms on the contract. The assigned DBE goal is expressed on the bid proposal as a percentage applicable to the total contract bid amount.

- (1) WisDOT identifies the assigned DBE goal in its contract advertisements and posts the contract DBE goal on the cover of the bidding proposal. The contractor can meet the assigned contract DBE goal by subcontracting work to a DBE firm or by procuring services or materials from a DBE firm.
- (2) Under the contract, the prime contractor should inform, advise, and develop participating DBE firms to be more knowledgeable contractors who are prepared to successfully complete their contractual agreement through the proactive provision of assistance in the following areas:
 - Produce accurate and complete quotes
 - Understand highway plans applicable to their work
 - Understand specifications and contract requirements applicable to their work
 - Understand contracting reporting requirements
- (3) The Department encourages contractors to assist DBE subcontractors more formally by participating in WisDOT's Business Development program as a mentor, coach, or resource. For comprehensive information on the Disadvantaged Business Enterprise Program, visit the Department's Civil Rights and Compliance Section website at: <http://wisconsindot.gov/Pages/doing-bus/civil-rights/dbe/default.aspx>

1. Definitions

Interpret these terms, used throughout this additional special provision, as follows:

- a. **Assigned DBE Contract Goal:** The percentage shown on the cover of the Highway Work Proposal that represents the feasible level of DBE participation for each contract. The goal is calculated using the Engineer's Estimate and DBE Interest Report. Goal assignment includes review of FHWA funds, analyzes bid items for subcontract opportunity and compatibility with DBE certified firm work codes. Additional factors considered include proximity, proportion, and regulations.
- b. **Bid Shopping:** In construction law, bid shopping is the practice of divulging a subcontractor's bid to another prospective contractor(s) before or after the award of a contract to secure a lower bid.
- c. **DBE:** Disadvantaged Business Enterprise- for-profit small business concern where socially and economically disadvantaged individuals own at least a 51% interest and control management and daily business operations.
- d. **DBE Commitment:** The DBE Commitment is identified in the Commitment to Subcontract to DBE (Form DT1506) and is expressed as the amount of DBE participation the prime contractor has secured. The DT1506, a contract document completed by the bidder, is required to be considered a responsive bidder on an FHWA-funded contract that has an assigned DBE goal.
- e. **DBE Utilization:** The actual participation of a DBE subcontractor on a project. WisDOT verifies DBE utilization through review of Form DT1506, payments to subcontractors, and contract documentation. The Prime Contractor receives DBE credit for payments made to the DBE firms performing the work listed on the approved Form DT1506, and those submitted after approved commitment with Attachment A.
- f. **Good Faith Effort:** Legal term describing a diligent and honest effort taken by a reasonable person under the same set of facts or circumstances. For DBE subcontracting, the bidder must show that it took all necessary and reasonable steps to achieve the assigned DBE goal by the scope, intensity, and appropriateness of effort that could reasonably be expected for a contractor to obtain sufficient DBE participation.
- g. **Manufacturer:** A firm that operates or maintains a factory or establishment that produces, on the premises, the materials, supplies, articles, or equipment required under the contract.

- h. **Reasonable Price:** Contractors are expected to assess reasonable price by analyzing the contract scope for DBE subcontract feasibility and comparing common line items in DBE and non-DBE subcontract quotes for the same work. Per federal regulation, reasonable price is not necessarily the lowest price.
- i. **Supplier:** A firm that owns, operates, or maintains a store, warehouse, or other establishment in which the materials, supplies, articles, or equipment required under the contract are bought, kept in stock, and regularly sold or leased to the public.
- j. **Tied quote:** Subcontractor quote that groups multiple bid/line items at a bundled/package price with a notation that the items within the quote will not be separated.

2. WisDOT DBE Program Compliance

a. Documentation Submittal

The Commitment to Subcontract to DBE (Form DT1506) and quotes from all DBEs included on the Commitment will be submitted at bid by ALL prime contractors. If the assigned DBE contract goal is not met, Documentation of Good Faith Effort (Form DT1202) is due at time of bid. Supplemental DT1202 documentation and signed Attachments A from DBEs included on Form DT1506 are due within 24-hours of bid closing, submitted to the DBE Alert email box.

Naming conventions: When emailing files, use the following language to identify your submission- "Project #, Proposal #, Let date, Business Name, GFE" and "Project #, Proposal #, Let date, Business Name, Attachment A" Email: DBE_Alert@dot.wi.gov

The DBE Office will not certify Good Faith Effort and the Bureau of Project Development will consider the bid nonresponsive if the contractor fails to furnish the Form DT1506, Attachments A, and Form DT1202 if applicable, as required. See sample forms in the Appendix.

b. Verification of DBE Commitment

The documentation related to DBE subcontract commitment submitted prior to contract award is evaluated as follows:

(1) DBE Goal Met

If the bidder indicates that the contract DBE goal is met, the Department will evaluate Form DT1506 and Attachments A to verify the actual DBE percentage calculation. If the DBE commitment is verified, the contract is eligible for award with respect to the DBE commitment.

(2) DBE Goal Not Met

- a) If the bidder indicates a bid percentage on Form DT1506 that does not meet the assigned DBE contract goal, the bidder must request alternative evaluation of good faith effort through submission of Form DT1202 (Documentation of Good Faith Effort) at the time of bid including narrative description. Supplementary documentation of good faith effort that supports the DT1202 submission is due within 24-hours of bid submission and prior to bid posting. The Department will review the bidder's DBE commitment and evaluate the bidder's good faith efforts submission.
- b) Following evaluation of the bidder's Good Faith Effort documentation the bidder will be notified that the Department intends to:
 1. *Approve* the request (adequate documentation of GFE has been submitted)- no conditions placed on the contract with respect to the DBE commitment;

2. *Deny* the request (inadequate documentation of GFE has been submitted)- the contract is viewed as non-responsive per Wisconsin Standard Specifications for Highway and Structure Construction and will not be executed.
- c) If the Department denies the bidder's request, the contract is ineligible for award. The Department will provide a written explanation for denying the request to the bidder. The bidder may appeal the Department's denial (see Section 4).

Supplemental good faith effort documentation must be submitted to the DBE Office by email at: DBE_Alert@dot.wi.gov. Email naming convention: "Project #, Proposal #, Let date, Business Name, GFE"

3. Department's Criteria for Good Faith Effort Documentation

The Federal-aid Construction Contract Provision, referenced as FHWA-1273, explicitly states that the prime contractor shall be responsible for all work performed on the contract by piecework, station work, or subcontract. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of the contract including assurances of equal employment opportunity laws, DBE regulations, and affirmative action. Compliance encompasses responsible and responsive action, documentation, and good faith effort.

Contractually, all contractors, subcontractors, and service providers on the contract are bound by FHWA 1273 and DBE program provisions. **Prime contractors should encourage subcontractors to utilize DBE firms whenever possible to contribute to the assigned DBE contract goal.**

Bidders are required to document good faith effort. Per 49 CFR Part 26.53, good faith effort is demonstrated in one of two ways. The bidder:

- (1) Documents that it has obtained enough DBE participation to meet the goal; OR
- (2) Documents that it made adequate good faith efforts to meet the goal, even though it did not succeed

Appendix A of 49 CFR Part 26 provides guidance concerning good faith efforts. WisDOT evaluates good faith effort on a contract basis just as each contract award is evaluated individually.

The efforts employed by the bidder should be those that WisDOT can reasonably expect a bidder to take to actively and aggressively obtain DBE participation sufficient to meet the DBE contract goal. The Department will only approve demonstration of good faith effort if the bidder documents the quality, quantity, and intensity of the variety of activities undertaken that are commensurate with expected efforts to meet the stated goal.

The Department, in conjunction with industry stakeholders, has developed the following guidance for contractor good faith effort activity. The guidance and the attached appendices provide a framework for the actions required by all parties in the processing and evaluation of bidder's total efforts to achieve the project specific DBE goal prior to the bid letting date.

a. Solicitation guidance for Prime Contractors:

- (1) Document all efforts and decisions made toward achieving the DBE goal on the contract. The bidder should use WisDOT-approved DBE outreach tools, including the UCP DBE Directory and the Bid Express Small Business Network to foster DBE participation on all applicable contracts.
- (2) As needed, request assistance with DBE outreach and follow-up by contacting the Department's DBE Support Services Office by phone or email request at least 14 days prior to the bid letting date. Phone numbers are (414) 438-4584 and/or (608) 267-3849; Fax: (414) 438-5392; E-mail: DBE_Alert@dot.wi.gov
- (3) Participate in and document a substantive conversation with at least one DBE firm per Let, to discuss questions, concerns, and any other contract related matters that may be applicable to the DBE firm. Guidelines for this conversation are provided in Appendix A of ASP-3.

- (4) Request quotes by identifying potential items to subcontract and solicit. In their initial contacts, contractors are strongly encouraged to include a single page, detailed list of items for which they are accepting quotes, by project, within a letting. See attached sample entitled "Sample Contractor Solicitation Letter" in Appendix B. Prime contractors should also indicate a willingness to accept quotes in areas they are planning to perform themselves, as required by federal rules. In some cases, it might be appropriate to use DBE firms to do work in a prime contractor's area of specialization.
 - i. Solicit quotes from certified DBE firms who match possible items to subcontract using all reasonable and available means. Additionally, forward copies of solicitations highlighting the work areas for which quotes are being sought to DBE_Alert@dot.wi.gov
 - ii. Acceptable outreach tools include SBN (Small Business Network, see Appendix C): <https://www.bidx.com/wi/main>, postal mail, email, fax, and phone.
 - a. Contractors must ask DBE firms for a response in their solicitations. See *Sample Contractor Solicitation Letter*, Appendix B. This letter may be included as an attachment to the sub-quoted request.
 - b. Solicit quotes at least 10 calendar days prior to the letting date to allow DBE firms sufficient time to respond. Prime contractors should contact DBE firms early, asking if they need help organizing their quote, assistance confirming equipment needs, or other assistance supporting their submission of a competitive quote for their services.
 - c. A follow up solicitation should take place within 5 calendar days of the letting date. Email and/or SBN are the preferred method for the solicitation.
 - iii. Upon request, provide interested DBE firms with adequate information about plans, specifications, and the requirements of the contract by letter, information session, email, phone call, and/or referral.
 - iv. When potential exists, the contractor should advise interested DBE firms on how to obtain bonding, line of credit, or insurance if requested.
 - v. Document DBE firm's interest in quoting by taking appropriate steps to follow up initial solicitation with:
 - a. Email to all prospective DBE firms in relevant work areas
 - b. Phone call log to DBE firms who express interest via written response or call
 - c. Fax/letter confirmation
 - d. Signed copy of record of subcontractor outreach effort
- b. Guidance for Evaluating DBE quotes
 - (1) Quote evaluation practices required to evaluate DBE quotes:
 - i. Reasonable Price: Contractors are expected to assess reasonable price by analyzing the contract scope for DBE subcontract feasibility and comparing common line items in DBE and non-DBE subcontract quotes for the same work. Per federal regulation, reasonable price is not necessarily the lowest price. See 49 CFR Part 26, Appendix A. IV.D(2).
 - (2) Documentation submitted by the prime of the following evaluation is required to evaluate DBE quotes by contractors:
 - i. Evaluation of DBE firm's ability to perform "possible items to subcontract" using legitimate reasons, including but not limited to, **a discussion** between the prime and DBE firm regarding its capabilities prior to the bid letting. If lack of capacity is the reason for not utilizing the DBE firm's quote, the prime is required to contact the DBE by phone and email regarding their ability to perform the work indicated in the UCP directory listed as their work area by NAICS code. Only the work area indicated by the NAICS code(s) listed in the UCP directory can be counted toward DBE credit. Documentation of the conversation is required.
 - a. In striving to meet an assigned DBE contract goal, contractors are expected to use DBE quotes that are responsive and reasonable. This includes DBE quotes that are not the low quote.
 - b. Additional evaluation - Evaluation of DBE quotes with tied bid items. Typically, this type of quoting represents a cost saving but is not clearly stated as a discount. Tied quotes

are usually presented as an 'all or none' quote. When non-DBE subcontractors submit tied bid items in their quotes, the DBE firm's quote may not appear competitive. In such a case, the following steps are taken in comparing the relevant quotes. These are qualitative examples:

- i Compare bid items common to both quotes, noting the reasonableness in the price comparison.
- ii Review quotes from other firms for the bid items not quoted by the DBE firm to see if combining both can provide the same competitive advantage that the tied bid items offered.

See Appendix D – *Good Faith Effort Evaluation Measures* and Appendix E - *Good Faith Effort Best Practices*.

- c. Requesting Good Faith Effort Evaluation: At the time of bid- if the DBE goal is not met in full, the prime contractor must request alternative Good Faith Effort Evaluation using form DT1202- Documentation of Good Faith Effort. Supplementary documentation of good faith effort that supports the DT1202 submission is due within 24-hours of bid submission and prior to bid posting. Supporting documentation for the DT1202 is to include the following:
- (1) Solicitation Documentation: The names, addresses, email addresses, and telephone numbers of DBE firms contacted along with the dates of both initial and follow-up contact; electronic copies of all written solicitations to DBE firms. A printed copy of SBN solicitation is acceptable.
 - (2) Selected Work Items Documentation: Identify economically feasible work units to be performed by DBEs to include activities such as: list of work items to be performed; breaking up of large work items into smaller tasks or quantities; flexible time frames for performance and delivery schedules.
 - (3) Documentation of Project Information provided to interested DBEs: A description of information provided to the DBE firms regarding the plans, specifications, and estimated quantities for portions of the work to be performed by that DBE firm.
 - (4) Documentation of Negotiation with Interested DBEs: Provide sufficient evidence to demonstrate that good faith negotiations took place. Merely sending out solicitations requesting bids from DBEs does not constitute sufficient good faith efforts.
 - (5) Documentation of Sound Reasoning for Rejecting DBEs and copies of each quote received from a DBE firm and, if rejected, copies of quotes from non-DBEs for same items.
 - (6) Documentation of Assistance to Interested DBEs- Bonding, Credit, Insurance, Equipment, Supplies/Materials
 - (7) Documentation of outreach to Minority, Women, and Community Organizations and other DBE Business Development Support: Contact organizations and agencies for assistance in contacting, recruiting, and providing support to DBE subcontractors, suppliers, manufacturers, and truckers at least 14 days before bid opening. Participate in or host activities such as networking events, mentor-protégé programs, small business development workshops, and others consistent with DBE support.

Naming conventions: When emailing files, use the following language to identify your submission- "Project #, Proposal #, Let date, Business Name, GFE" Email: DBE_Alert@dot.wi.gov

If the Good Faith Effort documentation is deemed adequate, the request will be approved and the DBE office will promptly notify the Prime Contractor and Bureau of Project Development.

If the DBE Office denies the request, the Prime Contractor will receive written correspondence outlining the reasons. The Department encourages the Prime Contractor to communicate with DBE staff to clarify any questions related to meeting goals and/or contractor demonstration of good faith efforts.

If the contract is awarded, the Prime Contractor must obtain written consent from the DBE Office to change or replace any DBE firm listed on the approved Form DT1506. No contractor, prime or subsequent tier, shall be

paid for completing work assigned to a DBE subcontractor on an approved DT1506 unless WisDOT has granted permission for the reduction, replacement, or termination of the assigned DBE in writing. If a prime contractor or a subcontractor on any tier uses its own forces to perform work assigned to a DBE on an approved DBE commitment, **they will not be paid for the work**. Any changes to DBE commitment after the approval of Form DT1506 must be reviewed and approved by the DBE Office prior to the change (see Section 9).

4. Bidder's Documentation of Good Faith Effort Evaluation Request Appeal Process

A bidder can appeal the Department's decision to deny the bidder's demonstration of Good Faith Effort through Administrative Reconsideration. The bidder must provide a written justification refuting the specific reasons for denial as stated in the Department's denial notice. The bidder may meet in person with the Department if so requested. Failure to appeal within 5 business days after receiving the Department's written notice denying the request constitutes a forfeiture of the bidder's right of appeal. Receipt of appeal is confirmed by email date stamp or certified mail signed by WisDOT staff. A contract will not be executed without documentation that the DBE provisions have been fulfilled.

The Department will appoint a representative who did not participate in the original good faith effort determination, to assess the bidder's appeal. The Department will issue a written decision within 5 business days after the bidder presents all written and oral information. In that written decision, the Department will explain the basis for finding that the bidder did or did not demonstrate an adequate good faith effort to meet the contract DBE goal. The Department's decision is final.

5. Determining DBE Eligibility

Directory of DBE firms

- a. The only resource for DBE firms certified in the State of Wisconsin is the Wisconsin Unified Certification Program (UCP) DBE Directory. WisDOT maintains a current list of certified DBE firms at: <http://wisconsindot.gov/Documents/doing-bus/civil-rights/dbe/dbe-ucp-directory.xlsx>
- b. The DBE Program office is available to assist with contracting DBE firms:(608) 267-3849.
- c. DBE firms are certified based on various factors including the federal standards from the Small Business Administration that assigns a North American Industrial Classification (NAICS) Codes. DBE firms are only eligible for credit when performing work in their assigned NAICS code(s). If a DBE subcontractor performs work that is not with its assigned NAICS code, the prime contractor should contact the DBE Office to inquire about compatibility with the Business Development Program.

6. Counting DBE Participation

Assessing DBE Work

The Department will only count the DBE usage towards the contract DBE goal if the DBE firm is certified as a DBE by one of the UCP agencies. The Department only counts the value of the work a DBE actually performs towards the DBE goal. The Department assesses the DBE work as follows:

- a. The Department counts work performed by the DBE firm's own resources. The Department includes the cost of materials and supplies the DBE firm obtains for the work. The Department also includes the cost of equipment the DBE firm leases for the work. The Department will not include the cost of materials, supplies, or equipment the DBE firm purchases or leases from the prime contractor or its affiliate, with the exception of non-project specific leases the DBE has in place before the work is advertised.

- b. The Department counts fees and commissions the DBE subcontractor charges for providing bona fide professional, technical, consultant, or managerial services. The Department also counts fees and commissions the DBE charges for providing bonds or insurance. The Department will only count costs the program engineer deems reasonable based on experience or prevailing market rates.
- c. If a DBE firm subcontracts work, the Department counts the value of the work subcontracted to a DBE subcontractor.
- d. The contractor will maintain records and may be required to furnish periodic reports documenting its performance under this item.
- e. It is the Prime Contractor's responsibility to determine whether the work that is committed and/or contracted to a DBE firm can be counted for DBE credit by referencing the work type and NAICS code listed for the DBE firm on the Wisconsin UCP DBE Directory.
- f. It is the Prime Contractor's responsibility to assess the DBE firm's ability to perform the work for which it is committing/contracting the DBE to do. Note that the Department encourages the Prime Contractor to assist and develop DBE firms to become fully knowledgeable contractors to successfully perform on its contracts.
- g. The Prime Contractor will inform the DBE office via email of all DBE subcontractors added to the project following execution of the contract. The Prime Contractor may omit submission of another form DT1506, but must submit signed Attachment A forms for additional DBE firms.
- h. See Section 7 for DBE credit evaluation for Trucking and Section 8 for DBE credit evaluation for Manufacturers, Suppliers, and Brokers

Naming conventions: When emailing files, please use the following language to identify your submission-
 "Project #, Proposal #, Let date, Business Name, Attachment A" Email: DBE_Alert@dot.wi.gov

*Note: A sublet request is required for DBE work, regardless of subcontract tier, and also for reporting materials or supplies furnished by a DBE.

- Sublet Requests via form DT1925 or WS1925 are required for 1st Tier DBEs
- For all 2nd Tier and below notification of DBE sublet is indicated by the contractor entering them in CRCS

7. Credit Evaluation for Trucking

All bidders are expected to adhere to the Department's current trucking policy posted on the HCCI website at: <http://wisconsindot.gov/Documents/doing-bus/civil-rights/dbe/trucking-utilization-policy.pdf>

The prime contractor is responsible for ensuring that all subcontractors including trucking firms, receive Form FHWA 1273: <https://www.fhwa.dot.gov/programadmin/contracts/1273/1273.pdf>

See Section 8 for Broker credit.

8. Credit Evaluation for Manufacturers, Suppliers, Brokers

The Department will calculate the amount of DBE credit awarded to a prime using a DBE firm for the provisions of materials and supplies on a contract-by-contract basis. The Department will count the material and supplies that a DBE firm provides under the contract for DBE credit based on whether the DBE firm is a manufacturer,

supplier, or broker. Generally, DBE credit is determined through evaluation of the DBE owner's role, responsibility, and contribution to the transaction. Maximum DBE credit is awarded when the DBE firm manufactures materials or supplies. DBE credit decreases when the DBE firm solely supplies materials, and minimal credit is allotted when the DBE firm's role is administrative or transactional. It is the bidder's responsibility to confirm that the DBE firm is considered a supplier or a manufacturer before listing them on Commitment to Subcontract to DBE form DT1506.

a. Manufacturers

- (1) A manufacturer is a firm that operates or maintains a factory or establishment that produces, on the premises, the materials, supplies, articles, or equipment required under the contract and of the general character described by the specifications.
- (2) If the materials or supplies are obtained from a DBE manufacturer, **100%** percent of the cost of the materials or supplies counts toward DBE goals.

b. Regular Dealers of Material and/or Supplies

- (1) Supplies purchased in bulk from DBE firms at the beginning of the season may be credited to current contracts if submitted with appropriate documentation to the DBE office.
- (2) A regular dealer is a firm that owns, operates, or maintains a store, warehouse, or other establishment in which the materials, supplies, articles or equipment of the general character described by the specifications and required under the contract are bought, kept in stock, and regularly sold or leased to the public in the usual course of business.
- (3) If the materials or supplies are purchased from a DBE regular dealer, count **60%** percent of the cost of the materials or supplies toward DBE goals.
- (4) At a minimum, a regular dealer must meet the following criteria to be counted for DBE credit:
 - i. The DBE firm must be an established, regular business that engages, as its principal business and under its own name, in the purchase and sale or lease of the products in question.
 - ii. The DBE firm must both own and operate distribution equipment for the product--bulk items such as petroleum products, steel, cement, gravel, stone, or asphalt. If some of the distribution equipment is leased, the lease agreement must accompany the DBE Commitment form for evaluation of the dealer's control before the DBE office approves the DBE credit.
- (5) When DBE suppliers are contracted, additional documentation must accompany form DT1506 and Attachment A forms. An invoice or bill-of-sale that includes names of the bidder and the DBE supplier, along with documentation of the calculations used as the basis for the purchase agreement, subcontract, or invoice. WisDOT recognizes that the amount on the Attachment A form may be more or less than the amount on the invoice per b.(1) above.
 - i. The bidder should respond to the following questions and include with submission of form DT1506:
 - a. What is the product or material?
 - b. Is this item in the prime's inventory or was the item purchased when contract was awarded?
 - c. Which contract line items were referenced to develop this quote?
 - d. What is the amount of material or product used on the project?

c. Brokers, Transaction Expeditors, Packagers, Manufacturers' Representatives

- (1) No portion of the cost of the materials, supplies, services themselves will count for DBE credit. However, WisDOT will evaluate the fees or commissions charged when a prime purchases materials, supplies, or services from a DBE certified firm which is neither a manufacturer nor a regular dealer, namely: brokers, packagers, manufacturers' representatives, or other persons who arrange or expedite transactions.
- (2) Brokerage fees are calculated as **10%** of the purchase amount.
- (3) WisDOT may count the amount of fees or commissions charged for assistance in the procurement of the materials and supplies, fees, or transportation charges for the delivery of materials or supplies required on a job site.

- (4) Evaluation of DBE credit includes review of the contract need for the item/service, the sub-contract or invoice for the item/service, and a comparison of the fees customarily allowed for similar services to determine whether they are reasonable.

9. DBE Commitment Modification Policy (Formerly “DBE Replacement Policy”)

A. Issuing a Contract Change Order

Any changes or modifications to the contract once executed are considered contract modifications and as such require a change order. In addition, the DBE office must provide consent for reduction, termination, or replacement of subcontractors approved on the DT1506 *in advance* of the modification for the prime contractor to receive payment for work or supplies. Additions to the DBE commitment do not require advance notification of the DBE office. (see D below)

Contractor Considerations

1. A prime contractor cannot modify the DBE commitment through reduction in participation, termination, or replacement of a DBE subcontractor listed on the approved DT1506 without prior written consent from the DBE Office. This includes, but is not limited to, instances in which a prime contractor seeks to perform work originally designated for a DBE subcontractor with its own forces or those of an affiliate, a non-DBE firm, or with another DBE firm.
2. If a prime contractor reduces participation, replaces, or terminates a DBE subcontractor who has been approved for DBE credit toward its contract, the prime is required to provide documentation supporting its inability to fulfill the contractual commitment made to the Department regarding the DBE utilization.
3. The Prime Contractor is required to demonstrate efforts to find another DBE subcontractor to perform at least the same amount of work under the contract as the DBE subcontractor that was terminated, to the extent needed to meet the assigned DBE contract goal.
4. When additional opportunity is available by contract modifications, the Prime Contractor must utilize DBE subcontractors that were committed to equal work items, in the original contract.
5. In circumstances when a DBE subcontractor fails to complete its work on the contract for any reason, or is terminated from a contract, the Prime Contractor must undertake efforts to maintain its commitment to the assigned DBE goal.
6. The DBE subcontractor should communicate with the Prime Contractor regarding its schedule and capacity in the context of the contract. If the DBE firm anticipates that it cannot fulfill its subcontract, they will advise the Prime Contractor and suggest a DBE subcontractor that may replace their services and provide written consent to be released from its subcontract.
 - (a) Before the Prime Contractor can request modification to the approved DT1506, the Prime Contractor must:
 - i. Make every effort to fulfill the DBE commitment by working with the listed DBE subcontractor to ensure that the firm is fully knowledgeable of the Prime Contractor’s expectations for successful performance on the contract. Document these efforts in writing.
 - ii. If those efforts fail, provide written notice to the DBE subcontractor of the Prime Contractor’s intent to request to modify the commitment through reduction in participation, termination, and/or replacement of the subcontractor including the reason(s) for pursuing this action.
 - iii. Copy the DBE Office on all correspondence related to changing a DBE subcontractor who has been approved for DBE credit on a contract, including preparation and coordination efforts.

- iv. Clearly state the amount of time the DBE firm has to remedy and/or respond to the notice of intent to replace/terminate. The DBE must be allowed five days from the date notice was received as indicated by email time stamp or signed certified mail, to respond, in writing. **EXCEPTION:** The Prime Contractor must provide a verifiable reason for a response period shorter than five days. For example, a WisDOT project engineer or project manager confirms that WisDOT has eliminated an item the DBE subcontractor was contracted for.
- v. The DBE subcontractor must acknowledge the contract modification with written response to the Prime Contractor and the DBE Office. If objecting to the subcontract modification, the DBE subcontractor must outline the basis for objection to the proposed modification, providing sound reasoning for WisDOT to reject the prime's request.

B. Request to Modify DBE Subcontracting Commitment

The written request referenced above may be delivered by email or fax. The request must contain the following:

1. Project ID number
2. WisDOT Contract Project Engineer's name and contact information
3. DBE subcontractor name and work type and/or NAICS code
4. Contract's progress schedule
5. Reason(s) for requesting that the DBE subcontractor be replaced or terminated
6. Attach/include all communication with the DBE subcontractor to deploy/address/resolve work completion

Naming conventions: When emailing files, please use the following language to identify your submission- "Project #, Proposal #, Let date, Business Name, MODIFICATION" Email: DBE_Alert@dot.wi.gov + Project Engineer

WisDOT will review the request and any supporting documentation submitted to evaluate if the circumstance and the reasons constitute good cause for replacing or terminating the approved DBE subcontractor.

Good Causes to Replace a DBE subcontractor according to the federal DBE program guidelines {49 CFR part 26.53}

- The listed DBE subcontractor fails or refuses to execute a written contract
- The listed DBE subcontractor fails or refuses to perform the work of its subcontract in a way consistent with normal industry standards. Provided, however, that good cause does not exist if the failure or refusal of the DBE subcontractor to perform its work on the subcontract results from the bad faith or discriminatory action of the prime contractor
- The listed DBE subcontractor fails or refuses to meet the prime contractor's reasonable, nondiscriminatory bond requirements
- The listed DBE subcontractor becomes bankrupt, insolvent, or exhibits credit unworthiness
- The listed DBE subcontractor is ineligible to work on public works projects because of suspension and debarment proceedings pursuant 2 CFR Parts 180, 215, and 1,200 or applicable state law
- The prime has determined that the listed DBE subcontractor is not a responsible contractor
- The listed DBE subcontractor voluntarily withdraws from the project and provides written notice of its withdrawal
- The listed DBE subcontractor is ineligible to receive DBE credit for the type of work required
- A DBE firm owner dies or becomes disabled with the result that the listed DBE subcontractor is unable to complete its work on the contract

C. Evaluation and Response to the Request

WisDOT's timely response to the Prime Contractor's request for modification of the approved DBE subcontracting commitment will be provided to the prime and the WisDOT project engineer via email.

If WisDOT determines that the Prime Contractor's basis for reduction in participation, replacement, or termination of the DBE subcontractor is not consistent with the good cause guidelines, the DBE office will provide a response via email within 48-hours of receipt of request from the Prime Contractor as indicated by email time stamp. The communication will include: the requirement to utilize the committed DBE, actions to support the completion of the contractual commitment, a list of available WisDOT support services, and administrative remedies, including withholding payment to the prime, that may be invoked for failure to comply with federal DBE guidelines for DBE replacement.

The WisDOT contact for all actions related to modification of the approved Form DT1506 is the DBE Program Engineer who can be reached at DBE_Alert@dot.wi.gov or (608) 264-9528.

D. DBE Utilization beyond the approved DBE Commitment (Form DT1506)

When the prime or a subcontractor increases the scope of work for an approved DBE subcontractor or adds a DBE subcontractor who was not on the approved form DT1506 at any time after contract execution, this is referred to as voluntary DBE contract goal achievement. The contractor must follow these steps to ensure that the participation is accurately credited toward the DBE goal:

- a. Forward a complete, signed Attachment A form to the DBE Office. A complete Attachment A includes DBE subcontractor contact information, signatures, subcontract value, and description of the work areas to be performed by the DBE. The DBE Office will verify the DBE participation and revise the DT1506 based on the email/discussion and the new Attachment A.
- b. When adding to an existing DBE commitment, submit a new Attachment A to the DBE Alert mailbox
- c. OR Submit a final Attachment A to DBE Alert during the Finals Process when Compliance receives notice of "Substantially Complete"

Naming conventions: When emailing files, please use the following language to identify your submission- "Project #, Proposal #, Let date, Business Name, New Attachment A" Email: DBE_Alert@dot.wi.gov

Special note on trucking

- DBE truckers added to the sublets in CRCS *will* be approved without DBE credit (You will see a "N" in CRCS instead of "Y")
- Prime Contractors may enter a "place holder" e.g. \$1000.00, for DBE Trucking in CRCS if the full amount of trucking is unknown for sublet purposes only
- The hiring contractor may obtain the Attachment A with DBE signature included but the **Prime Contractor** must sign the Attachment A before submitting

10. Commercially Useful Function

- a. Commercially Useful Function (CUF) is evaluated after the contract has been executed, while the DBE certified firm is performing contracted work items.
- b. The Department uses Form DT1011, DBE Commercially Useful Function Review and Certification to evaluate if the DBE is performing a commercially useful function. WisDOT counts expenditures of a DBE toward the DBE goal only if the DBE is performing a commercially useful function on that contract.
- c. A DBE firm is performing a commercially useful function if the following conditions are met:
 - (1) For contract work, the DBE is responsible for executing a distinct portion of the work and is carrying out its responsibilities by actually performing, managing, and supervising that work.

- (2) For materials and supplies, the DBE is responsible for negotiating price, determining quality and quantity, ordering, and paying for those materials and supplies.

11. Credit Evaluation for DBE Primes

WisDOT calculates DBE credit based on the amount and type of work performed by DBE certified firms for work submitted with required documentation. If the prime contractor is a DBE certified firm, the Department will only count the work that the DBE prime performs with its own forces for DBE neutral credit. The Department will also calculate DBE credit for work performed by any other DBE certified subcontractor, DBE certified supplier, and DBE certified manufacturer on the contract in each firm's approved NAICS code/work areas that are submitted with required documentation. Crediting for manufacturers and suppliers is calculated consistent with Section 8 of this document and 49 CFR Part 26.

12. Joint Venture

If a DBE performs as a participant in a joint venture, the Department will only count the portion of the total dollar value of the contract equal to the portion of the work that the DBE performs with its own forces, for DBE credit.

13. Mentor-Protégé

- a. If a DBE performs as a participant in a mentor-protégé agreement, the Department will credit the portion of the work performed by the DBE protégé firm.
- b. DBE credit is evaluated and confirmed by the DBE Office for any contracts on which the mentor-protégé team identifies itself to the DBE Office as a current participant of the Mentor-Protégé Program.
- c. Refer to WisDOT's Mentor-Protégé guidelines for guidance on the number of contracts and amount of DBE credit allowed on WisDOT projects.

14. Use of Joint Checks

The use of joint checks is allowable if it is a commonly recognized business practice in the material industry. A joint check is defined as a two-party check between a DBE subcontractor, a prime contractor, and the regular dealer or materials supplier who is neither the prime nor an affiliate of the prime. Typically, the prime contractor issues one check as payor to the DBE subcontractor and to the supplier jointly (to guarantee payment to the supplier) as payment for the material/supplies used by the DBE firm in cases where the DBE subcontractor and materials have been approved for DBE credit. The DBE subcontractor gains the opportunity to establish a direct contracting relationship with the supplier to potentially facilitate a business rapport that results in a line of credit or increased partnering opportunities.

The cost of material and supplies purchased by the DBE firm is part of the value of work performed by the DBE to be counted toward the goal. To receive credit, the DBE firm must be responsible for negotiating price, determining quality and quantity, ordering the materials, and installing (where applicable) and "paying for the material itself." See 49 CFR 26.55(c)(1).

The approval to use joint checks constitutes a commitment to provide further information to WisDOT, upon request by staff. WisDOT will allow the use of joint checks when the following conditions are met:

- a. The Prime Contractor must request permission to use joint checks from the DBE Office by submitting the Application to Use Joint Checks.

- (1) Request should be made when Form DT1506 or when the Request to Sublet is submitted; the request will not be considered if submitted after the DBE Subcontractor starts its work.
 - (2) Approval/Permission must be granted prior to the issuance of any joint checks.
 - (3) The payment schedule for the supplier must be presented to the DBE office before the first check is issued.
 - (4) The joint check for supplies must be strictly for the cost of approved supplies.
- b. The DBE subcontractor is responsible for furnishing and/or installing the material/work item and is not an 'extra participant' in the transaction. The DBE firm's role in the transaction cannot be limited solely to signing the check(s) to release payment to the material supplier. At a minimum, the DBE subcontractor's tasks should include the following:
- (1) The DBE subcontractor (not the prime/payor) negotiates the quantities, price, and delivery of materials.
 - (2) The DBE subcontractor consents to sign/release the check to the supplier by signing the Application to Use Joint Checks after establishing the conditions and documentation of payment within the subcontract terms or in a separate written document.
- c. The Prime contractor/payor acts solely as a guarantor.
- (1) The Prime Contractor agrees to furnish the check used for the payment of materials/supplies under the contract.
 - (2) The prime contractor/payor cannot require the subcontractor to use a specific supplier or the prime contractor's negotiated unit price.

15. Payment

Costs for conforming to this Additional Special Provision (ASP) and any associated DBE requirements are incidental to the contract.

Appendix A

Substantive Conversation Guidelines

The substantive conversation is critical to all bidders' demonstration of good faith effort to meet the DBE goal prior to bid opening. Relationship building between primes and subcontractors is crucial to DBE goal attainment. Responsible bidders seek to build rapport with potential DBE subcontractors to understand capacity, areas of expertise, and assess contracting feasibility. Bidders who compete for WisDOT contracts are specialty contractors responding to a growing and changing contract environment. Just as these specialists are responsible for care of the roads, they are likewise responsible for contributing to the health of the industry. The substantive conversation drives collaboration that will build industry health and capacity. The following is intended to provide guidance for such discussions but is not an exhaustive list. Contractors are encouraged to incorporate their existing strategies for cultivating business relationships as well.

Prior to Bid Opening- this discussion should happen as early as possible (WisDOT advertisements are released 5 weeks prior to each Let)

- Determine DBE subcontractor's interest in quoting
- If response indicates inexperience with quoting- offer support/assistance to the DBE in understanding the industry including fundamentals a subcontractor needs to know, required reading and/or resources.
- Assess their interest and experience in the road construction industry by asking questions such as:
 1. Have you competed for other WisDOT contracts? Ratio of competed/to wins
 2. Have you performed on any transportation industry contracts (locally or with other states)?
 3. What the largest contract you've completed?
 4. Have you worked in the industry: apprentice, journeyman, safety, inspection etc.?
 5. Does this project fit into your schedule? Are you working on any contracts now?
 6. Have you reviewed a copy of the plans? Are you comfortable performing within the scope and quantity considerations of this contract?
 7. What region do you work in? Home base?
 8. Which line items are you considering?
 9. Have you read/are you familiar with WisDOT Standard Specifications? Construction Material Manual?
 10. Do you understand where your work fits in the project schedule, project phases?

Following Bid Opening- this discussion can happen at any time

1. After reviewing their quote, note the following in your discussion:
 - Does the quote look complete? Irregular?
 - Are there errors in the quote? Are items very high or very low?
 - In general, does the quote look competitive?
2. Questions and Advice for the bidder to share with the potential DBE subcontractor:
 - What line items would typically be in a competitive quote for a subcontractor of their specialty?
 - How many employees and what is their role/experience/expertise in your firm?
 - Do you have resources for labor (union member, family-based, community-resourced) and capital (banking relationship, bond agent, CPA)?
 - Where have you worked: cities, states, government, commercial, residential/private sector, etc. Explain similarities or differences.
 - Refer them to reliable, trusted, industry resources that can educate or connect them to relevant resources, education/certification resources, more appropriate contract opportunities.
 - Discussion about prime contract and subcontract liability, critical path items, contract quantities, schedule risks, and potential profit/loss (for upcoming known projects or in general).
 - Discussion of bonding, insurance, and overall business risk considerations.

APPENDIX B
Sample Contractor Solicitation Letter Page 1
This sample is provided as a guide not a requirement

GFESAMPLE MEMORANDUM

TO: DBE FIRMS
FROM: POTENTIAL PRIME CONTRACTOR OR MAJOR SUBCONTRACTOR
SUBJECT: REQUEST FOR DBE QUOTES
LET DATE & TIME
DATE: MONTH DAY YEAR
CC: DBE OFFICE ENGINEER

Our company is considering bidding on the projects indicated on the next page, as a prime and/or a subcontractor for the Wisconsin Department of Transportation **Month- date -year** Letting. Page 2 lists the projects and work items that we may subcontract for this letting. We are interested in obtaining subcontractor quotes for these projects and work categories. Also note that we are willing to accept quotes in areas we may be planning to perform ourselves as required by federal rules.

Please review page 2, respond whether you plan to quote, highlight the projects and work items you are interested in performing and return it via fax or email within 3 days. Plans, specifications and addenda are available through WisDOT at the DBE Support Services office or at the Highway Construction Contract Information (HCCI) site at <http://roadwaystandards.dot.wi.gov/hcci/>

Your quote should include all of the costs required to complete the items you propose to perform including labor, equipment, material, and related bonding or insurance. The quote should note items that you are DBE certified to perform, tied items, and any special terms. Page 2, with the indicated projects and items you plan to quote, should be used as a cover sheet for your quote.

Please make every effort to have your quotes into our office by **time deadline** the prior to the letting date. ***Make sure the correct letting date, project ID and proposal number, unit price and extension are included in your quote.*** We prefer quotes be sent via SBN but **prime's alternatives** are acceptable. Our office hours are **include hours and days**.

Please call our office as soon as possible prior to the letting if you need information/clarification to prepare your quote at **contact number**.

If you wish to discuss or evaluate your quote in more detail, contact us after the contract is awarded. Status of the contract can be checked at WisDOT's HCCI site at <http://roadwaystandards.dot.wi.gov/hcci/>

All questions should be directed to:

Project Manager, John Doe, Phone:
 (000) 123-4567
 Email: Joe@joetheplumber.com
 Fax: (000) 123- 4657

Sample Contractor Solicitation Letter Page 2
This sample is provided as a guide not a requirement
 REQUEST FOR QUOTE

Prime's Name: _____
Letting Date: _____
Project ID: _____

Please check all that apply

- Yes, we will be quoting on the projects and items listed below
- No, we are not interested in quoting on the letting or its items referenced below
- Please take our name off your monthly DBE contact list
- We have questions about quoting this letting. Please have someone contact me at this number

Prime Contractor 's Contact Person:

DBE Contractor Contact Person:

Phone: _____

Phone: _____

Fax: _____

Fax: _____

Email: _____

Email: _____

Please circle the jobs and items you will be quoting below

Proposal No.	1	2	3	4	5	6	7
County							

WORK DESCRIPTION:

Clearing and Grubbing	X		X	X		X	X
Dump Truck Hauling	X		X	X		X	X
Curb & Gutter/Sidewalk, Etc.	X		X	X		X	X
Erosion Control Items	X		X	X		X	X
Signs and Posts/Markers	X		X	X		X	X
Traffic Control		X	X	X		X	X
Electrical Work/Traffic Signals		X	X	X		X	
Pavement Marking		X	X	X	X	X	X
Sawing Pavement		X	X	X	X	X	X
QMP, Base	X	X		X	X	X	X
Pipe Underdrain	X			X			
Beam Guard				X	X	X	X
Concrete Staining							X
Trees/Shrubs	X						X

Again please make every effort to have your quotes into our office by time deadline prior to the letting date.

We prefer quotes be sent via SBN but prime's preferred alternatives are acceptable.

If there are further questions please direct them to the prime contractor's contact person at phone number.

Appendix C

Small Business Network (SBN) Overview

The Small Business Network is a part of the Bid Express® service that was created to ensure that prime bidders have a centralized online location to find subs - including small and disadvantaged business enterprises (DBEs). It is available for prime bidders to use as part of their Basic Service subscription. Within the Small Business Network, **Prime Contractors** can:

1. **Easily select proposals, work types and items:**
 - a. After adding applicable work types, select items that you wish to quote. Enter the sub-quote quantities and add comments, if desired. Adding or removing items and work types can be done quickly. If needed, you can save the sub-quote for later completion.
2. **Create sub-quotes for the subcontracting community:**
 - a. Create sub-quotes with ease using the intuitive sub-quote creator. In seven short steps, you can rapidly create a custom sub-quote directed to all subcontractors that bid on the applicable work types. Steps include: provide contact information and sub-quote expiration date, select letting and proposal, add work types and items, specify terms and conditions, upload attachments, and select vendors.
 - b. Create a sub-quote to send to subcontractors or suppliers that lists the items in a proposal that you want quoted
 - c. Create an unlimited number of sub-quotes for items you want quoted, and optionally mark them as a DBE preferred request.
 - d. Add attachments to sub-quotes.
3. **View sub-quote requests & responses:**
 - a. After logging into the Bid Express service, you can quickly review all of your sub-quote requests and all unsolicited sub-quote requests from subcontractors. To simplify the Small Business Network home screen, sub-quote requests can be hidden with one click if they are not applicable.
 - b. View or receive unsolicited sub-quotes that subcontractors have posted, complete with terms, conditions and pricing.
4. **View Record of Subcontractor Outreach Effort:**
 - a. For each sub-quote produced, a *Record of Subcontractor Outreach Effort* is generated that shows the response statistics for a particular sub-quote. If accepted by the letting agency, this report may serve as proof of a "Good Faith" effort in reaching out to the DBE community.
 - b. Easily locate pre-qualified and certified small and disadvantaged businesses.
 - c. Advertise to small and disadvantaged businesses more efficiently and cost effectively.
 - d. Document your interactions with subs/DBEs by producing an Outreach Report (may be accepted as proof of DBE outreach at the discretion of each agency).

The Small Business Network is a part of the Bid Express® service that was created to ensure that small businesses have a centralized area to access information about upcoming projects. It can help small businesses learn more about opportunities, compete more effectively, network with other contractors and subcontractors, and win more jobs. **DBE firms can:**

1. View and reply to sub-quote requests from primes:
 - a. After logging into the Bid Express service, you can quickly review all incoming sub-quote requests and all unsolicited sub-quotes created by your company. Receive notifications by selected work type. To simplify on the Small Business Network home screen, sub-quote requests can be filtered by work types relevant to your interests or hidden with one click if they are not applicable.
2. Select items when responding to sub-quote requests from primes:
 - a. You have the freedom to choose and price any number of items when responding to a sub-quote request. Quantities can be modified, and per-item comments are also available.
 - b. View requests for sub-quotes for work that primes have posted for projects they are bidding, add your pricing, terms, and conditions, and submit completed sub-quotes to the requesting primes.
 - c. Add attachments to a sub-quote.
3. Create and send unsolicited sub-quotes to specific contractors:
 - a. Create unsolicited sub-quotes with ease using the intuitive sub-quote creator. In eight short steps, you can rapidly create a custom sub-quote directed at any number of specific vendors of your choosing. Steps include: provide contact information and sub-quote expiration date, select letting and proposal, add work types and items, specify terms and conditions, upload attachments, and select vendors.
4. Easily select and price items for unsolicited sub-quotes:
 - a. After adding applicable work types, select items that you wish to quote. The extended price calculates automatically, cutting out costly calculation errors. Comments can be provided on a per-item basis as well.
 - b. Create an unsolicited sub-quote that lists the items from a proposal that you want to quote, include pricing, terms and conditions, and send it to selected prime/plan holder.
 - c. Add attachments to a sub-quote.
 - d. Add unsolicited work items to sub-quotes that you are responding to.
5. Easy Access to Valuable Information
 - a. Receive a confirmation that your sub-quote was opened by a prime.
 - b. View Bid Tab Analysis data from past bids, including the high, average and low prices of items.
 - c. View important notices and publications from DOT targeted to small and disadvantaged businesses.
6. Accessing Small Business Network for WisDOT contracting opportunities
 - a. If you are a contractor not yet subscribing to the Bid Express service, go to www.bidx.com and select "Order Bid Express." The Small Business Network is a part of the Bid Express Basic Service.
 - b. DBE firms can request a Bid Express Small Business Network Account at no cost by calling 414-438-458

APPENDIX D

Good Faith Effort Evaluation Measures *by categories referenced in DBE regulations*

Bidders must demonstrate that they took all necessary and reasonable steps to achieve the assigned DBE contract goal. For each contract, all bidders must submit documentation indicating the goal has been met or if falling short of meeting the assigned goal, must request a DBE Goal Waiver and document all efforts employed to secure DBE subcontractor participation on Form DT1202.

DBE staff analyze the bidder's documented good faith efforts to determine if action taken was sufficient to meet the goal. Sufficiency is measured contract-by-contract. WisDOT evaluates active and aggressive efforts, quality, quantity, scope, intensity, and appropriateness of the bidder's efforts as a scale of the principles of Good Faith outlined in 49 CFR Part 26, Appendix A. Additional emphasis is placed on the bidder's demonstration of timely submission of documentation and communication with DBE subcontractors, and business development initiatives undertaken to support DBE firm growth.

The following is a sample of good faith effort activities that are rated according to the accompanying rubric. Contractors are encouraged to identify additional activities that align with their business type(s).

- Personal, tailored solicitation to firms that specialize in work types planned or desired for subcontracting
- Follow up to initial solicitation via email or phone
- Substantive conversation including topics such as contract liability, critical path work items, schedule risks, and potential profit/loss
- SBN utilization including posting quotes
- Review and response to DBE quotes including provision of information about plans, specifications, and requirements as applicable
- Documentation requesting subcontractors support DBE goal by solicitation and inclusion of DBE subcontractor quotes
- Responsive and timely submission of organized documentation
- Analysis of number of DBE firms who do work types that you typically subcontract
- Analysis of number of DBE firms who reside in geographical areas where prime seeks work
- Analysis of firms who express interest in bidding/quoting including the number of firms who declined your solicitation
- Reference check of DBE subcontractor work or training (documentation of questions and response required)
- Number of different efforts undertaken to meet the assigned DBE goal as documented in accompanying Form DT1202
- Submission of all DBE quotes received matched with a variety of work to be performed by DBEs
- Number and names of DBE firms provided written advice, or referral to industry-specific business development resources
- Overall pattern of DBE utilization on all WisDOT contracts which may include contracting with municipalities
- Documentation of resources expended to meet assigned DBE goal (#of hours, staff titles, average pay rate, actions taken)
- Analysis of subcontractable work items to be completed by prime beyond prime contractor's 30%
- Risk analysis of work items that are typically in tied quotes that could be unbundled
- List of contract work items in smallest economically feasible units, identifying schedule impact
- Submission of a Gap Analysis identifying DBE skillset and/or industry needs
- Staff training in EEO and Civil Rights laws as documented in training logs
- Written Capacity Assessment completed with DBE firm documenting its ability to perform the work quoted
- DBE engagement efforts beyond simple solicitation that include a substantive discussion, initiated as early in the acquisition process as possible (*points added for each day prior to letting*)
- Outreach and marketing efforts with minority, women, and veteran-focused organizations at least 10 days prior to bid opening
- Active involvement in WisDOT's Business Development Program, TrANS training, facilitated networking efforts, workshops
- Customized teaching/training efforts for future opportunities with DBE subcontractor, contract specific and/or annually
- Introduction and reference provided for DBE subcontractor to a prime who has not previously contracted with the DBE firm
- Prime utilization of a DBE subcontractor the prime has not contracted with previously
- Written referral/recommendation to bond/insurance agents, manufacturer, supplier
- Documented efforts fostering DBE participation through administrative and/or technical assistance
- Evidence of negotiation with the DBE firm about current and future Let opportunities
- Recommendation of local and state services that support small business and access to opportunity: DOA, SBA, WEDC, WPI, etc.
- Advice on bonding, lines of credit, or insurance as required to complete the items quoted and contract requirements

GFE EVALUATION RUBRIC – PHASE 1

	Active & Aggressive Category	Quality Category	Quantity Category	Scope & Intensity Category	Timing Category	Business Develop't Efforts	Total=
Solicitation Documentation							
Selected Work Items Documentation							
Documentation of Project Information provided to Interested DBEs							
Documentation of Negotiation with Interested DBEs							
Documentation of Sound Reason for Rejecting DBEs							
Documentation of Assistance to Interested DBEs- bonding, credit, insurance, equipment, supplies/materials							
Documentation of Outreach to Minority, Women, and Community organizations and other DBE Business Development Support							
Documentation of other GFE activities							
Overall Total=							

GFE EVALUATION RATING LEGEND – PHASE 1

ACTIVE & AGGRESSIVE: Demonstrated through engaged and assertive activity

QUALITY: Demonstrated through essential character of conscientious and serious activity

QUANTITY: Demonstrated through a measurable number of activities

SCOPE & INTENSITY: Demonstrated through a rigorous approach to an appropriate and purposeful range of activities

TIMING: Demonstrated through engagement efforts beyond simple solicitation, initiated early in the process

BUSINESS DEVELOPMENT INITIATIVES: Demonstrated by efforts to support business growth and health of DBEs

Rating Scale

- Each qualifying activity is worth 5 points per Category
- Documented efforts must receive 55 points or more to qualify for Phase 2 GFE evaluation
 - Pro Forma efforts= 0-50 points
Perfunctory effort characterized by routine or superficial activities
 - Bona Fide= 55+ points
Genuine effort characterized by sincere and earnest activities

GFE EVALUATION – PHASE 2

DBE Office completes:

- Review of quote comparisons submitted by Prime
- Bid analysis to confirm if any bid submitted met the DBE goal
- Review average of other bidders DBE goal achievement
- Team review of combined efforts documented in Phase 1 and 2 by apparent low bidder

Excerpt from Appendix A to 49 CFR Part 26:

V. In determining whether a bidder has made good faith efforts, it is essential to scrutinize its documented efforts. At a minimum, you must review the performance of other bidders in meeting the contract goal. For example, when the apparent successful bidder fails to meet the contract goal, but others meet it, you may reasonably raise the question of whether, with additional efforts, the apparent successful bidder could have met the goal. If the apparent successful bidder fails to meet the goal, but meets or exceeds the average DBE participation obtained by other bidders, you may view this, in conjunction with other factors, as evidence of the apparent successful bidder having made good faith efforts. As provided in §26.53(b)(2)(vi), you must also require the contractor to submit copies of each DBE and non-DBE subcontractor quote submitted to the bidder when a non-DBE subcontractor was selected over a DBE for work on the contract to review whether DBE prices were substantially higher; and contact the DBEs listed on a contractor's solicitation to inquire as to whether they were contacted by the prime. Pro forma mailings to DBEs requesting bids are not alone sufficient to satisfy good faith efforts under the rule.

APPENDIX E

Good Faith Effort Best Practices

This list is not a set of requirements; it is a list of potential strategies

Primes

- Prime contractor open houses inviting DBE firms to see the bid “war room” or providing technical assistance.
- Participate in speed networking and mosaic exercises as arranged by DBE office.
- Host information sessions not directly associated with a bid letting.
- Participate in a formal mentor protégé or joint venture with a DBE firm.
- Participate in WisDOT advisory committees i.e. TRANSAC, or Mega Project committee meetings.
- Facilitate a small group DBE ‘training session’ clarifying how your firm prepares for bid letting, evaluates subcontractors, preferred qualifications, and communication methods.
- Encourage subcontractors to solicit and highlight DBE participation in their quotes to you.
- Quality of communication, not quantity creates the best results. Contractors should be thorough in communicating with DBE firms before the bid and provide any assistance requested to assure best possible bid.

DBE

- DBE firms should contact primes as soon as possible with questions regarding their quotes or bid; seven days prior is optimal.
- Continually check for contract addendums on the HCCI website through the Thursday prior to letting to stay abreast of changes.
- Review the status of contracts on the HCCI website reviewing the ‘apparent low bidder’ list and bid tabs at a minimum.
- Prepare a portfolio or list of related projects and prime and supplier references; be sure to note transportation related projects of similar size and scope, firm expertise and staffing.
- Participate in DBE office assessment programs.
- Participate on advisory and mega-project committees.
- Sign up to receive the DBE Contracting Update.
- Consider membership in relevant industry or contractor organizations.
- Active participation is a must. Quote as many projects as you can reasonably work on; quoting the primes and bidding as a prime with the Department are the only ways to get work.

APPENDIX F
Good Faith Effort Evaluation Guidance
Appendix A of 49 CFR Part 26

I. When, as a recipient, you establish a contract goal on a DOT-assisted contract for procuring construction, equipment, services, or any other purpose, a bidder must, in order to be responsible and/or responsive, make sufficient good faith efforts to meet the goal. The bidder can meet this requirement in either of two ways. First, the bidder can meet the goal, documenting commitments for participation by DBE firms sufficient for this purpose. Second, even if it doesn't meet the goal, the bidder can document adequate good faith efforts. This means that the bidder must show that it took all necessary and reasonable steps to achieve a DBE goal or other requirement of this part which, by their scope, intensity, and appropriateness to the objective, could reasonably be expected to obtain sufficient DBE participation, even if they were not fully successful.

II. In any situation in which you have established a contract goal, Part 26 requires you to use the good faith efforts mechanism of this part. As a recipient, you have the responsibility to make a fair and reasonable judgment whether a bidder that did not meet the goal made adequate good faith efforts. It is important for you to consider the quality, quantity, and intensity of the different kinds of efforts that the bidder has made, based on the regulations and the guidance in this Appendix.

The efforts employed by the bidder should be those that one could reasonably expect a bidder to take if the bidder were actively and aggressively trying to obtain DBE participation sufficient to meet the DBE contract goal. Mere pro forma efforts are not good faith efforts to meet the DBE contract requirements. We emphasize, however, that your determination concerning the sufficiency of the firm's good faith efforts is a judgment call. Determinations should not be made using quantitative formulas.

III. The Department also strongly cautions you against requiring that a bidder meet a contract goal (i.e., obtain a specified amount of DBE participation) in order to be awarded a contract, even though the bidder makes an adequate good faith efforts showing. This rule specifically prohibits you from ignoring bona fide good faith efforts.

IV. The following is a list of types of actions which you should consider as part of the bidder's good faith efforts to obtain DBE participation. It is not intended to be a mandatory checklist, nor is it intended to be exclusive or exhaustive. Other factors or types of efforts may be relevant in appropriate cases.

A. (1) Conducting market research to identify small business contractors and suppliers and soliciting through all reasonable and available means the interest of all certified DBEs that have the capability to perform the work of the contract. This may include attendance at pre-bid and business matchmaking meetings and events, advertising and/or written notices, posting of Notices of Sources Sought and/or Requests for Proposals, written notices or emails to all DBEs listed in the State's directory of transportation firms that specialize in the areas of work desired (as noted in the DBE directory) and which are located in the area or surrounding areas of the project.

(2) The bidder should solicit this interest as early in the acquisition process as practicable to allow the DBEs to respond to the solicitation and submit a timely offer for the subcontract. The bidder should determine with certainty if the DBEs are interested by taking appropriate steps to follow up initial solicitations.

B. Selecting portions of the work to be performed by DBEs in order to increase the likelihood that the DBE goals will be achieved. This includes, where appropriate, breaking out contract work items into economically feasible units (for example, smaller tasks or quantities) to facilitate DBE participation, even when the prime contractor might otherwise prefer to perform these work items with its own forces. This may include, where possible, establishing flexible timeframes for performance and delivery schedules in a manner that encourages and facilitates DBE participation.

C. Providing interested DBEs with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation with their offer for the subcontract.

D. (1) Negotiating in good faith with interested DBEs. It is the bidder's responsibility to make a portion of the work available to DBE subcontractors and suppliers and to select those portions of the work or material needs consistent with the available DBE subcontractors and suppliers, so as to facilitate DBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of DBEs that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional Agreements could not be reached for DBEs to perform the work.

(2) A bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including DBE subcontractors, and would take a firm's price and capabilities as well as contract goals into consideration. However, the fact that there may be some additional costs involved in finding and using DBEs is not in itself sufficient reason for a bidder's failure to meet the contract DBE goal, as long as such costs are reasonable. Also, the ability or desire of a prime contractor to perform the work of a contract with its own organization does not relieve the bidder of the responsibility to make good faith efforts. Prime contractors are not, however, required to accept higher quotes from DBEs if the price difference is excessive or unreasonable.

E. (1) Not rejecting DBEs as being unqualified without sound reasons based on a thorough investigation of their capabilities. The contractor's standing within its industry, membership in specific groups, organizations, or associations and political or social affiliations (for example union vs. non-union status) are not legitimate causes for the rejection or non-solicitation of bids in the contractor's efforts to meet the project goal. Another practice considered an insufficient good faith effort is the rejection of the DBE because its quotation for the work was not the lowest received. However, nothing in this paragraph shall be construed to require the bidder or prime contractor to accept unreasonable quotes in order to satisfy contract goals.

(2) A prime contractor's inability to find a replacement DBE at the original price is not alone sufficient to support a finding that good faith efforts have been made to replace the original DBE. The fact that the contractor has the ability and/or desire to perform the contract work with its own forces does not relieve the contractor of the obligation to make good faith efforts to find a replacement DBE, and it is not a sound basis for rejecting a prospective replacement DBE's reasonable quote.

F. Making efforts to assist interested DBEs in obtaining bonding, lines of credit, or insurance as required by the recipient or contractor.

G. Making efforts to assist interested DBEs in obtaining necessary equipment, supplies, materials, or related assistance or services.

H. Effectively using the services of available minority/women community organizations; minority/women contractors' groups; local, State, and Federal minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of DBEs.

V. In determining whether a bidder has made good faith efforts, it is essential to scrutinize its documented efforts. At a minimum, you must review the performance of other bidders in meeting the contract goal. For example, when the apparent successful bidder fails to meet the contract goal, but others meet it, you may reasonably raise the question of whether, with additional efforts, the apparent successful bidder could have met the goal. If the apparent successful bidder fails to meet the goal, but meets or exceeds the average DBE participation obtained by other bidders, you may view this, in conjunction with other factors, as evidence of the apparent successful bidder having made good faith efforts. As provided in §26.53(b)(2)(vi), you must also require the contractor to submit copies of each DBE and non-DBE subcontractor quote submitted to the bidder when a non-DBE subcontractor was selected over a DBE for work on the contract to review whether DBE prices were substantially higher; and contact the DBEs listed on a contractor's solicitation to inquire as to whether they were contacted by the prime. Pro forma mailings to DBEs requesting bids are not alone sufficient to satisfy good faith efforts under the rule.

VI. A promise to use DBEs after contract award is not considered to be responsive to the contract solicitation or to constitute good faith efforts.

[79 FR 59600, Oct. 2, 2014]

COMMITMENT TO SUBCONTRACT TO DBE NON-TRADITIONAL PROJECTS

Wisconsin Department of Transportation

DT1880 4/2010 s.84.06(2) Wis. Stats.

Project(s): _____

Prime Contractor: _____

County: _____

Letting Date: _____

This contract requires that a specified percentage of the work be subcontracted to a disadvantaged business enterprise and that this information be submitted within **10 business days** after the notification of contract award. Completion of the following information indicates your intent in the fulfillment of these contract requirements.

Total \$ Value of: _____

Prime Contract: _____

DBE Contract Goal: _____ %

This form must be completed and returned for THIS contract. See reverse side for instructions.

A	V	NAME OF DBE SUBCONTRACTOR	TYPE OF WORK	SUBCONTRACT \$ VALUE	Government Use Only Adjusted Amounts
SUBTOTAL DBE \$ VALUE				A (\$)	TOTAL %
				V (\$)	TOTAL %

A	V	NAME OF DBE SUPPLIER AND/OR MANUFACTURER (see #3 on Instructions)	TYPE OF MATERIAL	SUBCONTRACT \$ VALUE	Government Use Only Adjusted Amounts
SUBTOTAL DBE \$ VALUE				A (\$)	TOTAL %
				V (\$)	TOTAL %

A	V	NAME OF DBE TRUCKING FIRM	MATERIAL HAULED	EST. # OF TON/C.Y.	EST. # OF TRUCKS REQ'D	\$ VALUE	Government Use Only Adjusted Amounts
					O= L=		
					O= L=		
					O= L=		
					O= L=		
					O= L=		
SUBTOTAL DBE \$ VALUE				A (\$)	TOTAL %		
				V (\$)	TOTAL %		
GRAND TOTAL DBE \$ VALUE				A (\$)	TOTAL %		
				V (\$)	TOTAL %		
				T =	TOTAL %		

I certify that arrangements have been made for the foregoing work with the listed DBE Contractors. I further understand that any willful falsification, fraudulent statement or misrepresentation will result in appropriate sanctions, which may include debarment and/or prosecution under applicable State (Trans 504) and Federal laws.

O = Owned Trucks Used on Project	Government Use Only Approved Amounts		X
	A = \$	%	
L = Leased Trucks Used on Project	V = \$	%	(Authorized Agent)
	Total = \$	%	(Date)
A = Assigned (DBE Conscious)	Signature:		Mail to: Wisconsin Department of Transportation DBE Programs Office, Rm. 451 PO Box 7965 Madison, WI 53707-7965
V = Voluntary (DBE Neutral)	Date:		
Good faith waiver granted: Yes <input type="checkbox"/> No <input type="checkbox"/>			

Instructions For Completing Commitment To Subcontract To DBE Form:

- 1 In accordance with the DBE Regulations (49 CFR part 26), WisDOT is tracking Assigned Goals for DBE's (DBE Conscious) and Voluntary Usage of DBE Firms (DBE Neutral). DBE participation reported on this form will be used to periodically adjust (DBE Conscious and DBE Neutral) components of WisDOT's overall annual DBE goal.
- 2 For each DBE firm listed on this form, place an "x" in the appropriate column to indicate whether it will be used to meet the Assigned Goal (A) and/or whether it is used on a Voluntary basis (V). Any achievement above assigned goals should be reported as a voluntary achievement. If you indicate that a firm will be used to meet both assigned and voluntary goals, indicate the dollar amount attributable to assigned goals and the amount attributable to the voluntary goal. Our objective is to capture all DBE achievement you generate. The following is an example:
 - a. The total contract amount is \$100,000 and the DBE goal is 10% or \$10,000 in DBE participation
 - b. If \$10,000 is the subcontract dollar value to ADBE Landscaping Co. then \$10,000 would be Assigned (DBE Conscious) and you would place an "x" in the "A" column
 - c. If \$15,000 is the subcontract dollar value to ADBE Landscaping Co. then \$10,000 would be Assigned (DBE Conscious) and you would place an "x" in the "A" column and ADBE Landscaping Co. would be listed **on the next line** for \$5,000 which would be Voluntary (DBE Neutral) and an "x" would be placed in the "V" column
- 3 The department will give full credit toward the DBE goal if the DBE is a manufacturer of their materials or supplies. The department will give 60 percent credit or brokerage fee set by industry's standard toward the DBE goal if the DBE is merely a supplier of these materials or supplies. It is the Prime Contractor's responsibility to use the Bidder's List or UCP Directory to find out if the DBE is considered a supplier or a manufacturer before listing them on Commitment to Subcontract to DBE form. WisDOT will apply the appropriate credit when approving the form.
- 4 After completing the form, if it does not indicate that the DBE goal has been met or exceeded, please complete and supply the necessary documentation on the Certificate of Good Faith Efforts form (DT1202 6/2007.)

Instructions For Completing Attachment A Form:

- 5 Section 26.53 (49 CFR part 26) requires written confirmation of participation from each DBE firm to be used on the contract. Please submit one copy of a completed Attachment A, Confirmation of Participation form, for each DBE firm to be used on this contract. Each form must be signed by the Prime Contractor, the hiring contractor (if applicable) and the DBE Firm specified on the form.
- 6 DBE crediting for the trucking industry is achieved in the following manner:
 - a. A minimum of one truck owned by the DBE must be used on the contract.
 - b. Full DBE credit is given for owned trucks and trucks leased from another DBE.
 - c. For one truck owned by the DBE firm, they can receive DBE credit for a truck leased from a non-DBE firm (one DBE truck owned = one non-DBE truck leased).
 - d. Trucks leased from non-DBE firms above the one-for-one ratio described in letter c, will be given DBE credit only for the brokerage fee charged by the DBE.
 - e. All trucks used for credit must be listed and approved on the DBE firm's Schedule of Owned/Leased Vehicles for DBE Credit and/or a WisDOT approved trucking utilization plan.

It is the Prime Contractor's and the DBE firm's responsibility to ensure that utilization of trucks and the DBE credit earned is in accordance with the above and will yield the subcontract dollar value listed on the Commitment to Subcontract to DBE form.

**COMMITMENT TO SUBCONTRACT TO DBE
ATTACHMENT A**

CONFIRMATION OF PARTICIPATION

Project I.D.:	Proposal Number:
Letting Date:	Total \$ Value of Prime Contract:

Name of DBE Firm Participating in this Contract:
Name of the Prime/Subcontractor who hired the DBE Firm: <i>(list all names of tiers if more than one)</i>
Type of Work or Type of Material Supplied:
Total Subcontract Value:

FOR PRIME CONTRACTORS ONLY: I certify that I made arrangements with the participating DBE firm to perform the type of work listed or supply the material indicated above for the subcontract value listed above.	Prime Contractor Representative's Signature
	Prime Contractor Representative's Name (Print Name)
	Prime Contractor (Print Company Name)
	Date

FOR PARTICIPATING DBE FIRMS ONLY: I certify that I made arrangements with the Prime Contractor or the Hiring Contractor to perform the type of work or supply the material indicated above for the subcontract value listed above. FOR DBE TRUCKING FIRMS ONLY: I certify that I will utilize, for DBE credit, only trucks listed on my WisDOT approved Schedule of Owned/Leased Vehicles for DBE Credit form and I will be utilizing the number of trucks and material hauled as listed below.	Participating DBE Firm Representative's Signature
	Participating DBE Firm Representative's Name (Print Name)
	Participating DBE Firm (Print Company Name)
	Date

# Owned Trucks	# Leased Trucks	# Estimated Tons/C.Y.	Material(s) Hauled



DOCUMENTATION OF GOOD FAITH EFFORT

Wisconsin Department of Transportation
DT1202 3/2020

Project ID	Proposal No.	Letting
Prime Contractor	County	
Person Submitting Document	Telephone Number	
Address	Email Address	

All bidders must undertake necessary and reasonable steps to achieve the assigned DBE contract goal per federal regulatory guidance at 49 CFR Part 26. Bidders use this form to document all efforts employed to meet the assigned goal as a record of contractor good faith efforts (GFE). Refer to ASP3 or 49 CFR Part 26 for guidance on actions that demonstrate good faith effort.

It is critical to list all efforts, attach documentation, and follow the instructions to complete this submission. Documentation of good faith effort includes copies of each DBE and non-DBE subcontractor quote submitted to the bidder for the same line items. Utilize the sample documentation logs to document and organize efforts.

Submit good faith effort documentation per ASP-3 guidelines.

Instructions: Provide a narrative description of all activities pursued to demonstrate good faith efforts, any corresponding documentation, and applicable explanation on separate pages. Include the following items, organized in the order listed below.

1. Solicitation Documentation:

- a. Purpose:** To identify all reasonable and available activities the bidder performed to solicit the interest of all certified DBEs who have the capacity and ability to perform work on the project. All solicitation efforts should begin as early as possible to ensure DBEs have ample time to respond and ask questions.
- b. Action:** Identify and list all activities engaged in to solicit DBEs using all reasonable and available means such as written notice and follow-up communications; substantive conversations; pre-bid meetings; networking events; market research; advertising.

2. Selected Work Items Documentation:

- a. Purpose:** To ensure that all work items are broken out into economically feasible units to facilitate DBE participation. This must occur even when you prefer to perform the work yourself.
- b. Action:** Identify economically feasible work units to be performed by DBEs to include activities such as: list of work items to be performed; breaking up of large work items into smaller tasks or quantities; flexible time frames for performance and delivery schedules.

3. Documentation of Project Information provided to Interested DBEs:

- a. Purpose:** To provide interested DBEs with adequate information about the plans, specifications, and any other contractual requirements in a timely manner to assist DBEs in response to solicitation.
- b. Action:** Provide DBEs access to plans, specifications, and other contract requirements. Early solicitation allows ample opportunity to provide project information, links to Let advertisements, and substantive engagement with DBEs.

4. **Documentation of Negotiation with Interested DBEs:**
 - a. **Purpose:** To ensure that negotiations with interested DBEs were made in good faith providing evidence as to why agreements could not be reached for DBEs to perform work.
 - b. **Action:** Provide sufficient evidence to demonstrate that good faith negotiations took place. Merely sending out solicitations requesting bids from DBEs does not constitute sufficient good faith efforts. A bidder using good business judgment considers a number of factors in negotiating with all subcontractors, and the firm's price and capabilities in addition to contract goals are taken into consideration. However, the fact that there may be some additional costs involved in finding and using DBEs is not in itself sufficient reason for failing to meet the DBE goal as long as costs are reasonable. (see 49 CFR Part 26 Appendix A)

5. **Documentation of Sound Reason for Rejecting DBEs:**
 - a. **Purpose:** To ensure that bidders avoid rejecting DBEs as unqualified without sound reasons. Reasons for rejection must be based on thorough investigation of DBE capabilities.
 - b. **Action:** Provide sufficient evidence to demonstrate that DBE was rejected for sound reasons such as past performance, relevant business experience and stability, safety record, business ethic and integrity, technical capacity, other tangible factors.

6. **Documentation of Assistance to Interested DBEs- Bonding, Credit, Insurance, Equipment, Supplies/Materials:**
 - a. **Purpose:** To assist interested DBEs in obtaining bonds, lines of credit, insurance, equipment, supplies, materials, and other assistance or services.
 - b. **Action:** Assist interested DBEs in obtaining bonding, lines of credit or insurance, and provide technical assistance or information related to plans, specifications, and project requirements. Assist DBEs in obtaining equipment, supplies, materials or other services related to meeting project requirements (excluding supplies or equipment the DBE purchases from the prime).

7. **Documentation of outreach to Minority, Women, and Community Organizations and other DBE Business Development Support:**
 - a. **Purpose:** To effectively use the services of minority, women, and community organizations as well as contractors' groups, local, state, and federal business assistance offices and organization that provide assistance in recruiting and supporting DBEs, as well as participation in activities that support DBE business development.
 - b. **Action:** Contact organizations and agencies for assistance in contacting, recruiting, and providing support to DBE subcontractors, suppliers, manufacturers, and truckers at least 14 days before bid opening. Participate in or host activities such as networking events, mentor-protégé programs, small business development workshops, and others consistent with DBE support.

Return to:
Wisconsin Department of Transportation
DBE Program Office
PO Box 7965
Madison, WI 53707-7965
DBE_Alert@dot.wi.gov

I certify that I have utilized comprehensive good faith efforts to solicit and utilize DBE firms to meet the DBE participation requirements of this contract proposal, as demonstrated by my responses and as specified in Additional Special Provision 3 (ASP-3).

I certify that the information given in the Documentation of Good Faith Efforts is true and correct to the best of my knowledge and belief.

I further understand that any willful falsification, fraudulent statement, or misrepresentation will result in appropriate sanctions, which may involve debarment and/or prosecution under applicable state (Trans 504) and Federal laws.

(Bidder/Authorized Representative Signature)

(Print Name)

(Title)

Good Faith Effort - Sample Documentation Logs

The sample logs below are provided as guides rather than exhaustive list. See ASP3, Appendix A for additional examples of demonstrable good faith efforts. Attach documentation for each activity listed.

