\$8,017,100.00

BID OF______R. G. HUSTON CO., INC.

2024

PROPOSAL, CONTRACT, BOND AND SPECIFICATIONS

FOR

PHEASANT BRANCH GREENWAY ENHANCEMENT

CONTRACT NO. 9517

PROJECT NO. 14370

MUNIS NO. 14370

IN

MADISON, DANE COUNTY, WISCONSIN

AWARDED BY THE COMMON COUNCIL MADISON, WISCONSIN ON DECEMBER 10, 2024

> **CITY ENGINEERING DIVISION** 1600 EMIL STREET MADISON, WISCONSIN 53713

https://bidexpress.com/login

PHEASANT BRANCH GREENWAY ENHANCEMENT CONTRACT NO. 9517

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This Proposal, and Agreement have been prepared by:

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

James M. Wolfe, P.E., City Engineer

JMW: jo

SECTION A: ADVERTISEMENT FOR BIDS AND INSTRUCTIONS TO BIDDERS

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

A BEST VALUE CONTRACTING MUNICIPALITY

PROJECT NAME:	Pheasant Branch Greenway Enhancement
CONTRACT NO.:	9517
SBE GOAL	10%
BID BOND	5%
SBE PRE BID MEETING (1:00 P.M.)	10/31/2024
PREQUALIFICATION APPLICATION DUE (2:00 P.M)	11/7/2024
BID SUBMISSION (2:00 P.M.)	11/14/2024
BID OPEN (2:30 P.M.)	11/14/2024
PUBLISHED IN WSJ	10/24/2024, 10/31/2024, & 11/7/2024

<u>SBE PRE BID MEETING</u>: Pre-Bid Meetings are being held virtually. Advance registration is required. Visit the SBE Meeting web page on Engineering's web site:

https://www.cityofmadison.com/engineering/developers-contractors/contractors/how-to-bid-public-works-contracts/small-business.

Questions regarding SBE Program requirements may be directed to Tracy Lomax, Affirmative Action Division. Tracy may be reached at (608) 267-8634, or by email, <u>TLomax@cityofmadison.com</u>.

<u>PREQUALIFICATION</u> <u>APPLICATION</u>: Forms are available on our website, <u>www.cityofmadison.com/engineering/developers-contractors/contractors/how-to-get-prequalified</u>. If not currently prequalified in the categories listed in Section A, an amendment to your Prequalification will need to be submitted prior to the same due date. Postmark is not applicable.

<u>SAM UNIQUE ENTITY ID REQUIRED</u>: Prior to bid award, all bidders for this project must submit a SAM Unique Entity ID to the City for all proposed prime and subcontractors listed in the bid.

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

Bids may be submitted on line through Bid Express or in person at 1600 Emil St. 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 - 2024 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/engineering/developers-contractors/standard-specifications.

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 prequalified 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)I. 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 (<u>www.bidexpress.com</u>). 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 equal to at least 5% of the bid or a Certificate of Annual/Biennial Bid Bond or certified check, payable to the City Treasurer. Bid deposit of the successful bidders shall be returned within forty-eight (48) hours following execution of the contract and bond as required.

MINOR DISCREPENCIES

Bidder is responsible for submitting all forms necessary for the City to determine compliance with State and City bidding requirements. Notwithstanding any language to the contrary contained herein, the City may

exercise its discretion to allow bidders to correct or supplement submissions after bid opening, if the minor discrepancy, bid irregularity or omission is insignificant and not one related to price, quality, quantity, time of completion or performance of the contract.

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

Building Demolition 101 Asbestos Removal 110 Building Demolition 120 THouse Mover Street, Utility and Site Construction Asphalt Paving Blasting Boring/Pipe Jacking 265 🔲 Retaining Walls, Precast Modular Units 201 205 270 Retaining Walls, Reinforced Concrete 275 X Sanitary, Storm Sewer and Water Main 210 Concrete Paving Construction 215 Con. Sidewalk/Čurb & Gutter/Misc. Flat Work 276 🗌 Sawcutting 220 Concrete Bases and Other Concrete Work 280 Sewer Lateral Drain Cleaning/Internal TV Insp. 221 Concrete Removal 285 Sewer Lining 222 Dredging 290 🗌 Sewer Pipe Bursting 225 295 Soil Borings 300 Soil Nailing 230 235 Fiber Optic Cable/Conduit Installation 305 🗍 Storm & Sanitary Sewer Laterals & Water Svc. Grading and Earthwork 240 Horizontal Saw Cutting of Sidewalk 310 Street Construction 241 Street Lighting Infrared Seamless Patching 315 🗌 242 318 🗍 Landscaping, Maintena Landscaping, Maintenance Tennis Court Resurfacing 245 320 Traffic Signals 246 Landscaping, Site and Street 325 🔲 Traffic Signing & Marking 250 332 Tree pruning/removal 333 Tree, pesticide treatment of Parking Ramp Maintenance 251 252 Pavement Marking Pavement Sealcoating and Crack Sealing 335 Trucking 255 Petroleum Above/Below Ground Storage 340 Utility Transmission Lines including Natural Gas, 260 Electrical & Communications Tank Removal/Installation 399 🗌 Other_ 262 Playground Installer Bridge Construction 501 Diridge Construction and/or Repair **Building Construction** Floor Covering (including carpet, ceramic tile installation, 437 Metals 401 rubber, VCT 440 Painting and Wallcovering 402 **Building Automation Systems** 445 🗍 Plumbing 450 🔲 Pump Repair 403 Concrete 455 Pump Systems Doors and Windows 404 460 🔲 Roofing and Moisture Protection Electrical - Power, Lighting & Communications 405 Elevator - Lifts Tower Crane Operator 410 464 \square 461 Solar Photovoltaic/Hot Water Systems 412 \Box Fire Suppression Furnishings - Furniture and Window Treatments 465 🗍 Soil/Groundwater Remediation 413 466 🗌 Warning Sirens 415 General Building Construction, Equal or Less than \$250,000 General Building Construction, \$250,000 to \$1,500,000 470 🗌 Water Supply Elevated Tanks 420 475 🗍 Water Supply Wells 425 428 Glass and/or Glazing 480 🔲 Wood, Plastics & Composites - Structural & Architectural Hazardous Material Removal 429 Heating, Ventilating and Air Conditioning (HVAC) 499 🗌 Other_ 430 433 Insulation - Thermal Masonry/Tuck pointing 435

- 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.
- 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".

Petroleum Above/Below Ground Storage Tank Removal and Installation (Attach copies of State Certifications.)
 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 <u>https://bidexpress.com</u> look up contract number and go to Section B: Proposal Page

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

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

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

SECTION C: SMALL BUSINESS ENTERPRISE Instructions to Bidders City of Madison SBE Program Information

2 Small Business Enterprise (SBE) Program Information

2.1 Policy and Goal

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

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

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

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

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

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

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

To be counted, the SBE vendor / supplier must be engaged in selling the product in question to the public. This is important in distinguishing an SBE vendor / supplier, which has a regular trade with a variety of customers, from a firm which performs supplier-like

functions on an <u>ad hoc</u> basis or for only one or two contractors with whom it has a special relationship.

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

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

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

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

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

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

2.2 Contract Compliance

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

2.3 Certification of SBE by City of Madison

The Affirmative Action Division maintains a directory of SBEs which are currently certified as such by the City of Madison. Contact the Contract Compliance Officer as indicated in Section 2.2 to receive a copy of the SBE Directory or you may access the SBE Directory online at www.cityofmadison.com/civil-rights/contract-compliance/targeted-business-enterprise.

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

2.4 Small Business Enterprise Compliance Report

2.4.1 Good Faith Efforts

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

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

2.4.2 **Reporting SBE Utilization and Good Faith Efforts**

The Small Business Enterprise Compliance Report is to be submitted by the <u>bidder</u> with the bid: This report is due by the specified bid closing time and date. Bids submitted without a completed SBE Compliance Report as outlined below may be deemed non-responsible and the bidder ineligible for award of this contract. Nothwithstanding any language to the contrary contained herein, the City may exercise its discretion to allow bidders to correct or supplement submissions after bid opening, if the minor discrepancy, bid irregularity or omission is insignificant

and not one related to price, quality, quantity, time of completion, performance of the contract, or percentage of SBE utilization.

- 2.4.2.1 If the Bidder <u>meets or exceeds</u> the goal established for SBE utilization, the Small Business Enterprise Compliance Report shall consist of the following:
 - 2.4.2.1.1 **Cover Page,** Page C-6; and
 - 2.4.2.1.2 **Summary Sheet,** C-7.
- 2.4.2.2 If the bidder <u>does not meet</u> the goal established for SBE utilization, the Small Business Enterprise Compliance Report shall consist of the following:
 - 2.4.2.2.1 **Cover Page,** Page C-6;
 - 2.4.2.2.2 Summary Sheet, C-7; and
 - 2.4.2.2.3 **SBE Contact Report,** C-8 and C-9. (A <u>separate</u> Contact Report must be completed for <u>each applicable</u> SBE which is <u>not</u> utilized.)

2.5 Appeal Procedure

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

2.6 SBE Requirements After Award of the Contract

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

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

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

2.7 SBE Definition and Eligibility Guidelines

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

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

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

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

SECTION D: SPECIAL PROVISIONS

PHEASANT BRANCH GREENWAY ENHANCEMENT CONTRACT NO. 9517

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.

ARTICLE 101 DEFINITIONS AND TERMS

Relationship Between the City and Strand Associates, Inc.[®] Strand Associates, Inc.[®] has been hired by the City to prepare drawings and specifications for the pedestrian bridge on this project. Additionally, Strand will assist the City by providing shop drawing review and responding to questions that may arise during construction. The City will provide resident engineering services and contract administration and is referred to as the City and/or Engineer in the Contract Documents.

Strand Associates, Inc.[®] will not supervise, direct, control or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or safety precautions and programs incidental thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the furnishing or performance of the Work. Strand Associates, Inc.[®] will not be responsible for Contractor's failure to perform or furnish the Work in accordance with the Contract Documents. Strand Associates, Inc.[®] will not be responsible for the acts or omissions of Contractor or of any subcontractor, any supplier, or of any person or organization performing or furnishing any of the Work.

During construction, the duties and responsibilities of Strand Associates, Inc.® include the following:

- 1. Review submittals from contractor related to pedestrian bridge.
- 2. Report to Engineer when clarifications and interpretations of the Contract Documents are needed. Consider, evaluate, and report to Engineer, Contractor's requests for modification.
- 3. Provide periodic site visits to observe the Work.

Strand Associates, Inc.[®] shall not:

- 1. Authorize any deviation from the Contract Documents or substitutions of materials or equipment.
- 2. Exceed limitations of Engineer's authority as set forth in the Contract Documents.
- 3. Undertake any of the responsibilities of Contractor, Subcontractor, Suppliers or Contractor's superintendent.
- 4. Advise on, issue directions relative to, or assume control over any aspect of the means, methods, techniques, sequences, or procedures of construction.
- 5. Advise on, issue directions regarding, or assume control over safety precautions and programs in connection with the Work.
- 6. Accept shop drawing or sample submittals from anyone other than City or Contractor.
- 7. Authorize the City to occupy the Project in whole or in part.

8. Participate in specialized field or laboratory tests or inspections conducted off-site by others except as specifically authorized by Engineer.

Section 102.1 PREQUALIFICATION OF BIDDERS

The bidder for this contract must be pre-qualified in at least one of several different categories due to the nature of work involved with this contract. The Subcontractor performing work under bid items 20701, 20970, (90042-90051, and 90070-90086) shall be prequalified in category 246 – Ecological Restoration.

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 \$75,500 for a single trade contract; or equal to or greater than \$369,500 for a multi-trade contract pursuant to MGO 33.07(7).

SECTION 102.13: PREVAILING WAGE

In addition to the requirements in Sec. 102.13 of the Standard Specifications, during the performance of this agreement, the Contractor agrees to comply with all applicable provisions of the Davis-Bacon Act (29 CFR part 5), as further set forth in Sec. 6 of Addendum A to the Agreement. The Federal Wage Decision applicable to this Project is attached as Attachment 3 to Addendum A to the Agreement.

In addition, the reporting language in Sec. 102.13(d) of the Standard Specifications applicable to replaced as follows:

Prior to all payments, including those under this Sec. 110.2 of these Special Provisions, Contractor or Subcontractor shall:

- 1. Submit weekly payroll reports, reflecting the number of hours worked by each employee, their rate of pay (including fringe benefits) and their specific trade, using LCP Tracker, at https://prod.lcptracker.net/Accounts/Accounts/Login.
- 2. Submit their monthly workforce reporting (Monthly Employment Utilization Report) including demographic information by the 15th of the next month using the City of Madison Contract Compliance online system at https://elam.cityofmadison.com/CitizenAccess/Default.aspx.
- 3. Submit their information on payments (Committed Cost Status Report) to subcontractors including Disadvantaged Business Enterprises by the 15th of the next month using the City of Madison Contract Compliance online system at <u>https://elam.cityofmadison.com/CitizenAccess/Default.aspx</u>.

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 Construction Type of work:

	Building
\triangleleft	Heavy
	Highway
7	Residential

ARTICLE 104 SCOPE OF WORK

The Pheasant Branch Enhancement Project is located on the northwest side of the City very close to the city limits of Middleton. The project is contained within Deming Way, Fourier Drive, and Excelsior Drive. In 2016, a large and intense storm event occurred in Madison, Wisconsin which caused widespread damage to existing infrastructure, channel corridors, and public property including buildings and structures in the project area. A further large event occurred in 2018 which caused flooding in excess of the 100-year storm event.

The design for this project is in response to the damage from those two extreme storm events and consists of the following; excavation and removal of sediment and native earthen materials to expand the flood storage capacity of the Old Sauk Greenway Pond located in the Old Sauk Greenway Business Park; excavation and removal of sediments and native earthen materials to expand the capacity of the Old Sauk Greenway channel leading up to the pond location between the Old Sauk Greenway Business Park; replacement of the culverts and hydraulic conveyance infrastructure along Deming Way, Fourier Avenue, and expansion to a box culvert system to allow for increased flood capacity; replacement and enhancement of existing storm sewer infrastructure near Blackhawk Road, Deming Way, and other miscellaneous locations to the pond and channel location; enhancement to the existing corridor for pedestrian access and bike paths with a trail along the east side of the pond and additional trees, plantings, and vegetation provided to enhance ecological health of the corridor.

Work shall include, but is not limited to; clearing & grubbing, tree removal, channel excavation and riprap placement, base course, installation of box culvert crossings, installation of storm pipe and structures, installation of water main and appurtenances, installation of sanitary sewer main and structures, installation of pedestrian bridge, grading, road reconstruction, pavement marking and restoration including the removal of invasive species, seeding and planting operations, and maintenance of plantings.

This project has received FEMA funding and is subject to all federal, state and local regulations and requirements as provided in these contract documents.

SECTION 104.4 INCREASED OR DECREASED QUANTITIES

The Contractor shall not be reimbursed for any deletions to the contract.

The modifications to the sanitary near 1289 Deming Way may not be required if the property owner connects their lateral to the new main on Deming Way. Additionally, plug planting, and the utility coordination bid items include estimates for work that may or may not be required. If actual quantities for the bid items to complete this work are less than estimated, or if items are deleted from the Contractor's work, the decreased quantities or deleted items shall not constitute the basis for a claim for damages for anticipated profits for the work dispensed with.

104.7 EXTRA WORK

Sec. 104.7 applies in full except that when calculating the prices for Extra Work to be completed by subcontractors federal requirements prohibit the addition of a percentage of cost as a mechanism for recovering indirect costs such as overhead or administrative costs. Contractors wishing to account for indirect costs must provide specific indirect cost rates at the time of submitting its costs that have been accepted by a Federal or State government agency in compliance with FAR Part 31 cost principles. These must be submitted in conjunction calculating the overall price for Extra Work.

SECTION 105.1 AUTHORITY OF THE ENGINEER

In this contract, the following definitions and contact information apply:

Project Engineer:	Jojo O'Brien, jobrien@cityofmadison.com
Stormwater Vegetation Coordinator	Maddie Dumas, MDumas2@cityofmadison.com
Construction Engineer or designee:	To be assigned, City of Madison Engineering Staff
Soils Testing Consultant:	Eric Fair, CGC, Inc. 608-288-4100 (office)
-	608-712-0409 (cell) efair@cgcinc.net

SECTION 105.12 COOPERATION BY THE CONTRACTOR

FEMA and Federal Contracting Requirements

No tree 3 inches in diameter or greater at breast height may be cut between April 1 and September 20 of any year. If this time restriction cannot be met it has to be brought to the attention of the Project Engineer immediately to coordinate with the State and FEMA for additional consultation with USFWS.

All borrow or fill material must come from pre-existing stockpiles form material onsite or commercially procured material for pre-existing source. The Contractor shall provide documentation of all sources of materials and pay tickets associated with any borrow, fill, topsoil, riprap, stone, and granular materials.

The Project Engineer and Contractor shall monitor ground disturbance for any potential archeological resources and if any are discovered will immediately cease construction and notify the State and FEMA.

Existing Items to Remain

The Contractor shall use care around existing trees, plantings, walls, signs, utilities, traffic signals, streetlights, pedestrian flashers and any other structures or amenities that are indicated on the plans to remain. The Contractor shall protect all items that are to remain and shall immediately clean off any residue from adjacent construction activities. Any items not specifically called out for removal are to remain. Damage to these items during construction, including any concrete residue, shall be repaired, remedied, or replaced at the Contractor's expense.

The Contractor shall use care around existing trees to remain as shown on the plans and as protected with construction fencing. No trees, other than those shown on the plan to be removed, shall be cut without the approval of the Project Engineer and the Stormwater Vegetation Coordinator; the abutting property owners shall be notified by the City in accordance with the City's Administrative Procedure Memorandum No. 6-2 prior to any removal. The Contractor shall notify the Project Engineer and city-hired arborist 3 weeks prior to when they request to remove any additional trees they identify so that the tree can be reviewed and considered for approval, and the City can notify the abutting property owners following APM No. 6-2. The Contractor shall not store materials or equipment within in 6 ft. of any existing tree that is to remain.

All curb and gutter, except as indicated on the plan set, shall be protected on Deming Way, Blackhawk Road, Fourier Drive and Excelsior Drive, and within easement areas. Damaged curb and gutter shall be replaced by Contractor incidental to contract, at the Contractor's expense.

Access to Properties

The Contractor shall maintain pedestrian access to all properties within the project limits and shall maintain vehicle access to all commercial and business driveways within the project limits per the City of Madison Standard Specifications for Public Works Construction—latest edition. Temporary cross walks shall be used as needed to maintain safe access through the project, and these are included with Bid Item 10701 – Traffic Control.

Greenway Access and Coordination

Construction is located within the Pheasant Branch Greenway, Deming Way, Blackhawk Road, Fourier Drive and Excelsior Drive. The Greenway sees regular pedestrian foot traffic. The Contractor shall note that portions of the Greenway that are not under construction will be opened to the public during the project.

Greenway Construction Schedule

The Contractor shall only disturb an area along the intermittent channel banks where grading, construction and restoration can occur within five (5) days and not remain exposed for a prolonged time period such that the area would be susceptible to erosion caused by rainfall events. If the Contractor chooses to construct the channel or pond area longitudinally and prevents flow from entering the section of the greenway they are constructing, the Contractor shall complete the restoration prior to opening the areas to flow. The sediment trap shown on the erosion control plans shall be in place when doing any grading work upstream in the pond, or in the greenways upstream or downstream of Fourier Dr. Once an area is disturbed, the Contractor shall work in the area each calendar day without breaks, until it is stabilized. The Contractor shall submit to the Project Engineer a construction schedule and plan detailing the process and sequence of construction and restoration activities and how work will progress along the Greenway as well as Deming Way, Blackhawk Road, Fourier Drive and Excelsior Drive to minimize erosion of disturbed areas. The Contractor shall provide a draft construction schedule prior to the preconstruction meeting and shall be prepared to discuss their schedule at the preconstruction meeting.

Coordination with Arborist

The City of Madison is contracting with a certified arborist to complete the initial marking of trees for removal, and for the root cutting around trees to remain. The Contractor shall coordinate with the City-hired arborist and let them know two (2) weeks prior to any tree removals. The Contractor shall verify the trees marked for removal and is responsible for removing the correct trees as shown on the plans. The Contractor shall bring any discrepancies to the attention of the Project Engineer prior to any tree removals. After reviewing the plans and the site, the Contractor shall provide a tree clearing plan that details the equipment they will use, including around the trees to remain, and how they chose their equipment to abide by the standard specifications and not damage adjacent trees that are to remain. The Project Engineer and City-hired arborist will review the plan. Tree removal shall not begin until the plan is approved.

Prior to tree removal, the Contractor, including any subcontractors completing the tree removals (Bid items 20404 and 20409) or grading, shall meet on-site for a tree-specific pre-construction meeting to discuss methods for clearing and grading with the City-hired arborist. The City-hired arborist will provide recommendations and guidelines for tree removal that will prevent damage to the adjacent trees to remain.

Following the tree removals, the City-hired arborist shall assist in modifying the tree fence boundary in the minor grading areas around the trees to remain in order to provide appropriate site-specific protection for the trees to remain (ex: STA 5004+00 to STA 5007+50, STA 5009+50 to STA 5011+00, STA 5011+50 to STA 5013+50, STA 5015+50 to STA 5017+00).

The City-hired arborist shall cut the roots over one (1) inch diameter of all trees to remain. The Contractor and arborist shall create a plan for how the grading shall be completed at each tree to allow for the arborist to cut roots of the remaining trees so as to protect the trees from damage. The fixed, agreed, and liquidated damages due by the Contractor to the City shall be in the amount of \$500 for each root that is cut by the City-hired arborist resulting from not properly coordinating grading activities with the arborist or that are damaged and need to be cut without prior consent from the City-hired arborist. The Contractor shall expect to attend a weekly meeting with the City-hired arborist where they share a detailed schedule of grading for the week so that the City-hired arborist can plan to be on-site when the grading adjacent to trees is occurring. It is the Contractor's responsibility to coordinate and share schedule updates with the City-hired arborist to allow grading to continue adjacent to trees on the Contractor's schedule.

Exposed roots shall be covered as soon as excavation and installation are complete. All roots over one (1) inch in diameter that are damaged shall be cleanly cut immediately back of the damaged section on the same day of the excavation. The Contractor shall not rip or pull roots out towards the trunk of a tree while excavating with a backhoe. The use of a backhoe to cut roots is NOT acceptable.

The City-hired arborist will coordinate with the City Engineer on enforcement of any violations of the standard specifications. The Contractor shall be aware that cost recovery charges for tree removals and tree damages are specific to this project, as stated in 107.13 Tree Protection.