Acceptable forms of documentation include copies of solicitations sent to DBEs, notes from substantive conversations and negotiations with DBEs, copies of advertisements placed, email communications, all quotes received from DBEs and from all subcontractors who were considered alongside DBE quotes, proof of attendance at applicable networking events; flyers for events or workshops for DBEs offered by the prime, and other physical records of good faith efforts activities.

SOLICITATION LOG

Date	Activity	Name of DBE Solicited	Follow-up
4/1/2020	Sent May Let solicitation	Winterland Electric	Spoke with Mark Winterland on 4/15/20 to ask if he would quote

SELECTED WORK ITEMS SOLICITED LOG

Work Type	DBE Firm	Contact Person	Date	Contact Mode
Pavement Marking	ABC Marking	Leslie Lynch	4/1/2020	Email; phone
	#1 Marking Co.	Mark Smart	4/1/2020	Email; left VM
Electrical	Winterland Electric	Tabitha Tinker	4/3/2020	Email, left VM
	Superstar Wiring	Jose Huascar	4/3/2020	Email; phone

INFORMATION PROVIDED LOG

Request Date	DBE Firm	Information Requested & Provided	Response Date
4/1/2020	Winterland Electric	Requested info on electrical requirements; provided plan and link to specs	4/3/2020
4/21/2020	Absolute Construction	Wanted to know how and when supplies are paid for by WisDOT; referred to spec that covers stockpiling	4/21/2020

NEGOTIATIONS LOG

Date	DBE Firm	Contact Name	Work Type	Quotes Rec'd?	Considered for project?	If not selected, why?
4/12/2020	ABC Landscape	John Dean	Erosion Control	Yes	No	Cannot perform all items
4/17/2020	Wild Ferns	Sandy Lynn	Erosion Control	Yes	Yes	
4/20/2020	#1 Marking	Mark Smart	Electrical	Yes	Yes	

ASSISTANCE LOG

Date	DBE Firm	Contact Person	Assistance Provided
4/1/2020	ABC Sawing	Jackie Swiggle	Informed DBE on how to obtain bonding
4/17/2020	Supreme Construction	Winston Walters	Provided contact for wholesale supply purchase

OUTREACH & BUSINESS DEVELOPMENT LOG

Date	Agency/Organization Contacted	Contact Person	Assistance Requested
4/1/2020	Women in Construction	LaTonya Klein	Contact information for woman-owned suppliers
4/28/2020	WBIC	Sam Smith	Asked for information to provide to DBE regarding financing programs through WBIC

SECTION D: SPECIAL PROVISIONS

GARVER PATH & STARKWEATHER DRIVE ASSESSMENT DISTRICT-2021 CONTRACT NO. 8572

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.

The current edition of Part 1 of the WisDOT Standard Specifications for Highway and Structure Construction will be a part of this contract and will govern the work on this contract. If there is any conflict between Part 1 of the WisDOT Standard Specifications and the City of Madison Standard Specifications for Public Works Construction, then the stricter of the two shall apply. Furthermore references to WisDOT personnel or positions will be interpreted as a reference to the applicable City of Madison personnel or positions. Part 1 language that solely refers to WisDOT State let procedures would not apply.

ARTICLE 102 – BIDDING REQUIREMENTS AND CONDITIONS

Each bidder shall meet or show adequate good faith efforts to meet the DBE project goal. The bidder shall meet or exceed or demonstrate that it could not meet the goal despite its best efforts.

This information **MUST BE SUBMITTED WITH THE BID** or submitted electronically through Bid Express. Commitment to Subcontract to DBE Non-Traditional Projects Form (DT1880) and all necessary attachment A forms, as well as Good Faith Waiver Form (DT1202) and supporting documentation as necessary is due by the specified bid closing time and date. Bids submitted without this information shall be deemed non-responsible and the bidder ineligible for award of this contract.

Note that Form DT1506 is not required, Form DT1880 is used instead. The WISDOT boilerplate language mentions Form DT1506 but this contract does not require it since it is a City let non-traditional project.

WISDOT boilerplate language references submitting various items to WISDOT. All required documentation shall be submitted to the City, potential bidders are not required to submit to WISDOT. The City will administer and oversee the public works contract and construction.

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 \$65,000 for a single trade contract; or equal to or greater than \$318,000 for a multi-trade contract pursuant to MGO 33.07(7).

SECTION 102.13: FEDERAL PREVAILING WAGE

For this project, payment of prevailing wages is required. The wages and benefits paid on the contract shall not be less than those specified in the Federal Wage Decision included with these contract documents for the following types of work:

- Building
- Heavy
- Highway
- Residential

When multiple boxes are checked, worker's wages may vary according to the type and area of work performed. It is the responsibility of the Contractor to determine and apply the appropriate wage rate for the specific work assigned.

The City of Madison will be utilizing Federal Funds for this project. Because of this additional terms and conditions will apply. In addition to the requirements In Article 102 of the Standard Specifications, during the performance of this agreement, the Contractor will be required to conform to the wage requirements prescribed by the federal Davis-Bacon and Related Acts which requires that all laborers and mechanics employed by contractors and sub-contractors performing on contracts funded in whole or in part with federal funds in excess of \$2,000 pay their laborers and mechanics not less than the prevailing wage rates and fringe benefits, as determined by the Secretary of Labor, for corresponding classes of laborers and mechanics employed on similar projects in the area.

Note that the Wage Decision is subject to change and does not lock in until the bid's due date.

ARTICLE 104 **SCOPE OF WORK**

This work generally consists of the construction of an approximately one-mile long asphalt paved shared use path. The contract includes three pre-fabricated steel pedestrian bridges and the reconstruction of a portion of Starkweather Drive to convert the roadway to one-way traffic.

Work shall include, but is not limited to: clearing & grubbing; grading and construction of embankments; installation of prefabricated pedestrian structures; adjustment of sanitary sewer structures; steel railings; new or replaced curb and gutter and concrete sidewalk, base course, riprap bank protection, asphaltic paving, pavement marking and restoration.

SECTION 105.12 **COOPERATION BY THE CONTRACTOR**

Public utilities are shown on the plans as located by Diggers Hotline or other service maps that have been provided to the engineer. It is the contractor's responsibility to confirm their locations in the field. Relocations resulting from any conflicts with the proposed work will be done prior to or in coordination with the construction under this contract.

AT&T has underground communication facilities within the project area; however, no adjustments are anticipated.

Charter/Spectrum has no facilities within the project area.

City of Madison – Water Utility has underground facilities throughout the project area. Adjustments are anticipated during construction at the following locations:

- *In the southwest quadrant of the Starkweather Drive/Hargrove St intersection the hydrant near Sta. 100+32'SW' will be relocated.*
- *A hydrant will be installed at the Starkweather Drive/Richard St intersection.*
- *In the southeast quadrant of the Starkweather Drive/Dawes St intersection the valve and hydrant will be relocated. The watermain on Dawes St will be replaced.*
- *Underground water facility along the Ivy Street connection from Sta. 100+23'IV' to Sta. 101+25'IV' will be relocated.*

Lumen has no facilities within the project area.

Madison Gas & Electric - Electric has underground and overhead electric facilities throughout the project area. Adjustments are anticipated during construction at the following locations:

- *Light pole at Sta. 100+61'SW' will be removed after the new streetlight is in place.*
- *Light pole at Sta. 106+15'SW' will be removed after the new streetlight is in place.*
- *Light pole at Sta. 109+01'SW' will be relocated prior to adjacent construction and will be removed after the new streetlight is in place.*

- *Light pole at Sta. 102+12'IV' will be removed once the adjacent path is closed and replaced prior to the adjacent path being re-opened.*

Madison Gas & Electric - Gas has underground facilities throughout the project area. Adjustments are anticipated during construction at the following locations:

- *Underground gas facility between Sta. 100+20'SW' to Sta. 14+86'GP' will be relocated.*
- *Underground gas facility in the northeast quadrant of Starkweather Drive/ Richard Street intersection will be relocated.*
- *Underground gas facility at Sta. 104+87'SW' is located near the residential driveway reconstruction; however, no adjustments are anticipated.*
- *Underground gas facility at Sta. 105+55'SW' will be replaced.*
- *Underground gas facilities at intersection of Starkweather Drive and Leon Street will be replaced.*
- *Underground gas facility at Sta. 108+00'SW' is located near the residential driveway reconstruction; however, no adjustments are anticipated.*
- *Underground gas facilities at intersection of Starkweather Drive and Dawes Street will be replaced.*

Madison Metro Sewerage District has no facilities within the project area.

Sprint has no facilities within the project area.

Supranet has underground facilities within the Garver Feed Mill property but outside of the project area; no conflicts are anticipated.

Town of Blooming Grove has no facilities within the project area.

US Signal has underground communication facilities within the project area; however, no adjustments are anticipated.

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

SECTION 107.1 PUBLIC CONVENIENCE AND SAFETY

Comply with Madison General Ordinance 24.08(3) for hours of operations of construction equipment unless prior written approval is obtained from the construction engineer.

Access to the site and hauling through the Garver Feed Mill site entrance shall comply to the access maps included in the plans.

The project is adjacent to railroad property owned by Wisconsin Department of Transportation (WisDOT) and operated by Wisconsin & Southern Railroad (WSOR). The Contractor shall take great care to avoid disturbance of railroad property beyond the construction limits. See Special Provision 107.12 for additional information.

Contractor shall obtain advance approval from the Construction Engineer to occupy or disturb additional areas for a construction trailer, material storage or other use. Such additional areas shall be clearly delineated in the field with construction fence or other means. Contractor shall restore all such areas to the satisfaction of the Construction Engineer, and will be paid for this restoration under the appropriate bid items. Any areas outside those approved by the Construction Engineer that are disturbed shall be restored by the Contractor at his own expense.

The Contractor shall use care around existing trees to remain. 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.

SECTION 107.4 CONTRACTORS LIABILITY INSURANCE

The Contractor shall require its insurer to name, in addition to the City of Madison, The Wisconsin Department of Transportation, its officers, agents and employees as additional insured on the Commercial General Liability Policy provided hereunder.

SECTION 107.7 MAINTENANCE OF TRAFFIC

All traffic control 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.

The Contractor shall submit an acceptable, complete Traffic Control Plan, including all necessary phases and any required sidewalk or bike route closures, to the office of the City Traffic Engineer, at 215 Martin Luther King, Jr. Blvd, Suite 100, Madison, WI 53703, a minimum of five (5) working days, prior to the pre-construction meeting. The Traffic Control Plan shall address all requirements of this section of the Special Provisions. The contractor shall not start work on this project until the Traffic Engineering Division has approved a traffic control plan and traffic control devices have been installed, in accordance with the approved plan. Failure of the Contractor to obtain approval of a Traffic Control Plan, as specified above, may prevent the Contractor from starting work and shall be considered a delay of the project, caused by the Contractor.

The Contractor will be responsible for installing and maintaining traffic control in accordance with the Traffic Control Plan and as directed by the City Traffic Engineer. The Contractor shall install and maintain modifications or additions to the traffic control, as directed by the City Traffic Engineer, at no cost to the City.

The General Contractor shall be responsible for making daily inspections of the traffic control to ensure that all required signs are in place and all warning lights are functional.

Access to businesses within the Garver Feed Mill Development will be kept open at all times.

The Contractor shall maintain a marked detour route for bicycles and pedestrians as shown on the plans during closure of the Ivy Street pedestrian bridge within OB Sherry Park.

Starkweather Creek Drive will be closed as shown on the plans. No detour route will be provided. Maintain local access to all properties on Starkweather Drive at all times.

Flagging operations will be necessary for constructing curb and gutter along Milwaukee Street as per the plans and as directed by the Construction Engineer.

No work will be allowed on roadways within the roadway clear width zone during events and holidays.

One changeable message sign shall be installed on each end of the project for the one week prior to the path closure. The sign shall read as follows or as otherwise directed by the City Traffic Engineer:

**PATH
CLOSURE
BEGINS
DAY
DATE**

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 (1) working day prior to placement of the plates.

The Contractor shall provide ADA/Handicap Accessible pedestrian access, where such accommodations are originally available, at all intersections within the construction area at all times.

No construction equipment or materials shall 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 Contractor shall not remove or cover any traffic signs. For removal, replacement, or covering 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 two working days in advance of when any existing signs need to be removed or covered. This service is free of charge. If the Contractor removes or covers the signs, the Contractor will be billed for the reinstallation or repair of, and any damage to, the signing equipment.

Measurement

Traffic Control will be measured as a single lump sum for all traffic control measures required, except for the Portable Changeable Message signs. Any traffic control required on other streets will not be measured for payment and will be considered incidental to other items of work.

Payment

Payment for the Traffic Control is full compensation for furnishing, erecting, maintaining and removing non permanent traffic signs, drums, barricades, and similar control devices. Maintaining shall include replacing damaged or stolen traffic control devices and moving or altering traffic control devices for altered or unexpected field conditions as required by the Engineer. Portable Changeable Message signs will be measured and paid for separately under the appropriate bid item.

Contact **Jerry Schippa, Traffic Engineering Division, (608)267-1969, jschippa@cityofmadison.com**, with any questions concerning these traffic control specifications.

SECTION 107.12 OPERATIONS ON RAILROAD RIGHT OF WAY

In addition to the conditions under these Special Provisions in Section 107.1 Contractor shall comply with the provisions of Article 107.12 of the Standard Specifications and Article 107.17 of the State of Wisconsin Standard Specifications for Highway and Bridge Construction, 2021 Edition regarding operations on Railroad right of way while doing any work near the rail right of way.

Contractor will be required to obtain railroad protective liability insurance and provide a certificate of insurance naming Wisconsin & Southern Railroad LLC and the Wisconsin Department of Transportation as additional insured. Payment will be made for this at the contract Lump Sum price for RAILROAD INSURANCE.

A.1 Railroad Insurance Requirements

In addition to standard spec 107.26 of the State of Wisconsin Standard Specifications for Highway and Bridge Construction provide railroad protective liability insurance coverage as specified in standard spec 107.17.3 of the State of Wisconsin Standard Specifications for Highway and Bridge Construction. Insurance is filed in the name of Wisconsin and Southern Railroad Company.

Notify evidence of the required coverage, and duration to Amanda Haggerty, Office Administrator; 1890 E Johnson Street, Madison, WI 53704; Telephone (608) 620-2048; E-mail: **ahaggerty@watcocompanies.com**.

Also send a copy to the following: Teri Beckman, SW Madison Region Railroad Coordinator; 2101 Wright Street, Madison, WI 53704; Telephone (608) 733-1923; E-mail: **teri.beckman@dot.wi.gov**

Include the following information on the insurance document:

- Project ID: 5992-10-40/41
- Project Location: Madison, Wisconsin
- Route Name: Garver Path, Dane County
- Crossing ID: 177326G
- Railroad Subdivision: Cottage Grove
- Railroad Milepost: 79.28
- Work Performed: Installing a new path

A.2 Train Operation

Approximately 2 through freight trains operate daily at up to 5 to 10 mph. Approximately 2 switching trains per day.

A.3 Names and Addresses of Railroad Representatives for Consultation and Coordination

Construction Contact:

Roger Schaalma, Superintendent of Maintenance of Way, Wisconsin and Southern Railroad Co.; 1890 East Johnson Street, Madison, WI 53704; Telephone (608) 620-2044; E-mail rschaalma@watcocompanies.com for consultation on railroad requirements during construction.

Amend standard spec 108.4 to include the railroad in the distribution of the initial bar chart, and monthly schedule updates. The bar chart shall specifically show work involving coordination with the railroad.

Flagging Contact:

See Construction Contact. Reference the Crossing ID, Wisconsin Milepost and Subdivision found in A.1.

Cable Locate Contact:

In addition to contacting Diggers Hotline, contact Amanda Haggerty, Office Administrator; Telephone (608) 620-2048; E-mail ahaggerty@watcocompanies.com at least five working days before the locate is needed. Reference the Crossing ID, Wisconsin Milepost and Subdivision found in A.1.

WSOR will only locate railroad owned facilities located in the railroad right-of-way. The railroad does not locate any other utilities.

A.4 Work by Railroad

The railroad will perform the work described in this section, except for work described in other special provisions, and will be accomplished without cost to the contractor. None

A.5 Temporary Grade Crossing

If a temporary grade crossing is desired, submit a written request to the railroad representative named in A.3 at least 40 days prior to the time needed. Approval is subject to the discretion of the railroad. The department has made no arrangements for a temporary grade crossing.

A.6 Rail Security Awareness and Contractor Orientation

Prior to entry on railroad right-of-way, the contractor shall arrange for on-line security awareness and contractor orientation training and testing and be registered through "e-RAILSAFE" for all contractor and subcontractor employees working on railroad right-of-way. See e-railsafe.com "Information". The security awareness and contractor orientation training are shown under the railroad's name.

The security awareness and contractor orientation certification is valid for 2 year(s) and must be renewed for projects that will carry over beyond the 2 year period. Contractor and subcontractor employees shall wear the identification badge issued by e-RAILSAFE when on railroad right-of-way. Costs associated with training and registration are incidental to other items in the contract.

ARTICLE 108

LEGAL RELATIONS

The Contractor agrees to assume the entire Responsibility for Damage and Tort Claims provision of the City of Madison (Project Sponsor) to The Wisconsin Department of Transportation under the State/Municipal Transportation Alternatives Program (TAP) Project Agreement, Project ID: 5992-10-40/41 which provision reads as follows:

Responsibility for Damage and Tort Claims: The Project Sponsor and the Project Sponsor's surety shall indemnify and save harmless the State, its officers and employees, from all suits, actions or claims of any character brought because of any injuries or damages received or sustained by any person, persons or property on account of the operations of the Project Sponsor; or on account of or in consequence of any neglect in safeguarding the work; or because of any act or omission, neglect or misconduct of the Project Sponsor; or because of any claims or amounts recovered for any infringement by the Project Sponsor of patent, trademark or copyright; or from any claims or amounts arising or recovered under the Worker's Compensation Act, relating to the Project Sponsor's employees; or any other law, ordinance, order or decree relating to the Project Sponsor's operations. So much of the money due the Project Sponsor under and by virtue of the contract as shall be considered necessary by the Department for such purposes, may be retained for the use of the State; or, in case no money or insufficient money is retained, the Project Sponsor's surety or insurer or both may be held until such suit or suits, action or actions, claim or claims for injuries or damages as aforesaid shall have been settled and suitable evidence to that effect furnished to WisDOT; except that money due the Project Sponsor will not be withheld when the Project Sponsor produces satisfactory evidence that the Project Sponsor is adequately protected by public liability and property damage insurance. The Project Sponsor also shall comply with all of the above requirements indemnifying and saving harmless the county, town, or municipality in which the improvement is made and each of them separately or jointly and their officers and employees.

The State shall not be liable to the Project Sponsor for damages or delays resulting from work by third parties. The State also shall be exempt from liability to the Project Sponsor for damages or delays resulting from injunctions or other restraining orders obtained by third parties except where the damage or delay is a direct result of an injunction or restraining order obtained by a citizen's action alleging violations of 42 U.S.C. 4331 - 4332, 23 U.S.C. 138 or Public Law 91-646.

It shall be the Project Sponsor's responsibility to see that all of the contract operations incident to the completion of the contract are covered by public liability and property damage liability insurance so the general public or any representative of the contracting authority may have recourse against a responsible party for injuries or damages sustained as a result of the contract operations. This requirement shall apply with equal force, whether the work is performed by the Project Sponsor, by a subcontractor or by anyone directly or indirectly employed by either of them.

It is the express intent of this provision, Section 13, that the Project Sponsor that is a county, town or municipality may and should contractually pass on this entire Responsibility for Damage and Tort Claims provision to any public and private entities with which it may subcontract any of the work covered by this agreement.

a) The word, "surety" in the above paragraphs refers to the issuer of a payment and performance bond under section 779.14 Wis. Stats. (2005-2006).

b) Nothing in this section should be construed as a waiver of any statutory defenses that may be available to any governmental party.

SECTION 108.2

PERMITS

The City of Madison has obtained coverage under a WPDES General Permit No. WI-S067831-5 for Construction Site Storm Water Runoff regarding erosion control for a disturbed area greater than one acre.

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

- Individual Permit for a bridge over a waterway with width greater than 25 feet at Ordinary High water, IP-SC-2020-13-03401-3483, issued 1/11/2021
- General Permit for recreational development wetland, GP-SC-2020-13-03585 issued 11/16/2020.
- Notice of Intent Construction Site Storm Water Permit, FIN 74467 issued 11/30/2020.

A Preconstruction Notice (PCN) for a Nationwide Transportation General Permit (TRGP) and concurrence from the Army Corps of Engineers was submitted and a permit letter was issued October 29, 2020; File No. MVP-2020-2106-KDZ.

A City of Madison Erosion Control permit has been obtained 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. See **SECTION 210.1(b)**. 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.

SECTION 109.2

PROSECUTION OF WORK

The project shall be completed on or prior to June 1, 2022

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

The contract start date is intended to allow the Contractor time to begin design and shop drawing review of the pre-fabricated bridge in advance of actual construction.

The wetland structure B-13-882 and approaches located within soft compressible soil areas including placement of the embankment fills and stone based as shown on the plans shall be completed prior to August 1st, 2021. Final grading and asphalt pavement of the path including installation of the safety rail for the approaches to the structure will be completed in the spring 2022 or by the project completion date of June 1, 2022.

In addition to the above requirements, Contractor shall schedule operations such that segments of the project which can be completed in shorter periods of time are not closed for the full duration of the contract. Specifically:

- Starkweather Drive may be closed to traffic for a maximum of **60 CALENDAR DAYS**.

Contractor may choose to begin these segments later in the contract period or to complete and re-open them prior to the total time for completion, or a combination of these options. In any case, the interim duration shall be considered to begin when the segment is closed to use and to end when the segment is re-opened for use on the new pavement.

Interim Liquidated Damages of **\$1,750 per Calendar Day** will be assessed for failure to complete either of the segments within the stated duration. Maximum Liquidated Damages for any calendar day will not exceed those calculated per Section 109.9 of the City of Madison Standard Specifications.

It is expected that the Contractor may need to utilize multiple crews working in multiple locations within the project limits to complete all work by the contract end date.

BID ITEM 20101 - EXCAVATION CUT

The item of Excavation Cut shall apply to all excavation for paths, curbs, and sidewalk within the project limits except for removal of concrete items, excavation for the bridge substructure units or trenching for underground pipes, which are paid for under other items. Excavation Cut shall be in accordance with Article 201 of the Standard Specifications except as provided below.

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.

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 20241 – RIPRAP FILTER FABRIC TYPE HR

Description.

The work shall consist of placing Riprap Filter Fabric Type HR at the abutments in accordance with the plans and these specifications.

Materials.

Riprap Filter Fabric Type HR shall conform to Section 645 of the State of Wisconsin Standard Specifications for Highway and Bridge Construction, 2021 Edition.

Construction Methods.

Riprap Filter Fabric Type HR shall conform to Section 645 of the State of Wisconsin Standard Specifications for Highway and Bridge Construction, 2021 Edition.

Method of Measurement.

Riprap Filter Fabric Type HR delivered and installed, will be measured by the square yard. Only accepted work will be measured for payment and the computation of the quantity thereof will be based on the area within the limiting dimensions designated on the plans, in the contract or established by the engineer.

Basis of Payment.

This work, measured as provided, will be paid for at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
20241	Riprap Filter Fabric Type HR	SY

Payment is full compensation for excavation and preparation of the bed, including backfilling and disposal of surplus material; furnishing and placing Geotextile Fabric Type HR, for restoring the site of the work; and for furnishing all equipment, tools, labor and incidentals necessary to complete the work.

BID ITEM 20401 & 20403 – CLEARING AND GRUBBING

Description

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

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 removals in the field and shall review the individual trees to be removed with the Construction Engineer prior to removing them. The construction Engineer and /or Forrester may designate certain trees near or within the intercepts to be saved or protected. Such trees shall be clearly marked and if necessary silt fence, construction fencing or other marking used to ensure that they are not damaged.

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.

BID ITEM 21002 – EROSION CONTROL INSPECTION

Work under this bid item shall be for weekend inspections (inspections required for rain events, half inch or larger, that occur on a Friday or Saturday) by the Contractor after half inch or greater rain events or as directed by the construction engineer. All weekly inspections and rain event inspections required during the work week (Monday-Friday) shall be completed by the City of Madison construction inspector.

BID ITEM 21021 – SILT FENCE - COMPLETE

Work under this bid item shall include installation of Amphibian/Reptile fencing turnaround gates as shown on the plans or as directed by the Construction Engineer. The length required for the turnaround gates shall be included and paid for as part of this bid item.

BID ITEM 40102 – CRUSHED AGGREGATE BASE COURSE GRADATION NO. 2 OR NO. 3

Description

Work under this item consists of constructing a sub-base in the locations and to the depth and widths shown on the plans.

Construction Methods

Excavate to a depth required to provide the aggregate sub-base, base course and asphalt pavement thickness shown on plans. Prepare subgrade, place and compact crushed aggregate in accordance with Section 401.2 of the Standard Specifications.

Measurement of Payment

This item will be measured and paid for in accordance with Section 401.3 of the Standard Specifications supplemented as follows: Contract unit price for Crushed Aggregate Base Course, Gradation No. 2 or No. 3 shall be considered full payment for layout of the lines and grades, preparation of the subgrade, furnishing, placing and compacting aggregate. Base course and HMA pavement above the sub-base will be paid for separately under the appropriate items.

BID ITEM 40321 - UNDERCUT

DESCRIPTION

Work under this item shall include all work, materials, equipment, and incidentals required to provide no less than two foot of undercut to remove soils unsuitable for compaction. Non-woven geotextile fabric (paid as BID ITEM 20241) and clear stone (paid as BID ITEM 20217) shall be installed prior to placement of all proposed sanitary sewer main and structures.

- 1) The subgrade for the boxes shall have filter fabric (paid under BID ITEM 20241 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 pipe and structure bedding shall be paid as BID ITEM 20217.

METHOD OF MEASUREMENT

UNDERCUT shall be paid for each cubic yard of excavation and completion of stabilized base.

BASIS OF PAYMENT

UNDERCUT shall be paid for at the contract price, which shall be full compensation for all work as outlined in the description.

ARTICLE 500 SEWER AND SEWER STRUCTURES GENERAL

The sanitary sewer designer for this project is Daniel Olivares and may be contacted at (608) 261-9285 or daolivares@cityofmadison.com.

The storm sewer designer for this project is Josh Mercier and may be contacted at (608) 663-1218, ext 817 or jmercier@klengineering.com.

SANITARY SEWER GENERAL

This project shall include installing approximately 553-feet of new 12" PVC, 533-feet of new 10" PVC, 50-feet of new 8" PVC, and approximately 101-feet of new PVC sanitary lateral.

ASTM D3034 SDR-35 sewer main and lateral as called for on the plan set shall be payable under Sanitary Sewer Main (BID ITEM 50301) and Sanitary Lateral (BID ITEM 50353).

All new sanitary sewer access structures shall include Neenah R-1550 castings 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 Latest ed. All new sewer main connections may be factory cored and shall be included in the structure. All existing 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.

Contractors shall have a locator device on-site if they intend to start laying lateral pipe at the property line to minimize the amount of extra sidewalk removal. Each sanitary lateral shall have a maximum of 4 sidewalk squares removed and replaced. No additional compensation shall be awarded beyond this amount for the replacement of a sewer lateral. If laterals called for reinstatement on the plans are to be plugged under the direction of the engineer on-site, Contractors are required to use a sonde device to confirm that the laterals are not active.

All sanitary sewer laterals on this project were located by television inspection of the main and from City records.

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.

STORM SEWER GENERAL

Reconnection of existing pipes at new structures, or new pipes at new 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/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.

If there are structures where the pipe walls are to be poured into the structure roof or both the pipe walls and the structure casting are to be poured in the structure roof, the Contractor shall not be provided additional compensation for complying with the structure requirements detailed on the storm sewer chart and plans.

Precast structures are only allowed where field poured structures are not specifically called for, and no precast structures are allowed until ULO's are completed and approval of the design engineer has been received.

BID ITEM 50202 - TYPE II DEWATERING

DESCRIPTION

This item is intended to cover any and all dewatering required for installation of the sanitary sewer. Dewatering shall be in accordance with Article 502 of the Standard Specifications. Note that the Contractor shall be responsible for obtaining any permits required by DNR for this work, and for complying with such permits, including any reporting requirements.

The Contractor shall be responsible for designing a dewatering plan to fit his/her construction methods and for permitting said plan if required.

The Contractor shall be aware that any dewatering (including trench dewatering) shall be treated prior to discharge. The pumped water shall be treated to remove suspended solids. At a minimum, this treatment shall include running the pump water through a geotextile sediment bag, prior to discharge to the storm sewer. This geotextile sediment bag shall have a 0.040 mm apparent opening size (AOS). If, at the determination of the Engineer, this treatment process is not providing sufficient sediment removal the Contractor shall add a polymer to the sediment bag. These polymers shall comply with the WDOT standards for Polyacrylamide Soil Stabilizers and shall conform to the WDOT's Product Acceptability List (PAL) for Soil Stabilizers, Type B.

Polymer would be added to the sediment bag in amounts as recommended by the manufacturer based on the pump rates being experienced on the site.

If necessary, the Contractor shall obtain, from the Wisconsin Department of Natural Resources (WDNR), in accordance with Paragraph 144.025(2)(e), Wisconsin Statutes, permits for all groundwater control wells which singly or in aggregate produce 70 or more gallons per minute. All wells shall be drilled and sealed in accordance with requirements of the WDNR for installing and abandoning wells. The address for obtaining well permits is:

Wisconsin Department of Natural Resources
Private Water Supply Section
BOX 7921
Madison, Wisconsin 53707

The Contractor shall be solely responsible for choosing a method of groundwater control, which is compatible with the constraints defined. The Contractor shall be responsible for the adequacy of the groundwater control system and shall take all necessary measures to ensure that the groundwater control operation will not endanger or damage any existing adjacent utilities or structures.

The method or methods shall be designed, installed and operated in such a manner to provide satisfactory working conditions and to maintain the progress of work. The methods and systems shall be designed so as to avoid settlement or damage to adjacent property in accordance with the applicable legislative statutes and judicial decisions of the State of Wisconsin. All required pumping, drainage and disposal of groundwater shall be done without damage to adjacent property or structures, or to the operations of other contractors and without interference with the access rights of public or private parties.

BID ITEM 50361 - WASTEWATER CONTROL

DESCRIPTION

Work under this bid item shall include wastewater control (bypass pumping of the sewer being replaced) in the amount of 200 gpm. Work shall be completed in accordance with Article 503.3 of the City of Madison Standard Specifications for Public Works Construction- Latest Edition.

Estimated flow volume is based upon observed flow volumes while televising the sewer main.

Work under this item shall include all work, materials, equipment, and incidentals required to provide necessary wastewater controls.

METHOD OF MEASUREMENT

WASTEWATER shall be measured by lump sum for flow controls provided through the duration of the project.

BASIS OF PAYMENT

WASTEWATER shall be paid for at the contract price, which shall be full compensation for all work as outlined in the description.

BID ITEM 50793 - PRIVATE STORM RECONNECT TYPE 1

3402 Dawes Street lateral

The property owner of 3402 Dawes St has a 4" PVC private storm sewer lateral that connects to existing storm sewer structure IN6140-016. This connection to the City of Madison storm sewer system is approved through Permit No. 2017-01258. This item shall include all work, materials, labor and incidentals necessary to make connection to proposed storm sewer structure 3.6 in the plans.

BID ITEM 50797 - EXTERNAL SEWER ACCESS STRUCTURE JOINT SEAL

DESCRIPTION

Work under this item shall include all work, materials, equipment, and incidentals required to provide and install External Sewer Access Structure Joint Seal in accordance with Article 507.3 of the City of Madison Standard Specifications for Public Works Construction Latest Edition.

METHOD OF MEASUREMENT

EXTERNAL JOINT SEAL shall be measured by each structure installation acceptably completed.

BASIS OF PAYMENT

EXTERNAL JOINT SEAL shall be paid for at the contract price, which shall be full compensation for all work as outlined in the description.

BID ITEM 50801 – UTILITY LINE OPENING (ULO)

The work under this item shall be completed in accordance with Article 508 of the Standard Specifications for Public Works Construction. It is the discretion of the Contractor to locate utilities by either a trench excavation or by a pothole technique. However, the Contractor shall not be compensated more than once for multiple utilities located within a maximum distance of five (5) feet long.

This contract includes 2 additional undistributed ULOs to be performed at the direction of the Engineer.

BID ITEM 90200 – PARK RESTORATION - MOW

Description

The work shall consist of restoration including preparation of seed beds including placement of topsoil, furnishing and sowing the required seed, furnishing and applying the required stabilizers, fertilizer, and mulching as shown on the plans or as directed by the Construction Engineer.

Materials

Follow the requirements in Article 207 of the standard specifications.

Seed mixture shall conform to Madison Parks Seed mix.

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. Topsoil shall be placed to a minimum thickness of six (6) inches unless otherwise shown on plans.

Construction Methods

Follow the requirements in Article 207 of the standard specifications.

Seed shall be applied at a rate of 5 lbs per 1,000 sf.
Topsoil placement shall include furnishing, spreading, fine grading and raking the surface in preparation for seeding, in accordance with Section 202 of the Standard Specifications.

Method of Measurement

Park Restoration – Mow will be measured by the square yard acceptably completed and according to Article 207 of the standards specifications.

Basis of Payment.

This work, measured as provided, will be paid for at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
90200	Park Restoration -Mow	SY

Payment is full compensation for furnishing, handling, and storing all seed, for preparing seed bed including placement of topsoil and sowing the seed; for furnishing, hauling, handling, storing, placing, and incorporating the fertilizer into the work; for furnishing, hauling, treating, placing, spreading, and anchoring

of the mulch unless the area receives erosion matting, in which case mulch is not required; for maintenance of the work and the repair of all damaged areas; and for furnishing all equipment, tools, labor and incidentals necessary to complete the work.

BID ITEM 90201 – PARK RESTORATION – NO MOW

Description

The work shall consist of restoration including preparation of seed beds including place of topsoil, furnishing and sowing the required seed, furnishing and applying the required stabilizers, fertilizer, and mulching as shown on the plans or as directed by the Construction Engineer.

Materials

Follow the requirements in Article 207 of the standard specifications.

Seed mixture shall conform to Madison Parks Seed mix.

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. Topsoil shall be placed to a minimum thickness of six (6) inches unless otherwise shown on plans.

Construction Methods

Follow the requirements in Article 207 of the standard specifications.

Seed shall be native plant seeds for Wet Mesic soils conforming to the following mix;

CUSTOM NATIVE SEED MIX							
GRASSES, SEDGES & RUSHES	COMMON NAME	OZ/ACRE	TOTAL OZ	COLOR	SEEDS/OZ	SEEDS/LF	% OF MIX
Andropogon gerardii	Big Bluestem	16	16.00	Green	12000	4.41	2.8%
Bouteloua curtipendula	Side Oats Gama	48	48.00	Green	12500	13.77	8.7%
Carex vulpinoidea	Brown Fox Sedge	3	3.00	Green	110000	7.58	4.8%
Poa palustris	Fowl Bluegrass	8	8.00	Green	130000	23.88	15.0%
Elymus virginicus	Virginia Wild Rye	16	16.00	Green	4200	1.54	1.0%
Bromus ciliates	Fringed Brome	16	16.00	Green	8000	2.94	1.9%
Sorghastrum nutans	Indian Grass	8	8.00	Green	12500	2.30	1.4%
Scirpus atrovirens	Dark-Green Bulrush	2	2.00	Green	450000	20.66	13.0%
Glyceria striata	Fowl Manna Grass	0.5	0.50	Green	110000	1.26	0.8%
GRASSES, SEDGES & RUSHES TOTAL		117.50	117.50	Green		78.33	49.3%
WILDFLOWERS	COMMON NAME	OZ/ACRE	TOTAL OZ	COLOR	SEEDS/OZ	SEEDS/LF	% OF MIX
Heliopsis helianthoides	Early Sunflower	8	8.00	Yellow	6500	1.19	0.8%
Achillea millefolium	Native yarrow	2	2.00	White	180000	8.26	5.2%
Agastache scrophulariaefolia	Purple Giant Hyssop	1	1.00	Purple	30000	0.69	0.4%
Allium cernuum	Nodding Onion	3	3.00	Pink	8500	0.59	0.4%
Cassia hebecarpa	Wild Senna	12	12.00	Yellow	1400	0.39	0.2%
Monarda fistulosa	Wild Bergamot	2	2.00	Lavender	100000	4.59	2.9%
Napaea dioica	Glad Mallow	8	8.00	White	2100	0.39	0.2%
Oenothera biennis	Common Evening Primrose	4	4.00	Yellow	75000	6.89	4.3%
Helenium autumnale	Sneezeweed	1	1.00	Yellow	150000	3.44	2.2%
Echinacea purpurea	Purple Coneflower	5	5.00	Purple	7000	0.80	0.5%
Rudbeckia hirta	Black-Eyed Susan	6	6.00	Yellow	130000	17.91	11.3%
Silphium perfoliatum	Cup Plant	5	5.00	Yellow	1900	0.22	0.1%
Solidago ohioensis	Ohio Goldenrod	3	3.00	Yellow	140000	9.64	6.1%
Vernonia fasciculata	Ironweed	1	1.00	Purple	35000	0.80	0.5%
Verbena hastata	Blue Vervain	4	4.00	Blue	100000	9.18	5.8%
Asclepias incarnata	Marsh (Red) Milkweed	1	1.00	Red	5500	0.13	0.1%
Liatris spicata	Marsh Blazing Star	3	3.00	Purple	20000	1.38	0.9%
Eupatorium perfoliatum	Boneset	0.3	0.30	White	200000	1.38	0.9%
Hypericum pyramidatum	Great St. John's Wort	2	2.00	Yellow	200000	9.18	5.8%
Lobelia siphilitica	Great Blue Lobelia	0.3	0.30	Blue	500000	3.44	2.2%
WILDFLOWERS TOTAL		71.60	71.60			80.49	50.7%
		OZ/ACRE	OZ/ACRE			SEEDS/SF	% OF MIX
SEED MIX TOTALS		189.10	189.10			158.82	100.0%

Topsoil placement shall include furnishing, spreading, fine grading and raking the surface in preparation for seeding, in accordance with Section 202 of the Standard Specifications.

Method of Measurement

Park Restoration – No Mow will be measured by the square yard acceptably completed and according to Article 207 of the standards specifications.

Basis of Payment.

This work, measured as provided, will be paid for at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
90201	Park Restoration – No Mow	SY

Payment is full compensation for furnishing, handling, and storing all seed including place of topsoil, for preparing seed bed and sowing the seed; for furnishing, hauling, handling, storing, placing, and incorporating the fertilizer into the work; for furnishing, hauling, treating, placing, spreading, and anchoring of the mulch unless the area receives erosion matting, in which case mulch is not required; for maintenance of the work and the repair of all damaged areas; and for furnishing all equipment, tools, labor and incidentals necessary to complete the work.

BID ITEM 90202 – WETLAND RESTORATION

Description

The work shall consist of restoration including preparation of seed beds including placement of topsoil, furnishing and sowing the required seed, furnishing and applying the required stabilizers, fertilizer, and mulching as shown on the plans or as directed by the Construction Engineer.

Materials

Follow the requirements in Article 207 of the standard specifications.

Seed mixture shall conform to "Path Rush" (*Juncus tenuis*) as supplied by the following nurseries; Agrecol, Prairie Nursery, Prairie Moon Nursery, or approved equal.

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. Topsoil shall be placed to a minimum thickness of six (6) inches unless otherwise shown on plans.

Construction Methods

Follow the requirements in Article 207 of the standard specifications.

Seed shall be applied at a rate of 1 lbs per acre.

Topsoil placement shall include furnishing, spreading, fine grading and raking the surface in preparation for seeding, in accordance with Section 202 of the Standard Specifications.

Method of Measurement

Wetland Restoration – Mow will be measured by the square yard acceptably completed and according to Article 207 of the standards specifications.

Basis of Payment.

This work, measured as provided, will be paid for at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
90202	Wetland Restoration - Mow	SY

Payment is full compensation for furnishing, handling, and storing all seed, for preparing seed bed including placement of topsoil and sowing the seed; for furnishing, hauling, handling, storing, placing, and incorporating the fertilizer into the work; for furnishing, hauling, treating, placing, spreading, and anchoring of the mulch unless the area receives erosion matting, in which case mulch is not required; for maintenance of the work and the repair of all damaged areas; and for furnishing all equipment, tools, labor and incidentals necessary to complete the work.

BID ITEM 90203 – GEOGRID SR

Description

The work shall consist of furnishing and placing geogrid for select fill sand areas and Excavation Below Subgrade as shown on the plans or as directed by the Construction Engineer.

Materials

Geogrid shall be biaxial geogrid BX Type 2 as manufactured by Tensar, RX1200 as manufactured by Terragrid, or approved equal.

Construction Methods

Follow the requirements of Section 645 of the State of Wisconsin Standard Specifications for Highway and Bridge Construction, 2021 Edition.

Method of Measurement

Geogrid SR will be measured by the square yard acceptably completed.

Basis of Payment.

This work, measured as provided, will be paid for at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
90203	Geogrid SR	SY

Payment is full compensation for providing the furnishing, handling, storing and placement of the geogrid; and for furnishing all equipment, tools, labor and incidentals necessary to complete the work.

BID ITEM 90204 – GEOGRID WETLAND

Description

The work shall consist of furnishing and placing geogrid in wetland areas as shown on the plans or as directed by the Construction Engineer.

Materials

Provide a triaxle geogrid conforming to the following;

Index Properties:	Longitudinal	Diagonal	Transverse	General
Rib Pitch	1.6 in	1.6 in	-	-
Mid-rib depth	-	2.0 in	0.06 in	-
Rib shape	-	-	-	rectangular
Aperture Shape	-	-	-	triangular

Construction Methods

Follow the requirements of Section 645 of the State of Wisconsin Standard Specifications for Highway and Bridge Construction, 2021 Edition.

Method of Measurement

Geogrid SR will be measured by the square yard acceptably completed.

Basis of Payment.

This work, measured as provided, will be paid for at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
90203	Geogrid Wetland	SY

Payment is full compensation for providing the furnishing, handling, storing and placement of the geogrid; and for furnishing all equipment, tools, labor and incidentals necessary to complete the work.

BID ITEM 90205 – SAFETY FENCE

Description

This Special Provision describes furnishing and installing metal fencing at locations and according to details shown on the Drawings.

Materials

All materials for the steel railing shall be in accordance with the 513.2 of the State of Wisconsin Standard Specifications for Highway and Bridge Construction, 2021 Edition. Railing assemblies shall be galvanized and receive a two-coat paint system from the WisDOT Bureau of Structures approved products list as specified in 517.2 of the State of Wisconsin Standard Specifications for Highway and Bridge Construction, 2021 Edition.

Construction Methods

Construct the railing in accordance with 513.3 of the State of Wisconsin Standard Specifications for Highway and Bridge Construction, 2021 Edition.

Paint the railing with a two-coat paint system from the WisDOT Bureau of Structures approved products list as specified in 517.3 of the State of Wisconsin Standard Specifications for Highway and Bridge Construction, 2021 Edition

Method of Measurement

Safety Fence will be measured by the lineal feet acceptably completed.

Basis of Payment.

This work, measured as provided, will be paid for at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
90205	Safety Fence	LF

Payment is full compensation for furnishing and installing fence and posts; for all maintenance necessary to keep the fence and posts in satisfactory condition; and for furnishing all labor, tools, equipment, materials, and incidentals necessary to complete the Contract Work

BID ITEM 90206 EXCAVATION, HAULING, AND DISPOSAL OF PETROLEUM CONTAMINATED SOIL

A Description

A.1 General

This special provision describes excavating, loading, hauling, and disposing of petroleum contaminated soil at a DNR approved bioremediation facility. The nearest bioremediation facility is:

Waste Management's Deer Track Park Landfill
N6756 Waldmann Ln.
Watertown, WI 53094

Perform this work conforming to standard spec 205 of the State of Wisconsin Standard Specifications for Highway and Bridge Construction, 2021 Edition and Chapters NR 700-754 of the Wisconsin Administrative Code, as supplemented herein. Per NR 718.07, a solid waste collection and transportation service-operating license is required under NR 502.06 for each vehicle used to transport contaminated soil.

A.2 Notice to the Contractor – Contaminated Soil Locations

The City completed testing for soil and groundwater contamination for locations within this project where excavation is required. Testing indicated that petroleum-contaminated soil is present at the following locations the plans show:

Station 10+59'GP' to Station 11+25'GP' from 10' right of centerline to 210' left of centerline

If contaminated soils are encountered elsewhere on the project, terminate excavation activities in the area and notify the engineer.

For further information regarding previous investigation and remediation activities at these sites contact:

Name: Brynn Bemis, Hydrogeologist
Address: City of Madison - Engineering
Phone: 608-267-1986
E-mail: bbemis@cityofmadison.com

A.3 Coordination

Coordinate work under this contract with the environment consultant:

Contact: Brynn Bemis, Hydrogeologist
Address: City of Madison - Engineering
Phone: 608-267-1986
E-mail: bbemis@cityofmadison.com

The role of the environmental consultant will be limited to:

1. Determining the location and limits of contaminated soil to be excavated based on soil analytical results from previous investigations, visual observations, and field screening of soil that is excavated;
2. Identifying contaminated soils to be hauled to the bioremediation facility;
3. Documenting that activities associated with management of contaminated soil are in conformance with the contaminated soil management methods for this project as specified herein; and
4. Obtaining the necessary approvals for disposal of contaminated soil from the bioremediation facility.

Provide at least a 14-calendar day notice of the preconstruction conference date to the environmental consultant. At the preconstruction conference, provide a schedule for all excavation activities in the areas of contamination to the environmental consultant. Also notify the environmental consultant at least three calendar days before beginning excavation activities in each of the contaminated areas.

Coordinate with the environmental consultant to ensure that the environmental consultant is present during excavation activities in the contaminated areas. Perform excavation work in each of the contaminated areas on a continuous basis until excavation work is completed.

Identify the DNR approved bioremediation facility that will be used for disposal of contaminated soils and provide this information to the environmental consultant no later than 30 calendar days before beginning excavation activities in the contaminated areas or at the preconstruction conference, whichever comes first. The environmental consultant will be responsible for obtaining the necessary approvals for disposal of contaminated soils from the bioremediation facility. Do not transport contaminated soil offsite without prior approval from the environmental consultant.

A.4 Health and Safety Requirements

Add the following to standard spec 107.1 of the State of Wisconsin Standard Specifications for Highway and Bridge Construction, 2021 Edition:

During excavation activities, expect to encounter soil contaminated with gasoline, diesel fuel, fuel oil, or other petroleum related products. Site workers taking part in activities that will result in the reasonable probability of exposure to safety and health hazards associated with hazardous materials shall have completed health and safety training that meets the Occupational Safety and Health Administration (OSHA) requirements for Hazardous Waste Operations and Emergency Response (HAZWOPER), as provided in 29 CFR 1910.120.

Prepare a site-specific Health and Safety Plan, and develop, delineate and enforce the health and safety exclusion zones for each contaminated site location as required by 29 CFR 1910.120. Submit the site-specific health and safety plan and written documentation of up-to-date OSHA training to the engineer before the start of work.

B (Vacant)

C Construction

Add the following to standard spec 205.3 of the State of Wisconsin Standard Specifications for Highway and Bridge Construction, 2021 Edition:

Control operations in the contaminated areas to minimize the quantity of contaminated soil excavated.

The environmental consultant will periodically evaluate soil excavated from the contaminated areas to determine if the soil will require offsite bioremediation. The environmental consultant will evaluate excavated soil based on visual observations, and soil analytical results from previous environmental investigations.

Directly load and haul soils designated by the environmental consultant for offsite bioremediation to the DNR approved bioremediation facility. Use loading and hauling practices that are appropriate to prevent any spills or releases of petroleum-contaminated soils or residues. Before transport, sufficiently dewater soils designated for off-site bioremediation so as not to contain free liquids.

D Measurement

Excavation, Hauling, and Disposal of Petroleum Contaminated Soil will be measured in Cubic Yards of contaminated soil, accepted by the bioremediation facility as documented by weight tickets generated by the bioremediation facility.

E Payment

ITEM NUMBER	DESCRIPTION	UNIT
90206	Excavation, Hauling, and Disposal of Petroleum Contaminated Soil	CY

Payment is full compensation for excavating, segregating, loading, hauling, and treatment via bioremediation of contaminated soil; obtaining solid waste collection and transportation service operating licenses; assisting in the collection soil samples for field evaluation; and dewatering of soils before transport, if necessary.

BID ITEM 90300– REMOVING OLD STRUCTURE OVER WATERWAY STATION 101+50

Description

This work shall consist of removing and disposing of the existing wood bridge and timber abutments located at the Ivy Street bridge site.

Conform to Section 203 of the State of Wisconsin Standard Specifications for Highway and Structure Construction, 2021 Edition as modified in this special provision.

Add the following to WisDOT standard spec:

203.3.6 Removals over Waterways and Wetlands

203.3.6.1 Removing Old Structure Over Waterway

Remove the existing structure at Ivy Street crossing over the Starkweather Creek conforming to the contractor’s approved structure removal and clean-up plan. Remove all portions of the structure and all other debris that falls into the waterway or wetland. Remove large pieces of the structure within 36 hours.

Submit a structure removal and clean-up plan as part of the erosion control implementation plan required under Wis DOT standard spec 107.20. Do not start work under the structure removal and clean-up plan without the construction engineer’s written approval of the plan. Include the following information in the structure removal and clean-up plan:

1. Methods and schedule to remove the structure.
2. Methods to control potentially harmful environmental impacts.
3. Methods for removing piers and abutments. If blasting in water, include restrictions that regulatory agencies and the contract require.
4. Methods for cleaning the waterway or wetlands.

If stockpiling spoil material, place it on an upland site an adequate distance from the waterway, wetland, or any open water created by excavation. Install silt fence between the spoil pile and the waterway, wetland, or excavation site.

Method of Measurement

Removing Old Structure Over Waterway Station 101+50 will be measured as a single unit of work, acceptably completed.

Basis of Payment.

This work, measured as provided, will be paid for at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
90300	Removing Old Structure Over Waterway Station 101+50	LS

Payment is full compensation for breaking down, removing, and disposing of the existing structure and for furnishing all labor, tools, equipment, materials and incidentals necessary to satisfactorily complete the work

BID ITEM 90301 – PILING CIP CONCRETE 10.75 X 0.365 INCH

Description

The work shall consist of providing Piling CIP Concrete 10 3/4 X 0.365 Inch delivered and installed for the bridge as shown on the drawings.

Materials

Piling CIP Concrete 10 3/4 X 0.365 Inch shall conform to Section 550 of the State of Wisconsin Standard Specifications for Highway and Structure Construction, 2021 Edition.

Construction Methods

Piling CIP Concrete 10 3/4 X 0.365 Inch shall be constructed as shown on the drawings and as specified in Section 550 of the State of Wisconsin Standard Specifications for Highway and Structure Construction, 2021 Edition.

Method of Measurement

Piling CIP Concrete 10.75 X 0.365 Inch will be measured by the linear foot acceptably completed.

Basis of Payment.

This work, measured as provided, will be paid for at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
90301	Piling CIP Concrete 10.75 X 0.365 Inch	LF

Payment is full compensation for providing piling and splices including fabricating, delivering, preparing, splicing, cutting of piling, and disposing of pile cutoffs not used; furnishing and placing concrete; and for furnishing all equipment, tools, labor and incidentals necessary to complete the work.

ITEM 90302 to 90304 - REINFORCED CONCRETE BRIDGE ABUTMENTS, AND WINGWALLS

Description.

The work shall consist of providing reinforced concrete abutments, and wingwalls as shown on the drawings for Structures B-13-880, B-13-881, B-13-882. This bid item includes Excavation for Structures; Backfill Structures, Concrete Masonry Bridges, Protective Surface Treatment, Bar Steel Reinforcement HS Structures, Rubberized Membrane Waterproofing, Pipe Underdrain Wrapped 6-Inch, and Geotextile Type DF.

Materials.

EXCAVATION FOR STRUCTURES: Excavation for Structures, B-13-880, B-13-881, B-13-882 shall conform to Section 206 of the State of Wisconsin Standard Specifications for Highway and Bridge Construction, 2021 Edition.

BACKFILL STRUCTURE TYPE A: Backfill Structure shall conform to Section 210 of the State of Wisconsin Standard Specifications for Highway and Bridge Construction, 2021 Edition.

CONCRETE MASONRY BRIDGES: Concrete shall conform to Sections 501 and 502 of the State of Wisconsin Standard Specifications for Highway and Bridge Construction, 2021 Edition. All concrete shall be Grade A, A-FA, A-S, A-T, A-IS, or A-IP.

PROTECTIVE SURFACE TREATMENT: Project surface Treatment shall conform to Section 502 of the State of Wisconsin Standard Specifications for Highway and Bridge Construction, 2021 Edition.

BAR STEEL REINFORCEMENT HS and HS COATED STRUCTURES: High strength bar steel reinforcement shall conform to Section 505 of the State of Wisconsin Standard Specifications for Highway and Bridge Construction, 2021 Edition.

RUBBERIZED MEMBRANE WATERPROOFING: Rubberized Membrane Waterproofing shall conform to Section 516 of the State of Wisconsin Standard Specifications for Highway and Bridge Construction, 2021 Edition.

PIPE UNDERDRAIN WRAPPED 6-INCH: Pipe Underdrain Wrapped 6-Inch shall conform to Section 612 of the State of Wisconsin Standard Specifications for Highway and Bridge Construction, 2021 Edition.

GEOTEXTILE TYPE DF SCHEDULE A: Geotextile Type DF shall conform to Section 645 of the State of Wisconsin Standard Specifications for Highway and Bridge Construction, 2021 Edition.

Construction Methods.

EXCAVATION FOR STRUCTURES: Excavation for Structures, B-13-880, B-13-881, B-13-882 shall conform to Section 206 of the State of Wisconsin Standard Specifications for Highway and Bridge Construction, 2021 Edition.

BACKFILL STRUCTURE TYPE A: Backfill Structure shall conform to Section 210 of the State of Wisconsin Standard Specifications for Highway and Bridge Construction, 2021 Edition.

CONCRETE MASONRY BRIDGES: Concrete shall conform to Sections 501 and 502 of the State of Wisconsin Standard Specifications for Highway and Bridge Construction, 2021 Edition. Dewatering the formwork prior to the footing pour, if necessary, shall be included in this bid item.

PROTECTIVE SURFACE TREATMENT: Project surface Treatment shall conform to Section 502 of the State of Wisconsin Standard Specifications for Highway and Bridge Construction, 2021 Edition.

BAR STEEL REINFORCEMENT HS and HS COATED STRUCTURES: High strength bar steel reinforcement shall conform to Section 505 of the State of Wisconsin Standard Specifications for Highway and Bridge Construction, 2021 Edition.

RUBBERIZED MEMBRANE WATERPROOFING: Rubberized Membrane Waterproofing shall conform to Section 516 of the State of Wisconsin Standard Specifications for Highway and Bridge Construction, 2021 Edition.

PIPE UNDERDRAIN WRAPPED 6-INCH: Pipe Underdrain Wrapped 6-Inch shall conform to Section 612 of the State of Wisconsin Standard Specifications for Highway and Bridge Construction, 2021 Edition.

GEOTEXTILE TYPE DF SCHEDULE A: Geotextile Type DF shall conform to Section 645 of the State of Wisconsin Standard Specifications for Highway and Bridge Construction, 2021 Edition.

Measurement

Reinforced Concrete Bridge Abutments, and Wingwalls will be measured as a single unit of work for each the structure (B-13-880, B-13-881, B-13-882) where the abutments, and wingwalls are satisfactorily furnished and installed.

Payment

This work, measured as provided, will be paid for at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
90302	Reinforced Concrete Bridge Abutments, and Wingwalls, B-13-880	LS
90303	Reinforced Concrete Bridge Abutments, and Wingwalls, B-13-881	LS
90304	Reinforced Concrete Bridge Abutments, and Wingwalls, B-13-882	LS

Payment is full compensation for Excavation for Structures; Backfill Structures, furnishing and installing Concrete Masonry Bridges including providing forms and falsework; for furnishing, placing, finishing, curing, and protecting concrete and for measuring and evaluating concrete strength including fabricating and testing cylinders, and evaluating maturity; furnishing and installing Bar Steel Reinforcement HS Bridges; furnishing and installing Rubberized Membrane Waterproofing; and furnishing and installing Geotextile Type DF schedule A; and furnishing and installing Pipe Underdrain Wrapped 6-Inch; and for furnishing all labor, tools, equipment, materials and incidentals necessary to satisfactorily complete the work.

BID ITEM 90305 to 90307 – PREFABRICATED STEEL TRUSS PEDESTRIAN BRIDGE B-13-880, B-13-881, B-13-882 LRFD

A Description

This special provision describes providing a fully engineered, fabricated steel truss pedestrian bridge structure, including bearings the plans show. Conforming to standard spec part 5 of the State of Wisconsin Standard Specifications for Highway and Bridge Construction, 2021 Edition as modified in this special provision. Regard these specifications as minimum standards for design and construction.

B Materials

B.1 Approved Manufacturers

The bridge shall be designed and manufactured by an approved designer and supplier selected from the WisDOT Bureau of Structures approved products list.

To be eligible for this project, pre-fabricated bridges from other manufacturers must be pre-approved before the bid opening date. Applications for pre-approval may be submitted at any time. Prepare the application according to the WisDOT Bureau of Structures requirements. If needed, obtain information and assistance with the pre-approval process from the Structures Maintenance Section in the Bureau of Structures, by sending an email to the following address: DOTDLStructuresFabrication@dot.wi.gov

B.2 Design Requirements

Structural design of the pedestrian bridge shall be by a professional engineer registered in the State of Wisconsin.

Design the bridge according to the most recent edition of the AASHTO LRFD Bridge Design Specifications, all current interims, and the AASHTO LRFD Guide Specifications for Design of Pedestrian Bridges, except as modified herein.

Design welded tubular connections according to the Structural Welding Code-Steel ANSI/AWS D1.1. The fracture critical requirements of ANSI/AWS D1.5 do not apply, and Charpy V-notch impact testing will not be required. Loading shall be as stated in Section 3 of the AASHTO LRFD Guide Specifications for Design of Pedestrian Bridges. The bridge shall be a half-through truss with profile as the plans show with one diagonal per panel. Chords, diagonals, verticals, bracing, and floor beams may be tube steel. Tube steel shall have a minimum thickness of 1/4 inch, angles shall have a minimum thickness of 1/4-inch, C-shaped side dams shall have a minimum web thickness of 3/16-inch, and W-shapes shall have a minimum web thickness of 1/4-inch if painted or coated and 5/16-inch if not painted or coated. All other steel shapes shall have a minimum thickness of 5/16 inch unless contract plans allow a minimum thickness of less than 5/16 inch for other steel shapes. Field splices shall be bolted with ASTM F3125 Grade A325 high strength bolts according to the "Specifications for Structural Joints Using High Strength Bolts". Type 3 bolts are required for weathering steel. For top and bottom chord field splices, splice plates are required on both the inside and outside surface of all four sides of the spliced tubing so that each bolt will be acting in double shear. Nuts may be welded to the splice plates to hold them in place during installation. When the collection of water inside a structural tube is a possibility, either during construction or during service, provide the tube with a drain hole at its lowest point.

If the profile grade line is on a crest vertical curve, camber the bridge to match the profile grade line the plans show plus the calculated dead load deflection. For a single span bridge, if the profile grade line has a constant slope (no vertical curve), camber the bridge to offset the calculated dead load deflection plus an amount equal to 1% of the bridge length. For a bridge with two or more spans, if the profile grade line has a constant slope (no vertical curve), camber the bridge to offset the calculated dead load deflection only. Concrete bridge decks shall be continuous over the floor beams. Concrete bridge decks may be supported by stay in place corrugated galvanized steel deck forms unless the contract plans specify removable deck forms only. The maximum depth of the stay in place corrugated steel deck forms shall be 2 inches. The steel area of the stay in place corrugated steel deck forms shall not be considered for the design of the concrete deck. Design of the stay in place corrugated steel deck forms shall be included with the truss design. The minimum slab thickness shall be 5.5 inches for removable deck forms and 6 inches for stay in place corrugated steel deck forms. For stay in place corrugated steel deck forms the 6 inch minimum is measured from the bottom of the deck form. Design the longitudinal reinforcing steel in the slab based on a wheel load located 1 foot from the face of the curb or toe plate, or a pedestrian live load of 90 psf, whichever controls.

Concrete strength (f'_c) shall be 4,000 psi and F_y of bar steel shall be 60,000 psi. A concrete mix with a unit weight of 120 pcf or 150 pcf may be used at the option of the manufacturer/contractor. Use a design dead load of 120 pcf or 150 pcf to match the concrete mix selected. Use load factors of 1.25 for dead load and 1.75 for live load for the design of the concrete slab and floor beams. Minimum concrete cover shall be 2 inches for top reinforcement and 1 inch for bottom reinforcement. Design the bridge for expansion and contraction with a temperature range of -30° F to 120° F. Utilize Teflon slip pads or other approved material on the sliding surface of the expansion bearing assembly.

Install protective screening, when required, as the plans show. Use protective screening that is 9 gauge chain link fence with 2 inch mesh, coated as the plans show.

The bridge shall be painted with a three-coat epoxy system from the WisDOT Bureau of Structures approved products list as specified in 517.2 of the State of Wisconsin Standard Specifications for Highway and Bridge Construction, 2021 Edition.

Provide protective surface treatment as specified in 502.2.11 of the State of Wisconsin Standard Specifications for Highway and Bridge Construction, 2021 Edition.

B.3 Plan Requirements and Submittals

Submit four sets of prints of the superstructure plans and one set of design computations to the engineer for acceptance. Make submittals to:

City of Madison, Engineering Division
Attn: Chris Petykowski
210 Martin Luther King Jr Blvd, Room 115
Madison, WI 53703
cpetykowski@cityofmadison.com

Submit shop drawings and calculations to the engineer conforming to 105.2 of the State of Wisconsin Standard Specifications for Highway and Bridge Construction, 2021 Edition. Engineer review does not relieve the contractor from responsibility for errors or omissions on shop drawings.

Make the submittal no later than 4 weeks after date of notice of contract approval. Allow the following time period in the construction schedule: 10 working days after the first receipt of plans by the City of Madison for a complete initial review of the design and plans submittal, and an additional 5 working days for any necessary revisions and/or corrections.

In the submittal, include the following:

1. Basic design criteria shown on the design plans.
2. Complete detailed drawings of all structural steel connections, sizes of members, span lengths between bearing points, skews, walkway widths, height of handrails and safety rails, bearing assembly details, anchor bolt locations, concrete deck reinforcement, design data, materials data, and dead and live load bearing reactions.
3. Engineer's certification. The plans shall be sealed, signed, and dated by a professional engineer registered in the State of Wisconsin.
4. One set of design calculations with independent checks.

One set of prints from this submittal, and any subsequent submittals, will be returned to the Contractor, either indicating acceptance or marked with required revisions and/or corrections. Provide the engineer copies of final plans to be used in fabrication and construction.

B.4 Weld Testing

An independent agency shall perform nondestructive weld testing; the manufacturer shall pay for this testing. All welds are to be visually inspected except as noted below.

Ten percent of all fillet welds shall be magnetic particle tested.

All full penetration welds of chords shall be ultrasonically or radiographically tested.

Bottom chord welded tube splices for tube thicknesses less than 3/8 inches thick shall be radiographically tested or covered with fillet welded splice plates with non-intersecting welds which develop 75% of the spliced member strength.

Submit electronically a written testing report upon completion.

C Construction

C.1 Delivery and Erection

Deliver the bridge by truck to the location that is nearest to the site and accessible by road. The contractor is responsible for unloading the bridge from the trucks at the time of arrival.

The manufacturer shall notify the contractor in advance of the expected arrival time. Information regarding delays after the trucks depart the plant such as inclement weather, delays in permits, rerouting by public agencies, or other circumstances shall be passed on to the contractor as soon as possible.

The manufacturer shall provide an erection procedure to the contractor and shall advise the contractor of the actual lifting weights, attachment points, and all other information needed to install the bridge. Unloading, splicing, bolting, and providing proper lifting equipment as well as all tools, equipment, labor, and miscellaneous items required to complete the work is the responsibility of the contractor. The procedure for bolting field splices shall be given to the contractor by the manufacturer.

C.2 Finishes

When unpainted steel is specified on the plans, all fabrications shall be produced from high strength, low alloy, atmospheric corrosion resistant ASTM A847 cold-formed welded square and rectangular tubing, ASTM A606 sheet, and/or ASTM A588, ASTM A242, or ASTM A709 Grade 50W plate and structural steel shapes ($F_y=50,000$ psi) with a minimum corrosion index of 5.8 per ASTM G101.

Blast-clean all exposed surfaces of weathering steel according to Steel Structures Painting Council Surface Preparation Specifications No. 7 Brush-Off Blast Cleaning (SSPC-SP7), latest edition. Exposed surfaces of weathering steel shall be defined as those surfaces seen from the deck and from outside the structure. Stringers, floor beams, lower brace diagonals and the inside face of the truss below the deck, and bottom of the bottom chord do not need to be blasted.

Paint the bridge with a three-coat epoxy system from the WisDOT Bureau of Structures approved products list as specified in 517.3 of the State of Wisconsin Standard Specifications for Highway and Bridge Construction, 2021 Edition.

Provide protective surface treatment as specified in 502.3.13.2 of the State of Wisconsin Standard Specifications for Highway and Bridge Construction, 2021 Edition.

D Measurement

Prefabricated Steel Truss Pedestrian Bridge B-13-880, B-13-881, B-13-882 LRFD will be measured as a single lump sum unit of work for the bridge, acceptably completed.

E Payment

The work, measured as provided, will be paid at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
90305	Prefabricated Steel Truss Pedestrian Bridge B-13-880 LRFD	LS
90306	Prefabricated Steel Truss Pedestrian Bridge B-13-881 LRFD	LS
90307	Prefabricated Steel Truss Pedestrian Bridge B-13-882 LRFD	LS

Payment is full compensation for designing, manufacturing, transporting and erecting the pedestrian bridge; furnishing bearing plates, pads, bolts, anchors bolts, grout, epoxy painting system, and protective surface treatment.

BID ITEM 90308 CUT STONE BOULDERS

Description

This special provision describes work consisting of furnishing and placing cut-stone boulders in accordance with the requirements of the plans and these specifications.

Materials

Provide stone for cut-stone boulders of durable quarry limestone of approved quality that are sound, hard, dense, resistant to the action of air and water, and free from seams, cracks, or other structural defects.

Provide stone pieces for cut-stone boulders that are rectangular in shape and approved by the engineer with dimensions as shown on the plans.

Construction

Properly trim and shape the bed for the cut-stone boulders in a stair-step configuration as shown on the plans.

Place cut-stone boulders by any mechanical means that will produce a completed job within reasonable tolerances of the typical section shown on the plans. Firmly set each cut stone boulder with no rocking or tipping providing a firm foundation for subsequent layers. Unless otherwise provided on the plans, provide cut-stone boulders not less than 8 inches thick. Limit hand work to the amount necessary to fill large voids or to correct segregated areas. Conform to the requirements of WisDOT standard specifications Subsection 645.3.1.7 for the placement of cut-stone boulders over geotextile fabric - Type HR. Do not place cut-stone boulders against or in contact with any concrete masonry surface prior to the expiration of the curing and protection period for the concrete.

Where storm sewer installations are required within the limits of the cut-stone boulder limits, coordinate the work schedule to ensure proper staging of operations.

Measurement

Cut-Stone Boulders will be measured by the square foot in place of the completed work, and the quantity thereof to be paid for will be the summation of the square foot projections onto a vertical plane of the surface areas of such cut-stone boulders incorporated in the work in accordance with the contract. Only accepted work will be measured for payment and the computation of the quantity thereof will be based on the area within the limiting dimensions designated on the plans, in the contract, or established by the engineer. The geotextile fabric under the cut stone boulders will be paid for under separate bid item, 20241.

Payment

This work, measured as provided, will be paid for at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
90308	Cut-Stone Boulders	SF

Payment is full compensation for installation of the cut-stone boulders and for furnishing all labor, tools, equipment, materials and incidentals necessary to satisfactorily complete the work.

BID ITEM 90309 to 90311 – RAILING PEDESTRIAN STEEL – B-13-880, B-13-881, B-13-882

Description

This special provision describes fabricating, galvanizing, painting and installing Railing Pedestrian Steel B-13-864 on the concrete wingwalls in accordance with Sections 506, 513, and 517 of the Standard Specifications current edition and the plan details, as directed by the Engineer, and as hereinafter provided.

Material

All materials for the steel railing shall be in accordance with the 513.2 of the State of Wisconsin Standard Specifications for Highway and Bridge Construction, 2021 Edition. Railing assemblies shall be galvanized and receive a two-coat paint system. This item included the rail at the concrete abutment wingwalls and shall include base plates and adhesive anchors.

Construction

Construct the railing in accordance with 513.3 of the State of Wisconsin Standard Specifications for Highway and Bridge Construction, 2021 Edition.

Measurement

“Railing Pedestrian Steel B-13-880, B-13-881, B-13-882” will be measured by the linear foot acceptably completed.

Payment

This work, measured as provided, will be paid for at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
90309	Railing Pedestrian Steel B-13-880	LF
90310	Railing Pedestrian Steel B-13-881	LF
90311	Railing Pedestrian Steel B-13-882	LF

Payment is full compensation for detail design and shop drawings for railing on bridge abutment wingwalls, fabricating, galvanizing, painting, transporting, and installing the railing, including any touch-up and repairs; furnishing and installing base plates and adhesive anchors; and for furnishing all labor, tools, equipment, materials and incidentals necessary to satisfactorily complete the work.

BID ITEM 90400 – SALAVAGING LIGHT POLE AND SPECIAL BASE

Description

This special provision describes salvaging a light pole and installing it on a new concrete base as shown on the plans or as directed by the Construction Engineer.

Materials

All materials shall be in accordance with the Article 604 of the Standard Specifications and according to the details on the plans.

Construction Methods

All construction shall be in accordance with the Article 604 of the Standard Specifications and according to the details on the plans.

Method of Measurement

Salvaging Light Pole and Special Base will be measured as each acceptably completed.

Basis of Payment.

This work, measured as provided, will be paid for at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
90400	Salvaging Light Pole and Special Base	EA

Payment is full compensation for providing new concrete base, salvaging light pole, handling, storing and placement of the salvaged light pole on new concrete base, disposal of existing light pole base; and for furnishing all equipment, tools, labor and incidentals necessary to complete the work

BID ITEM 90500 – COVER PLATE PERMANENT

Description

This special provision describes furnishing and installing a steel plate to cover and support embankment loading at endwalls and similar structures during grading operations, asphaltic pavement and traffic loading at manholes, inlets and similar structures as shown on the plans or as directed by the Construction Engineer.

Materials

Provide a 0.50-inch minimum thickness steel plate that extends, at a minimum, to the outside edge of the existing concrete structure.

Construction Methods

Install the cover plate to the structure securely using stainless steel anchors. Do not cover the plate until the engineer examines the installation.

Method of Measurement

Cover Plate Permanent will be measured as each acceptably completed.

Basis of Payment.

This work, measured as provided, will be paid for at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
90500	Cover Plate Permanent	EA

Payment is full compensation for providing the furnishing, handling, storing and placement of the cover plate; and for furnishing all equipment, tools, labor and incidentals necessary to complete the work.

BID ITEM 90501**REBUILD INLET ROOF W/ CASTING****DESCRIPTION**

This bid item shall include work to remove the existing casting and roof, sawcut the existing structure, as needed, adjust the structure to grade, rebuild roof and replace with Neenah 1550-0054 casting for structure RS-14, as shown on plans and schedule.

The final structure top of casting shall be constructed to match the proposed terrace elevation with no more than 0.75' of adjustment for casting installation. The precast roof shall be constructed with reinforcement at the opening and attached in accordance with S.D.D. 7.7.3.

METHOD OF MEASUREMENT

REBUILD INLET ROOF W/CASTING shall be measured by Each satisfactorily installed in place.

BASIS OF PAYMENT

REBUILD INLET ROOF W/CASTING, as measured above, shall be paid at contract unit price and shall be considered full compensation for all work, equipment, materials and incidentals to complete the work as explained in the description above.

BID ITEM 90600 – SKID/SLIP RESISTANT PREFORMED THERMOPLASTIC PAVEMENT MARKING, BIKE LANE GREEN**Description**

This work consists of furnishing and installing a durable, high skid and slip resistant preformed thermoplastic bike lane green pavement marking material for use on asphalt or Portland cement concrete pavement surfaces.

MaterialsGeneral

Preformed thermoplastic pavement marking to be produced of the materials and by methods described below as manufactured by Ennis-Flint or approved equal.

The material must be produced in the United States, and the manufacturer must be ISO 9001:2008 certified for design, development and manufacturing of preformed thermoplastic pavement markings, and provide proof of current certification.

The material shall be capable of being applied on bituminous and/or Portland cement concrete pavements by the use of a handheld heat torch, and/or infrared heater without preheating the surface.

The material shall be capable of being applied in temperatures down to 45°F (7.2°C) without any special storage, preheating or treatment of the material before application.

The material must be a resilient light green color preformed thermoplastic product which contains a minimum of thirty percent (30%) intermixed anti-skid/anti-slip elements with a hardness range of 7-9 (Mohs scale), and where the top surface contains anti-skid/anti-slip elements with a hardness of 9 (Mohs scale).