The Contractor to note that starting in 2027, this site will be maintained by a separate ecological restoration contractor. During this time, the Contractor shall be required to continue to care for plants under Article 209.6 care and all other guaranteed items.

Coordination with Utilities

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

The following utility conflicts have been identified and require coordination as follows: Notice of Potential Conflict letter was sent on behalf of the City of Madison on 5/21/2024 to the utilities.

Alliant Energy will abandon existing 5" and 6" electric conduits and replace with new 5" and 6" electric conduits on Deming Way (North) 2' below proposed box culverts 101, 102, and 103. Existing 6" electric conduit to be abandoned and replaced with new 6" electric conduit at Demina Way 2' below proposed box culvert 403. New 4" conduits to be installed north of storm/ sanitary easement near 1117 Deming Way at box culvert 403 and continue outside project area. New 5" electric conduit to be installed 2' below proposed box culvert 401. Alliant will abandon existing 6" electric conduit and replace with new 6" electric conduit 2' below proposed box culvert 301 on Deming Way (Southwest). At Fourier Dr, new 4" conduit to be installed within the west easement area 2' below proposed box culverts 201, 202, 203 and 204. Also at Fourier Dr, on the east side, new 6" conduit to be installed within easement area 2' below proposed box culverts 201, 202, 203 and 204. This work is planned to be completed in advance of construction under this contract at Alliant Dachniwskvi these locations. The contact for Energy is Nicholas at nicholasdachniwskyj@alliantenergy.com or Chris Gill at chrisgill@alliantenergy.com.

Charter/Spectrum (Charter) has utilities throughout the project. Charter will replace ducts and reuse fiber optic in 2 existing conduits that will be discontinued in place at the southwest Deming Way culvert where they cross box culvert 301 to clear the conflict in advance of construction under this contract. Existing fiber and coax in conduits crossing box culvert 403 are to remain. The Contractor shall expose and support Charter's facilities during the culvert installation. The Contractor shall notify Charter ten (10) days prior to excavation to have a watchdog present. When culvert is installed the Contractor shall install visgueen between the City's storm sewer and Charter's utilities prior to Charter pouring slurry over their exposed ducts. The Contractor shall complete standard backfill over the pipe. Charter's existing coax and fiber in conduit will be lowered beneath box culvert 401 at ~STA 503+55 in advance of construction if it is verified to be in conflict. Charter has an existing fiber in conduit on the north side of the Deming Way culvert crossing box culverts 101-103 in the utility easement that is to be exposed, supported, and protected in place by the Contractor. The Contractor shall notify Charter ten (10) days prior to excavation to have a watchdog present and coordinate work. When the culvert is installed, the Contractor shall install visqueen between the City's culvert and Charter's utilities prior to Charter pouring slurry over the exposed ducts. The Contractor shall complete standard backfill over the pipe and Charter's utilities. On Fourier Dr, Charter will relocate existing fiber crossing box culverts 201-204. In all locations, an onsite inspector from Charter must be present any time construction work is conducted within 10 feet of the facility. Where proper vertical clearance of 24" cannot be maintained, install temporary sandbags, or other suitable material to maintain proper clearance to the facility. The contact for Charter is Mike Trankle at mike.trankle@charter.com, mobile: (608)-220-3025.

Lumen has utilities throughout the project. Lumen will relocate a fiber line on the north side and on the south side of the Deming Way North culvert that crosses box culvert 101-103 in advance of construction under this contract. The new fiber line will be on the north side of Deming Way near the property line beneath the proposed culvert. At Deming Way near the Blackhawk intersection fiber lines crossing Deming way from S-13B to S-13 will be cut from service and left in place, and

the lines will be relocated near STA 402+00 prior to construction. The fiber line and existing handhold that cross box culvert 403 will be relocated by Lumen. The fiber line that crosses box culvert 401 will be cut and left in place, with the facilities relocated by Lumen. Lumen's existing fiber line on the east side of Fourier Drive crossing box culverts 201-204 will be relocated. The contact for Lumen is Ryan Birdsall at ryan.birdsall@lumen.com or 608-658-2899.

Madison Gas & Electric Co (MG&E) has utilities throughout the project. Offsets will be constructed at Deming Way by Blackhawk Road for the 2" PE crossing the P-14 and 4" PE at P-15. On Deming Way at proposed Box Culvert 301 a new 4" PE gas main will be installed 2' under the new box. On Deming Way north of the Greenway, both existing 4" PE (north side) and 2" PE (south side) gas mains will be gapped between 101+50 – 104+50. On Fourier Drive new 4" PE gas main will be installed under boxes, 201, 202, 203, and 204. 2" PE gas main crossing Fourier Drive will be relocated from 204+70 to ~203+81. The contact for MG&E is Zach McIntyre at 608-352-9299 or zachary.mcintyre@mge.com.

MCI Communications Services (Verizon) will relocate existing conduits with a new conduit under the proposed box culvert 201, 202, 203 & 204 at Fourier Drive. Relocation is planned to completed in advance of the construction of this area under this contract. The contact for MCI is Randy Cicatello at 262-232-1323 or randy.cicatello@verizon.com.

TDS has utilities throughout the project. TDS will relocate existing facilities and lower two 2" conduits on Deming Way 2' under new box culverts 101, 102 and 103. TDS will relocate existing facilities including a pedestal and telecom handhold, and two 2" conduits will be lowered on Deming Way 2' under new box culvert 403. TDS will relocate existing facilities and lower a 2" and 1.25" conduit on Deming Way 2' under new box culvert 301. At Fourier Dr, TDS will relocate existing facilities and lower a 2" and 1.25" conduit and copper cable on the west side of Fourier Dr 2' under new box culverts 201, 202, 203 and 204. On the east side of Fourier Dr, TDS will relocate existing facilities and lower copper cable 2' under new box culverts 201, 202, 203 and 204. In the Greenways downstream of Fourier Dr at ~STA 33+10 there are two existing fiber and copper lines. The deeper 4" and 1.25" conduits (17' from center of the existing walking path) will remain in place, and the 2x28F fiber will be abandoned. Upstream of the Fourier Drive crossing in the channel at STA ~21+80, existing fiber is beneath proposed grading and shall remain in place. The proposed relocation work is planned to be completed in advance of construction under this contract at these locations. The contact for TDS is Justin Ovist at justin.ovist@tdstelecom.com.

UW Health has utilities at Deming Way between station 401+00 - 404+00 overlapping P-15. Fiber watchdog required when working near or over UW-Health Fiber. Call Scott Feldmann (608-279-7137) a minimum of 3 days ahead of work.

At the southwest Deming Way crossing, at box culvert 301 the Contractor shall coordinate with Scott Feldmann (608-279-7137) of UW-Heath a minimum of 5 working days ahead of box culvert work.

- 1. The existing 144 count UW-Health Fiber is to be de-activated and temporarily removed for up to one week to allow for construction of the new box culvert. Removal shall occur just prior to this specific construction activity.
- 2. UW-Health's utility contractor will work with the City of Madison's Contractor to safely expose the 3 empty 1.25" ducts at the bottom of the excavation.
- 3. Exposed ducts will be reworked by UW-Health's contractor to elevation below the proposed box structure. Reworking is planned to take approximately 2 hours assuming no other complications arise such as solid rock being encountered, etc.
- 4. The City of Madison's Contractor shall provide a safe, OSHA approved shoring installation to allow for the exposure and reworking of the 3 empty ducts.
- 5. Upon completion of the excavation work over the fiber ducts, the UW-Health Fiber will be reinstalled and re-activated.

WIN Technology has a noted conflict on Fourier Drive on the east side around station 205+00. The new box culvert installations (201-204) and subsequent grading has the existing fiber in direct conflict. WIN will install a new section of fiber to resolve the conflict in advance of construction

under this contract. On Fourier Drive near station 202+85, WIN will window fiber facility following the removal of the asphalt pavement under the Contractors traffic control. WIN shall be alerted ten (10) days prior to work commencing near this facility. The contact for WIN Technology is Todd Ellickson at <u>Todd.Ellickson@wintechnology.com</u>

The existing Traffic Engineering electrical and fiber optic must remain in service throughout the duration of the project. If any existing conduit for signals, lighting or fiber optic have to be replaced, temporary connections have to be installed by the Contractor and operational before the existing can be removed. Once permanent conduit has been reinstalled by the Contractor and operational, the temporary connections can be removed. Any damages to City facilities resulting from the actions of the Contractor will require the Contractor to stop work immediately, keep excavated areas open and protected, and allow time and space for the City to inspect and make any repairs, the costs of which will all be the responsibility of the Contractor, including all City staff required to respond to the affected areas and any resulting outages. Coordinate with City TE Shop 266-4767.

SECTION 107.1 PUBLIC CONVENIENCE AND SAFETY

The project includes work adjacent to private properties owned by multiple entities. The Contractor shall not disturb private property beyond the construction limits. Those limits shall be staked by a surveyor prior to beginning construction and shall be paid under bid item 90064.

The Contractor is alerted that little additional space is available within the project right of way or easement lines for a construction trailer, material storage or other use. If the Contractor identifies public property near the site which could be used for such purposes, they shall obtain advance approval from the Construction Engineer to occupy or disturb such area. If approval is not granted, the Contractor shall be required to obtain other staging locations and shall not be provided additional compensation for this effort.

SECTION 107.6 DUST PROOFING

The Contractor shall take all necessary steps to control dust arising from operations connected with this contract. When ordered by the Engineer, the Contractor shall dust proof the construction area by using power sweepers and water. Dust proofing shall be incidental with operations connected with this contract.

SECTION 107.7 MAINTENANCE OF TRAFFIC

The Traffic Engineering contact for traffic control matters on this project is Ali Heinritz, City of Madison Traffic Engineering, at 608-267-1102 or <u>aheinritz@cityofmadison.com</u>.

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

Message boards shall be placed ten (10) days prior to all closures and traffic changes for each stage. One for each direction of travel.

Message boards shall read the following:

" _____ WORK BEGINS (day of week, month/date), expect traffic changes."

All roads, when under construction, shall be closed to through traffic with local traffic only when possible. Work with local businesses on alternate access when driveways are blocked. Madison Metro shall be notified ten (10) days in advance for bus reroute. Madison Metro can be notified by emailing <u>metronotice@cityofmadison.com</u>. This allows adequate notice for Metro to reroute bus routes and move stops when necessary. Failure to provide Madison Metro the required notification may require the Contractor to delay starting work activities in locations that impact Metro routes and/or stops. No additional compensation or time extensions will provided for delays resulting from not providing the required notification.

Traffic Control shall be measured as a lump sum. Payment for the Traffic Control is full compensation for constructing, assembling, hauling, erecting, re-erecting, maintaining, restoring, and removing nonpermanent traffic signs, drums, barricades, jersey barrier and similar control devices, including arrow boards, for providing, placing, and maintaining work zone. Maintaining shall include replacing damaged or stolen traffic control devices. Temporary pavement markings, tubular posts and bases and electronic message boards shall be paid for as separate bid items. Traffic control to install temporary or permanent pavement markings shall be included in the Traffic Control Lump Sum Bid Item.

Contractor shall supply all necessary mounting hardware and supports for signing. This shall also include covering and uncovering any conflicting overhead signs during the project. Contractor shall display all signing so as to be easily viewed by all users. Contractor shall mount traffic control on posts or existing poles or drive posts whenever possible. Existing poles may be used with approval of Construction Engineer. Contractor shall inspect traffic control daily to ensure all traffic control remains in place during the project.

The traffic control plan may need to be altered as conditions change in the field or as unexpected conditions occur. This shall include relocating existing traffic control or providing additional traffic control. This should be considered incidental to providing traffic control for the project.

Type A warning lights shall be installed on all barricades used in the project per State of Wisconsin S.D.D. 15C2-4B. Contractor shall also place Type C warning lights on any barrels used to taper traffic or lane closures.

All temporary inlet or structure plating for traffic control phasing shall be considered incidental to the traffic control bid item.

Contractor shall notify the City of Madison Police Department, Fire Department, Madison Metro, and Traffic Engineering 48 hours in advance of all switchovers of traffic lanes and closures of streets. Notifications must be given by 4:00 P.M. on Thursday for any such work to be done on the following Monday.

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

Construction equipment and materials are not to be stored within the street right-of-way that is open to traffic during non-working hours.

Backfill, plate, or protect work areas with traffic control devices during non-working hours. If steel plates are used, notify the City of Madison Streets Division, 608-266-4681, one day prior to the placement of the plates.

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

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

The Contractor shall not remove traffic signs. For removal or replacement of traffic and parking signs, contact the traffic engineer on the project, Ali Heinritz, 215 Martin Luther King Jr. Blvd, Suite 109, 267-1102, 8:00 a.m. to 4:00 p.m., a minimum of 2 working days in advance of when any existing signs need to be removed. This service is provided free of charge. If the contractor removes the signs, the contractor will be billed for the reinstallation of, and any damage to, the signing equipment. The contractor shall notify the traffic engineer upon completion of final landscaping to have permanent signs reinstalled. The contractor shall leave in place all necessary traffic control until given notice by the construction engineer that permanent signing is in place and temporary traffic control may be removed.

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

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

Provide access for mail delivery to all properties.

Provide access to all businesses at all times and work to allow access to driveways. If driveways cannot be maintained, work with the businesses for alternate access.

The Contractor shall come prepared to discuss any proposed modifications to the traffic control or detour plans at the pre-construction meeting. Final approval of any changes shall be given by Traffic Engineering and Madison Metro prior to the start of any work or traffic control set-ups.

Deming Way

Follow the traffic control plan. The phases must be implemented in a sequential order. Deming Way will be closed to thru vehicle traffic during the duration of the planned culvert replacement and roadway reconstruction for this location. Deming Way will need to be completed prior to staging shut down of other planned closure locations on Blackhawk Road, Fourier Drive and Excelsior Drive.

The intersection of Fourier and Deming shall be closed for a maximum of 14 days. Work in this intersection impacts the existing Metro route and requires a detour. Metro shall be notified 10 days prior to this intersection closing and shall be kept up to date on when it will be re-opened. The intersection shall be restored to binder and re-opened to all traffic within the 14-day window.

Blackhawk Road

Follow the traffic control plan. The phases must be implemented in a sequential order. Two-way traffic shall be maintained at all times with a single lane of traffic serving both directions at least 11 feet wide. Use flag persons as necessary to safely maintain two-way traffic. No vehicle access is required to Deming Way as it will be completely closed during his stage of construction.

Fourier Drive

Follow the traffic control plan. The phases must be implemented in a sequential order. Deming Way will be closed to traffic during the duration of the planned culvert replacement and roadway reconstruction for this location. Deming Way will need to be completed prior to staging closures of other planned closure locations on Blackhawk Road, Fourier Drive and Excelsior Drive. Work on Fourier Drive impacts the existing Metro route and requires a detour. Metro shall be notified 10 days prior to Fourier Drive closing and shall be kept up to date on when it will be re-opened.

The intersection of Fourier and Excelsior shall be closed for a maximum of 14 days. The intersection shall be restored to binder and re-opened to all traffic within the 14-day window. The re-opening of this intersection will allow Metro to change their detour, so they shall be kept up to date on when the intersection will re-open.

Excelsior Drive

Follow the traffic control plan. The phases must be implemented in a sequential order. Two-way traffic shall be maintained at all times with a single lane of traffic serving both directions at least 11 feet wide. Use flag persons as necessary to safely maintain two-way traffic. No vehicle access is required to Fourier as it will be closed during his stage of construction.

Paths

All walking paths will be closed on the Greenway and around the pond during construction. The Contractor shall place path or sidewalk closed signs and use construction fencing as needed to keep the site secure. The path closed signs and fencing shall be incidental to Bid Item 10701 Traffic Control.

SECTION 107.13 TREE PROTECTION

All existing trees that are not shown as removal, both public and private, shall be protected. Tree protection shall be considered incidental to this contract. Any damage to trees including injury to roots, trunks or branches, bark or tree wounding, soil compaction that degrades the function of roots may be determined by the Engineer as damage subject to fine or cost recovery charges. Construction fencing has been specified on plans to minimize impacts to trees that are planned to be saved. Construction fencing that is shown on the plans around the approximate driplines shall be installed prior to any tree clearing. Construction fencing in the larger minimal grading areas shall be installed after tree clearing, prior to grading. Contractor is responsible for damage to any trees and root structures for trees that are shown to be saved on the plans within the construction fence.

All specifications in Section 107.13 apply to this contract. The Contractor's failure to follow the proper safeguards of these specifications shall result in the following cost recovery charges to be assessed against the Contractor. The cost recovery charges listed below supersede the charges listed in section 107.13(i) of the standard specifications:

Where construction damage occurs causing or resulting in <u>removal of the tree of 3 inch diameter or less</u> (as measured at 4 1/2 feet above the ground):

1. The costs associated with removing the tree including wood disposal.

The costs associated with removing the stump to a depth of at least 24 inches below the ground.
 The costs associated with replanting a replacement tree that is balled & burlapped and shall have a minimum caliper of two (2) inches. The species and replanting location shall be determined by the Stormwater Vegetation Coordinator.

Where construction damage occurs causing or resulting in <u>removal of the tree of greater than 3 inch</u> diameter (as measured at 4 1/2 feet above the ground):

- 1. The costs associated with removing the tree including wood disposal.
- 2. The costs associated with removing the stump to a depth of at least 24 inches below the ground.
- 3. The costs associated with replanting a replacement tree that is balled & burlapped and shall have a minimum caliper of two (2) inches. The species and replanting location shall be determined by the Stormwater Vegetation Coordinator.
- 4. The value of the existing tree which shall equal <u>\$250.00</u> per trunk diameter inch, as measured at 4 1/2 feet above the ground.

For bark scraping, trunk wounding and broken branches:

- 1. The costs associated with pruning broken branches, including wood disposal.
- Loss of limb or broken branch larger than three (3) inches in diameter: \$1,000.00 for each occurrence. Breakage of limbs that are less than fourteen (14) feet above the roadway shall be reviewed on a case by case basis.

- 3. Any damage to trunk or bark for trees measuring less than 8 inches as measured at 4 1/2 feet: \$1,000.00 for each area.
- 4. Damage (measuring 8 square inches) to trunk or bark for trees measuring 8 inches 12 inches as measured at 4 1/2 feet: \$1,000.00 for each area.
- 5. Damage (measuring 16 square inches) to trees measuring greater than 12 inches as measured at 4 1/2 feet: \$1,000.00 each area.

ARTICLE 108.2 PERMITS

The City of Madison has submitted the following permit applications:

- US Army Corps of Engineers, St. Paul District, Permit Number MVP-2023-00198-KDZ 202406314 NWP43v
- Wisconsin Department of Natural Resources Artificial Waterbody, Structures & Stream Course Change Permit Number IP-SC-2024-13-00884_00970_00971
- Wisconsin Department of Natural Resources General Permit TCSB and Wetland Impacts General Permit Issuance_01054 and General Permit Issuance_01053
- Wisconsin Department of Natural Resources WDNR Fish Waiver Permit Number IP-SC-2024-13-00884_00970_00971
- Wisconsin Department of Natural Resources 347.05 Review Permit Number IP-SC-2024-13-00884_00970_00971
- Wisconsin Department of Natural Resources Municipal Transportation GP
- Wisconsin Department of Natural Resources Construction Stormwater (NOI)
- Wisconsin Department of Natural Resources Water Extension Permit
- Wisconsin Department of Natural Resources Sanitary Sewer Extension Permit
- City of Madison Erosion Control Permit

A City of Madison Erosion Control permit has been applied for and weekly inspections will be completed by the Contractor. The Contractor shall also complete inspections following storm events, and this work will be paid for under the appropriate bid item. Copies of the permits will be provided.

It shall be the responsibility of the Contractor to obtain the permits listed below, if required, and to pay all applicable charges and fees associated with these permits.

- Wisconsin DNR Dewatering (paid for in Bid Item 90002)
- Aquatic Plant Management Permit Application (paid for in Mobilization)
- Electrical Permits from Building Inspection & Rehabilitation Unit of the City Department of Planning and Development for furnishing and installing a metered electric service and breaker panel (paid for in Bid Item 90065)

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 permits are 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

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The Contractor shall begin work after <u>JANUARY 16, 2025</u>. All work shall be completed on or prior to <u>DECEMBER 31, 2026</u>. Once work begins on Deming Way, Blackhawk Road, Fourier Drive and Excelsior Drive, complete all work necessary to re-open each city street to all traffic without stopping. All culvert work and street paving and restoration shall be completed by <u>OCTOBER 15, 2026</u>, provided that all work is completed per the standard specifications, including weather and/or temperature restrictions. All trees called for removal on the plans and/or previously marked in the field shall be removed between <u>JANUARY</u> 16, 2025 and <u>MARCH 14, 2025</u> to minimize ground disturbance and wildlife impacts. Work on the Deming Way (North) culvert may not begin until <u>MARCH 1, 2025</u>. Greenway and pond grading and stabilization, and the Deming Way (North) and Fourier Drive culverts shall be completed by <u>MARCH 15, 2026</u>. Greenway stabilization includes placing riprap, temporary seed and erosion control matting per the plans.

The Contractor shall complete the street work stages within the following windows of time:

- Deming Way (North) ONE HUNDRED TWENTY (120) CALENDAR DAYS
 Intersection of Deming Way and Fourier Dr- FOURTEEN (14) CALENDAR DAYS
- Fourier Drive **NINETY (90) CALENDAR DAYS**
 - Intersection of Fourier Drive and Excelsior Dr FOURTEEN (14) CALENDAR DAYS
- Deming Way at Blackhawk Rd SEVENTY-SEVEN (77) CALENDAR DAYS
- Deming Way (Southwest) FORTY-FOUR (44) CALENDAR DAYS

Final surface of all streets can be completed at once, however bus routes shall be maintained during final surface paving.

All planting shall be completed by June 15th, 2026 at the dates specified in Article 209.4 of the Standard Specifications.

Work shall begin only after the start work letter is received. If it is desirable to begin work before or after the above-mentioned date, the Contractor shall establish a mutually acceptable date with the City Engineer, and the agreed upon date must be determined prior to the preconstruction meeting. The Contractor shall notify the City a minimum of 6 weeks prior to the desired start work date.

City expects that all permits applied for by the City listed in Section 108.2 will be obtained prior to the named start date, apart from the Water Extension Permit and Sewer Extension Permit. The City plans to apply for the Water Extension Permits and Sewer Extension Permit in the fall of 2024 and will have the permits prior to the sewer and water work occurring with the Deming Way north culvert reconstruction in spring 2025. If elements of work critical to the schedule are delayed beyond the agreed start date due solely to the City's failure to obtain the permits listed in Section 108.2, the Completion Date will be adjusted accordingly. However, such delays shall not be grounds for any compensation from the City or adjustment in unit prices unless they exceed 45 calendar days.

The City anticipates the Permanent Limited Easements (PLE) and Temporary Limited Easements (TLE) will be obtained prior to <u>the project start date</u>. The Contractor may not complete work in the PLE or TLE areas prior to the City having final easements.

Any work that is not completed prior to the end of the year shall be left overwinter in a condition approved by the Project Engineer. All areas must be stabilized, and channel and stormwater flow shall not be impeded; any temporary paving materials necessary to bring streets to an acceptable condition for winter will be at the Contractor's expense. Once the Contractor starts grading a section they must work diligently to stabilize and restore the section before it will be impacted by a rain event. The Contractor shall not leave sections of the pond or Greenway un-stabilized for more than five (5) days unless all flows have been diverted around disturbed areas. Once the Contractor disturbs a portion of pond or Greenway, the Contractor shall work daily in the area until it is stabilized. If a Contractor is unable to work daily in the area, the Contractor shall place interim stabilization at no additional cost to the City.

SECTION 109.9: LIQUIDATED DAMAGES

The fixed, agreed, and liquidated damages for failure to complete the Greenway and pond grading and stabilization by the specified date shall be assessed in the amount of **\$1,750** per calendar day.

The fixed, agreed, and liquidated damages for failure to complete all work within the specified timeframe or by the specified completion date for the Deming Way (North), Fourier Dr, Deming Way (southwest) and Deming Way near Blackhawk Rd storm sewer, sanitary and street restoration work shall be assessed in the amount of **\$1,500** per calendar day.

If all planned tree removals are not completed by the specified dated, the fixed, agreed, and liquidated damages will be assessed in the amount of **\$400** per calendar day.

If all required seeding and plantings are not completed by the specified dated, the fixed, agreed, and liquidated damages will be assessed in the amount of **\$400** per calendar day.

In the event that work extends beyond multiple completion dates and/or timeframes, the Liquidated Damages shall be summed for each violation, but the total liquidated damages amount shall not exceed **\$2,650** per calendar day.

110.2 PARTIAL PAYMENT TO CONTRACTORS AND PROMPT PAYMENT TO SUBCONTRACTORS

I. <u>Partial Payments to Contractor</u>. Partial payments based on the value of the work satisfactorily performed or satisfactory materials furnished, at contract or agreed unit or lump sum prices, will be made to the Contractor as the work progresses, except that partial payments will not be made if the Contractor is in noncompliance with any order given to the Contractor by the Engineer pursuant to the contract.

Twice each month (provided that a payment of \$1,000 or more becomes due, which amount may at the Engineer's discretion be reduced for contracts of \$25,000 or less) the Contractor will prepare an estimate of the quantities of work performed and the value thereof at contract or agreed unit or lump sum prices. The estimate will be prepared on forms provided by the Engineer. After review and acceptance of the estimate by the Engineer, the City shall issue a partial payment. Workforce Profiles shall be approved prior to the first partial payment.

The quantities included shall be computed to reflect the approximate amount of work completed, or substantially completed under each of the pertinent contract items to the date of the estimate less, in each case, an allowance adequate to cover contingencies and costs still to be incurred incident to finishing, maintaining, repairing and restoring of the work, and to cover possible variations between the contract and final quantities in instances where contract quantities are used as a basis for the estimate.

The Engineer may, upon presentation by the Contractor of receipted bills, freight bills or other satisfactory evidence of payment, include in the estimate prepared for partial payment the value of nonperishable materials which are to form a part of the completed work, produced or purchased, and delivered and stored in the vicinity of the work at such location where they will be available for ready incorporation into the work. The amounts paid for such materials shall go to reduce the amount of other partial or final payments due to the Contractor for the work performed as the materials are incorporated into the completed work.

The payment of any current estimate prior to final acceptance of the work by the City shall in no way constitute acceptance of the work, nor in any way prejudice or affect the obligation of the

Contractor, to repair, restore, correct, renew or replace any defects or imperfections in the construction or in the strength or quality of the materials used in or about the construction of the work under contract and its appurtenances, or any damage due or attributable to such defects, which defects, imperfections or damage shall have been discovered on or before the final inspection or acceptance of the work. The Engineer shall be the sole judge of such defects, imperfections or damage and the Contractor shall be liable to the City for failure to correct the same as provided herein.

II. <u>Prompt Payment to Subcontractors</u>. The Contractor is required pursuant to 49 CFR §26.29 and Wis. Stat. § 66.0135 to pay all Subcontractors for all work that the Subcontractor has satisfactorily completed, no later than seven (7) days from the receipt of each payment that the City makes to the Contractor under sub. I above. Contractor must pay subcontractors in full and may not withhold any amount in retainage. Any delay in or postponement of payment to the Subcontractor requires good cause and prior written approval of the Engineer. Failure to comply with this prompt payment requirement is a breach of contract, which may result in the City withholding payment under sub. I above or pursuing any remedies permitted under law, including, but not limited to, Contractor Debarment. In addition, Contractor's failure to promptly pay its Subcontractors is subject to the provisions of Wis. Stat. §66.0135(3).

SECTION 209.6: ACCEPTANCE AND GUARANTEE

Plants shall be installed by June 15, 2026. All plants shall be guaranteed until the first frost in 2027, one year after the certificate of completion is issued.

The certificate of completion will be released at the end of the 2026 growing season, once Bid Item 90045 Year 2 Restoration Maintenance is complete.

BID ITEM 20101 – EXCAVATION CUT

DESCRIPTION

Work under this item shall include all labor, equipment, materials, and incidentals necessary to excavate to the grades as represented by the contours on the plan set, as shown on the cross sections, or as defined in these Special Provisions and shall be completed in accordance with the Standard Specifications. The bid item excludes the stripping of topsoil, which is paid under Bid Item 20221 and dredging, which is paid under Bid Item 90004.

Excavation cut and fill quantities were calculated using the difference of the existing and proposed surfaces of the digital terrain models (modified to include necessary undercut). The finished proposed surface model used in the calculations includes the additional excavation required for excavation six (6) inches of topsoil for grading work outside of the permanent wet pool. Existing surface used was the top of the existing conditions surface. No expansion or shrinkage factors have been applied to the earthwork quantities. Measurement and payment of excavation cut will be per the plan quantities noted below, excluding undercut for the paths and street areas, which will be based on in-field measurements resulting from additional cut directed by the Engineer following proof rolling.

0	Excavation – Cut (Common): (Paid Under Bid Item 20101)	77,532 C.Y.
	 Total Cut (Surface Comparison): 	49,945 C.Y.
	 Bike Path & Concrete Walk: 	1,364 C.Y.
	Box Culverts:	10,410 C.Y.
	Undercut (Clay Liner):	15,313 C.Y.
	 Estimated Undercut for path and street areas 	500 C.Y.
0	Excavation – Dredging: (Paid Under Bid Item 90004)	9,795 C.Y.
0	Select Fill Placement: (Paid Under Bid Item 20205)	1,335 C.Y
0	Topsoil Placement: (Paid Under Bid Item 20221)	67,234S.Y.

Topsoil segregation, temporary stockpiling, and redistribution over disturbed areas, shall be paid under Bid Item 20221 – Topsoil.

Salvaged excavated material can be reused for site grading if inspected and approved by the Construction Engineer for use as fill. All re-use cut material shall be clear of cobble, rocks, large debris, etc. Excess material generated during construction shall hauled off-site and disposed of by the Contractor at a site provided by the Contractor.

As noted on the plans, grading may need to be adjusted in the field for the primary purpose of preserving trees. It is anticipated that these adjustments will likely result in a net-neutral amount of grading or potentially less quantity than the plan quantity. If field conditions differ significantly from what is anticipated, and if there are substantial changes in the site grading, the Project Engineer, Contractor, and City survey crews will coordinate on an approach to measure/calculate the differences.

All on-site stockpiles shall be enclosed with a silt fence paid under Bid Items 21021, Silt Fence – Complete. No material is permitted to be stockpiled in the wooded areas or around trees. The Contractor shall not store Excavation Cut on site, with the exception of topsoil, for periods longer than 1 day. The Contractor shall be mindful of predicted weather events and remove materials accordingly. The entire project site serves as a floodplain, and unnecessary material shall not be stored on site. There is very limited space on site that is suitable for stockpiling.

Contractor to note the following bid items shall be paid separately:

- Topsoil placing/furnishing, segregation, temporary stockpiling, and redistribution over disturbed areas, shall be paid under Bid Item 20221 TOPSOIL. It is estimated that 322 cubic yards of topsoil shall be made available through excavation cut.
- Sediment removal to design depths shall be paid under Bid Item 90004 DREDGE, HAUL, AND DISPOSE OF SEDIMENT.
- Placement of clay liner shall be paid under Bid Item 90005 CLAY LINER PROVISION AND PLACEMENT.

All other Excavation Cut shall be considered incidental to this contract.

METHOD OF MEASUREMENT

Excavation Cut shall be measured by the cubic yard within the limits shown in the plan set, or as defined in these Special Provisions, which shall be paid based on the "Plan Quantity" without measurement thereof, consistent with the Standard Specifications.

BASIS OF PAYMENT

Excavation Cut shall be paid at the contract unit price for the work as described above, which shall be considered full compensation for all labor, materials, equipment, and incidentals necessary to complete this item of work.

BID ITEM 20109 – FINISH GRADING

DESCRIPTION

Finish Grading shall include all work within pond and greenway areas that do not have proposed grading, or have minimal grading.

Work on this item includes grading areas outside of grading limits that have been disturbed due to tree removal or other construction activity. The City realizes while disturbance shall be minimized outside the grading limits, the construction will result in ruts outside the grading limits. Work under this bid item shall

include all labor, materials, equipment, and incidentals necessary to grade outside the channel. Care shall be taken to minimize disturbance and grading around saved trees.

The Contractor shall loosen the topmost 6 inches of dirt and level the area to be restored as shown in the plans. The Contractor shall notify Project Engineer once finish grading is complete and not conduct any restoration activities (seeding and erosion control matting) until finish grading is approved by Project Engineer. If the Contractor needs topsoil to complete any finish grading, that shall be considered incidental to this bid item.

METHOD OF MEASUREMENT

Finish Grading shall be measured as a Lump Sum.

BASIS OF PAYMENT

Finish Grading shall be measured as provided above and shall be paid at the contract unit price, which shall be considered full compensation for the work described above.

BID ITEM 20221 - TOPSOIL

DESCRIPTION

Work under this bid item includes all work, equipment, materials, and incidentals necessary to provide and place topsoil within the grading limits, as shown on the plan set.

The Contractor shall provide sufficient topsoil to place 4 inches of material within the grading limits on the construction plans and 6 inches in the terraces along Deming Way and Fourier Drive. Existing topsoil at this site may be limited and bidders are encouraged to visit the site to estimate available quantities. The Contractor may salvage existing topsoil, so long as it meets the material specification as set forth in Article 202.2 (f).

The Contractor may reuse stripped topsoil from on site for restoration of disturbed areas as indicated on the plans, except for in areas receiving Sun Terrace Seed Mix, or as directed by the Construction Engineer. Salvaged topsoil may not be reused in terraces or easements. All topsoil material must meet the requirements of the Standard Specifications, including topsoil that is reused from on site, and it shall be free of noxious/ invasive weeds, stones, debris, and vegetable material, and free of excess peat, sand, or clay. Topsoil shall be placed evenly enough that erosion matting can be placed on top without leaving gaps between the matting and the soil. The topsoil shall be raked as it is applied if it has lumps larger than 4 inches. Topsoil used in street terraces and backside of the sidewalk shall be shredded.

The Contractor shall contact the Project Engineer to inspect and approve the finish grade prior to seeding and mulching.

All salvaged topsoil shall be stored in an appropriate manner, which includes storing the material in an upland area and surrounding the stockpile with two (2) layers of silt fence.

If insufficient quantities of topsoil are available at this site, or the available material is unacceptable, the Contractor shall import topsoil from a suitable location. No additional compensation shall be paid for imported material; it is considered incidental to this bid item.

In cut sections, if over-excavation is required to place adequate topsoil thickness, over-excavation shall be considered to be incidental to this bid item.

Any topsoil needed for Finish Grading shall be incidental to that bid item.

The Engineer shall approve the topsoil grading prior to placement of seed and erosion control mat.

METHOD OF MEASUREMENT

Topsoil will be measured by the square yard, acceptably placed.

BASIS OF PAYMENT

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

BID ITEM 20247 - MEDIUM RIPRAP - GLACIAL FIELD STONE

DESCRIPTION

Work under this item includes all equipment, materials, labor, and incidentals required to provide and install glacial field stone as shown in the plan set and described in these Special Provisions. The stone shall be sized based on the average dimension ranges for Medium Riprap in the standard specifications. The intent of the varied stone sizes is to create graded stone stabilization at outfalls. Therefore, material of various sizes within the sizing limits is encouraged.

The material shall be comprised of rounded, durable, glacial till that has been sorted for size and is not susceptible to freeze-thaw degradation. Crushed, blasted, or "made" stone will not be permitted on site.

Prior to placement, the Contractor shall submit sourcing information to the Project Engineer. The Project Engineer, or their representative, may choose to evaluate the material at the source prior to acceptance.

Riprap shall be placed on top of Riprap Filter Fabric Type HR (paid under bid item 2056) which shall be placed on top of smooth grades as shown on the plans.

Medium riprap shall be placed to a depth of 18 inches, unless otherwise stated.

• Estimated Quantity: 110 Tons

METHOD OF MEASUREMENT

Medium Riprap – Glacial Field Stone shall be measured per Ton of material provided, transported, and placed on site. Tonnage shall be determined by truck tickets.

BASIS OF PAYMENT

Medium Riprap – Glacial Field Stone shall be measured as described above and shall be paid for at the contract unit price which shall be considered full compensation for all work, materials, equipment, and incidentals necessary to source, transport, and place stone as defined in the plan set and these Special Provisions.

BID ITEM 20251 - HEAVY RIPRAP – GLACIAL FIELD STONE

DESCRIPTION

Work under this item includes all equipment, materials, labor, and incidentals required to provide and install glacial field stone as shown in the plan set and described in these Special Provisions. The stone shall be sized based on the average dimension ranges for Heavy Riprap in the standard specifications. The intent

of the varied stone sizes is to create graded stone stabilization at outfalls. Therefore, material of various sizes within the sizing limits is encouraged.

The material shall be comprised of rounded, durable, glacial till that has been sorted for size and is not susceptible to freeze-thaw degradation. Crushed, blasted, or "made" stone will not be permitted on site.

Prior to placement, the Contractor shall submit sourcing information to the Project Engineer or Construction Engineer. The Project Engineer, or their representative, may choose to evaluate the material at the source prior to acceptance.

Riprap shall be placed on top of Riprap Filter Fabric Type HR (paid under bid item 2056) which shall be placed on top of smooth grades as shown on the plans.

Heavy riprap shall be placed to a depth of 2 feet, unless otherwise stated.

• Estimated Quantity: 705 Tons

METHOD OF MEASUREMENT

Heavy Riprap – Glacial Field Stone shall be measured per Ton of material provided, transported, and placed on site. Tonnage shall be determined by truck tickets.

BASIS OF PAYMENT

Heavy Riprap – Glacial Field Stone shall be measured as described above and shall be paid for at the contract unit price which shall be considered full compensation for all work, materials, equipment, and incidentals necessary to source, transport, and place stone as defined in the plan set and these Special Provisions.

BID ITEM 20401 – CLEARING

I. DESCRIPTION

Work under this item shall include all labor, equipment, materials, and incidentals necessary to remove or trim trees outside of the clearing sheets in the pond parcel, or as directed in the field by the Project Engineer. Remobilizations to remove trees outside of the clearing sheets shall be incidental to this bid item.

This bid item includes 271 I.D. of trees that are called out for removal on utility sheets but are not shown on the tree clearing and preservation sheets. It also includes an undistributed amount of 200 I.D. that applies to the removal of individual trees, greater than 4 inches in diameter, which are currently marked to save on the plans, but need to be removed as directed by the Project Engineer or have grown to a size of 4" since the initial survey. This bid item shall also include any trees marked to save but become damaged, or diseased, and the City-hired arborist or Stormwater Vegetation Coordinator decide it needs to be removed after the plans are issued. Trees marked for removal on the Tree Preservation and Clearing Plan(D10-D12), shall be cleared under Bid Item 20404.

Clearing shall be completed by sawing all trees and brush near the ground line. The stumps shall be grubbed or ground, in accordance with Bid Item 20406.

All wood, brush, stumps, fallen trees, and general woody debris shall become the property of the Contractor. It shall be the responsibility of the Contractor to remove all material from the site.

METHOD OF MEASUREMENT

Clearing will be measured per Inch Diameter, as described in Article 204.3 of the Standard Specifications.

BASIS OF PAYMENT

The contract unit price for Clearing shall be payment in full for furnishing all labor and equipment necessary to clear individual trees as specified in this bid item and the Standard Specifications.

BID ITEM 20404 - CLEARING

Work under this bid item shall include all work, equipment, and incidentals necessary to remove trees, brush, and fallen material as shown on the clearing plans.

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

CONSTRUCTION METHODS

TREES TO REMAIN

The Contractor shall note that many trees within the project limits are to remain. These trees are individually identified on Sheets D10-D12, and on all U-sheets. Each tree in the pond area has been labeled with a metal identification tag containing a unique identifier. The City-hired arborist will mark the trees for removal with orange or red paint. The Contractor shall provide the City-hired arborist 2 weeks' notice prior to completing any tree removals. The Contractor shall verify that the trees have been properly marked for removal and complete a site walk with the Project Engineer and Construction Engineer prior to removing any trees.

The Contractor shall pay cost recovery charges as described in Section 107.13 for any trees removed or damaged that were noted to remain on the plans. Trees shown on the plans to be protected require construction fencing and other measures to ensure that they are not damaged, in accordance with these Special Provisions under the item of Construction Fence (Plastic).

The Contractor shall complete an on-site pre-con with the arborist and Construction Engineer and Project Engineer after the trees have been marked to discuss expectations and challenges. The Contractor shall review their Tree Clearing Plan, including what equipment will be used near trees to remain, and how those will be protected during the clearing process. The Project Engineer and City-hired arborist shall approve the Tree Clearing Plan prior to clearing operations commence. The Contractor and any tree clearing subcontractors shall attend the on-site pre-con ready to discuss methods that follow these specifications and protect the remaining trees.

Trees identified to remain shall be protected. Construction fencing shown on the plans around the dripline of trees shall be installed prior to beginning clearing activities. Limbing and pruning may be permitted to facilitate tree removal. Prior to limbing trees to remain, the Contractor shall receive permission from the Project Engineer or Construction Engineer. Limbing shall follow the standard specifications including timing and shall be incidental to this bid item.

Any questions pertaining to tree removal or tree limbing shall be brought to the immediate attention of the Project Engineer.

TREE REMOVAL

Any tree or shrub not identified to remain, shall be cut and fully removed from the site. This also applies to any fallen material greater than 4 inches in diameter and 5 feet in length. The Contractor shall haul this material off site and dispose of it appropriately. In order to estimate the amount of work, the following estimate of inch diameter is provided based on a tree inventory that was completed in 2020, with some updates in 2023 therefore the diameters have increased since the data was collected: 851 trees, totaling 8,743 inches DBH (Note: multi-stemmed trees are accounted for in DBH quantities, but not in tree numbers).

A list of tree removals is included at the end of these specifications as ATTACHMENT A.

In order to prevent excess sediment from leaving the site, all erosion control shall be installed prior to completing the clearing. Excessive rutting from clearing will not be permitted. The Contractor shall use low-ground pressure equipment if completing tree removals on thawed soil around trees that will be saved. The City-contracted arborist shall decide what equipment is appropriate for use during the pre-construction site meeting.

METHOD OF MEASUREMENT

Clearing will be measured as a Lump Sum as provided in the Standard Specifications.

BASIS OF PAYMENT

Clearing shall be measured as described above and shall be paid for at the contract unit price which shall be considered full compensation for all work, materials, equipment, and incidentals necessary to remove the trees and brush as described above and remove all fallen trees. This bid item also includes hauling all materials off site and disposing of them properly.

METHOD OF MEASUREMENT

Clearing will be measured as a Lump Sum as provided in the Standard Specifications.

BID ITEM 20406 - GRUBBING

DESCRIPTION

Work under this item shall include all labor, equipment, materials, and incidentals necessary to grub trees outside of the clearing sheets in the pond parcel, or as directed in the field by the Project Engineer. Remobilizations to grub trees outside of the tree preservation and clearing sheets shall be incidental to this bid item.

Work under this bid item shall include all labor, equipment, materials, and incidentals necessary to grub trees as directed by the Construction Engineer in the field. This bid item shall also include any trees marked to save but become damaged, or diseased, and the City –hired arborist or Stormwater Vegetation Coordinator decide needs to be removed after the plans are issued. All other stumps necessary to be grubbed within the construction limits, as indicated by the plans, shall be paid under Bid Item 20409.

This bid item includes 271 I.D. of trees that are called out for removal on utility sheets, but are not shown on the tree clearing and preservation sheets. It also includes an undistributed amount of 200 I.D. that applies to the removal of individual trees, greater than 4 inches in diameter, which are currently marked to save on the plans, but need to be removed as directed by the Project Engineer or have grown to a size of 4" since the initial survey. This bid item shall also include any trees marked to save but become damaged, or diseased, and the City contracted arborist or Stormwater Vegetation Coordinator decide need to be removed after the plans are issued. Trees marked for removal on the Tree Preservation and Clearing Plan(D10-D12), shall be cleared under Bid Item 20404.

Grubbing shall be completed in accordance with Article 204 of the Standard Specifications. Any fill required to backfill holes where stumps have been removed shall be considered incidental to this bid item. All stumps and woody debris generated during grubbing shall be removed from the site and properly disposed by the Contractor.

If stumps cannot be grubbed without damaging remaining trees, impacting adjacent features, or impacting subsurface utilities, the Contractor shall grind the stumps. Stumps shall be ground to approximately 1 inch below final grade. Grinding shall be considered incidental to this bid item.

Any black locust tree shall be treated with herbicide and left to sit for three (3) days prior to grubbing. The herbicide shall be the least toxic required to prevent regrowth.

METHOD OF MEASUREMENT

Grubbing will be measured per Inch Diameter, as set forth in the Standard Specifications.

BASIS OF PAYMENT

The contract unit price for Grubbing per Inch Diameter shall be payment in full for furnishing all labor, equipment, and incidentals necessary to fully excavate, grind, transport, and dispose of stumps as marked on the plan set.

BID ITEM 20409 - GRUBBING

Work under this bid item shall include all work, equipment, and incidentals necessary to grub stumps or treat stumps.