Material shall be composed of an ester-modified rosin impervious to degradation by motor fuels, lubricants, etc., in conjunction with aggregates, pigments, binders, and anti-skid/anti-slip elements uniformly distributed throughout the material. The thermoplastic material shall conform to AASHTO

designation M249, with the exception of the relevant differences due to the material being supplied in a preformed state, being non-reflective, and being of a color different from white or yellow.

Pigment Color

The bike lane green color shall be manufactured with appropriate pigment to ensure that the resulting colors complies with the Light Green color as specified in the FHWA Memorandum dated April 15th, 2011: Interim Approval for Optional Use of Green Colored Pavement for Bike Lanes (IA-14).

The pigment system must not contain heavy metals or any carcinogen, as defined in 29 CFR 1910.1200 in amounts exceeding permissible limits as specified in relevant Federal Regulations.

Heating Indicators

The top surface of the material shall have regularly spaced indents. The closing of these indents during application shall act as a visual cue that the material has reached a molten state, allowing for satisfactory adhesion and proper embedment of the anti-skid/anti-slip elements, and a post-application visual cue that proper application procedures have been followed.

Skid Resistance

The surface of the preformed thermoplastic material shall contain factory applied anti-skid elements with a minimum hardness of 9 (Mohs scale). Upon application, the material shall provide a minimum skid resistance value of 60 BPN when tested according to ASTM E 303.

Slip Resistance

The surface of the preformed thermoplastic material shall contain factory applied anti-skid elements with a minimum hardness of 9 (Mohs scale). Upon application the material shall provide a minimum static coefficient of friction of 0.6 when tested according to ASTM C 1028 (wet and dry), and a minimum static coefficient of friction of 0.6 when tested according to ASTM D 2047.

Thickness

The material must be supplied at a minimum thickness of 90 mils (2.29 mm) or 125 mils (3.15 mm).

Environmental Resistance

The material shall be resistant to deterioration due to exposure to sunlight, water, salt or adverse weather conditions and impervious to oil and gasoline.

Construction Method

Install preformed thermoplastic pavement marking in accordance with manufactures specifications.

Performance Requirements

Preformed thermoplastic pavement marking shall be installed per plans and specification. The Engineer will notify the Contractor within 48 hours of installation regarding any pavement marking not installed to specification or to the satisfaction of the Engineer. Non-conforming preformed thermoplastic pavement marking shall be removed at no charge to the City and replaced with a conforming product.

Method of Measurement

Will be measured by the squared foot (SF) of preformed thermoplastic pavement marking installed and accepted.

Basis of Payment

This work, measured as provided, will be paid for at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
90600	Skid/Slip Resistant Preformed Thermoplastic Pavement Marking, Bike Lane, Green	SF

Payment for this work, measured as provided above, will be made under at the contract unit price per each square foot(SF) of thermoplastic pavement marking, which shall be full compensation for all work, materials, labor, and incidentals required to complete the work as specified, including any re-application or repair required under the performance requirements as provided herein.



Construction • Geotechnical
Consulting Engineering/Testing

July 28, 2020
C20051-4

Mr. Chris Petykowski
City of Madison – Engineering Department
210 Martin Luther King, Jr. Boulevard, Room 115
Madison, WI 53710
(Email: CPetykowski@cityofmadison.com)

Re: Geotechnical Exploration Report
Proposed Pedestrian Bridges & Path
Garver – Starkweather Area
Madison, Wisconsin

Dear Mr. Petykowski:

Construction • Geotechnical Consultants, Inc. (CGC) has completed the geotechnical exploration program for the project referenced above. The purpose of this exploration program was to evaluate the subsurface conditions within the proposed construction area and to provide geotechnical recommendations regarding foundation and pavement design and construction. An electronic copy of this report is provided for your use. We are also sending an electronic copy to Mr. Aaron Steger at KL Engineering, the project design consultant.

PROJECT AND SITE DESCRIPTIONS

We understand that new and existing paved pedestrian/bicycle paths will be created, resurfaced and/or reconstructed to the east of Sugar Avenue at the Garver site, across and along Starkweather Creek northward through multiple parks to Milwaukee Street. Construction of three single-span bridges over the creek and a wetland is proposed to connect various segments of path. The southernmost bridge will be constructed southeast of the Garver site to join the path with Starkweather Drive at Hargrove Street. This bridge will involve a 90-ft span with a bottom of abutment elevation near EL 845 ft (east) and EL 846 ft (west). A second bridge crossing the east branch of Starkweather Creek near the southeastern terminus of Ivy Street will be constructed in approximately the same location as an existing bridge and involve a 90-ft span with a bottom of abutment elevation near EL 846 ft. A third bridge with a 135-ft span and bottom of abutment elevation near EL 845 ft will extend across a wetland bounded by Starkweather creek to the west, Sherry Park to the south and Milwaukee Street to the north. New path will be constructed adjacent to the Garver site, along Starkweather Drive and northward from the Ivy Street bridge through Sherry Park and the wetland to Milwaukee Street. The existing path will be resurfaced/reconstructed within both Starkweather Creek Park and Sherry Park. Some path realignment will likely result due to widening and existing tree locations. Starkweather Drive will be reconstructed and its right-of-way shared with the path to protect the creek's riparian zone. Although the path and bridges will generally experience very light loads associated with pedestrian and bicycle traffic, occasional motorized service and maintenance vehicles may travel on both the path and bridges.

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The bridges will be pile supported with required *factored* pile resistances of 50 to 60 tons per pile and the path will be asphalt surfaced. The general topography in the vicinity of the path and structures is fairly flat to gently sloping.

SUBSURFACE CONDITIONS

A total of nineteen Standard Penetration Test (SPT) soil borings were completed for this project. Twelve borings were drilled to 10 to 15 ft below existing site grades along the proposed path alignment, and six borings (2, 3, 10, 11, 15 and 16) were extended 60 to 100 ft below existing site grades for the proposed structures. Note that an additional boring was necessary to achieve the requested depth at SB-8 after an initial attempt terminated on a shallow, unidentified obstruction. The borings were drilled by Badger State Drilling (under subcontract to CGC) in April and May of 2020 using both truck and ATV-mounted drill rigs equipped with hollow-stem augers as well as mud-rotary tools. Both types of rigs incorporate automatic SPT hammers. For the structure borings, the SPT N-values were corrected by CGC for hammer efficiency (i.e., to N_{60}) assuming an automatic hammer efficiency of 80 percent; further correction for overburden was completed using the computer program DRIVEN™ during our analysis (detailed below). Boring locations were staked in the field and elevations determined by KL Engineering personnel. Slight adjustments to staked locations were necessary to avoid underground utilities and other conflicts such as trees at Borings (SB) 3, 4-8, 11, 14 and 15 (many of which were discussed during an on-site meeting April 20th). The boring locations are shown in plan on the Soil Boring Location Map attached in Appendix A.

The subsurface conditions at the boring locations were somewhat variable at shallow depths due to previous filling and proximity to the creek or wetland, but the profile was fairly similar at greater depths. A generalized profile included the following strata, in descending order:

- About 2.5 to 8 ft of *fill* (including topsoil or pavement layers); over
- 2.5 to 27 ft of very loose to loose *sedimentary to fibrous peat* and very loose *organic silt*; followed by
- Very loose to very dense *sand* with variable silt and gravel contents, occasionally interrupted by clay or silt seams/layers to the maximum depth explored.

As exceptions to the above profile, a 2.5 ft layer of lean clay was present in lieu of organic soils at SB-1, the organic soils at SB-10 and SB-16 were interrupted by loose to very loose sandy layers near 15 ft and 6 ft, respectively; while several feet of soft to very soft *organic clay* were encountered beneath the peat and organic silt at SB-2 and SB-15.

Groundwater was encountered at all of the boring locations, generally noted from 1 to 9 ft below existing site grades. Groundwater was noted near ground surface at SB-14 through SB-18 shortly after precipitation events during the drilling process. Groundwater levels can be expected to fluctuate with seasonal variations in precipitation, infiltration, evapotranspiration, the level of



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Starkweather Creek/Lake Monona, as well as other factors. A more detailed description of the site soil and groundwater conditions is presented on the Soil Boring Logs attached in Appendix B.

DISCUSSION AND RECOMMENDATIONS

Subject to the limitations discussed below and based on the subsurface exploration, it is our opinion that although the site has some challenging geotechnical conditions, it is suitable for the proposed construction, assuming appropriate measures are implemented. We understand the pedestrian bridges are to be supported on piles driven to capacity within the dense to very dense sand and gravel strata. Further, we understand that new portions of at-grade pedestrian paths will be asphalt paved, with a portion being constructed near existing grades and another portion being constructed over wetland area, where filling of up to 8 ft to establish path grades will be required. For the path section which will cross the wetland, we anticipate that a relatively thick, geosynthetically-reinforced stabilization layer will be required to support the path pavement over low-strength and highly compressible organic soils.

Because of the high compressibility of the peat and organic soils, raising grade will likely result in significant settlement where the paved path and bridge abutment embankments will be constructed within and adjacent to the wetland, or where organic soils were encountered below previously placed fill soils. We therefore recommend that special provisions be included to place fill above planned grade, preferably at least a couple feet above final grade several months to a year in advance of final grading to allow the compressible soils to consolidate and settle under the weight of the fill. Surcharging the portion of the paved path (including abutment fills) that will be constructed over highly organic soils will reduce (but not eliminate) the potential for long-term settlement. Similarly, the inclusion of the geosynthetically-reinforced stabilization layer is intended to reduce the potential for differential settlement, but additional maintenance and shorter pavement lifespan should still be expected where the path crosses the wetland. Consideration could also be given to including a boardwalk within the wetland area and only constructing a conventionally paved path in portions of the site where more suitable soil conditions were encountered and/or minimal grade change is required to establish design elevations. The following subsections provide our recommendations for foundation and path pavement design and construction, as well as utility and pavement design/construction for the reconstructed Starkweather Drive.

1. Bridge Foundations (Driven Piles)

A. *Foundation Recommendations*

Abutments are planned at three bridge locations (six abutments total), and we understand that bottom of abutment elevations will be at/near the following elevations, which were provided by the design team:

Hargrove Street
 West: *844.96 ft*
 East: *844.18 ft*

Ivy Street
 West: *845.37 ft*
 East: *845.80 ft*

Milwaukee Street (wetland)
 South: *844.82 ft*
 North: *844.92 ft*

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Based on the available subsurface information and our analysis, it is our opinion that cast-in-place concrete/steel shell piles driven to the required axial compression resistance within the dense to very dense sand and gravel soils encountered in Borings SB-2 and 3, SB-10 and 11, and SB-15 and 16 (performed near the proposed abutment locations) are likely the most suitable foundation system to support the bridge. Spread footing foundations are not suitable to support the bridge based on the presence of peat, organic soils and low-strength clays encountered that extend well below existing site and proposed abutment grades.

For pile design, the estimated nominal (ultimate) side resistance and end bearing at the abutments were calculated using DRIVEN v1.2 and are summarized in Table 1. The nominal (ultimate) end bearing and side resistance parameters were determined in general accordance with the WisDOT *Load and Resistance Factored Design (LRFD)* procedures (adopted from the AASHTO *LRFD Bridge Design Specifications*) using the Nordlund static analysis method for cohesionless soils and alpha method for cohesive soils and do not include a resistance factor (e.g., *resistance factor*, $\phi = 1.0$).

The *factored* end bearing and skin friction can be calculated by multiplying the nominal parameters by the applicable resistance factor (ϕ), with the resistance factor determined by the level of pile testing completed prior to and during construction. For example, if pile driving will be monitored during construction using the Modified Gates formula, the minimum amount expected on WisDOT projects, a resistance factor of 0.5 is applicable. If dynamic (PDA) or static pile load testing is completed, the resistance factor can be increased, but we do not anticipate that the moderate to significant expense associated with pile load testing will make economic sense for this project. We can provide additional consultation on load testing, if needed.

Using the ultimate side resistance and end bearing parameters in Table 1, we estimated pile tip depths to develop a required (ultimate, $\phi = 1.0$) axial compression resistance of 110 and 120 tons for both a 10.75-in. and 12.75-in. diameter steel-shelled CIP pile with shell thicknesses of 0.365 and 0.375 in., respectively, per WisDOT *Bridge Manual*, Table 11.3-5 based on the use of the Modified Gates Formula. Using the Modified Gates Formula, as discussed in the WisDOT *Bridge Manual Chapter 11*, 10.75-in. and 12.75 in. CIP piles that drive to a resistance of 110 to 120 tons will have a *factored* axial compression resistance of 55 to 60 tons, assuming a resistance factor of 0.5 (see Section 11.3.1.18.2 of the Bridge Manual). We expect that the CIP piles will reach to the required driving resistance within the dense to very dense sand and gravel encountered in the bridge borings, and the estimated CIP pile tip elevations are summarized in Table 2.

Due to the potential for high stresses during driving through granular soils with gravel and potentially cobbles/boulders as encountered in the borings, we recommend that thicker pile shells (e.g., minimum 0.365 to 0.375-in. shell thickness for 10.75 and 12.75-in. CIP piles, respectively) and potentially reinforced/thicker end plates, be used to reduce the risk of overstressing the piles during driving.

TABLE 1 - Design Parameters for Driven Piles
Garver Path Bridges
Sugar Avenue to Milwaukee Street

Soil Description	Approx. Depth Below Existing Ground Surface (ft)	Estimated Angle of Internal Friction ⁽¹⁾ (deg)	Cohesion ⁽²⁾ (psf)	Estimated Unit Weight (pcf)	Active Earth Pressure Coefficient, K_a	Passive Earth Pressure Coefficient, K_p	Driven Closed-End Pipe Pile	
							Ultimate Skin Friction ⁽³⁾ (ksf)	Ultimate End Bearing ⁽³⁾ (ksf)
Hargrove Street Bridge								
Boring B-2								
Topsoil Fill	0 to 8	0	100	100	1.00	1.00	N.R.	N.R.
Very Loose Sedimentary Peat	8 to 12	15	0	70	0.59	1.70	N.R.	N.R.
Very Loose Organic Silt and Soft Organic Clay	12 to 23	0	250	115	1.00	1.00	N.R.	N.R.
Medium Dense Sand	23 to 38	33	0	120	0.29	3.39	0.6	31
Dense Sand	38 to 57	38	0	125	0.24	4.20	1.4	216
Very Dense Sand	57 to 70	39	0	130	0.23	4.40	2.1	288
Boring B-3								
Clay Fill	0 to 3	0	1,000	115	1.00	1.00	N.R.	N.R.
Loose Fibrous to Sedimentary Peat	3 to 5.5	15	0	70	0.59	1.70	N.R.	N.R.
Very Loose Organic Silt	5.5 to 13	20	0	110	0.49	2.04	N.R.	N.R.
Medium Dense Sand	13 to 27	33	0	120	0.29	3.39	0.5	29
Dense Sand	27 to 50	38	0	125	0.24	4.20	1.3	200
Very Dense Sand	50 to 60	40	0	130	0.22	4.60	2.3	456

Notes: N.R. - Not recommended

⁽¹⁾ For cohesionless soils, friction angle was calculated by DRIVEN based on SPT N-values corrected for hammer efficiency and overburden stress. As an exception, friction angle of peat layers is based on research by Edil and Wang, Shear Strength and K_0 of Peats and Organic Soils. For cohesive soils, short-term loading conditions are assumed.

⁽²⁾ Average cohesion assuming short-term loading conditions.

⁽³⁾ Skin friction and end bearing are nominal (*ultimate*) resistance capacities (i.e., $\phi = 1$) calculated using the Nordlund and α -methods. Multiply the nominal resistance capacities by the applicable resistance factors to compute the factored resistance capacities of the piling in accordance with WisDOT Standard Specifications, Section 11.3.1.

TABLE 1 - Design Parameters for Driven Piles

Garver Path Bridges
Sugar Avenue to Milwaukee Street

Soil Description	Approx. Depth Below Existing Ground Surface (ft)	Estimated Angle of Internal Friction ⁽¹⁾ (deg)	Cohesion ⁽²⁾ (psf)	Estimated Unit Weight (pcf)	Active Earth Pressure Coefficient, K_a	Passive Earth Pressure Coefficient, K_p	Driven Closed-End Pipe Pile	
							Ultimate Skin Friction ⁽³⁾ (ksf)	Ultimate End Bearing ⁽³⁾ (ksf)
Ivy Street Bridge								
Boring B-10								
Very Loose Fibrous to Sedimentary Peat/Organic Silt	0 to 32	15	0	70	0.59	1.70	N.R.	N.R.
Very Loose Silty Sand	32 to 38	28	0	115	0.36	2.77	0.1	5
Soft to Medium Stiff Lean Clay	38 to 43	0	500	115	1.00	1.00	0.5	5
Medium Dense Sand	43 to 47	35	0	120	0.27	3.69	0.6	75
Very Dense Sand	47 to 75	40	0	130	0.22	4.60	3.7	483
Boring B-11								
Clay Fill	0 to 3	0	1,000	115	1.00	1.00	N.R.	N.R.
Very Loose Fibrous to Sedimentary Peat	0 to 8	15	0	70	0.59	1.70	N.R.	N.R.
Very Loose Organic Silt, Peat Seams	8 to 23	20	0	110	0.49	2.04	N.R.	N.R.
Medium Dense Sand	23 to 52	33	0	120	0.29	3.39	0.8	29
Dense Sand	52 to 67	38	0	125	0.24	4.20	1.8	229
Very Dense Sand	67 to 85	40	0	130	0.22	4.60	3.0	443

Notes: N.R. - Not recommended

⁽¹⁾ For cohesionless soils, friction angle was calculated by DRIVEN based on SPT N-values corrected for hammer efficiency and overburden stress. As an exception, friction angle of peat layers is based on research by Edil and Wang. Shear Strength and K_0 of Peats and Organic Soils. For cohesive soils, short-term loading conditions are assumed.

⁽²⁾ Average cohesion assuming short-term loading conditions.

⁽³⁾ Skin friction and end bearing are nominal (*ultimate*) resistance capacities (i.e., $\phi = 1$) calculated using the Nordlund and α -methods. Multiply the nominal resistance capacities by the applicable resistance factors to compute the factored resistance capacities of the piling in accordance with WisDOT Standard Specifications, Section 11.3.1.

Table 2 - Estimated CIP Pile Tip Elevations
Garver Path Pedestrian Bridges
Madison, Wisconsin

Boring	Bottom of Abutment Elevation (ft)	10.75 in. CIP Pile (0.365-in. shell thickness) ³				12.75 in. CIP Pile (0.375-in. shell thickness) ⁴			
		Required Nominal ($\phi = 1.0$) Axial Compression Resistance ²		Required Nominal ($\phi = 1.0$) Axial Compression Resistance ²		100 tons		120 tons	
		Depth (ft) ⁽¹⁾	Elevation (ft)	Depth (ft) ⁽¹⁾	Elevation (ft)	Depth (ft) ⁽¹⁾	Elevation (ft)	Depth (ft) ⁽¹⁾	Elevation (ft)
Hargrove Street Bridge									
SB-2	846.0	60	786	65	781	50	796	55	791
SB-3	845.2	55	790	55	790	45	800	50	795
Ivy Street Bridge									
SB-10	846.3	55	791	55	791	55	791	55	791
SB-11	846.3	60	786	70	776	60	786	60	786
Wetland (Milwaukee Street) Bridge									
SB-15	845.1	65	780	65	780	65	780	65	780
SB-16	845.2	80	765	80	765	75	770	80	765

Notes:

1. Depth measured below bottom of abutment.
2. Nominal Axial Compression Resistance does not include resistance factor (i.e., $\phi = 1.0$); to determine Factored Axial Compression Resistance, multiply Nominal Axial Compression Resistance by the applicable resistance factor (e.g., $f = 0.5$ for Modified Gates formula, $f = 0.65$ for Pile Driving Analyzer with Signal Matching, or $f = 0.8$ if static load testing and PDA testing completed) in accordance with AASHTO Section 10.5.5.
3. Per Table 11.3-5 of the WisDOT LRFD Bridge Manual, maximum nominal axial compression resistance of 150 tons using Modified Gates during driving.
4. Per Table 11.3-5 of the WisDOT LRFD Bridge Manual, maximum nominal axial compression resistance of 210 tons using Modified Gates during driving.

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While HP piles were also considered, the estimated pile depths to reach capacity were up to 10 ft deeper than the CIP piles, which is mostly due to the larger end area and resulting higher end bearing of the CIP piles compared to the HP piles. It has also been our experience that HP piles also tend to drive to less predictable lengths in these types of soils (“clean” sand strata) compared to CIP piles.

Note that because grade will be raised at each of the bridge approaches, settlement of the organic and very soft clay/silt soils will occur that will result in down drag loads (negative skin friction) being developed on the piles that will reduce the available load carrying capacity of the piles. In order to help reduce, though not eliminate, down drag loads on the piles, we recommend that the bridge approach embankments be filled well in advance of pile driving operations to allow for consolidation/settlement of the new embankment fill and underlying highly-compressible organic soils to largely occur prior to pile driving (discussed in more detail below). While early fill placement will help reduce the potential for down drag loads, we recommend that an unfactored (ultimate) negative skin friction load of 10 kips (5 tons) for the organic and soft clay soils, as well and the newly-placed fill above the organic soils, be added as a load to the piles to account for potential longer-term settlement after pile driving.

Down drag loads can likely be accommodated by driving the piles to a greater driving resistance, as 10.75-in. CIP piles (0.365-in. shell thickness) and 12.75-in. CIP piles (0.375-in. shell thickness) can be driven to an ultimate capacity of 150 tons (300 kips) and 210 tons (420 kips), respectively, according to Table 11.3.-5 in the WisDOT *LRFD Bridge Manual*. Because we estimate that the piles will be driven to capacity shortly after encountering the dense to very dense granular soils in the borings, it is our opinion that the greater driving resistance required to accommodate up to 10 kips of down drag can be achieved by driving the piles to the estimated pile depths included in Table 2. Care should be exercised such that the maximum capacity of the pile is not exceeded during driving.

Other pertinent pile design parameters include the following:

- For adequate frost protection, we recommend that the abutment pile caps be founded at least 4 ft below finish grade. A minimum embedment depth of 2.5 ft is recommended for sill abutments, per WisDOT *Bridge Manual*.
- It is recommended that the minimum spacing between individual piles be no less than 2.5 ft or 2.5 times the pile diameter, whichever is greater. WisDOT recommends a maximum pile spacing of 8 ft. During driving of pipe piles, heaving and/or lateral displacements of driven piles may occur during subsequent nearby pile driving operations. Therefore, it is important that horizontal and vertical alignment checks be performed during pile driving operations. Piles that heave more than 0.25 in. vertically must be resealed.

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- Cobbles and boulders may be encountered within the sand and gravel strata underlying the site, and as recommended, slightly thicker pile shells (0.365 to 0.375 in.) and reinforced end plates may prove useful for reducing pile damage due to high driving stresses and driving the piles straighter.
- To minimize pile driving problems, new embankment fill material in the vicinity of the abutments or wing walls should not contain cobbles or boulders.

Note that settlement due to the placement of embankment fill at bridge approaches should not be underestimated. Early fill placement or surcharging, including settlement monitoring, similar to what is described in the Wetland Path subsection of this report should be performed prior to pile driving.

B. Lateral Earth Pressures

In accordance with WisDOT *Bridge Manual* procedures (Sections 12.4 and 12.8), pile-supported wing walls (if any) should be designed as retaining walls extending from the abutments, and an equivalent fluid pressure of 40 psf per foot of depth and a 2 ft surcharge (240 psf) should be used in design. This recommendation is based on granular fill being used as backfill, as indicated in Section 210 of the WisDOT *Standard Specifications*. It is recommended that procedures for placement and compaction of backfill conform to those outlined in paragraph 207.3.6.2 (Standard Compaction) of the *Standard Specifications*. The wing wall design should include surcharge loads, if applicable.

3. Path Pavement Design

The paved sections of the proposed path segment will generally fall into two general categories: path segments through wetland (or low-lying areas) where grade will be raised greater than about 1 ft, and path segments constructed at/near existing grades or along an existing path/roadway. The path segments within or near the boundaries of the wetlands are expected to have fairly deep layers of soft and organic soils, as well as shallow groundwater that are conditions typically considered very poor for pavement support. Based on the borings and preliminary plans provided, we expect these conditions will generally exist along the path and at bridge embankments between about STA 33+00 GP and 39+00 GP, as well as potentially at the Hargrove and Ivy Street bridge approaches, where filling is required to establish embankment elevations. The soils outside the wetlands are expected to consist of predominantly existing clay and sand fill soils (after topsoil removal) over clay or organic soils. However, organic peat is expected at existing grades near the south bridge approach at Ivy Street (Boring SB-10).

A. At-Grade Path

We anticipate that paved path sections which will be constructed at/near existing grades can generally be constructed as described in the following paragraphs, with the understanding that excavation below subgrade (EBS) may potentially be required in some areas in order to develop suitable path subgrades. Undercutting/stabilization of some magnitude should be expected in areas

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where peat/organic soils are present at or just below subgrade elevations below a thin layer of existing fill.

The at-grade path pavement design recommendations contained herein are based on a clay subgrade (after topsoil stripping or existing path removal), based on the borings in the project area. If grades will be raised, engineered granular fill should be placed and compacted in accordance with City of Madison requirements (or the recommended compacted fill specifications in Appendix B).

Since the existing clay and sand fill soils may be marginal to poor near the ground surface, we recommend that the project budget include a generous contingency for excavation below subgrade (EBS) throughout the planned at-grade pavement segments, which may involve about 12 in. of additional coarse aggregate over biaxial geogrid (e.g., Tensar BX Type 1 or equivalent). The potential for EBS may be reduced where surficial sand and gravel fill soils are encountered at planned subgrade elevations, or where minor amounts of new engineered fill are required following topsoil stripping. However, isolated undercutting/stabilization may still be required in these areas.

The areas requiring stabilization will depend on several factors including weather, groundwater depth, etc. Pavement subgrades should be evaluated during construction by proof-rolling with a loaded tri-axle dump truck (or other heavy rubber-tire construction equipment such as front-end loader or scraper) to determine the EBS locations and required stabilization section (i.e., EBS depth, need for geogrid reinforcement). A flexible pavement profile for a paved recreation path on a firm or adequately stabilized clay or silt subgrade generally involves 3 in. of asphalt pavement over 8 in. of dense graded base course, which is consistent with the preliminary plans provided by KL. A final proof-roll should be conducted after base course placement and prior to paving to document firm/non-yielding conditions exist. Recommended soil parameters for pavement design are given in Table 4.

TABLE 3 – Recommended Pavement Design Parameters for At-Grade Trail Segments

Parameter	Recommended Design Value
USCS Classification	ML/CL
AASHTO Classification	A-4/A-6
Design Group Index, DGI	16
Frost Index, FI	F-4
Soil Support Value, SSV	3.6
Subgrade Modulus, k (pci)	75

Note:

These values are based on the following assumptions:

- 1) The subgrade has been closely monitored.
- 2) The subgrade has been thoroughly and adequately compacted.
- 3) Wet zones have been dried, drained, or removed.

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- 4) Pockets of dissimilar material have been removed, replaced or mixed to achieve a homogeneous subgrade.
- 5) Adequate subgrade drainage has been achieved.
(Reference: WisDOT, *Geotechnical Manual*)

B. Wetland Path

The sections of paved path where filling of about 2 to 8 ft is required, generally anticipated between STA 33+00 and 39+00 GP, but potentially also in some areas where grade-raise filling is required at the Ivy and Hargrove bridge approaches, are expected to traverse wetlands that have low-strength and highly compressible organic deposits, over low-strength and moderately compressible clay and silt soils. These soil conditions represent a special case for pavement design since these soils have very low strength and will require a more robust stabilization section in order to support construction traffic and eventually the paved path. Additionally, these soils are extremely compressible both in the short-term due to consolidation (water squeezing out) as well as long-term secondary compression from decomposition of the organic soils, which will likely result in increased path maintenance and reduced pavement lifespan. Overfilling or placing a surcharge load above planned path grade will promote settlement largely occurring prior to paving, and is discussed in more detail below.

In our opinion, construction of the path over the low-strength subgrade conditions can be accomplished using a thicker stabilization layer consisting of high-strength woven geotextile or high-strength geogrid. Due to the potential for fine-grained soils to migrate through the apertures of the geogrid and degrade the stabilization layer, a non-woven geotextile separation layer is recommended with a geogrid alternative. A high-strength woven geotextile will provide both separation and reinforcement. There are different possible solutions to develop a suitable stabilization layer, and we are providing one alternative using both high-strength geogrid and fabric based on experience in similar geotechnical conditions. Alternative stabilization layer systems may also be possible and we recommend that the technical representative of the geosynthetic (geogrid or woven geotextile) supplier be consulted on the proper installation of their product through these challenging geotechnical conditions.

In general, installation of the stabilization layer through the wetland areas where grade-raise filling is required should occur by placing the bottom geosynthetic layer(s) directly on the wetland surface without removing the surficial vegetation since the root mat may actually provide strength above the peat deposits. If encountered, trees should be cut flush with the ground surface. Large trees may require partial stump removal to prevent puncture of the geosynthetic layer. The geogrid or woven-geotextile layer should extend beyond the outside edges of the gravel shoulder of the path a minimum of preferably 2H:1V from the shoulder break point. Special attention is required to remove wrinkles from the geosynthetic layers to promote soil reinforcement. Low-ground pressure tracked equipment should be used for path construction, with wheeled construction traffic prohibited from the path alignment until the full stabilization thickness is established. End dumping material outside the wetland and subsequent placement with a dozer will likely be required.

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Adjacent sheets of geosynthetic reinforcement should be properly overlapped and mechanically connected. Geogrid sheets should be placed in the direction of fill placement (direction of travel), overlapped a minimum of 3 ft and be mechanically fastened with *high-strength* zip-ties. The ends of the rolls should be overlapped at least 4 ft and be mechanically fastened with new rolls. Adjacent high-strength geosynthetic sheets should be overlapped 6 to 12 in. and sewn along the entire length; high-strength woven geotextile can be factory sewn in custom dimensions, as well as sewn in the field.

A summary recommended lowland path section through the wetland is included in Table 4. The installation of the path section through wetland areas is expected to occur in the following sequence:

- Remove trees and brush within proposed path alignment and geotextile oversizing zone (i.e., minimum of 2H:1V from outside of gravel shoulder). Trees should be cut flush to the surface, and some trees stumps may require partial removal below the ground surface to prevent puncture of geosynthetic layer.
- **Lower Stabilization and Separation Layer** – For the geogrid alternative, the bottom geogrid reinforcing layer is recommended to be Tensar TX-7 (or equivalent) placed over a separation layer consisting of Mirafi 140N (or equivalent). Parallel adjacent geogrid rolls should be placed on the subgrade that are overlapped 3 ft, with the middle roll of geogrid above the outside rolls. The geogrid rolls should be attached with plastic ties (heavy-duty zip-ties that are UV resistant). For the geotextile alternative, we recommended that Mirafi 580i (or equivalent) be overlapped at least 6 to 12 in. between adjacent sheets that are sewn along the entire length of the overlapped sheets. Factory-sewn woven geotextile can be ordered in custom dimensions and delivered to the site to reduce field installation work (field sewing, etc.).
- **Grade Raise Fill** – Place a minimum 2-ft (woven geotextile) to 3-ft thick (geogrid) granular stabilization/bridging layer on top of the geogrid/geosynthetic with low-ground-pressure equipment. Special care is required such that the dozer blade does not push down at the leading edge of the fill or that excess sand is not mounded at the leading edge, which could over-stress the weak, compressible soils.
- We recommend that the fill soils consist of a well-graded sand with less than 8% passing the No. 200 U.S. standard sieve. An example would be WisDOT Granular Backfill, Grade 1.

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- Compaction of the initial 2 to 3 ft lift of sand fill should be accomplished through a combination of the dozer running back-and-forth across the sand layer, as well as soaking the sand layer with water to promote consolidation. Following placement of the initial lift, compaction should occur with a smaller vibratory smooth-drum compactor or larger walk-behind vibratory plate compactor.
- **Upper Stabilization Layer** –To provide additional stabilization, place a second (upper) stabilization layer consisting of Tensar BX Type 2 (or equivalent) directly below the specified dense graded base course layer. A minimum overlap of 2 ft is recommended.
- **Dense Graded Base Course Layer** – Place a minimum 8-in. thick base course layer (i.e., 1¼-in. dense graded base) and compact with smaller vibratory smooth-drum roller or larger walk-behind vibratory plate compactor. Water should be added to base course, as needed, to promote compaction. (Note that consideration could also be given to delaying dense graded base course layer installation until after settlement/surcharging period is complete, in which case it is recommend that additional sand be placed at least 2 ft above finish grade.)

The stabilization layer is intended to allow construction of the paved path over the low-strength and compressible subgrade conditions, but the stabilization layer will not significantly reduce the large anticipated settlement from path construction over the highly compressible soils. The weight of the stabilization layer and typical pavement section through the wetland will result in significant short-term settlement, as well as long-term (secondary) settlement. For a total stabilization layer and pavement section of up to about 8 ft, we *estimate* (based on literature) that short-term settlement could be on the order of 2 to 5 ft, with much of the short-term settlement expected to occur over the course of path construction. The higher end of the settlement estimate is expected to occur within the wetland where filling of up to 8 ft will be required, as well as near Borings SB-10 and 11, where 4 to 5 ft of filling will occur over thick peat soils. Secondary compression could result in additional settlement on the order of 2 to 4 ft over the course of 20 to 30 years (or about 0.5 to 1 in./year). Estimated settlement of the highly-organic peat soils at this site is difficult due to their composition (sedimentary versus fibrous) and water content, as well as the variability of existing fill soil thickness (amount of peat consolidation which has already occurred) and amount of new fill required. Therefore, the ranges of settlement included above should be considered approximate and differential settlement should be expected.

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If the total estimated settlement is not acceptable (e.g., due to concerns about maintenance, etc.), it is our opinion that the most feasible alternative to constructing a paved path would be to construct a helical pier supported boardwalk. The negative effects of both short-term and long-term settlement can be reduced by applying a surcharge load (essentially additional temporary fill above planned finish grade) and allowing the compressible soils to pre-consolidate and settle, as discussed above. Once primary (consolidation) settlement has largely occurred, which could be on the order of 6 to 12 months (potentially longer), the surcharge load can be removed, and the pavement section can be constructed. If a surcharging program is not feasible, placing the fill to finish grade (or slightly above finish grade) and allowing the path to settle prior to re-grading and paving could also be considered. If possible (and recommended), initial grading and surcharge load placement would occur in one construction season, with final grading and paving completed in the subsequent construction season. We recommend the path early fill placement or surcharging program incorporate the following elements:

- Install settlement platforms (see Appendix E), and cover platform base with 2 ft of sand and survey immediately upon installation. Three to five settlement platforms spread along the lowland trail segments will likely be sufficient, with additional platforms installed at the Ivy and Hargrove bride approaches where greater than about 2 ft of filling is required.
- Allow stabilization layer and dense graded base layer (if installed) to settle a minimum of 6 months prior to paving; or
- If surcharging will be included, a minimum delay period of at least one month should be observed to allow some consolidation and strength gain of the weak organic soils to occur prior to installing surcharge soil layer. If the dense graded base layer is installed, we recommend using dense graded base as surcharge material, as after settlement occurs, the bottom of the planned asphalt layer may end up being within the surcharge layer. If the dense graded base course layer is not installed, additional sand can be installed as the surcharging layer.
- Settlement readings should occur weekly for the first month and every other week after that to determine settlement profile. This will enable refinement of overall settlement estimates.
- After completion of settlement period, final grading should be done such that a minimum of 8 in. of dense graded base is below the planned pavement section at the time of paving. (Note that the weight of new fill to establish grade will likely result in additional settlement.)
- If surcharging occurred, the excess material should be removed to install a minimum of 8 in. of dense graded base below the planned pavement section, followed by paving with at least 3 in. of asphalt.

TABLE 4 - Recommended Wetland Path Pavement Alternatives
Garver Path

Sugar Avenue to Milwaukee Street

Layer	High-Strength Geogrid Alternative		High-Strength Woven Geotextile Alternative	
	Type	Thickness (in.)	Type	Thickness (in.)
Asphalt Pavement	LT, 9.5 mm	3	LT, 9.5 mm	3
Dense Graded Base Layer	1-1/4 in. Dense Graded Base ⁽²⁾	8	1-1/4 in. Dense Graded Base ⁽²⁾	8
Upper Geosynthetic Layer	Tensor BX Type 2 ⁽¹⁾	<1	Tensor BX Type 2 ⁽¹⁾	<1
Embankment Fill	Granular Fill, Grade 1 ⁽³⁾	As Needed	Granular Fill, Grade 1 ⁽³⁾	As Needed
Lower Geosynthetic Layer	Tensor TX-7 ⁽¹⁾	<1	Mirafi 580j ⁽¹⁾	<1
Separation Layer	Mirafi 140N ⁽¹⁾	<1	Not required	<1
	Total Thickness	11	Total Thickness	11

Notes: ⁽¹⁾ Equivalent products would be acceptable substitutes, which should be used upon material data sheets.

⁽²⁾ Dense Graded Base - Refer to WisDOT Standard Specifications, Section 305.

⁽³⁾ Granular Backfill, Grade 1 - Refer to WisDOT Standard Specifications, Section 209.

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Because of the highly compressible nature of the organic deposits, additional maintenance and shorter pavement lifespan should be expected for the portion of the path and bridge approaches constructed over areas underlain by thick layers of peat and organic silt. Due to the high expected settlement due to the weight of the stabilization and pavement section, careful consideration should be given to trail grades. Initial overfilling (filling a few feet above planned finish grade, i.e., surcharging) is a potential strategy to reduce (but not eliminate) the potential for significant grading being required after the settlement/surcharging period has concluded.

4. Starkweather Drive Reconstruction

A. *Overview*

For the section of path which is to share right-of-way with Starkweather Drive, we understand a roadway and utility reconstruction is proposed. Starkweather Drive is to become a one-way street to accommodate the new path and maintain a buffer along the creek. Soil borings SB-4 through SB-7 were performed through the pavement and extended to 15 ft below existing grades along Starkweather Drive.

We anticipate that the new pavement surface will be constructed at/near existing grades and can generally be constructed as described in the following paragraphs. Since the existing clay and sand fill soils over underlying organics may be marginal to poor near the ground surface, we recommend that the project budget include a generous contingency for EBS, which may involve about 12 in. of additional coarse aggregate over biaxial geogrid (e.g., Tensar BX Type 1 or equivalent). Further, utilities can be installed using traditional open-cut or braced excavations, with the understanding that some undercutting and dewatering will likely be required.

Standard earthwork-related techniques that are typically utilized during City of Madison roadway reconstruction projects include:

- Proof-rolling/recompaction of the exposed subgrades;
- Undercutting and/or stabilization in soft areas; and
- Compaction control of fill/backfill materials.

B. *Utility Installation*

Where a utility alignment coincides with soft/loose conditions (which were encountered at all of the borings), we recommend that increased bedding thicknesses, possibly underlain by a geotextile, be considered. In addition, peat soils exposed directly below new utilities *should be removed*. Furthermore, dewatering will likely be necessary during deeper utility installations. While pumping from filtered sump pits is typically acceptable for drawdowns of about two feet or less, well points are generally needed for greater drawdowns. Additional details can be provided upon request, with dewatering means and methods the responsibility of the contractor.

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We anticipate that imported sands will generally be required for use as backfill which is a typical requirement for City projects. On-site sands could be considered for reuse as trench backfill but they should be separated from clay soils and selectively stockpiled. Moisture conditioning would likely be necessary to achieve desired compaction levels. We recommend that at least a level of 95% compaction be achieved within backfill material placed within the final 3 feet below finished subgrades (including undercut backfill - if any), with 90% compaction required at depths greater than 3 feet. The specified levels of compaction are based on modified Proctor methods (ASTM D1557). Also, the backfill material should be placed and compacted in accordance with our Recommended Compacted Fill Specifications presented in Appendix B.

C. Pavement Subgrade Preparation

Significant construction traffic and exposure to wet weather has the potential to destabilize the existing fill soil crust and necessitate some undercutting. The areas requiring undercutting and stabilization will depend on several factors including weather, groundwater depth, etc. Pavement subgrades should be evaluated following utility reconstruction by proof-rolling with a loaded tri-axle dump truck to determine the EBS locations and required stabilization section (i.e., EBS depth, need for geogrid reinforcement).

We recommend that consideration be given to removing any significant layers of peat which remain at or just below pavement subgrade elevations after utility reconstruction and grading. However, because the peat is overlain by existing fill soils, and as the depths of the organic layers encountered at the boring locations could make for costly removal, it is CGC’s opinion that the peat could potentially remain in-place below existing fill soils provided *minimal (less than 1 ft) grade changes are anticipated* and that stable conditions are observed during proof-rolling operations. Although short term consolidation settlement of the existing peat soils may have largely occurred due to the presence of surficial fill, review of past pavement performance and maintenance should occur to determine whether removal of underlying peat layers is warranted.

D. Roadway Pavement Design

Clays will control the roadway/path pavement design, as we anticipate that the pavement subgrades will generally consist of fill materials containing clay. The following *generalized* parameters should be used to develop the design pavement sections (which are considered conservative in sandy areas):

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TABLE 5 – Recommended Pavement Design Parameters

Parameter	Recommended Design Value
USCS Classification	ML/CL
AASHTO Classification	A-4/A-6
Design Group Index, DGI	16
Frost Index, FI	F-4
Soil Support Value, SSV	3.6
Subgrade Modulus, k (pci)	75

Note:

These values are based on the following assumptions:

- 1) The subgrade has been closely monitored.
 - 2) The subgrade has been thoroughly and adequately compacted.
 - 3) Wet zones have been dried, drained, or removed.
 - 4) Pockets of dissimilar material have been removed, replaced or mixed to achieve a homogeneous subgrade.
 - 5) Adequate subgrade drainage has been achieved.
- (Reference: WisDOT, *Geotechnical Manual*)

Provided that stable subgrade conditions are developed, and based on our understanding that Starkweather Drive generally experiences light-duty passenger vehicle traffic, KL’s preliminary pavement design of 3.5 in. of asphalt over 10 in. of coarse aggregate appears suitable for traffic support. However, pavement section thicknesses should be based on the provided soil parameters in Table 4 and City of Madison requirements.

CONSTRUCTION CONSIDERATIONS

Due to variations in weather, construction methods and other factors, specific construction problems are difficult to predict. Soil related difficulties that could be encountered on the site are discussed below:

- Earthwork construction during the early spring or late fall could be complicated as a result of wet weather and freezing temperatures. During cold weather, exposed subgrades should be protected from freezing before and after pile cap construction. Fill should never be placed while frozen or on frozen ground.
- Excavations extending greater than 4 ft in depth below the existing ground surface should be sloped in accordance with current OSHA standards.



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- Based on observations made during the field exploration, groundwater infiltration into abutment and utility trench excavations should be expected and dewatering with pumps operating from filtered sump pits or a stone (working mat) layer should be expected. If the excavation will be immediately adjacent to the creek a cofferdam may be required in conjunction with dewatering for work to occur “in the dry”. Dewatering is the responsibility of the earthwork contractor.
- Construction of the path through the wetland will require special care and low-ground pressure tracked equipment appropriate for such conditions, which was discussed previously, and should not be underestimated. We strongly encourage engaging the technical representatives of a geosynthetic manufacturer to assist in the design and construction details of the lowland path segments.
- Special consideration should be given to creating a stable working platform for pile driving equipment along large portions of the planned bridge alignment, with means and methods of subgrade preparation being the responsibility of the deep foundation contractor.

RECOMMENDED CONSTRUCTION MONITORING

The level of care exercised during site development and earthwork activities will largely determine the quality of the bridge foundations and pavement subgrades. To check that earthwork and foundation construction proceeds in accordance with our recommendations, qualified construction inspectors should monitor the following operations:

- Driven pile installation;
- Path subgrade preparation (including EBS) and stabilization layer installation;
- Fill/backfill placement and compaction; and
- Concrete and asphalt placement.

* * * * *



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We trust this report addresses your present needs. General limitations regarding the conclusions and opinions presented in this report are discussed in Appendix C. We appreciate the opportunity to be of service on this project and look forward to working with you as it proceeds. If you have any questions, please contact us.

Sincerely,

CGC, Inc.

Alex J. Bina, P.E.
Project Engineer

Eric S. Fair
Senior Staff Engineer/Geologist

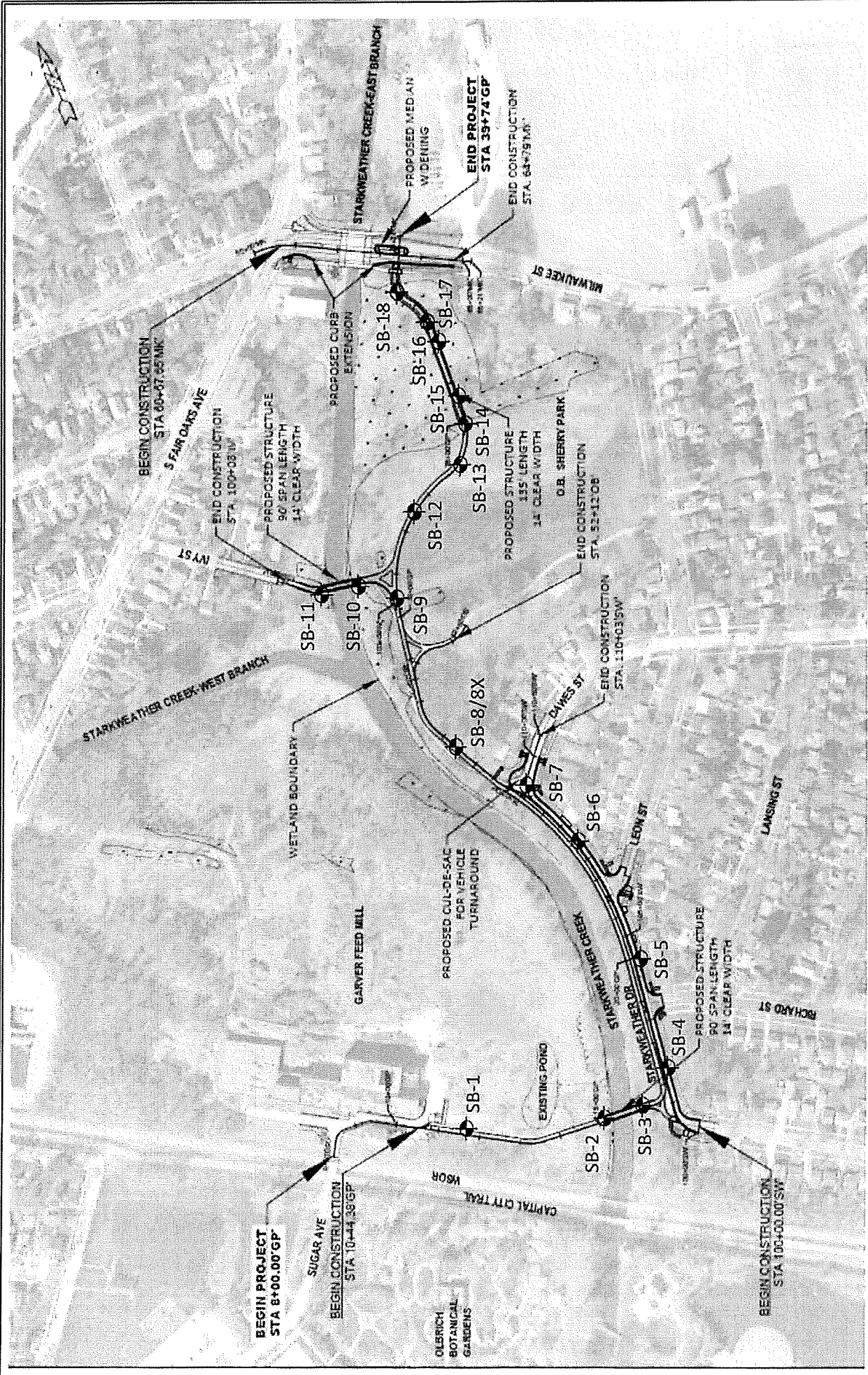
Michael N. Schultz, PE
Principal/Senior Consulting Professional

- Encl: Appendix A - Soil Boring Location Map
 Logs of Test Borings (19)
 Log of Test Boring-General Notes
 Unified Soil Classification System
Appendix B - Recommended Compacted Fill Specifications
Appendix C - Document Qualifications
Appendix D - Settlement Platform

Cc: Mr. Aaron Steger, KL Engineering (email)

APPENDIX A

**SOIL BORING LOCATION MAP
LOGS OF TEST BORINGS (19)
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 Badger State Drilling in April and May of 2020

Scale: Reduced

Date:	6/2020
Job No.	C20051-4



Soil Boring Location Map
Carver Path and Bridges
 Madison, WI



LOG OF TEST BORING

Project Garver Path and Bridges
N489884 E834677
 Location Madison, WI

Boring No. **SB-1**
 Surface Elevation (ft) 851.0
 Job No. C20051-4
 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.	TYPE	Rec (in.)	Moist	N		Depth (ft)	qu (qa) (tsf)	W	LL	PL	LOI
1		16	M/W	2	0-2	TOPSOIL (Mulch Landscaping)					
2		14	M	7	2-5	FILL: Soft to Very Soft Brown Clay with Trace Sand	(0.25)				
3		14	W	5	5-8	Stiff, Gray and Brown (Mottled) Lean CLAY, Little to Some Sand (CL)	(1.75)				
4		12	W	8	8-10	Loose, Light Brown Fine to Coarse SAND, Trace to Little Silt (SP/SP-SM)					
					10	End of Boring at 10 ft					
					10-50	Backfilled with Bentonite Chips					

WATER LEVEL OBSERVATIONS

GENERAL NOTES

While Drilling ∇ 6.0' Upon Completion of Drilling _____
 Time After Drilling _____ 10 Min.
 Depth to Water _____ 6' ∇
 Depth to Cave in _____ 6.5'

Start 4/30/20 End 4/30/20
 Driller BSD Chief DB Rig D-50
 Logger KD Editor ESF
 Drill Method 4.25" HSA; Autohammer

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



LOG OF TEST BORING

Project Garver Path and Bridges
N489749 E834961
 Location Madison, WI

Boring No. **SB-2**
 Surface Elevation (ft) 849.9
 Job No. C20051-4
 Sheet 1 of 2

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

SAMPLE					VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES					
No.	TYPE	Rec (in.)	Moist	N		Depth (ft)	qu (qa) (tsf)	W	LL	PL	LOI
1		18	M	11							
2		18	M	20		5 in. TOPSOIL					
3		6	M/W	4		FILL: Medium Dense Black Clayey Topsoil with Sand and Gravel Trace Cinders Noted Near 4'					
4		18	M/W	3		Becoming Very Loose Near 6'					
5		18	W	3		Very Loose, Black Sedimentary PEAT, Trace Sand (PT - Possible Fill to 10')					
6		18	W	5		Very Loose, Gray Organic SILT, Trace to Little Sand, Scattered Fibers and Shells (OL)					
7		16	W	16		Soft, Dark Gray Organic CLAY (OH)	(0.4)				
8		16	W	14		Medium Dense, Light Brown/Gray Silty Fine to Medium SAND, Occasional Seams and Layers having Less Silt (SM)					
9		10	W	17		Medium Dense, Light Brown Fine to Medium SAND, Little to Some Silt, Trace Gravel (SP-SM/SM)					
10		12	W	31		Dense, Light Brown Fine to Medium SAND, Trace to Little Silt (SP/SP-SM)					
11		14	W	32							
12		12	W	31							

WATER LEVEL OBSERVATIONS

GENERAL NOTES

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

Start 4/30/20 End 4/30/20
 Driller BSD Chief DB Rig D-50
 Logger KD Editor ESF
 Drill Method 4.25" HSA to 10'; 3 7/8"
RB with Mud to 70'; Autohammer

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



LOG OF TEST BORING

Project Garver Path and Bridges
N489777 E835088
 Location Madison, WI

Boring No. SB-3
 Surface Elevation (ft) 849.0
 Job No. C20051-4
 Sheet 1 of 2

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

SAMPLE					VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES				
No.	TYPE	Rec (in.)	Moist	N		Depth (ft)	qu (qa) (tsf)	W	LL	PL
1		8	M	5	11.5 in. TOPSOIL					
2		18	M	6	FILL: Medium to Stiff Brown to Gray Clay with Some Sand	(1.0)				
3		12	M/W	2	Loose, Black Fibrous to Sedimentary PEAT (PT)					
4		0	W	2	Very Loose, Gray Organic SILT, Little to Some Sand, Scattered Fibers and Shells (OL)					
5		12	W	11	Medium Dense to Dense, Light Brown Fine to Medium SAND, Little to Some Silt, Trace Gravel (SP-SM/SM)					
6		6	W	16						
7		8	W	16						
8		12	W	36						
9		14	W	22	Occasional Seams and Layers of Silty Fine Sand (SM)					
10		10	W	27						
11		12	W	31						
12		14	W	32						

WATER LEVEL OBSERVATIONS

GENERAL NOTES

While Drilling ∇ 5.5' Upon Completion of Drilling _____
 Time After Drilling _____
 Depth to Water _____
 Depth to Cave in _____

Start 4/24/20 End 4/24/20
 Driller BSD Chief DB Rig D-50
 Logger KD Editor ESF
 Drill Method 4.25" HSA to 15'; 3 7/8"
RB with Mud to 60'; Autohammer

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




LOG OF TEST BORING

Project Garver Path and Bridges
N489777 E835088
 Location Madison, WI

Boring No. **SB-3**
 Surface Elevation 849.0
 Job No. C20051-4
 Sheet 2 of 2

2921 PERRY STREET, MADISON, WIS. 53713 (608) 288-4100, FAX (608) 288-7887

SAMPLE					VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES				
No.	TYPE	Rec (in.)	Moist	N		Depth (ft)	qu (qa) (tsf)	W	LL	PL
13		14	W	41	 Dense to Very Dense, Light Brown/Gray Silty Fine SAND, Occasional Seams and Layers Having Less Silt (SM)					
14		12	W	50						
					End of Boring at 60 ft Backfilled with Bentonite Slurry and Chips					



LOG OF TEST BORING

Project Garver Path and Bridges
Starkweather Dr: 130'S of Richard, 5'E of CL
 Location Madison, WI

Boring No. **SB-4**
 Surface Elevation (ft) 851.2
 Job No. C20051-4
 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	LOI
					5 in. Asphalt Pavement/8.5 in. Base Course					
1	18	M	10		FILL: Loose to Medium Dense Gray Sand with Clay to 3'	(0.75)				
2	18	M/W	3		Medium to Stiff Gray Clay with Sand to 5.5'	(0.75)				
3	18	M	3		Very Loose, Black Sedimentary PEAT, Trace Sand (PT)					
4	18	M/W	2		Very Loose, Gray Fine SAND, Trace to Little Silt (SP/SP-SM)		115.6			19.4
5	10	W	9		Loose, Brown Fine to Coarse SAND, Trace to Little Silt (SP/SP-SM)					
					End Boring at 15 ft					
					Borehole backfilled with bentonite chips and asphalt patch					

WATER LEVEL OBSERVATIONS					GENERAL NOTES	
While Drilling	<input checked="" type="checkbox"/>	<u>13.5'</u>	Upon Completion of Drilling	<u>7.5'</u>	Start	<u>4/23/20</u> End <u>4/23/20</u>
Time After Drilling				<u>30 Min.</u>	Driller	<u>BSD</u> Chief <u>MC</u> Rig <u>CME-55</u>
Depth to Water				<u>7.5'</u>	Logger	<u>GB</u> Editor <u>ESF</u>
Depth to Cave in				<u>10'</u>	Drill Method	<u>2.25" HSA; Autohammer</u>
<small>The stratification lines represent the approximate boundary between soil types and the transition may be gradual.</small>						



LOG OF TEST BORING

Project Garver Path and Bridges
Starkweather Dr: 110'N of Richard, Near CL
 Location Madison, WI

Boring No. **SB-5**
 Surface Elevation (ft) 850.9
 Job No. C20051-4
 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.	TYPE	Rec (in.)	Moist	N		Depth (ft)	qu (qa) (tsf)	W	LL	PL
1		18	M	11	7.5 in. Asphalt Pavement/12 in. Base Course					
2		18	M	3	FILL: Medium Dense Gray Sand with Clay and Gravel to 3'					
					Medium-Stiff Gray Clay with Sand to 5'	(0.75)				
3		18	M	3	Very Loose, Black Fibrous PEAT, Trace Sand (PT)		242.0			54.4
4		18	W	7	Very Loose, Dark Gray Silty SAND with Organics (SM)					
					Loose to Medium Dense, Brown Fine to Medium SAND, Trace to Little Silt (SP/SP-SM)					
5		10	W	11	Becoming Fine to Coarse Near 14.5'					
					End Boring at 15 ft					
					Borehole backfilled with bentonite chips and asphalt patch					

WATER LEVEL OBSERVATIONS					GENERAL NOTES				
While Drilling	∇	8.5'	Upon Completion of Drilling	6.5'	Start	4/23/20	End	4/23/20	
Time After Drilling				30 Min.	Driller	BSD	Chief	MC	Rig CME-55
Depth to Water				6.5'	Logger	GB	Editor	ESF	
Depth to Cave in				9'	Drill Method	2.25" HSA; Autohammer			

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



LOG OF TEST BORING

Project Garver Path and Bridges
Starkweather Dr: 140'S of Dawes, 12'W of CL
 Location Madison, WI

Boring No. SB-6
 Surface Elevation (ft) 850.4
 Job No. C20051-4
 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	LOI
1	12	M	5	5	3.5 in. Asphalt Pavement/10 in. Base Course FILL: Medium Stiff to Soft Gray Clay with Sand and Gravel	(0.75)				
2	18	M/W	2	5	Loose to Very Loose, Black Sedimentary PEAT, Trace Sand (PT)	(0.5)				
3	18	M	4	10	Very Soft, Gray Lean CLAY (CL)	(0.2)	116.2			15.2
4	18	M	2	10	Very Loose, Brown Fine to Coarse SAND, Trace to Little Silt (SP/SP-SM)					
5	18	W	2	15	Very Soft, Gray Lean CLAY (CL)	(<0.2)				
6	18	W	1	15	End Boring at 15 ft Borehole backfilled with bentonite chips and asphalt patch					

WATER LEVEL OBSERVATIONS	GENERAL NOTES
While Drilling <input checked="" type="checkbox"/> <u>11.0'</u> Upon Completion of Drilling <u>9'</u> Time After Drilling _____ <u>30 Min.</u> Depth to Water _____ <u>9'</u> ▼ Depth to Cave in _____ <u>12'</u>	Start <u>4/23/20</u> End <u>4/23/20</u> Driller <u>BSD</u> Chief <u>MC</u> Rig <u>CME-55</u> Logger <u>GB</u> Editor <u>ESF</u> Drill Method <u>2.25" HSA; Autohammer</u>
The stratification lines represent the approximate boundary between soil types and the transition may be gradual.	



LOG OF TEST BORING

Project Garver Path and Bridges
 Starkweather Dr: 25'NW of Dawes, 5'SW of CL
 Location Madison, WI

Boring No. **SB-7**
 Surface Elevation (ft) 849.5
 Job No. C20051-4
 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.	TYPE	Rec (in.)	Moist	N		Depth (ft)	qu (qa) (tsf)	W	LL	PL
1		10	M	5	4.5 in. Asphalt Pavement/8.5 in. Base Course					
					FILL: Loose Gray Sand with Gravel and Clay					
2		14	M	4	Loose, Black Sedimentary PEAT, Trace Sand (PT)		122.4			35.3
3		18	M/W	3	Soft to Medium Stiff, Gray Lean CLAY, Occasional Plant Fibers (CL)	(0.5)				
4		18	M/W	3	Becoming Very Soft Near 8.5'	(<0.2)				
5		18	W	9	Loose to Medium Dense, Brown Fine to Coarse SAND, Trace to Little Silt (SP/SP-SM)					
6		8	W	10						
					End Boring at 15 ft					
					Borehole backfilled with bentonite chips and asphalt patch					

WATER LEVEL OBSERVATIONS

While Drilling ∇ 11.0' Upon Completion of Drilling 6'
 Time After Drilling _____ 30 Min.
 Depth to Water _____ 6' ∇
 Depth to Cave in _____ 9'

GENERAL NOTES

Start 4/23/20 End 4/23/20
 Driller BSD Chief MC Rig CME-55
 Logger GB Editor ESF
 Drill Method 2.25" HSA; Autohammer

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



LOG OF TEST BORING

Project **Garver Path and Bridges**
N490750 E834964
 Location **Madison, WI**

Boring No. **SB-8**
 Surface Elevation (ft) **850±**
 Job No. **C20051-4**
 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.	TYPE	Rec (in.)	Moist	N		Depth (ft)	qu (qa) (tsf)	W	LL	PL
1		12	M	17	5.5 in. TOPSOIL					
2		12	M/W	5	FILL: Mixed Medium Dense Sand and Clay with Gravel					
3		14	W	7	Loose, Black Fibrous to Sedimentary PEAT, Trace Sand (PT)					
4		14	W	13	Loose, Light Brown/Gray Silty Fine SAND (SM)	(0.3)				
					Soft, Gray Lean CLAY, Occasional Plant Fibers (CL)					
					Medium Dense, Light Brown Fine to Medium SAND, Little to Some Silt, Trace Gravel (SP-SM/SM)					
					End of Boring at 10 ft					
					Backfilled with Bentonite Chips					

WATER LEVEL OBSERVATIONS

While Drilling ∇ **6.5'** Upon Completion of Drilling _____
 Time After Drilling _____
 Depth to Water _____
 Depth to Cave in _____

GENERAL NOTES

Start **4/27/20** End **4/27/20**
 Driller **BSD** Chief **DB** Rig **D-50**
 Logger **KD** Editor **ESF**
 Drill Method **4.25" HSA; Autohammer**

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



LOG OF TEST BORING

Project Garver Path and Bridges
N490750 E834964
 Location Madison, WI

Boring No. SB-8X
 Surface Elevation (ft) 850±
 Job No. C20051-4
 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.	TYPE	Rec (in.)	Moist	N		Depth (ft)	qu (qa) (tsf)	W	LL	PL
1	6	M	26	26	<div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">6 in. TOPSOIL</div> FILL: Medium Dense Brown Sand with Gravel to Buried Concrete to 2.5' End of Boring at 2.5 ft Due to Unknown, Unmarked Obstruction. Backfilled with Soil Cuttings. Moved 5'W and Advanced SB-8 to 10'	(0.3)				
					5					
					10					
					15					
					20					
					25					
					30					
					35					
					40					
					45					
					50					

WATER LEVEL OBSERVATIONS	GENERAL NOTES
While Drilling <input checked="" type="checkbox"/> <u>NW</u> Upon Completion of Drilling _____ Time After Drilling _____ Depth to Water _____ Depth to Cave in _____	Start <u>4/27/20</u> End <u>4/27/20</u> Driller <u>BSD</u> Chief <u>DB</u> Rig <u>D-50</u> Logger <u>KD</u> Editor <u>ESF</u> Drill Method <u>4.25" HSA; Autohammer</u>
The stratification lines represent the approximate boundary between soil types and the transition may be gradual.	



LOG OF TEST BORING

Project Garver Path and Bridges
N491066 E834975
 Location Madison, WI

Boring No. **SB-9**
 Surface Elevation (ft) 847.4
 Job No. C20051-4
 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.	TYPE	Rec (in.)	Moist	N		Depth (ft)	qu (qa) (tsf)	W	LL	PL
1	█	16	M	4	0	6.5 in. TOPSOIL				
2	█	16	M	2	1	FILL: Stiff Brown to Gray Clay with Sand and Gravel	(1.75)			
3	█	14	M/W	2	2	Very Loose, Brown Fibrous to Sedimentary PEAT, Trace Sand (PT - Possible Fill to 5')				
4	█	18	W	2	3	Very Loose, Gray Organic SILT, Trace to Little Clay, Scattered Fibers and Shells (OL)				
5	█	12	W	8	4	Loose, Light Brown Fine to Medium SAND, Little to Some Silt, Trace Gravel (SP-SM/SM)				
					15	End of Boring at 15 ft				
					20	Backfilled with Bentonite Chips				
					25					
					30					
					35					
					40					
					45					
					50					

WATER LEVEL OBSERVATIONS	GENERAL NOTES
While Drilling ∇ <u>7.0'</u> Upon Completion of Drilling _____ Time After Drilling _____ Depth to Water _____ Depth to Cave in _____	Start <u>4/27/20</u> End <u>4/27/20</u> Driller <u>BSD</u> Chief <u>DB</u> Rig <u>D-50</u> Logger <u>KD</u> Editor <u>ESF</u> Drill Method <u>4.25" HSA; Autohammer</u>
The stratification lines represent the approximate boundary between soil types and the transition may be gradual.	



LOG OF TEST BORING

Project Garver Path and Bridges
N491153 E834920
 Location Madison, WI

Boring No. SB-10
 Surface Elevation (ft) 848.6
 Job No. C20051-4
 Sheet 1 of 2

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

SAMPLE					VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES				
No.	TYPE	Rec (in.)	Moist	N		Depth (ft)	qu (qa) (tsf)	W	LL	PL
1		12	M	5	4.5 in. TOPSOIL					
2		10	M/W	4	FILL: Loose Gray Sandy Peat Mixed with Clay and Gravel to 3' Loose to Very Loose Peat to 5.5'	(1.5)				
3		12	M/W	2	Very Loose, Black Fibrous to Sedimentary PEAT, Trace Sand (PT - Possible Fill to 8')					
4		18	M/W	2						
5		8	W	7	Loose, Gray Fine to Medium SAND, Some Silt and Plant Fibers (SM)					
6		16	W	2	Very Loose, Gray to Brown Gray Organic SILT, Trace to Little Clay, Scattered Fibers and Shells (OL)		198.8			13.7
7		18	W	2	Very Loose, Dark Brown to Black Sedimentary PEAT, Trace Sand (PT)					
8		18	W	2			117.8			19.6
9		10	W	3	Very Loose, Light Brown Silty Fine SAND, Occasional Seams and Layers Having Silt (SM)					
10		18	W	3	Soft to Medium Stiff, Gray Lean CLAY (CL)	(0.5)				
11		12	W	21	Medium Dense, Brown Fine to Coarse SAND, Trace to Little Silt (SP/SP-SM)					
12		18	W	46	Dense, Light Brown Fine SAND, Trace to Little Silt (SP/SP-SM)					

WATER LEVEL OBSERVATIONS

GENERAL NOTES

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

Start 4/27/20 End 4/27/20
 Driller BSD Chief DB Rig D-50
 Logger KD Editor ESF
 Drill Method 4.25" HSA to 10'; 3 7/8"
RB with Mud to 75'; Autohammer

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



LOG OF TEST BORING

Project Garver Path and Bridges
N491153 E834920
 Location Madison, WI

Boring No. **SB-10**
 Surface Elevation 848.6
 Job No. C20051-4
 Sheet 2 of 2

2921 PERRY STREET, MADISON, WIS. 53713 (608) 288-4100, FAX (608) 288-7887

SAMPLE					VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES					
No.	TYPE	Rec (in.)	Moist	N		Depth (ft)	qu (qa) (tsf)	W	LL	PL	LI
					55	Dense, Light Brown Fine SAND, Trace to Little Silt (SP/SP-SM) Occasional Seams and Layers of Fine to Medium or Fine to Coarse SAND with Trace to Some Gravel Beginning Near 50'					
13	█	14	W	46							
14	█	16	W	31	60						
15	█	14	W	53	65						
					70	Very Dense Near 65' Very Dense, Light Brown Fine SAND, Some Silt (SM)					
16	█	16	W	52							
17	█	14	W	57	75						
					80	End of Boring at 75 ft Backfilled with Bentonite Slurry and Chips					
					85						
					90						
					95						
					100						
					105						



LOG OF TEST BORING

Project Garver Path and Bridges
N491170 E834832
 Location Madison, WI

Boring No. SB-11
 Surface Elevation (ft) 849.1
 Job No. C20051-4
 Sheet 1 of 2

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

SAMPLE					VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES				
No.	TYPE	Rec (in.)	Moist	N		Depth (ft)	qu (qa) (tsf)	W	LL	PL
1		12	M	5	10 in. TOPSOIL					
					FILL: Brown Clay to 1.5'					
2		10	M	4	Loose to Very Loose, Black Fibrous to Sedimentary PEAT, Trace Sand (PT - Possible Fill) to 3'					
3		18	W	1						
4		16	W	1	Very Loose, Brown to Gray Organic SILT, Trace to Little Clay, Scattered Fibers and Shells, Occasional Seams of Fine Sand (OL)					
5		18	W	1						
					Peaty Seam Noted Near 14'		237.4			16.6
6		15	W	1						
7		9	W	23	Medium Dense, Light Brown Fine to Medium SAND, Little to Some Silt, Trace Gravel, Occasional Seams and Layers of Fine or Fine to Coarse Sand (SP-SM/SM)					
8		6	W	15						
9		12	W	16	Medium Dense, Light Brown/Gray Silty Fine SAND (SM)					
10		16	W	14						
11		14	W	14	Medium Dense, Gray SILT, Little to Some Sand (ML)					
12		14	W	12						
					Increasing Sand Content with Depth					

WATER LEVEL OBSERVATIONS

GENERAL NOTES

While Drilling 5.0' Upon Completion of Drilling _____
 Time After Drilling _____
 Depth to Water _____
 Depth to Cave in _____

Start 5/4/20 End 5/4/20
 Driller BSD Chief DB Rig D-50
 Logger KD Editor ESF
 Drill Method 4.25" HSA to 10'; 3 7/8"
RB with Mud to 85'; Autohammer

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



LOG OF TEST BORING

Project Garver Path and Bridges
N491170 E834832
 Location Madison, WI

Boring No. **SB-11**
 Surface Elevation 849.1
 Job No. C20051-4
 Sheet 2 of 2

2921 PERRY STREET, MADISON, WIS. 53713 (608) 288-4100, FAX (608) 288-7887

SAMPLE					Depth (ft)	VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES				
No.	TYPE	Rec (in.)	Moist	N			qu (qa) (tsf)	W	LL	PL	LI
					50	Medium Dense, Gray SILT, Little to Some Sand (ML)					
13		8	W	32	55	Dense, Light Brown Fine to Medium SAND, Trace to Little Silt (SP/SP-SM)					
14		10	W	34	60						
15		14	W	35	65						
16		16	W	41	70	Dense to Very Dense, Light Brown Silty Fine SAND, Occasional Seams and Layers having Less Silt (SM)					
17		14	W	48	75						
18		14	W	52	80						
19		16	W	56	85						
					90	End of Boring at 85 ft					
					95	Backfilled with Bentonite Slurry and Chips					
					100						
					105						



LOG OF TEST BORING

Project Garver Path and Bridges
N491257 E835101
 Location Madison, WI

Boring No. SB-12
 Surface Elevation (ft) 849.4
 Job No. C20051-4
 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.	TYPE	Rec (in.)	Moist	N		Depth (ft)	qu (qa) (tsf)	W	LL	PL	LOI
1		12	M	10	0 - 3'	8.5 in. TOPSOIL FILL: Very Stiff Brown to Gray Clay with Sand and Gravel to 3'	(3.5)				
2		6	W	8	3' - 5.5'	Loose Gray Silty Sand and Gravel to 5.5'					
3		16	W	5	5.5' - 10'	Loose to Very Loose, Black Fibrous to Sedimentary PEAT, Trace Sand (PT)					
4		18	W	2	10' - 15'	Very Loose, Gray Organic SILT, Trace to Little Clay, Scattered Fibers and Shells (OL)		302.3			50.0
5		18	W	2	15' - 50'	End of Boring at 15 ft Backfilled with Bentonite Chips					

WATER LEVEL OBSERVATIONS

GENERAL NOTES

While Drilling ∇ 3.5' Upon Completion of Drilling 4'
 Time After Drilling _____
 Depth to Water _____ ∇
 Depth to Cave in _____

Start 4/28/20 End 4/28/20
 Driller BSD Chief DB Rig D-50
 Logger KD Editor ESF
 Drill Method 4.25" HSA; Autohammer

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



LOG OF TEST BORING

Project Garver Path and Bridges
N491330 E835228
 Location Madison, WI

Boring No. **SB-13**
 Surface Elevation (ft) 848.0
 Job No. C20051-4
 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.	TYPE	Rec (in.)	Moist	N		Depth (ft)	q _u (qa) (tsf)	W	LL	PL
1	6	M	4	4	7.5 in. TOPSOIL					
2	3	W	3	3	FILL: Medium Stiff to Very Soft Brown to Gray Clay with Sand and Gravel	(0.75)				
3	18	W	4	4	Loose to Very Loose, Black Fibrous to Sedimentary PEAT, Trace Sand (PT)	(0.2)				
4	18	W	2	2	End of Boring at 10 ft Backfilled with Bentonite Chips					

WATER LEVEL OBSERVATIONS	GENERAL NOTES
While Drilling ∇ <u>3.5'</u> Upon Completion of Drilling <u>3'</u> Time After Drilling _____ Depth to Water _____ Depth to Cave in _____	Start <u>4/28/20</u> End <u>4/28/20</u> Driller <u>BSD</u> Chief <u>DB</u> Rig <u>D-50</u> Logger <u>KD</u> Editor <u>ESF</u> Drill Method <u>4.25" HSA; Autohammer</u>
The stratification lines represent the approximate boundary between soil types and the transition may be gradual.	