STUMP MANAGEMENT

Stumps within the grading limits shall be fully grubbed to accommodate earth moving. Material generated from grubbing shall be the responsibility of the Contractor. The Contractor shall haul this material off site and dispose of it appropriately.

Grubbing shall be completed in accordance with Article 204 of the Standard Specifications. Any fill required to backfill holes where stumps have been removed shall be considered incidental to this bid item. All stumps and woody debris generated during grubbing shall be removed from the site and properly disposed by the Contractor.

If stumps cannot be grubbed without damaging remaining trees, impacting adjacent features, or impacting subsurface utilities, the Contractor shall grind the stumps. Stumps shall be ground to approximately 1 inch below final grade. Grinding shall be considered incidental to this bid item.

In order to estimate the amount of work, the following estimate of inch diameter is provided based on a tree inventory that was completed in 2020 with some updates in 2023, therefore the diameters have increased since the data was collected: Estimated Quantity of Trees to be Grubbed: 851 trees, totaling 8,743 inches DBH.

BASIS OF PAYMENT

Grubbing shall be measured as described above and shall be paid for at the contract unit price which shall be considered full compensation for all work, materials, equipment, and incidentals necessary to grub stumps within the grading limits, treat stumps outside the grading limits, and remove any material generated from this process.

METHOD OF MEASUREMENT

Grubbing will be measured as a Lump Sum in the Standard Specifications.

BASIS OF PAYMENT

Grubbing, measured as provided above, will be paid at the contract price as a Lump Sum, which shall be full payment for all work to complete this item in accordance with the Standard Specifications.

SECTION 209: TREES, SHRUBS, PERENNIALS AND GRASSES

BID ITEM 90070 - Amelanchier canadensis / Shadblow Serviceberry BID ITEM 90071 - Betula nigra / River Birch Multi-Trunk
BID ITEM 90072 - Carpinus caroliniana / American Hornbeam
BID ITEM 90073 - Carya ovata / Shagbark Hickory
BID ITEM 90074 - Carya cordiformis / Bitternut Hickory
BID ITEM 90075 - Crataegus crus-galli / Thornless Hawthorn
BID ITEM 90076 - Quercus macrocarpa / Bur Oak
BID ITEM 90077 - Quercus x schuetti / Swamp Bur Oak
BID ITEM 90078 - Aronia melanocarpa / Black Chokeberry
BID ITEM 90079 - Cephalanthus occidentalis / Buttonbush
BID ITEM 90080 - Comptonia peregrina / Sweet Fern
BID ITEM 90081 - Corylus americana / American Hazelnut
BID ITEM 90082 - Rosa blanda / Smooth Rose
BID ITEM 90083 - Sambucus canadensis / American Elderberry
BID ITEM 90084 - Staphylea trifolia / American Bladdernut
BID ITEM 90085 - Viburnum lentago / Nannyberry
BID ITEM 90086 - Viburnum prunifolium / Blackhaw Viburnum

All planting as part of this contract shall be completed per Article 209 – Trees, Shrubs, Perennials and Grasses of the latest edition of the City of Madison Standard Specifications for Public Works Construction and as outlined in these Special Provisions.

All plants shall be installed in by June 15th, 2026.

All plantings shall be installed after sections of the Greenway are complete at the planting windows defined in Article 209 of the Standard Specifications.

Care of plants shall be incidental to bid items 90070-90086 as defined in Subsection 209.6(b) and shall continue until the first frost in 2027, one year after the certificate of completion is issued. No additional payment shall be provided for any work described in 209.6(b).

The certificate of completion will be released at the end of the 2026 growing season, once Bid Item 90045 Year 2 Restoration Maintenance is complete.

The Contractor shall only mulch newly planted trees and shrubs that are outside of the Greenway side slopes.

If plants are being installed in areas that are receiving herbicide treatment, plants shall be planted after herbicide will no longer pose a threat to the survival of the proposed plant.

Plants shall be watered the day of installation. Watering the day of installation shall be incidental to this bid item. All plants shall be appropriately watered throughout the growing first and second growing to keep plants in a healthy growing condition regardless of drought condition. The Contractor shall be required to water based on recommendations of the <u>University of Minnesota Extension</u>, with allowable adjustments for specific site, weather, or species conditions. Waterings shall be incidental to this section item, except as defined under BID ITEM 20970.

Additional waterings determined necessary by the Engineer during periods of extreme drought or heat shall be paid for under BID ITEM 20970. There is no existing water access available on site. The Contractor shall be required to supply water.

A monthly inspection of all landscape areas shall be completed by the Contractor. This is to assess work to be done and to locate problems which may have developed since the last inspection. The Contractor shall notify the Project Engineer 48 hours prior to inspection.

Substitutions may be allowed at the discretion of the City Engineer. Any substitutions that result in a smaller size than indicated in the schedule below shall receive reduced payment. Substitutions that are larger than the size specified in the schedule below shall be incidental to the bid price and not receive additional payment.

Tree and shrub protection as defined under 209.5(e) Protection shall be incidental to this bid item. All trees shall be protected with tree protection during the guarantee period. The Contractor shall be responsible for removing and disposing of the protection at the end of the guarantee period.

All trees and shrubs shall conform to the sizes specified below:

BOTANICAL NAME	COMMON NAME	SIZE	ROOT
TREES			
AC Amelanchier canadensis	Shadblow Serviceberry	6' Height	CONT
BN Betula nigra	River Birch Multi-Trunk	8' Height	B&B
CC Carpinus caroliniana	American Hornbeam	1.5" Cal.	B&B
CD Carya cordiformis	Bitternut Hickory	1.5"	B&B
CO Carya ovata	Shagbark Hickory	1.5" Cal.	B&B
CG Crataegus crus-galli	Thornless Hawthorn	6' Height	B&B
QM Quercus macrocarpa	Bur Oak	1.5" Cal.	B&B
QX Quercus x schuetti	Swamp Bur Oak	1.5" Cal.	B&B
SHRUBS			
AM Aronia melanocarpa	Black Chokeberry	3 gal	CONT
CB Cephalanthus occidentalis	Buttonbush	3 gal	CONT
CP Comptonia peregrina	Sweet Fern	2 gal	CONT
CA Corylus americana	American Hazelnut	3 gal	CONT
RB Rosa blanda	Smooth Rose	3 gal	CONT
SE Sambucus canadensis	American Elderberry	2 gal	CONT
ST Staphylea trifolia	American Bladdernut	3 gal	CONT
VL Viburnum lentago	Nannyberry	3 gal	CONT
VB Viburnum prunifolium	Blackhaw Viburnum	3 gal	CONT

BID ITEM 20970 TREES, SHRUBS, PERENNIALS AND GRASSES DROUGHT WATERING

DESCRIPTION

Work under this bid item shall include all work, equipment and incidentals necessary to complete additional waterings as directed by the Engineer during periods of drought and extreme heat, regardless of U.S. Drought Monitor status prior to the issuance of the certificate of completion. The Contractor shall only receive additional compensation for watering required to keep plants in a healthy growing condition only when there has been less than 1/2" of total accumulated rainfall in over 14 days or greater than seven (7) days in a row greater than 95 degrees temperature. All watering during drought periods after the issuance of the certificate of completion, but within the guarantee shall be incidental to bid items 90070 to 90086.

All other watering for first- and second-year plant establishment and health shall otherwise be incidental to this contract.

METHOD OF MEASUREMENT

Trees, Shrubs, Perennials and Grasses Drought Watering shall be measured by the unit price for additionally waterings necessary to thoroughly soak the root zones of all plants in the contract, once. Each unit shall be considered an additional waterings for all plants at the site.

BASIS OF PAYMENT

Trees, Shrubs, Perennials and Grasses Drought Watering shall be paid for at the contract unit price each, which shall be full compensation for furnishing, transporting and water plants; and for furnishing all labor, tools, equipment and incidentals necessary to complete the work. In order to receive payment for drought watering, the Contractor must submit photos of watering with the date and each time that the watering occurred.

BID ITEM 21002 – EROSION CONTROL INSPECTION

DESCRIPTION

Work under this bid item shall include all work, equipment, and incidentals necessary to complete weekly and post-rain event Erosion Control (EC) inspections per the City's standard specifications and outlined below. A post-rain reports shall negate the need for a routine, weekly inspection for the week that it rained. A rain event is classified as greater than 0.5" of rain in 24 hours. Due to the size and nature of the project, the Contractor shall document the stability of the site and effectiveness of the EC measures with photos, fill out the provided detailed checklist and upload the completed checklist and photos to the City's Licensing and Permitting online portal as part of the weekly inspection report.

The Contractor shall be responsible for tracking forecasted weather events and complete inspections as needed including any weekend rain events.

The Contractor shall fill out a checklist provided by the City that shall document the type of EC measure in each major portion of work and whether or not they need modification. See example checklist

ATTACHMENT C - EROSION CONTROL INSPECTION CHECKLIST

The Contractor shall fill out the checklist and add notes on the effectiveness of the EC measures, whether they need fixing, and if they've been fixed.

Photos shall be taken that show the effectiveness of the installed erosion control devices. The photos shall show the disturbed area, erosion control measure, and the downstream area in a single image wherever possible.

The Contractor shall be aware that this is a highly erodible site and extra care shall be taken to assess and fix or bolster EC measures prior to rain events.

METHOD OF MEASUREMENT

Erosion Control Inspection shall be measured per Each inspection successfully completed.

BASIS OF PAYMENT

Erosion Control Inspection shall be measured as described above and shall be paid for at the contract unit price which shall be considered full compensation for all work, materials, equipment, and incidentals necessary to take photos, fill out the spreadsheet, upload the spreadsheet and photos, and create an inspection record in the City's Licensing and Permitting online portal.

BID ITEM 21302 - CONSTRUCTION FENCE (PLASTIC)

DESCRIPTION

Work under this item shall include all work, materials, labor and incidentals necessary for the Contractor to provide, install, maintain and remove construction fence for safety and at the direction of the Construction Engineer or Project Engineer.

Construction Fence shall be used in areas of the plan called out for Tree Protection Fencing. This fence shall be highly visible (orange), constructed of a plastic web, and able to withstand the expected amount of use it will receive on a construction site. The intent of this item is to delineate the area to which the Contractor shall confine his or her operations, to protect trees, and to prevent disturbance of areas by the public following seeding operations. Minor relocation of fencing may be required as the work progresses. No extra payment shall be made for temporarily opening and re-closing the fence, or minor relocation of the fencing as needed to perform the work.

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

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

Estimated Quantities:

- 3,350 linear feet is estimated to be needed for Tree Protection Fencing to be placed per the plans.
- 35 linear feet is estimated to be needed at 1111 Deming Way.
- 1000 linear feet are included in the bid item as an undistributed amount to be used as needed to keep adjacent residents from entering, and to keep the construction site safe.

METHOD OF MEASUREMENT

Construction Fence (Plastic) shall be measured by the Linear Foot of fence installed, maintained, and removed.

BASIS OF PAYMENT

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

ARTICLE 500 SEWER AND SEWER STRUCTURES GENERAL

STORM SEWER GENERAL

Removal of existing pipes along the same alignment as proposed pipes and existing pipes exposed as part of proposed box culvert excavation shall be considered incidental to new pipe installation and not paid items. Removal of existing pipes along alignments different than proposed pipe alignments will be paid. Removal of existing box culverts shall be incidental to the new box culvert installations.

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

Where a new structure is to be constructed at an existing pipe, it is expected that the Contractor shall saw cut the existing pipe in the required location to accommodate the placement of the new structure. If the Contractor, for their 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 at the Contractor's responsibility and shall not be compensated.

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

Precast structures are only allowed where field poured structures are not specifically called for, and no placement of orders for precast box culvert sections or structures are allowed until ULO's are completed and approval of the Project Engineer has been received.

SANITARY SEWER GENERAL

This project consists of the installation of 44' of 8" City sewer main. Sanitary sewer pipe shall be PVC Sanitary Sewer Pipe (ASTM D3034 SDR-35, SDR-26) at the lengths and locations specified on the plan set and in accordance with the Standard Specifications.

This project consists of the installation of 527' of 10" City sewer main. Sanitary sewer pipe shall be PVC Sanitary Sewer Pipe (ASTM D3034 SDR-35, SDR-26) at the lengths and locations specified on the plan set and in accordance with the Standard Specifications.

This project consists of the installation of 49' of 15" City sewer main. Sanitary sewer pipe shall be PVC Sanitary Sewer Pipe (ASTM D3034 SDR-35, SDR-26) at the lengths and locations specified on the plan set and in accordance with the Standard Specifications.

This project consists of the installation of 1006' of 27" City sewer main. Sanitary sewer pipe shall be PVC Sanitary Sewer Pipe (PS 46, ASTM F679/PS115, ASTM F679) and Fiberglass Reinforced Sewer Pipe at the lengths and locations specified on the plan set and in accordance with the Standard Specifications.

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

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

BID ITEM 50227 – UTILITY TRENCH PATCH, TYPE IV (UNDISTRIBUTED)

DESCRIPTION

An undistributed amount of Utility Trench Patch, Type IV has been added to the contract to be used at the Construction Engineer's discretion.

BID ITEM 50361 – WASTEWATER CONTROL

DESCRIPTION

Work under this bid item shall include wastewater control (bypass pumping of the sewer being replaced). Work shall be completed in accordance with Article 503.3 of the City of Madison Standard Specifications for Public Works Construction Latest Edition. Contractor shall plan for 1100 GPM wastewater bypass flow: 27" @0.0009 ft/ft operating at 25% capacity.

METHOD OF MEASUREMENT

Wastewater Control shall be measured by the Lump Sum acceptably completed.

BASIS OF PAYMENT

Wastewater Control measured as described, which will be paid at the contract unit price, which shall be full compensation for all materials, labor, equipment, and incidentals necessary to acceptably complete the work as set forth in the description.

BID ITEM 50501 – PRECAST REINFORCED CONCRETE BOX CULVERT (6'X4') BID ITEM 50502 – PRECAST REINFORCED CONCRETE BOX CULVERT (8' X 4') BID ITEM 50503 – PRECAST REINFORCED CONCRETE BOX CULVERT B-13-943 BID ITEM 50503 – PRECAST REINFORCED CONCRETE BOX CULVERT B-13-943

This section describes construction of precast reinforced concrete box culverts at the lengths and locations specified on the plan set and in accordance with Article 505 of the Standard Specifications.

Removal of the existing box culverts in each respective location shall be incidental to each installation.

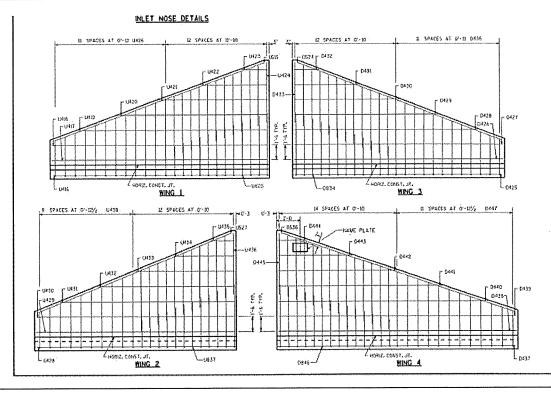
Shoring necessary to install the box culverts at the lengths and locations shown on the plans is incidental to the installation bid item. This includes all work, materials, and incidentals to install and remove or abandon temporary shoring. Materials and construction methods shall be in accordance with Sections 511.2 and 511.3 of the current edition of the Wisconsin Department of Transportation Standard Specifications for Highway and Structure Construction. If the Contractor choses to abandon the shoring in place it shall be removed a minimum of 4ft below existing grade and a final plan for abandonment shall be provided to the Project Engineer for approval.

505.3 BOX CULVERT WINGWALLS

All wingwalls shall be constructed in accordance with standard detail drawings 5.5.1 A &B.

Wingwalls that require Bridge Number nameplates shall have the nameplates mounted to the wingwall in accordance with WisDOT S.D.D. 12A3 Name Plate (Structure). Attachment of nameplates shall be considered incidental to the wingwall bid items. The contractor shall supply a new structure nameplate in accordance with Wisconsin Department of Transportation Standard Specifications Section 502.3.11 and WisDOT Standard Detail Drawing 12a3. Nameplate shall show original construction year and structure number for the respective structures.

The nameplates shall be installed on the 1st wing to the right as you approach the structure in the cardinal direction, as shown in the detail below. <u>The Project Engineer shall confirm the placement and accuracy of the nameplate prior to installation.</u>



Apart from the upstream wingwall at Deming Way (North) which is paid for under Bid Item 90031, wingwalls may be either field poured or precast. Precast wingwall shop drawings shall be provided to the Project Engineer for review and approval. If wingwalls are not deemed to be able to be precast no additional compensation shall be provided to the Contractor.

SECTION 701 PROVISIONS FOR WATER INSTALLATION AND ABANDONMENT

The project consists of furnishing and installing water main and fittings on Deming Way and Fourier Drive. The proposed water main is being lowered to accommodate proposed box culvert crossings at each street.

The project also includes abandoning and removing existing water main. Any required removal and disposal of existing main shall be incidental to the installation of new main. Any broken curb stops, buried curb boxes or otherwise dysfunctional service components must be approved for adjustment, removal and/or replacement by the Water Utility inspector in advance of any work being performed.

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

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

SECTION 702 MATERIALS

Furnish all materials, labor and equipment necessary to complete this project.

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

SECTION 703 CONSTRUCTION METHODS

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

BID ITEM 90001 – STORMWATER CONTROL PLAN AND IMPLEMENTATION

DESCRIPTION

Work under this item shall include all labor, materials, and incidentals required to prepare a stormwater control plan and to implement the approved plan. The stormwater control plan shall include dry weather, wet weather and backwater flow control contingencies and detail what erosion control measures or BMPs will be implemented to minimized sediment transport. The Contractor shall submit to the Project Engineer a plan that details how flows will be managed and/or diverted during placement of the new box culverts at Deming Way and Fourier Dr, and during associated grading and restoration. The approved methodology shall be installed prior to any storm sewer work. Any work, materials, and incidentals necessary to repair and restore the site due to the Stormwater Control Plan and Implementation shall be considered incidental to this bid item.

This item includes the temporary sediment basin, including the sediment basin berm and the materials to construct and maintain the basin, as shown in the plans. The basin shall be used as a downstream erosion control device to minimize the amount of sediment that flows downstream during construction of the pond, and of the Greenways upstream and downstream of Fourier Drive. The Contractor shall maintain 3' of depth within the basin in order for it to continue effectively capturing sediment. Any dredging of the basin necessary to maintain the 3' of permanent pool depth shall be incidental to this bid item. Following the grading of the upstream Greenways and upstream portion of the pond, the Contractor shall remove the Sediment Basin, including all accumulated sediment, grade to match the grading plans, and restore the area per the plans. All work and materials to construct and maintain the sediment basin, including the medium riprap and 3" clear stone are incidental to this bid item.

The Contractor shall describe their methods in the Stormwater Control Implementation Plan for approval by the Project Engineer prior to construction. The Contractor shall be prepared to discuss their plan in detail at the <u>pre-construction meeting</u>.

The existing channel receives a large amount of water during rain events, including overland flow. The Contractor shall be prepared to manage storm flow and secure construction and grading, protect adjacent properties, and protect the new and existing structures and grading during rain events (see table below).

The Contractor will be required to manage the work area during construction to account for fluctuations in water flow and Greenway water levels as necessary to protect the Work and Contractor's equipment, material, and personnel, and according to all applicable laws and regulations.

The Contractor shall be aware that significant changes in flow and water level can occur in the project area at any given time. Contractor is responsible for any impacts that could result from changing water flow/level conditions.

The table below provides flows in cfs downstream (DS) at the Deming Way North (north of Greenway), Deming Way West (south of Blackhawk Road) and Fourier Dr culverts under existing conditions. It shall be the sole responsibility of Contractor to repair or reconstruct project components damaged by stream flow and protect existing properties while the temporary stormwater control operations are going.

24-hr Rainfall Event	Rainfall Depth (inch)	DS North Deming (cfs)	DS West Deming (cfs)	DS Fourier (cfs)
1-year	2.49	305	136	350
2-year	2.84	414	152	411
5-year	3.45	538	176	561
10-year	4.09	777	205	743
25-year	5.02	1239	281	1086
100-year	6.66	2200	415	1806

The Contractor shall describe their methods in the Stormwater Control Implementation Plan for approval by the Project Engineer prior to construction. The Contractor shall be prepared to discuss their plan in detail at the pre-construction meeting.

Water levels and flow volumes shall be controlled in the work area by pumping or bypassing to an extent that the permanent works being performed are not adversely affected. Contractor shall provide energy dissipation measures where pumped or by-passed water re-enters the greenway channel or pond areas.

The Contractor shall be solely responsible for means and methods, integrity of any cofferdams, shoring, earth retention, pumps or dewatering methods, etc. including maintaining integrity of channel function and ensuring safety of public and workers. Any additional equipment, erosion control devices, stone, etc. required to manage storm events shall be included with this bid item.

The Contractor shall be responsible for re-grading, filling or otherwise removing interim drainage and water control features upon completion of that portion of the stormwater control work. The areas shall be permanently restored as shown on the drawings and as specified, or to existing conditions if work is done outside of the proposed grading areas.

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

The Stormwater Control and Implementation Plan shall include details of where the stormwater will go in the event of their system being overwhelmed. A back-up plan or system for controlling stormwater including type of system, equipment, power supply (if necessary), and how the system will be operated shall be included in this bid item.

Following the construction of the culverts, the Contractor shall install any necessary armoring, erosion control devices, stone etc to create a temporary connection to the existing channel if the adjacent channel has not been graded to the proposed grading in order to protect the new culverts and maintain a stable channel.

The Contractor shall be aware that any storm sewer dewatering, including trench dewatering or pumping of accumulated storm water, shall include treatment for sediment removal prior to discharge off-site. At a minimum, this treatment shall include filtering the water via a sediment bag prior to discharge. The geotextile bag shall have a 0.040 mm apparent opening size (AOS). If, at the determination of the Construction Engineer, this treatment process in not providing sufficient sediment removal, the Contractor shall add 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. All treatment and sediment removal required for dewatering or storm control shall be incidental to this bid item.

METHOD OF MEASUREMENT

Stormwater Control Plan and Implementation shall be measured as a Lump Sum bid item.

BASIS OF PAYMENT

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

BID ITEM 90002 - GROUNDWATER CONTROL/SITE DEWATERING

DESCRIPTION

Work under this item shall include all work, materials, equipment, permitting and incidentals required to dewater the site during construction or to work with the water on-site in a manner that is acceptable to the Contractor and allows the project to be constructed in accord with these plans and specifications.

No masonry shall be installed in water, nor shall water be allowed to rise over masonry or concrete if there is danger of flotation or of setting up unequal pressures in the concrete until the concrete has set at least 24 hours and any danger of flotation has been removed.