LOG OF TEST BORING

Project Garver Path and Bridges
N491422 E835258
 Location Madison, WI

Boring No. **SB-14**
 Surface Elevation (ft) 846.1
 Job No. C20051-4
 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.	TYPE	Rec (in.)	Moist	N		Depth (ft)	qu (qa) (tsf)	W	LL	PL
1		10	W	4	4 in. TOPSOIL					
2		12	W	2	FILL: Soft Brown to Gray Clay with Sand and Gravel	(0.3)				
3		14	W	2	Very Loose, Brown to Black Fibrous to Sedimentary PEAT, Trace Sand (PT)					
4		16	W	2						
5		18	W	2						
6		18	W	2						
					End of Boring at 15 ft		218.2			20.9
					Backfilled with Bentonite Chips					

WATER LEVEL OBSERVATIONS

GENERAL NOTES

While Drilling ∇ 1.0' Upon Completion of Drilling _____
 Time After Drilling _____
 Depth to Water _____
 Depth to Cave in _____

Start 4/28/20 End 4/28/20
 Driller BSD Chief DB Rig D-50
 Logger KD Editor ESF
 Drill Method 4.25" HSA; Autohammer

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



LOG OF TEST BORING

Project Garver Path and Bridges
N491466 E835267
 Location Madison, WI

Boring No. **SB-15**
 Surface Elevation (ft) 845.1
 Job No. **C20051-4**
 Sheet 1 of 2

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

SAMPLE					VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES				
No.	TYPE	Rec (in.)	Moist	N		Depth (ft)	qu (qa) (tsf)	W	LL	PL
1		3	W	2	0 - 4 in. Peaty TOPSOIL FILL: Soft Gray Clay/Peat to 3 in.	(0.3)				
2		18	W	4	4 - 5' Loose to Very Loose, Dark Brown to Black Peat and Dark Gray Sand to 5'					
3		18	W	2	5' - Very Loose, Black Sedimentary PEAT, Trace to Little Sand (PT)					
4		18	W	2			207.7			16.7
5		18	W	2						
6		18	W	2			192.6			15.0
7		18	W	2	20' - Very Loose, Gray Organic SILT, Trace to Little Clay, Scattered Fibers and Shells (OL)					
8		18	W	3	25' - Very Soft, Dark Gray Organic CLAY (OH)	(0.2)				
9		14	W	16	30' - Medium Dense to Dense, Light Brown Fine to Medium and Fine to Coarse SAND, Little to Some Silt, Trace Gravel (SP-SM/SM)					
10		10	W	18						
11		8	W	18						
12		10	W	30	Occasional Thin <1/2" Clay Seams Noted Near 44'					

WATER LEVEL OBSERVATIONS

GENERAL NOTES

While Drilling ∇ 1.0' Upon Completion of Drilling _____
 Time After Drilling _____
 Depth to Water _____
 Depth to Cave in _____

Start 4/28/20 End 4/28/20
 Driller BSD Chief DB Rig D-50
 Logger KD Editor ESF
 Drill Method 4.25" HSA to 10'; 3 7/8"
RB with Mud to 80'; Autohammer

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



LOG OF TEST BORING

Project Garver Path and Bridges
N491598 E835294
 Location Madison, WI

Boring No. **SB-16**
 Surface Elevation (ft) 846.3
 Job No. C20051-4
 Sheet 1 of 2

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	LOI
1	0	W	0	0	Loose, Black Fibrous to Sedimentary PEAT, Trace Sand (PT - Possible Fill)					
2	10	W	0	5	Loose, Gray Sandy Organic SILT, Trace to Little Clay, Scattered Fibers and Shells (OL)					
3	8	W	0	8	Very Loose, Brown Fine to Coarse SAND, Trace to Little Silt (SP/SP-SM)					
4	14	W	0	10	Very Loose, Gray Organic SILT, Trace to Little Clay, Scattered Fibers and Shells (OL)					
5	16	W	0	15						
6	18	W	7	20	Soft to Very Soft, Gray Lean CLAY (CL)	(0.25)				
7	8	W	16	25	Medium Dense to Dense, Light Brown Fine to Medium SAND, Little to Some Silt, Trace Gravel (SP-SM/SM)					
8	16	W	19	30						
9	10	W	30	35						
10	14	W	33	40						
11	12	W	30	45						
12	10	W	23	50						

WATER LEVEL OBSERVATIONS

GENERAL NOTES

While Drilling ∇ 1.0' Upon Completion of Drilling _____
 Time After Drilling _____
 Depth to Water _____
 Depth to Cave in _____

Start 5/14/20 End 5/14/20
 Driller BSD Chief DB Rig D-50
 Logger KD Editor ESF
 Drill Method 4.25" HSA to 10'; 3 7/8"
RB with Mud to 100'; Autohammer

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



LOG OF TEST BORING

Project Garver Path and Bridges
N491665 E835296
 Location Madison, WI

Boring No. **SB-17**
 Surface Elevation (ft) 846.1
 Job No. C20051-4
 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.	TYPE	Rec (in.)	Moist	N		Depth (ft)	q _u (qa) (tsf)	W	LL	PL	LOI
1	█	6	W	0	▽						
2	█	14	W	0	5						
3	█	12	W	3	5						
4	█	16	W	3	10						
					10	End of Boring at 10 ft					
					15	Backfilled with Bentonite Chips					
					20						
					25						
					30						
					35						
					40						
					45						
					50						

WATER LEVEL OBSERVATIONS

GENERAL NOTES

While Drilling ▽ 1.0' Upon Completion of Drilling _____
 Time After Drilling _____
 Depth to Water _____
 Depth to Cave in _____

Start 5/15/20 End 5/15/20
 Driller BSD Chief DB Rig D-50
 Logger KD Editor ESF
 Drill Method 2.25" HSA; Autohammer

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



LOG OF TEST BORING

Project Garver Path and Bridges
N491734 E835265
 Location Madison, WI

Boring No. **SB-18**
 Surface Elevation (ft) 845.7
 Job No. C20051-4
 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.	TYPE	Rec (in.)	Moist	N		Depth (ft)	qu (qa) (tsf)	W	LL	PL	LOI
1	█	3	W	0	0	Black Fibrous to Sedimentary PEAT, Trace Sand (PT - Possible Fill) Very Loose, Gray Sandy Organic SILT, Trace to Little Clay, Scattered Fibers and Shells (OL) Less Sand with Depth End of Boring at 15 ft Backfilled with Bentonite Chips					
2	█	16	W	1	5						
3	█	16	W	0	5						
4	█	18	W	0	10						
5	█	18	W	0	10						
6	█	18	W	0	15						
					15						
					20						
					25						
					30						
					35						
					40						
					45						
					50						

WATER LEVEL OBSERVATIONS	GENERAL NOTES
While Drilling <input checked="" type="checkbox"/> <u>1.0'</u> Upon Completion of Drilling _____ Time After Drilling _____ Depth to Water _____ Depth to Cave in _____	Start <u>5/15/20</u> End <u>5/15/20</u> Driller <u>BSD</u> Chief <u>DB</u> Rig <u>D-50</u> Logger <u>KD</u> Editor <u>ESF</u> Drill Method <u>4.25" HSA; Autohammer</u>
The stratification lines represent the approximate boundary between soil types and the transition may be gradual.	

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 _a -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 6" 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_a – 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 with fines (More than 12% fines)



GM

Silty gravels, gravel-sand-silt mixtures



GC

Clayey gravels, gravel-sand-clay mixtures

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

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 with fines (More than 12% fines)



SM

Silty sands, sand-silt mixtures



SC

Clayey sands, sand-clay mixtures

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

FINE-GRAINED SOILS

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



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



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



PT

Peat and other highly organic soils

SILTS AND CLAYS
Liquid limit less than 50%

SILTS AND CLAYS
Liquid limit 50% or greater

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

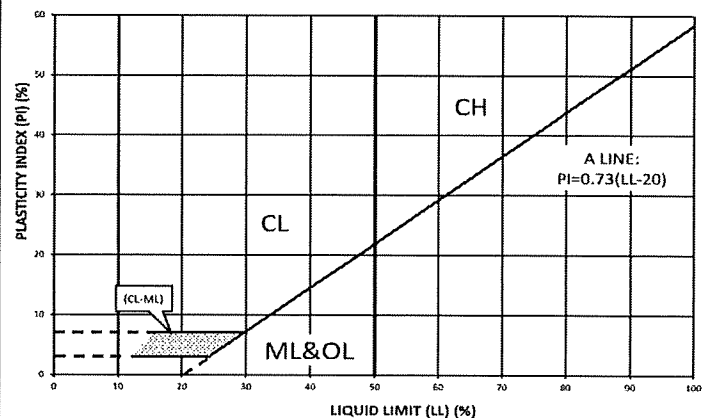
Determine percentages of sand and gravel from grain-size curve. Depending on percentage of fines (fraction smaller than No. 200 sieve size), coarse-grained soils are classified as follows:

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



APPENDIX B

RECOMMENDED COMPACTED FILL SPECIFICATIONS

APPENDIX B

CGC, INC.

RECOMMENDED COMPACTED FILL SPECIFICATIONS

General Fill Materials

Proposed fill shall contain no vegetation, roots, topsoil, peat, ash, wood or any other non-soil material which by decomposition might cause settlement. Also, fill shall never be placed while frozen or on frozen surfaces. Rock, stone or broken concrete greater than 6 in. in the largest dimension shall not be placed within 10 ft of the building area. Fill used greater than 10 ft beyond the building limits shall not contain rock, boulders or concrete pieces greater than a 2 sq ft area and shall not be placed within the final 2 ft of finish subgrade or in designated utility construction areas. Fill containing rock, boulders or concrete pieces should include sufficient finer material to fill voids among the larger fragments.

Special Fill Materials

In certain cases, special fill materials may be required for specific purposes, such as stabilizing subgrades, backfilling undercut excavations or filling behind retaining walls. For reference, WisDOT gradation specifications for various types of granular fill are attached in Table 1.

Placement Method

The approved fill shall be placed, spread and leveled in layers generally not exceeding 10 in. in thickness before compaction. The fill shall be placed at moisture content capable of achieving the desired compaction level. For clay soils or granular soils containing an appreciable amount of cohesive fines, moisture conditioning will likely be required.

It is the Contractor's responsibility to provide all necessary compaction equipment and other grading equipment that may be required to attain the specified compaction. Hand-guided vibratory or tamping compactors will be required whenever fill is placed adjacent to walls, footings, columns or in confined areas.

Compaction Specifications

Maximum dry density and optimum moisture content of the fill soil shall be determined in accordance with modified Proctor methods (ASTM D1557). The recommended field compaction as a percentage of the maximum dry density is shown in Table 2. Note that these compaction guidelines would generally not apply to coarse gravel/stone fill. Instead, a method specification would apply (e.g., compact in thin lifts with a vibratory compactor until no further consolidation is evident).

Testing Procedures

Representative samples of proposed fill shall be submitted to CGC, Inc. for optimum moisture-maximum density determination (ASTM D1557) prior to the start of fill placement. The sample size should be approximately 50 lb.

CGC, Inc. shall be retained to perform field density tests to determine the level of compaction being achieved in the fill. The tests shall generally be conducted on each lift at the beginning of fill placement and at a frequency mutually agreed upon by the project team for the remainder of the project.

Table 1
Gradation of Special Fill Materials

Material	WisDOT Section 311	WisDOT Section 312	WisDOT Section 305			WisDOT Section 209		WisDOT Section 210
	Breaker Run	Select Crushed Material	3-in. Dense Graded Base	1 1/4-in. Dense Graded Base	3/4-in. Dense Graded Base	Grade 1 Granular Backfill	Grade 2 Granular Backfill	Structure Backfill
Sieve Size	Percent Passing by Weight							
6 in.	100							
5 in.		90-100						
3 in.			90-100					100
1 1/2 in.		20-50	60-85					
1 1/4 in.				95-100				
1 in.					100			
3/4 in.			40-65	70-93	95-100			
3/8 in.				42-80	50-90			
No. 4			15-40	25-63	35-70	100 (2)	100 (2)	25-100
No. 10		0-10	10-30	16-48	15-55			
No. 40			5-20	8-28	10-35	75 (2)		
No. 100						15 (2)	30 (2)	
No. 200			2-12	2-12	5-15	8 (2)	15 (2)	15 (2)

Notes:

1. Reference: Wisconsin Department of Transportation *Standard Specifications for Highway and Structure Construction*.
2. Percentage applies to the material passing the No. 4 sieve, not the entire sample.
3. Per WisDOT specifications, both breaker run and select crushed material can include concrete that is 'substantially free of steel, building materials and other deleterious material'.

Table 2
Compaction Guidelines

Area	Percent Compaction (1)	
	Clay/Silt	Sand/Gravel
Within 10 ft of building lines		
Footing bearing soils	93 - 95	95
Under floors, steps and walks		
- Lightly loaded floor slab	90	90
- Heavily loaded floor slab and thicker fill zones	92	95
Beyond 10 ft of building lines		
Under walks and pavements		
- Less than 2 ft below subgrade	92	95
- Greater than 2 ft below subgrade	90	90
Landscaping	85	90

Notes:

1. Based on Modified Proctor Dry Density (ASTM D 1557)

APPENDIX C
DOCUMENT QUALIFICATIONS

APPENDIX C DOCUMENT QUALIFICATIONS

I. GENERAL RECOMMENDATIONS/LIMITATIONS

CGC, Inc. should be provided the opportunity for a general review of the final design and specifications to confirm that earthwork and foundation requirements have been properly interpreted in the design and specifications. CGC should be retained to provide soil engineering services during excavation and subgrade preparation. This will allow us to observe that construction proceeds in compliance with the design concepts, specifications and recommendations, and also will allow design changes to be made in the event that subsurface conditions differ from those anticipated prior to the start of construction. CGC does not assume responsibility for compliance with the recommendations in this report unless we are retained to provide construction testing and observation services.

This report has been prepared in accordance with generally accepted soil and foundation engineering practices and no other warranties are expressed or implied. The opinions and recommendations submitted in this report are based on interpretation of the subsurface information revealed by the test borings indicated on the location plan. The report does not reflect potential variations in subsurface conditions between or beyond these borings. Therefore, variations in soil conditions can be expected between the boring locations and fluctuations of groundwater levels may occur with time. The nature and extent of the variations may not become evident until construction.

II. IMPORTANT INFORMATION ABOUT YOUR GEOTECHNICAL ENGINEERING REPORT

Subsurface problems are a principal cause of construction delays, cost overruns, claims, and disputes. While you cannot eliminate all such risks, you can manage them. The following information is provided to help.

Geotechnical engineers structure their services to meet the specific needs of their clients. A geotechnical engineering study conducted for a civil engineer may not fulfill the needs of a construction contractor or even another civil engineer. Because each geotechnical engineering study is unique, each geotechnical engineering report is unique, prepared *solely* for the client. *No one except you* should rely on your geotechnical engineering report without first conferring with the geotechnical engineer who prepared it. *And no one - not even you* - should apply the report for any purpose or project except the one originally contemplated.

READ THE FULL REPORT

Serious problems have occurred because those relying on a geotechnical engineering report did not read it all. Do not rely on an executive summary. Do not read selected elements only.

A GEOTECHNICAL ENGINEERING REPORT IS BASED ON A UNIQUE SET OF PROJECT-SPECIFIC FACTORS

Geotechnical engineers consider a number of unique, project-specific factors when establishing the scope of a study. Typical factors include: the client's goals, objectives, and risk management preferences; the general nature of the structure involved, its size, and configuration; the location of the structure on the site; and other planned or existing site improvements, such as access roads, parking lots, and underground utilities. Unless the geotechnical engineer who conducted the study specifically indicates otherwise, *do not rely on a geotechnical engineering report* that was:

- not prepared for you,
- not prepared for your project,
- not prepared for the specific site explored, or
- completed before important project changes were made.

Typical changes that can erode the reliability of an existing geotechnical report include those that affect:

- the function of the proposed structure, as when it's changed from a parking garage to an office building, or from a light industrial plant to a refrigerated warehouse,
- elevation, configuration, location, orientation, or weight of the proposed structure,
- composition of the design team, or project ownership.

As a general rule, *always* inform your geotechnical engineer of project changes - even minor ones - and request an assessment of their impact. *CGC cannot accept responsibility or liability for problems that occur because our reports do not consider developments of which we were not informed.*

SUBSURFACE CONDITIONS CAN CHANGE

A geotechnical engineering report is based on conditions that existed at the time the geotechnical engineer performed the study. *Do not rely on a geotechnical engineering report* whose adequacy may have been affected by: the passage of time; by man-made events, such as construction on or adjacent to the site; or by natural events, such as floods, earthquakes, or groundwater fluctuations. *Always* contact the geotechnical engineer before applying the report to determine if it is still reliable. A minor amount of additional testing or analysis could prevent major problems.

MOST GEOTECHNICAL FINDINGS ARE PROFESSIONAL OPINION

Site exploration identifies subsurface conditions only at those points where subsurface tests are conducted or samples are taken. Geotechnical engineers review field and laboratory data and then apply their professional judgement to render an opinion about subsurface conditions throughout the site. Actual subsurface conditions may differ - sometimes significantly - from those indicated in your report. Retaining the geotechnical engineer who developed your report to provide construction observation is the most

effective method of managing the risks associated with unanticipated conditions.

A REPORT'S RECOMMENDATIONS ARE NOT FINAL

Do not over-rely on the confirmation-dependent recommendations included in your report. *Those confirmation-dependent recommendations are not final*, because geotechnical engineers develop them principally from judgement and opinion. Geotechnical engineers can finalize their recommendations *only* by observing actual subsurface conditions revealed during construction. *CGC cannot assume responsibility or liability for the report's confirmation-dependent recommendations if we do not perform the geotechnical-construction observation required to confirm the recommendations' applicability.*

A GEOTECHNICAL ENGINEERING REPORT IS SUBJECT TO MISINTERPRETATION

Other design team members' misinterpretation of geotechnical engineering reports has resulted in costly problems. Confront that risk by having your geotechnical engineer confer with appropriate members of the design team after submitting the report. Also retain your geotechnical engineer to review pertinent elements of the design team's plans and specifications. Constructors can also misinterpret a geotechnical engineering report. Confront that risk by having CGC participate in prebid and preconstruction conferences, and by providing geotechnical construction observation.

DO NOT REDRAW THE ENGINEER'S LOGS

Geotechnical engineers prepare final boring and testing logs based upon their interpretation of field logs and laboratory data. To prevent errors or omissions, the logs included in a geotechnical engineering report should *never* be redrawn for inclusion in architectural or other design drawings. Only photographic or electronic reproduction is acceptable, *but recognize that separating logs from the report can elevate risk.*

GIVE CONSTRUCTORS A COMPLETE REPORT AND GUIDANCE

Some owners and design professionals mistakenly believe they can make constructors liable for unanticipated subsurface conditions by limiting what they provide for bid preparation. To help prevent costly problems, give constructors the complete geotechnical engineering report, *but* preface it with a clearly written letter of transmittal. In that letter, advise constructors that the report was not prepared for purposes of bid development and that the report's accuracy is limited; encourage them to confer with the geotechnical engineer who prepared the report (a modest fee may be required) and/or to conduct additional study to obtain the specific types of information they need or prefer. A prebid conference can also be valuable. *Be sure constructors have sufficient time* to perform additional study. Only then might you be in a position to give constructors the best information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions.

READ RESPONSIBILITY PROVISIONS CLOSELY

Some clients, design professionals, and constructors do not recognize that geotechnical engineering is far less exact than other engineering disciplines. This lack of understanding has created unrealistic

expectations that have led to disappointments, claims, and disputes. To help reduce the risk of such outcomes, geotechnical engineers commonly include a variety of explanatory provisions in their reports. Sometimes labeled "limitations," many of these provisions indicate where geotechnical engineer's responsibilities begin and end, to help others recognize their own responsibilities and risks. *Read these provisions closely.* Ask questions. Your geotechnical engineer should respond fully and frankly.

ENVIRONMENTAL CONCERNS ARE NOT COVERED

The equipment, techniques, and personnel used to perform an *environmental* study differ significantly from those used to perform a *geotechnical* study. For that reason, a geotechnical engineering report does not usually relate any environmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. *Unanticipated environmental problems have led to numerous project failures.* If you have not yet obtained your own environmental information, ask your geotechnical consultant for risk management guidance. *Do not rely on an environmental report prepared for someone else.*

OBTAIN PROFESSIONAL ASSISTANCE TO DEAL WITH MOLD

Diverse strategies can be applied during building design, construction, operation, and maintenance to prevent significant amounts of mold from growing on indoor surfaces. To be effective, all such strategies should be devised for the *express purpose* of mold prevention, integrated into a comprehensive plan, and executed with diligent oversight by a professional mold prevention consultant. Because just a small amount of water or moisture can lead to the development of severe mold infestations, many mold prevention strategies focus on keeping building surfaces dry. While groundwater, water infiltration, and similar issues may have been addressed as part of the geotechnical engineering study whose findings are conveyed in this report, the geotechnical engineer in charge of this project is not a mold prevention consultant; *none of the services performed in connection with the geotechnical engineer's study were designed or conducted for the purpose of mold prevention. Proper implementation of the recommendations conveyed in this report will not of itself be sufficient to prevent mold from growing in or on the structure involved.*

RELY ON YOUR GEOTECHNICAL ENGINEER FOR ADDITIONAL ASSISTANCE

Membership in the Geotechnical Business Council (GBC) of Geoprofessional Business Association exposes geotechnical engineers to a wide array of risk confrontation techniques that can be of genuine benefit for everyone involved with a construction project. Confer with CGC, a member of GBC, for more information.

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Geotechnical Business Council
of the Geoprofessional Business Association
8811 Colesville Road, Suite G 106
Silver Spring, MD 20910

APPENDIX D

SETTLEMENT PLATFORM

Settlement Platform Instructions

Settlement platforms will be placed as close to the bottom of the fill as is practical. The surface upon which the settlement platform should rest must be cleaned off to a flat compacted surface. The settlement platform should then be placed in this surface and backfill should be placed over the top of the settlement platform to a depth of at least two feet.

Initial elevations should be taken on the top of the first section of the pipe riser. These should be referenced to the elevation at the platform so that all future additional lengths of riser pipe can be referenced to the elevation of the platform.

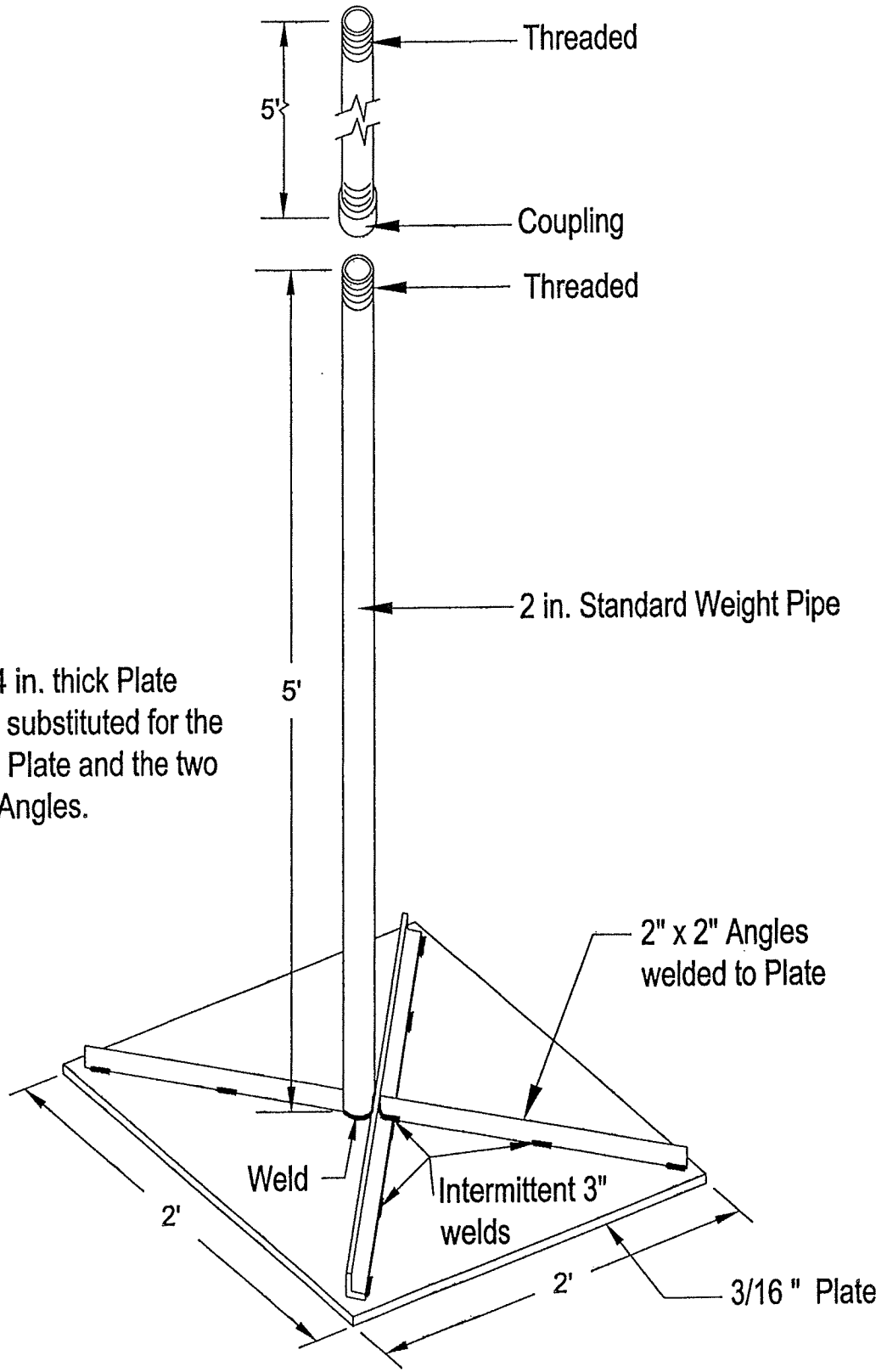
The settlement platform locations should be guarded with tall stakes driven into the fill marked with red flags. No equipment should be permitted to operate closer than three feet from the riser pipes. As each layer of fill is being added to the area, fill should be carefully placed around the riser pipe to an elevation slightly above the surrounding area. The vibrating compactor then should be moved to within a foot or so of the riser pipe with care being taken so as to avoid disturbance of the riser pipe. If necessary, hand compacting equipment should be used to avoid damage to the riser pipe.

When settlement platform readings are taken, the elevation of nearby fill should also be taken.

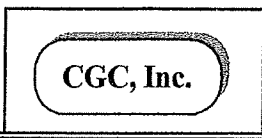
The elevation at the settlement platform and the nearby fill should be observed at least once each week, and during the period that fill is being placed in the vicinity of the platform, these elevations should be obtained daily. All elevation data should be plotted according to time, with one graph prepared per settlement platform. The plotting should contain the time scale along the abscissa and the vertical scale should be height of fill shown going upward from the middle of the paper, and the settlement of the settlement platforms should be plotted downward from the middle of the paper. The time scale should include both the actual calendar date and also the number of days since the platform was installed.

The benchmark to be used in reading the various settlement platforms should be well away from the proposed excavation or filling areas.

If damage occurs to any settlement platform riser pipe, it is suggested that the pipe be repaired as quickly as possible and the readings continued. The adjustment of these readings can be made, considering that settlement rate during the period of damage was uniform.



One 3/4 in. thick Plate may be substituted for the 3/16 in. Plate and the two 2" x 2" Angles.



Typical Detail
Settlement Platform



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

City-County Building, Room 115
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Madison, Wisconsin 53703
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James M. Wolfe, P.E.

Facilities & Sustainability

Bryan Cooper, Principal Architect

Mapping Section Manager

Eric T. Pederson, P.S.

Financial Manager

Steven B. Danner-Rivers

February 16, 2021

**NOTICE OF ADDENDUM
ADDENDUM NO. 1
CONTRACT NO. 8572**

GARVER PATH & STARKWEATHER DRIVE ASSESSMENT DISTRICT-2021

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

Page A-1, SECTION A: ADVERTISEMENT FOR BIDS AND INSTRUCTIONS TO BIDDERS:

Remove and replace with attached Page A-1. The **bid submission date** and other dates are revised.

Addendum No. 2:

Addendum No. 2 will be issued within the next two days. The addendum will include clarification on several items that have been identified by potential bidders.

Informational: WisDOT Approved Supplier List:

Link to WisDOT's Approved Supplier list for Prefabricated Steel Truss Pedestrian Bridges :
<https://wisconsindot.gov/Documents/doing-bus/eng-consultants/cnslt-rsrcs/tools/appr-prod/ap-current/prefab-steel-truss-bridges-12-07-2020.pdf>

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.

Sincerely,

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

SECTION A: ADVERTISEMENT FOR BIDS AND INSTRUCTIONS TO BIDDERS

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

**PROJECT NAME: GARVER PATH & STARKWEATHER DRIVE ASSESSMENT
DISTRICT-2021**

CONTRACT NUMBER: 8572

DBE GOAL: 5%

Note: This Project is FEDERALLY FUNDED

Plans and Specifications are available starting January 28, 2021 at <https://bidexpress.com/login> .

Prequalifications: Bidders who have not been prequalified by the City Engineer and Affirmative Action Director must submit their application on or before 2:00 p.m., **February 18, 2021**. Forms are available on our website at <http://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.

Bidders must be prequalified by the City in at least one of the following Type(s) of Construction: Street Construction (310) or Bridge Construction (501).

The Prime Contractor will perform at least 30 percent of the original contract amount with the contractor's own organization as per Section 108.1.2 of the current edition of the WisDOT Standard Specifications for Highway and Structure Construction.

Submittal: Bidders must submit proposals no later than **2:00 P.M.** local time, **Thursday, February 25, 2021**. Bids to be submitted by hand shall be in a sealed envelope to 1600 Emil Street, Madison, WI 53713. Bids may be submitted online at www.bidexpress.com .

Bids will be opened at **2:30 P.M. on Thursday, February 25, 2021** at 1600 Emil Street, Madison, WI.

Proposal Guaranty: The bidder must submit with its sealed bid a properly executed bid bond or certified check in an amount equal to five percent (5%) of the total bid or certificate of Annual Bid Bond. In case the successful bidder fails to submit an executed contract and payment and performance bond, the amount of the bid bond shall be forfeited to the City as liquidated damages.

Hours of Labor and Minimum Wage Rate: Pursuant to regulations provided by applicable federal and/or state Laws, the hours of labor and minimum wage rates are set forth in the bidding proposals.

Disadvantaged Business Enterprise (DBE): It is the policy for this project that disadvantaged business enterprises, as defined by 49 CFR Part 23, shall have the maximum opportunity to participate in the performance of this contract. This project has an assigned goal of 5% Disadvantaged Business Enterprise (DBE). Bidders must demonstrate a good faith effort to meet this goal.

Affirmative Action: The City will affirmatively insure that disadvantaged business enterprises will be afforded full opportunity to submit bids in response to this invitation, and they will not be discriminated against on the grounds of race, color, sex, or national origin in consideration for an award.

REVISED 2/16/2021



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

Deputy City Engineer
Gregory T. Fries, P.E.

Deputy Division Manager
Kathleen M. Cryan

Principal Engineer 2
Christopher J. Petykowski, P.E.
John S. Fahrney, P.E.
Janet Schmidt, P.E.

Principal Engineer 1
Christina M. Bachmann, P.E.
Mark D. Moder, P.E.
James M. Wolfe, P.E.

Facilities & Sustainability
Bryan Cooper, Principal Architect

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

Financial Manager
Steven B. Danner-Rivers

February 18, 2021

**NOTICE OF ADDENDUM
ADDENDUM NO. 2
CONTRACT NO. 8572**

GARVER PATH & STARKWEATHER DRIVE ASSESSMENT DISTRICT-2021

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

SPECIAL PROVISIONS:

Remove and replace page D-8: Section 109.2 PROSECUTION OF WORK
The special provision has been modified, changes are indicated with red text.

Remove and replace page D-20: Bid Item 90205 – SAFETY RAILING
The bid item name has been modified, changes are indicated with red text.

Remove and replace page D-23: BID ITEM 90206 EXCAVATION, HAULING, AND DISPOSAL OF PETROLEUM CONTAMINATED SOIL
Section E. Payment has been modified, changes are indicated with red text.

Remove and replace page D-27 and page D-29: BID ITEM 90305 to 90307 – PREFABRICATED STEEL TRUSS PEDESTRIAN BRIDGE B-13-880, B-13-881, B-13-882 LRFD
Section B.2 Design Requirements has been modified, changes are indicated with red text.
Section C.2 Finishes has been modified, changes are indicated with red text.

Remove and replace page D-30: Bid Item 90308 – CUT STONE BOULDERS
The special provision has been modified, changes are indicated with red text.

PROPOSAL:

See below for a summary of items that have been removed, added or revised. Refer to the proposal for updated quantities. See proposal on bidexpress.com.

GARVER PATH ITEMS:

Action	Bid Item	Description
MODIFY	20101	EXCAVATION CUT
ADD	20217	CLEAR STONE
MODIFY	20241	RIPRAP FILTER FABRIC, TYPE HR
DELETE	40321	UNDERCUT
MODIFY	90205	SAFETY RAILING
MODIFY	90308	CUT STONE BOULDERS

STARKWEATHER DRIVE ITEMS:

Action	Bid Item	Description
MODIFY	20101	EXCAVATION CUT

PLANS:

Remove and insert revised plan sheets as noted below.

Sheet CD-1: Earthwork Summary added

Sheets S-1, S-2, S-4, S-6, S-9, S-10, S-12, S-14 and S-18: Revisions include HSS tubing, lumber treatment, clear stone and revised quantities.

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.

Sincerely,



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

SECTION 108.2

PERMITS

The City of Madison has obtained coverage under a WPDES General Permit No. WI-S067831-5 for Construction Site Storm Water Runoff regarding erosion control for a disturbed area greater than one acre.

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

- Individual Permit for a bridge over a waterway with width greater than 25 feet at Ordinary High water, IP-SC-2020-13-03401-3483, issued 1/11/2021
- General Permit for recreational development wetland, GP-SC-2020-13-03585 issued 11/16/2020.
- Notice of Intent Construction Site Storm Water Permit, FIN 74467 issued 11/30/2020.

A Preconstruction Notice (PCN) for a Nationwide Transportation General Permit (TRGP) and concurrence from the Army Corps of Engineers was submitted and a permit letter was issued October 29, 2020; File No. MVP-2020-2106-KDZ.

A City of Madison Erosion Control permit has been obtained 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. See **SECTION 210.1(b)**. 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.

SECTION 109.2

PROSECUTION OF WORK

The project shall be completed on or prior to July 1, 2022

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

The contract start date is intended to allow the Contractor time to begin design and shop drawing review of the pre-fabricated bridge in advance of actual construction.

The wetland structure B-13-882 and its approaches located within soft compressible soil areas including placement of the embankment fills and stone based as shown on the plans shall be completed prior to September 1st, 2021. Final grading and asphalt pavement of the path from 34+00 to Milwaukee St. including installation of the safety railing for the approaches to the structure will be completed in the month of June 2022 or by the project completion date of July 1, 2022.

All other work including Structures B-13-880 and B-13-881, Starkweather Drive, & Garver Path work shall be completed prior to November 1, 2021.

Method of Measurement

Geogrid SR will be measured by the square yard acceptably completed.

Basis of Payment.

This work, measured as provided, will be paid for at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
90203	Geogrid Wetland	SY

Payment is full compensation for providing the furnishing, handling, storing and placement of the geogrid; and for furnishing all equipment, tools, labor and incidentals necessary to complete the work.

BID ITEM 90205 – SAFETY RAILING

Description

This Special Provision describes furnishing and installing metal railing at locations and according to details shown on the Drawings.

Materials

All materials for the steel railing shall be in accordance with the 513.2 of the State of Wisconsin Standard Specifications for Highway and Bridge Construction, 2021 Edition. Railing assemblies shall be galvanized and receive a two-coat paint system from the WisDOT Bureau of Structures approved products list as specified in 517.2 of the State of Wisconsin Standard Specifications for Highway and Bridge Construction, 2021 Edition.

Construction Methods

Construct the railing in accordance with 513.3 of the State of Wisconsin Standard Specifications for Highway and Bridge Construction, 2021 Edition.

Paint the railing with a two-coat paint system from the WisDOT Bureau of Structures approved products list as specified in 517.3 of the State of Wisconsin Standard Specifications for Highway and Bridge Construction, 2021 Edition

Method of Measurement

Safety Railing will be measured by the lineal feet acceptably completed.

Basis of Payment.

This work, measured as provided, will be paid for at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
90205	Safety Railing	LF

Payment is full compensation for furnishing and installing railing and posts; for all maintenance necessary to keep the railing and posts in satisfactory condition; and for furnishing all labor, tools, equipment, materials, and incidentals necessary to complete the Contract Work

E Payment

ITEM NUMBER	DESCRIPTION	UNIT
90206	Excavation, Hauling, and Disposal of Petroleum Contaminated Soil	CY

Payment is full compensation for excavating, segregating, loading, hauling, disposal and treatment via bioremediation of contaminated soil; obtaining solid waste collection and transportation service operating licenses; assisting in the collection soil samples for field evaluation; and dewatering of soils before transport, if necessary.

BID ITEM 90300-- REMOVING OLD STRUCTURE OVER WATERWAY STATION 101+50

Description

This work shall consist of removing and disposing of the existing wood bridge and timber abutments located at the Ivy Street bridge site.

Conform to Section 203 of the State of Wisconsin Standard Specifications for Highway and Structure Construction, 2021 Edition as modified in this special provision.

Add the following to WisDOT standard spec:

203.3.6 Removals over Waterways and Wetlands

203.3.6.1 Removing Old Structure Over Waterway

Remove the existing structure at Ivy Street crossing over the Starkweather Creek conforming to the contractor's approved structure removal and clean-up plan. Remove all portions of the structure and all other debris that falls into the waterway or wetland. Remove large pieces of the structure within 36 hours.

Submit a structure removal and clean-up plan as part of the erosion control implementation plan required under Wis DOT standard spec 107.20. Do not start work under the structure removal and clean-up plan without the construction engineer's written approval of the plan. Include the following information in the structure removal and clean-up plan:

1. Methods and schedule to remove the structure.
2. Methods to control potentially harmful environmental impacts.
3. Methods for removing piers and abutments. If blasting in water, include restrictions that regulatory agencies and the contract require.
4. Methods for cleaning the waterway or wetlands.

If stockpiling spoil material, place it on an upland site an adequate distance from the waterway, wetland, or any open water created by excavation. Install silt fence between the spoil pile and the waterway, wetland, or excavation site.

Method of Measurement

Removing Old Structure Over Waterway Station 101+50 will be measured as a single unit of work, acceptably completed.

Basis of Payment.

This work, measured as provided, will be paid for at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
90300	Removing Old Structure Over Waterway Station 101+50	LS

B.2 Design Requirements

Structural design of the pedestrian bridge shall be by a professional engineer registered in the State of Wisconsin.

Design the bridge according to the most recent edition of the AASHTO LRFD Bridge Design Specifications, all current interims, and the AASHTO LRFD Guide Specifications for Design of Pedestrian Bridges, except as modified herein.

Design welded tubular connections according to the Structural Welding Code-Steel ANSI/AWS D1.1. The fracture critical requirements of ANSI/AWS D1.5 do not apply, and Charpy V-notch impact testing will not be required. Loading shall be as stated in Section 3 of the AASHTO LRFD Guide Specifications for Design of Pedestrian Bridges. The bridge shall be a half-through truss with profile as the plans show with one diagonal per panel. Chords, diagonals, verticals, bracing, and floor beams may be tube steel. Tube steel shall have a minimum thickness of 1/4 inch, angles shall have a minimum thickness of 1/4-inch, C-shaped side dams shall have a minimum web thickness of 3/16-inch, and W-shapes shall have a minimum web thickness of 1/4-inch if painted or coated and 5/16-inch if not painted or coated. All other steel shapes shall have a minimum thickness of 5/16 inch unless contract plans allow a minimum thickness of less than 5/16 inch for other steel shapes. Field splices shall be bolted with ASTM F3125 Grade A325 high strength bolts according to the "Specifications for Structural Joints Using High Strength Bolts". ~~Type 3 bolts are required for weathering steel.~~ For top and bottom chord field splices, splice plates are required on both the inside and outside surface of all four sides of the spliced tubing so that each bolt will be acting in double shear. Nuts may be welded to the splice plates to hold them in place during installation. When the collection of water inside a structural tube is a possibility, either during construction or during service, provide the tube with a drain hole at its lowest point.

If the profile grade line is on a crest vertical curve, camber the bridge to match the profile grade line the plans show plus the calculated dead load deflection. For a single span bridge, if the profile grade line has a constant slope (no vertical curve), camber the bridge to offset the calculated dead load deflection plus an amount equal to 1% of the bridge length. For a bridge with two or more spans, if the profile grade line has a constant slope (no vertical curve), camber the bridge to offset the calculated dead load deflection only. Concrete bridge decks shall be continuous over the floor beams. Concrete bridge decks may be supported by stay in place corrugated galvanized steel deck forms unless the contract plans specify removable deck forms only. The maximum depth of the stay in place corrugated steel deck forms shall be 2 inches. The steel area of the stay in place corrugated steel deck forms shall not be considered for the design of the concrete deck. Design of the stay in place corrugated steel deck forms shall be included with the truss design. The minimum slab thickness shall be 5.5 inches for removable deck forms and 6 inches for stay in place corrugated steel deck forms. For stay in place corrugated steel deck forms the 6 inch minimum is measured from the bottom of the deck form. Design the longitudinal reinforcing steel in the slab based on a wheel load located 1 foot from the face of the curb or toe plate, or a pedestrian live load of 90 psf, whichever controls.

Concrete strength (f'_c) shall be 4,000 psi and F_y of bar steel shall be 60,000 psi. A concrete mix with a unit weight of 120 pcf or 150 pcf may be used at the option of the manufacturer/contractor. Use a design dead load of 120 pcf or 150 pcf to match the concrete mix selected. Use load factors of 1.25 for dead load and 1.75 for live load for the design of the concrete slab and floor beams. Minimum concrete cover shall be 2 inches for top reinforcement and 1 inch for bottom reinforcement. Design the bridge for expansion and contraction with a temperature range of -30° F to 120° F. Utilize Teflon slip pads or other approved material on the sliding surface of the expansion bearing assembly.

Install protective screening, when required, as the plans show. Use protective screening that is 9 gauge chain link fence with 2 inch mesh, coated as the plans show.

The bridge shall be painted with a three-coat epoxy system from the WisDOT Bureau of Structures approved products list as specified in 517.2 of the State of Wisconsin Standard Specifications for Highway and Bridge Construction, 2021 Edition.

C.1 Delivery and Erection

Deliver the bridge by truck to the location that is nearest to the site and accessible by road. The contractor is responsible for unloading the bridge from the trucks at the time of arrival.

The manufacturer shall notify the contractor in advance of the expected arrival time. Information regarding delays after the trucks depart the plant such as inclement weather, delays in permits, rerouting by public agencies, or other circumstances shall be passed on to the contractor as soon as possible.

The manufacturer shall provide an erection procedure to the contractor and shall advise the contractor of the actual lifting weights, attachment points, and all other information needed to install the bridge. Unloading, splicing, bolting, and providing proper lifting equipment as well as all tools, equipment, labor, and miscellaneous items required to complete the work is the responsibility of the contractor. The procedure for bolting field splices shall be given to the contractor by the manufacturer.

C.2 Finishes

When unpainted steel is specified on the plans, all fabrications shall be produced from high strength, low alloy, atmospheric corrosion resistant ASTM A847 cold-formed welded square and rectangular tubing, ASTM A606 sheet, and/or ASTM A588, ASTM A242, or ASTM A709 Grade 50W plate and structural steel shapes ($F_y=50,000$ psi) with a minimum corrosion index of 5.8 per ASTM G101.

~~Blast clean all exposed surfaces of weathering steel according to Steel Structures Painting Council Surface Preparation Specifications No. 7 Brush-Off Blast Cleaning (SSPC-SP7), latest edition. Exposed surfaces of weathering steel shall be defined as those surfaces seen from the deck and from outside the structure. Stringers, floor beams, lower brace diagonals and the inside face of the truss below the deck, and bottom of the bottom chord do not need to be blasted.~~

Paint the bridge with a three-coat epoxy system from the WisDOT Bureau of Structures approved products list as specified in 517.3 of the State of Wisconsin Standard Specifications for Highway and Bridge Construction, 2021 Edition.

Provide protective surface treatment as specified in 502.3.13.2 of the State of Wisconsin Standard Specifications for Highway and Bridge Construction, 2021 Edition.

D Measurement

Prefabricated Steel Truss Pedestrian Bridge B-13-880, B-13-881, B-13-882 LRFD will be measured as a single lump sum unit of work for the bridge, acceptably completed.

E Payment

The work, measured as provided, will be paid at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION UNIT	
90305	Prefabricated Steel Truss Pedestrian Bridge B-13-880 LRFD	LS
90306	Prefabricated Steel Truss Pedestrian Bridge B-13-881 LRFD	LS
90307	Prefabricated Steel Truss Pedestrian Bridge B-13-882 LRFD	LS

Payment is full compensation for designing, manufacturing, transporting and erecting the pedestrian bridge; furnishing bearing plates, pads, bolts, anchors bolts, grout, epoxy painting system, and protective surface treatment.

BID ITEM 90308 CUT STONE BOULDERS

Description

This special provision describes work consisting of furnishing and placing cut-stone boulders in accordance with the requirements of the plans and these specifications.

Materials

Provide stone for cut-stone boulders of durable quarry dolomitic limestone of approved quality that are sound, hard, dense, resistant to the action of air and water, and free from seams, cracks, or other structural defects.

Provide stone pieces for cut-stone boulders that are rectangular in shape and approved by the engineer with dimensions as shown on the plans and meet the following minimum criteria:

- Snapped/natural on front, top and bottom
- Sawed or snapped on two 24" sides and back
- Water Absorption (ASTM C97): 0.66%
- Density (ASTM C97): 173 pcf
- Modulus of Rupture (ASTM C99): 1450 psi
- Compressive Strength w/ Rift (ASTM C170): 26,260 psi
- Compressive Strength across Rift: 34,000 psi

Construction

Properly trim and shape the bed for the cut-stone boulders in a stair-step configuration as shown on the plans.

Cut-stone boulders shall be placed in an offset pattern such that vertical seams between stones do not horizontally align from one vertical layer of stone to the next.

Place cut-stone boulders by any mechanical means that will produce a completed job within reasonable tolerances of the typical section shown on the plans. Firmly set each cut stone boulder with no rocking or tipping providing a firm foundation for subsequent layers. ~~Unless otherwise provided on the plans, provide cut-stone boulders not less than 8 inches thick.~~ Limit hand work to the amount necessary to fill large voids or to correct segregated areas. Conform to the requirements of WisDOT standard specifications Subsection 645.3.1.7 for the placement of cut-stone boulders over clear stone and geotextile fabric - Type HR. Do not place cut-stone boulders against or in contact with any concrete masonry surface prior to the expiration of the curing and protection period for the concrete.

Cut-stone boulders shall be placed at the plan elevations and locations regardless of existing water levels. Provide dewatering and protection of the work area as required for proper installation.

Where storm sewer installations are required within the limits of the cut-stone boulder limits, coordinate the work schedule to ensure proper staging of operations.

Measurement

Cut-Stone Boulders will be measured by the exposed square foot in place of the completed work, and the quantity thereof to be paid for will be the summation of the exposed square foot projections onto a vertical horizontal plane of the surface areas of such cut-stone boulders incorporated in the work in accordance with the contract. Only accepted work will be measured for payment and the computation of the quantity thereof will be based on the area within the limiting dimensions designated on the plans, in the contract, or established by the engineer. The clear stone and geotextile fabric under the cut stone boulders will be paid for under separate bid items, 20217 and 20241, respectively.

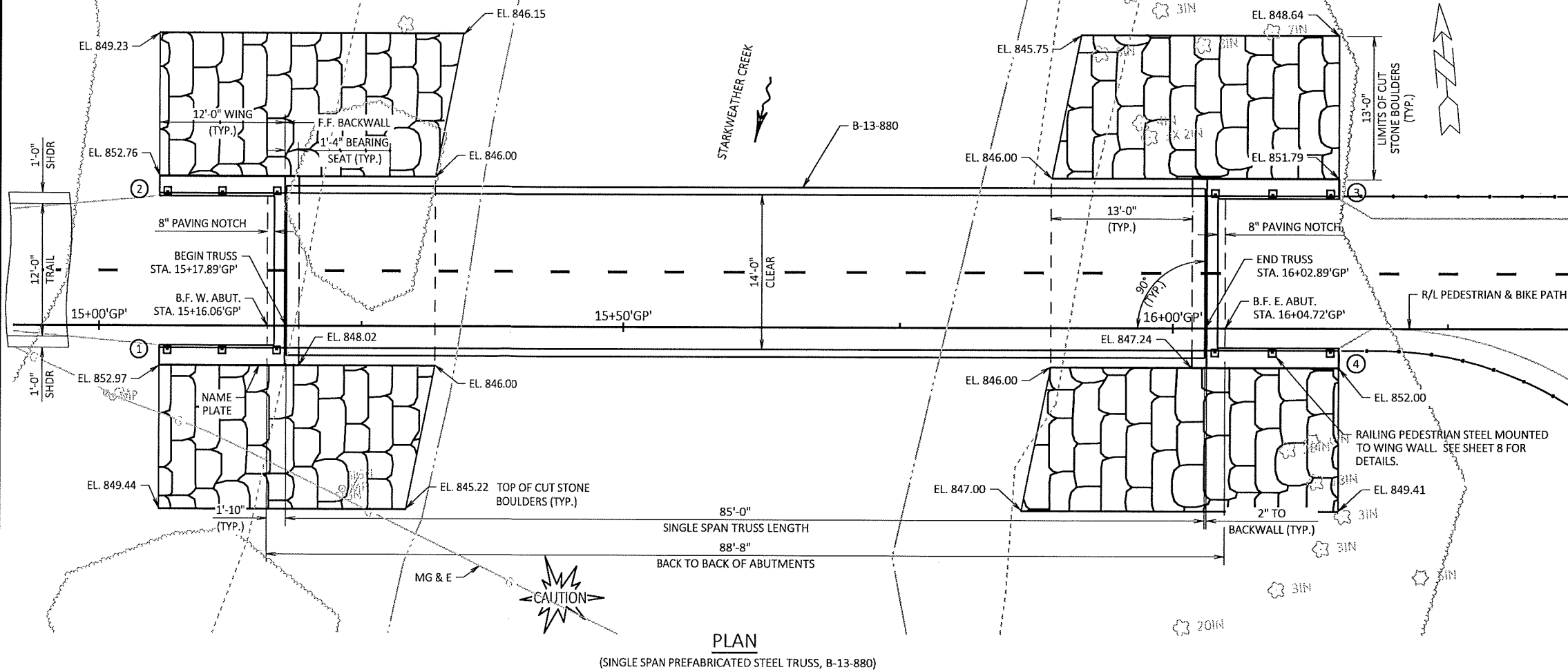
Payment

This work, measured as provided, will be paid for at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
90308	Cut-Stone Boulders	SF

Payment is full compensation for installation of the cut-stone boulders and for furnishing all labor, tools, equipment, materials and incidentals necessary to satisfactorily complete the work.

(X) INDICATES WING NUMBER



Addendum No. 2, ID 5992-10-41
 Revised sheet S-1
 02/17/2021

NOTE:
 ELEVATIONS GIVEN FOR CUT-STONE BOULDERS ARE AT TOP OF BOULDER. HEIGHT OF LOWEST COURSE TO BE 1'-0" MIN.

DESIGN DATA

DESIGN SPECIFICATIONS:
 AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS
 AASHTO LRFD BRIDGE SPECIFICATIONS FOR THE DESIGN OF PEDESTRIAN BRIDGES

LIVE LOAD:
 90 PSF PEDESTRIAN LOAD
 20,000 LB. VEHICLE LOAD (H10)

WIND LOAD:
 WIND LOADS DESIGNED IN ACCORDANCE TO AASHTO DESIGN FOR PEDESTRIAN BRIDGES AND AASHTO SIGNS.

MATERIAL PROPERTIES:
 CONCRETE MASONRY BRIDGES $f_c = 4,000$ PSI
 HIGH STRENGTH BAR STEEL REINFORCEMENT GRADE 60 $f_y = 60,000$ PSI
 HIGH STRENGTH STRUCTURAL STEEL ASTM A847, A588, A606, A709 OR A242 $f_y = 50,000$ PSI
 STRUCTURAL CARBON STEEL ASTM A36 $f_y = 36,000$ PSI

FOUNDATION DATA:

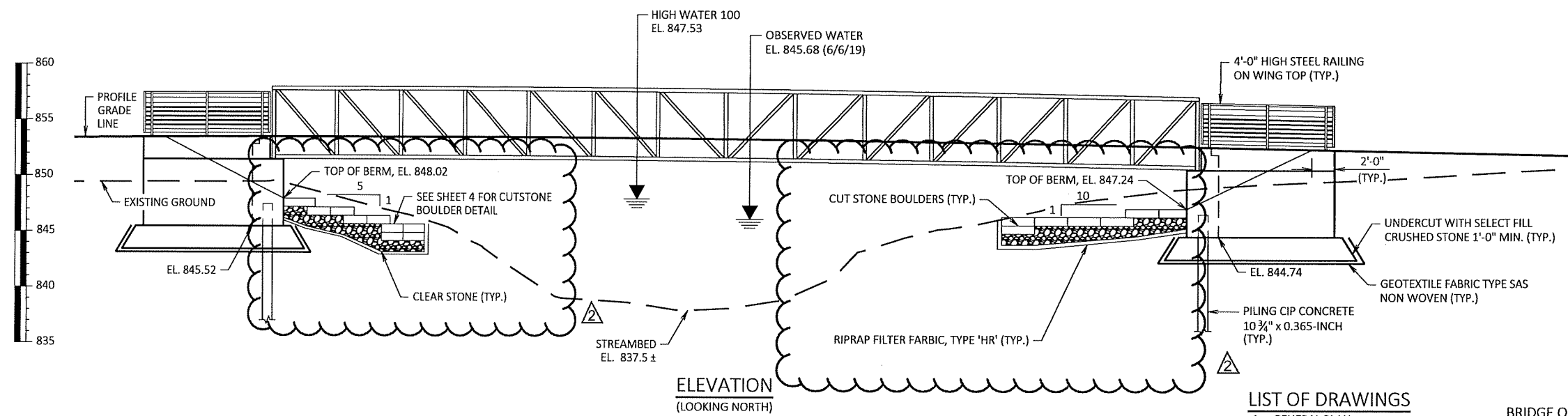
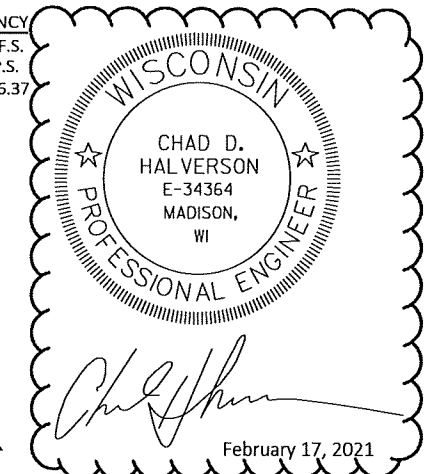
ABUTMENTS TO BE SUPPORTED ON PILING CIP CONCRETE 10 3/4 X 0.365-INCH DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 110* TONS PER PILE AS REQUIRED BY THE MODIFIED GATES DYNAMIC EQUATION. ESTIMATED 60' LONG AT THE EAST ABUTMENT AND 70' LONG AT THE WEST ABUTMENT.

* THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5 USING MODIFIED GATES TO DETERMINE DRIVEN PILE CAPACITY.

HYDRAULIC DATA:

100 YEAR FREQUENCY
 $Q_{100} = 1427$ C.F.S.
 VEL. = 4.47 F.P.S.
 HW₁₀₀ = EL. 847.53
 WATERWAY AREA = 370 SQ. FT.
 DRAINAGE AREA = 20.4 SQ. MI.
 SCOUR CRITICAL CODE = 5

2 YEAR FREQUENCY
 $Q_2 = 290$ C.F.S.
 VEL. = 1.7 F.P.S.
 HW₂ = EL. 846.37



LIST OF DRAWINGS

1. GENERAL PLAN
2. CROSS SECTION, QUANTITIES & NOTES
3. SUBSURFACE EXPLORATION
4. WEST ABUTMENT
5. WEST ABUTMENT DETAILS
6. EAST ABUTMENT
7. EAST ABUTMENT DETAILS
8. RAILING PEDESTRIAN STEEL

BRIDGE OFFICE CONTACT
 AARON BONK, P.E.
 TELEPHONE: (608) 261-0261

CONSULTANT CONTACT
 CHAD HALVERSON, P.E.
 TELEPHONE: (608) 663-1218

NO.	DATE	REVISION	BY

KL Engineering
 [A] Better Experience

ACCEPTED _____
 CHIEF STRUCTURES DESIGN ENGINEER DATE _____

STRUCTURE B-13-880
 HARGROVE STREET PEDESTRIAN & BIKE PATH OVER STARKWEATHER CREEK

COUNTY DANE TOWN/CITY/VILLAGE MADISON

DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS
 DESIGNED BY CAH CK'D. CDH DRAWN BY STD PLANS CK'D. CDH

GENERAL PLAN SHEET 1 OF 8

ADDENDUM 2

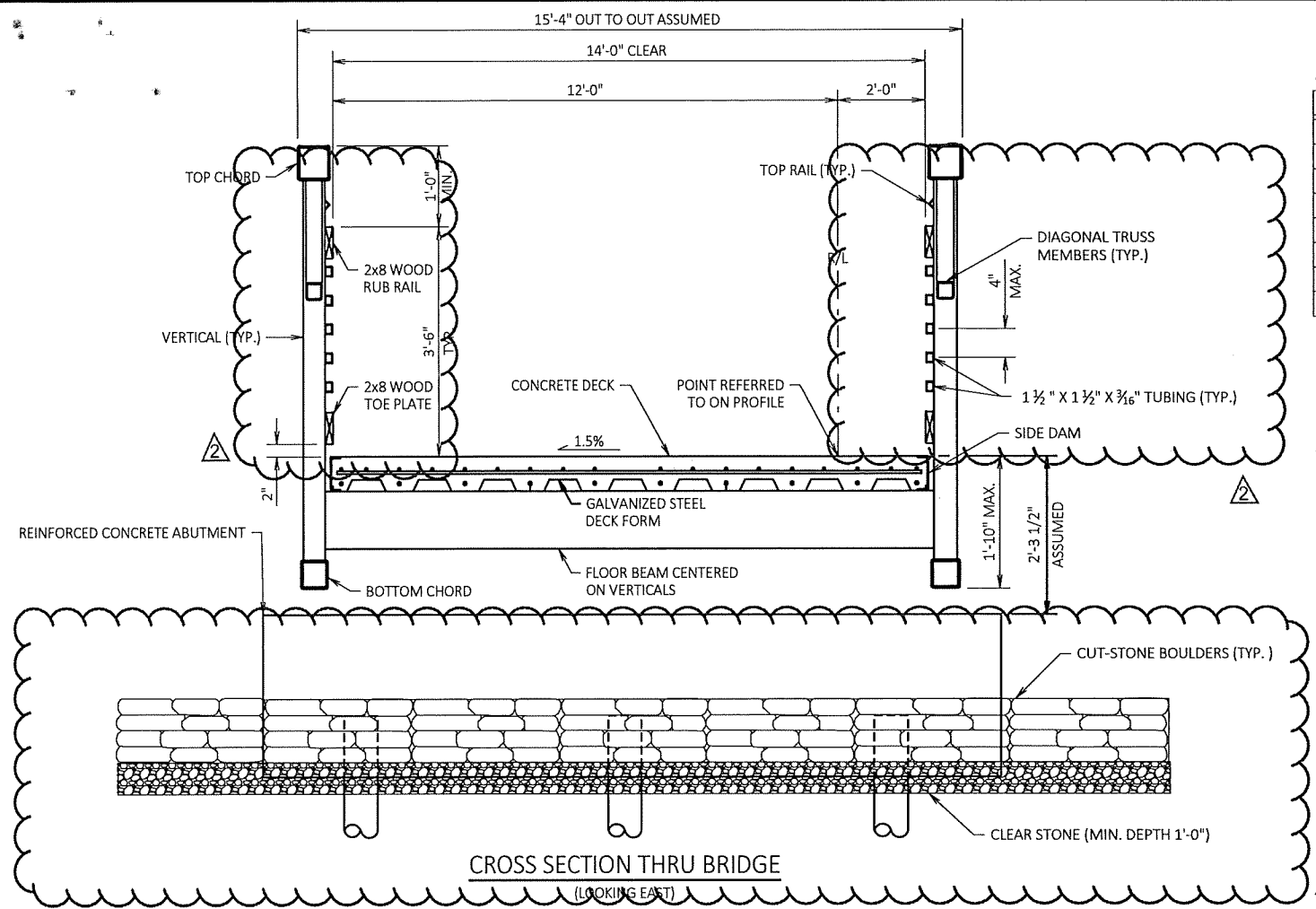
10160
 MADISON, WI
 CONTRACT NO: 8142

GENERAL PLAN
 GARVER PATH
 CITY OF MADISON

2/17/2021 CAH
 REVISION
 DATE BY
 Scale: 1 IN = 12 FT
 S-1

10160
 S-1

REVISION



BRIDGE REACTIONS (SERVICE LOADS)

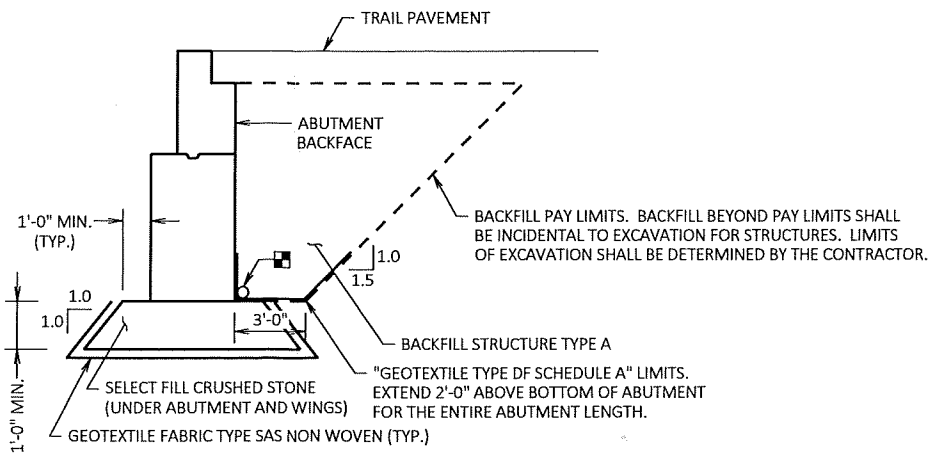
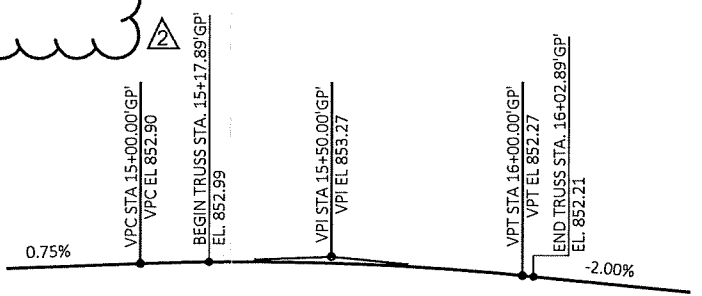
LOAD TYPE	"P" (LBS)	"H" (LBS)	"L" (LBS)
DEAD	26,290		
LIVE	27,500		
VEHICLE	14,960		
WIND		8,740	5,720
WINDWARD	-11,880		
LEEWARD	1,870		
STREAM			5,280
THERMAL			5,280

P = VERTICAL LOAD AT EACH BASE PLATE (4 PER BRIDGE)
H = HORIZONTAL LOAD AT EACH SUBSTRUCTURE UNIT (2 PER BRIDGE)
L = LONGITUDINAL LOAD AT EACH FIXED BEARING (4 PER BRIDGE)

- NOTES:**
- VALUES IN THIS TABLE ARE ESTIMATES. ACTUAL VALUES SHALL BE PROVIDED BY PREFABRICATED BRIDGE MANUFACTURER.
 - "+" INDICATES DOWNWARD LOAD
"-" INDICATES UPWARD LOAD

BRIDGE LENGTH = 85'
BRIDGE CLEAR WIDTH = 14'
DECK TYPE = CONCRETE
LIVE LOAD = 90 PSF/H10
RAIL HEIGHT = 54" MIN.

Addendum No. 2, ID 5992-10-41
Revised sheet S-2
02/17/2021



STRUCTURE BACKFILL LIMITS

PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN.

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS SHOWN OR NOTED OTHERWISE.

THE FIRST DIGIT OF A THREE DIGIT AND THE FIRST TWO DIGITS OF A FOUR DIGIT BAR MARK SIGNIFIES THE BAR SIZE.

AT ABUTMENTS, ALL EXCAVATED VOLUME NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL.

THE EXISTING GROUND LINE SHALL BE THE UPPER LIMITS OF EXCAVATION FOR STRUCTURES.

THE BACKFILL QUANTITIES ARE BASED ON THE PAY LIMITS SHOWN ON THE PLANS AND MAY NOT REFLECT ACTUAL PLACED QUANTITIES. "BACKFILL STRUCTURE TYPE A" REQUIRED DIRECTLY BEHIND ABUTMENTS AND ABUTMENT WINGS FOR 3 FEET. BACKFILL PLACED BEYOND PAY LIMITS OR EXCEEDING PLAN QUANTITIES SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES.

EXCAVATION BELOW THE ABUTMENTS AND WINGS IS REQUIRED. UNDERCUT TO BE FILLED WITH SELECT FILL CRUSHED STONE TO A MINIMUM OF 1'-0" BELOW BOTTOM OF ABUTMENT. EXCAVATION LIMITS TO EXTEND 1'-0" BEYOND ABUTMENT AND WING DIMENSIONS.

ALL PREFABRICATED BRIDGE DIMENSIONS ARE APPROXIMATE. CONTRACTOR SHALL VERIFY FINAL DIMENSIONS WITH BRIDGE MANUFACTURER.

THE DISTANCE BETWEEN THE FRONT FACE OF ABUTMENT BACKWALLS SHALL BE 85'-4" WHICH INCLUDES THE EXPANSION JOINT WIDTH REQUIRED BY THE BRIDGE MANUFACTURER.

WOOD RUB RAIL SHALL BE S4S (SURFACED 4 SIDES).

ALL FASTENERS USED TO SECURE WOOD RUB RAILS AND TOE PLATES TO SUPPORT FRAMING SHALL BE STAINLESS STEEL.

IF TREATED TIMBER OR LUMBER MEMBERS ARE CUT IN THE FIELD OR DURING FABRICATION, SEAL ALL CUT ENDS PER SECTION 507.3.7 OF THE WISDOT STANDARD SPECIFICATIONS.

ALL LUMBER SHALL BE PRESSURE TREATED WITH COPPER AZOLE TYPE C (CA-C) OR MICRONIZED COPPER AZOLE (MCA) TO A RETENTION TO MEET AWPA UC4A AND IN ACCORDANCE WITH SECTION 507 OF THE WISDOT STANDARD SPECIFICATIONS.

THE PREFABRICATED STEEL TRUSS PEDESTRIAN BRIDGE B-13-880 LRFD BID ITEM INCLUDES DESIGNING, FURNISHING AND INSTALLING THE PREFABRICATED BRIDGE, BEARING PLATES, PADS, BOLTS, ANCHOR BOLTS, GROUT, WOOD AND STEEL RAILS AND DECKING MATERIALS INCLUDING CONCRETE MASONRY AND BAR STEEL REINFORCEMENT. USE "BAR STEEL REINFORCEMENT HS COATED STRUCTURES" IN THE BRIDGE DECK.

COAT, PAINT AND FINISH STEEL TRUSS AND RAILING PER SECTION 517 OF THE WISDOT STANDARD SPECIFICATIONS. PAINT COLOR FOR THE STEEL TRUSS AND RAILING SHALL BE FEDERAL STANDARD 595B COLOR #30045, BROWN.

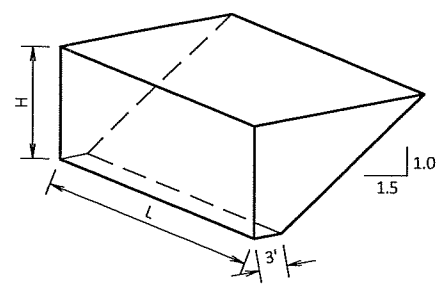
PROTECTIVE SURFACE TREATMENT SHALL BE APPLIED TO THE TOP OF DECK, AND TO ALL EXPOSED FACES OF THE ABUTMENTS AND WINGS.

APPLY BRIDGE SEAT PROTECTION TO BEAM SEATS PRIOR TO SETTING BEARINGS PER SECTION 502.3.12 OF THE CURRENT WISDOT SPECIFICATIONS.

THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH CUT STONE BOULDERS AND RIPRAP FILTER FABRIC, TYPE HR (TYP.) TO THE LIMITS SHOWN ON SHEET 1 AND ON THE ABUTMENT SHEETS OR AS DIRECTED BY THE ENGINEER. THE AREAS OUTSIDE THE WINGS AND ENDS OF ABUTMENT SHALL BE COVERED WITH CUT-STONE BOULDERS TO THE LIMITS SHOWN ON SHEET 1 OR AS DIRECTED BY THE ENGINEER.

THE TRUSS SHALL BE ANCHORED TO THE ABUTMENTS IN A MANNER TO:
- ALLOW THERMAL MOVEMENTS OF THE SUPERSTRUCTURE ALONG C/L OF THE PEDESTRIAN BRIDGE.
- PREVENT HORIZONTAL TRANSLATION OF THE SUPERSTRUCTURE PERPENDICULAR TO THE C/L OF THE PEDESTRIAN BRIDGE.

THE TRUSS SHALL BE CAMBERED TO OFFSET THE CALCULATED DEAD LOAD DEFLECTION.