The Contractor shall be responsible for designing a dewatering plan to fit his/her construction methods and for permitting said plan if that is required. The Contractor shall submit a dewatering plan for approval prior to beginning dewatering activities. The plan shall include proposed sediment control measures to be used during dewatering.

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 that is compatible with the constraints defined in this section. 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 utility or structure.

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.

The Contractor shall maintain dewatering activities until channel grading and riprap placement is complete.

Borings will be posted as an informational item with the bid documents to assist the Contractor in determining what methods are required to dewater the site.

METHOD OF MEASUREMENT

Groundwater Control/Site Dewatering shall be measured as a Lump Sum for all dewatering necessary throughout construction.

BASIS OF PAYMENT

Groundwater Control/Site Dewatering shall be paid for at the contract unit price, which shall be full compensation for all work as outlined in the description.

BID ITEM 90003 - REMOVAL OF EXCESS DEBRIS (DEMING WAY - NORTH)

DESCRIPTION

In August of 2018 a large portion of Deming Way failed and flowed north downstream into the Greenway. There is a lot of road base and miscellaneous material that surrounds the existing outfall.

Work under this bid item shall include all work, materials, equipment and incidentals necessary to remove road base and other debris encountered in the downstream section of the Deming Way (north) culvert. The Contractor shall remove any debris that would not negatively impact adjacent trees. Prior to removal the Contractor shall coordinate with the Project Engineer to determine the extent of the removals based on the site constraints, means and methods for removal. Due to the wooded nature of this area the Contractor is advised to complete a site visit prior to bidding. Any material that is to be recycled for potential reuse shall be sorted and any debris to be landfilled shall be segregated and disposed of appropriately. The Contractor shall identify any materials that will be recycled and reused.

Debris removal and disposal shall comply with the FEMA Guidance: Debris Removal (Category A), including providing locations any temporary debris staging sites and location of the final disposal sites. If the disposal site is a commercial site, the name of the vendor along with copies of permits and authorizations from the disposal site is required.

All costs or fees, including associated landfill fees and requirements, necessary to complete the disposal of this debris and described above is incidental to this bid item. The Contractor shall supply the location(s) used for disposing materials prior to removal.

METHOD OF MEASUREMENT

Removal of Excess Debris shall be measured by Tonnage removed based on load tickets provided. Load tickets will only be accepted if oversite monitoring is occurring during the work.

BASIS OF PAYMENT

Removal of Excess Debris shall be measured as defined above and paid at the contract unit price, which shall be full payment for all work, equipment, labor, fees, and incidentals required to remove and dispose of the materials as laid out in the description.

BID ITEM 90004 - DREDGE, HAUL, AND DISPOSE OF SEDIMENT

DESCRIPTION

Work under this bid item shall include all labor, materials, equipment and incidentals necessary to excavate, remove, haul, and dispose of sediment as shown on the drawings after the site had been dewatered. Sealed water-tight trucks shall be used to transport all sediment to a location provided by the Contractor.

Proper erosion control and restoration/stabilization shall be provided at the disposal site. No material may be disposed of in a wetland or floodplain.

Sediment sampling and analysis has been completed and analytical results indicate existing sediment from the pond does not require landfill disposal. The sediment sampling report with analytical results are available upon request.

Mobilization for excavating sediment shall be included in bid item Mobilization. Mobilization at dewatering and disposal site, shall be incidental to bid item Mobilization. Disposal of all materials shall be to a site determined by the Contractor, and shall be disposed of at no additional fees to the City. No additional compensation shall be provided for mobilization or de-mobilization.

Contractor shall select and identify a fill site, offsite reuse location, or land application site that will be used for disposal of dredged materials and shall provide this information to the City of Madison no later than 15 calendar days prior to commencement of dredging activities or at the preconstruction meeting, whichever comes first. Contractor shall follow the performance standards outlined in NR 528.04(2) to ensure the sediment end use will not cause any of the following:

- 1) A significant adverse impact on wetlands as defined in ch. NR 103.
- 2) A take of an endangered or threatened species prohibited by s. 29.604, Stats.
- 3) A detrimental effect on any surface water

4) A detrimental effect on groundwater quality that will cause or exacerbate an exceedance of any NR 140.22 groundwater PAL or ES standard.

Contractor shall be responsible for obtaining all necessary approvals from the WDNR, including Accumulated Sediment End Use Certification Form 4400-248, and from all appropriate landowners if dredged materials will be disposed of or reused at fill site, other reuse location, or at a land application site. See the Permits sections for additional requirements related to the disposal site.

The estimated sediment dredging quantity was calculated as all the excavation in the existing wet pond areas:

Total Estimated Sediment Dredging 9,795 C.Y.

METHOD OF MEASUREMENT

Dredge, Haul, and Dispose of Sediment shall be measured by the Cubic Yard based on "Plan Quantity" without measurement thereof. No changes to this quantity will be approved unless there are modifications to the design. The Contractor is required to review the data used to determine sediment depths prior to bidding.

BASIS OF PAYMENT

Dredge, Haul, and Dispose of Sediment shall be paid at the contract price for work as defined above, which shall be considered full compensation for work, materials, labor and incidentals necessary to complete the work. 50% of payment shall be withheld until the bottom of pond survey is submitted per BID ITEM 90064 – CONSTRUCTION SURVEYING verifying that plan depths were met.

BID ITEM 90005 - CLAY LINER PROVISION AND PLACEMENT

DESCRIPTION

This item includes all work necessary to provide and place a 2-foot clay liner (finish depth) in the pond areas below the permanent pool, as shown in the plan set. Excavation of the in-situ soil to accommodate the clay liner placement is paid under Bid Item 20101 – Excavation Cut. The top of the clay liner shall have a finish grade as shown in the plan set.

The estimated clay quantity was determined by using the average end area method for a 2-foot layer.

• Estimated Quantity: 14,685 CU. YD.

The quantity listed above represents fully compacted material, with a thickness of 2 feet. If the Contractor elects to place more than 2 feet of clay for ease of placement, it shall not be compensated. Further, if additional depth is placed the finish grade for top of clay shall not be modified from the plan grade. As a result, any additional clay depth shall be done on the bottom of the clay layer and shall not result in any additional compensation in Bid Item 20101—Excavation Cut.

The clay liner shall extend underneath any riprap, pipes or structures that extend to the edge, or into, the permanent pool.

SUBMITTALS AND APPROVALS

The Contractor is responsible submitting the following documents, and/or for receiving approval for the following items. Failure to do so may result in forfeiture of payment for this bid item.

Submittals:

- a. Test results for proposed clay liner material, to include Atterberg limits, grain size distribution, and proctor tests.
- b. In-Situ Material Substitution Plan, if applicable.

Approvals:

- a. Material: written approval from the Project Engineer or Construction engineer for use of the proposed material.
- b. In-Situ Material Substitution Plan: written approval from the Project Engineer or Construction Engineer to substitute in-situ clay with placed clay liner.
- c. Foundation Preparation: verbal approval from the Project Engineer or Construction Engineer prior to placement of the first lift of clay.
- d. Final Acceptance: written approval from the Project Engineer or Construction Engineer accepting placement of the liner. This will only be granted after all field testing has been reviewed and approved.

MATERIAL

Soils used in clay liner construction shall not contain sod, brush, roots, frozen soil, or other perishable materials. Rock particles larger than 3 inches shall be removed prior to compaction of the clay.

The clay liner material shall meet the DNR Type B criteria as follows:

- a. 50% fines (200 sieve) or more.
- b. An in-place hydraulic conductivity of 1 x 10 -6 cm./sec. or less.
- c. Average liquid limit value of 16 or greater, with no value less than 14.
- d. Average PI of 7 or more with no values less than 5.
- e. Clay compaction and documentation as specified in NRCS Wisconsin Construction Specification 204, Earthfill for Waste Storage Facilities.
- f. Minimum thickness of two feet.
- g. Specify method for keeping the pool full or use of composite soils below liner.

The Contractor may use material generated on site, provided it meets all specifications listed above. Insitu material may also be used to replace up to 1 foot of the 2-foot liner. The Contractor shall submit an InSitu Material Substitution plan to be reviewed by the Project Engineer, Construction Engineer, and soils testing consultant.

CONSTRUCTION

FOUNDATION PREPARATION

Foundation surfaces shall be graded to remove surface irregularities and shall be scarified, or otherwise acceptably scored or loosened, to a minimum depth of 2 inches. The moisture content of the loosened material shall be controlled as specified for the clay liner, and the surface materials of the foundation shall be compacted and bonded with the first layer of the clay liner as specified for subsequent layers of clay liner.

There may be existing base flows within the ponds. It is anticipated that dewatering below pond draw down may be necessary. The Contractor shall be required to obtain all permitting and approvals for dewatering including dewatering that creates well points. This shall be incidental to this bid item.

PLACEMENT

The clay liner shall not be placed until the required foundation preparation has been completed and the foundation has been inspected and approved by the Project Engineer and Construction Engineer. The Contractor shall be required to provide spot elevations of the foundation to prove that it has been excavated per the plans. The clay liner shall not be placed upon a frozen surface, nor shall snow, ice, or frozen material be incorporated in the clay liner.

The liner shall be placed in lifts. The thickness of each lift, before compaction, shall not exceed the smaller of 6 inches or the length of the teeth of the footed compactor used.

The distribution of materials throughout the clay liner shall be essentially uniform, and the clay liner shall be free from lenses, pockets, streaks, or layers of material differing substantially in texture, moisture content, or gradation from the surrounding material.

If the surface of any layer becomes too and smooth for proper bond with the succeeding layer, it shall be scarified to a depth of not less than 2 inches before the next layer is placed.

CONTROL OF MOISTURE CONTENT

During placement and compaction of the clay liner, the moisture content of the clay being placed shall be maintained above optimum moisture as determined by the Standard Proctor Test (ASTM D698) or Modified Proctor Test (ASTM D1557).

The application of water to the clay shall be accomplished at the borrow area insofar as practicable. If necessary, water may be applied by sprinkling the clay after placement and before compaction of the liner. Uniform moisture distribution shall be obtained by disking.

If the moisture conditions described herein cannot be achieved, the Contractor shall work with the soils testing consultant to assure the placement meets the intent of the specification.

COMPACTION

The clay liner shall be compacted to a minimum of 95% of standard proctor dry density (ASTM D698) or to a minimum of 90% of modified proctor dry density (ASTM D1557), at a moisture content above optimum moisture.

The clay liner shall be compacted with a non-vibratory, footed compactor weighting at least 25,000 pounds, operated continuously, in uncompacted lift thicknesses not to exceed the smaller of 6 inches or the length of the teeth on the footed compactor used. Alternate compaction equipment shall be approved by the Project Engineer and soil testing consultant prior to use on site.

REWORKING OR REMOVAL AND REPLACEMENT OF DEFECTIVE CLAY LINER

Clay placed at densities lower than the specified minimum density or at moisture contents lower than optimum moisture content or otherwise not conforming to the requirement of the specifications shall be reworked to meet the specifications or shall be removed and replaced. The replacement clay and the foundation fill surfaces upon which it is placed shall conform to all requirements of this specification for foundation preparation, approval, placement, moisture control, and compaction.

Warranty of the liner will be determined by the capacity of the pond to maintain a consistent water level. Failure of the pond to maintain a consistent water level within the warranty period will result in the Contractor repairing or replacing the liner as needed.

The Contractor shall maintain dewatering activities until the pond construction is completed.

TESTING AND DOCUMENTATION REQUIREMENTS

Prior to placement of any material, the Contractor shall submit testing results showing the proposed material is appropriate for use in a clay liner. This includes a minimum of one of each of the following: Standard Proctor or Modified Proctor, grain size distribution, and Atterberg Limits. These tests shall be completed at the expense of the Contractor.

Field and laboratory soil tests shall be completed on the clay liner, by a third-party soil testing consultant retained by the City, to document compliance with this specification. Testing shall be completed as the liner is being placed. The Contractor shall accommodate access and scheduling of this work, including potential delays if a representative is not immediately available. The following tests shall be completed at the specified frequency. Copies of the documentation report, including test locations and test results, shall be provided to Construction Engineer.

TEST	STANDARD	FREQUENCY (per liner quantity)
Standard Proctor	ASTM D-698	1 per 5,000 cy
Modified Proctor	ASTM D-1557	1 per 5,000 cy
Field Density	ASTM D-2922, D-2167, D-1556, D-2937	1 per 500 cy
Atterberg Limit	ASTM D-4318	1 per 5,000 cy
Grain Size Distribution	ASTM D-422	1 per 5,000 cy
Permeability	ASTM D-5084	1 per 5,000 cy

Atterberg limits, grain size distribution, and permeability tests shall be completed on undisturbed samples obtained from the constructed clay liner. The Contractor shall prepare test locations at the direction of the soil testing consultant. A minimum of one of each of the laboratory tests specified above shall be completed per clay liner.

All test holes shall be backfilled using powdered bentonite mixed with clay soil used in liner construction and compacted by hand tamping. The clay shall be broken down into clods less than ½ inch in diameter. A minimum of 25% of the backfilled test hole volume shall be occupied by powdered bentonite after backfilling.

METHOD OF MEASUREMENT

Clay Liner Provision and Placement shall be measured by the Cubic Yard based on plan quantity, without measurement thereof. The quantity listed on the Proposal Page was calculated using the average end area method for a 2-foot layer of clay below the permanent water pool elevation (top of safety bench to top of safety bench).

BASIS OF PAYMENT

Clay Liner Provision and Placement shall be measured as defined above and paid at the contract unit price, which shall be full payment for all work as laid out in the description.

BID ITEM 90021 – PRIVATE OUTFALL PIPE PROTECTION

DESCRIPTION

Work under this bid item shall include identifying all private outfalls that come from the adjacent private properties, that are not already identified on the plans, prior to the start of grading or tree removals. The outfalls shall be marked and protected to ensure they are not damaged by construction activities or vehicles. The Project Manager shall be notified of any private outfall pipes that are not identified on the plans.

All private outfall pipes shall be kept in working condition and not blocked or broken as work progresses. If private outfall pipes are identified during grading or tree removal activities those outfalls shall be marked and protected or if they are damaged they shall be cut back to the most intact section of pipe (or as directed by the Construction Engineer in the field) and reinstated temporarily until the final grading is completed. All private pipes shall be altered to meet the new grade by either extending the pipes with the appropriately sized pipe and connectors, or by removing and cutting / modifying the pipes or structures so they are cleanly cut and reattached. If any private outfall pipes have existing end treatments those shall be allowed to drain during construction activities and not blocked in any manner. Modifications necessary to provide temporary drainage shall be incidental to this bid item. Any pipes that are damaged during construction shall be replaced in kind.

Any pipes less than 12" in diameter that are damaged or that require modification during the construction activities shall be replaced as described above and any labor, equipment, materials necessary shall be considered incidental to this bid item.

For pipes larger than 12" in diameter, the pipe removal and new pipes, concrete collars, apron ends, riprap, filter fabric shall be paid for paid for under the respective bid items in this contract.

METHOD OF MEASUREMENT

Private Outfall Pipe Protection shall be measured as each unit, completed in place, operational and accepted in accordance with the contract.

BASIS OF PAYMENT

Private Outfall Pipe Protection shall be measured as provided above, and shall be paid for at the contract unit price, which price shall be full compensation for removing, modifying, and reinstating Private Outfall Pipes that are not already identified in the plans, and all materials, labor, tools, equipment and incidentals necessary to complete this item of work.

BID ITEM 90022 – APRON ENDWALL FOR CULVERT PIPE SALVAGED

DESCRIPTION

This section describes excavating and removing existing apron endwall for culvert pipe, and transporting, cleaning, and re-installing at new locations as the plan shows.

- Quantity 2 of 24-Inch Apron Endwalls at Greenway Culverts
 - o R-55A
 - o **R-58**

Apron Endwall for Culvert Pipe Salvaged shall be measured by each unit acceptably removed and reinstalled.

BASIS OF PAYMENT

Apron Endwall for Culvert Pipe Salvaged shall be measured as described above and shall be paid for at the contract price which shall be full compensation for all work, materials, labor and incidentals required to complete the work as set forth in the description.

BID ITEM 90023 - 4'X'8 STORM STRUCTURE

DESCRIPTION

Work under this item includes construction of Storm Structure S-12 at Deming Way at Blackhawk Road. 4'X8' Storm Structure shall be constructed in accordance with standard detail drawing 5.7.4A except the interior dimensions shall be 4ft by 8ft and the structure shall not require a sump.

METHOD OF MEASUREMENT

The 4'X8' Storm Structure shall be measured by Each when structures are constructed in the field and approved by the Construction Engineer or Project Engineer.

BASIS OF PAYMENT

The 4'X8' Storm Structure shall be paid for at the contract unit price, which shall be considered full compensation for construction of the structure described above.

BID ITEM 90024 – 6'X7' CATCHBASIN

DESCRIPTION

Work under this item includes construction of Storm Structure S-41 and S-42. 6 X7' Catchbasin shall be constructed in accordance with standard detail drawing 5.7.4 except the interior dimensions shall be 6ft by 7ft and S-41 shall not require a sump.

METHOD OF MEASUREMENT

The 6'X7' Catchbasin shall be measured by Each when structures are constructed in the field and approved by the Construction Engineer or Project Engineer.

BASIS OF PAYMENT

The 6'X7' Catchbasin shall be paid for at the contract unit price, which shall be considered full compensation for construction of the structure described above.

BID ITEM 90025 - CULVERT WINGWALL RAILINGS

DESCRIPTION

Work under this item shall include all work, materials, and incidentals necessary to construct and install railings along culvert headwalls and wingwalls per the City of Madison's Standard Detail Drawing 5.5.3. All shop drawing submittals shall be provided to the Project Engineer for approval prior to fabrication.

METHOD OF MEASUREMENT

Culvert Wingwall Railings shall be measured per linear foot acceptably completed.

BASIS OF PAYMENT

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

BID ITEM 90030 - ENCASEMENT - SANITARY SEWER

DESCRIPTION

Work under this bid item shall include all work and material necessary to install a 10" sanitary sewer inside of a 15" steel casing pipe across the base slab of the 4 proposed 10' x 4' box culverts on Fourier Dr. The base slab of the boxes shall be sawcut and removed in order to install the sewer inside of a casing with spacers as shown on the drawings on detail D-2.

10" sanitary sewer main installed within the box crossing shall be paid under Bid Item 50302 10 Inch Sanitary Sewer Pipe.

Storm water control and dewatering for installation shall be paid under Bid Item 90001 Storm Water Control.

MATERIALS

<u>CASING</u>

- ASTM specification A139 Grade B or AWWA specification C200
- Outside diameter as specified by the Contractor
- Not coated or cathodically protected, no hydrostatic testing required
- 0.3125" (5/16") minimum thickness
- Specified minimum yield strength, SMYS, of at least 35,000 psi
- New and unused pipe
- Straight and round pipe
- Beveled ends for butt welding

The Contractor shall submit the following to the Engineer for approval prior to ordering of materials and the start of construction:

- Certificate of compliance for the steel casing pipe
- Materials for sand
- Materials for Type B slurry mix
- Materials for casing spacers and distances between spacers
- Materials and methods for bulk-heading the casing ends

CONCRETE AND REINFORCING STEEL

- Type B Slurry shall consist of:
 - 2700 lb. Sand
 - 100 lb. Portland Cement
 - 300 lb. Class C Fly Ash
 - 50 gal. Water

Notes:

1. All design aggregate batch weights are saturated surface dry.

- 2. Aggregate batch weights shall be adjusted for free moisture at the time of mixing.
- 3. Admixture quantity may be varied within manufactures recommended dosage to provide desired results.

Concrete shall be in accordance with Article 301 - Concrete and Concrete Materials. Concrete shall have a minimum compressive strength of 4,000 PSI at 28 days.

Reinforcing steel shall be in accordance with Article 301.3 - Reinforcing Steel.

CONSTRUCTION METHODS

CASING WORK

Block Spacers shall be placed on the 10" diameter sanitary sewer carrier pipe to adjust the pipe to the proposed grade. The blocks shall be set so that the pipe does not touch the casing. Pipe joints shall be made outside of the casing. After the sanitary sewer is in place at the proper slope, the voids between the sewer main and the casing pipe shall be filled with blown sand or pea gravel into the casing to the spring line of the pipe to provide bedding under the pipe.

BOX MODIFICATIONS

The box culverts shall be cleanly sawn to provide the placement of the casing pipe and slurry. No hammering of the floor or walls will be allowed unless expressly approved by the Construction Engineer. The box and sanitary encasement pipe shall have a base that has been adequately dewatered and compacted prior to installation to avoid settlement issues. Place type HR filter fabric below clear bedding stone. Install casing and 10" sanitary sewer pipe. All slurry to fill the floor or walls shall be troweled smooth and flush with the existing box. Provide bar steel reinforcing, adhesive anchors and concrete base slab as shown on the drawings. HR filter fabric, clear bedding stone, bar steel, anchors and concrete are all incidental to this bid item.

METHOD OF MEASUREMENT

Encasement – Sanitary Sewer shall be measured by the Lump Sum.

BASIS OF PAYMENT

Encasement – Sanitary Sewer shall be measured as described above and shall be paid at the contract price, which shall be full compensation for all work, materials, labor, and incidentals required to complete the work set forth in the description.

BID ITEM 90031 - SANITARY CONCRETE ENCASEMENT AND WING WALL AT DEMING WAY

DESCRIPTION

Work under this bid item shall include all work and material necessary to install the upstream wingwall and concrete encasement for a 27" fiberglass reinforced sanitary sewer at the south end of 3 proposed 12' x 6' box culverts, 101, 102, and 103. The concrete encasement shall be formed, rebar provided and placed, backfilled, and poured as shown on the drawings on detail D-1 and following SDD 5.5.1A&B.

Contractor to supply shop drawings for the forming, reinforcement, and concrete. Drawings will need to be approved by the Project Engineer prior to construction. Allow 2 weeks for this approval.

27" sanitary sewer main installed within the encasement shall be paid under Bid Item 90032 27-inch Fiberglass Reinforced Sewer Pipe.

Storm water control and dewatering for installation shall be paid under Bid Item 90001 Storm Water Control.

The Contractor shall submit the following to the Engineer for approval prior to ordering of materials and the start of construction:

- Certificate of compliance for the rebar
- Materials for granular backfill

CONCRETE AND REINFORCING STEEL

Concrete shall be in accordance with Article 301 - Concrete and Concrete Materials. Concrete shall have a minimum compressive strength of 4,000 PSI at 28 days.

Reinforcing steel shall be in accordance with Article 301.3 - Reinforcing Steel.

METHOD OF MEASUREMENT

Sanitary Concrete Encasement and Wing Wall at Deming Way shall be measured by the Lump Sum.

BASIS OF PAYMENT

Sanitary Concrete Encasement and Wing Wall at Deming Way shall be measured as described above and shall be paid at the contract price, which shall be full compensation for all work, materials, labor, and incidentals required to complete the work set forth in the description.

BID ITEM 90032 – 27 INCH FIBERGLASS REINFORCED SEWER PIPE

DESCRIPTION

Work under this bid item shall include all work, materials, equipment, and incidentals necessary to install 190 linear feet of 27 Inch Fiberglass Reinforced Sewer Pipe. Fiberglass reinforced sewer pipe must be a factory-formed conduit of polyester resin, continuous roving fiberglass and silica sand built up in laminates and must conform to the requirements of ASTM D3262-11, including the appendix and subsequent specifications. Joints for pipe and fittings must be confined compression rubber gasket bell and spigot type joints conforming to the material and performance requirements of ASTM D4161-01. All fittings must be capable of withstanding all operating conditions when installed. They may be contact molded or manufactured from mitered sections of pipe joined by glass-fiber reinforced overlays. Minimum pipe stiffness will not be less than 115 psi for direct bury applications.

Install 2-inch Styrofoam insulation above and along the both sides of the pipe installation, between the concrete and pipe. Installation of insulation is included with this item.

METHOD OF MEASUREMENT

27 Inch Fiberglass Reinforced Sewer Pipe shall be measured by Linear Foot installed.

BASIS OF PAYMENT

27 Inch Fiberglass Reinforced Sewer Pipe shall be measured as described above and shall be paid at the contract price, which shall be full compensation for all work, materials, labor, and incidentals required to complete the work set forth in the description.

BID ITEM 90033 - MANHOLE 9-FT DIAMETER

DESCRIPTION

Work under this bid item shall include all work, materials, equipment, and incidentals necessary to install an 9-ft diameter storm manhole following the standards in 507.3 for the City of Madison.

METHOD OF MEASUREMENT

Manhole 9-FT Diameter shall be measured by Each structure installed.

BASIS OF PAYMENT

Manhole 9-FT Diameter shall be measured as described above and shall be paid at the contract price, which shall be full compensation for all work, materials, labor, and incidentals required to complete the work set forth in the description.

BID ITEM 90034 - TEMPORARY FLUSHING DEVICE

DESCRIPTION

Work under this bid item shall include all work, materials and incidentals to install, maintain and remove a temporary flushing device. Approved flushing devices are either standard 5-¼-inch hydrants or a standard 2-inch diameter flushing/blow-off device, constructed of rigid potable water pipe discharging between 2-feet and 4-feet above the surface in accordance with SDD 7.07 – 2-IN TEMPORARY FLUSHING/BLOWOFF FOR 8-IN PIPE AND SMALLER.

METHOD OF MEASUREMENT

Temporary Flushing Device shall be measured by Each device installed.

BASIS OF PAYMENT

Temporary Flushing Device shall be measured as described above and shall be paid at the contract price, which shall be full compensation for all work, materials, labor, and incidentals required to complete the work set forth in the description.

BID ITEM 90041 - REINFORCED CHECK DAM

DESCRIPTION

Work under this item shall include all work, materials, equipment, and incidentals required to install a reinforced check dam at the downstream end of the channel, as shown on the plans. The reinforced check dam shall be built following the shape of the SDD 1.05. It should extend the length of the low-flow channel. The clear stone shall be 4" deep covering the upstream side and top of the check riprap check dam.

Installation, maintenance and removal are all included in this bid item.

The quantities estimated are:

- Medium Riprap-Glacial Fieldstone: 2 tons
- Clear Stone: 2 tons

The Medium Riprap and Clear Stone shall be paid under the appropriate bid items. The Medium Riprap – Glacial Field Stone may be reused. Reused stone shall be paid once for provision.

Reinforced Check Dam shall be measured as a Lump Sum for a reinforced ditch check that is successfully built, maintained, and removed.

BASIS OF PAYMENT

Reinforced Check Dam shall be paid at the contract unit price, which shall be considered full compensation for all work as provided in the description.

BID ITEM 90042 - EROSION MATTING CLASS II, TYPE B - ORGANIC

DESCRIPTION

Work under this bid item shall include all work, materials, equipment and incidentals necessary to install Erosion Matting, Class II, Type B- Organic, AEC Premier Coconut FibreNet erosion control matting with biodegradable thread, or approved equal, as shown on the plans per the manufacturer's specifications. The matting shall have a permissible shear stress of 2.0 lb/ft² and be biodegradable. Alternatives shall be submitted to the Project Engineer for approval prior to the installation.

The Contractor shall install the topsoil and seed per the plans. Note that per the plans, Channel Bottom Seed Mix or one of the other specified seed mixes shall be installed *underneath* the matting. Additional seed may be installed on top of the matting if needed to reach required amounts of vegetation, as long as an initial seed mix has been installed underneath the matting. The Erosion matting Class II Type B-Organic shall only be installed after fine grading has been verified by the Construction Inspector.

METHOD OF MEASUREMENT

Erosion Matting, Class II, Type B – Organic shall be measured per Square Yard of matting acceptably installed, not including runout in anchor trenches or overlap.

BASIS OF PAYMENT

Erosion Matting, Class II, Type B -- Organic shall be measured as described above and shall be paid at the contract price, which shall be considered full compensation for all labor, equipment, materials and incidentals necessary to provide, store, and place in accordance with Article 210 of the Standard Specifications and supplier's recommendations.

BID ITEM 90043 - INITIAL INVASIVE SPECIES MANAGEMENT

DESCRIPTION

Work under this bid item shall include all labor, materials, equipment, and incidentals necessary to remove small invasive trees, shrubs and herbaceous plants and select native plants within all areas that do not need to be significantly graded. This work shall include the removal of all woody and invasive plants listed in Attachment B, non-native plants, as well as aggressive native plants including mulberry (Morus spp.), basswood (Tilia americana), elm (Ulmus spp.), black cherry (Prunus serotina), chokecherry (Prunus virginiana) boxelder (Acer negundo), and cottonwood (Populous deltoides), including trees smaller than 3 inches cal. and non-native perennials, grasses and shrubs and vines. The Contractor shall assume that most woody resprouts are unwanted and should be controlled, including native trees that may be desirable in their mature form. Exceptions may be volunteers of the following native species:

- Quercus spp.
- Carya spp.
- Sambucus canadensis or Sambucus racemosa

- Cornus sericea
- Cornus alternifolia

All initial invasive species management shall be completed prior to planting and seeding. The Contractor shall be responsible for identifying invasive and non-native species. All cutting and clearing debris shall become property of the Contractor and shall be removed from the project site at no additional cost to the City.

This bid item includes any additional site preparation required for areas undisturbed by construction (such as around preserved trees) prior to installation of native seed or plants. For example, undisturbed areas may have mature stands of reed canary grass (Phalaris arundinaceae) that require treatment prior to application of native seed.

This bid item does not include removal of existing trees greater than 4" cal. These shall be bid separately under BID ITEM 20404 or BID ITEM 20401.

Exposed roots and stumps after initial invasive species management shall be immediately treated with herbicide as appropriate to prevent regrowth. The herbicide shall be the least toxic required to prevent regrowth. The Contractor shall select an herbicide that will not prevent growth or germination of future seeding and planting operations. Herbicide chemistry and the potential for exposure (i.e. application method) shall be considered as part of the herbicide selection process. Herbicides containing Triclopyr, or Glyphosphate, or similar chemicals are recommended. Herbicides containing Picloram will not be approved. Treatment of vegetation after initial invasive species management shall be included in this bid item.

All herbicides shall be applied by a licensed applicator and in accordance with the manufacturer's instructions. The Contractor shall submit to the Project Engineer and Stormwater Vegetation Coordinator a Brushing and Herbicide Submittal for approval prior to any invasive species management activities. The submittal shall include:

- Proposed herbicides and their individual applications, i.e. which herbicides will be used on which plants
- Material Data Safety Sheets for each herbicide
- Proposed application methods and timing
- Qualifications of personnel as highlighted in the section below

All herbicide application shall be in strict accordance with the City of Madison Pesticide policy, available at <u>https://www.cityofmadison.com/parks/about/documents/pesticidepolicy2004.pdf</u>. The Contractor shall adhere to this policy and the notification requirements contained in the policy, and shall promptly report to the Project Engineer and Stormwater Vegetation Coordinator all dates of application, type of herbicide used, and amount applied.

All initial invasive species management activities shall be completed in a manner that prevents damage to adjacent vegetation. Mowing with a Forestry mower to remove brush shall be allowed.

Areas that receive initial invasive species management shall have seeding as indicated on restoration plan. No topsoil shall be placed in areas that receive initial invasive species management only. Seeding will be paid for under the appropriate seed bid items.

METHOD OF MEASUREMENT

Initial Invasive Species Management shall be measured as a Lump Sum.

BASIS OF PAYMENT

Initial Invasive Species Management shall be measured as described above and shall be paid for at the contract unit price which shall be full compensation for all work, materials, tools, equipment, labor, hauling, placement, disposal and incidentals required to complete the work as set forth in the description.

BID ITEM 90044 – YEAR 1 RESTORATION MAINTENANCE

This bid item includes treatment of invasive or nuisance plant growth removed through BID ITEM 90004 – Initial Invasive Species Management throughout the entire site including disturbed areas, and all recently planted or seeded areas during the first year growing season after tree removals, after initial invasive species management has been completed. This contract anticipates that Year 1 Restoration Maintenance shall begin in Spring 2025 and shall be complete after the first fall frost in 2025.

The Contractor shall begin Year 1 Restoration Maintenance as sections are cleared in the pond and Greenway. The Contractor shall coordinate areas that should begin year 1 restoration prior to final grading to prepare the site for native seed establishment where applicable.

The Contractor shall employ personnel capable of identifying invasive plants and removing the plant as appropriate for that specific species.

This work shall include the removal of all invasive plants listed in Attachment B, non-native plants, as well as aggressive native plants including mulberry (Morus spp.), basswood (Tilia americana), elm (Ulmus spp.), black cherry (Prunus serotina), chokecherry (Prunus virginiana) boxelder (Acer negundo), and cottonwood (Populous deltoides), including trees smaller than 3 inches cal. and non-native perennials, grasses and shrubs and vines. The Contractor shall assume that most woody resprouts are unwanted and should be controlled including native trees that may be desirable in their mature form. Exceptions may be volunteers of the following native species:

- Quercus spp.
- Carya spp.
- Sambucus canadensis or Sambucus racemosa
- Cornus sericea
- Cornus alternifolia

This contract shall include at least five site visits to treat all invasive vegetation from April – September, unless otherwise approved by the Project Engineer.

During each treatment the Contractor shall use a combination of the following, listed below in the order of the preferred method by the City of Madison:

- Mowing (for annual invasive plants that can be managed by removing the seeds produced that season).
- Hand pulling (for individual small patches of invasive plants that do not spread more aggressively
 after hand pulling i.e. hand pulling is not allowed for Japanese Knotweed which spreads
 rhizomatically and would become more aggressive if hand pulled).
- Prescribed Burning for locations where burning would be an effective treatment. Exact locations to be burned shall be determined upon contract award.
- Spot herbicide application by "painting" treated stumps, or the "glove of death method" which requires placing a chemical resistant glove over one hand, putting a cotton glove over that, and then spraying herbicide on the cotton glove and hand wiping the undesirable plant.
- Spray herbicide with backpack and pump sprayers, selectively spraying undesirable species.

The herbicide shall be the least toxic required to prevent regrowth. The Contractor shall select an herbicide that will not prevent growth or germination of future seeding and planting operations. Herbicide chemistry and the potential for exposure (i.e. application method) shall be considered as part of the herbicide selection process. Herbicides containing Triclopyr, or Glyphosphate, or similar chemicals are recommended. Herbicides containing Picloram will not be approved. The Contractor shall select herbicides that are appropriate for both wood and herbacious regrowth. All herbicides shall be applied by a licensed applicator and in accordance with the manufacturer's instructions. The Contractor shall include all proposed

herbicides and methodologies in the Brushing and Herbicide Submittal as described in this bid item.

All herbicides shall be applied by a licensed applicator and in accordance with the manufacturer's instructions. The Contractor shall submit to the Project Engineer and Stormwater Vegeation Coordinator a Brushing and Herbicide Submittal for approval prior to any invaisve species management activities. The submittal shall include:

- Proposed herbicides and their individual applications, i.e. which herbicides will be used on which plants
- Material Data Safety Sheets for each herbicide
- Proposed application methods and timing
- Qualifications of personnel

All herbicide application shall be in strict accordance with the City of Madison Pesticide policy, available at <u>https://www.cityofmadison.com/parks/about/documents/pesticidepolicy2004.pdf</u>. The Contractor shall adhere to this policy and the notification requirements contained in the policy, and shall promptly report to the Project Engineer and Stormwater Vegeation Coordinator all dates of application, type of herbicide used, and amount applied.

All herbicide application shall be completed in a manner that prevents damage to adjacent vegetation. The Contractor shall adhere to the following:

- All cutting and clearing debris shall become property of the Contractor and shall be removed from the project site at no additional cost to the City.
- The Contractor shall remove trash that has accumulated on site at each treatment and shall dispose at no additional compensation.
- The Contractor shall be responsible for replacing any native species at the direction of the Project Engineer that have died as a result of herbicide overspray which can include trees, shrubs, and forbs.
- All herbicide application signage must be clearly visible.
- The Contractor shall be required to use aquatic herbicide as necessary for all areas required by the Wisconsin Department of Natural Resources and to obtain all required permits necessary for application of aquatic herbicide.
 - The Contractor shall submit to the Project Engineer an herbicide submittal for approval prior to any invasive removal activities. The submittal shall include:
 - Proposed herbicides and their individual applications, i.e. which herbicides will be used on which plants
 - Material Data Safety Sheets for each herbicide
 - Proposed application methods and timing
 - Qualifications of personnel as highlighted in the section below
- All Japanese or Bohemian knotweed shall be treated with Polaris AC®, Milestone® or Perspective® herbicide per product instructions. Other products for removing Japanese knotweed must be approved by the Project Engineer prior to application. If Japanese or Bohemian knotweed is found on site, the Contractor shall submit, as part of the Invasive Plant Removal Methods Submittal, a thorough description of how knotweed will be controlled. Treatment plans for Japanese or Bohemian knotweed shall be in accordance with accepted knotweed control methods which may include combinations of cutting stalks, foliar or injection herbicide applications, but *must* include at a minimum the appropriate use of herbicide.

Prior to removing invasive plants, the Contractor shall submit the proposed method for removals for approval from the Project Engineer.

METHOD OF MEASUREMENT

Year 1 Restoration Maintenance shall be measured by lump sum.

BASIS OF PAYMENT

Year 1 Restoration Maintenance shall be measured as described above and shall be paid for at the contract unit price which shall be full compensation for all work, materials, tools, equipment, labor, hauling, placement, disposal and incidentals required to complete the work as set forth in the description.

BID ITEM 90045 – YEAR 2 RESTORATION MAINTENANCE

DESCRIPTION

Work under this bid item shall include all labor, materials, equipment, and incidentals necessary to treat invasive or nuisance plant regrowth throughout the entire site during the second growing season.

Year 2 Restoration Maintenance is anticipated to begin in Spring 2026 (after the last frost) and shall be complete after the first fall frost in 2026.

The Contractor shall employ personnel capable of identifying invasive plants and removing the plant as appropriate for that specific species.

This work shall include the removal of all invasive plants listed in Attachment B, non-native plants, as well as aggressive native plants including mulberry (Morus spp.), basswood (Tilia americana), elm (Ulmus spp.), black cherry (Prunus serotina), chokecherry (Prunus virginiana) boxelder (Acer negundo), and cottonwood (Populous deltoides), including trees smaller than 3 inches cal. and non-native perennials, grasses and shrubs and vines. The Contractor shall assume that most woody resprouts are unwanted and should be controlled including native trees that may be desirable in their mature form. Exceptions may be volunteers of the following native species:

- Quercus spp.
- Carya spp.
- Sambucus canadensis or Sambucus racemosa
- Cornus sericea
- Cornus alternifolia

This contract shall include at least five site visits to treat all invasive vegetation from April – September, unless otherwise approved by the Project Engineer.

During each treatment the Contractor shall use a combination of the following, listed below in the order of the preferred method by the City of Madison:

- Mowing (for annual invasive plants that can be managed by removing the seeds produced that season).
- Hand pulling (for individual small patches of invasive plants that do not spread more aggressively after hand pulling i.e. hand pulling is not allowed for Japanese Knotweed which spreads rhizomatically and would become more aggressive if hand pulled).
- Prescribed Burning for locations where burning would be an effective treatment. Exact locations to be burned shall be determined upon contract award.
- Spot herbicide application by "painting" treated stumps, or the "glove of death method" which requires placing a chemical resistant glove over one hand, putting a cotton glove over that, and then spraying herbicide on the cotton glove and hand wiping the undesirable plant.
- Spray herbicide with backpack and pump sprayers, selectively spraying undesirable species.

The herbicide shall be the least toxic required to prevent regrowth. The Contractor shall select an herbicide that will not prevent growth or germination of future seeding and planting operations. Herbicide chemistry and the potential for exposure (i.e. application method) shall be considered as part of the herbicide selection process. Herbicides containing Triclopyr, or Glyphosphate, or similar chemicals are recommended.

Herbicides containing Picloram will not be approved. The Contractor shall select herbicides that are appropriate for both wood and herbacious regrowth. All herbicides shall be applied by a licensed applicator and in accordance with the manufacturer's instructions. The Contractor shall include all proposed herbicides and methodologies in the Brushing and Herbicide Submittal as described in this bid item.

All herbicides shall be applied by a licensed applicator and in accordance with the manufacturer's instructions. The Contractor shall submit to the Project Engineer and Stormwater Vegetation Coordinator a Brushing and Herbicide Submittal for approval prior to any invasive species management activities. The submittal shall include:

- Proposed herbicides and their individual applications, i.e. which herbicides will be used on which plants
- Material Data Safety Sheets for each herbicide
- Proposed application methods and timing
- Qualifications of personnel

All herbicide application shall be in strict accordance with the City of Madison Pesticide policy, available at <u>https://www.cityofmadison.com/parks/about/documents/pesticidepolicy2004.pdf</u>. The Contractor shall adhere to this policy and the notification requirements contained in the policy, and shall promptly report to the Project Engineer and Stormwater Vegetation Coordinator all dates of application, type of herbicide used, and amount applied.

All herbicide application shall be completed in a manner that prevents damage to adjacent vegetation. The Contractor shall adhere to the following:

- All cutting and clearing debris shall become property of the Contractor and shall be removed from the project site at no additional cost to the City.
- The Contractor shall remove trash that has accumulated on site at each treatment and shall dispose at no additional compensation.
- The Contractor shall be responsible for replacing any native species at the direction of the Project Engineer that have died as a result of herbicide overspray which can include trees, shrubs, and forbs.
- All herbicide application signage must be clearly visible.
- The Contractor shall be required to use aquatic herbicide as necessary for all areas required by the Wisconsin Department of Natural Resources and to obtain all required permits necessary for application of aquatic herbicide.
 - The Contractor shall submit to the Project Engineer an herbicide submittal for approval prior to any invasive removal activities. The submittal shall include:
 - Proposed herbicides and their individual applications, i.e. which herbicides will be used on which plants
 - Material Data Safety Sheets for each herbicide
 - Proposed application methods and timing
 - Qualifications of personnel as highlighted in the section below

All Japanese or Bohemian knotweed shall be treated with Polaris AC®, Milestone® or Perspective® herbicide per product instructions. Other products for removing Japanese knotweed must be approved by the Project Engineer prior to application. If Japanese or Bohemian knotweed is found on site, the Contractor shall submit, as part of the Invasive Plant Removal Methods Submittal, a thorough description of how knotweed will be controlled. Treatment plans for Japanese or Bohemian knotweed shall be in accordance with accepted knotweed control methods which may include combinations of cutting stalks, foliar or injection herbicide applications, but *must* include at a minimum the appropriate use of herbicide.

Prior to removing invasive plants, the Contractor shall submit the proposed method for removals for approval from the Project Engineer.

Year 2 Restoration Maintenance shall be measured as a Lump Sum.

BASIS OF PAYMENT

Year 2 Restoration Maintenance shall be measured as described above and shall be paid for at the contract unit price which shall be full compensation for all work, materials, tools, equipment, labor, hauling, placement, disposal and incidentals required to complete the work as set forth in the description.

BID ITEM 90046 – PLUGS

DESCRIPTION

This bid item shall include all necessary work, labor and incidentals required to procure plant plugs in accordance with the City of Madison Standard Specifications for Public Works Contract and as outlined in Section 209 of this contract.

Wetland emergent plugs shall be installed from approximately 2.5"D x 2.5"W x 4"H containers. Plants shall be placed 1'-1.5' on center.

Wetland emergent plugs shall be installed just above the safety shelf. The Contractor shall be responsible for determining the exact location based on existing vegetation, removals, sun/shade and soil moisture. The Stormwater Vegetation Coordinator shall approve the final general planting locations prior to installation.

Plants shall be placed in dense groupings to promote establishment of high biodiverse, low invasive colonies of native plants. This approach is intended to minimize invasive species growth to unplanted areas that can be treated chemically without impact to surrounding native plants, and to encourage spread of native plant dense groupings for long term establishment.

Plants shall be installed so that the top (crowns) stems shall be set at grade. The Contractor shall install plugs by cutting through the existing erosion control matting. The Contractor shall not mulch around the plugs, but shall ensure their roots are fully covered with topsoil.

The Contractor shall be required to ensure that ~75% of the total number of forbs and grasses are flourishing by the end of the 2025 growing season.

The Contractor shall provide the below species and quantities. Slight variations based on availability shall be accepted as determined by the Stormwater Vegetation Coordinator.

Plug species shall include:

- Blueflag Iris (Iris virginica shrevei)
- Common Arrowhead (Sagittaria latifolia)
- Fowl Manna Grass (Glyceria striata)
- Dark Green Bulrush (Scirpus atrovirens)
- Fringed Sedge (Carex crinita)
- Blue Joint Grass (Calamagrostis canadensis)
- Prairie Cordgrass (Spartina pectinata)

The Contractor shall determine if rootstock protection is necessary for wetland plantings based on site conditions. All rootstock protection is incidental to this bid item. Any rootstock protection used shall remain in place until the end of the guarantee period.

Plugs shall be measured by Each plug successfully installed.

BASIS OF PAYMENT

Plugs shall be measured as described above and shall be paid for at the contract unit price as listed on the proposal page which shall be full compensation for all work, materials, tools, equipment, labor, hauling, placement, disposal and incidentals required to complete the work as set forth in the description.