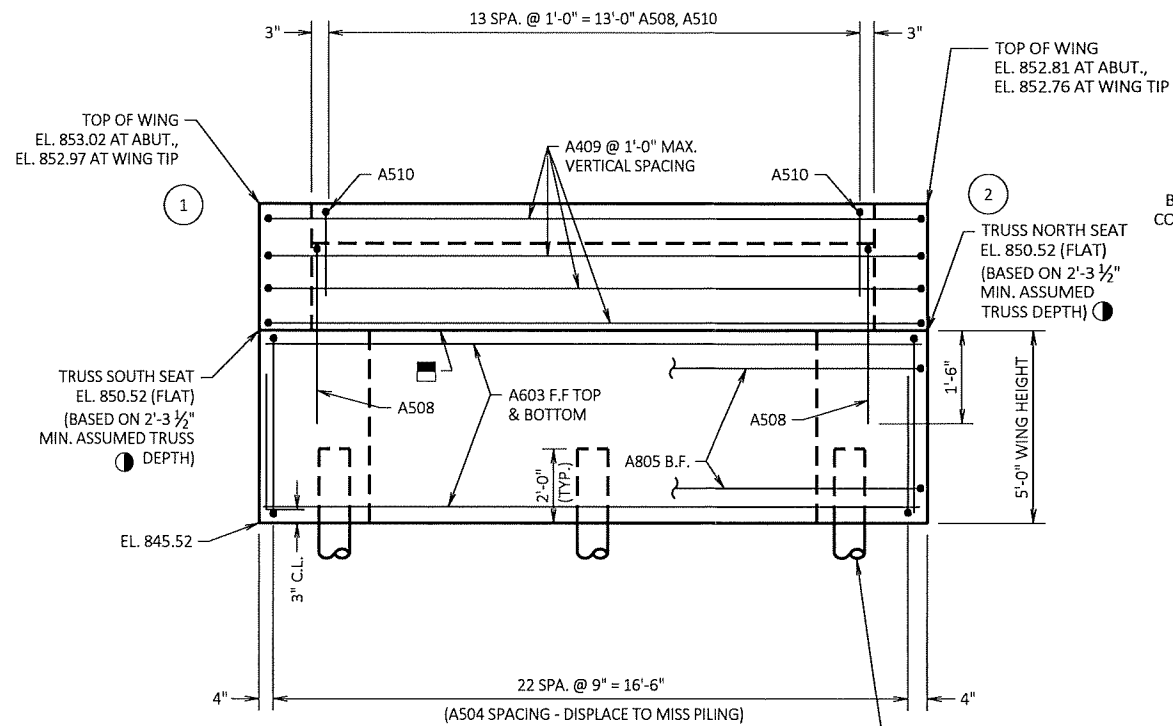
ABUTMENT BACKFILL PAY QUANTITY DIAGRAM

L = OUT TO OUT OF ABUTMENT, INCLUDING WINGS (FT)
H = AVERAGE ABUTMENT FILL HEIGHT (FT)
EF = EXPANSION FACTOR (1.20 FOR CY BID ITEMS AND 1.00 FOR TON BID ITEMS)
 $V_{CF} = (L)(3.0')(H) + (L)(0.5)(1.5H)(H)$
 $V_{CY} = V_{CF}(EF)/27$
 $V_{TON} = V_{CY}(2.0)$

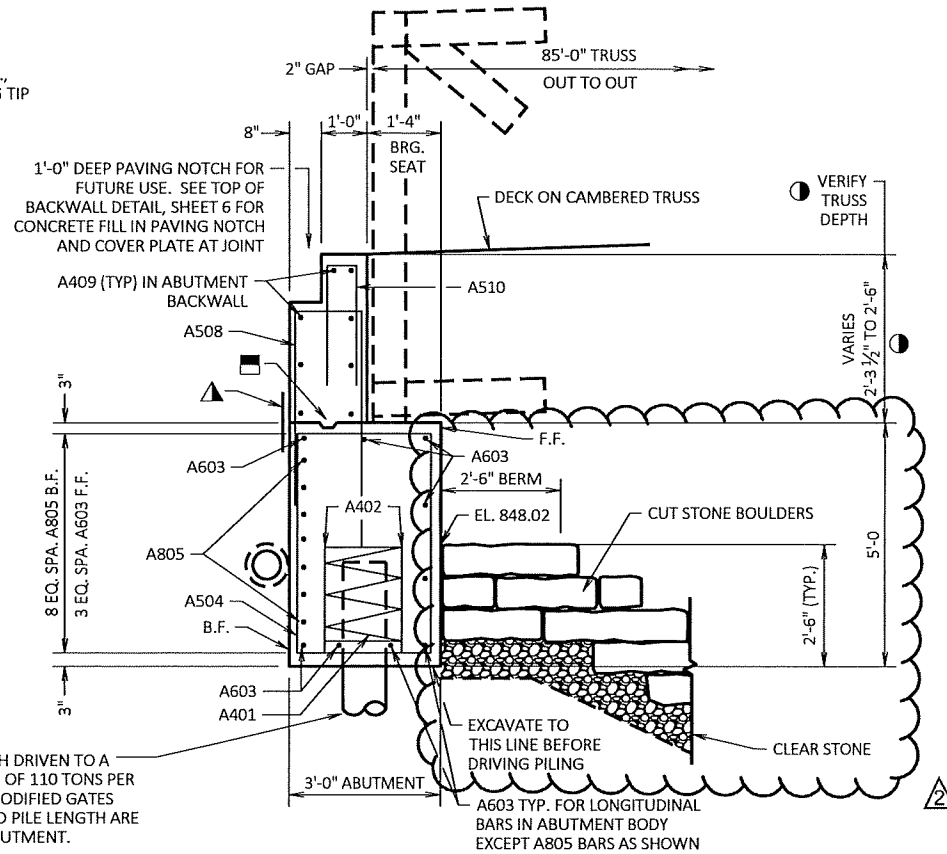
TOTAL ESTIMATED QUANTITIES

ITEM NUMBER	ITEM DESCRIPTION	UNIT	W. ABUT	E. ABUT	SUPER.	TOTAL
20140	GEOTEXTILE FABRIC TYPE SAS NON WOVEN	SY	46	46	---	92
20214	SELECT FILL CRUSHED STONE	TON	20	20	---	40
20217	CLEAR STONE	TON	93	92	---	185
20241	RIPRAP FILTER FABRIC, TYPE HR	SY	154	154	---	308
90301	PILING CIP CONCRETE 10 3/4 X 0.365-INCH	LF	210	180	---	390
90302	REINFORCED CONCRETE BRIDGE ABUTMENTS, AND WINGWALLS, B-13-880	LS	---	---	---	1
	EXCAVATION FOR STRUCTURES BRIDGES B-13-880	LS	---	---	---	1
	BACKFILL STRUCTURE TYPE A	TON	79	79	---	158
	CONCRETE MASONRY BRIDGES	CY	27	27	---	54
	PROTECTIVE SURFACE TREATMENT	SY	25	25	---	50
	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	1200	1200	---	2400
	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	1440	1440	---	2880
	RUBBERIZED MEMBRANE WATERPROOFING	SY	6	6	---	12
	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	98	98	---	196
	GEOTEXTILE TYPE DF SCHEDULE A	SY	10	10	---	20
90305	PREFABRICATED STEEL TRUSS PEDESTRIAN BRIDGE B-13-880 LRFD	LS	---	---	---	1
	PROTECTIVE SURFACE TREATMENT	SY	---	---	133	133
	PAINTING EPOXY SYSTEM STEEL TRUSS B-13-880	LS	---	---	1	1
90308	CUT-STONE BOULDERS	SF	910	910	---	1820
90309	RAILING PEDESTRIAN STEEL B-13-880	LF	24	24	---	48
	NON-BID ITEMS					
	BRIDGE SEAT PROTECTION					
	FILLER		1/2"	1/2"		

ADDENDUM 2
 2/17/2021 CAH
 10160
 MADISON, WI
 GARVER PATH
 CITY OF MADISON
 CONTRACT NO.: 8142
 SHEET 2 OF 8
 STRUCTURE B-13-880
 DRAWN BY: STD
 PLANS CKD: CDH
 S-2
 REVISIONS



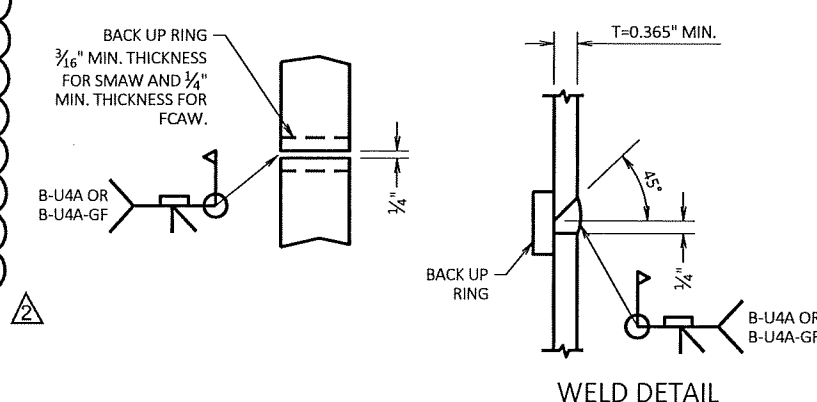
ELEVATION
(LOOKING AT FRONT FACE OF ABUTMENT)



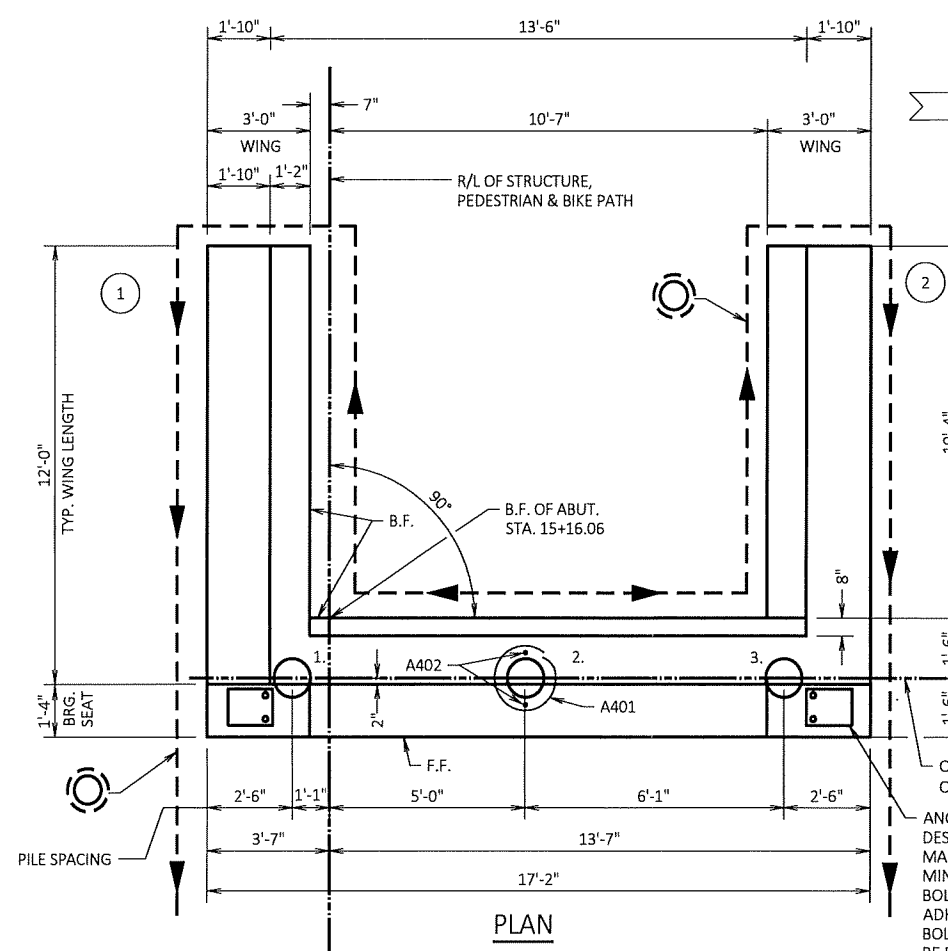
SECTION THRU ABUTMENT

- LEGEND**
- CONSTRUCTION JOINT FORMED BY BEVELED 2X6. PLACE 3/4" BEVEL ON F.F. OF WINGS.
 - SET ABUTMENT BEARING SEAT TO ELEVATION DEPENDENT ON TRUSS DEPTH. TRUSS DEPTH INCLUDES MIN. ASSUMED DEPTH TO LOW CHORD (1'-10") AND ASSUMED HEIGHT OF BEARING (5 1/2").
 - ▲ HORIZONTAL 18" WIDE RUBBERIZED MEMBRANE WATERPROOFING. PLACE ON B.F. OF CONSTRUCTION JOINT AS SHOWN.
 - PIPE UNDERDRAIN WRAPPED 6-INCH. EXTEND THRU GEOTEXTILE AT FACE OF CUT STONE BOULDERS. SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. PROVIDE RODENT PROTECTION AT ENDS OF PIPE. SEE RODENT SHIELD DETAIL, SHEET 6.
- F.F. = FRONT FACE B.F. = BACK FACE CL. = CLEAR
- INDICATES WING NUMBER.

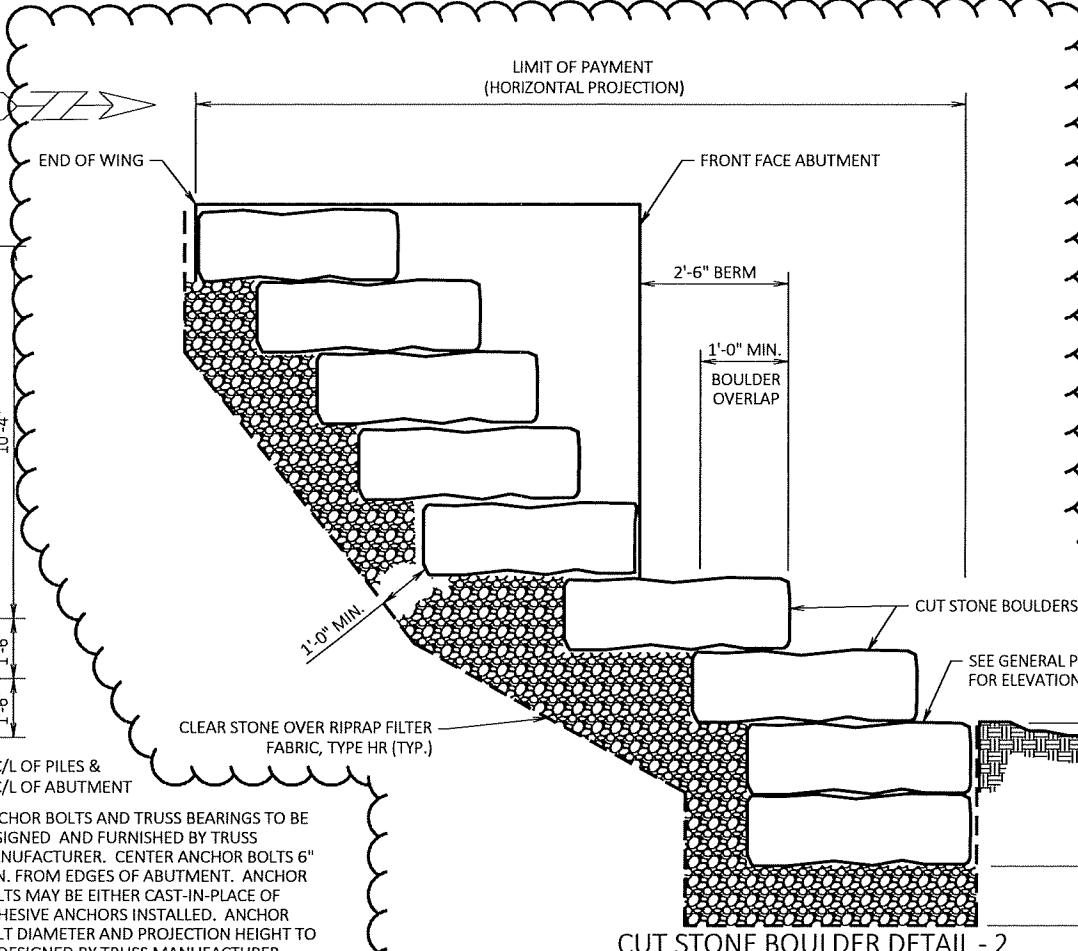
Addendum No. 2, ID 5992-10-41
Revised sheet S-4
02/17/2021



WELD DETAIL

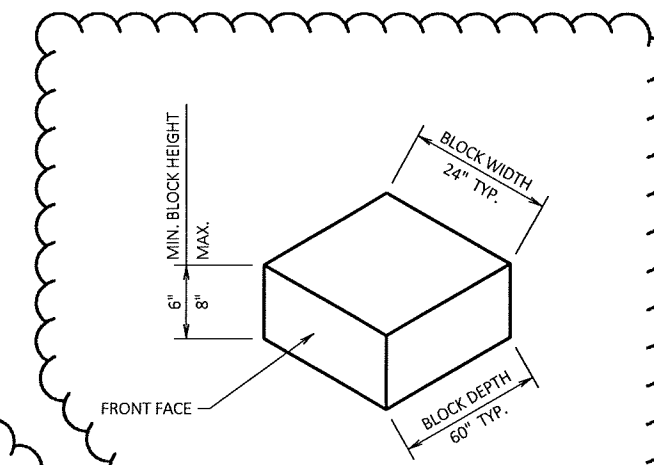


PLAN



CUT STONE BOULDER DETAIL - 2

CAST-IN-PLACE 'PIPE PILE' SPLICE DETAILS



CUT STONE BOULDER DETAIL - 1

UNDERLAY CUT-STONE BOULDER WALL WITH CLEAR STONE AND GEOTEXTILE TYPE HR. EXTEND FABRIC TO OVERLAP 2'-0" MIN. TO FRONT FACES OF BRIDGE WING WALLS.

SHEET 4 OF 8

STRUCTURE B-13-880

DRAWN BY STD PLANS CK'D. CDH

ADDENDUM 2	2/17/2021 CAH	DATE	S-4
MARK	REVISION	DATE	BY
DESIGNED BY: CAH	DATE: 10/01/2020	SCALE:	###

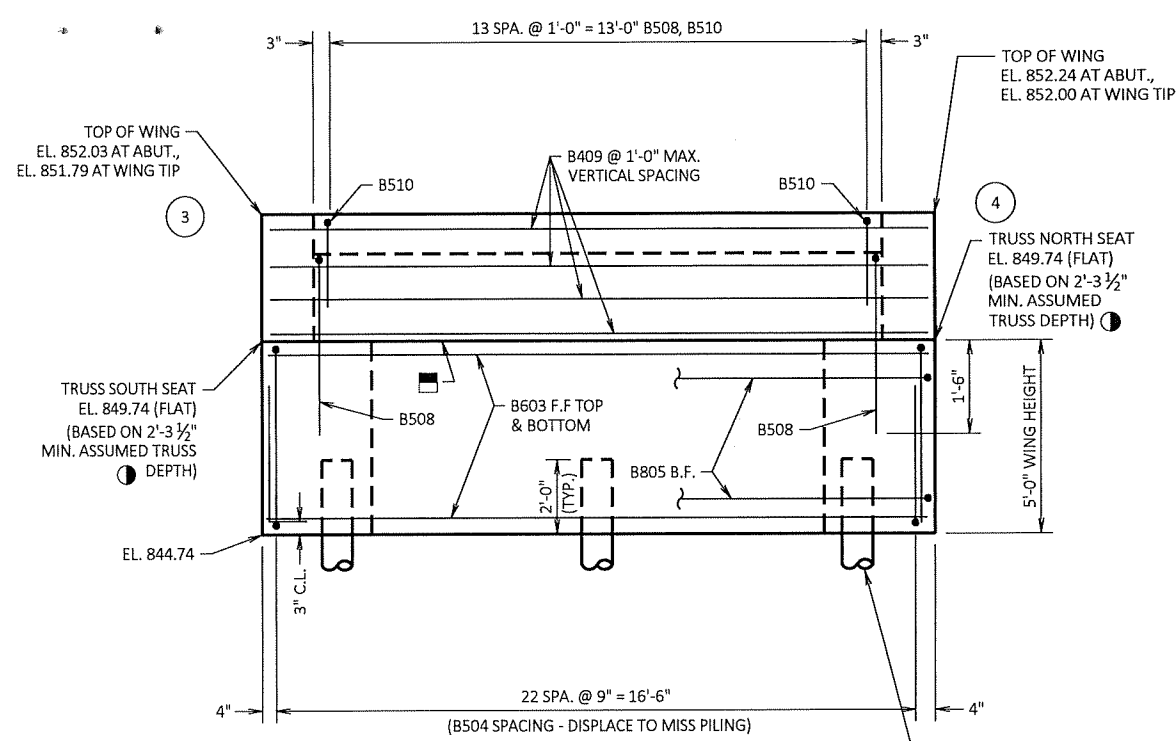
10160
MADISON, WI
CONTRACT NO.: 8142

WEST ABUTMENT
GARVER PATH
CITY OF MADISON



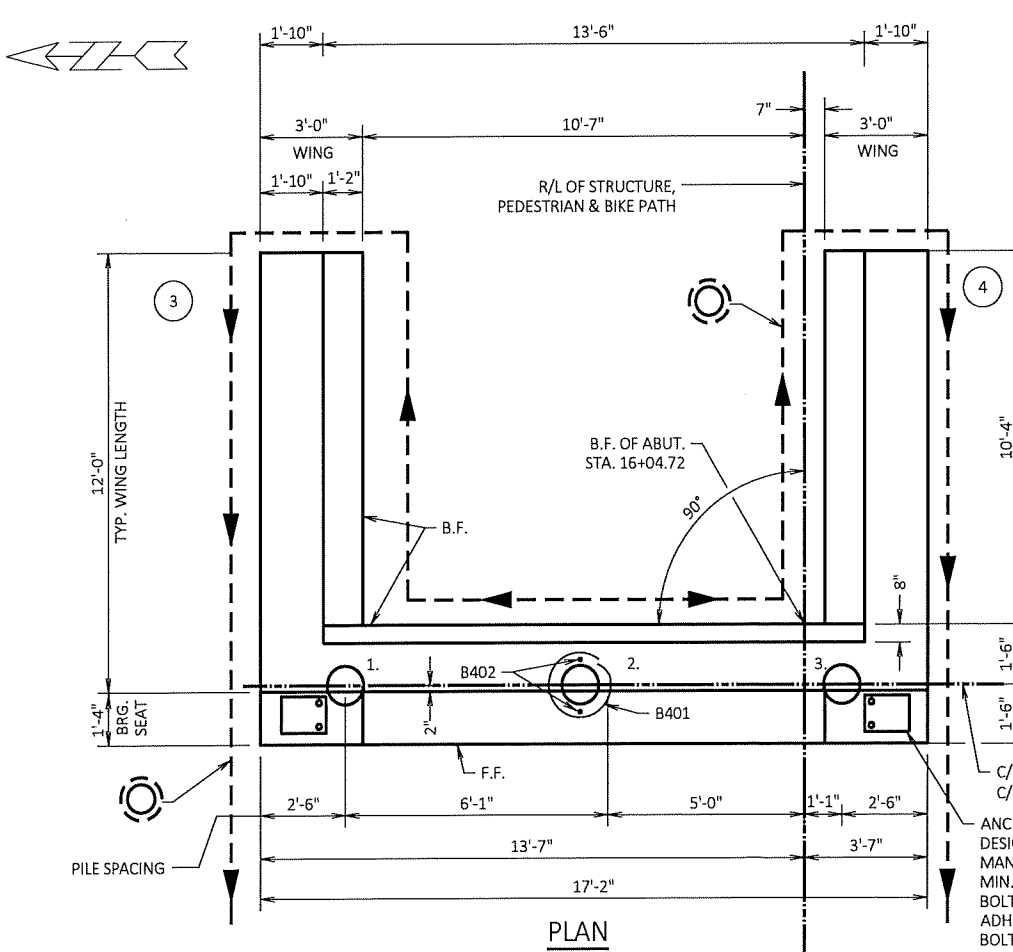
10160
S-4

REVISION

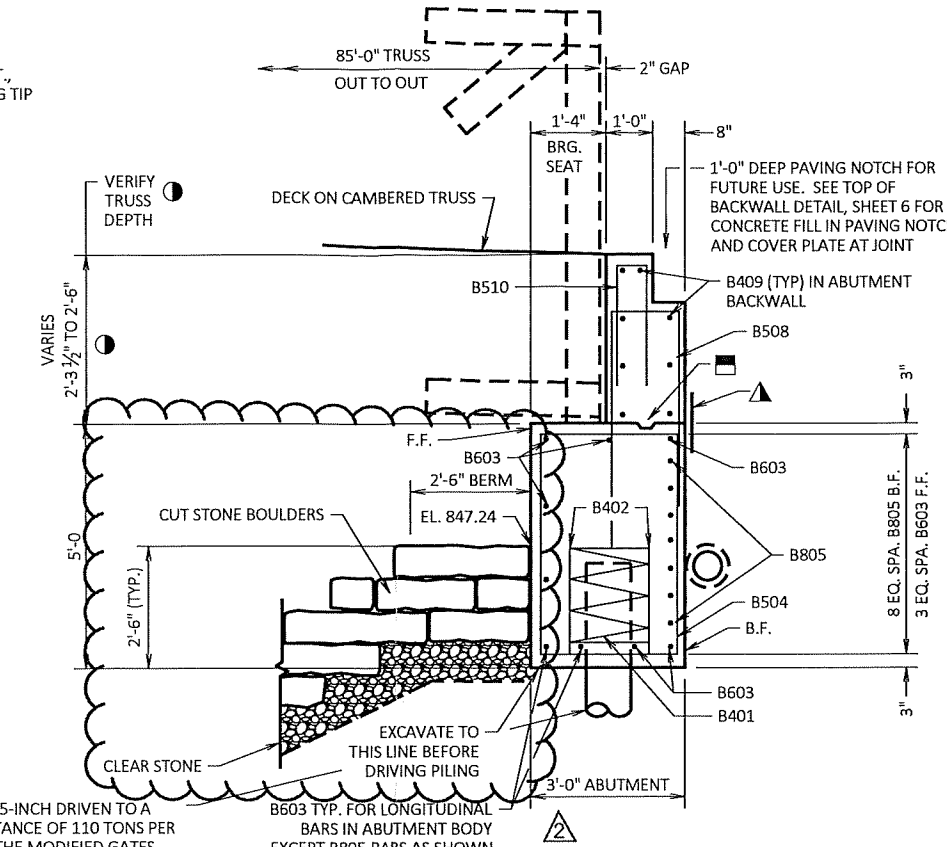


ELEVATION
(LOOKING AT FRONT FACE OF ABUTMENT)

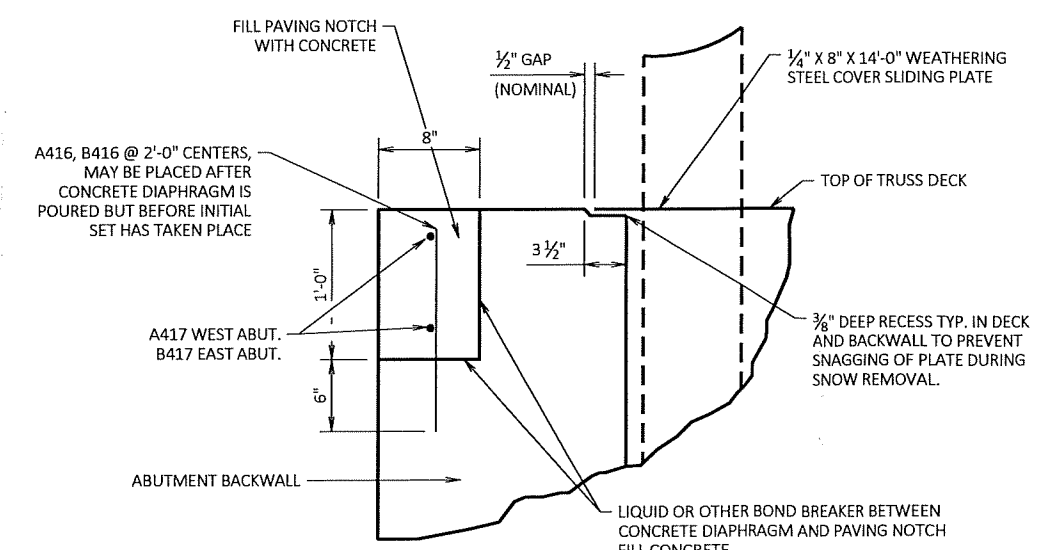
PILING CIP 10 3/4" X 0.365-INCH DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 110 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED PILE LENGTH ARE 60'-0" AT THE EAST ABUTMENT.



PLAN



SECTION THRU ABUTMENT

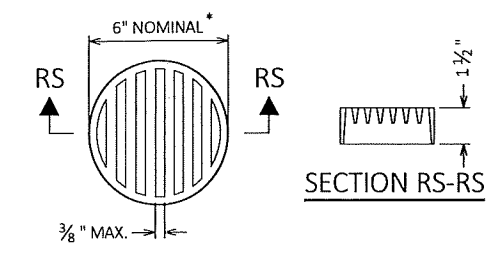


TOP OF BACKWALL DETAIL

LEGEND

- CONSTRUCTION JOINT FORMED BY BEVELED 2X6. PLACE 3/4" BEVEL ON F.F. OF WINGS.
- SET ABUTMENT BEARING SEAT TO ELEVATION DEPENDENT ON TRUSS DEPTH. TRUSS DEPTH INCLUDES MIN. ASSUMED DEPTH TO LOW CHORD (1'-10") AND ASSUMED HEIGHT OF BEARING (5 1/2").
- ▲ HORIZONTAL 18" WIDE RUBBERIZED MEMBRANE WATERPROOFING. PLACE ON B.F. OF CONSTRUCTION JOINT AS SHOWN.
- PIPE UNDERDRAIN WRAPPED 6-INCH. EXTEND THRU GEOTEXTILE AT FACE OF CUT STONE BOULDERS. SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. PROVIDE RODENT PROTECTION AT ENDS OF PIPE. SEE RODENT SHIELD DETAIL, THIS SHEET.
- F.F. = FRONT FACE B.F. = BACK FACE CL. = CLEAR
- INDICATES WING NUMBER.

Addendum No. 2, ID 5992-10-41
Revised sheet S-6
02/17/2021



RODENT SHIELD DETAIL

*DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

THE RODENT SHIELD, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.

2/17/2021 CAH	DATE	S-6
ADDENDUM	REVISION	MARK
10/01/2020	DATE	###
CAH	BY	###

10160
MADISON, WI
CONTRACT NO: 8142

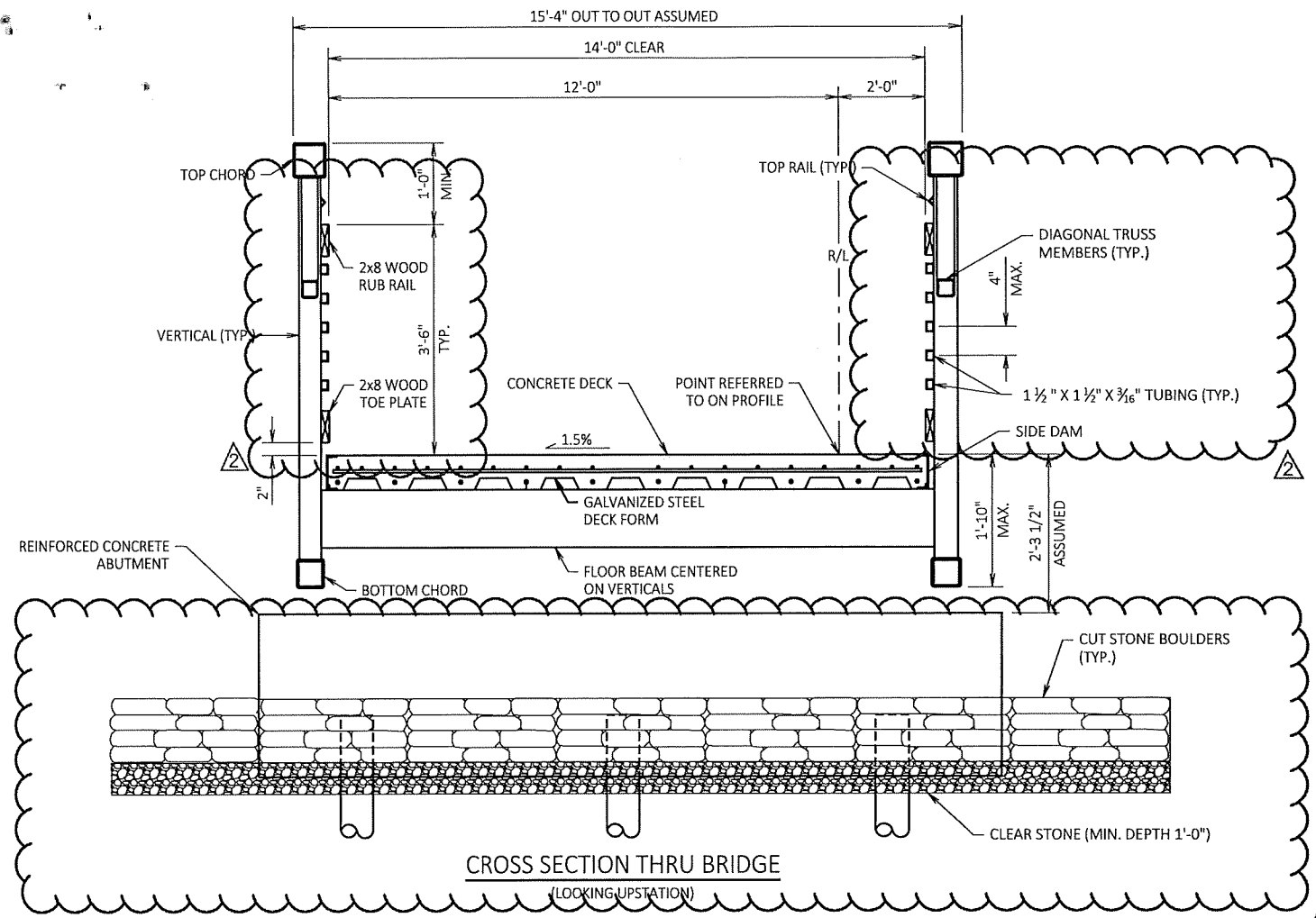
EAST ABUTMENT
GARVER PATH
CITY OF MADISON



SHEET 6 OF 8

10160
S-6
STRUCTURE B-13-880
DRAWN BY STD PLANS CK'D. CDH

REVISION



BRIDGE REACTIONS (SERVICE LOADS)

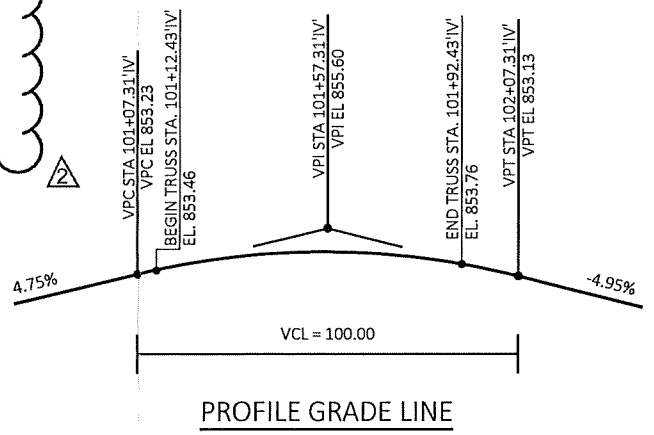
LOAD TYPE	"P" (LBS)	"H" (LBS)	"L" (LBS)
DEAD	25,095		
LIVE	26,250		
VEHICLE	14,280		
WIND		8,085	5,460
WINDWARD	-11,340		
LEEWARD	1,785		
STREAM			
THERMAL			5,040

P = VERTICAL LOAD AT EACH BASE PLATE (4 PER BRIDGE)
H = HORIZONTAL LOAD AT EACH SUBSTRUCTURE UNIT (2 PER BRIDGE)
L = LONGITUDINAL LOAD AT EACH FIXED BEARING (4 PER BRIDGE)

NOTES:
1. VALUES IN THIS TABLE ARE ESTIMATES. ACTUAL VALUES SHALL BE PROVIDED BY PREFABRICATED BRIDGE MANUFACTURER.
2. "+" INDICATES DOWNWARD LOAD
"-" INDICATES UPWARD LOAD

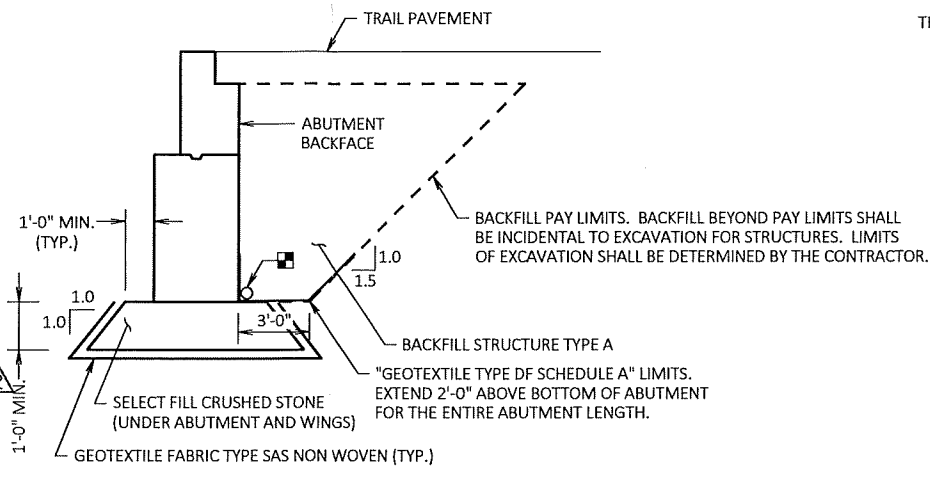
BRIDGE LENGTH = 80'
BRIDGE CLEAR WIDTH = 14'
DECK TYPE = CONCRETE
RAIL HEIGHT = 54" MIN.
LIVE LOAD = 90 PSF/H10

Addendum No. 2, ID 5992-10-41
Revised sheet S-10
02/17/2021



TOTAL ESTIMATED QUANTITIES

ITEM NUMBER	ITEM DESCRIPTION	UNIT	W. ABUT	E. ABUT	SUPER.	TOTAL
20140	GEOTEXTILE FABRIC TYPE SAS NON WOVEN	SY	46	46	---	92
20214	SELECT FILL CRUSHED STONE	TON	20	20	---	40
20217	CLEAR STONE	TON	79	50	---	129
20241	RIPRAP FILTER FABRIC, TYPE HR	SY	135	96	---	231
90300	REMOVING OLD STRUCTURE OVER WATERWAY STA. 101+50	LS	---	---	---	1
90301	PILING CIP CONCRETE 10 3/4 X 0.365-INCH	LF	195	180	---	375
90303	REINFORCED CONCRETE BRIDGE ABUTMENTS, AND WINGWALLS, B-13-881	LS	---	---	---	1
	EXCAVATION FOR STRUCTURES BRIDGES B-13-881	LS	---	---	---	1
	BACKFILL STRUCTURE TYPE A	TON	79	79	---	158
	CONCRETE MASONRY BRIDGES	CY	27	27	---	54
	PROTECTIVE SURFACE TREATMENT	SY	25	25	---	50
	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	1200	1200	---	2400
	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	1440	1440	---	2880
	RUBBERIZED MEMBRANE WATERPROOFING	SY	6	6	---	12
	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	98	98	---	196
	GEOTEXTILE TYPE DF SCHEDULE A	SY	10	10	---	20
90305	PREFABRICATED STEEL TRUSS PEDESTRIAN BRIDGE B-13-881 LRFD	LS	---	---	---	1
	PROTECTIVE SURFACE TREATMENT	SY	---	---	125	125
	PAINTING EPOXY SYSTEM STEEL TRUSS B-13-881	LS	---	---	---	1
90308	CUT-STONE BOULDERS	SF	780	480	---	1260
90309	RAILING PEDESTRIAN STEEL B-13-881	LF	24	24	---	48
	NON-BID ITEMS					
	BRIDGE SEAT PROTECTION					
	FILLER		1/2"	1/2"		



STRUCTURE BACKFILL LIMITS
* PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN.

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.
BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS SHOWN OR NOTED OTHERWISE.
THE FIRST DIGIT OF A THREE DIGIT AND THE FIRST TWO DIGITS OF A FOUR DIGIT BAR MARK SIGNIFIES THE BAR SIZE.
AT ABUTMENTS, ALL EXCAVATED VOLUME NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL.
THE EXISTING GROUND LINE SHALL BE THE UPPER LIMITS OF EXCAVATION FOR STRUCTURES.
THE BACKFILL QUANTITIES ARE BASED ON THE PAY LIMITS SHOWN ON THE PLANS AND MAY NOT REFLECT ACTUAL PLACED QUANTITIES. "BACKFILL STRUCTURE TYPE A" REQUIRED DIRECTLY BEHIND ABUTMENTS AND ABUTMENT WINGS FOR 3 FEET. BACKFILL PLACED BEYOND PAY LIMITS OR EXCEEDING PLAN QUANTITIES SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES.
EXCAVATION BELOW THE ABUTMENTS AND WINGS IS REQUIRED. UNDERCUT TO BE FILLED WITH SELECT FILL CRUSHED STONE TO A MINIMUM OF 1'-0" BELOW BOTTOM OF ABUTMENT. EXCAVATION LIMITS TO EXTEND 1'-0" BEYOND ABUTMENT AND WING DIMENSIONS.
ALL PREFABRICATED BRIDGE DIMENSIONS ARE APPROXIMATE. CONTRACTOR SHALL VERIFY FINAL DIMENSIONS WITH BRIDGE MANUFACTURER.
THE DISTANCE BETWEEN THE FRONT FACE OF ABUTMENT BACKWALLS SHALL BE 80'-4" WHICH INCLUDES THE EXPANSION JOINT WIDTH REQUIRED BY THE BRIDGE MANUFACTURER.
WOOD RUB RAIL SHALL BE S4S (SURFACED 4 SIDES).
ALL FASTENERS USED TO SECURE WOOD RUB RAILS AND TOE PLATES TO SUPPORT FRAMING SHALL BE STAINLESS STEEL.

IF TREATED TIMBER OR LUMBER MEMBERS ARE CUT IN THE FIELD OR DURING FABRICATION, SEAL ALL CUT ENDS PER SECTION 507.3.7 OF THE WISDOT STANDARD SPECIFICATIONS.
ALL LUMBER SHALL BE PRESSURE TREATED WITH COPPER AZOLE TYPE C (CA-C) OR MICRONIZED COPPER AZOLE (MCA) TO A RETENTION TO MEET AWPA UC4A AND IN ACCORDANCE WITH SECTION 507 OF THE WISDOT STANDARD SPECIFICATIONS.

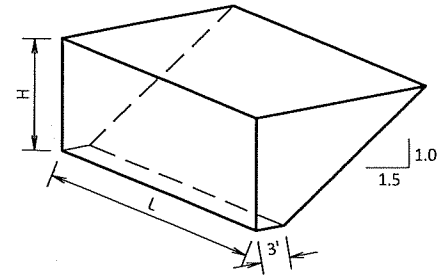
THE PREFABRICATED STEEL TRUSS PEDESTRIAN BRIDGE B-13-881 LRFD BID ITEM INCLUDES DESIGNING, FURNISHING AND INSTALLING THE PREFABRICATED BRIDGE, BEARING PLATES, PADS, BOLTS, ANCHOR BOLTS, GROUT, WOOD AND STEEL RAILS AND DECKING MATERIALS INCLUDING CONCRETE MASONRY AND BAR STEEL REINFORCEMENT. USE "BAR STEEL REINFORCEMENT HS COATED STRUCTURES" IN THE BRIDGE DECK.
COAT, PAINT AND FINISH STEEL TRUSS AND RAILING PER SECTION 517 OF THE WISDOT STANDARD SPECIFICATIONS. PAINT COLOR FOR THE STEEL TRUSS AND RAILING SHALL BE FEDERAL STANDARD 5958 COLOR #30045, BROWN.

PROTECTIVE SURFACE TREATMENT SHALL BE APPLIED TO THE TOP OF DECK, AND TO ALL EXPOSED FACES OF THE ABUTMENTS AND WINGS.
APPLY BRIDGE SEAT PROTECTION TO BEAM SEATS PRIOR TO SETTING BEARINGS PER SECTION 502.3.12 OF THE CURRENT WISDOT SPECIFICATIONS.

THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH CUT STONE BOULDERS AND RIPRAP FILTER FABRIC, TYPE HR (TYP.) TO THE LIMITS SHOWN ON SHEET 1 AND ON THE ABUTMENT SHEETS OR AS DIRECTED BY THE ENGINEER. THE AREAS OUTSIDE THE WINGS AND ENDS OF ABUTMENT SHALL BE COVERED WITH CUT-STONE BOULDERS TO THE LIMITS SHOWN ON SHEET 1 OR AS DIRECTED BY THE ENGINEER.

THE TRUSS SHALL BE ANCHORED TO THE ABUTMENTS IN A MANNER TO:
- ALLOW THERMAL MOVEMENTS OF THE SUPERSTRUCTURE ALONG C/L OF THE PEDESTRIAN BRIDGE.
- PREVENT HORIZONTAL TRANSLATION OF THE SUPERSTRUCTURE PERPENDICULAR TO THE C/L OF THE PEDESTRIAN BRIDGE.

THE TRUSS SHALL BE CAMBERED TO OFFSET THE CALCULATED DEAD LOAD DEFLECTION.



ABUTMENT BACKFILL PAY QUANTITY DIAGRAM
L = OUT TO OUT OF ABUTMENT, INCLUDING WINGS (FT)
H = AVERAGE ABUTMENT FILL HEIGHT (FT)
EF = EXPANSION FACTOR (1.20 FOR CY BID ITEMS AND 1.00 FOR TON BID ITEMS)
V_{CF} = (L)(3.0')(H) + (L)(0.5)(1.5H)(H)
V_{CY} = V_{CF}(EF)/27
V_{TON} = V_{CY}(2.0)

STRUCTURE B-13-881	
DRAWN BY	PLANS CK'D.
STD	CDH

ADDENDUM 2
10160
MADISON, WI
8142
CONTRACT NO.:
CROSS SECTION, QUANTITIES & NOTES
GARVER PATH
CITY OF MADISON
2/17/2021 CAH
REVISION
DATE
BY
S-10

Revision

Addendum No. 2, ID 5992-10-41
 Revised sheet S-18
 02/08/2021

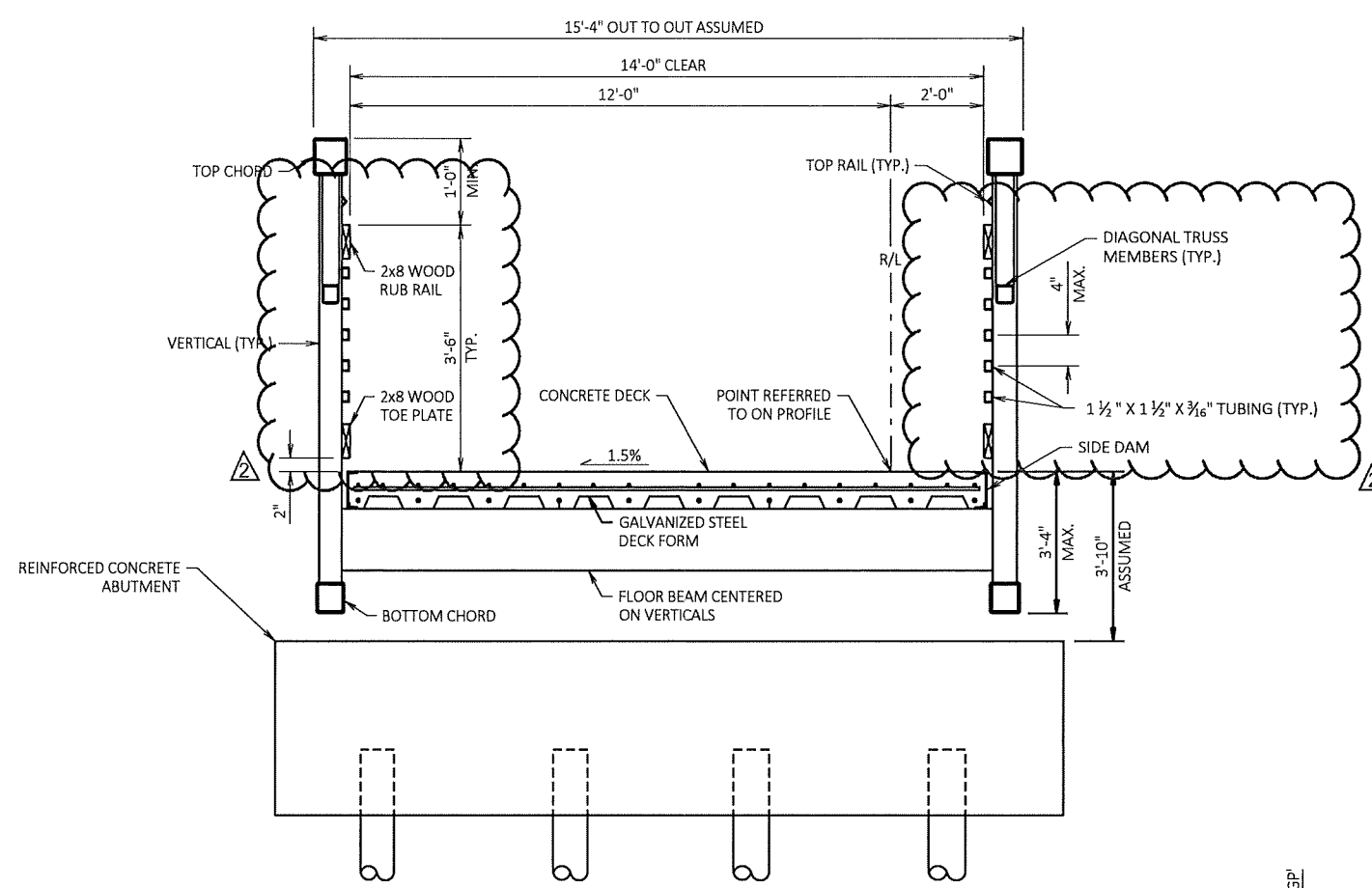
2/17/2021 CAH	DATE	BY	S-18
ADDENDUM 2	REVISION	MARK	###
DESIGNED BY: CAH	DATE: 10/01/2020	SCALE:	

10160
 MADISON, WI
 CONTRACT NO: 8142

CROSS SECTION, QUANTITIES & NOTES
 GARVER PATH
 CITY OF MADISON



10160
 S-18



BRIDGE REACTIONS (SERVICE LOADS)

LOAD TYPE	"P" (LBS)	"H" (LBS)	"L" (LBS)
DEAD	48,300		
LIVE	44,415		
VEHICLE	14,385		
WIND		20,475	6,090
WINDWARD	-22,785		
LEEWARD	6,090		
STREAM			
THERMAL			9,660

P = VERTICAL LOAD AT EACH BASE PLATE (4 PER BRIDGE)
 H = HORIZONTAL LOAD AT EACH SUBSTRUCTURE UNIT (2 PER BRIDGE)
 L = LONGITUDINAL LOAD AT EACH FIXED BEARING (4 PER BRIDGE)

- NOTES:
- VALUES IN THIS TABLE ARE ESTIMATES. ACTUAL VALUES SHALL BE PROVIDED BY PREFABRICATED BRIDGE MANUFACTURER.
 - "+" INDICATES DOWNWARD LOAD
 "-" INDICATES UPWARD LOAD

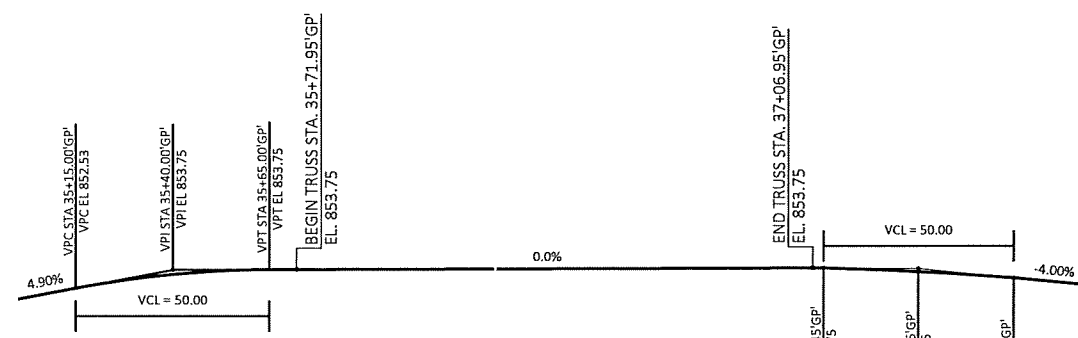
BRIDGE LENGTH = 135'
 BRIDGE CLEAR WIDTH = 14'
 DECK TYPE = CONCRETE
 RAIL HEIGHT = 54" MIN.
 LIVE LOAD = 90 PSF/H10

GENERAL NOTES

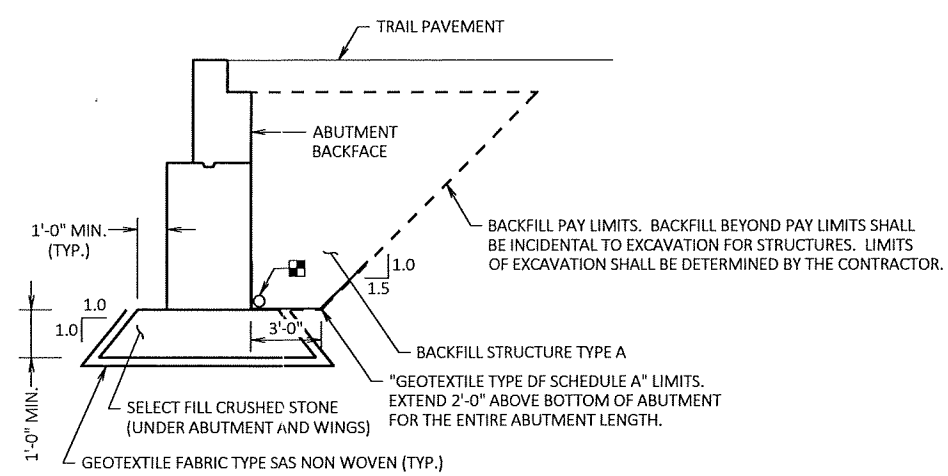
- DRAWINGS SHALL NOT BE SCALED.
- BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS SHOWN OR NOTED OTHERWISE.
- THE FIRST DIGIT OF A THREE DIGIT AND THE FIRST TWO DIGITS OF A FOUR DIGIT BAR MARK SIGNIFIES THE BAR SIZE.
- AT ABUTMENTS, ALL EXCAVATED VOLUME NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL.
- THE EXISTING GROUND LINE SHALL BE THE UPPER LIMITS OF EXCAVATION FOR STRUCTURES.
- THE BACKFILL QUANTITIES ARE BASED ON THE PAY LIMITS SHOWN ON THE PLANS AND MAY NOT REFLECT ACTUAL PLACED QUANTITIES. "BACKFILL STRUCTURE TYPE A" REQUIRED DIRECTLY BEHIND ABUTMENTS AND ABUTMENT WINGS FOR 3 FEET. BACKFILL PLACED BEYOND PAY LIMITS OR EXCEEDING PLAN QUANTITIES SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES.
- EXCAVATION BELOW THE ABUTMENTS AND WINGS IS REQUIRED. UNDERCUT TO BE FILLED WITH SELECT FILL CRUSHED STONE TO A MINIMUM OF 1'-0" BELOW BOTTOM OF ABUTMENT. EXCAVATION LIMITS TO EXTEND 1'-0" BEYOND ABUTMENT AND WING DIMENSIONS.
- ALL PREFABRICATED BRIDGE DIMENSIONS ARE APPROXIMATE. CONTRACTOR SHALL VERIFY FINAL DIMENSIONS WITH BRIDGE MANUFACTURER.
- THE DISTANCE BETWEEN THE FRONT FACE OF ABUTMENT BACKWALLS SHALL BE 135'-4" WHICH INCLUDES THE EXPANSION JOINT WIDTH REQUIRED BY THE BRIDGE MANUFACTURER.
- WOOD RUB RAIL SHALL BE S4S (SURFACED 4 SIDES).
- ALL FASTENERS USED TO SECURE WOOD RUB RAILS AND TOE PLATES TO SUPPORT FRAMING SHALL BE STAINLESS STEEL.
- IF TREATED TIMBER OR LUMBER MEMBERS ARE CUT IN THE FIELD OR DURING FABRICATION, SEAL ALL CUT ENDS PER SECTION 507.3.7 OF THE WISDOT STANDARD SPECIFICATIONS.
- ALL LUMBER SHALL BE PRESSURE TREATED WITH COPPER AZOLE TYPE C (CA-C) OR MICRONIZED COPPER AZOLE (MCA) TO A RETENTION TO MEET AWPA UC4A AND IN ACCORDANCE WITH SECTION 507 OF THE WISDOT STANDARD SPECIFICATIONS.
- THE PREFABRICATED STEEL TRUSS PEDESTRIAN BRIDGE B-13-882 LRFD BID ITEM INCLUDES DESIGNING, FURNISHING AND INSTALLING THE PREFABRICATED BRIDGE, BEARING PLATES, PADS, BOLTS, ANCHOR BOLTS, GROUT, WOOD AND STEEL RAILS AND DECKING MATERIALS INCLUDING CONCRETE MASONRY AND BAR STEEL REINFORCEMENT. USE "BAR STEEL REINFORCEMENT HS COATED STRUCTURES" IN THE BRIDGE DECK.
- COAT, PAINT AND FINISH STEEL TRUSS AND RAILING PER SECTION 517 OF THE WISDOT STANDARD SPECIFICATIONS. PAINT COLOR FOR THE STEEL TRUSS AND RAILING SHALL BE FEDERAL STANDARD 595B COLOR #30045, BROWN.
- PROTECTIVE SURFACE TREATMENT SHALL BE APPLIED TO THE TOP OF DECK, AND TO ALL EXPOSED FACES OF THE ABUTMENTS AND WINGS.
- APPLY BRIDGE SEAT PROTECTION TO BEAM SEATS PRIOR TO SETTING BEARINGS PER SECTION 502.3.12 OF THE CURRENT WISDOT SPECIFICATIONS.
- THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE VEGETATED SLOPE TO THE LIMITS SHOWN ON SHEET 1 AND ON THE ABUTMENT SHEETS OR AS DIRECTED BY THE ENGINEER. THE AREAS OUTSIDE THE WINGS AND ENDS OF ABUTMENT SHALL BE COVERED WITH VEGETATED SLOPE.
- THE TRUSS SHALL BE ANCHORED TO THE ABUTMENTS IN A MANNER TO:
- ALLOW THERMAL MOVEMENTS OF THE SUPERSTRUCTURE ALONG C/L OF THE PEDESTRIAN BRIDGE.
 - PREVENT HORIZONTAL TRANSLATION OF THE SUPERSTRUCTURE PERPENDICULAR TO THE C/L OF THE PEDESTRIAN BRIDGE.
- THE TRUSS SHALL BE CAMBERED TO OFFSET THE CALCULATED DEAD LOAD DEFLECTION.

TOTAL ESTIMATED QUANTITIES

ITEM NUMBER	ITEM DESCRIPTION	UNIT	S. ABUT	N. ABUT	SUPER.	TOTAL
20140	GEOTEXTILE FABRIC TYPE SAS NON WOVEN	SY	46	46	---	92
20214	SELECT FILL CRUSHED STONE	TON	20	20	---	40
90301	PIILING CIP CONCRETE 10 3/4 X 0.365-INCH	LF	280	340	---	620
90304	REINFORCED CONCRETE BRIDGE ABUTMENTS, AND WINGWALLS, B-13-882	LS	---	---	---	1
	EXCAVATION FOR STRUCTURES BRIDGES B-13-882	LS	---	---	---	1
	BACKFILL STRUCTURE TYPE A	TON	109	109	---	218
	CONCRETE MASONRY BRIDGES	CY	31	31	---	62
	PROTECTIVE SURFACE TREATMENT	SY	30	30	---	60
	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	1220	1220	---	2440
	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	1730	1730	---	3460
	RUBBERIZED MEMBRANE WATERPROOFING	SY	6	6	---	12
	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	98	98	---	196
	GEOTEXTILE TYPE DF SCHEDULE A	SY	10	10	---	20
90305	PREFABRICATED STEEL TRUSS PEDESTRIAN BRIDGE B-13-882 LRFD	LS	---	---	---	1
	PROTECTIVE SURFACE TREATMENT	SY	---	---	210	210
	PAINTING EPOXY SYSTEM STEEL TRUSS B-13-882	LS	---	---	1	1
90309	RAILING PEDESTRIAN STEEL B-13-882	LF	24	24	---	48
	NON-BID ITEMS					
	BRIDGE SEAT PROTECTION					
	FILLER		1/2"	1/2"		

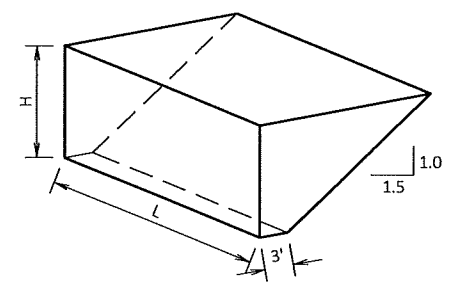


PROFILE GRADE LINE



STRUCTURE BACKFILL LIMITS

- PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN.

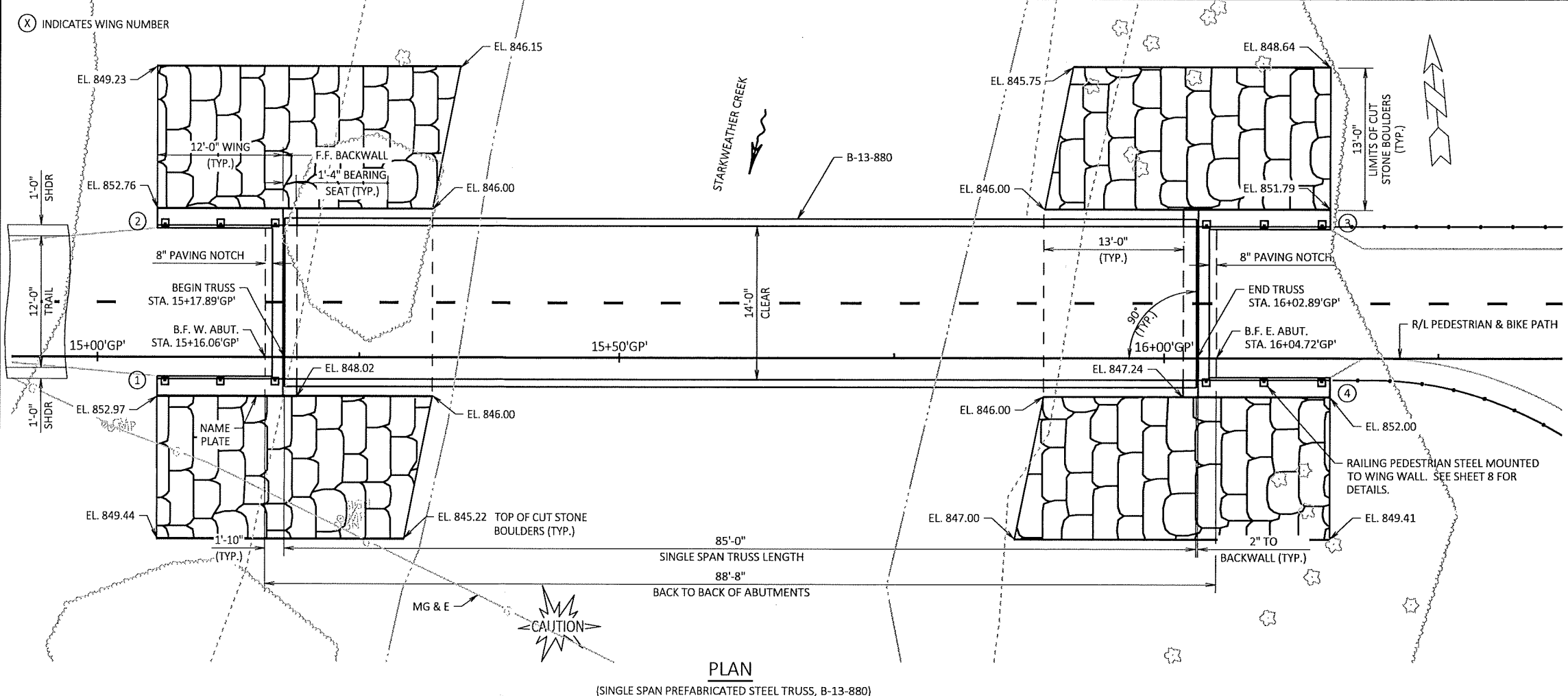


ABUTMENT BACKFILL PAY QUANTITY DIAGRAM

- L = OUT TO OUT OF ABUTMENT, INCLUDING WINGS (FT)
- H = AVERAGE ABUTMENT FILL HEIGHT (FT)
- EF = EXPANSION FACTOR (1.20 FOR CY BID ITEMS AND 1.00 FOR TON BID ITEMS)
- $V_{CF} = (L)(3.0')(H) + (L)(0.5)(1.5H)(H)$
- $V_{CY} = V_{CF}(EF)/27$
- $V_{TON} = V_{CY}(2.0)$

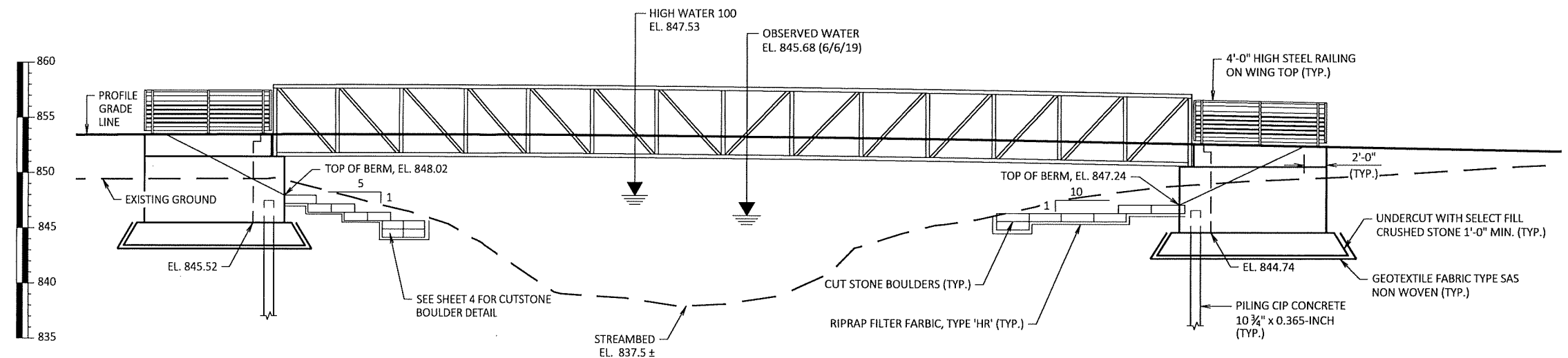
STRUCTURE B-13-882
 DRAWN BY: STD
 PLANS CKD: CDH

SHEET 2 OF 8



PLAN
(SINGLE SPAN PREFABRICATED STEEL TRUSS, B-13-880)

NOTE:
ELEVATIONS GIVEN FOR CUT-STONE BOULDERS ARE AT TOP OF BOULDER. HEIGHT OF LOWEST COURSE TO BE 1'-0" MIN.



ELEVATION
(LOOKING NORTH)

LIST OF DRAWINGS

1. GENERAL PLAN
2. CROSS SECTION, QUANTITIES & NOTES
3. SUBSURFACE EXPLORATION
4. WEST ABUTMENT
5. WEST ABUTMENT DETAILS
6. EAST ABUTMENT
7. EAST ABUTMENT DETAILS
8. RAILING PEDESTRIAN STEEL

BRIDGE OFFICE CONTACT
AARON BONK, P.E.
TELEPHONE: (608) 261-0261

CONSULTANT CONTACT
CHAD HALVERSON, P.E.
TELEPHONE: (608) 663-1218

DESIGN DATA

DESIGN SPECIFICATIONS:
AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS
AASHTO LRFD BRIDGE SPECIFICATIONS FOR THE DESIGN OF PEDESTRIAN BRIDGES

LIVE LOAD:
90 PSF PEDESTRIAN LOAD
20,000 LB. VEHICLE LOAD (H10)

WIND LOAD:
WIND LOADS DESIGNED IN ACCORDANCE TO AASHTO DESIGN FOR PEDESTRIAN BRIDGES AND AASHTO SIGNS.

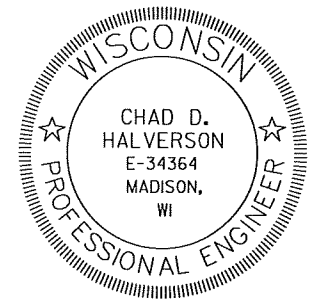
MATERIAL PROPERTIES:
CONCRETE MASONRY BRIDGES $f_c = 4,000$ PSI
HIGH STRENGTH BAR STEEL REINFORCEMENT GRADE 60 $f_y = 60,000$ PSI
HIGH STRENGTH STRUCTURAL STEEL ASTM A847, A588, A606, A709 OR A242 $f_y = 50,000$ PSI
STRUCTURAL CARBON STEEL ASTM A36 $f_y = 36,000$ PSI

FOUNDATION DATA:
ABUTMENTS TO BE SUPPORTED ON PILING CIP CONCRETE 10 3/4 X 0.365-INCH DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 110* TONS PER PILE AS REQUIRED BY THE MODIFIED GATES DYNAMIC EQUATION. ESTIMATED 60' LONG AT THE EAST ABUTMENT AND 70' LONG AT THE WEST ABUTMENT.

* THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5 USING MODIFIED GATES TO DETERMINE DRIVEN PILE CAPACITY.

HYDRAULIC DATA:
100 YEAR FREQUENCY
 $Q_{100} = 1427$ C.F.S.
VEL. = 4.47 F.P.S.
HW₁₀₀ = EL. 847.53
WATERWAY AREA = 370 SQ. FT.
DRAINAGE AREA = 20.4 SQ. MI.
SCOUR CRITICAL CODE = 5

2 YEAR FREQUENCY
 $Q_2 = 290$ C.F.S.
VEL. = 1.7 F.P.S.
HW₂ = EL. 846.37



Chad Halverson
November 23, 2020

NO.	DATE	REVISION	BY

KL Engineering
(A) Better Experience

ACCEPTED *Chad Halverson* SDR 12/08/20
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-13-880
HARGROVE STREET PEDESTRIAN & BIKE PATH OVER STARKWEATHER CREEK

COUNTY DANE TOWN/CITY/VILLAGE MADISON

DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS
DESIGNED BY CAH CK'D. CDH DRAWN BY STD CK'D. CDH

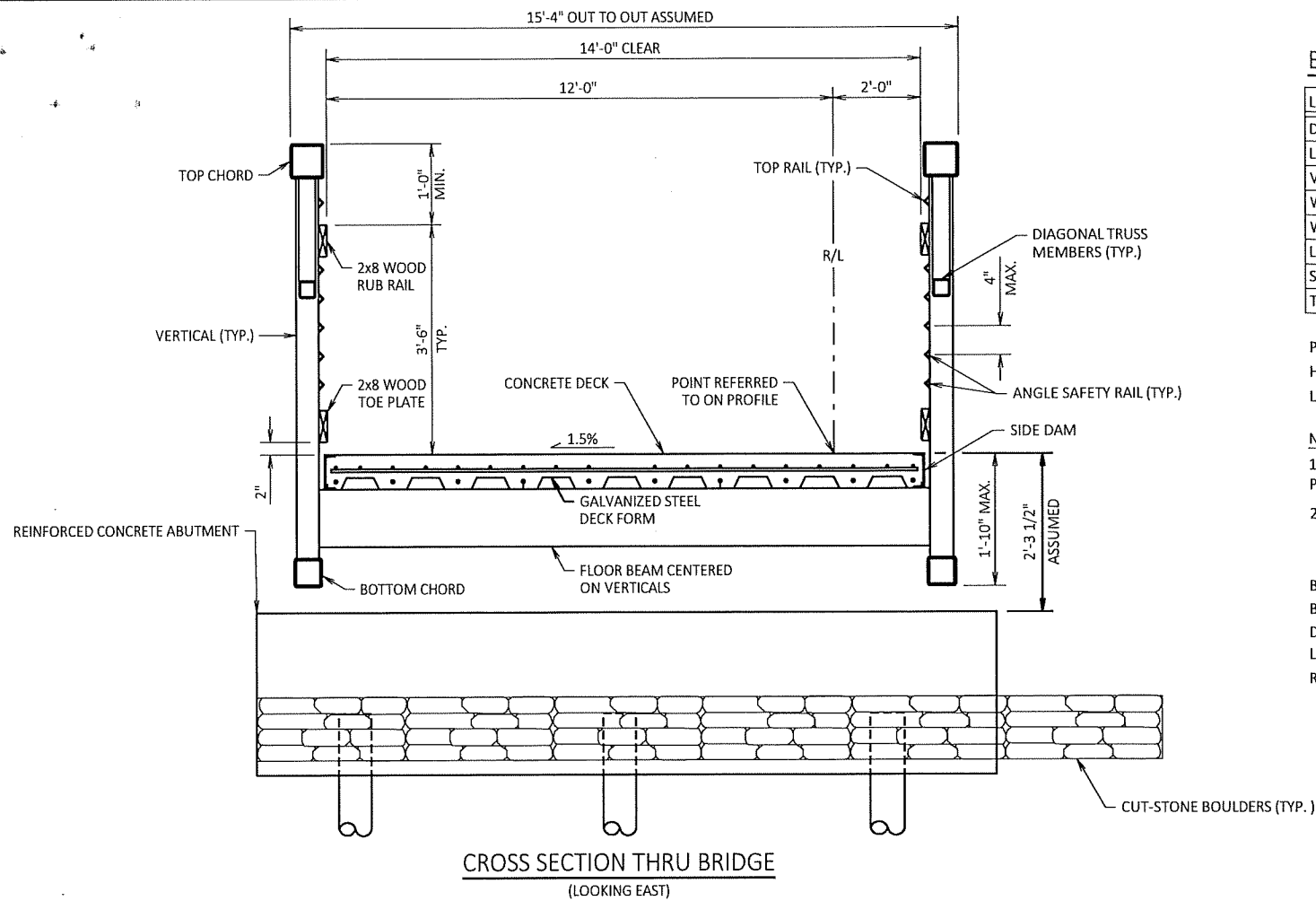
GENERAL PLAN SHEET 1 OF 8

10160 & 12952
MADISON, WI
CONTRACT NO: 8572

GENERAL PLAN
GARVER PATH
CITY OF MADISON

10160
S-1

ORIGINAL



BRIDGE REACTIONS (SERVICE LOADS)

LOAD TYPE	"P" (LBS)	"H" (LBS)	"L" (LBS)
DEAD	26,290		
LIVE	27,500		
VEHICLE	14,960		
WIND		8,740	5,720
WINDWARD	-11,880		
LEEWARD	1,870		
STREAM			
THERMAL			5,280

P = VERTICAL LOAD AT EACH BASE PLATE (4 PER BRIDGE)
H = HORIZONTAL LOAD AT EACH SUBSTRUCTURE UNIT (2 PER BRIDGE)
L = LONGITUDINAL LOAD AT EACH FIXED BEARING (4 PER BRIDGE)

- NOTES:
- VALUES IN THIS TABLE ARE ESTIMATES. ACTUAL VALUES SHALL BE PROVIDED BY PREFABRICATED BRIDGE MANUFACTURER.
 - "+" INDICATES DOWNWARD LOAD
"-" INDICATES UPWARD LOAD

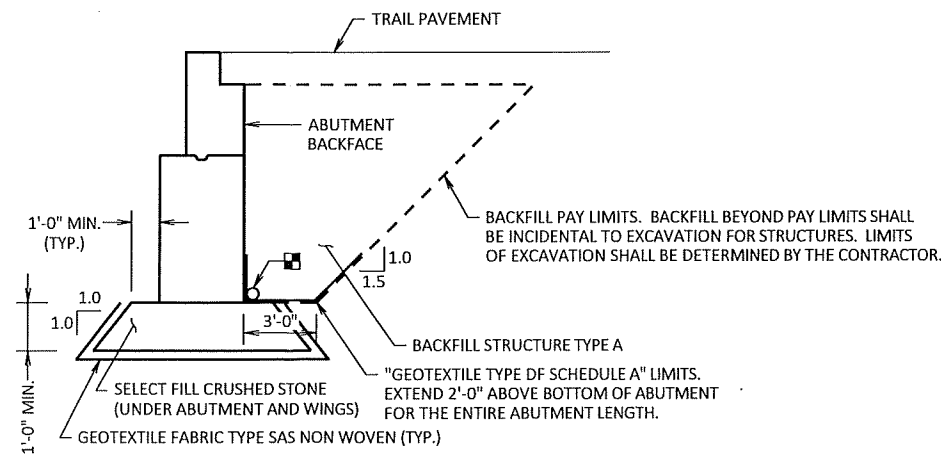
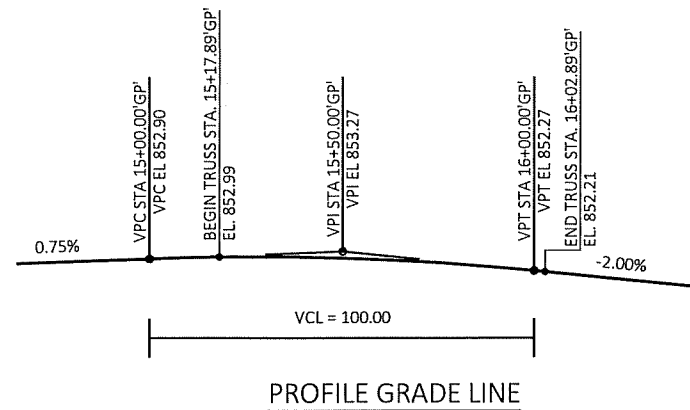
BRIDGE LENGTH = 85'
BRIDGE CLEAR WIDTH = 14'
DECK TYPE = CONCRETE
LIVE LOAD = 90 PSF/H10
RAIL HEIGHT = 54" MIN.

GENERAL NOTES

- DRAWINGS SHALL NOT BE SCALED.
- BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS SHOWN OR NOTED OTHERWISE.
- THE FIRST DIGIT OF A THREE DIGIT AND THE FIRST TWO DIGITS OF A FOUR DIGIT BAR MARK SIGNIFIES THE BAR SIZE.
- AT ABUTMENTS, ALL EXCAVATED VOLUME NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL.
- THE EXISTING GROUND LINE SHALL BE THE UPPER LIMITS OF EXCAVATION FOR STRUCTURES.
- THE BACKFILL QUANTITIES ARE BASED ON THE PAY LIMITS SHOWN ON THE PLANS AND MAY NOT REFLECT ACTUAL PLACED QUANTITIES. "BACKFILL STRUCTURE TYPE A" REQUIRED DIRECTLY BEHIND ABUTMENTS AND ABUTMENT WINGS FOR 3 FEET. BACKFILL PLACED BEYOND PAY LIMITS OR EXCEEDING PLAN QUANTITIES SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES.
- EXCAVATION BELOW THE ABUTMENTS AND WINGS IS REQUIRED. UNDERCUT TO BE FILLED WITH SELECT FILL CRUSHED STONE TO A MINIMUM OF 1'-0" BELOW BOTTOM OF ABUTMENT. EXCAVATION LIMITS TO EXTEND 1'-0" BEYOND ABUTMENT AND WING DIMENSIONS.
- ALL PREFABRICATED BRIDGE DIMENSIONS ARE APPROXIMATE. CONTRACTOR SHALL VERIFY FINAL DIMENSIONS WITH BRIDGE MANUFACTURER.
- THE DISTANCE BETWEEN THE FRONT FACE OF ABUTMENT BACKWALLS SHALL BE 85'-4" WHICH INCLUDES THE EXPANSION JOINT WIDTH REQUIRED BY THE BRIDGE MANUFACTURER.
- WOOD RUB RAIL SHALL BE 54S (SURFACED 4 SIDES).
- ALL FASTENERS USED TO SECURE WOOD RUB RAILS AND TOE PLATES TO SUPPORT FRAMING SHALL BE STAINLESS STEEL.
- IF TREATED TIMBER OR LUMBER MEMBERS ARE CUT IN THE FIELD OR DURING FABRICATION, SEAL ALL CUT ENDS PER SECTION 507.3.7 OF THE WISDOT STANDARD SPECIFICATIONS.
- ALL LUMBER SHALL BE PRESSURE TREATED WITH ALKALINE COPPER OR QUATERNARY (ACQ) TO A 0.4 PCF RETENTION IN ACCORDANCE WITH SECTION 507 OF THE WISDOT STANDARD SPECIFICATIONS.
- THE PREFABRICATED STEEL TRUSS PEDESTRIAN BRIDGE B-13-880 LRFD BID ITEM INCLUDES DESIGNING, FURNISHING AND INSTALLING THE PREFABRICATED BRIDGE, BEARING PLATES, PADS, BOLTS, ANCHOR BOLTS, GROUT, WOOD AND STEEL RAILS AND DECKING MATERIALS INCLUDING CONCRETE MASONRY AND BAR STEEL REINFORCEMENT. USE "BAR STEEL REINFORCEMENT HS COATED STRUCTURES" IN THE BRIDGE DECK.
- COAT, PAINT AND FINISH STEEL TRUSS AND RAILING PER SECTION 517 OF THE WISDOT STANDARD SPECIFICATIONS. PAINT COLOR FOR THE STEEL TRUSS AND RAILING SHALL BE FEDERAL STANDARD 595B COLOR #30045, BROWN.
- PROTECTIVE SURFACE TREATMENT SHALL BE APPLIED TO THE TOP OF DECK, AND TO ALL EXPOSED FACES OF THE ABUTMENTS AND WINGS.
- APPLY BRIDGE SEAT PROTECTION TO BEAM SEATS PRIOR TO SETTING BEARINGS PER SECTION 502.3.12 OF THE CURRENT WISDOT SPECIFICATIONS.
- THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH CUT STONE BOULDERS AND RIPRAP FILTER FABRIC, TYPE HR (TYP.) TO THE LIMITS SHOWN ON SHEET 1 AND ON THE ABUTMENT SHEETS OR AS DIRECTED BY THE ENGINEER. THE AREAS OUTSIDE THE WINGS AND ENDS OF ABUTMENT SHALL BE COVERED WITH CUT-STONE BOULDERS TO THE LIMITS SHOWN ON SHEET 1 OR AS DIRECTED BY THE ENGINEER.
- THE TRUSS SHALL BE ANCHORED TO THE ABUTMENTS IN A MANNER TO:
- ALLOW THERMAL MOVEMENTS OF THE SUPERSTRUCTURE ALONG C/L OF THE PEDESTRIAN BRIDGE.
 - PREVENT HORIZONTAL TRANSLATION OF THE SUPERSTRUCTURE PERPENDICULAR TO THE C/L OF THE PEDESTRIAN BRIDGE.
- THE TRUSS SHALL BE CAMBERED TO OFFSET THE CALCULATED DEAD LOAD DEFLECTION.

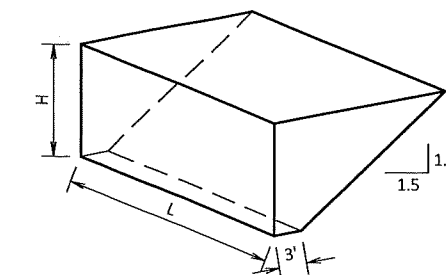
TOTAL ESTIMATED QUANTITIES

ITEM NUMBER	ITEM DESCRIPTION	UNIT	W. ABUT	E. ABUT	SUPER.	TOTAL
20140	GEOTEXTILE FABRIC TYPE SAS NON WOVEN	SY	46	46	---	92
20214	SELECT FILL CRUSHED STONE	TON	20	20	---	40
20241	RIPRAP FILTER FABRIC, TYPE HR	SY	136	136	---	272
90301	PILING CIP CONCRETE 10 3/4 X 0.365-INCH	LF	210	180	---	390
90302	REINFORCED CONCRETE BRIDGE ABUTMENTS, AND WINGWALLS, B-13-880	LS	---	---	---	1
	EXCAVATION FOR STRUCTURES BRIDGES B-13-880	LS	---	---	---	1
	BACKFILL STRUCTURE TYPE A	TON	79	79	---	158
	CONCRETE MASONRY BRIDGES	CY	27	27	---	54
	PROTECTIVE SURFACE TREATMENT	SY	25	25	---	50
	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	1200	1200	---	2400
	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	1440	1440	---	2880
	RUBBERIZED MEMBRANE WATERPROOFING	SY	6	6	---	12
	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	98	98	---	196
	GEOTEXTILE TYPE DF SCHEDULE A	SY	10	10	---	20
90305	PREFABRICATED STEEL TRUSS PEDESTRIAN BRIDGE B-13-880 LRFD	LS	---	---	---	1
	PROTECTIVE SURFACE TREATMENT	SY	---	---	133	133
	PAINTING EPOXY SYSTEM STEEL TRUSS B-13-880	LS	---	---	1	1
90308	CUT-STONE BOULDERS	SF	960	960	---	1920
90309	RAILING PEDESTRIAN STEEL B-13-880	LF	24	24	---	48
	NON-BID ITEMS					
	BRIDGE SEAT PROTECTION					
	FILLER		1/2"	1/2"		



STRUCTURE BACKFILL LIMITS

- PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN.



ABUTMENT BACKFILL PAY QUANTITY DIAGRAM

- L = OUT TO OUT OF ABUTMENT, INCLUDING WINGS (FT)
- H = AVERAGE ABUTMENT FILL HEIGHT (FT)
- EF = EXPANSION FACTOR (1.20 FOR CY BID ITEMS AND 1.00 FOR TON BID ITEMS)
- $V_{CF} = (L)(3.0')(H) + (L)(0.5)(1.5H)(H)$
- $V_{CY} = V_{CF}(EF)/27$
- $V_{TON} = V_{CY}(2.0)$

SHEET 2 OF 8

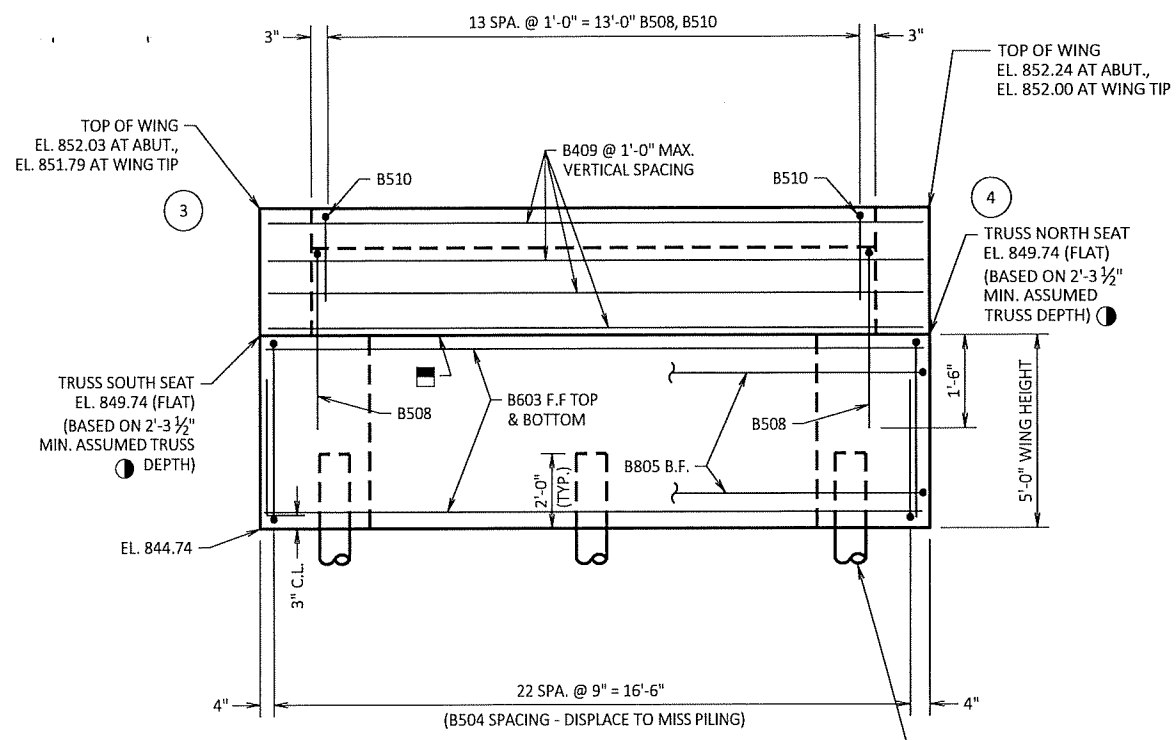
10160 & 12952
MADISON, WI
CONTRACT NO.: 8572
CITY OF MADISON
GARVER PATH
CITY OF MADISON
10160
S-2

REVISION
 DATE BY
 MARKS
 DESIGNED BY: CAH
 DATE: 10/01/2020
 Scale: S-2
 #####

STRUCTURE B-13-880

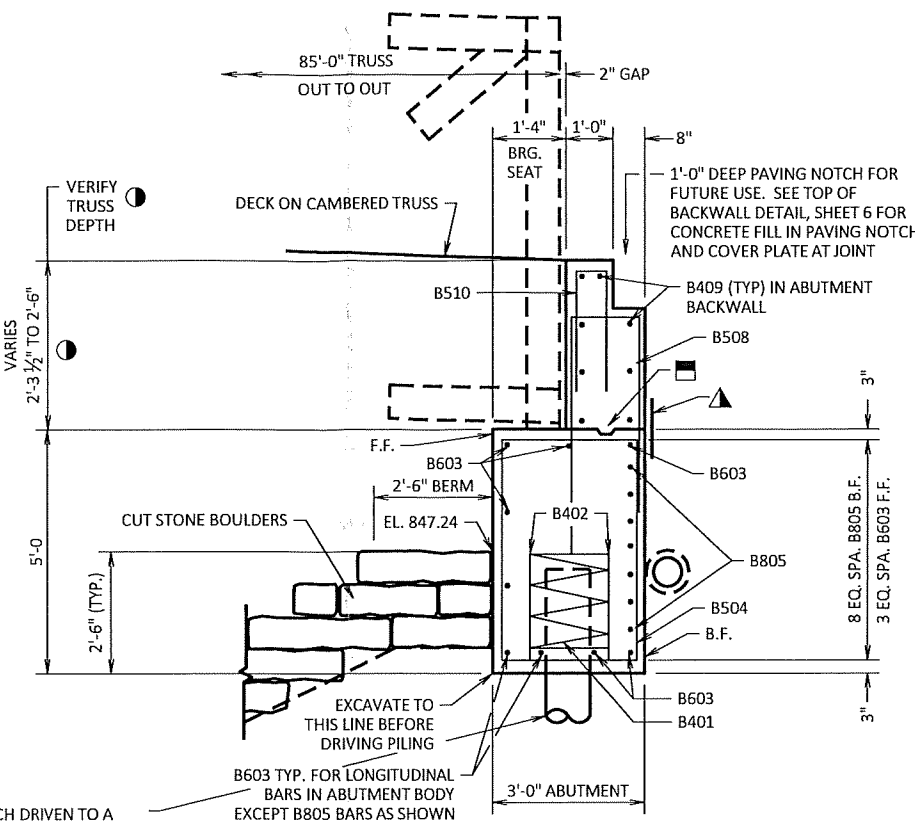
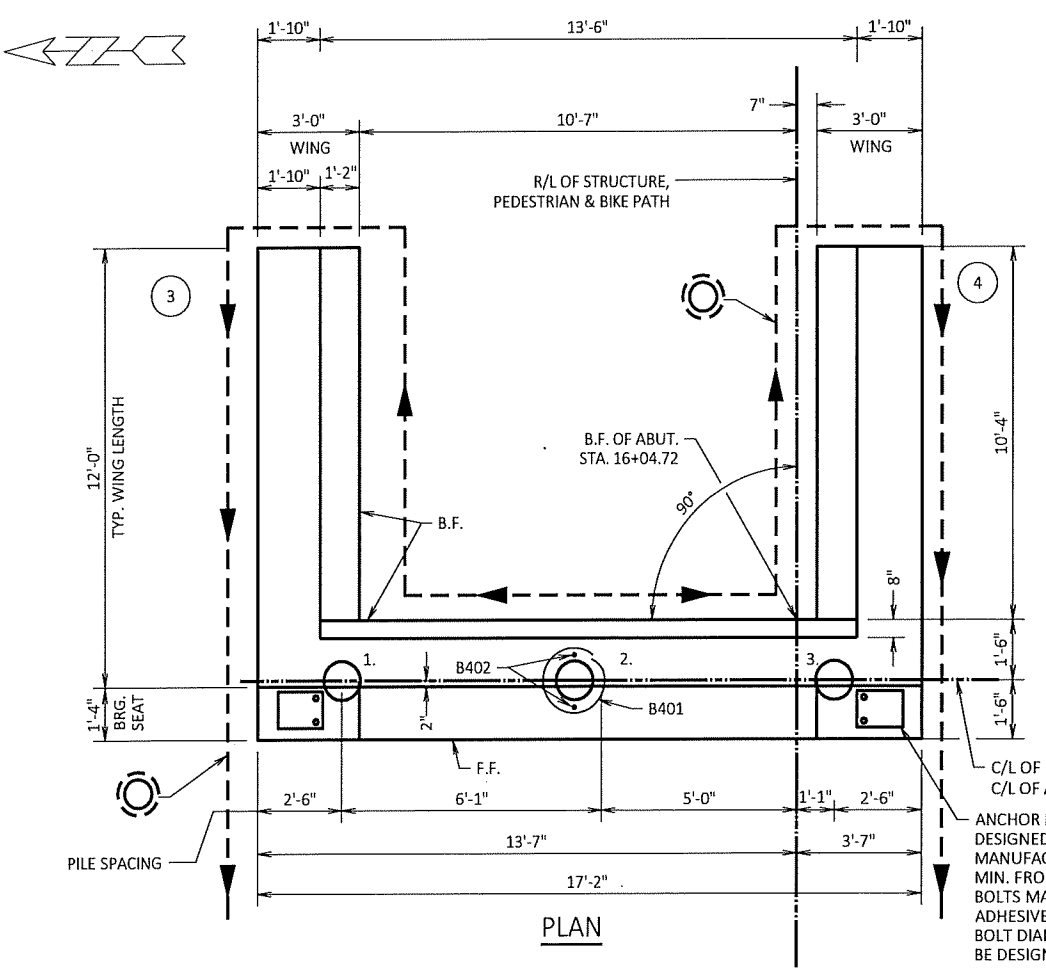
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ORIGINAL

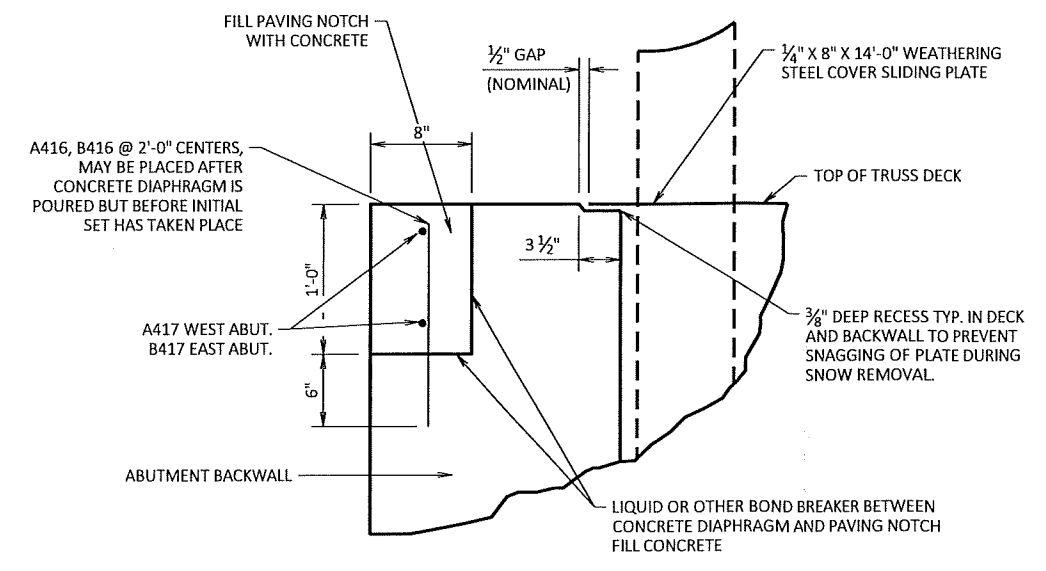


ELEVATION
(LOOKING AT FRONT FACE OF ABUTMENT)

PILING CIP 10 3/4 X 0.365-INCH DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 110 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED PILE LENGTH ARE 60'-0" AT THE EAST ABUTMENT.



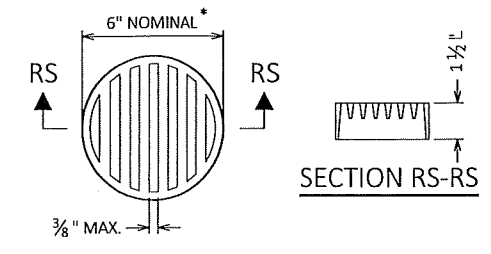
SECTION THRU ABUTMENT



TOP OF BACKWALL DETAIL

LEGEND

- CONSTRUCTION JOINT FORMED BY BEVELED 2X6. PLACE 3/4" BEVEL ON F.F. OF WINGS.
- SET ABUTMENT BEARING SEAT TO ELEVATION DEPENDENT ON TRUSS DEPTH. TRUSS DEPTH INCLUDES MIN. ASSUMED DEPTH TO LOW CHORD (1'-10") AND ASSUMED HEIGHT OF BEARING (5 1/2").
- ▲ HORIZONTAL 18" WIDE RUBBERIZED MEMBRANE WATERPROOFING. PLACE ON B.F. OF CONSTRUCTION JOINT AS SHOWN.
- PIPE UNDERDRAIN WRAPPED 6-INCH. EXTEND THRU GEOTEXTILE AT FACE OF CUT STONE BOULDERS. SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. PROVIDE RODENT PROTECTION AT ENDS OF PIPE. SEE RODENT SHIELD DETAIL, THIS SHEET.
- F.F. = FRONT FACE B.F. = BACK FACE CL. = CLEAR
- INDICATES WING NUMBER.



RODENT SHIELD DETAIL

*DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

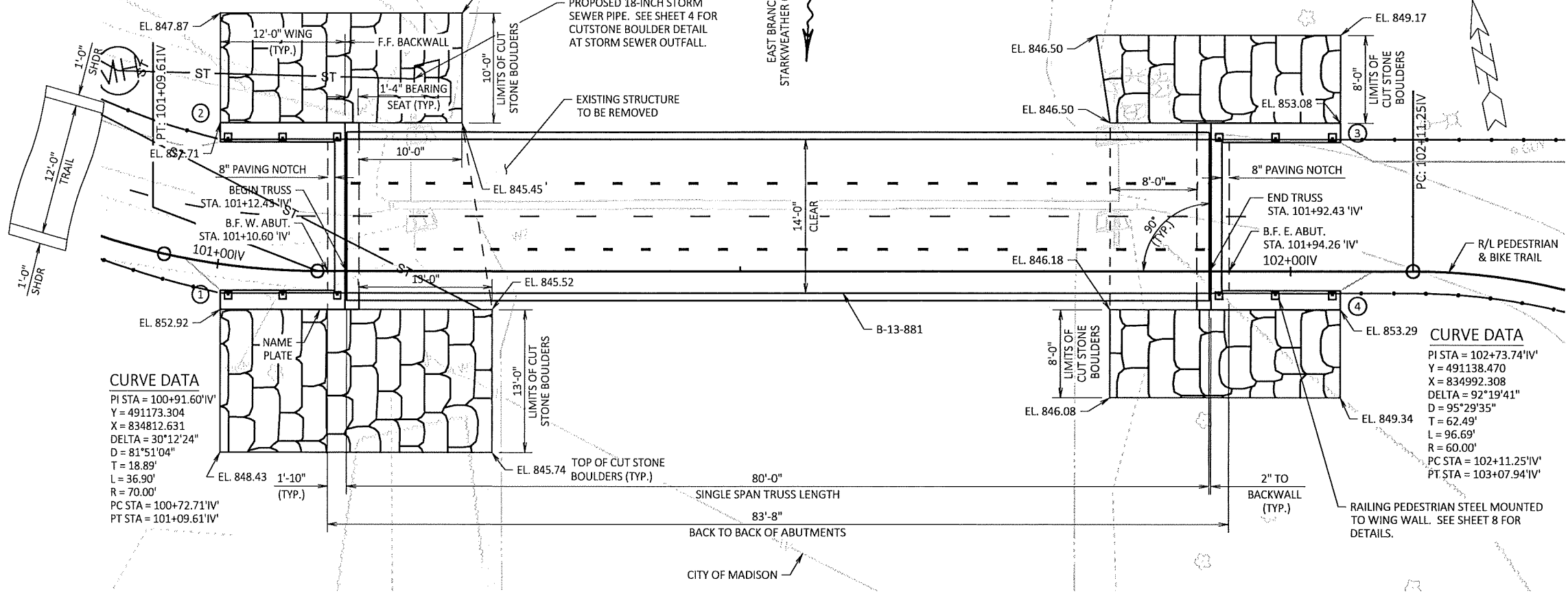
THE RODENT SHIELD, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.

10160 & 12952	MADISON, WI	8572	CONTRACT NO:	S-6
EAST ABUTMENT	GARVER PATH	CITY OF MADISON	10160	S-6
SHEET 6 OF 8		STRUCTURE B-13-880		DRAWN BY STD PLANS CK'D. CDH

ORIGINAL

(X) INDICATES WING NUMBER



CURVE DATA
 PI STA = 100+91.60' IV'
 Y = 491173.304
 X = 834812.631
 DELTA = 30°12'24"
 D = 81°51'04"
 T = 18.89'
 L = 36.90'
 R = 70.00'
 PC STA = 100+72.71' IV'
 PT STA = 101+09.61' IV'

CURVE DATA
 PI STA = 102+73.74' IV'
 Y = 491138.470
 X = 834992.308
 DELTA = 92°19'41"
 D = 95°29'35"
 T = 62.49'
 L = 96.69'
 R = 60.00'
 PC STA = 102+11.25' IV'
 PT STA = 103+07.94' IV'

PLAN
 (SINGLE SPAN PREFABRICATED STEEL TRUSS B-13-881)

NOTE:
 ELEVATIONS GIVEN FOR CUT-STONE BOULDERS ARE AT TOP OF BOULDER. HEIGHT OF LOWEST COURSE TO BE 1'-0" MIN.

DESIGN DATA

DESIGN SPECIFICATIONS:
 AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS
 AASHTO LRFD BRIDGE SPECIFICATIONS FOR THE DESIGN OF PEDESTRIAN BRIDGES

LIVE LOAD:
 90 PSF PEDESTRIAN LOAD
 20,000 LB. VEHICLE LOAD (H10)

WIND LOAD:
 WIND LOADS DESIGNED IN ACCORDANCE TO AASHTO DESIGN FOR PEDESTRIAN BRIDGES AND AASHTO SIGNS.

MATERIAL PROPERTIES:
 CONCRETE MASONRY BRIDGES $f'_c = 3,500$ PSI
 HIGH STRENGTH BAR STEEL REINFORCEMENT GRADE 60 $f_y = 60,000$ PSI
 HIGH STRENGTH STRUCTURAL STEEL ASTM A847, A588, A606, A709 OR A242 $f_y = 50,000$ PSI
 STRUCTURAL CARBON STEEL ASTM A36 $f_y = 36,000$ PSI

FOUNDATION DATA:

ABUTMENTS TO BE SUPPORTED ON PILING CIP CONCRETE 10 3/4" X 0.365-INCH DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 100* TONS PER PILE AS REQUIRED BY THE MODIFIED GATES DYNAMIC EQUATION. ESTIMATED 60' LONG AT THE EAST ABUTMENT AND 65' LONG AT THE WEST ABUTMENT.

* THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5 USING MODIFIED GATES TO DETERMINE DRIVEN PILE CAPACITY.

HYDRAULIC DATA:

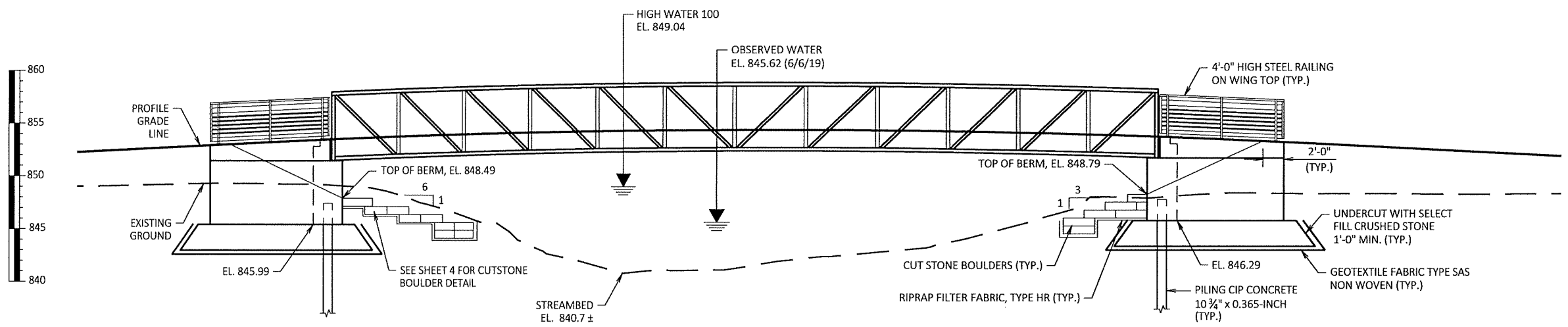
100 YEAR FREQUENCY
 $Q_{100} = 868$ C.F.S.
 VEL. = 2.26 F.P.S.
 HW₁₀₀ = EL. 849.04
 WATERWAY AREA = 460 SQ. FT.
 DRAINAGE AREA = 8.2 SQ. MI.
 SCOUR CRITICAL CODE = 5

2 YEAR FREQUENCY

$Q_2 = 268$ C.F.S.
 VEL. = 1.1 F.P.S.
 HW₂ = EL. 846.78



Chad Halverson
 November 23, 2020



ELEVATION
 (LOOKING NORTH)

LIST OF DRAWINGS

1. GENERAL PLAN
2. CROSS SECTION, QUANTITIES & NOTES
3. SUBSURFACE EXPLORATION
4. WEST ABUTMENT
5. WEST ABUTMENT DETAILS
6. EAST ABUTMENT
7. EAST ABUTMENT DETAILS
8. RAILING PEDESTRIAN STEEL

BRIDGE OFFICE CONTACT

AARON BONK, P.E.
 TELEPHONE: (608) 261-0261

CONSULTANT CONTACT

CHAD HALVERSON, P.E.
 TELEPHONE: (608) 663-1218

NO.	DATE	REVISION	BY

KL Engineering
 [A] Better Experience

ACCEPTED *AMR* SDR 12/08/20
 CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-13-881
 IVY STREET PEDESTRIAN & BIKE PATH OVER STARKWEATHER CREEK

COUNTY DANE TOWN/CITY/VILLAGE MADISON

DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

DESIGNED BY CAH DESIGN CK'D. CDH DRAWN BY STD PLANS CK'D. CDH

GENERAL PLAN SHEET 1 OF 8

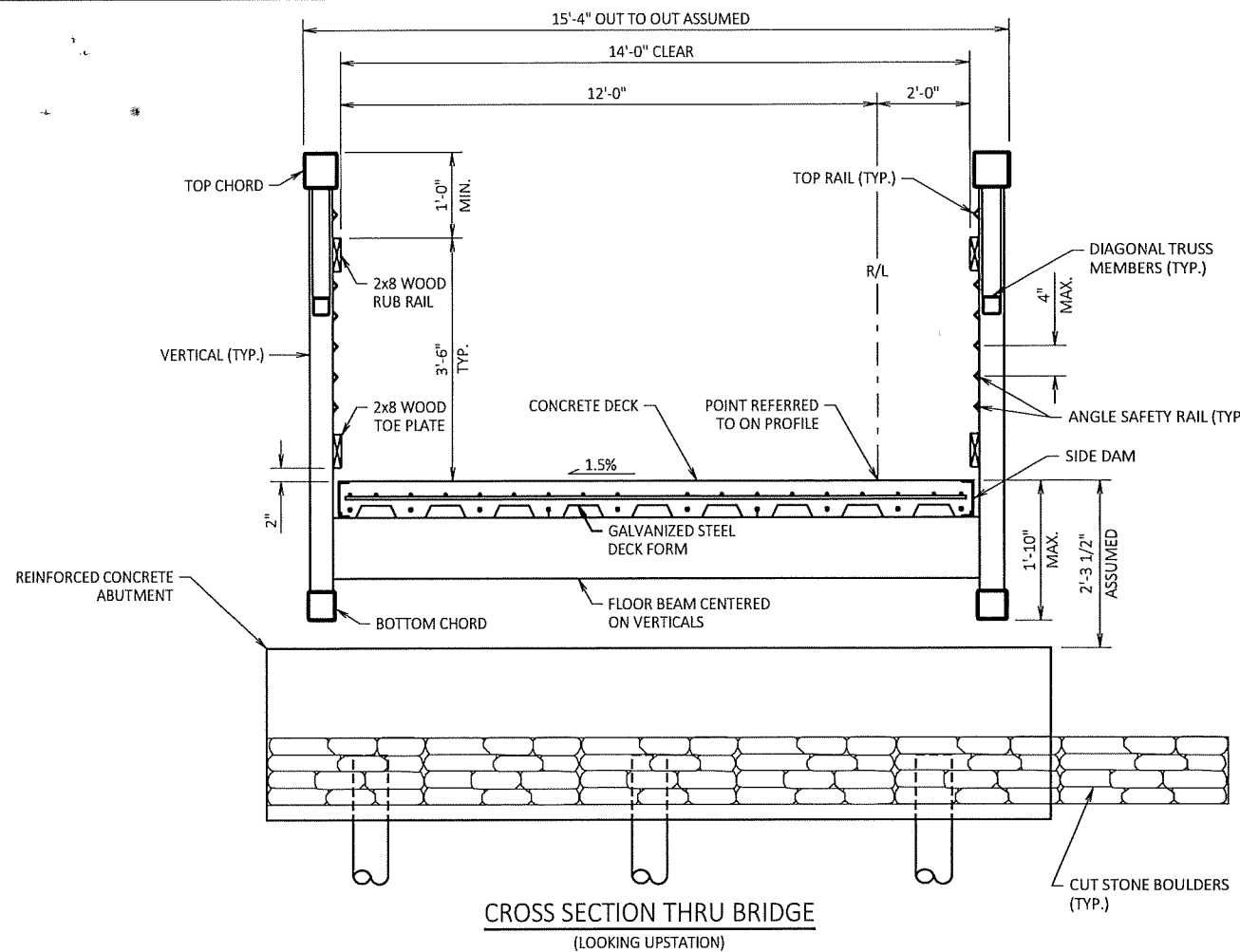
10160 & 12952
 MADISON, WI
 CONTRACT NO: 8572

GENERAL PLAN
 GARVER PATH
 CITY OF MADISON



10160
 S-9

ORIGINAL



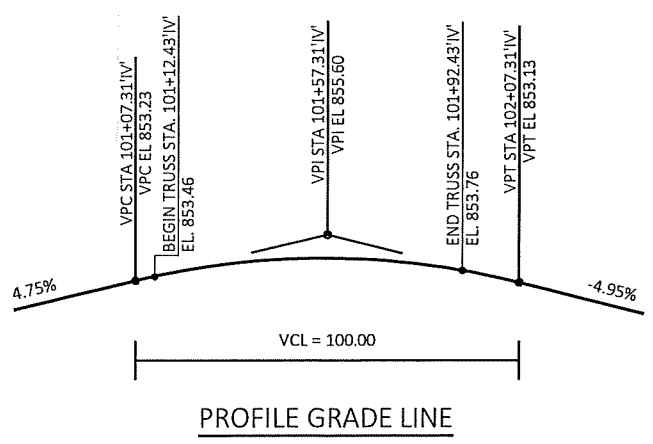
BRIDGE REACTIONS (SERVICE LOADS)

LOAD TYPE	"P" (LBS)	"H" (LBS)	"L" (LBS)
DEAD	25,095		
LIVE	26,250		
VEHICLE	14,280		
WIND		8,085	5,460
WINDWARD	-11,340		
LEEWARD	1,785		
STREAM			
THERMAL			5,040

P = VERTICAL LOAD AT EACH BASE PLATE (4 PER BRIDGE)
H = HORIZONTAL LOAD AT EACH SUBSTRUCTURE UNIT (2 PER BRIDGE)
L = LONGITUDINAL LOAD AT EACH FIXED BEARING (4 PER BRIDGE)

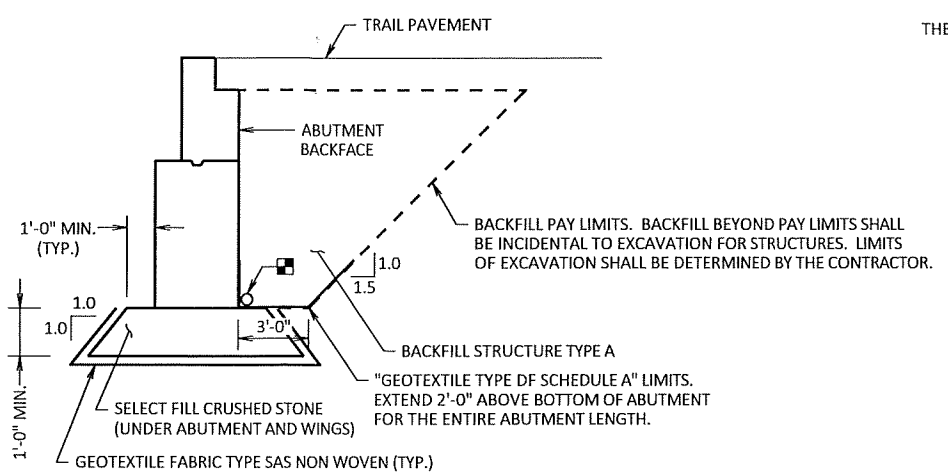
- NOTES:**
- VALUES IN THIS TABLE ARE ESTIMATES. ACTUAL VALUES SHALL BE PROVIDED BY PREFABRICATED BRIDGE MANUFACTURER.
 - "+" INDICATES DOWNWARD LOAD
"-" INDICATES UPWARD LOAD

BRIDGE LENGTH = 80'
BRIDGE CLEAR WIDTH = 14'
DECK TYPE = CONCRETE
RAIL HEIGHT = 54" MIN.
LIVE LOAD = 90 PSF/H10



TOTAL ESTIMATED QUANTITIES

ITEM NUMBER	ITEM DESCRIPTION	UNIT	W. ABUT	E. ABUT	SUPER.	TOTAL
20140	GEOTEXTILE FABRIC TYPE SAS NON WOVEN	SY	46	46	---	92
20214	SELECT FILL CRUSHED STONE	TON	20	20	---	40
20241	RIPRAP FILTER FABRIC, TYPE HR	SY	118	81	---	199
90300	REMOVING OLD STRUCTURE OVER WATERWAY STA. 101+50	LS	---	---	---	1
90301	PILING CIP CONCRETE 10 3/4 X 0.365-INCH	LF	195	180	---	375
90303	REINFORCED CONCRETE BRIDGE ABUTMENTS, AND WINGWALLS, B-13-881	LS	---	---	---	1
	EXCAVATION FOR STRUCTURES BRIDGES B-13-881	LS	---	---	---	1
	BACKFILL STRUCTURE TYPE A	TON	79	79	---	158
	CONCRETE MASONRY BRIDGES	CY	27	27	---	54
	PROTECTIVE SURFACE TREATMENT	SY	25	25	---	50
	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	1200	1200	---	2400
	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	1440	1440	---	2880
	RUBBERIZED MEMBRANE WATERPROOFING	SY	6	6	---	12
	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	98	98	---	196
	GEOTEXTILE TYPE DF SCHEDULE A	SY	10	10	---	20
90305	PREFABRICATED STEEL TRUSS PEDESTRIAN BRIDGE B-13-881 LRFD	LS	---	---	---	1
	PROTECTIVE SURFACE TREATMENT	SY	---	---	125	125
	PAINTING EPOXY SYSTEM STEEL TRUSS B-13-881	LS	---	---	1	1
90308	CUT-STONE BOULDERS	SF	820	520	---	1340
90310	RAILING PEDESTRIAN STEEL B-13-881	LF	24	24	---	48
	NON-BID ITEMS					
	BRIDGE SEAT PROTECTION					
	FILLER		1/2"	1/2"		

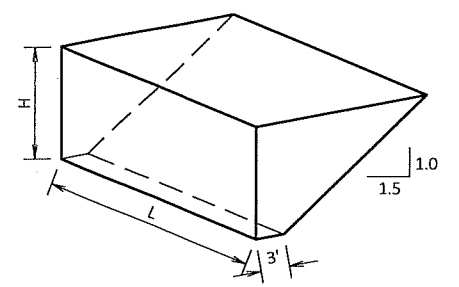


STRUCTURE BACKFILL LIMITS

PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN.

GENERAL NOTES

- DRAWINGS SHALL NOT BE SCALED.
- BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS SHOWN OR NOTED OTHERWISE.
- THE FIRST DIGIT OF A THREE DIGIT AND THE FIRST TWO DIGITS OF A FOUR DIGIT BAR MARK SIGNIFIES THE BAR SIZE.
- AT ABUTMENTS, ALL EXCAVATED VOLUME NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL.
- THE EXISTING GROUND LINE SHALL BE THE UPPER LIMITS OF EXCAVATION FOR STRUCTURES.
- THE BACKFILL QUANTITIES ARE BASED ON THE PAY LIMITS SHOWN ON THE PLANS AND MAY NOT REFLECT ACTUAL PLACED QUANTITIES. "BACKFILL STRUCTURE TYPE A" REQUIRED DIRECTLY BEHIND ABUTMENTS AND ABUTMENT WINGS FOR 3 FEET. BACKFILL PLACED BEYOND PAY LIMITS OR EXCEEDING PLAN QUANTITIES SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES.
- EXCAVATION BELOW THE ABUTMENTS AND WINGS IS REQUIRED. UNDERCUT TO BE FILLED WITH SELECT FILL CRUSHED STONE TO A MINIMUM OF 1'-0" BELOW BOTTOM OF ABUTMENT. EXCAVATION LIMITS TO EXTEND 1'-0" BEYOND ABUTMENT AND WING DIMENSIONS.
- ALL PREFABRICATED BRIDGE DIMENSIONS ARE APPROXIMATE. CONTRACTOR SHALL VERIFY FINAL DIMENSIONS WITH BRIDGE MANUFACTURER.
- THE DISTANCE BETWEEN THE FRONT FACE OF ABUTMENT BACKWALLS SHALL BE 80'-4" WHICH INCLUDES THE EXPANSION JOINT WIDTH REQUIRED BY THE BRIDGE MANUFACTURER.
- WOOD RUB RAIL SHALL BE S4S (SURFACED 4 SIDES).
- ALL FASTENERS USED TO SECURE WOOD RUB RAILS AND TOE PLATES TO SUPPORT FRAMING SHALL BE STAINLESS STEEL.
- IF TREATED TIMBER OR LUMBER MEMBERS ARE CUT IN THE FIELD OR DURING FABRICATION, SEAL ALL CUT ENDS PER SECTION 507.3.7 OF THE WISDOT STANDARD SPECIFICATIONS.
- ALL LUMBER SHALL BE PRESSURE TREATED WITH ALKALINE COPPER OR QUATERNARY (ACQ) TO A 0.4 PCF RETENTION IN ACCORDANCE WITH SECTION 507 OF THE WISDOT STANDARD SPECIFICATIONS.
- THE PREFABRICATED STEEL TRUSS PEDESTRIAN BRIDGE B-13-881 LRFD BID ITEM INCLUDES DESIGNING, FURNISHING AND INSTALLING THE PREFABRICATED BRIDGE, BEARING PLATES, PADS, BOLTS, ANCHOR BOLTS, GROUT, WOOD AND STEEL RAILS AND DECKING MATERIALS INCLUDING CONCRETE MASONRY AND BAR STEEL REINFORCEMENT. USE "BAR STEEL REINFORCEMENT HS COATED STRUCTURES" IN THE BRIDGE DECK.
- COAT, PAINT AND FINISH STEEL TRUSS AND RAILING PER SECTION 517 OF THE WISDOT STANDARD SPECIFICATIONS. PAINT COLOR FOR THE STEEL TRUSS AND RAILING SHALL BE FEDERAL STANDARD 595B COLOR #30045, BROWN.
- PROTECTIVE SURFACE TREATMENT SHALL BE APPLIED TO THE TOP OF DECK, AND TO ALL EXPOSED FACES OF THE ABUTMENTS AND WINGS.
- APPLY BRIDGE SEAT PROTECTION TO BEAM SEATS PRIOR TO SETTING BEARINGS PER SECTION 502.3.12 OF THE CURRENT WISDOT SPECIFICATIONS.
- THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH CUT STONE BOULDERS AND RIPRAP FILTER FABRIC, TYPE HR (TYP.) TO THE LIMITS SHOWN ON SHEET 1 AND ON THE ABUTMENT SHEETS OR AS DIRECTED BY THE ENGINEER. THE AREAS OUTSIDE THE WINGS AND ENDS OF ABUTMENT SHALL BE COVERED WITH CUT-STONE BOULDERS TO THE LIMITS SHOWN ON SHEET 1 OR AS DIRECTED BY THE ENGINEER.
- THE TRUSS SHALL BE ANCHORED TO THE ABUTMENTS IN A MANNER TO:
- ALLOW THERMAL MOVEMENTS OF THE SUPERSTRUCTURE ALONG C/L OF THE PEDESTRIAN BRIDGE.
- PREVENT HORIZONTAL TRANSLATION OF THE SUPERSTRUCTURE PERPENDICULAR TO THE C/L OF THE PEDESTRIAN BRIDGE.
- THE TRUSS SHALL BE CAMBERED TO OFFSET THE CALCULATED DEAD LOAD DEFLECTION.



ABUTMENT BACKFILL PAY QUANTITY DIAGRAM

L = OUT TO OUT OF ABUTMENT, INCLUDING WINGS (FT)
H = AVERAGE ABUTMENT FILL HEIGHT (FT)
EF = EXPANSION FACTOR (1.20 FOR CY BID ITEMS AND 1.00 FOR TON BID ITEMS)
V_{CF} = (L)(3.0')(H) + (L)(0.5)(1.5H)(H)
V_{CY} = V_{CF}/27
V_{TON} = V_{CY}(2.0)

SHEET 2 OF 8

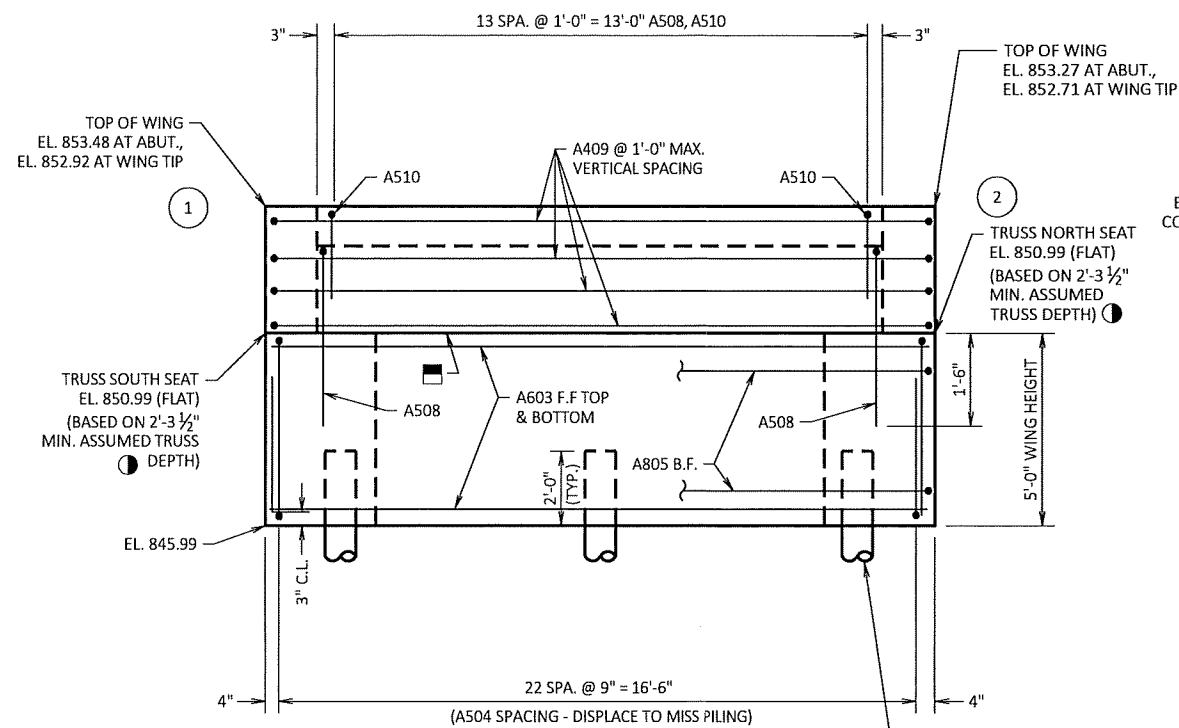
CROSS SECTION, QUANTITIES & NOTES
GARVER PATH
CITY OF MADISON
10160 & 12952
MADISON, WI
CONTRACT NO: 8572
S-10
 Designed By: CAH Date: 10/01/2020
 REVISION DATE BY
 MARK
 Scale:

STRUCTURE B-13-881

DRAWN BY: STD PLANS CK'D: CDH

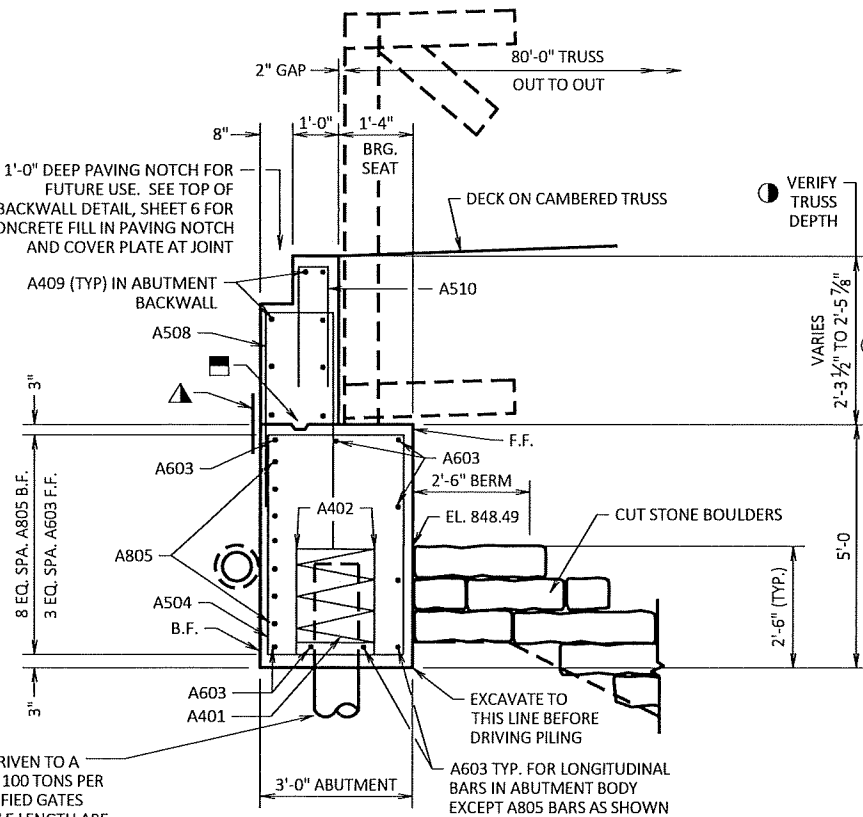
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S-10

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ELEVATION

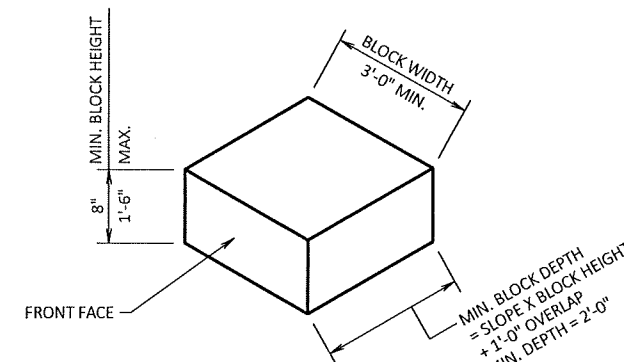
(LOOKING AT FRONT FACE OF ABUTMENT)



SECTION THRU ABUTMENT

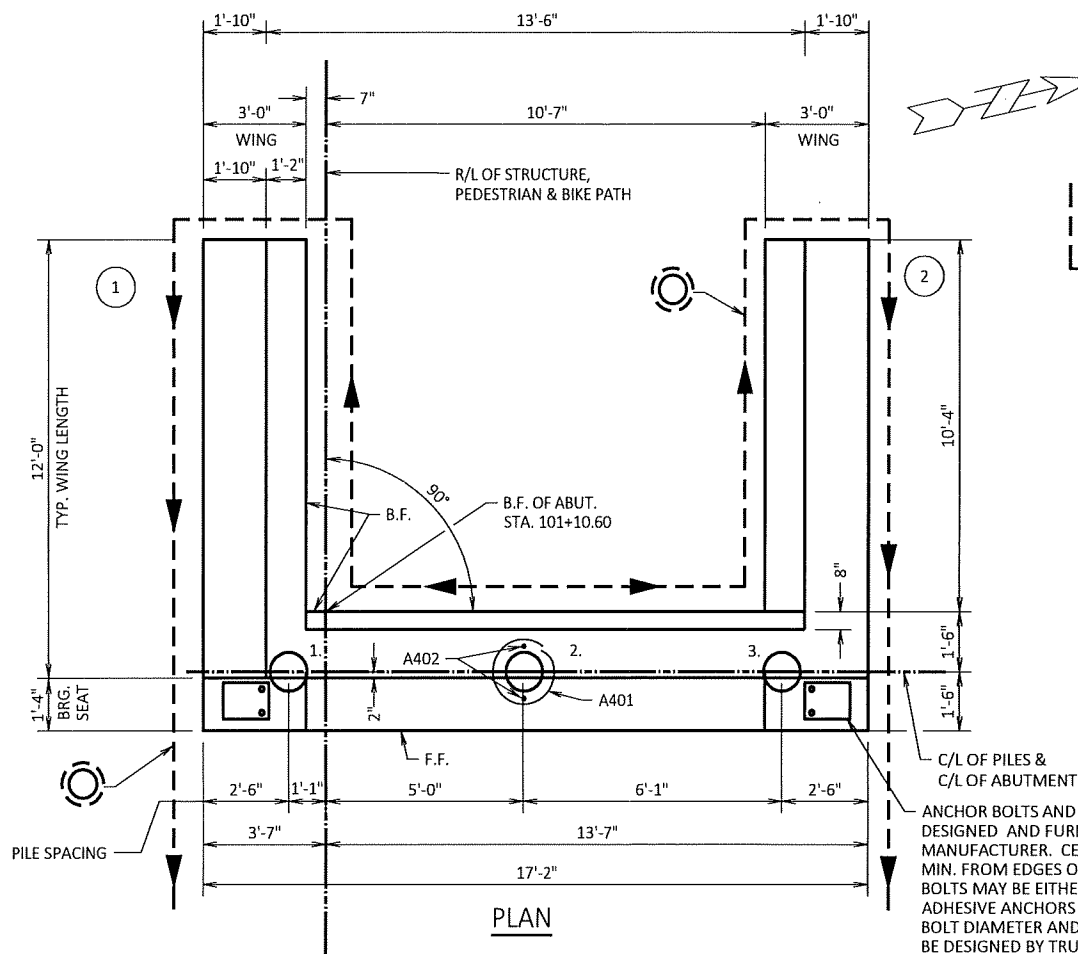
LEGEND

- CONSTRUCTION JOINT FORMED BY BEVELED 2X6. PLACE 3/4" BEVEL ON F.F. OF WINGS.
- SET ABUTMENT BEARING SEAT TO ELEVATION DEPENDENT ON TRUSS DEPTH. TRUSS DEPTH INCLUDES MIN. ASSUMED DEPTH TO LOW CHORD (1'-10") AND ASSUMED HEIGHT OF BEARING (5 1/2").
- ▲ HORIZONTAL 18" WIDE RUBBERIZED MEMBRANE WATERPROOFING. PLACE ON B.F. OF CONSTRUCTION JOINT AS SHOWN.
- PIPE UNDERDRAIN WRAPPED 6-INCH. EXTEND THRU GEOTEXTILE AT FACE OF CUT STONE BOULDERS. SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. PROVIDE RODENT PROTECTION AT ENDS OF PIPE. SEE RODENT SHIELD DETAIL, SHEET 6.
- F.F. = FRONT FACE B.F. = BACK FACE CL. = CLEAR
- INDICATES WING NUMBER.

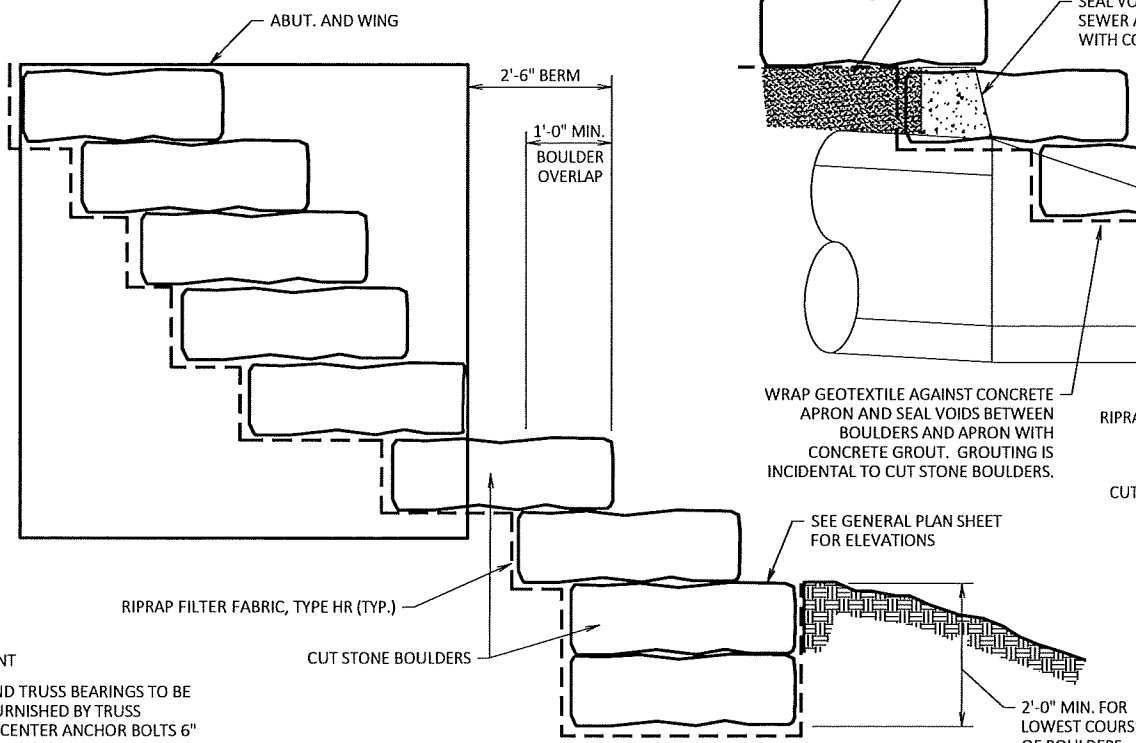


CUT STONE BOULDER DETAIL - 1

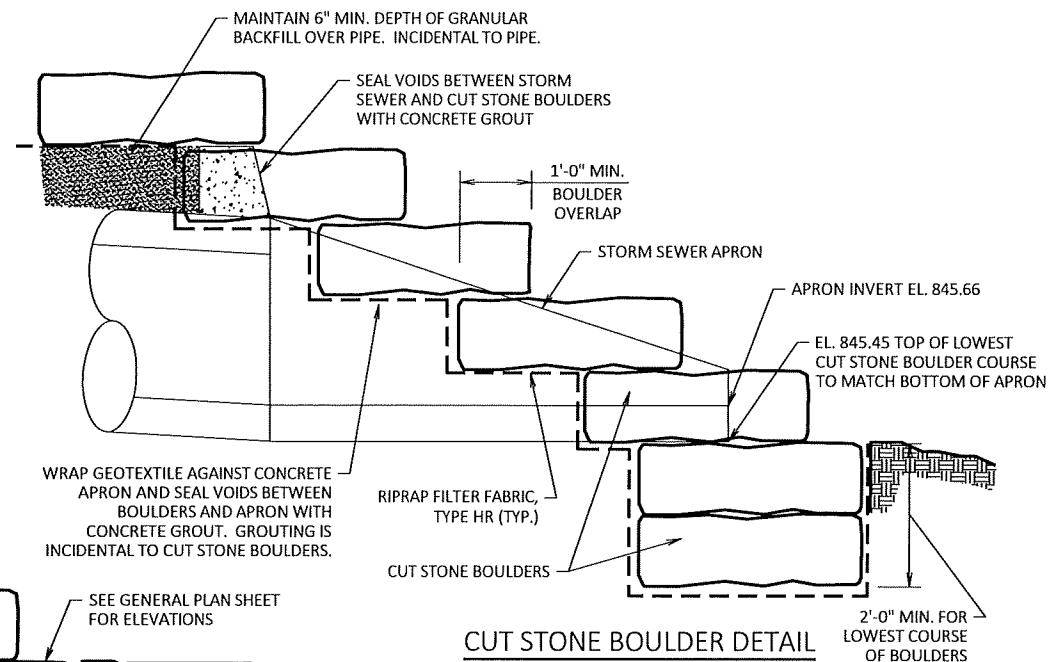
UNDERLAY CUT-STONE BOULDER WALL WITH GEOTEXTILE TYPE HR. FOLD FABRIC SHEET ALONG BOTTOM AND BACK OF WALL STEPS, EXTEND FABRIC TO OVERLAP 2'-0" MIN. TO FRONT FACES OF BRIDGE WING WALLS.



PLAN



CUT STONE BOULDER DETAIL - 2



CUT STONE BOULDER DETAIL AT STORM SEWER OUTFALL

SHEET 4 OF 8

DATE	BY	SCALE
10/17/2020	CAH	S-12
REVISION		
MARK		###

10160 & 12952
MADISON, WI
CONTRACT NO: 8572

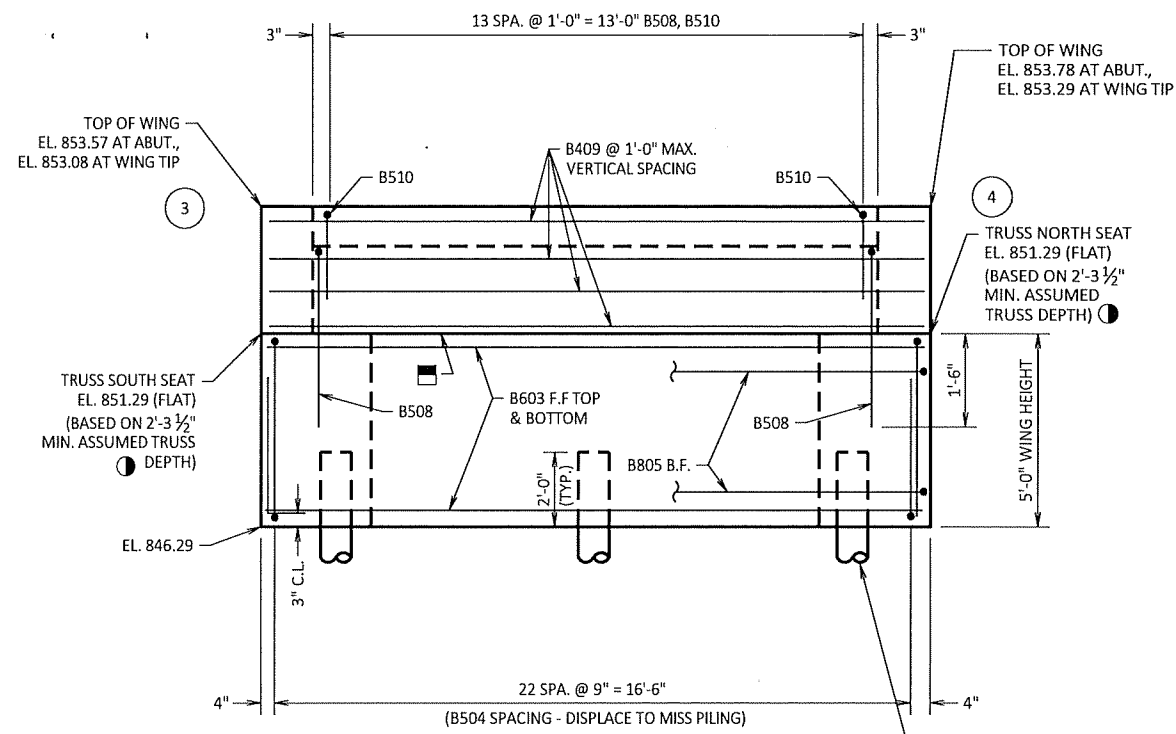
WEST ABUTMENT
GARVER PATH
CITY OF MADISON



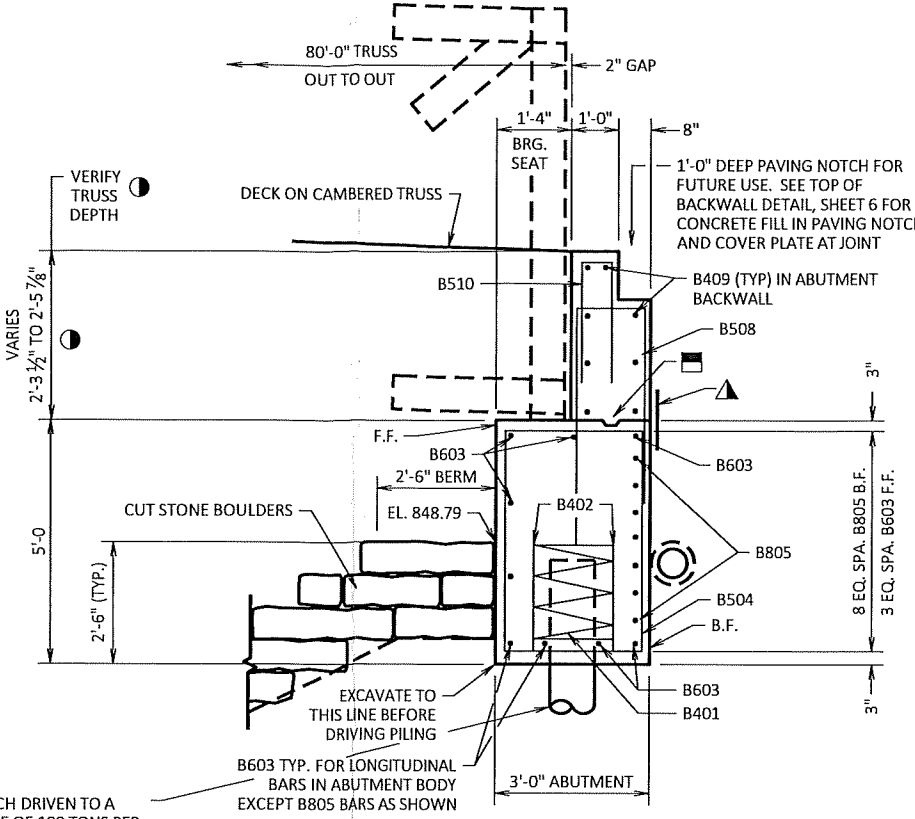
10160
S-12

STRUCTURE B-13-881
DRAWN BY STD PLANS CK'D. CDH

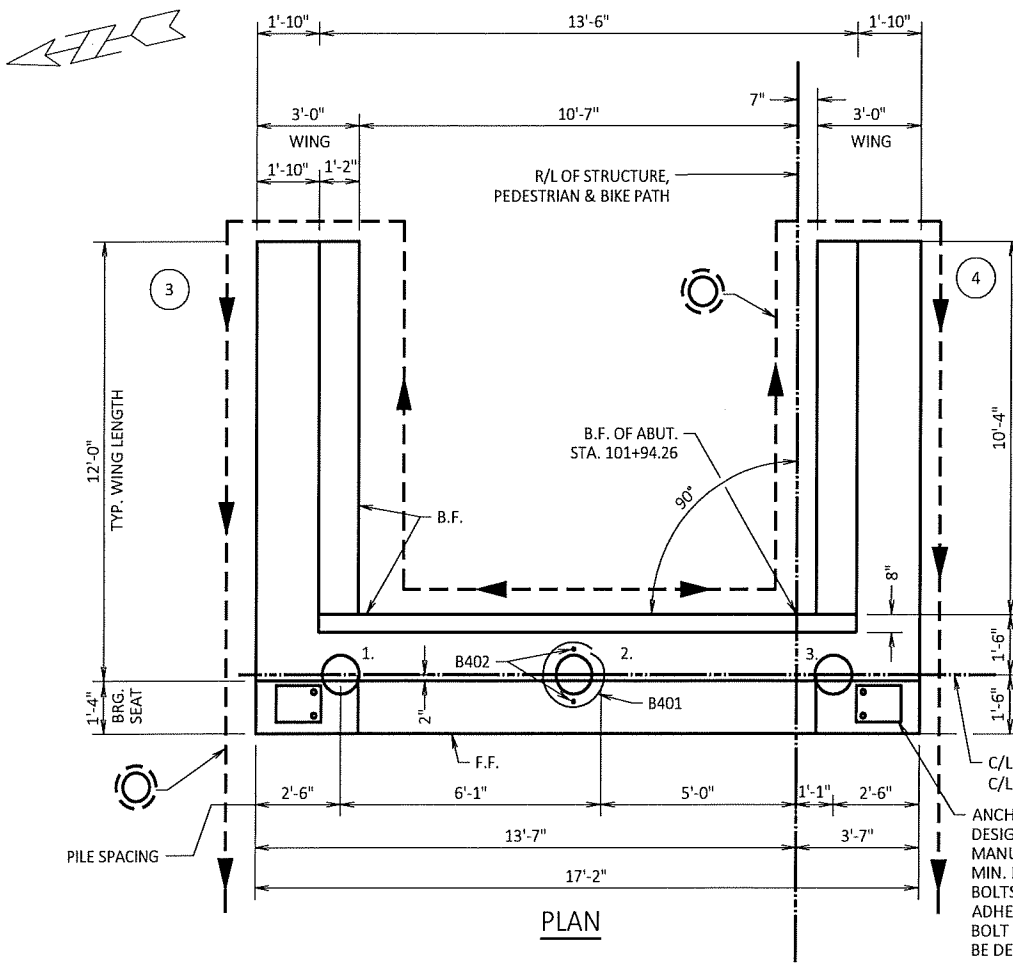
O. R. 16. INCA



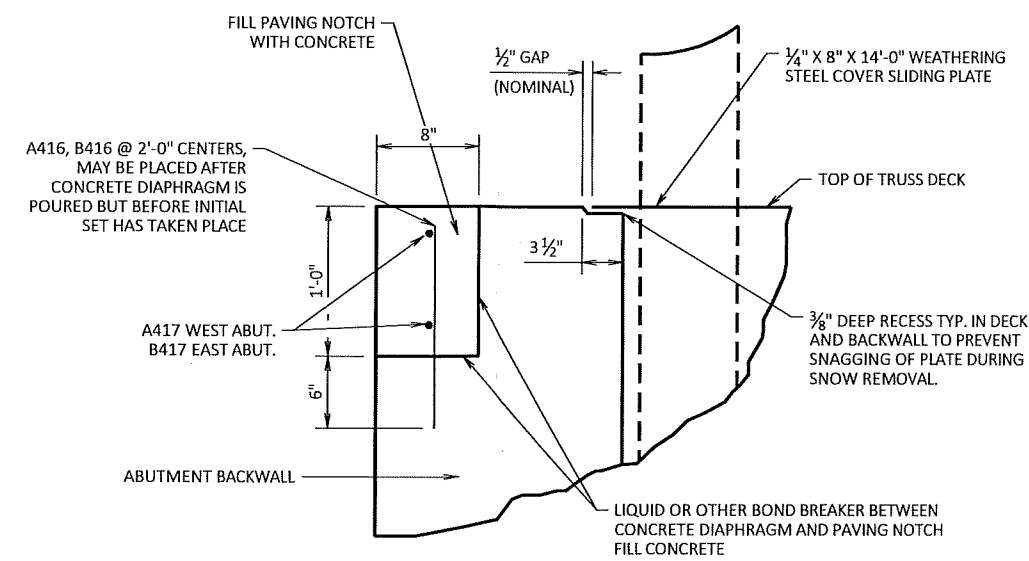
ELEVATION
(LOOKING AT FRONT FACE OF ABUTMENT)



SECTION THRU ABUTMENT

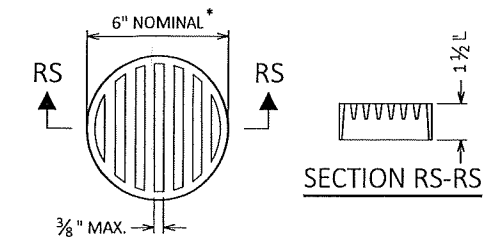


PLAN



TOP OF BACKWALL DETAIL

- LEGEND**
- CONSTRUCTION JOINT FORMED BY BEVELED 2X6. PLACE 3/4" BEVEL ON F.F. OF WINGS.
 - SET ABUTMENT BEARING SEAT TO ELEVATION DEPENDENT ON TRUSS DEPTH. TRUSS DEPTH INCLUDES MIN. ASSUMED DEPTH TO LOW CHORD (1'-10") AND ASSUMED HEIGHT OF BEARING (5 1/2").
 - ▲ HORIZONTAL 18" WIDE RUBBERIZED MEMBRANE WATERPROOFING. PLACE ON B.F. OF CONSTRUCTION JOINT AS SHOWN.
 - PIPE UNDERDRAIN WRAPPED 6-INCH. EXTEND THRU GEOTEXTILE AT FACE OF CUT STONE BOULDERS. SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. PROVIDE RODENT PROTECTION AT ENDS OF PIPE. SEE RODENT SHIELD DETAIL, THIS SHEET.
- F.F. = FRONT FACE B.F. = BACK FACE CL. = CLEAR
- INDICATES WING NUMBER.