BID ITEM 90047- CHANNEL BOTTOM SEED MIX

DESCRIPTION

Work under this bid item shall include all work, materials, labor, equipment and incidentals necessary to provide and place seed as defined in these special provisions and the City of Madison Standard Specifications for Public Works Construction. Channel Bottom Seed Mix may be applied at any time of year.

The Contractor shall submit a final mix to Project Engineer and Stormwater Vegetation Coordinator for approval at a minimum of 1 week prior to placement. The Stormwater Vegetation Coordinator shall inspect and approve the seed prior to placement.

The Contractor shall be responsible for ensuring that approximately 70% of the site is vegetated with native species that are components of this seed mix at the end of the contract. If it is determined that additional or supplemental seeding is needed, the Contractor may reseed the site with additional quantities, as agreed upon by the Project Engineer, of the specified seed mix and will be paid for up to two (2) times the plan quantity

The Contractor shall note that the Channel Bottom Mix will originally be placed beneath a more robust erosion matting, and therefore overseeding can be challenging to get seed established. The Contractor shall submit an overseeding application plan to Project Engineer and Stormwater Vegetation Coordinator for approval at a minimum of 1 week prior to placement. Overseeding shall only be required as necessary to meet 70% of native seed establishment.

Seed shall be native ecotypes. No improved varieties are allowed. Seed source shall be native ecotypes from Southeast Minnesota, Eastern Iowa, Southern Wisconsin, or Northern Illinois.

The initial application of the seed mix must be applied *underneath* Class II, Type B matting per BID ITEM 90042.

CHANNEL BOTTOM SEED MIX	K	
Botanical Name	Common Name	OZ/Acres
Calamagrostis canadensis	Canada Blue Joint Grass	1
Elymus riparius	Riverbank Wild Rye	32
Elymus virginicus	<u>Virginia Wild Rye</u>	64
Glyceria grandis	Reed Manna Grass	16
Glyceria striata	Fowl Manna Grass	16
Leersia oryzoides	Rice Cut Grass	16
Spartina pectinata	Prairie Cordgrass	2

The native species listed above do not require winter conditions to be able to germinate.

Channel Bottom Seed Mix shall be measured by the **plan** square yard quantity for the initial seeding of the entire site with Channel Bottom Seed Mix one-time. Any increases or decreases in seeding shall be measured by the Contractor and verified by the Project Engineer.

BASIS OF PAYMENT

Channel Bottom Seeding shall be measured as described above and shall be paid for at the contract unit price which shall be full compensation for all work, materials, tools, equipment, labor, hauling, placement, and incidentals required to complete the work as set forth in the description.

BID ITEM 90048 - SHORELINE SEED MIX AREAS

DESCRIPTION

Work under this bid item shall include all work, materials, labor, equipment and incidentals necessary to provide and place Shoreline Seed Mix as defined and in accordance with these special provisions and the City of Madison Standard Specifications for Public Works Construction. Wet mesic prairie seeding shall only be applied prior to April 30th and after October 14th.

All initial seeding shall be applied under erosion control matting.

Outside of this timeframe, the Contractor shall use the non-strat seed mix BID – ITEM 90051 as the initial seeding. Payment for seeding Non-Strat Summer Seeding shall be paid under BID ITEM 90051 and shall overseed using the seed mix (Shoreline) in fall over existing erosion control matting. Overseeding in fall shall be paid under this bid item and included in plan quantities.

Prior to application of seed, the Contractor shall verify with the Stormwater Vegetation Coordinator whether to seed with temporary seed or native seed mix.

This bid item included twice the plan quantity of shoreline seed. The initial shoreline seed application shall be paid at plan quantity. The Project Engineer shall determine if additional seed quantities shall be applied. Any additional seeding shall be measured and paid by in-field quantity.

Quantities listed in the proposal page may be reduced or increased based on additional seeding required.

The Contractor shall be responsible for ensuring that approximately 70% of the site is vegetated with native species that are components of this seed mix at the end of the contract.

Seed at the rate recommended by the manufacturer. Submit additions or substitutions and final mix to Project Engineer and Stormwater Vegetation Coordinator for approval at a minimum of 1 week prior to placement. The Stormwater Vegetation Coordinator shall inspect and approve the seed prior to placement.

Seed shall be native ecotypes. No improved varieties are allowed. Seed source shall be native ecotypes from Southeast Minnesota, Eastern Iowa, Southern Wisconsin, or Northern Illinois.

SHORELINE SEED MIX		111111111111111111111111111111111111111
WILDFLOWERS		J. 11. J. L.
Botanical Name	Common Name	OZ/Acres
Alisma subcordatum	Mud Plantain	1.00
Asclepias incarnata	Marsh (Red) Milkweed	3.00
Aster novae-angliae	New England Aster	1.00
Aster puniceus	Swamp Aster	1.00

Eupatorium maculatum	Spotted Joe Pye Weed	1.00
Eupatorium perfoliatum	Boneset	0.50
Helenium autumnale	Sneezeweed	0.30
Helianthus grosseserratus	Sawtooth Sunflower	0.50
Liatris spicata	Marsh Blazing Star	3.00
Lobelia cardinalis	Cardinal Flower	0.30
Lobelia siphilitica	Great Blue Lobelia	0.35
Pycnanthemum virginianum	Mountain Mint	0.50
Rudbeckia laciniata	Wild Golden Glow	3.00
Silphium perfoliatum	Cup Plant	4.00
Solidago riddellii	Riddell's Goldenrod	4.00
Verbena hastata	Blue Vervain	2.00
Vernonia fasciculata	Ironweed	4.00
Zizia aurea	Golden Alexanders	4.00
GRASSES, SEDGES & RUSHES		a Nadiona
Bromus ciliatus	Fringed Brome	24.00
Carex vulpinoidea	Brown Fox Sedge	4.00
Elymus riparius	Riverbank Wild Rye	30.00
Leersia oryzoides	Rice Cut Grass	2.00
Scirpus atrovirens	Dark-Green Bulrush	1.00
Scirpus cyperinus	Wool Grass	0.25
Scirpus Validus	Great Bulrush	0.30
Spartina petinata	Prairie Cordgrass	4.00

For Contractor's information, as of August, 2024, a seed mix meeting these specifications called "Flood Plain Seed Mix" is available from Agrecol Nursery LLC.

METHOD OF MEASUREMENT

Shoreline Seed Mix Areas shall be measured by the **plan** square yard quantity for the initial seeding of the entire site with Shoreline Seed one-time. Any increases or decreases in seeding shall be measured by the Contractor and verified by the Project Engineer.

BASIS OF PAYMENT

Shoreline Seed Mix Areas shall be measured as described above and shall be paid for at the contract unit price which shall be full compensation for all work, materials, tools, equipment, labor, hauling, placement, and incidentals required to complete the work as set forth in the description.

BID ITEM 90049 - UPLAND MESIC PRAIRIE SEED MIX AREAS

DESCRIPTION

Work under this bid item shall include all work, materials, labor, equipment and incidentals necessary to provide and place Upland Mesic Prairie Seed Mix as defined and in accordance with these special provisions and the City of Madison Standard Specifications for Public Works Construction. Wet mesic prairie seeding shall only be applied prior to April 30th and after October 14th.

All initial seeding shall be applied under erosion control matting.

Outside of this timeframe, the Contractor shall use the non-strat seed mix BID – ITEM 90051 as the initial seeding. Payment for seeding Non-Strat Summer Seeding shall be paid under BID ITEM 90051 and shall overseed using the seed mix (Upland Mesic Prairie) in fall over existing erosion control matting. Overseeding in fall shall be paid under this bid item and included in plan quantities.

Prior to application of seed, the Contractor shall verify with the Project Engineer and Stormwater Vegetation Coordinator whether to seed with temporary seed or native seed mix.

This bid item included twice the plan quantity of upland mesic prairie seed. The initial upland mesic prairie seed application shall be paid at plan quantity. The Project Engineer shall determine if additional seed quantities shall be applied. Any additional seeding shall be measured and paid by in-field quantity.

Quantities listed in the proposal page may be reduced or increased based on additional seeding required.

The Contractor shall be responsible for ensuring that approximately 70% of the site is vegetated with native species that are components of this seed mix at the end of the contract.

Seed at the rate recommended by the manufacturer. Submit additions or substitutions and final mix to Project Engineer and Stormwater Vegetation Coordinator for approval at a minimum of 1 week prior to placement. The Stormwater Vegetation Coordinator shall inspect and approve the seed prior to placement.

Seed shall be native ecotypes. No improved varieties are allowed. Seed source shall be native ecotypes from Southeast Minnesota, Eastern Iowa, Southern Wisconsin, or Northern Illinois.

For the majority of the site, in sunny areas, the Contractor shall use the	following mix:
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SHORELINE SEED MIX				
WILDFLOWERS				
Botanical Name	Common Name	% by wt.		
Agastache foeniculum	Anise Hyssop	0.92		
Agastache nepetoides	Yellow Giant Hyssop	0.46		
Allium stellatum	Prairie Onion	1.38		
Anemone canadensis	Canada Anemone	0.23		
Apocynum cannabinum	Dogbane	0.46		
Arnoglossum atriplicifolium	Pale Indian Plantain	0.23		
Arnoglossum reniforme	Great Indian Plantain	0.23		
Asclepias incarnata	Rose Milkweed	0.92		
Asclepias syriaca	Common Milkweed	0.46		
Asclepias verticillata	Whorled Milkweed	0.46		
Astragalus canadensis	Canada Milk Vetch	0.23		
Baptisia alba	White Wild Indigo	0.92		
Baptisia australis	Blue Wild Indigo	0.92		
Baptisia tinctoria	Small Yellow Wild Indigo	0.46		
Boltonia asteroids	False Aster	0.46		
Brickellia eupatorioides	False Boneset	0.46		
Camassia scilloides	Wild Hyacinth	0.92		
Chamaecrista fasciculata	Partridge Pea	3.67		

Chamaenerion angustifolium	Fireweed account of the second	0.23
Cirsium discolor	Pasture Thistle	0.46
Coreopsis lanceolata	Lance-leaf Coreopsis	1.84
Coreopsis tripteris	Tall Coreopsis	0.23
Dalea candida	White Prairie Clover	1.38
Dalea purpurea	Purple Prairie Clover	1.38
Desmanthus illinoensis	Illinois Bundle Flower	0.46
Desmodium canadense	Showy Tick Trefoil	0.23
Desmodium illinoense	Illinois Tick Trefoil	0.23
Dodecatheon meadia	Midland Shooting Star	0.23
Drymocallis arguta	Prairie Cinquefoil	0.23
Echniacea pallida	Pale Purple Coneflower	3.22
Echinacea purpurea	Purple Coneflower	1.38
Eryngium yuccifolium	Rattlesnake Master	1.84
Euphorbia corollata	Flowering Spurge	0.46
Euthamia graminifolia	Grass-leaved Goldenrod	0.46
Gaura biennis	Biennial Gaura	0.46
Gentiana flavida	Cream Gentian	0.69
Glycyrrhiza lepidota	Wild-Licorice	0.46
Helianthus pauciflorus	Showy Sunflower	0.92
Heliopsis helianthoides	Early Sunflower	0.46
Hibiscus laevis	Rose Mallow	0.92
Hypericum pyramidatum	Greater St. John's Wort	0.46
Lespedeza capitata	Round-headed Bush Clover	0.46
Liatris ligulistylis	Meadow Blazing Star	0.46
Liatris pycnostachya	Prairie Blazing Star	1.84
Liatris spicata	Dense Blazing Star	2.30
Lilium michiganense	Michigan Lily	0.23
Lobelia siphilitica	Great Blue Lobelia	0.69
Monarda fistulosa	Wild Bergamot	0.92
Napaea dioica	Glade Mallow	0.46
Oligoneuron rigidum	Stiff Goldenrod	0.46
Parthenium integrifolium	Wild Quinine	1.38
Pedicularis canadensis	Wood Betony	0.46
Penstemon digitalis	Foxglove Beardtongue	0.92
Penstemon hirsutus	Hairy Beardtongue	0.46
Physostegia virginiana	Obedient Plant	0.46
Pycnanthemum tenuifolium	Slender Mountain Mint	0.46
Pycnanthemum virginianum	Mountain Mint	0.46
Ratibida pinnata	Yellow Coneflower	0.46
Rudbeckia hirta	Black-eyed Susan	1.84
Rudbeckia subtomentosa	Sweet Black-eyed Susan	0.46

Rudbeckia triloba	Brown-eyed Susan	0.46
Ruellia humilis	Wild Petunia	0.46
Scutellaria lateriflora	Mad-dog Skullcap	0.46
Senna hebecarpa	Wild Senna	0.92
Senna marilandica	Maryland Senna	0.46
Silene regia	Royal Catchfly	0.23
Silphium integrifolium	Rosinweed	0.23
Silphium laciniatum	Compass Plant	0.46
Silphium perfoliatum	Cup Plant	0.23
Silphium terebinthinaceum	Prairie Dock	0.46
Solidago speciosa	Showy Goldenrod	0.46
Symphyotrichum laeve	Smooth Blue Aster	0.92
Symphyotrichum novae-angliae	New England Aster	0.46
Symphyotrichum oolentangiense	Sky Blue Aster	0.92
Taenidia integerrima	Yellow Pimpernel	0.46
Thalictrum dasycarpum	Purple Meadow Rue	0.92
Thaspium trifoliatum flavum	Meadow Parsnip	0.46
Tradescantia ohiensis	Ohio Spiderwort	1.84
Trosteum perfoliatum	Late Horse Gentian	0.46
Verbena hastata	Blue Vervain	0.92
Verbena stricta	Hoary Vervain	0.92
Vernonia gigantea	Tall Ironweed	0.46
Vernonia missurica	Missouri Ironweed	0.46
Veronicastrum virginicum	Culver's Root	0.46
Zizia aptera	Heart-leaved Golden Alexanders	0.92
Zizia aurea	Golden Alexanders	1.84
Totals of Wildflowers		64.76%
TREES, SHRUBS & VINES		% by wt.
Amorpha canascens	Lead Plant	0.92
Rosa blanda	Early Wild Rose	0.46
Totals of Trees, Shrubs & Vines		1.38%
GRASSES, SEDGES & RUSHES		% by wt.
Andropogon gerardii	Big Bluestem	0.46
Bouteloua curtipendula	Side-oats Grama	7.84
Carex brevior	Plains Oval Sedge	2.76
Carex crus-corvi	Crowfoot Fox Sedge	0.46
Carex molesta	Field Oval Sedge	0.92
Carex vulpinoidea	Brown Fox Sedge	1.38
Elymus canadensis	Canada Wild Rye	5.70
Elymus virginicus	Virginia Wild Rye	2.30
Juncus dudleya	Dudley's Rush	0.46
Juncus tenuis	Path Rush	0.46

Panicum virgatum	Switch Grass and a state	0.11
Schizachyrium scoparium	Little Bluestem	7.35
Sorghastrum nutans	Indian Grass	0.92
Sporobolus compositus	Rough Dropseed	1.84
Sporobolus heterolepsis	Prairie Dropseed	0.92
Totals of Grasses, Sedges & Rush	les	33.86%

For Contractor's information, a seed mix meeting these specifications called "Grand Diversity Seed Mix" is available from Prairie Moon Nursery.

In areas where there is enough canopy remaining that the Contractor deems that the seed mix above will not be successful, the Contractor shall use the following seed mix:

PARTIALLY SHADE TOLERANT S	EED MIX	
WILDFLOWERS		
Botanical Name	Common Name	OZ/Acres
Agastache scrophulariaefolia	Purple Giant Hyssop	1.00
Allium cernuum	Nodding Onion	8.00
Anemone virginiana	Tall Anemone	0.50
Aquilegia canadensis	Wild Columbine	1.50
Aster sagittifolius	Arrow-leaved Aster	1.00
Chamaecrista fasciculata	Partridge Pea	13.00
Coreopsis lanceolata	Lance-leaf (Sand) Coreopsis	2.00
Coreopsis palmata	Prairie Coreopsis	1.50
Echinacea pallida	Pale Purple Coneflower	4.00
Eupatorium pupureum	Purple Joe Pye Weed	0.75
Helianthus strumosus	Pale-leaved Sunflower	2.00
Heliopsis helianthoides	Early Sunflower	10.00
Hypericum pyramidatum	Greater St. John's Wort	0.25
Kuhnia eupatorioides	False Boneset	2.00
Liatris pycnostachya	Prairie Blazing Star	1.50
Monarda fistulosa	Wild Bergamot	1.50
Penstemon digitalis	Foxglove Beardtongue	1.00
Ratibida pinnata	Yellow Coneflower	2.00
Rudbeckia hirta	Black-eyed Susan	4.00
Rudbeckia subtomentosa	Sweet Black-eyed Susan	2.00
Scrophularia lanceolata	Early Figwort and a second to a subscription of the	0.25
Solidago speciosa	Showy Goldenrod	0.75
Tradescantia ohiensis	Ohio Spiderwort was a set of the second second	3.00
Veronicastrum virginicum	Culver's Root	0.50
Ziza aurea	Golden Alexanders	8.00
GRASSES, SEDGES & RUSHES		OZ/Acres
Andropogon gerardii	Big Bluestem	8.00
Bouteloua curtipendula	Sideoats Grama	16.00

Bromus ciliatus	Fringed Brome	6.00
Bromus kalmia	Prairie Brome	10.00
Carex bicknellii	Copper-shouldered Oval Sedge	2.00
Diarrhena americana	Beak Grass	4.00
Elymus canadensis	Canada Wild Rye	64.00
Elymus villosus	Silky Wild Rye	16.00
Hystrix patula	Bottlebrush Grass	16.00
Schizachyrium scoparium	Little Bluestem	8.00
Sorghastrum nutans	Indian Grass	10.00

For Contractor's information, as of August 2024, a seed mix meeting these specifications called "Savanna & Woodland Edge" is available from Agrecol Nursery LLC.

METHOD OF MEASUREMENT

Upland Mesic Prairie Seed Mix Areas shall be measured by the **plan** square yard quantity for the initial seeding of the entire site with Upland Mesic Prairie Seed one-time. Any increases or decreases in seeding shall be measured by the Contractor and verified by the Project Engineer.

ii. BASIS OF PAYMENT

Upland Mesic Prairie Seed Mix Areas shall be measured as described above and shall be paid for at the contract unit price which shall be full compensation for all work, materials, tools, equipment, labor, hauling, placement, and incidentals required to complete the work as set forth in the description.

BID ITEM 90050- WET-MESIC PRAIRIE SEED MIX AREAS

DESCRIPTION

Work under this bid item shall include all work, materials, labor, equipment and incidentals necessary to provide and place Wet Mesic Prairie Seed Mix as defined and in accordance with these special provisions and the City of Madison Standard Specifications for Public Works Construction. Wet mesic prairie seeding shall only be applied prior to April 30th and after October 14th.

All initial seeding shall be applied under erosion control matting.

Outside of this timeframe, the Contractor shall use the non-strat seed mix BID – ITEM 90051 as the initial seeding. Payment for seeding Non-Strat Summer Seeding shall be paid under BID ITEM 90051 and shall overseed using the seed mix (Wet Mesic Prairie) in fall over existing erosion control matting. Overseeding in fall shall be paid under this bid item and included in plan quantities.

Prior to application of seed, the Contractor shall verify with the Project Engineer and Stormwater Vegetation Coordinator whether to seed with temporary seed or native seed mix.

This bid item included twice the plan quantity of wet mesic prairie seed. The initial wet mesic seed application shall be paid at plan quantity. The Project Engineer shall determine if additional seed quantities shall be applied. Any additional seeding shall be measured and paid by in-field quantity.

Quantities listed in the proposal page may be reduced or increased based on additional seeding required.

The Contractor shall be responsible for ensuring that approximately 70% of the site is vegetated with native species that are components of this seed mix at the end of the contract.

Seed at the rate recommended by the manufacturer. Submit additions or substitutions and final mix to Project Engineer and Stormwater Vegetation Coordinator for approval at a minimum of 1 week prior to placement. The Stormwater Vegetation Coordinator shall inspect and approve the seed prior to placement.

Seed shall be native ecotypes. No improved varieties are allowed. Seed source shall be native ecotypes from Southeast Minnesota, Eastern Iowa, Southern Wisconsin, or Northern Illinois.

WET-MESIC PRAIRIE SEED MIX		
WILDFLOWERS		
Botanical Name	Common Name	OZ/Acres
Asclepias incarnata	Marsh (Red) Milkweed	3.00
Aster novae-angliae	New England Aster	2.00
Aster puniceus	Swamp Aster	1.00
Baptisia alba	White Wild Indigo	4.00
Cassia hebecarpa	Wild Senna	4.00
Desmodium canadense	Canada Tick Trefoil	1.00
Echinacea purpurea	Purple Coneflower	4.00
Eupatorium maculatum	Spotted Joe Pye Weed	0.50
Eupatorium perfoliatum	Boneset States S	0.20
Helenium autumnale	Sneezeweed	0.25
Helianthus grosseserratus	Sawtooth Sunflower	0.25
Hypericum pyramidatum	Greater St. John's Wort	0.10
Liatris spicata	Marsh Blazing Star	0.75
Mimulus ringens	Monkey Flower	0.20
Monarda fistulosa	Wild Bergamot	1.00
Parthenium integrifolium	Wild Quinine	1.50
Pycnanthemum virginianum	Mountain Mint	0.25
Ratibida pinnata	Yellow Coneflower	3.00
Rudbeckia hirta	Black-eyed Susan	4.00
Rudbeckia subtomentosa	Sweet Black-eyed Susan	2.00
Silphium integrifolium	Rosinweed	1.00
Silphium perfoliatum	Cup Plant	3.00
Silphium terebinthinaceum	Prairie Dock	1.50
Solidago ohiensis	Ohio Goldenrod	1.00
Solidago riddellii	Riddell's Goldenrod	2.00
Solidago rigida	Stiff Goldenrod	0.75
Tradescantia ohiensis	Ohio Spiderwort	0.75
Verbena hastata	Blue Vervain	0.75
Vernonia fasciculata	Ironweed	2.50
Veronicastrum virginicum	Culver's Root	0.50
Ziza aurea	Golden Alexanders	3.50
GRASSES, SEDGES & RUSHES		OZ/Acres
Andropogon gerardii	Big Bluestem	16.00

Bromus ciliatus	Fringed Brome	20.00
Calamagrostis canadensis	Blue Joint Grass	0.75
Carex bebbii	Bebb's Oval Sedge	0.50
Carex crawfordii	Crawford's Sedge	0.20
Carex crinita	Fringed Sedge	1.00
Carex scoparia	Lance-fruited Oval Sedge	1.00
Carex vulpinoidea	Brown Fox Sedge	1.00
Elymus canadensis	Canada Wild Rye	32.00
Elymus virginicus	Virginia Wild Rye	32.00
Panicum virgatum	Switchgrass	2.00
Scirpus atrovirens	Dark-Green Bulrush	0.50
Scirpus cyperinus	Wool Grass	0.30
Scirpus pendulus	Red Bulrush	0.50
Sorghastrum nutans	Indian Grass	10.00
Spartina pectinata	Prairie Cordgrass	4.00

For Contractor's information, as of August 2024, a seed mix meeting these specifications called "Tallgrass Prairies for Wet Mesic Soils" is available from Agrecol Nursery LLC.