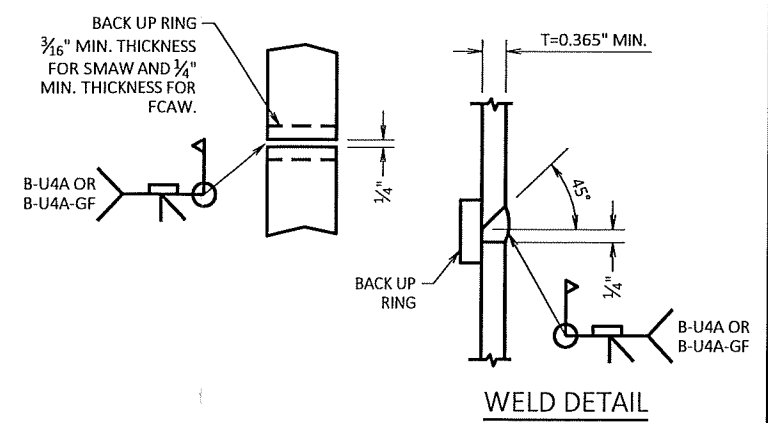


RODENT SHIELD DETAIL

*DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

THE RODENT SHIELD, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.



WELD DETAIL

CAST-IN-PLACE 'PIPE PILE' SPLICE DETAILS

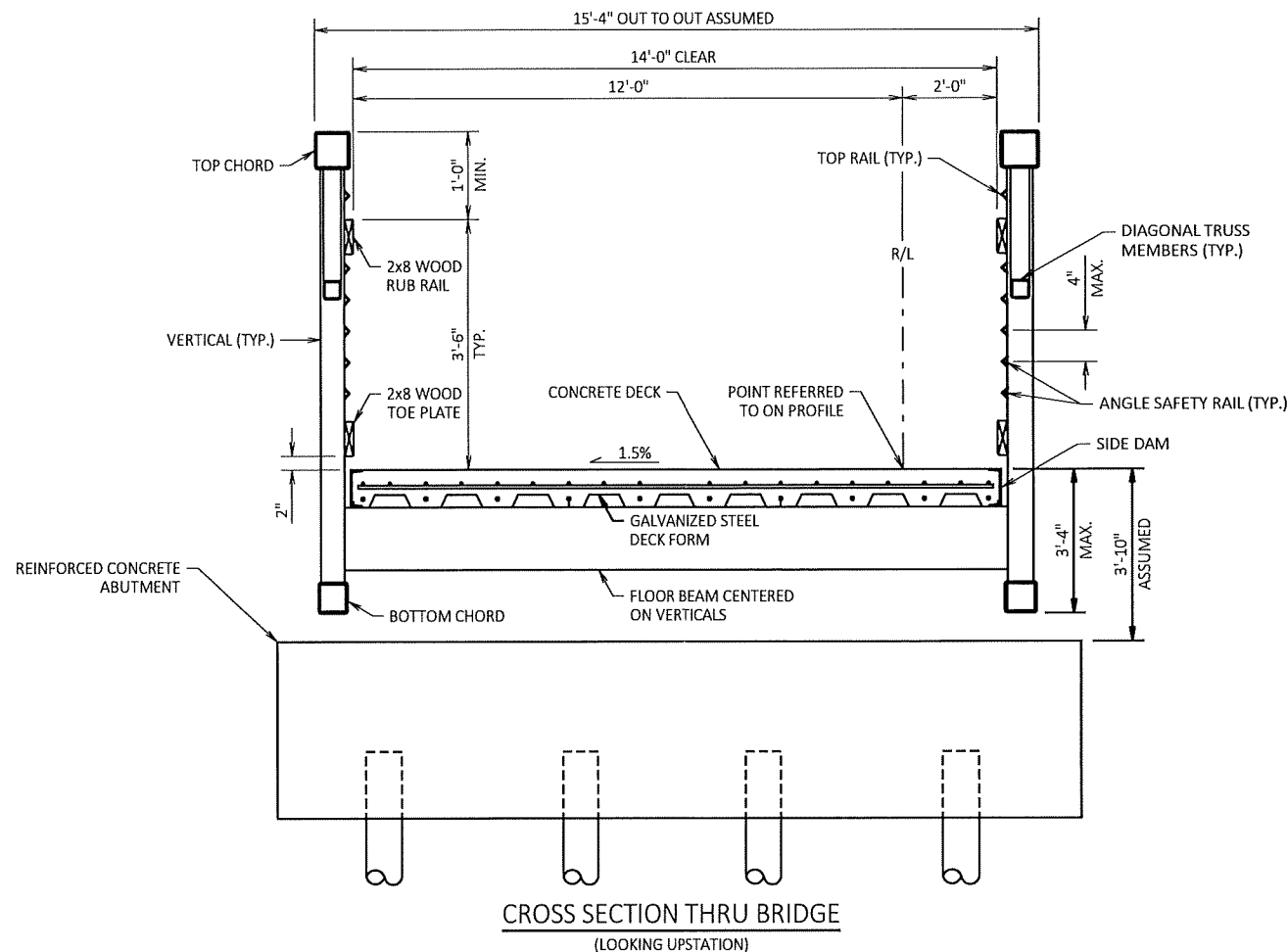
Scale	S-14
REVISION	DATE
MARKS	DATE
Drawn By: CAH	Date: 10/12/2020
#####	#####

10160 & 12952
MADISON, WI
CONTRACT NO: 8572
EAST ABUTMENT
GARVER PATH
CITY OF MADISON

10160
S-14

SHEET 6 OF 8
STRUCTURE B-13-881
DRAWN BY: STD
PLANS CK'D: CDH

ORIGINAL



BRIDGE REACTIONS (SERVICE LOADS)

LOAD TYPE	"P" (LBS)	"H" (LBS)	"L" (LBS)
DEAD	48,300		
LIVE	44,415		
VEHICLE	14,385		
WIND		20,475	6,090
WINDWARD	-22,785		
LEEWARD	6,090		
STREAM			
THERMAL			9,660

P = VERTICAL LOAD AT EACH BASE PLATE (4 PER BRIDGE)
H = HORIZONTAL LOAD AT EACH SUBSTRUCTURE UNIT (2 PER BRIDGE)
L = LONGITUDINAL LOAD AT EACH FIXED BEARING (4 PER BRIDGE)

- NOTES:**
- VALUES IN THIS TABLE ARE ESTIMATES. ACTUAL VALUES SHALL BE PROVIDED BY PREFABRICATED BRIDGE MANUFACTURER.
 - "+" INDICATES DOWNWARD LOAD
"-" INDICATES UPWARD LOAD

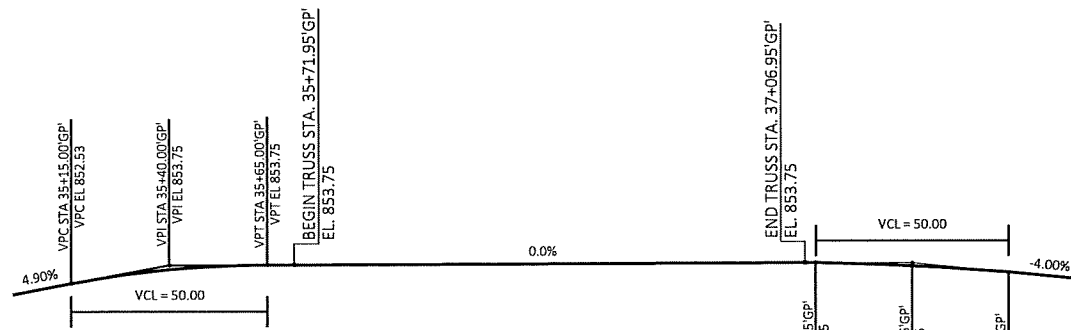
BRIDGE LENGTH = 135'
BRIDGE CLEAR WIDTH = 14'
DECK TYPE = CONCRETE
RAIL HEIGHT = 54" MIN.
LIVE LOAD = 90 PSF/H10

GENERAL NOTES

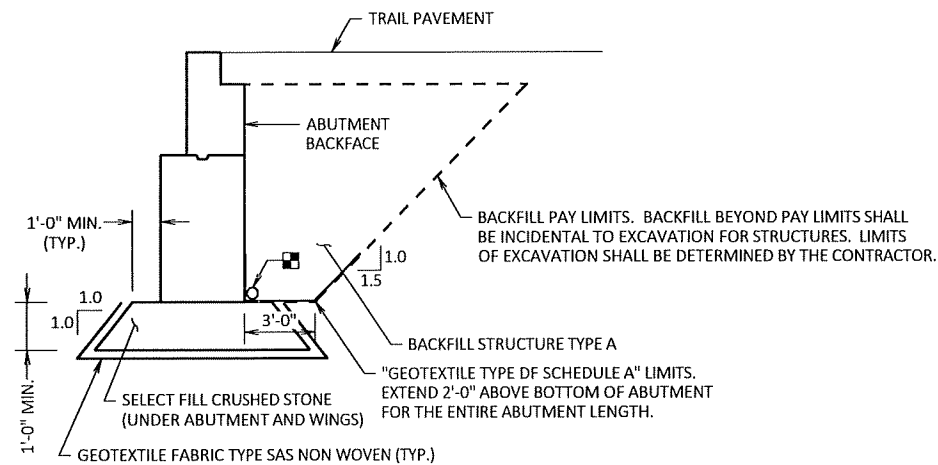
- DRAWINGS SHALL NOT BE SCALED.
- BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS SHOWN OR NOTED OTHERWISE.
- THE FIRST DIGIT OF A THREE DIGIT AND THE FIRST TWO DIGITS OF A FOUR DIGIT BAR MARK SIGNIFIES THE BAR SIZE.
- AT ABUTMENTS, ALL EXCAVATED VOLUME NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL.
- THE EXISTING GROUND LINE SHALL BE THE UPPER LIMITS OF EXCAVATION FOR STRUCTURES.
- THE BACKFILL QUANTITIES ARE BASED ON THE PAY LIMITS SHOWN ON THE PLANS AND MAY NOT REFLECT ACTUAL PLACED QUANTITIES. "BACKFILL STRUCTURE TYPE A" REQUIRED DIRECTLY BEHIND ABUTMENTS AND ABUTMENT WINGS FOR 3 FEET. BACKFILL PLACED BEYOND PAY LIMITS OR EXCEEDING PLAN QUANTITIES SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES.
- EXCAVATION BELOW THE ABUTMENTS AND WINGS IS REQUIRED. UNDERCUT TO BE FILLED WITH SELECT FILL CRUSHED STONE TO A MINIMUM OF 1'-0" BELOW BOTTOM OF ABUTMENT. EXCAVATION LIMITS TO EXTEND 1'-0" BEYOND ABUTMENT AND WING DIMENSIONS.
- ALL PREFABRICATED BRIDGE DIMENSIONS ARE APPROXIMATE. CONTRACTOR SHALL VERIFY FINAL DIMENSIONS WITH BRIDGE MANUFACTURER.
- THE DISTANCE BETWEEN THE FRONT FACE OF ABUTMENT BACKWALLS SHALL BE 135'-4" WHICH INCLUDES THE EXPANSION JOINT WIDTH REQUIRED BY THE BRIDGE MANUFACTURER.
- WOOD RUB RAIL SHALL BE S4S (SURFACED 4 SIDES).
- ALL FASTENERS USED TO SECURE WOOD RUB RAILS AND TOE PLATES TO SUPPORT FRAMING SHALL BE STAINLESS STEEL.
- IF TREATED TIMBER OR LUMBER MEMBERS ARE CUT IN THE FIELD OR DURING FABRICATION, SEAL ALL CUT ENDS PER SECTION 507.3.7 OF THE WISDOT STANDARD SPECIFICATIONS.
- ALL LUMBER SHALL BE PRESSURE TREATED WITH ALKALINE COPPER OR QUATERNARY (ACQ) TO A 0.4 PCF RETENTION IN ACCORDANCE WITH SECTION 507 OF THE WISDOT STANDARD SPECIFICATIONS.
- THE PREFABRICATED STEEL TRUSS PEDESTRIAN BRIDGE B-13-882 LRFD BID ITEM INCLUDES DESIGNING, FURNISHING AND INSTALLING THE PREFABRICATED BRIDGE, BEARING PLATES, PADS, BOLTS, ANCHOR BOLTS, GROUT, WOOD AND STEEL RAILS AND DECKING MATERIALS INCLUDING CONCRETE MASONRY AND BAR STEEL REINFORCEMENT. USE "BAR STEEL REINFORCEMENT HS COATED STRUCTURES" IN THE BRIDGE DECK.
- COAT, PAINT AND FINISH STEEL TRUSS AND RAILING PER SECTION 517 OF THE WISDOT STANDARD SPECIFICATIONS. PAINT COLOR FOR THE STEEL TRUSS AND RAILING SHALL BE FEDERAL STANDARD 595B COLOR #30045, BROWN.
- PROTECTIVE SURFACE TREATMENT SHALL BE APPLIED TO THE TOP OF DECK, AND TO ALL EXPOSED FACES OF THE ABUTMENTS AND WINGS.
- APPLY BRIDGE SEAT PROTECTION TO BEAM SEATS PRIOR TO SETTING BEARINGS PER SECTION 502.3.12 OF THE CURRENT WISDOT SPECIFICATIONS.
- THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE VEGETATED SLOPE TO THE LIMITS SHOWN ON SHEET 1 AND ON THE ABUTMENT SHEETS OR AS DIRECTED BY THE ENGINEER. THE AREAS OUTSIDE THE WINGS AND ENDS OF ABUTMENT SHALL BE COVERED WITH VEGETATED SLOPE.
- THE TRUSS SHALL BE ANCHORED TO THE ABUTMENTS IN A MANNER TO:
 - ALLOW THERMAL MOVEMENTS OF THE SUPERSTRUCTURE ALONG C/L OF THE PEDESTRIAN BRIDGE.
 - PREVENT HORIZONTAL TRANSLATION OF THE SUPERSTRUCTURE PERPENDICULAR TO THE C/L OF THE PEDESTRIAN BRIDGE.
- THE TRUSS SHALL BE CAMBERED TO OFFSET THE CALCULATED DEAD LOAD DEFLECTION.

TOTAL ESTIMATED QUANTITIES

ITEM NUMBER	ITEM DESCRIPTION	UNIT	S. ABUT	N. ABUT	SUPER.	TOTAL
20140	GEOTEXTILE FABRIC TYPE SAS NON WOVEN	SY	46	46	---	92
20214	SELECT FILL CRUSHED STONE	TON	20	20	---	40
90301	PILING CIP CONCRETE 10 3/4 X 0.365-INCH	LF	280	340	---	620
90304	REINFORCED CONCRETE BRIDGE ABUTMENTS, AND WINGWALLS, B-13-882	LS	---	---	---	1
	EXCAVATION FOR STRUCTURES BRIDGES B-13-882	LS	---	---	---	1
	BACKFILL STRUCTURE TYPE A	TON	109	109	---	218
	CONCRETE MASONRY BRIDGES	CY	31	31	---	62
	PROTECTIVE SURFACE TREATMENT	SY	30	30	---	60
	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	1220	1220	---	2440
	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	1730	1730	---	3460
	RUBBERIZED MEMBRANE WATERPROOFING	SY	6	6	---	12
	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	98	98	---	196
	GEOTEXTILE TYPE DF SCHEDULE A	SY	10	10	---	20
90305	PREFABRICATED STEEL TRUSS PEDESTRIAN BRIDGE B-13-882 LRFD	LS	---	---	---	1
	PROTECTIVE SURFACE TREATMENT	SY	---	---	210	210
	PAINTING EPOXY SYSTEM STEEL TRUSS B-13-882	LS	---	---	1	1
90311	RAILING PEDESTRIAN STEEL B-13-882	LF	24	24	---	48
	NON-BID ITEMS					
	BRIDGE SEAT PROTECTION					
	FILLER		1/2"	1/2"		

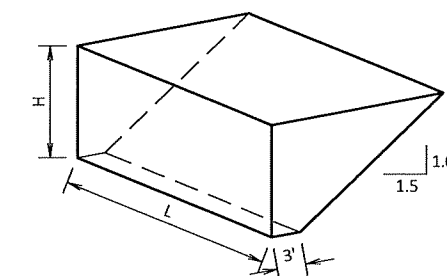


PROFILE GRADE LINE



STRUCTURE BACKFILL LIMITS

PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN.



ABUTMENT BACKFILL PAY QUANTITY DIAGRAM

L = OUT TO OUT OF ABUTMENT, INCLUDING WINGS (FT)
H = AVERAGE ABUTMENT FILL HEIGHT (FT)
EF = EXPANSION FACTOR (1.20 FOR CY BID ITEMS AND 1.00 FOR TON BID ITEMS)
 $V_{CF} = (L)(3.0')(H) + (L)(0.5)(1.5H)(H)$
 $V_{CY} = V_{CF}(EF)/27$
 $V_{TON} = V_{CY}(2.0)$

SHEET 2 OF 8

STRUCTURE B-13-882			
DRAWN BY	STD	PLANS CK'D.	CDH

CROSS SECTION, QUANTITIES & NOTES
GARVER PATH
CITY OF MADISON
 10160 & 12952
 MADISON, WI
 CONTRACT NO: 8572
 S-18
 Designated By: CAH Date: 10/12/2020
 Scale: #####
 REVISION DATE BY
 ORIGINAL



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

Deputy City Engineer

Gregory T. Fries, P.E.

Deputy Division Manager

Kathleen M. Cryan

Principal Engineer 2

Christopher J. Petykowski, P.E.
John S. Fahrney, P.E.
Janet Schmidt, P.E.

Principal Engineer 1

Christina M. Bachmann, P.E.
Mark D. Moder, P.E.
James M. Wolfe, P.E.

Facilities & Sustainability

Bryan Cooper, Principal Architect

Mapping Section Manager

Eric T. Pederson, P.S.

Financial Manager

Steven B. Danner-Rivers

February 23, 2021

NOTICE OF ADDENDUM ADDENDUM NO. 3 CONTRACT NO. 8572

GARVER PATH & STARKWEATHER DRIVE ASSESSMENT DISTRICT-2021

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

PLANS:

Remove and insert revised plan sheets as noted below.

Sheets S-1 and S-9: Revisions include note deletion, indicated with blue text.

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>

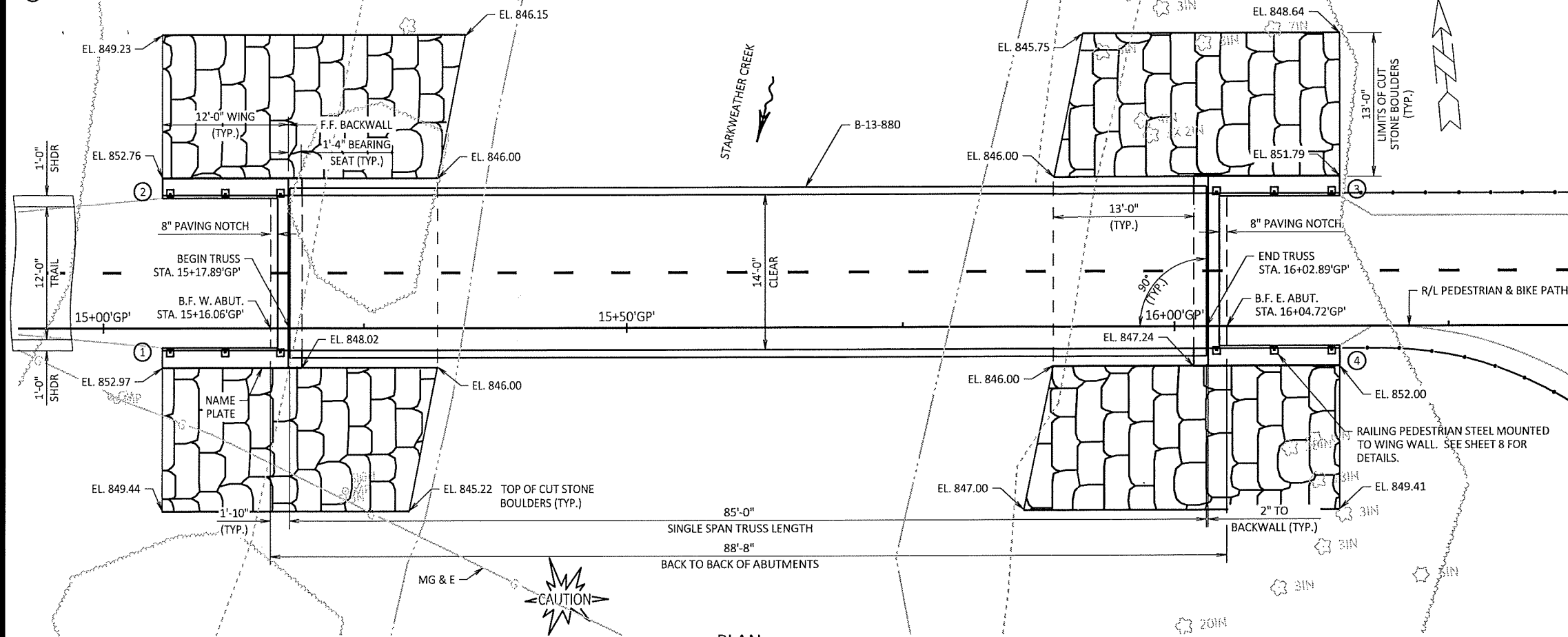
If you are unable to download plan revisions associated with the addendum, please contact the Engineering office at 608-266-4751 receive the material by another route.

Sincerely,

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

RFP:cmb

(X) INDICATES WING NUMBER



PLAN
(SINGLE SPAN PREFABRICATED STEEL TRUSS, B-13-880)

Addendum No. 2, ID 5992-10-41
Revised sheet S-1
02/17/2021

NOTE:
ELEVATIONS GIVEN FOR CUT-STONE BOULDERS ARE AT TOP OF BOULDER. HEIGHT OF LOWEST COURSE TO BE 1'-0" MIN.

Addendum No. 3, ID 5992-10-41
Revised S-1
02/23/2021

DESIGN DATA

DESIGN SPECIFICATIONS:
AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS
AASHTO LRFD BRIDGE SPECIFICATIONS FOR THE DESIGN OF PEDESTRIAN BRIDGES

LIVE LOAD:
90 PSF PEDESTRIAN LOAD
20,000 LB. VEHICLE LOAD (H10)

WIND LOAD:
WIND LOADS DESIGNED IN ACCORDANCE TO AASHTO DESIGN FOR PEDESTRIAN BRIDGES AND AASHTO SIGNS.

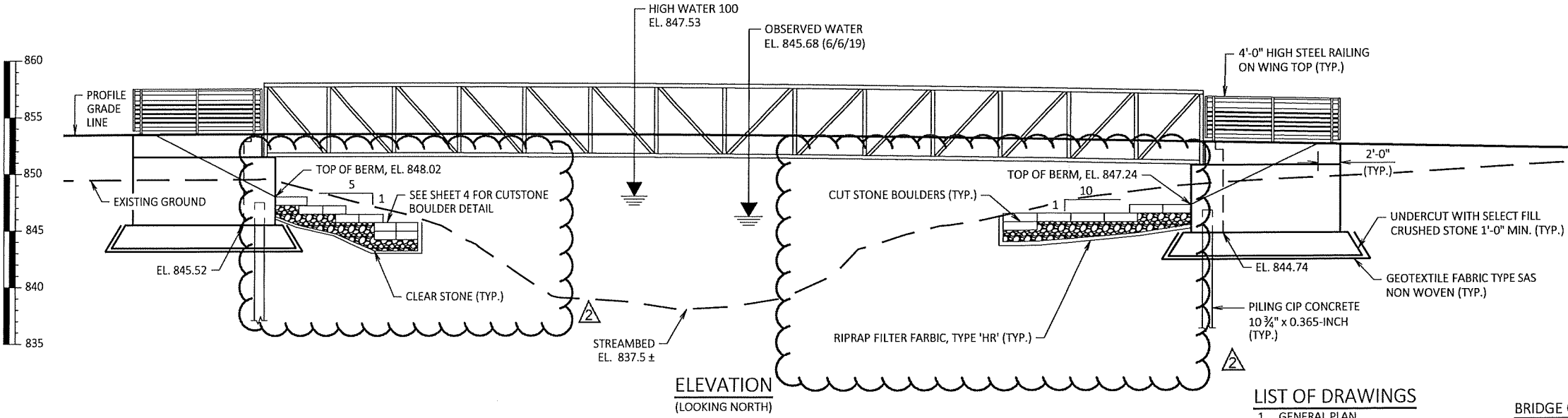
MATERIAL PROPERTIES:
CONCRETE MASONRY BRIDGES $f_c = 4,000$ PSI
HIGH STRENGTH BAR STEEL REINFORCEMENT GRADE 60 $f_y = 60,000$ PSI
HIGH STRENGTH STRUCTURAL STEEL ASTM A847, A588, A606, A709 OR A242 $f_y = 50,000$ PSI
STRUCTURAL CARBON STEEL ASTM A36 $f_y = 36,000$ PSI

FOUNDATION DATA:
ABUTMENTS TO BE SUPPORTED ON PILING CIP CONCRETE $10\frac{3}{4}$ X 0.365-INCH DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 110^* TONS PER PILE AS REQUIRED BY THE MODIFIED GATES DYNAMIC EQUATION. ESTIMATED 60' LONG AT THE EAST ABUTMENT AND 70' LONG AT THE WEST ABUTMENT.

* THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5 USING MODIFIED GATES TO DETERMINE DRIVEN PILE CAPACITY.

HYDRAULIC DATA:
100 YEAR FREQUENCY
 $Q_{100} = 1427$ C.F.S.
VEL. = 4.47 F.P.S.
HW₁₀₀ = EL. 847.53
WATERWAY AREA = 370 SQ. FT.
DRAINAGE AREA = 20.4 SQ. MI.
SCOUR CRITICAL CODE = 5

2 YEAR FREQUENCY
 $Q_2 = 290$ C.F.S.
VEL. = 1.7 F.P.S.
HW₂ = EL. 846.37



ELEVATION
(LOOKING NORTH)

LIST OF DRAWINGS

1. GENERAL PLAN
2. CROSS SECTION, QUANTITIES & NOTES
3. SUBSURFACE EXPLORATION
4. WEST ABUTMENT
5. WEST ABUTMENT DETAILS
6. EAST ABUTMENT
7. EAST ABUTMENT DETAILS
8. RAILING PEDESTRIAN STEEL

BRIDGE OFFICE CONTACT
AARON BONK, P.E.
TELEPHONE: (608) 261-0261

CONSULTANT CONTACT
CHAD HALVERSON, P.E.
TELEPHONE: (608) 663-1218

NO.	DATE	REVISION	BY

ACCEPTED: _____ CHIEF STRUCTURES DESIGN ENGINEER DATE _____

STRUCTURE B-13-880

HARGROVE STREET PEDESTRIAN & BIKE PATH OVER STARKWEATHER CREEK

COUNTY: DANE TOWN/CITY/VILLAGE: MADISON

DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

DESIGNED BY: CAH DESIGN CK'D: CDH DRAWN BY: STD PLANS CK'D: CDH

GENERAL PLAN SHEET 1 OF 8

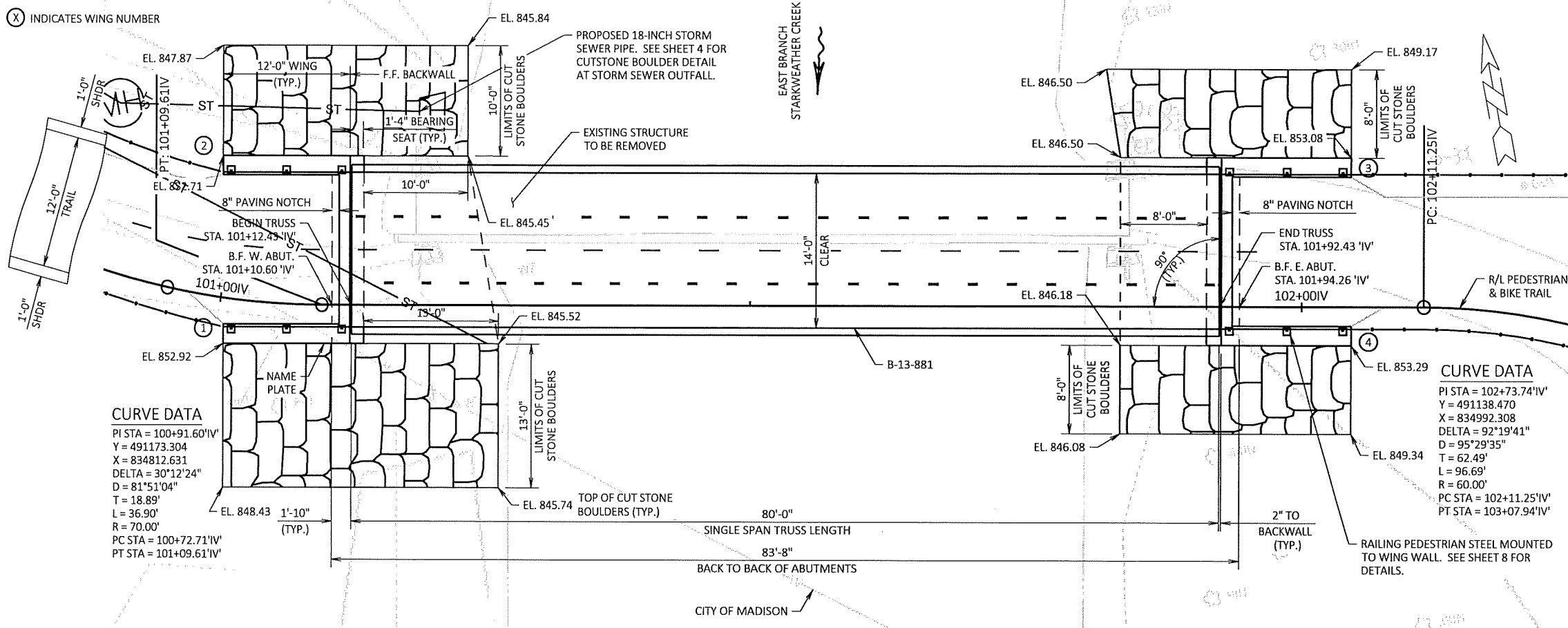
10160
MADISON, WI
CONTRACT NO: 8142

GENERAL PLAN
GARVER PATH
CITY OF MADISON

10160
S-1

REVISED

(X) INDICATES WING NUMBER



DESIGN DATA

DESIGN SPECIFICATIONS:
 AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS
 AASHTO LRFD BRIDGE SPECIFICATIONS FOR THE DESIGN OF PEDESTRIAN BRIDGES

LIVE LOAD:
 90 PSF PEDESTRIAN LOAD
 20,000 LB. VEHICLE LOAD (H10)

WIND LOAD:
 WIND LOADS DESIGNED IN ACCORDANCE TO AASHTO DESIGN FOR PEDESTRIAN BRIDGES AND AASHTO SIGNS.

MATERIAL PROPERTIES:
 CONCRETE MASONRY BRIDGES $f_c = 3,500$ PSI
 HIGH STRENGTH BAR STEEL REINFORCEMENT GRADE 60 $f_y = 60,000$ PSI
 HIGH STRENGTH STRUCTURAL STEEL ASTM A847, A588, A606, A709 OR A242 $f_y = 50,000$ PSI
 STRUCTURAL CARBON STEEL ASTM A36 $f_y = 36,000$ PSI

FOUNDATION DATA:
 ABUTMENTS TO BE SUPPORTED ON PILING CIP CONCRETE $10\frac{3}{4}$ X 0.365-INCH DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 100 TONS PER PILE AS REQUIRED BY THE MODIFIED GATES DYNAMIC EQUATION. ESTIMATED 60' LONG AT THE EAST ABUTMENT AND 65' LONG AT THE WEST ABUTMENT.

* THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5 USING MODIFIED GATES TO DETERMINE DRIVEN PILE CAPACITY.

HYDRAULIC DATA:
100 YEAR FREQUENCY
 $Q_{100} = 868$ C.F.S.
 $VEL. = 2.26$ F.P.S.
 $HW_{100} = EL. 849.04$
 WATERWAY AREA = 460 SQ. FT.
 DRAINAGE AREA = 8.2 SQ. MI.
 SCOUR CRITICAL CODE = 5

2 YEAR FREQUENCY
 $Q_2 = 268$ C.F.S.
 $VEL. = 1.1$ F.P.S.
 $HW_2 = EL. 846.78$

CURVE DATA

PI STA = 102+73.74'IV'
 Y = 491138.470
 X = 834992.308
 DELTA = 92°19'41"
 D = 95°29'35"
 T = 62.49'
 L = 96.69'
 R = 60.00'
 PC STA = 102+11.25'IV'
 PT STA = 103+07.94'IV'

CURVE DATA

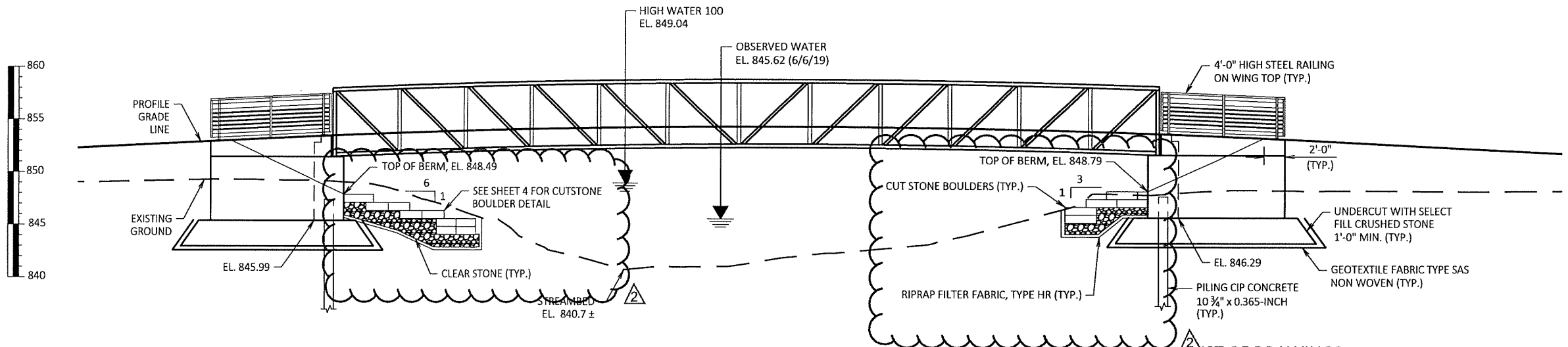
PI STA = 100+91.60'IV'
 Y = 491173.304
 X = 834812.631
 DELTA = 30°12'24"
 D = 81°51'04"
 T = 18.89'
 L = 36.90'
 R = 70.00'
 PC STA = 100+72.71'IV'
 PT STA = 101+09.61'IV'

PLAN
 (SINGLE SPAN PREFABRICATED STEEL TRUSS B-13-881)

Addendum No. 2, ID 5992-10-41
 Revised sheet S-9
 02/17/2021

~~NOTE:~~
 ELEVATIONS GIVEN FOR CUT-STONE BOULDERS ARE AT TOP OF BOULDER. HEIGHT OF LOWEST COURSE TO BE 1'-0" MIN.

Addendum No. 3, ID 5992-10-41
 Revised sheet S-9
 2/23/2021



ELEVATION
 (LOOKING NORTH)

LIST OF DRAWINGS

1. GENERAL PLAN
2. CROSS SECTION, QUANTITIES & NOTES
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4. WEST ABUTMENT
5. WEST ABUTMENT DETAILS
6. EAST ABUTMENT
7. EAST ABUTMENT DETAILS
8. RAILING PEDESTRIAN STEEL

BRIDGE OFFICE CONTACT
 AARON BONK, P.E.
 TELEPHONE: (608) 261-0261

CONSULTANT CONTACT
 CHAD HALVERSON, P.E.
 TELEPHONE: (608) 663-1218

NO.	DATE	REVISION	BY

KL Engineering
 [A] Better Experience

ACCEPTED _____ DATE _____
 CHIEF STRUCTURES DESIGN ENGINEER

STRUCTURE B-13-881
 IVY STREET PEDESTRIAN & BIKE PATH OVER STARKWEATHER CREEK

COUNTY _____ TOWN/CITY/VILLAGE MADISON

DESIGN SPEC. _____
 AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

DESIGNED BY	CAH	DESIGN CK'D.	CDH	DRAWN BY	STD	PLANS CK'D.	CDH
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GENERAL PLAN SHEET 1 OF 8

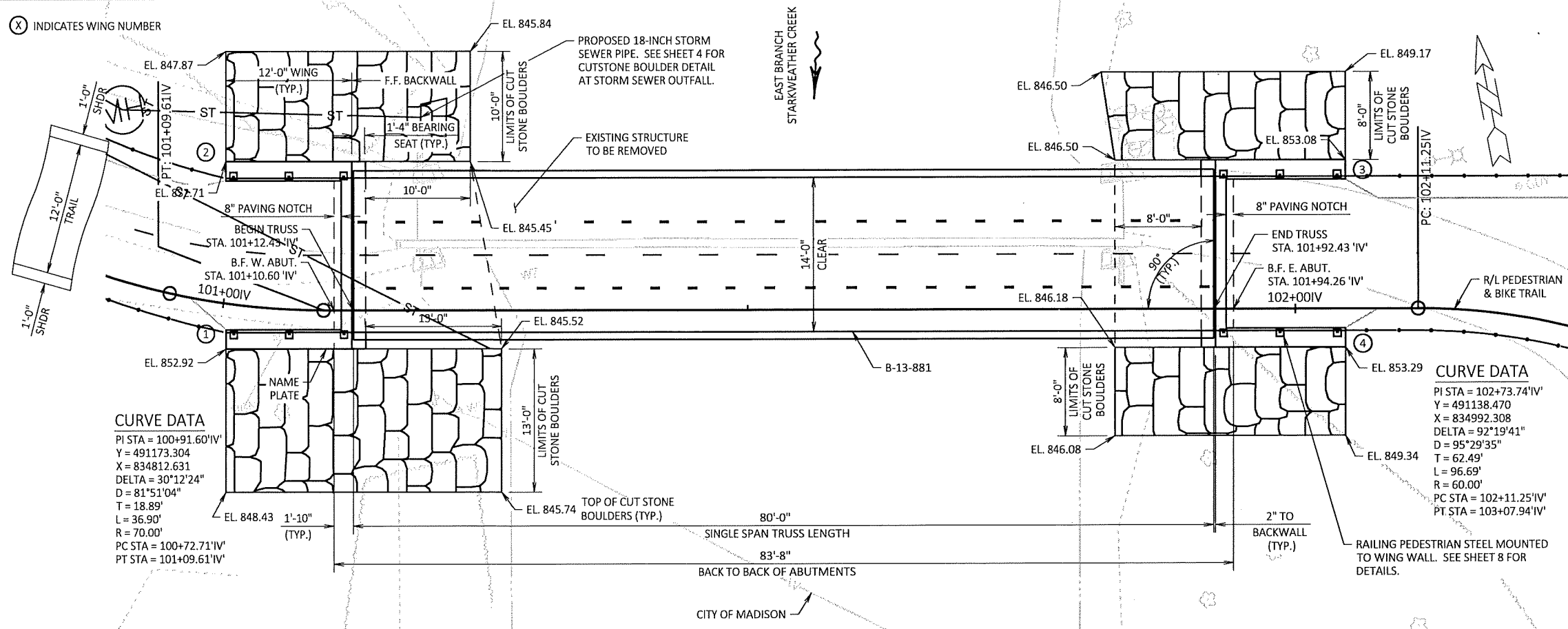
10160
 MADISON, WI
 CONTRACT NO: 8142

GENERAL PLAN
 GARVER PATH
 CITY OF MADISON

10160
 S-9

REUSED

(X) INDICATES WING NUMBER



CURVE DATA

PI STA = 100+91.60'IV'
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CURVE DATA

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PLAN
 (SINGLE SPAN PREFABRICATED STEEL TRUSS B-13-881)

NOTE:

ELEVATIONS GIVEN FOR CUT-STONE BOULDERS ARE AT TOP OF BOULDER. HEIGHT OF LOWEST COURSE TO BE 1'-0" MIN.

DESIGN DATA

DESIGN SPECIFICATIONS:
 AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS
 AASHTO LRFD BRIDGE SPECIFICATIONS FOR THE DESIGN OF PEDESTRIAN BRIDGES

LIVE LOAD:
 90 PSF PEDESTRIAN LOAD
 20,000 LB. VEHICLE LOAD (H10)

WIND LOAD:
 WIND LOADS DESIGNED IN ACCORDANCE TO AASHTO DESIGN FOR PEDESTRIAN BRIDGES AND AASHTO SIGNS.

MATERIAL PROPERTIES:
 CONCRETE MASONRY BRIDGES $f'_c = 3,500$ PSI
 HIGH STRENGTH BAR STEEL REINFORCEMENT GRADE 60 $f_y = 60,000$ PSI
 HIGH STRENGTH STRUCTURAL STEEL ASTM A847, A588, A606, A709 OR A242 $f_y = 50,000$ PSI
 STRUCTURAL CARBON STEEL ASTM A36 $f_y = 36,000$ PSI

FOUNDATION DATA:

ABUTMENTS TO BE SUPPORTED ON PILING CIP CONCRETE 10 3/4" X 0.365-INCH DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 100* TONS PER PILE AS REQUIRED BY THE MODIFIED GATES DYNAMIC EQUATION. ESTIMATED 60' LONG AT THE EAST ABUTMENT AND 65' LONG AT THE WEST ABUTMENT.

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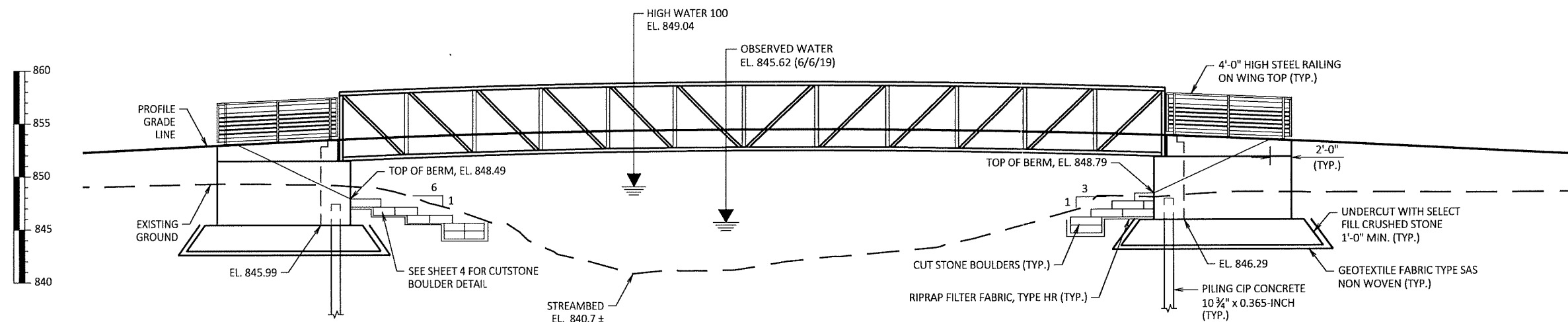
HYDRAULIC DATA:

100 YEAR FREQUENCY
 $Q_{100} = 868$ C.F.S.
 VEL. = 2.26 F.P.S.
 HW₁₀₀ = EL. 849.04
 WATERWAY AREA = 460 SQ. FT.
 DRAINAGE AREA = 8.2 SQ. MI.
 SCOUR CRITICAL CODE = 5

2 YEAR FREQUENCY
 $Q_2 = 268$ C.F.S.
 VEL. = 1.1 F.P.S.
 HW₂ = EL. 846.78



Chad Halverson
 November 23, 2020



ELEVATION
 (LOOKING NORTH)

LIST OF DRAWINGS

1. GENERAL PLAN
2. CROSS SECTION, QUANTITIES & NOTES
3. SUBSURFACE EXPLORATION
4. WEST ABUTMENT
5. WEST ABUTMENT DETAILS
6. EAST ABUTMENT
7. EAST ABUTMENT DETAILS
8. RAILING PEDESTRIAN STEEL

BRIDGE OFFICE CONTACT
 AARON BONK, P.E.
 TELEPHONE: (608) 261-0261

CONSULTANT CONTACT
 CHAD HALVERSON, P.E.
 TELEPHONE: (608) 663-1218

NO.	DATE	REVISION	BY
ACCEPTED		SDR	12/08/20
CHIEF STRUCTURES DESIGN ENGINEER		DATE	
STRUCTURE B-13-881 IVY STREET PEDESTRIAN & BIKE PATH OVER STARKWEATHER CREEK			
COUNTY	DANE	TOWN/CITY/VILLAGE	MADISON
DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS			
DESIGNED BY	CAH	DESIGN CK'D.	CDH
DRAWN BY	STD	PLANS CK'D.	CDH
GENERAL PLAN			SHEET 1 OF 8

10160 & 12952
 MADISON, WI
 CONTRACT NO: 8572
 GENERAL PLAN
 GARVER PATH
 CITY OF MADISON
 10160
 S-9

ORIGINAL

SECTION E: BIDDERS ACKNOWLEDGEMENT

CONTRACT TITLE GARVER PATH & STARKWEATHER DRIVE ASSESSMENT DISTRICT-2021

CONTRACT NO. 8572

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.

- 1. 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 - 2020 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 to the Contract Nos. 1 through 3 issued thereto, 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)
2. 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.
3. 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.
4. 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).
5. I hereby certify that all statements herein are made on behalf of Janke General Contractors, Inc. (name of corporation, partnership, or person submitting bid) a corporation organized and existing under the laws of the State of Wisconsin 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 Steve J. Janke

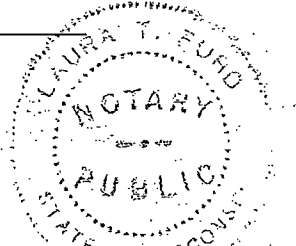
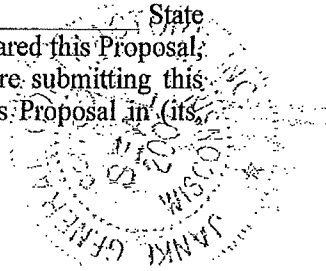
President TITLE, IF ANY

Sworn and subscribed to before me this 25th day of February, 2021

[Signature]

(Notary Public or other officer authorized to administer oaths) My Commission Expires May 5, 2022

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



Contract 8572 – Janke General Contractors, 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

**COMMITMENT TO SUBCONTRACT TO DBE
NON-TRADITIONAL PROJECTS**

Wisconsin Department of Transportation

DT1880 4/2010 s.84.06(2) Wis. Stats.

Project(s): Garver Path & Starkweather Drive
Assesment District -2021
8572 5992-10-41

Prime Contractor: Janke General Contractors, Inc.
 County: Dane - City of Madison

Letting Date: February 25, 2021

This contract requires that a specified percentage of the work be subcontracted to a disadvantaged business enterprise and that this information be submitted within 10 business days after the notification of contract award. Completion of the following information indicates your intent in the fulfillment of these contract requirements.

Total \$ Value of: _____

Prime Contract: \$2,619,451.45

DBE Contract Goal: \$1,32,395.96 5.05 %

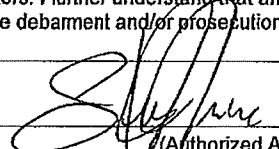
This form must be completed and returned for THIS contract. See reverse side for instructions.

A	V	NAME OF DBE SUBCONTRACTOR	TYPE OF WORK	SUBCONTRACT \$ VALUE	Government Use Only Adjusted Amounts
x		Hard Rock Sawing & Drilling Spec Co.	Saw cutting	\$2,020.00	
x		Crowley Construction	Line Painting	\$18,731.25	
X		Gestra Engineering	Testing	\$6,210.00	
		SUBTOTAL DBE \$ VALUE	A (\$) 26,961.25 V (\$)	TOTAL %1.03% TOTAL %	

A	V	NAME OF DBE SUPPLIER AND/OR MANUFACTURER (see #3 on Instructions)	TYPE OF MATERIAL	SUBCONTRACT \$ VALUE	Government Use Only Adjusted Amounts
		SUBTOTAL DBE \$ VALUE	A (\$) V (\$)	TOTAL % TOTAL %	

A	V	NAME OF DBE TRUCKING FIRM	MATERIAL HAULED	EST. # OF TON/C.Y.	EST. # OF TRUCKS REQ'D	\$ VALUE	Government Use Only Adjusted Amounts
X	X	Bullet Transit Co., Inc.	Asphalt / Aggregate / Soils		O=5 L= O= L= O= L= O= L=	\$105,434.71	
		SUBTOTAL DBE \$ VALUE	A (\$) \$104,011.32 V (\$) \$ 1,423.39	TOTAL %3.97% TOTAL %0.05%			
		GRAND TOTAL DBE \$ VALUE	A (\$) \$130,972.57 V (\$) \$ 1,423.39 T = \$132,395.96	TOTAL %5.00% TOTAL %0.05% TOTAL %5.05%			

I certify that arrangements have been made for the foregoing work with the listed DBE Contractors. I further understand that any willful falsification, fraudulent statement or misrepresentation will result in appropriate sanctions, which may include debarment and/or prosecution under applicable State (Trans 504) and Federal laws.

O = Owned Trucks Used on Project	Government Use Only Approved Amounts		X  (Authorized Agent) 02/25/2021 (Date)
L = Leased Trucks Used on Project	A = \$	%	
A = Assigned (DBE Conscious)	V = \$	%	
V = Voluntary	Total = \$	%	
Signature: _____			Mail to: Wisconsin Department of Transportation DBE Programs Office, Rm. 451

GARVER PATH & STARKWEATHER DRIVE ASSESSMENT DISTRICT - 2021

CONTRACT NO. 8572
DATE: 2/25/2021

**Janke General
Contractors, Inc.**

Item	Quantity	Price	Extension
Section B: Proposal Page			
10701.0 - TRAFFIC CONTROL - LS	1.00	\$6,550.00	\$6,550.00
10721.0 - TRAFFIC CONTROL SIGN - PORTABLE CHANGEABLE MESSAGE - DAYS	30.00	\$51.00	\$1,530.00
10790.0 - RAILROAD INSURANCE - LS	1.00	\$3,510.00	\$3,510.00
10911.0 - MOBILIZATION - LS	1.00	\$74,000.00	\$74,000.00
20101.0 - EXCAVATION CUT - C.Y.	3400.00	\$19.00	\$64,600.00
20109.0 - FINISH GRADING - LS	1.00	\$8,700.00	\$8,700.00
20140.0 - GEOTEXTILE FABRIC TYPE SAS NON WOVEN - S.Y.	3626.00	\$2.65	\$9,608.90
20202.0 - FILL BORROW - C.Y.	900.00	\$24.40	\$21,960.00
20207.0 - SELECT FILL SAND - C.Y.	3250.00	\$24.40	\$79,300.00
20214.0 - SELECT FILL CRUSHED STONE - TON	520.00	\$19.00	\$9,880.00
20241.0 - RIPRAP FILTER FABRIC, TYPE HR - SY	540.00	\$3.75	\$2,025.00
20303.0 - SAWCUT ASPHALT PAVEMENT - L.F.	515.00	\$1.77	\$911.55
20322.0 - REMOVE CONCRETE CURB & GUTTER - L.F.	831.00	\$3.40	\$2,825.40
20323.0 - REMOVE CONCRETE SIDEWALK AND DRIVE - S.F.	2841.00	\$1.10	\$3,125.10
20401.0 - CLEARING - I.D.	125.00	\$22.00	\$2,750.00
20403.0 - CLEARING - SY	900.00	\$4.50	\$4,050.00
20406.0 - GRUBBING - I.D.	125.00	\$22.00	\$2,750.00
20408.0 - GRUBBING - SY	900.00	\$4.50	\$4,050.00
20703.0 - TEMPORARY SEEDING - S.Y.	700.00	\$2.05	\$1,435.00
21002.0 - EROSION CONTROL INSPECTION - EACH	60.00	\$253.00	\$15,180.00
21011.0 - CONSTRUCTION ENTRANCE - EACH	3.00	\$1,450.00	\$4,350.00
21014.0 - CLEAR STONE BERM (DITCH CHECK) - EACH	1.00	\$800.00	\$800.00
21021.0 - SILT FENCE - COMPLETE - L.F.	3500.00	\$3.75	\$13,125.00
21063.0 - EROSION MATTING, CLASS I, TYPE A - ORGANIC - S.Y.	1100.00	\$1.90	\$2,090.00
21084.0 - EROSION MATTING, CLASS III, TYPE D - S.Y.	850.00	\$22.25	\$18,912.50
21092.0 - TERRACE RESTORATION - S.Y.	2250.00	\$2.25	\$5,062.50
21093.0 - TURBIDITY BARRIER - COMPLETE - LF	550.00	\$21.00	\$11,550.00
30201.0 - TYPE "A" CONCRETE CURB AND GUTTER - L.F.	576.00	\$35.90	\$20,678.40
30205.0 - TYPE "E" CONCRETE CURB & GUTTER - L.F.	180.00	\$35.90	\$6,462.00
30301.0 - 5 INCH CONCRETE SIDEWALK - S.F.	3050.00	\$5.90	\$17,995.00
30302.0 - 7 INCH CONCRETE SIDEWALK & DRIVE - S.F.	2700.00	\$6.30	\$17,010.00
30311.0 - CONCRETE MOUNTABLE MEDIAN ISLAND NOSE - S.F.	268.00	\$11.75	\$3,149.00
30340.0 - CURB RAMP DETECTABLE WARNING FIELDS - S.F.	336.00	\$30.30	\$10,180.80
40102.0 - CRUSHED AGGREGATE BASE COURSE, GRADATION NO. 2 OR NO. 3 - TON	4650.00	\$20.50	\$95,325.00
40202.0 - HMA PAVEMENT 4 LT 58-28 S - TON	640.00	\$76.30	\$48,832.00
40209.0 - HMA PAVEMENT 3 HT 58-28 H - TON	25.00	\$136.35	\$3,408.75
40210.0 - HMA PAVEMENT 4 HT 58-28 H - TON	15.00	\$146.45	\$2,196.75
40218.0 - TACK COAT - GAL.	10.00	\$5.05	\$50.50
60800.0 - PAVEMENT MARKING EPOXY, LINE, 4-INCH - L.F.	1500.00	\$2.20	\$3,300.00
60802.0 - PAVEMENT MARKING EPOXY, LINE, 6-INCH - L.F.	150.00	\$3.30	\$495.00
60803.0 - PAVEMENT MARKING EPOXY, LINE, 8-INCH - L.F.	100.00	\$4.30	\$430.00
60820.0 - PAVEMENT MARKING EPOXY, MEDIAN NOSE - S.F.	225.00	\$10.05	\$2,261.25
60822.0 - PAVEMENT MARKING EPOXY, SYMBOL, BIKE SHARROW - EACH	1.00	\$126.25	\$126.25
60823.0 - PAVEMENT MARKING EPOXY, SYMBOL, BIKE LANE - EACH	8.00	\$200.00	\$1,600.00
60824.0 - PAVEMENT MARKING EPOXY, SYMBOL, BIKE STRAIGHT ARROW - EACH	2.00	\$126.25	\$252.50
60829.0 - PAVEMENT MARKING EPOXY, SYMBOL, LEFT ARROW - EACH	1.00	\$196.95	\$196.95
60831.0 - PAVEMENT MARKING EPOXY, SYMBOL, STRAIGHT ARROW - EACH	6.00	\$176.75	\$1,060.50
60880.0 - PAVEMENT MARKING REMOVAL, 4-INCH - L.F.	600.00	\$3.00	\$1,800.00
60887.0 - PAVEMENT MARKING REMOVAL, SYMBOL, ARROW - EACH	1.00	\$227.25	\$227.25
90200.0 - PARK RESTORATION - MOW - S.Y.	1600.00	\$3.65	\$5,840.00
90201.0 - PARK RESTORATION - NO MOW - S.Y.	3000.00	\$3.80	\$11,400.00
90202.0 - WETLAND RESTORATION - S.Y.	700.00	\$3.70	\$2,590.00
90203.0 - GEOGRID SR - S.Y.	3000.00	\$2.30	\$6,900.00

GARVER PATH & STARKWEATHER DRIVE ASSESSMENT DISTRICT - 2021

CONTRACT NO. 8572

DATE: 2/25/2021

**Janke General
Contractors, Inc.**

Item	Quantity	Price	Extension
90204.0 - GEOGRID WETLAND - S.Y.	850.00	\$8.25	\$7,012.50
90205.0 - SAFETY RAILING - L.F.	712.00	\$267.50	\$190,460.00
90206.0 - EXCAVATION, HAULING, AND DISPOSAL OF PETROLEUM CONTAMINATED SOIL - C.Y.	70.00	\$151.00	\$10,570.00
90500.0 - COVER PLATE PERMANENT - EACH	1.00	\$3,500.00	\$3,500.00
90600.0 - SKID/SLIP RESISTANT PREFORMED THERMOPLASTIC PAVEMENT MARKING, BIKE LANE GREEN - SF	400.00	\$18.15	\$7,260.00
20313.0 - REMOVE INLET - EACH	2.00	\$105.00	\$210.00
20314.0 - REMOVE PIPE - L.F.	184.00	\$5.30	\$975.20
21045.0 - INLET PROTECTION, TYPE A - COMPLETE - EACH	2.00	\$355.00	\$710.00
21049.0 - INLET PROTECTION, RIGID FRAME - PROVIDE AND INSTALL - EACH	7.00	\$305.00	\$2,135.00
21050.0 - INLET PROTECTION, RIGID FRAME - MAINTAIN - EACH	7.00	\$31.00	\$217.00
21051.0 - INLET PROTECTION, RIGID FRAME - REMOVE - EACH	7.00	\$41.00	\$287.00
50211.0 - SELECT BACKFILL STORM SEWER - T.F.	213.00	\$22.00	\$4,686.00
50401.0 - 12 INCH TYPE I RCP STORM SEWER PIPE - L.F.	81.00	\$54.00	\$4,374.00
50403.0 - 18 INCH TYPE I RCP STORM SEWER PIPE - L.F.	125.00	\$55.00	\$6,875.00
50445.0 - 18 INCH TYPE III STORM SEWER PIPE - L.F.	7.00	\$63.00	\$441.00
50461.0 - 12 INCH RCP AE - EACH	2.00	\$1,300.00	\$2,600.00
50463.0 - 18 INCH RCP AE - EACH	3.00	\$1,450.00	\$4,350.00
50499.0 - CONCRETE COLLAR - EACH	1.00	\$1,450.00	\$1,450.00
50603.0 - 18 INCH RCP AE GATE - EACH	3.00	\$522.00	\$1,566.00
50723.0 - 3'X3' STORM SAS - EACH	2.00	\$2,225.00	\$4,450.00
50741.0 - TYPE "H" INLET - EACH	3.00	\$2,600.00	\$7,800.00
50792.0 - STORM SEWER TAP - EACH	2.00	\$735.00	\$1,470.00
90501.0 - REBUILD INLET ROOF W/ CASTING - EACH	1.00	\$2,305.00	\$2,305.00
60230.0 - FURNISH & INSTALL 2 INCH PVC (SCHEDULE 80) CONDUIT - L.F.	189.00	\$8.10	\$1,530.90
60232.0 - FURNISH & INSTALL 2 INCH PVC (SCHEDULE 40) CONDUIT - L.F.	3224.00	\$6.10	\$19,666.40
60241.0 - GOPHER RACEWAY FOR ELECTRICAL CONDUIT OR CABLE-IN-DUCT - L.F.	30.00	\$30.30	\$909.00
60261.0 - ELECTRICAL TRENCH - L.F.	3009.00	\$3.05	\$9,177.45
60403.0 - CONSTRUCT LB-3 BASE - EACH	19.00	\$910.00	\$17,290.00
60421.0 - REMOVE STREET LIGHT BASE - EACH	2.00	\$205.00	\$410.00
60702.0 - CONSTRUCT ELECTRICAL HANDHOLE TYPE I - EACH	9.00	\$1,010.00	\$9,090.00
60704.0 - CONSTRUCT ELECTRICAL HANDHOLE TYPE III - EACH	1.00	\$610.00	\$610.00
90400.0 - SPECIAL BASE - EACH	1.00	\$2,020.00	\$2,020.00
90300.0 - REMOVING OLD STRUCTURE OVER WATERWAY STATION 101+50 - LS	1.00	\$7,500.00	\$7,500.00
90301.0 - PILING CIP CONCRETE 10 3-4 X 0.365-INCH - LF	1385.00	\$58.00	\$80,330.00
90302.0 - REINFORCED CONCRETE BRIDGE ABUTMENTS, AND WINGWALLS, B-13- 880 - LS	1.00	\$55,000.00	\$55,000.00
90303.0 - REINFORCED CONCRETE BRIDGE ABUTMENTS, AND WINGWALLS, B-13- 881 - LS	1.00	\$55,000.00	\$55,000.00
90304.0 - REINFORCED CONCRETE BRIDGE ABUTMENTS, AND WINGWALLS, B-13- 882 - LS	1.00	\$56,000.00	\$56,000.00
90305.0 - PREFABRICATED STEEL TRUSS PEDESTRIAN BRIDGE B-13-880 LRFD - LS	1.00	\$114,000.00	\$114,000.00
90306.0 - PREFABRICATED STEEL TRUSS PEDESTRIAN BRIDGE B-13-881 LRFD - LS	1.00	\$110,000.00	\$110,000.00
90307.0 - PREFABRICATED STEEL TRUSS PEDESTRIAN BRIDGE B-13-882 LRFD - LS	1.00	\$211,000.00	\$211,000.00
90308.0 - CUT-STONE BOULDERS - SF	3080.00	\$119.00	\$366,520.00
90309.0 - RAILING PEDESTRIAN STEEL B-13-880 - LF	48.00	\$228.00	\$10,944.00
90310.0 - RAILING PEDESTRIAN STEEL B-13-881 - LF	48.00	\$228.00	\$10,944.00
90311.0 - RAILING PEDESTRIAN STEEL B-13-882 - LF	48.00	\$228.00	\$10,944.00
20217 - CLEAR STONE - TONS	314.00	\$22.10	\$6,939.40

Section B: Proposal Page-Starkweather Drive

GARVER PATH & STARKWEATHER DRIVE ASSESSMENT DISTRICT - 2021

CONTRACT NO. 8572

DATE: 2/25/2021

Janke General
Contractors, Inc.

Item	Quantity	Price	Extension
10701.0 - TRAFFIC CONTROL - LS	1.00	\$7,600.00	\$7,600.00
10801.0 - ROOT CUTTING - CURB & GUTTER - L.F.	405.00	\$2.50	\$1,012.50
10802.0 - ROOT CUTTING - SIDEWALK - L.F.	75.00	\$6.55	\$491.25
10911.0 - MOBILIZATION - LS	1.00	\$31,000.00	\$31,000.00
20101.0 - EXCAVATION CUT - C.Y.	1375.00	\$19.00	\$26,125.00
20303.0 - SAWCUT ASPHALT PAVEMENT - L.F.	125.00	\$1.80	\$225.00
20322.0 - REMOVE CONCRETE CURB & GUTTER - L.F.	1705.00	\$3.45	\$5,882.25
20323.0 - REMOVE CONCRETE SIDEWALK AND DRIVE - S.F.	765.00	\$1.65	\$1,262.25
20335.0 - ABANDON SEWER PIPE WITH SLURRY - C.Y.	2.00	\$550.00	\$1,100.00
20504.0 - ADJUST VALVE CASTING - EACH	3.00	\$165.00	\$495.00
21092.0 - TERRACE RESTORATION - S.Y.	850.00	\$4.00	\$3,400.00
30201.0 - TYPE "A" CONCRETE CURB AND GUTTER - L.F.	1830.00	\$19.30	\$35,319.00
30208.0 - HAND FORMED CONCRETE CURB & GUTTER (TREE LOCATIONS) - L.F.	210.00	\$35.90	\$7,539.00
30302.0 - 7 INCH CONCRETE SIDEWALK & DRIVE - S.F.	1350.00	\$6.30	\$8,505.00
40102.0 - CRUSHED AGGREGATE BASE COURSE, GRADATION NO. 2 OR NO. 3 - TON	1700.00	\$22.75	\$38,675.00
40202.0 - HMA PAVEMENT 4 LT 58-28 S - TON	360.00	\$74.75	\$26,910.00
21002.0 - EROSION CONTROL INSPECTION - EACH	13.00	\$24.00	\$312.00
21011.0 - CONSTRUCTION ENTRANCE - EACH	2.00	\$1,255.00	\$2,510.00
21045.0 - INLET PROTECTION, TYPE A - COMPLETE - EACH	17.00	\$271.00	\$4,607.00
21049.0 - INLET PROTECTION, RIGID FRAME - PROVIDE AND INSTALL - EACH	27.00	\$281.00	\$7,587.00
21050.0 - INLET PROTECTION, RIGID FRAME - MAINTAIN - EACH	27.00	\$26.00	\$702.00
21051.0 - INLET PROTECTION, RIGID FRAME - REMOVE - EACH	27.00	\$36.00	\$972.00
50401.0 - 12 INCH TYPE I RCP STORM SEWER PIPE - L.F.	292.00	\$49.00	\$14,308.00
50741.0 - TYPE "H" INLET - EACH	16.00	\$2,600.00	\$41,600.00
20217.0 - CLEAR STONE - TON	270.00	\$36.00	\$9,720.00
20241.0 - RIPRAP FILTER FABRIC, TYPE HR - S.Y.	650.00	\$3.50	\$2,275.00
20311.0 - REMOVE SEWER ACCESS STRUCTURE - EACH	4.00	\$850.00	\$3,400.00
20314.0 - REMOVE PIPE (SANITARY) - L.F.	915.00	\$10.00	\$9,150.00
40321.0 - UNDERCUT - C.Y.	200.00	\$20.00	\$4,000.00
50202.0 - TYPE II DEWATERING - LS	1.00	\$30,000.00	\$30,000.00
50212.0 - SELECT BACKFILL SANITARY SEWER - T.F.	1237.00	\$32.00	\$39,584.00
50301.0 - 8" PVC SEWER PIPE (SDR-35) - L.F.	50.00	\$52.00	\$2,600.00
50302.0 - 10" PVC SEWER PIPE (SDR-35) - L.F.	533.00	\$55.00	\$29,315.00
50303.0 - 12" PVC SEWER PIPE (SDR-35) - L.F.	553.00	\$57.00	\$31,521.00
50353.0 - SANITARY SEWER LATERAL - L.F.	101.00	\$49.00	\$4,949.00
50356.0 - RECONNECT - EACH	2.00	\$205.00	\$410.00
50359.0 - COMPRESSION COUPLING - EACH	1.00	\$387.00	\$387.00
50361.0 - WASTEWATER CONTROL - L.S.	1.00	\$24,000.00	\$24,000.00
50390.0 - SEWER ELECTRONIC MARKERS - EACH	6.00	\$51.00	\$306.00
50701.0 - 4' DIA SAS - EACH	11.00	\$4,400.00	\$48,400.00
50771.0 - INTERNAL CHIMNEY SEAL - EACH	11.00	\$575.00	\$6,325.00
50780.0 - CLEANOUT - EACH	1.00	\$1,200.00	\$1,200.00
50791.0 - SANITARY SEWER TAP - EACH	4.00	\$1,200.00	\$4,800.00
50797.0 - EXTERNAL SEWER ACCESS STRUCTURE JOINT SEAL - EACH	11.00	\$410.00	\$4,510.00
20313.0 - REMOVE INLET - EACH	12.00	\$175.00	\$2,100.00
20314.0 - REMOVE PIPE (STORM) - L.F.	366.00	\$10.00	\$3,660.00
20336.0 - PIPE PLUG - EACH	4.00	\$205.00	\$820.00
40362.0 - ADJUST ACCESS STRUCTURE CASTING - RESURFACING - EACH	1.00	\$515.00	\$515.00
50211.0 - SELECT BACKFILL STORM SEWER - T.F.	453.00	\$12.50	\$5,662.50
50443.0 - 12 INCH TYPE III STORM SEWER PIPE - L.F.	131.00	\$55.00	\$7,205.00
50445.0 - 18 INCH TYPE III STORM SEWER PIPE - L.F.	22.00	\$160.00	\$3,520.00
50792.0 - STORM SEWER TAP - EACH	6.00	\$1,150.00	\$6,900.00
50793.0 - PRIVATE STORM SEWER RECONNECT, TYPE 1 - EACH	1.00	\$650.00	\$650.00
50801.0 - UTILITY LINE OPENING (ULO) - EACH	4.00	\$875.00	\$3,500.00
152 Items	Totals		\$2,619,451.45

SECTION G: BID BOND

LET ALL KNOW BY THESE DOCUMENTS PRESENTED, THAT Principal and Surety, as identified below, are held and firmly bound unto the City of Madison, (hereinafter referred to as the "Obligee"), in the sum of five per cent (5%) of the amount of the total bid or bids of the Principal herein accepted by the Obligee, for the payment of which the Principal and the Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

The conditions of this obligation are such that, whereas the Principal has submitted, to the City of Madison a certain bid, including the related alternate, and substitute bids attached hereto and hereby made a part hereof, to enter into a contract in writing for the construction of:

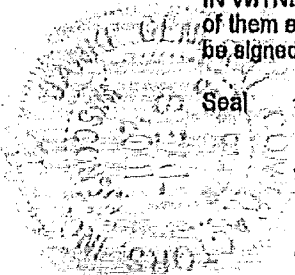
GARVER PATH & STARKWEATHER DRIVE ASSESSMENT DISTRICT-2021 CONTRACT NO. 8572

1. If said bid is rejected by the Obligee, then this obligation shall be void.
2. If said bid is accepted by the Obligee and the Principal shall execute and deliver a contract in the form specified by the Obligee (properly completed in accordance with said bid) and shall furnish a bond for his/her faithful performance of said contract, and for the payment of all persons performing labor or furnishing materials in connection therewith, and shall in all other respects perform the agreement created by the acceptance of said bid, then this obligation shall be void.

If said bid is accepted by the Obligee and the Principal shall fail to execute and deliver the contract and the performance and payment bond noted in 2. above executed by this Surety, or other Surety approved by the City of Madison, all within the time specified or any extension thereof, the Principal and Surety agree jointly and severally to forfeit to the Obligee as liquidated damages the sum mentioned above, it being understood that the liability of the Surety for any and all claims hereunder shall in no event exceed the sum of this obligation as stated, and it is further understood that the Principal and Surety reserve the right to recover from the Obligee that portion of the forfeited sum which exceed the actual liquidated damages incurred by the Obligee.

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

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.



Seal PRINCIPAL

Janke General Contractors, Inc.

Name of Principal

[Signature]

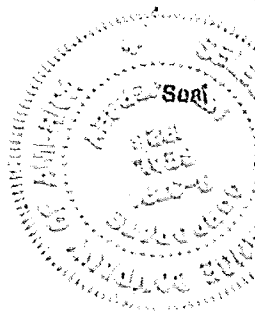
By

Steve J. Janke, President

Name and Title

February 25, 2021

Date



Seal SURETY

Selective Insurance Company of America

Name of Surety

[Signature]

By

Troy Staples, Attorney-in-Fact

Name and Title

February 12, 2021

Date

This certifies that I have been duly licensed as an agent for the above company in Wisconsin under National Provider No. 17512518 for the year 2021, and appointed as attorney in fact with authority to execute this bid bond and the payment and performance bond referred to above, which power of attorney has not been revoked.

February 12, 2021

Date

[Signature]

Agent Signature

1276 S Robert Street

Address

West St. Paul, MN 55118

City, State and Zip Code

651-457-6842

Telephone Number

NOTE TO SURETY & PRINCIPAL

The bid submitted which this bond guarantees shall be rejected if the following instrument is not attached to this bond:

Power of Attorney showing that the agent of Surety is currently authorized to execute bonds on behalf of the Surety, and in the amounts referenced above.

SELECTIVE
BE UNIQUELY INSUREDSM

Selective Insurance Company of America
40 Wantage Avenue
Branchville, New Jersey 07890
973-948-3000

BondNo.B 1241662

POWER OF ATTORNEY

SELECTIVE INSURANCE COMPANY OF AMERICA, a New Jersey corporation having its principal office at 40 Wantage Avenue, in Branchville, State of New Jersey ("SICA"), pursuant to Article VII, Section I of its By-Laws, which state in pertinent part:

The Chairman of the Board, President, Chief Executive Officer, any Executive Vice President, any Senior Vice President or any Corporate Secretary may, from time to time, appoint attorneys in fact, and agents to act for and on behalf of the Corporation and they may give such appointee such authority, as his/her certificate of authority may prescribe, to sign with the Corporation's name and seal with the Corporation's seal, bonds, recognizances, contracts of indemnity and other writings obligatory in the nature of a bond, recognizance or conditional undertaking, and any of said Officers may, at any time, remove any such appointee and revoke the power and authority given him/her.

does hereby appoint Troy Staples

, its true and lawful attorney(s)-in-fact, full authority to execute on SICA's behalf fidelity and surety bonds or undertakings and other documents of a similar character issued by SICA in the course of its business, and to bind SICA thereby as fully as if such instruments had been duly executed by SICA's regularly elected officers at its principal office, in amounts or penalties not exceeding the sum of: \$15,000,000.00

Signed this 12th day of February, 2021

SELECTIVE INSURANCE COMPANY OF AMERICA

By: _____

Brian C. Sarisky
Its SVP, Strategic Business Units, Commercial Lines



CERTIFIED COPY

STATE OF NEW JERSEY :

County of Sussex : ss. Branchville

COUNTY OF SUSSEX :

On this 12th day of February, 2021 before me, the undersigned officer, personally appeared Brian C. Sarisky, who acknowledged himself to be the Sr. Vice President of SICA, and that he, as such Sr. Vice President, being duly authorized to do, executed the foregoing instrument for the purposes therein contained, by signing the name of the corporation by himself as Sr. Vice President and that the same was his free act and deed and the free act and deed of SICA.

Charlene Kimble
Notary Public of New Jersey
My Commission Expires 6/2/2021

Charlene Kimble
Notary Public



The power of attorney is signed and sealed by facsimile under and by the authority of the following Resolution adopted by the Board of Directors of SICA at a meeting duly called and held on the 6th of February 1987, to wit:

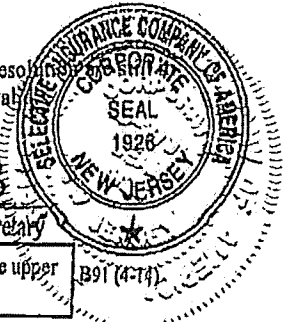
"RESOLVED, the Board of Directors of Selective Insurance Company of America authorizes and approves the use of a facsimile corporate seal, facsimile signatures of corporate officers and notarial acknowledgements thereof on powers of attorney for the execution of bonds, recognizances, contracts of indemnity and other writing obligatory in the nature of a bond, recognizance or conditional undertaking."

CERTIFICATION

I do hereby certify as SICA's Corporate Secretary that the foregoing extract of SICA's By-Laws and Resolutions is true in force and effect and this Power of Attorney issued pursuant to and in accordance with the By-Laws is valid.

Signed this 12th day of February, 2021.

Michael H. Lanza
Michael H. Lanza, SICA Corporate Secretary



Important Notice: If the bond number embedded within the Notary Seal does not match the number in the upper right-hand corner of this Power of Attorney, contact us at 973-948-3000.

B91 (4-14)

SECTION H: AGREEMENT

THIS AGREEMENT made this 16 day of April in the year Two Thousand and Twenty One between **JANKE GENERAL CONTRACTORS, 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 **MARCH 16, 2021**, 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:

GARVER PATH & STARKWEATHER DRIVE ASSESSMENT DISTRICT-2021 CONTRACT NO. 8572

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 **TWO MILLION SIX HUNDRED NINETEEN THOUSAND FOUR HUNDRED FIFTY-ONE AND 45/100 (\$2,619,451.45)** 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 Contractors 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.


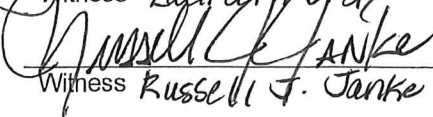
c. Exemptions: This section shall not apply when:

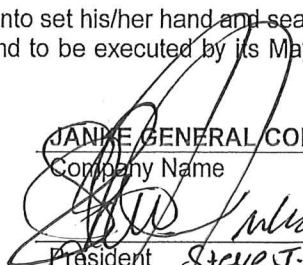
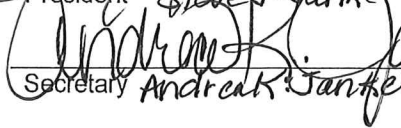
1. Hiring for a position where certain convictions or violations are a bar to employment in that position under applicable law, or
2. Hiring a position for which information about criminal or arrest record, or a background check is required by law to be performed at a time or in a manner that would otherwise 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.

**GARVER PATH & STARKWEATHER DRIVE ASSESSMENT DISTRICT-2021
CONTRACT NO. 8572**

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.

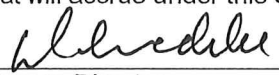
Countersigned:

 Witness Laura Ford 3/17/21 Date

 Witness Russell J. Janke 3-17-21 Date

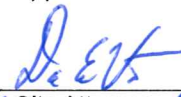
JANKE GENERAL CONTRACTORS, INC.
 Company Name

 President Steve J. Janke 3/17/21 Date

 Secretary Andrew K. Janke 3/17/21 Date


CITY OF MADISON, WISCONSIN


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

Approved as to form:


 Finance Director 4/9/21 Date


 City Attorney MIKE HAAS 4-16-21 Date

Witness _____ Date _____

 Witness _____ Date _____

SEE FOLLOWING PAGE
 Mayor _____ Date _____

 City Clerk Sherry Hancock for 3/29/21 Date

**GARVER PATH & STARKWEATHER DRIVE ASSESSMENT DISTRICT-2021
CONTRACT NO. 8572**

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:		<u>JANKE GENERAL CONTRACTORS, INC.</u>
	<u>[Signature]</u>	<u>Company Name</u>
Witness	<u>[Signature]</u> <u>3/17/21</u>	<u>[Signature]</u> <u>3/17/21</u>
	<u>Laurent Ford</u> <u>Date</u>	<u>Steve Janke</u> <u>Date</u>
Witness	<u>[Signature]</u> <u>3-17-21</u>	<u>[Signature]</u> <u>3/17/21</u>
	<u>Russell J. Janke</u> <u>Date</u>	<u>Andrea K. Janke</u> <u>Date</u>
		<u>Secretary</u>

CITY OF MADISON, WISCONSIN

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

Approved as to form:

	<u>[Signature]</u> <u>4/9/21</u>
Finance Director	<u>Date</u>
Witness	<u>[Signature]</u> <u>04/16/2021</u>
	<u>Date</u>
Witness	<u>[Signature]</u> <u>3/29/21</u>
	<u>Date</u>

	<u>[Signature]</u> <u>4-16-21</u>
City Attorney	<u>Date</u>
Mayor	<u>[Signature]</u> <u>04/16/2021</u>
	<u>Date</u>
City Clerk	<u>[Signature]</u> <u>for 3/29/21</u>
	<u>Date</u>

SECTION I: PAYMENT AND PERFORMANCE BOND

LET ALL KNOW BY THESE DOCUMENTS PRESENTED, that we JANKE GENERAL CONTRACTORS, INC., as principal, and Selective Insurance Company of America Company of NJ as surety, are held and firmly bound unto the City of Madison, Wisconsin, in the sum of TWO MILLION SIX HUNDRED NINETEEN THOUSAND FOUR HUNDRED FIFTY-ONE AND 45/100 (\$2,619,451.45) 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:

**GARVER PATH & STARKWEATHER DRIVE ASSESSMENT DISTRICT-2021
CONTRACT NO. 8572**

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 17th day of March, 2021

Countersigned:

[Signature]
Witness Haurat. Ford
[Signature]
Secretary Andrea K. Janke

JANKE GENERAL CONTRACTORS, INC.
Company Name (Principal)
[Signature]
President Steve J. Janke, President Seal

Approved as to form:

[Signature]
for City Attorney MIKE HAAS

Selective Insurance Company of America
Surety Seal
 Salary Employee Commission
By [Signature]
Attorney-in-Fact Connie Smith

This certifies that I have been duly licensed as an agent for the above company in Wisconsin under National Producer Number 16492915 for the year 2021, and appointed as attorney-in-fact with authority to execute this payment and performance bond which power of attorney has not been revoked.

03/17/2021
Date

[Signature]
Agent Signature Connie Smith

SECTION J: LIST OF SUBCONTRACTOR

March 2010

LIST OF SUBCONTRACTORS

Section 66.0901(7), Wisconsin Statutes, provides that as a part of the proposal, the bidder also shall submit a list of the subcontractors the bidder proposes to contract with and the class of work to be performed by each. In order to qualify for inclusion in the bidder's list a subcontractor shall first submit a bid in writing, to the general contractor at least 48 hours prior to the time of the bid closing. The list may not be added to or altered without the written consent of the municipality. A proposal of a bidder is not invalid if any subcontractor and the class of work to be performed by the subcontractor has been omitted from a proposal; the omission shall be considered inadvertent or the bidder will perform the work personally.

No subcontract, whether listed herein or later proposed, may be entered into without the written consent of the Engineer as provided in Subsection 108.1 of the Standard Specifications.

<u>Name of Subcontractor</u>	<u>Class of Work</u>	<u>Estimated Value</u>
Wolf Paving Co., Inc.	Asphalt	\$80,560
Bullet Transit Co., Inc.	Trucking	\$105,434.71
Crowley Construction Corp.	Line Painting	\$18,731. ²⁵
Gestra Engineering	Material Testing	\$6210
Hard Rock Sawing & Drilling Specialists Co.	^{Saw} Cutting	\$2020
Raymond P. Cattell, Inc.	Concrete	\$132,208
Cumming & Turk Inc.	Electrical	\$59,883

DECEMBER 2000

**CERTIFICATION REGARDING DEBARMENT, SUSPENSION, AND OTHER
RESPONSIBILITY MATTERS - PRIMARY COVERED TRANSACTIONS**

Instructions for Certification

1. By signing and submitting this proposal, the prospective contractor is providing the certification set out below.
2. The inability of a person to provide the certification required below will not necessarily result in denial of participation in this covered transaction. The prospective contractor shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective contractor to furnish a certification or an explanation shall disqualify such person from participation in this transaction.
3. The certification in this clause is a material representation of fact upon which reliance was placed when the department determined to enter into this transaction. If it is later determined that the contractor knowingly rendered an erroneous certification in addition to other remedies available to the Federal Government the department may terminate this transaction for cause or default.
4. The prospective contractor shall provide immediate written notice to the department to whom this proposal is submitted if at any time the prospective contractor learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
5. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of the rules implementing Executive Order 12549. You may contact the department to which this proposal is being submitted for assistance in obtaining a copy of those regulations.
6. The prospective contractor agrees by submitting this proposal that, should this contract be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department entering into this transaction.
7. The prospective contractor further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," which is included as an addendum to PR-1273 - "Required Contract Provisions Federal Aid Construction Contracts," without

modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.

8. The contractor may rely upon a certification of a prospective subcontractor/materials supplier that it is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A contractor may decide the method and frequency by which it determines the eligibility of its principals. Each contractor may, but is not required to, check the Disapproval List (telephone # 608/266/1631).
9. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a contractor is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
10. Except for transactions authorized under paragraph 6 of these instructions, if a contractor in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department may terminate this transaction for cause or default.

Certification Regarding Debarment, Suspension, and Other Responsibility Matters - Primary Covered Transactions

- (1) The prospective contractor certifies to the best of its knowledge and belief, that it and its principals:
 - (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
 - (b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements or receiving stolen property;
 - (c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offense enumerated in paragraph (1)(b) of this certification; and
 - (d) Have not within a three-year period preceding this proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
- (2) Where the prospective contractor is unable to certify to any of the statements in this certification, such prospective contractor shall attach an explanation to this proposal.

Effective August 2015 letting

BUY AMERICA PROVISION

All steel and iron materials permanently incorporated in this project shall be domestic products and all manufacturing and coating processes for these materials from smelting forward in the manufacturing process must have occurred within the United States. Coating includes epoxy coating, galvanizing, painting and any other coating that protects or enhances the value of a material subject to the requirements of Buy America. The exemption of this requirement is the minimal use of foreign materials if the total cost of such material permanently incorporated in the product does not exceed one-tenth of one percent (1/10 of 1%) of the total contract cost or \$2,500.00, whichever is greater. For purposes of this paragraph, the cost is that shown to be the value of the subject products as they are delivered to the project. The contractor shall take actions and provide documentation conforming to CMM 2-28.5 to ensure compliance with this "Buy America" provision.

<http://wisconsindot.gov/rdwy/cmm/cm-02-28.pdf>

Upon completion of the project certify to the engineer, in writing using department form WS4567, that all steel, iron, and coating processes for steel or iron incorporated into the contract work conform to these "Buy America" provisions. Attach a list of exemptions and their associated costs to the certification form. Department form WS4567 is available at:

<http://wisconsindot.gov/hcciDocs/contracting-info/ws4567.doc>



BUY AMERICA CERTIFICATION

Wisconsin Department of Transportation
DT4567 9/2020

Project ID: _____ Highway: _____ County: _____

Name of Road/Project: _____

Prime Contractor: _____

Address: _____

Contact Person: _____ Phone: _____

DOT Project Manager: _____ Project Engineer: _____

The undersigned certifies that only domestic steel and iron was permanently incorporated into the construction portion of the project.

To be considered domestic, all steel and iron used and all products manufactured from steel and iron must be produced in the United States. This includes smelting, coating, bending, shaping, and all other manufacturing processes performed on the product. Coating includes all processes which protect or enhance the value of the material to which the coating is applied.

This requirement does not preclude a minimal use of foreign steel and iron materials, provided the cost of such materials does not exceed 0.1 percent of the contract price or \$2500 whichever is greater. Attached to this certification are invoices and other available documentation substantiating a claimed exemption.

Signature (prime contractor representative) _____

Typed or Printed Name _____

Title _____

Date _____

SEPTEMBER 2002

**NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE
EQUAL EMPLOYMENT OPPORTUNITY (EXECUTIVE ORDER 11246)**

1. The Offeror's or Bidder's attention is called to the "Employment Practices" and "Equal Opportunity Clause" set forth in the Required Contract Provisions, FHWA 1273.
2. The goals and timetables for minority and female participation expressed in percentage terms for the contractor's aggregate work force in each trade, on all construction work in the covered area, are as follows:

Goals for Minority Participation for Each Trade:

<u>County</u>	<u>%</u>	<u>County</u>	<u>%</u>	<u>County</u>	<u>%</u>
Adams	1.7	Iowa	1.7	Polk	2.2
Ashland	1.2	Iron	1.2	Portage	0.6
Barron	0.6	Jackson	0.6	Price	0.6
Bayfield	1.2	Jefferson	7.0	Racine	8.4
Brown	1.3	Juneau	0.6	Richland	1.7
Buffalo	0.6	Kenosha	3.0	Rock	3.1
Burnett	2.2	Kewaunee	1.0	Rusk	0.6
Calumet	0.9	La Crosse	0.9	St. Croix	2.9
Chippewa	0.5	Lafayette	0.5	Sauk	1.7
Clark	0.6	Langlade	0.6	Sawyer	0.6
Columbia	1.7	Lincoln	0.6	Shawano	1.0
Crawford	0.5	Manitowoc	1.0	Sheboygan	7.0
Dane	2.2	Marathon	0.6	Taylor	0.6
Dodge	7.0	Marinette	1.0	Trempealeau	0.6
Door	1.0	Marquette	1.7	Vernon	0.6
Douglas	1.0	Menominee	1.0	Vilas	0.6
Dunn	0.6	Milwaukee	8.0	Walworth	7.0
Eau Claire	0.5	Monroe	0.6	Washburn	0.6
Florence	1.0	Oconto	1.0	Washington	8.0
Fond du Lac	1.0	Oneida	0.6	Waukesha	8.0
Forest	1.0	Outagamie	0.9	Waupaca	1.0
Grant	0.5	Ozaukee	8.0	Waushara	1.0
Green	1.7	Pepin	0.6	Winnebago	0.9
Green Lake	1.0	Pierce	2.2	Wood	0.6

Goals for female participation for each trade: 6.9%

These goals are applicable to all the contractor's construction work, (whether or not it is federal or federally assisted), performed in the covered area. If the contractor performs construction work in the geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its federally involved and nonfederally involved construction.

The contractor's compliance with the Executive Order and the Regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from contractor to contractor or from project to project for the sole purpose of meeting the contractor's goals shall be a violation of the contract, the Executive Order and the Regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within ten (10) working days of award of any construction subcontract in excess of \$10,000.00 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor, employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed.

As referred to in this section, the Director means:

Director
Office of Federal Contract Compliance Programs
Ruess Federal Plaza
310 W. Wisconsin Ave., Suite 1115
Milwaukee, WI 53202

The "Employer Identification Number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941.

4. As used in this notice, and in the contract resulting from solicitation, the "covered area" is the county(ies) in Wisconsin to which this proposal applies.

**REQUIRED CONTRACT PROVISIONS
FEDERAL-AID CONSTRUCTION CONTRACTS**

- I. General
- II. Nondiscrimination
- III. Nonsegregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- X. Compliance with Governmentwide Suspension and Debarment Requirements
- XI. Certification Regarding Use of Contract Funds for Lobbying

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services). The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract).

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

1. Equal Employment Opportunity: Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under

this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.

b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: 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, pre-apprenticeship, and/or on-the-job training."

2. EEO Officer: The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.

3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting to duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

5. Personnel Actions: Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are

applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar

with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. Assurance Required by 49 CFR 26.13(b):

a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.

b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the contracting agency deems appropriate.

11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391. The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor

will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

1. Minimum wages

a. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions

of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b.(1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(ii) The classification is utilized in the area by the construction industry; and

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or

will notify the contracting officer within the 30-day period that additional time is necessary.

(4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

c. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

2. Withholding

The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

3. Payrolls and basic records

a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-

Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

b.(1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/esa/whd/forms/wh347instr.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency..

(2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.

(4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and trainees

a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly

rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

6. Subcontracts. The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

7. Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

9. Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of eligibility.

a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

The following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section.

3. Withholding for unpaid wages and liquidated damages. The FHWA or the contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.

4. Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term "perform work with its own organization" refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:

(1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;

(2) the prime contractor remains responsible for the quality of the work of the leased employees;

(3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and

(4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.

2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is

evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C.3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.
2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200.

1. Instructions for Certification – First Tier Participants:

- a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.
- b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this

covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

2. Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200)

a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which

this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the

department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

* * * * *

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

* * * * *

XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 (49 CFR 20).

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

**ATTACHMENT A - EMPLOYMENT AND MATERIALS
PREFERENCE FOR APPALACHIAN DEVELOPMENT
HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS
ROAD CONTRACTS**

This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.

5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

Cargo Preference Act Requirement

All Federal-aid projects shall comply with 46 CFR 381.7 (a) – (b) as follows:

(a) *Agreement Clauses.* "Use of United States-flag vessels:"

(1) Pursuant to Pub. L. 664 (43 U.S.C. 1241(b)) at least 50 percent of any equipment, materials or commodities procured, contracted for or otherwise obtained with funds granted, guaranteed, loaned, or advanced by the U.S. Government under this agreement, and which may be transported by ocean vessel, shall be transported on privately owned United States-flag commercial vessels, if available.

(2) Within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (a)(1) of this section shall be furnished to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590."

(b) *Contractor and Subcontractor Clauses.* "Use of United States-flag vessels: The contractor agrees—"

(1) To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels.

(2) To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (b) (1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590.

(3) To insert the substance of the provisions of this clause in all subcontracts issued pursuant to this contract.

ADDITIONAL SPECIAL PROVISION 4

Payment to First-Tier Subcontractors

Within 10 calendar days of receiving a progress payment for work completed by a subcontractor, pay the subcontractor for that work. The prime contractor may withhold payment to a subcontractor if, within 10 calendar days of receipt of that progress payment, the prime contractor provides written notification to the subcontractor and the department documenting "just cause" for withholding payment.

The prime contractor may also withhold routine retainage from payments due subcontractors.

Payment to Lower-Tier Subcontractors

Ensure that subcontracting agreements at all tiers provide prompt payment rights to lower-tier subcontractors that parallel those granted first-tier subcontractors in this provision.

Release of Routine Retainage

After granting substantial completion the department may reduce the routine retainage withheld from the prime contractor to 75 percent of the original total amount retained.

When the Department sends the semi-final estimate the department may reduce the routine retainage withheld from the prime contractor to 10 percent of the original total amount retained.

Within 30 calendar days of receiving the semi-final estimate from the department, submit written certification that subcontractors at all tiers are paid in full for acceptably completed work and that no routine retainage is being withheld. The department will pay the prime contractor in full and reduce the routine retainage withheld from the prime contractor to zero when the department approves the final estimate.

This special provision does not limit the right of the department, prime contractor, or subcontractors at any tier to withhold payment for work not acceptably completed or work subject to an unresolved contract dispute.

APRIL 2013

ADDITIONAL FEDERAL-AID PROVISIONS

NOTICE TO ALL BIDDERS

To report bid rigging activities call:

1-800-424-9071

The U.S. Department of Transportation (DOT) operates the above toll-free "hotline" Monday through Friday, 8:00 a.m. to 5:00 p.m., Eastern Time. Anyone with knowledge of possible bid rigging, bidding collusion, or other fraudulent activities should use the "hotline" to report such activities.

The "hotline" is part of the DOT's continuing effort to identify and investigate highway construction contract fraud and abuse and is operated under the direction of the DOT Inspector General. All information will be treated confidentially and caller anonymity will be respected.

Additional Special Provision 6

ASP 6 - Modifications to the standard specifications

Make the following revisions to the standard specifications:

102.1 Prequalifying Bidders

Replace paragraph two with the following effective with the October 2020 letting:

- (2) Furnish a dated prequalification statement on the department's form at least 10 business days before the time set for the letting to close.

102.6 Preparing the Proposal

Replace the entire text with the following effective with the October 2020 letting:

102.6.1 General

- (1) Submit completed proposals on the department's bidding proposal described in 102.2. Submit legible information only. Write everything in ink, by typewriter, or by computer-controlled printer. Provide all dollar amounts in dollars and cents, in numerals. Attach all addenda to the submitted proposal.
- (2) Properly execute the proposal. Place the required signatures, in ink, in the space provided on the bidding proposal as indicated below:

ENTITY SUBMITTING PROPOSAL

REQUIRED SIGNATURE

Individual The individual or a duly authorized agent.

Partnership A partner or a duly authorized agent.

Joint venture A member or a duly authorized agent of at least one of the joint venture firms.

Corporation An authorized officer or duly authorized agent of the corporation. Also show the name of the state chartering that corporation and affix the corporate seal.

Limited liability company A manager, a member, or a duly authorized agent.

- (3) Instead of using the schedule of items provided on the department's bidding proposal, the bidder may submit a substitute schedule with the proposal. Use a format for the substitute schedule conforming to the department's guidelines for approval of a bidder-generated schedule of items. Obtain the department's written approval before using a substitute schedule.
- (4) Provide a unit price for each bid item listed in the schedule of items. Calculate and show, in the bid amount column, the products of the respective unit prices and quantities. For a lump sum bid item, show the same price in the unit price column and in the bid amount column pertaining to that bid item. Show the total bid obtained by adding the values entered in the bid amount column for the listed bid items.
- (5) If a unit price or lump sum bid already entered in the proposal needs to be altered, cross out the entered unit price or lump sum bid with ink or typewriter and enter the new price above or below and initial it in ink.
- (6) A change that the bidder makes in the proposal is not an alteration if the bidder makes that change as directed in a specific instruction contained in an addendum.

102.6.2 Disadvantaged Business Enterprise (DBE) Commitment

- (1) Before the letting is closed, submit the following documentation for proposals with a DBE goal:
 - 1. Commitment to subcontract to DBE on department form DT1506.
 - 2. Attachment A for each subcontractor listed on the DT1506.
 - 3. If the DBE goal is not attained, certificate of good faith efforts on department form DT1202.
- (2) Within 24 hours after the letting is closed, email all supplemental documentation for the DT1202 verifying efforts made to attain the DBE goal to DBE_Alert@dot.wi.gov.

102.7.2 Department May Reject

Replace paragraph one with the following effective with the October 2020 letting:

- (1) Proposals are irregular and the department may reject them for one or more of the following reasons:
 1. The proposal contains unauthorized alterations of format, words, or figures.
 2. The schedule of items contains errors, alterations, or omissions in, bid item numbers, quantities, descriptions, or units of measure, that cannot be corrected as specified in 102.7.1.
 3. The proposal is not prepared as specified in 102.6.
 4. There are unauthorized alterations, additions, conditional or alternate bids, amendments, attachments, or irregularities that may tend to make the proposal incomplete, indefinite, or ambiguous as to its meaning.
 5. There are unauthorized erasures or alterations appearing on the designation of the party to whom the department issued the bidding proposal.
 6. The award of the bid, together with the value of the bidder's uncompleted contract work, exceeds the bidder's established ratings, as determined in 102.1, at the time set for awarding the work.
 7. A single entity, under the same or different names, or affiliated entities submit more than one proposal for the same work. The submitting entity may be an individual, partnership, joint venture, corporation, or limited liability company.
 8. Does not submit the DBE forms and required supplemental documentation of the good faith efforts as specified in 102.6.2.

102.12 Public Opening of Proposals

Replace paragraph one with the following effective with the October 2020 letting:

- (1) The letting will close at the time and place indicated in the notice to contractors. The department will publicly open and post the total bid for each proposal on the Bid Express web site beginning at noon on the day after the letting is closed except as specified in 102.7.3 and 102.8. If a proposal has no total bid shown, the department will not post the bid. After verification for accuracy under 103.1, the department will post bid totals on the HCCI web site.

<https://wisconsindot.gov/Pages/doing-bus/contractors/hcci/bid-let.aspx>

103.1 Consideration of Proposals

Replace paragraph one with the following effective with the October 2020 letting:

- (1) Following the public opening of the proposals received, the department will compare them based on the summation of the products of the quantities of work listed and the contract unit prices offered. In case of discrepancies, errors, or omissions, the department will make corrections as specified in 102.7.1. In awarding contracts, the department, in addition to considering the amounts stated in the proposals, may consider one or more of the following:
 1. The responsibility of the various bidders as determined from a study of the data required under 102.1.
 2. The responsiveness of the bid as determined under 102.6.
 3. Information from other investigations that the department may make.

107.17.1 General

Replace paragraph four with the following effective with the November 2020 letting:

- (4) Comply with the railroad's rules and regulations regarding operations on or near the railroad right-of-way as follows:
 - When working on the railroad right-of-way.
 - When working within 25 feet of the track centerline or adjacent facilities, including equipment or extensions of equipment that can fall within 25 feet of the track centerline or adjacent facilities.

If the railroad's chief engineering officer requires, arrange with the railroad to obtain the services of qualified railroad employees to protect railroad traffic through the work area. Bear the cost of these services and pay the railroad directly. Notify the railroad's representative, specified in the project special provisions, in writing at least 40 business days before starting work near a track. Provide the specific time planned to start the operations.

109.6.3.3 Retainage

Delete paragraph two effective with the December 2020 letting:

450.2.1 Acronyms and Definitions

Add the following definitions to 450.2.1(2) effective with the November 2020 letting:

- Butt Joint** A transverse joint between existing and newly paved surfaces, formed by milling or sawing a vertical notch into the existing surface and then paving against the notch.
- Echelon Paving** Paving two or more adjacent lanes with adjacent pavers offset from each other by 200 feet or less.
- Notched Wedge Joint** A longitudinal joint consisting of a wedge placed at the edge of the initially paved lane with an overlapping wedge placed on the subsequent lane.
- Tandem Paving** Paving two or more adjacent lanes with adjacent pavers offset from each other by more than 200 feet.
- Vertical Joint** A longitudinal joint between 2 paved lanes with a vertical or nearly vertical interface between the adjacent mats.
-

450.3.2.8 Jointing

Replace paragraph two with the following with the November 2020 letting:

- (2) Where placing against existing HMA pavement, saw or mill the existing mat to form a full-depth joint.

Replace paragraphs five and six with the following effective with the November 2020 letting:

- (5) At the pre pave meeting, submit documentation to the engineer that includes the brand name and model of each extruding and compacting device proposed for notched wedge joint construction. Alternatively, submit pictures of fabricated wedging and compacting devices. Do not use devices before engineer approval.
- (6) For notched wedge joints, construct and shape the wedge for each layer using the engineer-approved extruding device and compacting device that will provide a uniform slope and will not restrict the main screed. Compact the wedge with a weighted roller wheel or vibratory plate compactor the same width as the wedge. Clean and apply tack coat to the wedge surface and both notches before placing the adjacent lane.
- (7) For butt and vertical joints, clean and apply tack coat to promote bonding and seal the joint.
- (8) If paving in echelon, the contractor may use a vertical or notched wedge joint. Joints paved in echelon need not be tack coated.

460.2.2.3 Aggregate Gradation Master Range

Replace table 460-1 with the following effective with the November 2020 letting:

TABLE 460-1 AGGREGATE GRADATION MASTER RANGE AND VMA REQUIREMENTS

SIEVE	PERCENT PASSING DESIGNATED SIEVES							
	NOMINAL SIZE							
	No. 1 (37.5 mm)	No. 2 (25.0 mm)	No.3 (19.0 mm)	No. 4 (12.5 mm)	No. 5 (9.5 mm)	No. 6 (4.75 mm)	SMA No. 4 (12.5 mm)	SMA No. 5 (9.5 mm)
50.0-mm	100							
37.5-mm	90 - 100	100						
25.0-mm	90 max	90 - 100	100					
19.0-mm	___	90 max	90 - 100	100			100	
12.5-mm	___	___	90 max	90 - 100	100		90 - 97	100
9.5-mm	___	___	___	90 max	90 - 100	100	58 - 80	90 - 100
4.75-mm	___	___	___	___	90 max	90 - 100	25 - 35	35 - 45
2.36-mm	15 - 41	19 - 45	23 - 49	28 - 58	32 - 67	90 max	15 - 25	18 - 28
1.18-mm	___	___	___	___	___	30 - 55	___	___
0.60-mm	___	___	___	___	___	___	18 max	18 max
0.075-mm	0 - 6.0	1.0 - 7.0	2.0 - 8.0	2.0 - 10.0	2.0 - 10.0	6.0 - 13.0	8.0 - 11.0	8.0 - 12.0
% VMA	11.0 min	12.0 min	13.0 min	14.0 min ^[1]	15.0 min ^[2]	16.0 - 17.5	16.0 min	17.0 min

^[1] 14.5 for LT and MT mixes.

^[2] 15.5 for LT and MT mixes.

532.2.1 General

Replace paragraph one with the following effective with the November 2020 letting:

- (1) Furnish structural steel conforming to ASTM as follows:

- <= 1/2 inch thick structural tube and pipeASTM A500 grade C
- > 1/2 inch thick structural tube and pipe API 5L PSL 2 grade 46 or ASTM 1085
- Tapered vertical supportsASTM A595 grade A or ASTM A572 grade 55
- Multi-sided or greater than 26-inch diameter round tapered poles ASTM A572 grade 65
- Structural angles and plates ASTM A709 grade 36

532.3.8 Acceptance and Inspection

Add the following new subsection effective with the November 2020 letting:

532.3.8 Acceptance and Inspection

- (1) Demonstrate to the engineer that electrical and mechanical systems for each high mast tower installation are fully operational. The department will not accept an installation until the engineer is satisfied that it functions properly.
- (2) Inspect completed "S" or "L" designated structures before opening to public traffic conforming to the BOS structure inspection manual part 4 for sign, signal, and high mast towers available at:

<https://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrcs/strct/inspection-manual.aspx>

Ensure that a department-certified active team leader for sign/signal inspections, listed on the department's highway structures information system (HSIS) website, performs inspections. Conform to the following:

- Notify the engineer at least 5 business days before inspection.
- Ensure that the team leader performing inspections submits the signed inspection reports and provides punch list items as maintenance items in the inspection report to the engineer within one business day after completing each inspection. Submit that signed final inspection report to the engineer and HSIS at:

<https://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrcs/strct/hsi.aspx>

- Notify the engineer and region ancillary structure project manager upon completion of the punch list items.

550.2.1 Steel Piles and Pile Shells

Replace paragraph three with the following effective with the November 2020 letting:

- (3) For steel pipe sections and steel pile shells for cast-in-place concrete piles, use ASTM A252 grade 3 steel.

614.3.2.1 Installing Posts

Replace paragraphs four and five with the following effective with the December 2020 letting:

- (4) For bid items 614.0220, 0230, and 2500; do not trim posts before installation and mark one face of each post as follows:

- Draw an embedment depth line.
- Above the embedment line, write the post length.
- Posts 3 through 8 of bid item 614.0220 do not require marking.

Install posts with the markings on the roadway side. Ensure the markings remain on the posts until guardrail final acceptance.

- (5) Ensure that posts are at least the minimum length and minimum embedment the plans show before cutting post tops to the finished elevation. After installation, the engineer may direct the contractor to remove and re-install up to 5% of the posts to verify they were placed to the required plan depth. If a post is embedded less than the required plan depth, the engineer may direct additional sampling. Re-install sampled posts at the locations and to the depths the plans show. Replace posts and other components that are damaged during sampling.
- (6) Provide offset block-mounted reflectors as the plans show.

710.2 Small Quantities

Replace paragraph one with the following effective with the November 2020 letting:

- (1) For contracts with only small quantities of material subject to testing, as defined under specific contract QMP provisions, modify the requirements of 710 as follows:
1. The contractor may submit an abbreviated quality control plan as allowed in 701.1.2.3.
 2. The engineer may accept aggregate based on documented previous testing and non-random start-up gradation testing as allowed in 710.5.6.1.

710.5.6 Aggregate Testing

Replace the entire text with the following effective with the November 2020 letting:

710.5.6.1 General

- (1) Test aggregate gradations during concrete production. The department will accept non-random start-up testing during concrete production for the following:
 - Small quantities, as defined in 715.1.1.2, of class I concrete placed under 715.
 - Less than 400 cubic yards of class II ancillary concrete placed under the contract.

710.5.6.2 Gradation Testing During Concrete Production

- (1) Test aggregate gradation during concrete production batching either at a central mix batch plant or at a ready mix plant. The contractor's concrete production QC tests can be used for the same mix design on multiple contracts.
- (2) Conform to combined gradation limits submitted in the contractor's quality control plan. Determine the complete gradation using a washed analysis for both fine and coarse aggregates. Report results for the 1/2", 1", 3/4", 1/2", 3/8", #4, #8, #16, #30, #50, #100, and #200 sieves.
- (3) Contractor QC testing frequency is based on the cumulative plant production for each mix design across multiple WisDOT contracts.

TABLE 710-1 PLANT PRODUCTION QC GRADATION TESTING FREQUENCY

Daily Plant Production Rate for WisDOT Work	Minimum QC Frequency per Stockpile
250 cubic yards or less	one test per cumulative total of 250 cubic yards
more than 250 through 1000 cubic yards	one test per day
more than 1000 cubic yards	two tests per day

- (4) Department QV testing frequency is based on the quantity of each mix design placed under each individual WisDOT contract.

TABLE 710-2 CONTRACT PLACEMENT QV GRADATION TESTING FREQUENCY

Anticipated Daily Placement Rate Each WisDOT Contract	Minimum QV Frequency per Stockpile
less than or equal to 1000 cubic yards	one test per 5 days of placement
more than 1000 cubic yards	two tests per 5 days of placement

716.2.1 Class II Concrete

Replace paragraphs four through six with the following effective with the November 2020 letting:

- (4) Provide concrete with a 28-day compressive strength that equals or exceeds the following:
 - If the contract specifies f_c , then f_c .
 - If the contract does not specify f_c , then 3000 psi.

ERRATA

101.3 Definitions

Adopt AASHTO change order definition.

Change order A written order to the contractor detailing changes to the specified work quantities or modifications within the scope of the original contract..

Delete existing contract change order, contract modification, and contract revision definitions.

460.2.7(1) HMA Mixture Design

Correct table 460-2 errata by eliminating plasticity index requirements for LT, MT, and HT mixes.

TABLE 460-2 MIXTURE REQUIREMENTS

Mixture type	LT	MT	HT	SMA
LA Wear (AASHTO T96)				
100 revolutions(max % loss)	13	13	13	13
500 revolutions(max % loss)	50	45	45	35
Soundness (AASHTO T104) (sodium sulfate, max % loss)	12	12	12	12
Freeze/Thaw (AASHTO T103 as modified in CMM 860.2.7) (specified counties, max % loss)	18	18	18	18
Fractured Faces (ASTM D5821 as modified in CMM 860.7.2) (one face/2 face, % by count)	65/___	75 / 60	98 / 90	100/90
Flat & Elongated (ASTM D4791) (max %, by weight)	5 (5:1 ratio)	5 (5:1 ratio)	5 (5:1 ratio)	20 (3:1 ratio)
Fine Aggregate Angularity (AASHTO T304, method A, min)	40 ^[1]	43 ^[1]	45	45
Sand Equivalency (AASHTO T176, min)	40	40 ^[2]	45	50
Clay Lumps and Friable Particle in Aggregate (AASHTO T112)	<= 1%	<= 1%	<= 1%	<= 1%
Plasticity Index of Material Added to Mix Design as Mineral Filler (AASHTO T89/90)				<= 4
Gyratory Compaction				
Gyrations for Nini	6	7	8	7
Gyrations for Ndes	40	75	100	65
Gyrations for Nmax	60	115	160	100
Air Voids, %Va (%Gmm Ndes)	4.0 (96.0)	4.0 (96.0)	4.0 (96.0)	4.5 (95.5)
% Gmm Nini	<= 91.5 ^[3]	<= 89.0 ^[3]	<= 89.0	___
% Gmm Nmax	<= 98.0	<= 98.0	<= 98.0	<= 98.0
Dust to Binder Ratio ^[4] (% passing 0.075/Pbe)	0.6 - 1.2 ^[5]	0.6 - 1.2 ^[5]	0.6 - 1.2 ^[5]	1.2 - 2.0
Voids filled with Binder (VFB or VFA, %)	68 - 80 ^[6] ^[8]	65 - 75 ^[6] ^[7] ^[9]	65 - 75 ^[6] ^[7] ^[9]	70 - 80
Tensile Strength Ratio (TSR) (AASHTO T283) ^[10] ^[11]				
no antistripping additive	0.75 min	0.75 min	0.75 min	0.80 min
with antistripping additive	0.80 min	0.80 min	0.80 min	0.80 min
Draindown (AASHTO T305) (%)	___	___	___	<= 0.30
Minimum Effective Asphalt Content, Pbe (%)	___	___	___	5.5

^[1] For No 6 (4.75 mm) nominal maximum size mixes, the specified fine aggregate angularity is 43 for LT and 45 MT mixes.

^[2] For No 6 (4.75 mm) nominal maximum size mixes, the specified sand equivalency is 43 for MT mixes.

^[3] The percent maximum density at initial compaction is only a guideline.

^[4] For a gradation that passes below the boundaries of the caution zone (ref. AASHTO M323), the dust to binder ratio limits are 0.6 - 1.6.

^[5] For No 6 (4.75 mm) nominal maximum size mixes, the specified dust to binder ratio limits are 1.0 - 2.0 for LT mixes and 1.5 - 2.0 for MT and HT mixes.

^[6] For No. 6 (4.75mm) nominal maximum size mixes, the specified VFB is 67 - 79 percent for LT mixes and 66 - 77 percent for MT and HT mixes.

^[7] For No. 5 (9.5mm) and No. 4 (12.5 mm) nominal maximum size mixtures, the specified VFB range is 70 - 76 percent.

^[8] For No. 2 (25.0mm) nominal maximum size mixes, the specified VFB lower limit is 67 percent.

^[9] For No. 1 (37.5mm) nominal maximum size mixes, the specified VFB lower limit is 67 percent.

^[10] WisDOT eliminates freeze-thaw conditioning cycles from the TSR test procedure.

^[11] Run TSR at asphalt content corresponding to 3.0% air void regressed design, or 4.5% air void design for SMA, using distilled water for testing.

513.2.1(2) General

Correct errata by changing the CMM reference from 875.2 to 875.4.

- (2) Conform to the department's certification method of acceptance, as defined in CMM 875.4, for railing and railing components. Furnish a certificate of compliance for miscellaneous hardware.
-

531.1(1) Description

Correct errata by adding structural steel sign supports constructed under 635.

- (1) This section describes constructing drilled shaft foundations for the following:
- Overhead sign structures constructed under 532.
 - High mast light towers constructed under 532.
 - Structural steel sign supports constructed under 635.
 - Camera poles constructed under 677.
-

635.3.1(1) Structural Steel Sign Supports

Correct errata by adding "type NS" concrete footings.

- (1) Locate and erect the supports as specified for placement and orientation in 637.3.3.2. Construct Type NS concrete footings conforming to 531.
-

654.5(2) Payment

Correct errata by changing excavating to drilling.

- (2) Payment for the Bases bid items is full compensation for providing concrete bases; for embedded conduit and electrical components; for anchor templates, rods, nuts, and washers; for bar steel reinforcement; and for drilling and backfilling.
-

Effective with December 2017 Letting

**WISCONSIN DEPARTMENT OF TRANSPORTATION
DIVISION OF TRANSPORTATION AND SYSTEM DEVELOPMENT**

**SUPPLEMENTAL REQUIRED CONTRACT PROVISIONS
FOR PROJECTS WITH FEDERAL AID**

I. PREVAILING WAGE RATES

The attached U.S. Department of Labor (Davis-Bacon Minimum Wage Rates) furnishes the minimum prevailing wage rates pursuant to the Davis-Bacon and Related Acts. The wage rates shown are the minimum rates required by the contract to be paid during its life, however this is not a representation that labor can be obtained at these rates. It is the responsibility of bidders to inform themselves as to the local labor conditions and prospective changes or adjustments of wage rates. No increase in the contract price will be allowed or authorized on account of the payment of wage rates in excess of those listed herein.

II. COVERAGE OF TRUCK DRIVERS

Truck drivers are covered by Davis-Bacon Minimum Wage Rates in the following circumstances:

- Drivers of a contractor or subcontractor for time spent working on the site of the work.
- Drivers of a contractor or subcontractor for time spent loading and/or unloading materials and supplies on the site of the work, if such time is not de minimis. https://www.dol.gov/whd/FOH/FOH_Ch15.pdf
- Truck drivers transporting materials or supplies between a facility that is deemed part of the site of the work and the actual construction site.
- Truck drivers transporting portions of the building or work between a site established specifically for the performance of the contract where a significant portion of such building or work is constructed and the physical place where the building or work called for in the contract will remain.

Truck drivers are not covered by Davis-Bacon Minimum Wage Rates in the following circumstances:

- Material delivery truck drivers while off the site of the work.
- Drivers of a contractor or subcontractor traveling between a Davis-Bacon job and a commercial supply facility while they are off the site of the work.”
- Truck drivers whose time spent on the site of the work is de minimis, such as only a few minutes at a time merely to pick up or drop off materials or supplies.

Details are available online at:

<https://www.dol.gov/whd/recovery/pwrb/Tab9.pdf>

<http://wisconsindot.gov/Pages/doing-bus/civil-rights/labornwage/trckng.aspx>

III. POSTINGS AT THE SITE OF THE WORK

In addition to the required postings furnished by the department, the contractor shall post the following in at least one conspicuous and accessible place at the site of work:

- a. A copy of the contractor's Equal Employment Opportunity Policy.

All required documents shall be posted by the first day of work and be accurate and complete. Postings must be readable, in an area where they will be noticed, and maintained until the last day of work.

IV. RESOURCES

Required information regarding compliance with federal provisions is found in the following resources:

- FHWA-1273 included in this contract
- U.S. Department of Labor Prevailing Wage Resource Book
- U.S. Department of Labor Field Operations Handbook
- U.S. Code of Federal Regulations
- Any applicable law, Act, or Executive Order enacted by the federal government at the time of the letting of this contract

SECTION Q: PREVAILING WAGE RATES

* BRWI0002-002 06/01/2020

ASHLAND, BAYFIELD, DOUGLAS, AND IRON COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 42.77	23.47

BRWI0002-005 06/01/2019

ADAMS, ASHLAND, BARRON, BROWN, BURNETT, CALUMET, CHIPPEWA,
CLARK, COLUMBIA, DODGE, DOOR, DUNN, FLORENCE, FOND DU LAC,
FOREST, GREEN LAKE, IRON, JEFFERSON, KEWAUNEE, LANGLADE,
LINCOLN, MANITOWOC, MARATHON, MARINETTE, MARQUETTE, MENOMINEE,
OCONTO, ONEIDA, OUTAGAMIE, POLK, PORTAGE, RUSK, ST CROIX, SAUK,
SHAWANO, SHEBOYGAN, TAYLOR, VILAS, WALWORTH, WAUPACA, WAUSHARA,
WINNEBAGO, AND WOOD COUNTIES

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER...	\$ 35.51	23.37

* BRWI0003-002 06/01/2020

BROWN, DOOR, FLORENCE, KEWAUNEE, MARINETTE, AND OCONTO COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 35.68	24.40

BRWI0004-002 06/01/2019

KENOSHA, RACINE, AND WALWORTH COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 38.43	25.10

BRWI0006-002 06/01/2019

ADAMS, CLARK, FOREST, LANGLADE, LINCOLN, MARATHON, MENOMINEE,
ONEIDA, PORTAGE, PRICE, TAYLOR, VILAS AND WOOD COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 35.06	23.02

BRWI0007-002 06/03/2019

GREEN, LAFAYETTE, AND ROCK COUNTIES

	Rates	Fringes
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SECTION Q: PREVAILING WAGE RATES

BRICKLAYER.....\$ 35.57 24.22

BRWI0008-002 06/01/2019

MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES

Rates Fringes

BRICKLAYER.....\$ 38.93 24.22

* BRWI0011-002 06/01/2020

CALUMET, FOND DU LAC, MANITOWOC, AND SHEBOYGAN COUNTIES

Rates Fringes

BRICKLAYER.....\$ 35.68 24.40

* BRWI0019-002 06/01/2020

BARRON, BUFFALO, BURNETT, CHIPPEWA, DUNN, EAU CLAIRE, PEPIN,
PIERCE, POLK, RUSK, ST. CROIX, SAWYER AND WASHBURN COUNTIES

Rates Fringes

BRICKLAYER.....\$ 34.86 25.22

BRWI0034-002 06/03/2019

COLUMBIA AND SAUK COUNTIES

Rates Fringes

BRICKLAYER.....\$ 35.56 24.23

CARP0087-001 05/01/2016

BURNETT (W. of Hwy 48), PIERCE (W. of Hwy 29), POLK (W. of Hwys
35, 48 & 65), AND ST. CROIX (W. of Hwy 65) COUNTIES

Rates Fringes

Carpenter & Piledrivermen.....\$ 36.85 18.39

CARP0252-002 06/01/2016

ADAMS, BARRON, BAYFIELD (Eastern 2/3), BROWN, BUFFALO,
BURNETT (E. of Hwy 48), CALUMET, CHIPPEWA, CLARK, COLUMBIA,
CRAWFORD, DANE, DODGE, DOOR, DUNN, EAU CLAIRE, FLORENCE (except
area bordering Michigan State Line), FOND DU LAC, FOREST,
GRANT, GREEN, GREEN LAKE, IOWA, IRON, JACKSON, JEFFERSON,
JUNEAU, KEWAUNEE, LA CROSSE, LAFAYETTE, LANGLADE, LINCOLN,
MANITOWOC, MARATHON, MARINETTE (except N.E. corner), MARQUETTE,

SECTION Q: PREVAILING WAGE RATES

MENOMINEE, MONROE, OCONTO, ONEIDA, OUTAGAMIE, PEPIN, PIERCE (E. of Hwys 29 & 65), POLK (E. of Hwys 35, 48 & 65), PORTAGE, PRICE, RICHLAND, ROCK, RUSK, SAUK, SAWYER, SHAWANO, SHEBOYGAN, ST CROIX (E. of Hwy 65), TAYLOR, TREMPLEAU, VERNON, VILAS, WALWORTH, WASHBURN, WAUPACA, WAUSHARA, WINNEBAGO, AND WOOD COUNTIES

	Rates	Fringes
CARPENTER		
CARPENTER.....	\$ 33.56	18.00
MILLWRIGHT.....	\$ 35.08	18.35
PILEDRIVER.....	\$ 34.12	18.00

CARP0252-010 06/01/2016		

ASHLAND COUNTY

	Rates	Fringes
Carpenters		
Carpenter.....	\$ 33.56	18.00
Millwright.....	\$ 35.08	18.35
Pile Driver.....	\$ 34.12	18.00

CARP0264-003 06/01/2016		

KENOSHA, MILWAUKEE, OZAUKEE, RACINE, WAUKESHA, AND WASHINGTON COUNTIES

	Rates	Fringes
CARPENTER.....	\$ 35.78	22.11

CARP0361-004 05/01/2018		

BAYFIELD (West of Hwy 63) AND DOUGLAS COUNTIES

	Rates	Fringes
CARPENTER.....	\$ 36.15	20.43

CARP2337-001 06/01/2016		

ZONE A: MILWAUKEE, OZAUKEE, WAUKESHA AND WASHINGTON

ZONE B: KENOSHA & RACINE

	Rates	Fringes
PILEDRIVERMAN		
Zone A.....	\$ 31.03	22.69

SECTION Q: PREVAILING WAGE RATES

Zone B.....\$ 31.03 22.69

ELEC0014-002 06/14/2020

ASHLAND, BARRON, BAYFIELD, BUFFALO, BURNETT, CHIPPEWA, CLARK
(except Maryville, Colby, Unity, Sherman, Fremont, Lynn &
Sherwood), CRAWFORD, DUNN, EAU CLAIRE, GRANT, IRON, JACKSON, LA
CROSSE, MONROE, PEPIN, PIERCE, POLK, PRICE, RICHLAND, RUSK, ST
CROIX, SAWYER, TAYLOR, TREMPLEAU, VERNON, AND WASHBURN
COUNTIES

	Rates	Fringes
Electricians:.....	\$ 35.98	20.98

ELEC0014-007 07/05/2020

REMAINING COUNTIES

	Rates	Fringes
Teledata System Installer Installer/Technician.....	\$ 27.75	15.14

Low voltage construction, installation, maintenance and
removal of teledata facilities (voice, data, and video)
including outside plant, telephone and data inside wire,
interconnect, terminal equipment, central offices, PABX,
fiber optic cable and equipment, micro waves, V-SAT,
bypass, CATV, WAN (wide area networks), LAN (local area
networks), and ISDN (integrated systems digital network).

ELEC0127-002 06/01/2020

KENOSHA COUNTY

	Rates	Fringes
Electricians:.....	\$ 41.62	30%+12.70

ELEC0158-002 06/01/2020

BROWN, DOOR, KEWAUNEE, MANITOWOC (except Schleswig),
MARINETTE (Wausaukee and area South thereof), OCONTO, MENOMINEE
(East of a line 6 miles West of the West boundary of Oconto
County), SHAWANO (Except Area North of Townships of Aniwa and
Hutchins) COUNTIES

	Rates	Fringes
ELECTRICIAN.....	\$ 34.77	29.75%+10.26

SECTION Q: PREVAILING WAGE RATES

ELEC0159-003 08/02/2020

COLUMBIA, DANE, DODGE (Area West of Hwy 26, except Chester and Emmet Townships), GREEN, LAKE (except Townships of Berlin, Seneca, and St. Marie), IOWA, MARQUETTE (except Townships of Neshkoka, Crystal Lake, Newton, and Springfield), and SAUK COUNTIES

	Rates	Fringes
ELECTRICIAN.....	\$ 41.86	22.67

ELEC0219-004 06/01/2019

FLORENCE COUNTY (Townships of Aurora, Commonwealth, Fern, Florence and Homestead) AND MARINETTE COUNTY (Township of Niagara)

	Rates	Fringes
Electricians:		
Electrical contracts over		
\$180,000.....	\$ 33.94	21.80
Electrical contracts under		
\$180,000.....	\$ 31.75	21.73

ELEC0242-005 05/31/2020

DOUGLAS COUNTY

	Rates	Fringes
Electricians:.....	\$ 39.77	28.11

ELEC0388-002 06/01/2020

ADAMS, CLARK (Colby, Freemont, Lynn, Mayville, Sherman, Sherwood, Unity), FOREST, JUNEAU, LANGLADE, LINCOLN, MARATHON, MARINETTE (Beecher, Dunbar, Goodman & Pembine), MENOMINEE (Area West of a line 6 miles West of the West boundary of Oconto County), ONEIDA, PORTAGE, SHAWANO (Aniwa and Hutchins), VILAS AND WOOD COUNTIES

	Rates	Fringes
Electricians:.....	\$ 34.85	26%+11.20

ELEC0430-002 06/01/2020

RACINE COUNTY (Except Burlington Township)

	Rates	Fringes
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SECTION Q: PREVAILING WAGE RATES

Electricians:.....\$ 41.86 22.66

 ELEC0494-005 06/01/2020

MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES

Rates Fringes

Electricians:.....\$ 42.84 25.54

 ELEC0494-006 06/01/2020

CALUMET (Township of New Holstein), DODGE (East of Hwy 26 including Chester Township), FOND DU LAC, MANITOWOC (Schleswig), and SHEBOYGAN COUNTIES

Rates Fringes

Electricians:.....\$ 36.32 22.51

 ELEC0494-013 06/07/2020

DODGE (East of Hwy 26 including Chester Twp, excluding Emmet Twp), FOND DU LAC (Except Waupun), MILWAUKEE, OZAUKEE, MANITOWOC (Schleswig), WASHINGTON, AND WAUKESHA COUNTIES

Rates Fringes

Sound & Communications

Installer.....\$ 21.46 18.52
 Technician.....\$ 31.34 20.00

Installation, testing, maintenance, operation and servicing of all sound, intercom, telephone interconnect, closed circuit TV systems, radio systems, background music systems, language laboratories, electronic carillon, antenna distribution systems, clock and program systems and low-voltage systems such as visual nurse call, audio/visual nurse call systems, doctors entrance register systems. Includes all wire and cable carrying audio, visual, data, light and radio frequency signals. Includes the installation of conduit, wiremold, or raceways in existing structures that have been occupied for six months or more where required for the protection of the wire or cable, but does not mean a complete conduit or raceway system. work covered does not include the installation of conduit, wiremold or any raceways in any new construction, or the installation of power supply outlets by means of which external electric power is supplied to any of the foregoing equipment or products

SECTION Q: PREVAILING WAGE RATES

* ELEC0577-003 06/01/2020

CALUMET (except Township of New Holstein), GREEN LAKE (N. part including Townships of Berlin, St Marie, and Seneca), MARQUETTE (N. part including Townships of Crystal Lake, Neshkoro, Newton, and Springfield), OUTAGAMIE, WAUPACA, WAUSHARA, AND WINNEBAGO COUNTIES

	Rates	Fringes
Electricians:.....	\$ 34.23	29.50%+10.00

 ELEC0890-003 06/01/2020

DODGE (Emmet Township only), GREEN, JEFFERSON, LAFAYETTE, RACINE (Burlington Township), ROCK AND WALWORTH COUNTIES

	Rates	Fringes
Electricians:.....	\$ 37.41	25.95%+11.11

 ELEC0953-001 06/02/2019

	Rates	Fringes
Line Construction:		
(1) Lineman.....	\$ 47.53	21.43
(2) Heavy Equipment Operator.....	\$ 42.78	19.80
(3) Equipment Operator.....	\$ 38.02	18.40
(4) Heavy Groundman Driver..	\$ 33.27	16.88
(5) Light Groundman Driver..	\$ 30.89	16.11
(6) Groundsman.....	\$ 26.14	14.60

 ENGI0139-005 06/01/2020

	Rates	Fringes
Power Equipment Operator		
Group 1.....	\$ 41.62	23.80
Group 2.....	\$ 41.12	23.80
Group 3.....	\$ 40.62	23.80
Group 4.....	\$ 40.36	23.80
Group 5.....	\$ 40.07	23.80
Group 6.....	\$ 34.17	23.80

HAZARDOUS WASTE PREMIUMS:
 EPA Level ""A"" protection - \$3.00 per hour
 EPA Level ""B"" protection - \$2.00 per hour
 EPA Level ""C"" protection - \$1.00 per hour

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

SECTION Q: PREVAILING WAGE RATES

GROUP 1: Cranes, tower cranes, and derricks with or without attachments with a lifting capacity of over 100 tons; or cranes, tower cranes, and derricks with boom, leads and/or jib lengths measuring 176 feet or longer.

GROUP 2: Cranes, tower cranes and derricks with or without attachments with a lifting capacity of 100 tons or less; or cranes, tower cranes, and derricks with boom, leads, and/or jibs lengths measuring 175 feet or under and Backhoes (excavators) weighing 130,000 lbs and over; caisson rigs; pile driver; dredge operator; dredge engineer; Boat Pilot.

GROUP 3: Mechanic or welder - Heavy duty equipment; cranes with a lifting capacity of 25 tons or under; concrete breaker (manual or remote); vibratory/sonic concrete breaker; concrete laser screed; concrete slipform paver; concrete batch plant operator; concrete pvt. spreader - heavy duty (rubber tired); concrete spreader & distributor; automatic subgrader (concrete); concrete grinder & planing machine; concrete slipform curb & gutter machine; slipform concrete placer; tube finisher; hydro blaster (10,000 psi & over); bridge paver; concrete conveyor system; concrete pump; Rotec type Conveyor; stabilizing mixer (self-propelled); shoulder widener; asphalt plant engineer; bituminous paver; bump cutter & grooving machine; milling machine; screed (bituminous paver); asphalt heater, planer & scarifier; Backhoes (excavators) weighing under 130,000 lbs; grader or motor patrol; tractor (scraper, dozer, pusher, loader); scraper - rubber tired (single or twin engine); endloader; hydraulic backhoe (tractor type); trenching machine; skid rigs; tractor, side boom (heavy); drilling or boring machine (mechanical heavy); roller over 5 tons; percussion or rotary drilling machine; air track; blaster; loading machine (conveyor); tugger; boatmen; winches & A-frames; post driver; material hoist.

GROUP 4: Greaser, roller steel (5 tons or less); roller (pneumatic tired) - self propelled; tractor (mounted or towed compactors & light equipment); shouldering machine; self-propelled chip spreader; concrete spreader; finishing machine; mechanical float; curing machine; power subgrader; joint sawer (multiple blade) belting machine; burlap machine; texturing machine; tractor endloader (rubber tired) - light; jeep digger; forklift; mulcher; launch operator; fireman, environmental burner

GROUP 5: Air compressor; power pack; vibrator hammer and extractor; heavy equipment, leadman; tank car heaters; stump chipper; curb machine operator; Concrete proportioning plants; generators; mudjack operator; rock breaker; crusher or screening plant; screed (milling machine); automatic belt conveyor and surge bin; pug mill operator; Oiler, pump (over 3 inches); Drilling Machine Tender.

SECTION Q: PREVAILING WAGE RATES

GROUP 6: Off-road material hauler with or without ejector.

 IRON0008-002 06/01/2020

BROWN, CALUMET, DOOR, FOND DU LAC, KEWAUNEE, MANITOWOC,
 MARINETTE, OCONTO, OUTAGAMI, SHAWANO, SHEBOYGAN, AND WINNEBAGO
 COUNTIES:

	Rates	Fringes
IRONWORKER.....	\$ 37.31	27.62

Paid Holidays: New Year's Day, Memorial Day, July 4th, Labor
 Day, Thanksgiving Day & Christmas Day.

 IRON0008-003 06/01/2020

KENOSHA, MILWAUKEE, OZAUKEE, RACINE, WALWORTH (N.E. 2/3),
 WASHINGTON, AND WAUKESHA COUNTIES

	Rates	Fringes
IRONWORKER.....	\$ 39.11	27.87

Paid Holidays: New Year's Day, Memorial Day, July 4th, Labor
 Day, Thanksgiving Day & Christmas Day.

 IRON0383-001 06/01/2020

ADAMS, COLUMBIA, CRAWFORD, DANE, DODGE, FLORENCE, FOREST,
 GRANT, GREENE, (Excluding S.E. tip), GREEN LAKE, IOWA,
 JEFFERSON, JUNEAU, LA CROSSE, LAFAYETTE, LANGLADE, MARATHON,
 MARQUETTE, MENOMINEE, MONROE, PORTAGE, RICHLAND, ROCK (Northern
 area, vicinity of Edgerton and Milton), SAUK, VERNON, WAUPACA,
 WAUSHARA, AND WOOD COUNTIES

	Rates	Fringes
IRONWORKER.....	\$ 37.10	27.06

 IRON0498-005 06/01/2019

GREEN (S.E. 1/3), ROCK (South of Edgerton and Milton), and
 WALWORTH (S.W. 1/3) COUNTIES:

	Rates	Fringes
IRONWORKER.....	\$ 40.25	40.53

SECTION Q: PREVAILING WAGE RATES

IRON0512-008 06/03/2019

BARRON, BUFFALO, CHIPPEWA, CLARK, DUNN, EAU CLAIRE, JACKSON, PEPIN, PIERCE, POLK, RUSK, ST CROIX, TAYLOR, AND TREMPPEALEAU COUNTIES

	Rates	Fringes
IRONWORKER.....	\$ 37.60	29.40

IRON0512-021 06/03/2019

ASHLAND, BAYFIELD, BURNETT, DOUGLAS, IRON, LINCOLN, ONEIDA, PRICE, SAWYER, VILAS AND WASHBURN COUNTIES

	Rates	Fringes
IRONWORKER.....	\$ 33.19	29.40

LAB00113-002 06/01/2020

MILWAUKEE AND WAUKESHA COUNTIES

	Rates	Fringes
LABORER		
Group 1.....	\$ 30.05	22.26
Group 2.....	\$ 30.20	22.26
Group 3.....	\$ 30.40	22.26
Group 4.....	\$ 30.55	22.26
Group 5.....	\$ 30.70	22.26
Group 6.....	\$ 26.54	22.26

LABORERS CLASSIFICATIONS

GROUP 1: General Laborer; Tree Trimmer; Conduit Layer; Demolition and Wrecking Laborer; Guard Rail, Fence, and Bridge Builder; Landscaper; Multiplate Culvert Assembler; Stone Handler; Bituminous Worker (Shoveler, Loader, and Utility Man); Batch Truck Dumper or Cement Handler; Bituminous Worker (Dumper, Ironer, Smoother, and Tamper); Concrete Handler

GROUP 2: Air Tool Operator; Joint Sawyer and Filler (Pavement); Vibrator or Tamper Operator (Mechanical Hand Operated); Chain Saw Operator; Demolition Burning Torch Laborer

GROUP 3: Bituminous Worker (Raker and Luteman); Formsetter (Curb, Sidewalk, and Pavement); Strike Off Man

GROUP 4: Line and Grade Specialist

SECTION Q: PREVAILING WAGE RATES

GROUP 5: Blaster and Powderman

GROUP 6: Flagperson; traffic control person

LAB00113-003 06/01/2020

OZAUKEE AND WASHINGTON COUNTIES

	Rates	Fringes
LABORER		
Group 1.....	\$ 29.30	22.26
Group 2.....	\$ 29.40	22.26
Group 3.....	\$ 29.45	22.26
Group 4.....	\$ 29.65	22.26
Group 5.....	\$ 29.50	22.26
Group 6.....	\$ 26.39	22.26

LABORERS CLASSIFICATIONS

GROUP 1: General Laborer; Tree Trimmer; Conduit Layer; Demolition and Wrecking Laborer; Guard Rail, Fence, and Bridge Builder; Landscaper; Multiplate Culvert Assembler; Stone Handler; Bituminous Worker (Shoveler, Loader, and Utility Man); Batch Truck Dumper or Cement Handler; Bituminous Worker (Dumper, Ironer, Smoother, and Tamper); Concrete Handler

GROUP 2: Air Tool Operator; Joint Sawyer and Filler (Pavement); Vibrator or Tamper Operator (Mechanical Hand Operated);

GROUP 3: Bituminous Worker (Raker and Luteman); Formsetter (Curb, Sidewalk, and Pavement); Strike Off Man

GROUP 4: Line and Grade Specialist

GROUP 5: Blaster; powderman

GROUP 6: Flagperson and Traffic Control Person

LAB00113-011 06/01/2020

KENOSHA AND RACINE COUNTIES

	Rates	Fringes
LABORER		
Group 1.....	\$ 29.11	22.26
Group 2.....	\$ 29.26	22.26
Group 3.....	\$ 29.46	22.26
Group 4.....	\$ 29.43	22.26

SECTION Q: PREVAILING WAGE RATES

Group 5.....	\$ 29.76	22.26
Group 6.....	\$ 26.25	22.26

LABORERS CLASSIFICATIONS:

GROUP 1: General laborer; Tree Trimmer; Conduit Layer; Demolition and Wrecking Laborer; Guard Rail, Fence, and Bridge Builder; Landscaper; Multiplate Culvert Assembler; Stone Handler; Bituminous Worker (Shoveler, Loader, and Utility Man); Batch Truck Dumper or Cement Handler; Bituminous worker (Dumper, Ironer, Smoother, and Tamper); Concrete Handler

GROUP 2: Air Tool Operator; Joint Sawyer and Filler (Pavement); Vibrator or Tamper Operator (Mechanical Hand Operated); Chain Saw Operator; Demolition Burning Torch Laborer

GROUP 3: Bituminous Worker (Raker and Luteman); Formsetter (Curb, Sidewalk, and Pavement); Strike Off Man

GROUP 4: Line and Grade Specialist

GROUP 5: Blaster and Powderman

GROUP 6: Flagman; traffic control person

LAB00140-002 06/01/2020

ADAMS, ASHLAND, BARRON, BAYFIELD, BROWN, BUFFALO, BURNETT, CALUMET, CHIPPEWA, CLARK, COLUMBIA, CRAWFORD, DODGE, DOOR, DOUGLAS, DUNN, EAU CLAIRE, FLORENCE, FOND DU LAC, FOREST, GRANT, GREEN, GREEN LAKE, IRON, JACKSON, JUNEAU, IOWA, JEFFERSON, KEWAUNEE, LA CROSSE, LAFAYETTE, LANGLADE, LINCOLN, MANITOWOC, MARATHON, MARINETTE, MARQUETTE, MENOMINEE, MONROE, OCONTO, ONEIDA, OUTAGAMIE, PEPIN, PIERCE, POLK, PORTAGE, PRICE, RICHLAND, ROCK, RUSK, SAUK, SAWYER, SHAWANO, SHEBOYGAN, ST. CROIX, TAYLOR, TREMPLEAU, VERNON, VILLAS, WALWORTH, WASHBURN, WAUPACA, WAUSHARA, WINNEBAGO, AND WOOD COUNTIES

	Rates	Fringes
LABORER		
Group 1.....	\$ 33.72	17.95
Group 2.....	\$ 33.82	17.95
Group 3.....	\$ 33.87	17.95
Group 4.....	\$ 34.07	17.95
Group 5.....	\$ 33.92	17.95
Group 6.....	\$ 30.35	17.95

LABORER CLASSIFICATIONS

GROUP 1: General Laborer; Tree Trimmer; Conduit Layer;

SECTION Q: PREVAILING WAGE RATES

Demolition and Wrecking Laborer; Guard Rail, Fence, and Bridge Builder; Landscaper; Multiplate Culvert Assembler; Stone Handler; Bituminous Worker (Shoveler, Loader, and Utility Man); Batch Truck Dumper or Cement Handler; Bituminous Worker (Dumper, Ironer, Smoother and Tamper); Concrete Handler

GROUP 2: Air Tool Operator; Joint Sawyer and Filler (Pavement); Vibrator or Tamper Operator (Mechanical Hand Operated); Chain Saw Operator, Demolition Burning Torch Laborer

GROUP 3: Bituminous Worker (Raker and Luteman); Formsetter (Curb, Sidewalk and Pavement); Strike Off Man

GROUP 4: Line and Grade Specialist

GROUP 5: Blaster; powderman

GROUP 6: Flagperson; Traffic Control

LAB00464-003 06/01/2020

DANE COUNTY

	Rates	Fringes
LABORER		
Group 1.....	\$ 34.00	17.95
Group 2.....	\$ 34.10	17.95
Group 3.....	\$ 34.15	17.95
Group 4.....	\$ 34.35	17.95
Group 5.....	\$ 34.20	17.95
Group 6.....	\$ 30.35	17.95

LABORERS CLASSIFICATIONS:

GROUP 1: General Laborer; Tree Trimmer; Conduit Layer; Demolition and Wrecking Laborer; Guard Rail, Fence, and Bridge Builder; Landscaper; Multiplate Culvert Assembler; Stone Handler; Bituminous Worker (Shoveler, Loader, and Utility Man); Batch Truck Dumper or Cement Handler; Bituminous Worker (Dumper, Ironer, Smoother, and Tamper); Concrete Handler

GROUP 2: Air Tool Operator; Joint Sawyer and Filler (Pavement); Vibrator or Tamper Operator (Mechanical Hand Operated); Chain Saw Operator; Demolition Burning Torch Laborer

GROUP 3: Bituminous Worker (Raker and Luteman); Formsetter (Curb, Sidewalk, and Pavement); Strike Off Man

GROUP 4: Line and Grade Specialist

SECTION Q: PREVAILING WAGE RATES

GROUP 5: Blaster; Powderman

GROUP 6: Flagperson and Traffic Control Person

 PAIN0106-008 05/01/2017

ASHLAND, BAYFIELD, BURNETT, AND DOUGLAS COUNTIES

	Rates	Fringes
Painters:		
New:		
Brush, Roller.....	\$ 30.33	17.27
Spray, Sandblast, Steel....	\$ 30.93	17.27
Repaint:		
Brush, Roller.....	\$ 28.83	17.27
Spray, Sandblast, Steel....	\$ 29.43	17.27

 PAIN0108-002 06/01/2019

RACINE COUNTY

	Rates	Fringes
Painters:		
Brush, Roller.....	\$ 36.08	20.36
Spray & Sandblast.....	\$ 37.08	20.36

 PAIN0259-002 05/01/2008

BARRON, CHIPPEWA, DUNN, EAU CLAIRE, PEPIN, PIERCE, POLK, RUSK,
 SAWYER, ST. CROIX, AND WASHBURN COUNTIES

	Rates	Fringes
PAINTER.....	\$ 24.11	12.15

 PAIN0259-004 05/01/2015

BUFFALO, CRAWFORD, JACKSON, LA CROSSE, MONROE, TREMPLEAU, AND
 VERNON COUNTIES

	Rates	Fringes
PAINTER.....	\$ 22.03	12.45

 PAIN0781-002 06/01/2019

JEFFERSON, MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES

Rates	Fringes
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SECTION Q: PREVAILING WAGE RATES

Painters:

Bridge.....	\$ 33.30	23.86
Brush.....	\$ 32.95	23.86
Spray & Sandblast.....	\$ 33.70	23.86

 PAIN0802-002 06/01/2019

COLUMBIA, DANE, DODGE, GRANT, GREEN, IOWA, LAFAYETTE, RICHLAND,
 ROCK, AND SAUK COUNTIES

	Rates	Fringes
PAINTER		
Brush.....	\$ 30.93	18.44

PREMIUM PAY:

Structural Steel, Spray, Bridges = \$1.00 additional per
 hour.

 PAIN0802-003 06/01/2019

ADAMS, BROWN, CALUMET, CLARK, DOOR, FOND DU LAC, FOREST, GREEN
 LAKE, IRON, JUNEAU, KEWAUNEE, LANGLADE, LINCOLN, MANITOWOC,
 MARATHON, MARINETTE, MARQUETTE, MENOMINEE, OCONTO, ONEIDA,
 OUTAGAMIE, PORTAGE, PRICE, SHAWANO, SHEBOYGAN, TAYLOR, VILAS,
 WAUSHARA, WAUPACA, WINNEBAGO, AND WOOD COUNTIES

	Rates	Fringes
PAINTER.....	\$ 30.93	18.58

 PAIN0934-001 06/01/2017

KENOSHA AND WALWORTH COUNTIES

	Rates	Fringes
Painters:		
Brush.....	\$ 33.74	18.95
Spray.....	\$ 34.74	18.95
Structural Steel.....	\$ 33.89	18.95

 PAIN1011-002 06/02/2019

FLORENCE COUNTY

	Rates	Fringes
Painters:.....	\$ 25.76	13.33

 PLAS0599-010 06/01/2017

SECTION Q: PREVAILING WAGE RATES

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER		
Area 1.....	\$ 39.46	17.17
Area 2 (BAC).....	\$ 35.07	19.75
Area 3.....	\$ 35.61	19.40
Area 4.....	\$ 34.70	20.51
Area 5.....	\$ 36.27	18.73
Area 6.....	\$ 32.02	22.99

AREA DESCRIPTIONS

AREA 1: BAYFIELD, DOUGLAS, PRICE, SAWYER, AND WASHBURN COUNTIES

AREA 2: ADAMS, ASHLAND, BARRON, BROWN, BURNETT, CALUMET, CHIPPEWA, CLARK, COLUMBIA, DODGE, DOOR, DUNN, FLORENCE, FOND DU LAC, FOREST, GREEN LAKE, IRON, JEFFERSON, KEWAUNEE, LANGLADE, LINCOLN, MANITOWOC, MARATHON, MARINETTE, MARQUETTE, MENOMINEE, OCONTO, ONEIDA, OUTAGAMIE, POLK, PORTAGE, RUSK, ST CROIX, SAUK, SHAWANO, SHEBOYGAN, TAYLOR, VILAS, WALWORTH, WAUPACA, WAUSHARA, WINNEBAGO, AND WOOD COUNTIES

AREA 3: BUFFALO, CRAWFORD, EAU CLAIRE, JACKSON, JUNEAU, LA CROSSE MONROE, PEPIN, PIERCE, RICHLAND, TREMPLEAU, AND VERNON COUNTIES

AREA 4: MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES

AREA 5: DANE, GRANT, GREEN, IOWA, LAFAYETTE, AND ROCK COUNTIES

AREA 6: KENOSHA AND RACINE COUNTIES

TEAM0039-001 06/01/2020

	Rates	Fringes
TRUCK DRIVER		
1 & 2 Axles.....	\$ 31.07	22.94
3 or more Axles; Euclids, Dumpton & Articulated, Truck Mechanic.....	\$ 31.22	22.94

WELL DRILLER.....	\$ 16.52	3.70

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

SECTION Q: PREVAILING WAGE RATES

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing

SECTION Q: PREVAILING WAGE RATES

this classification and rate.

Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests

SECTION Q: PREVAILING WAGE RATES

for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION

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