METHOD OF MEASUREMENT

Wet-Mesic Prairie Seed Mix Areas shall be measured by the **plan** square yard quantity for the initial seeding of the entire site with Wet-Mesic Prairie Seed one-time. Any increases or decreases in seeding shall be measured by the Contractor and verified by the Project Engineer.

BASIS OF PAYMENT

Wet-Mesic Prairie Seed Mix Areas shall be measured as described above and shall be paid for at the contract unit price which shall be full compensation for all work, materials, tools, equipment, labor, hauling, placement, and incidentals required to complete the work as set forth in the description.

BID ITEM 900051 – NON-STRAT SUMMER SEED

DESCRIPTION

This bid item shall be for all seeding within disturbed areas and brushed areas for immediate stabilization. This bid item shall only be used when final grading is completed outside of the timeframe appropriate for shoreline, upland mesic prairie, and wet mesic prairie as identified in each respective bid item. Prior to application of seed, the Contractor shall verify with the Project Engineer and Stormwater Vegetation Coordinator whether to seed with non-strat summer seed or native seed mix.

This seed mix includes seeding with Seed Oats or Regreen[™] as a cover crop at the manufacturer's specified rate, or as specified in Article 207.3 (b) of the Standard Specifications.

Winter Wheat shall not be allowed.

Non-Strat Summer Seed shall be installed over topsoil, under erosion control matting.

NON-STRAT SUMMER SEED WITH COVER CROP											
Botanical Name	Common Name	OZ/Acres									
	Seed Oats or Regreen™										
Sorghastrum nutans	Indian Grass	8									
Elymus canadensis	Canada Wild Rye	2									
Elymus virginicus	Virginia wild rye	16									
Andropogon gerardii	Big Bluestem	2									
Veronicastrum virginicum	Culver's Root	1									
Pycnanthemum virginianum	Mountain Mint	2									
Monarda fistulosa	Wild Bergamot	2									
Helenium autumnale	Sneezeweed	2									
Ratibida pinnata	Gray-headed coneflower	2									
Rudbeckia hirta	Black-eyed Susan	2									

These native species shall be seeded either before or after the cover crop, prior to installation of any erosion matting and at the same time as seeding for cover crop. Unlike the native seed mix that will be used in the fall or winter, the native species listed above do not require winter conditions to be able to germinate.

METHOD OF MEASUREMENT

Non-strat summer seed shall be measured by the **installed** square yard quantity. Any increases or decreases in seeding shall be measured by the Contractor and verified by the Project Engineer. 10,695 SQ YD have been included in this contract for bidding purposes, these quantities may be eliminated, reduced or added.

BASIS OF PAYMENT

Non-strat summer seed shall be measured as described above and shall be paid for at the contract unit price which shall be full compensation for all work, materials, tools, equipment, labor, hauling, placement, and incidentals required to complete the work as set forth in the description.

BID ITEM 90061 – BOLLARDS

DESCRIPTION

Work under this bid item shall include all labor, equipment, materials and incidentals necessary to procure and construct the bollards with footings as described below in the locations on the plans.

The Contractor shall install the footing and bollards as described Below.

The bollard shall be 72" tall constructed with 8" diameter Schedule 40 steel pipe. Bollards have yellow epoxy coated paint finish with reflective tape. Each bollard shall have a welded d-loop that makes attaching a chain possible. Bollards shall be placed within 4ft deep, 10" diameter concrete footings and shall be placed into the footing at least 2ft. such that the finish height of each bollard shall be 48" above grade. The Contractor shall provide the Project Engineer with the product details for approval prior to the purchase and installation.

METHOD OF MEASUREMENT

Bollards shall be measured by each bollard installed and accepted.

BASIS OF PAYMENT

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

BID ITEM 90062 – PROJECT INFORMATION SIGN (4' x 6')

DESCRIPTION

Work under this item shall include the furnishing and installation of project information signs as shown on the sign detail. The background of the sign shall be orange, the message shall be black, and the border shall be black. The lettering series shall be C. The sign may be plastic or metal. The signs shall be attached to Type III barricades and placed at either end of the project for the duration of the project. The signs shall be located outside major construction areas while they are actively being worked on and can be moved to locations are different stages of the project are completed. Moving the sign to different locations during different stages is considered incidental to his bid item.

METHOD OF MEASUREMENT

Shall be measured by Each 4-foot x 6-foot sign, acceptably installed.

Orange construction signs shall be placed at each end of the construction site for each phase notifying property owners of project.

BASIS OF PAYMENT

Project Information Sign (4'x6'), measured as provided and paid at the contract unit price, shall be full compensation for all material, formwork, finishing, equipment, labor and incidentals necessary to complete the work as set forth in the description.

BID ITEM 90063 – BOUNDARY STAKING

DESCRIPTION

Contractor shall stake the public/private boundary of the stormwater utility owned ponds and Greenways with boundary markers, as described in the <u>City's SDD 2.11</u>, with a density sufficient to mark the private property boundary for adjacent property owners (a maximum of 100' between boundary markers along a straight boundary, and a post at all corners of the Greenway property). The Stormwater-Utility owned parcels that need boundary staking include:

- Parcel 070815101012, 8308 Excelsior Dr
- Parcel 070815402022, 1014 Fourier Dr
- Parcel 070815401066, 1013 Fourier Dr

The City shall purchase the boundary markers for the Contractor to install in the Greenway. The Contractor shall tell the City how many posts are needed 2 months prior to the installation.

A final map of where boundary markers were installed shall be provided to the City in PDF and survey point file format following the installation of the boundary markers.

All survey data shall be collected in Wisconsin County Coordinate System – Dane Zone, NAD83 datum. All horizontal and vertical control points (minimum of three (3) of each per project location) shall be surveyed in by the City of Madison and provided to the Contractor. All survey data shall be referenced to NAVD 88 (pre 2007 adjustment) ft for vertical datum. Various surveying technology (i.e. GPS, Conventional Total Station) may be used as long as the following minimum horizontal standards are satisfied.

Horizontal Standard: The maximum allowable Relative Positional Precision for a Survey is 0.07 feet plus 50 parts per million (based on the direct distance between the two corners being tested). It is recognized that in certain circumstances, the size or configuration of the surveyed property, or the relief, vegetation or improvements on the surveyed property may result in survey measurements for which the maximum allowable Relative Positional Precision may be exceeded. Explanation of reasons for exceeding the Relative Positional Precision requirement shall be provided to the City for approval. If not approved, the Contractor shall complete the survey to the above standard.

METHOD OF MEASUREMENT

Boundary Staking shall be measured by each fiberglass boundary marker acceptably installed.

BASIS OF PAYMENT

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

BID ITEM 90064 - CONSTRUCTION SURVEYING

DESCRIPTION

Work under this item includes all necessary labor, materials, equipment, and incidentals required for the Contractor to perform construction surveying. The Contractor shall be responsible for all surveying and staking required for layout, construction and accurate completion of the project in accordance with the plans or any field changes directed by the Engineer. This includes staking all objects shown in the plans, limits, lines, contours, bid items, additional control, and grades required for construction of the project. An AutoCAD (.dwg) file will be provided by the City upon request. The Contractor shall be responsible for configuring the file to a usable format in order to create nodes, alignments, or other useful data to facilitate surveying and staking.

The Contractor shall be responsible for staking out the layout of all plantings, including shrubs, trees, plugs, seeding areas, as shown on plans with either spray paint or flags. The Contractor shall notify the Stormwater Vegetation Coordinator 48 hours prior to staking planting areas and plants. The Contractor shall give the Stormwater Vegetation Coordinator at least ten (10) business days after staking to review plant locations prior to or planting.

The Contractor shall also be responsible for staking locations of shrubs and trees for review and approval by the Stormwater Vegetation Coordinator.

Final approval for the staking locations shall be required by the Stormwater Vegetation Coordinator prior to planting.

Contractor shall provide a topographic survey of the pond bottom after completion of grading and clay liner construction to confirm construction in accordance with the drawings. Two-dimensional CAD files and three-dimensional CAD files containing the digital terrain models are available for Contractor's use.

The City of Madison shall provide initial local horizontal control (coordinates) and initial vertical control (benchmarks) for use during construction. The City will provide staking for all storm pipe and structures. The City will verify the bottom, safety shelf and top of pond or basin segments during construction. Contractor shall coordinate verification of the basin layout and elevations with the City. If it is found during verification that the grading is not set to the correct limits or elevation the contractor shall continue grading until the correct elevations are met at no additional cost to the City.

The Contractor shall use the established horizontal and vertical control points as provided by the City of Madison as initial control. The Contractor may need to set additional control for completion of the project. Additional control set by the Contractor shall be incidental to this bid item. It is the Contractor's responsibility to check for accuracy of set control.

The City of Madison will check the accuracy of the pond grading in order to provide quality control. The Contractor shall contact the City surveyor assigned to this project at least 48 hours prior to requesting storm sewer staking, elevation checks of subgrades and finished grades.

METHOD OF MEASUREMENT

Construction Surveying shall be measured as a Lump Sum.

BASIS OF PAYMENT

Construction Surveying shall be measured as described above, and shall be paid at the contract unit price, which shall be considered full compensation for work as defined in this bid item.

BID ITEM 90065 - FURNISH & INSTALL METERED ELECTRIC SERVICE & BREAKER PANEL

DESCRIPTION

This special provision describes furnishing, installing and obtaining necessary permits required by the utility company for a metered electrical service at the streetlight cabinet base.

MATERIALS

The Contractor shall furnish and install a single phase 200A or less, 120/208V Cold-Sequence (Switch-Fuse-Meter) approved by utility company; and an outdoor rated electrical disconnect box. Utility company requirements for all equipment shall be met.

CONSTRUCTION METHODS

The Contractor shall obtain the electrical permits necessary for completing this work, including but not limited to the permits required by Building Inspection & Rehabilitation Unit of the City Department of Planning and Development. These permits shall be incidental to this bid item.

The Contractor shall install two 5/8" x 8' copper ground rods, with 6' minimum horizontal spacing, connecting them with a No. 4 copper wire using ground clamps. Ground rods and connection wire shall have 30" minimum ground cover. No. 4 wire shall be continuous and extend up the outside of 2" G.S. conduit to control panel and connect to the ground buss on the main disconnect.

METHOD OF MEASUREMENT

Furnish & Install Metered Electric Service & Breaker Panel item shall be measured as each unit, completed in place, operational and accepted in accordance with the contract.

BASIS OF PAYMENT

Furnish & Install Metered Electric Service & Breaker Panel, measured as provided above, will be paid for at the contract unit price, which price shall be full compensation for furnishing and installing wire, ground rods, ground clamps, metered service, permits, meter, disconnect box, galvanized steel conduit and all labor, tools, equipment and incidentals necessary to complete this item and comply with all requirements by the electrical utility company.

BID ITEM 90066 - REMOVE & REPLACE PRIVATE LIGHT UNIT

DESCRIPTION

This special provision describes removing, storing, and installing concrete base, light pole, light fixture and wiring for private lights that need to be replaced as shown on the plans.

MATERIALS

The Contractor shall design and install concrete bases following all requirements specified in Article 301 – Concrete and Concrete Materials, regarding mix design, high-early strength concrete, testing, materials, mixing, placing, curing, and protecting the concrete, shall apply to the concrete used in the construction of the private light unit bases. Conduit cast within the bases shall be Schedule 40 PVC electrical conduit.

The Contractor shall install underground conduits as necessary to connect the new bases to the existing circuit and wiring following all requirements specified in Article 602 – Underground Distribution Systems, regarding street lighting distribution system and Article 605 – Installation of Street Lighting Units, regarding conductors to each luminaire.

CONSTRUCTION METHODS

The Contractor shall remove existing base, pole, fixture and wiring, maintaining operational the private lights to remain.

The Contractor shall dispose of old concrete bases at a site provided by the Contractor. Pole and fixture shall be stored and kept in good condition by the Contractor during construction and re-installed once new concrete bases are cured. Any damage to the poles or fixtures will be the responsibility of the Contractor to replace with new equipment of the same manufacturer and style. It is advised that the poles and fixtures be inventoried prior to removal to note any damages.

The Contractor shall replace the bases at the locations shown on the plans or located in the field by the Engineer. Verify anchor bolt circle diameter with pole during design and before constructing the base. The top surface of the base shall be level. Furnish and install manufactured elbows in all bases. Elbows shall conform to the requirements of the type of conduit entering the base. Extend existing conduit into the bases. Do not erect poles on the concrete bases until the bases have cured for at least seven (7) days.

Wiring shall be furnished, installed and spliced to power new lights connected to existing underground private circuit to provide a complete, operational system when finished.

METHOD OF MEASUREMENT

Furnish & Replace Private Light Unit item shall be measured as each unit, completed in place, operational and accepted in accordance with the contract.

BASIS OF PAYMENT

Furnish & Replace Private Light Unit, measured as provided above, will be paid for at the contract unit price, which price shall be full compensation for removing, storing, furnishing and installing pole, fixture and concrete base, anchor bolts, washers, nuts, pole, fixture, wire, ground rods, ground clamps, conduit and all labor, tools, equipment and incidentals necessary to complete this item of work.

BID ITEM 90067 - TEMPORARY CROSSWALK ACCESS

DESCRIPTION

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

MATERIALS

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

Any temporary crossings shall either be on existing pavement or constructed with temporary concrete or asphalt; rubber mat or steel plates will not be acceptable materials for crossings at these locations. The temporary crossings shall be lined with construction fence and construction barrels on both sides of the crossing within the right-of-way. Place temporary pedestrian signing on barrels so pedestrians can identify the crosswalk location. Construction fence shall be paid separately. Construction barrels and temporary signs shall be included with this item.

CONSTRUCTION

Install, maintain, and remove temporary surface material at Temporary Crosswalk Access locations as directed by the Construction Engineer. Level and compact the surface prior to placing temporary surface material. The temporary crosswalk shall have a minimum clear width of 5 ft. and meet the requirements of the current Americans with Disabilities Act Accessibility Guidelines (ADAAG). The Contractor shall maintain the Temporary Crosswalk Access when disturbed by construction operations or utility trenches or as necessary to keep the access in compliance with ADAAG. Depending on the amount of disturbance to the Temporary Crosswalk, maintaining that temporary access may require removing and relaying the material in the same location.

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

METHOD OF MEASUREMENT

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

BASIS OF PAYMENT

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

BID ITEM 90101-EXCAVATION FOR STRUCTURES BRIDGES

DESCRIPTION

This special provision describes excavating for bridge.

CONSTRUCTION METHODS

Construction methods shall be in accordance with Section 206 of the State of Wisconsin Standard Specifications for Highway and Structure Construction, Current Edition.

METHOD OF MEASUREMENT

The City will measure the Excavation for Structures bid item as each individual structure acceptably complete.

BASIS OF PAYMENT

Excavation for Structures bid item will be paid for at the contract unit price.

Payment for the Excavation for Structures bid item is full compensation for removing and disposing of all excavations; for preparing foundations; and for backfilling and compacting all spaces excavated and not occupied by the new structure, unless specified elsewhere.

The City will pay separately for structure backfill, if specified, under the Select Fill bid item.

BID ITEM 90102-CONCRETE MASONRY BRIDGES

Description

This special provision describes constructing concrete abutments for the bridges.

Materials

Materials shall be in accordance with Section 502.2 of the State of Wisconsin Standard Specifications for Highway and Structure Construction, Current Edition.

Construction Methods

Construction methods shall be in accordance with Section 502.3 of the State of Wisconsin Standard Specifications for Highway and Structure Construction.

Testing and Sampling

Concrete testing shall be in accordance with Section 301.2 of the City of Madison Standard Specifications for Public Works Construction.

Method of Measurement

The City will measure the Concrete Masonry Bridges bid item by the cubic yard acceptably completed. The City will not measure work or material for forms, falsework, cofferdams, pumping, bracing, or other incidentals necessary to complete the work as required in these specifications.

Basis of Payment

Concrete Masonry Bridges bid item will be paid for at the contract unit price.

Payment for the Concrete Masonry bid item is full compensation for providing forms and falsework; for placing, finishing, curing, protecting, and heating concrete; and for all concrete testing.

If Contractor pours footings wholly, or in part without forms, the City will only pay for material placed within the footing dimensions the plans show.

If Engineer allows Contractor to substitute high early strength concrete to expedite the work as allowed under 502.2.2, Contractor will bear the additional costs associated with that substitution.

Payment for concrete for the bridge deck of the prefabricated steel truss pedestrian bridge is included in the Prefabricated Steel Truss Pedestrian Bridge LRFD bid item and will not be measured for payment under this bid item.

BID ITEM 90103-EXPANSION DEVICES

Description

This special provision describes constructing new strip seal expansion devices at the ends of the bridge deck including cover plates.

Materials

Strip seal expansion device materials shall be in accordance with Section 502.2.7.3 of the State of Wisconsin Standard Specifications for Highway and Structure Construction, current edition and as shown on the drawings.

Construction Methods

Construction methods for strip seal expansion devices shall be in accordance with Section 502.3.6.3.3 of the State of Wisconsin Standard Specifications for Highway and Structure Construction, current edition and as shown on the drawings.

Method of Measurement

The City will measure this bid item by the linear foot acceptably completed.

Basis of Payment

This bid item will be paid for at the contract unit price. Payment is full compensation for providing and installing devices.

BID ITEM 90104–PROTECTIVE SURFACE TREATMENT

Description

This special provision describes furnishing and placing concrete protective surface treatment to the exposed surface of the concrete pedestrian bridge deck, concrete approaches, and top surface of abutment backwall.

Materials

Materials shall be in accordance with Section 502.2.11 of the State of Wisconsin Standard Specifications for Highway and Structure Construction.

Construction Methods

Construction methods shall be in accordance with Section 502.3.13.2 of the State of Wisconsin Standard Specifications for Highway and Structure Construction.

Method of Measurement

The City will measure Protective Surface Treatment by the square yard acceptably completed, measured as the net area treated.

Basis of Payment

Protective Surface Treatment bid item will be paid for at the contract unit price. Payment is full compensation for providing the treatment including surface preparation.

BID ITEM 90105-BAR STEEL REINFORCEMENT HIGH STRENGTH STRUCTURES BID ITEM 90106-BAR STEEL REINFORCEMENT HIGH STRENGTH COATED STRUCTURES

Description

This special provision describes furnishing and placing high strength bar steel and coated high strength bar steel for the bridge.

Materials

Materials shall be in accordance with Section 505.2 of the State of Wisconsin Standard Specifications for Highway and Structure Construction.

Construction Methods

Construction methods shall be in accordance with Section 505.3 of the State of Wisconsin Standard Specifications for Highway and Structure Construction.

Method of Measurement

The City will measure the Bar Steel Reinforcement bid items by the pound acceptably completed. The City will compute the bar weight from the nominal weights for corresponding sizes for deformed bars in AASHTO M31. The City will not measure the extra steel used if Contractor chooses to substitute bars larger than those specified, the extra steel necessary for splices the plans do not show, or the weight of any devices used to support or fasten the steel in its correct position.

Basis of Payment

Bar Steel Reinforcement bid items will be paid for at the contract unit price.

Payment for the Bar Steel Reinforcement bid items is full compensation for providing, transporting, and placing all reinforcement including supports.

Payment for the Coated Bar Steel Reinforcement bid item also includes coating, including epoxy-coated metal chair supports.

BID ITEM 90107-RUBBERIZED MEMBRANE WATERPROOFING

Description

This special provision describes furnishing and placing a rubberized membrane waterproofing on concrete construction joints for the bridge abutments.

Materials

Materials shall be in accordance with Section 516.2.3 of the State of Wisconsin Standard Specifications for Highway and Structure Construction.

Construction Methods

Construction methods shall be in accordance with Section 516.3.3 of the State of Wisconsin Standard Specifications for Highway and Structure Construction.

Method of Measurement

The City will measure Rubberized Membrane Waterproofing by the square yard acceptably completed, measured as the length of the concrete joint sealed times the width of the membrane with no measurement for overlap at joints and intersections.

Basis of Payment

Rubberized Membrane Waterproofing will be paid for at the contract unit price. Payment is full compensation for heating materials; for applying prime coats, mastic, and asphalt, coal-tar pitch, or emulsified asphalt; and for placing preformed membrane.

BID ITEM 90108-PIPE UNDERDRAIN WRAPPED 6-INCH

Description

This special provision describes furnishing and installing pipe underdrains behind structures where shown on the drawings.

Materials\Materials shall be in accordance with Section 612.2 of the State of Wisconsin Standard Specifications for Highway and Structure Construction.

Construction Methods

Construction methods shall be in accordance with Section 612.3 of the State of Wisconsin Standard Specifications for Highway and Structure Construction.

Method of Measurement

The City will measure Pipe Underdrain Wrapped 6-Inch by the linear foot acceptably completed, measured along the centerline of the pipe.

Basis of Payment

Pipe Underdrain Wrapped 6-Inch bid item will be paid for at the contract unit price. Payment is full compensation for providing the underdrain and for excavation and backfilling.

BID ITEM 90109-PREFABRICATED STEEL TRUSS PEDESTRIAN BRIDGE LRFD

A. Description. Furnish a fully engineered, fabricated steel truss pedestrian bridge structure, including bearings, and transport and erect it as shown in the plans, in accordance to Part 5 Structures of the Wisconsin Department of Transportation Standard Specifications for Highway and Structure Construction, current edition, and as hereinafter provided. These specifications shall be regarded 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 Wisconsin Department of Transportation's current approved products list for prefabricated steel truss pedestrian bridge.

To be eligible for this project, pre-fabricated bridges from other manufacturers must be pre-approved prior to the bid opening date. Applications for pre-approval may be submitted at any time.

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 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. 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 be 2 inches 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 6 inches for stay in place corrugated steel deck forms, 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.

B.3. Plan Requirements and Submittals. Submit shop drawings and design computations to the City for review.

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. Set of design calculations with independent checks.

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-inch 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 a testing report upon completion.

C. Construction.

C.1. Delivery and Erection. Deliver the bridge by truck to the site. 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 pertinent 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.

Concrete deck construction methods shall be in accordance with Section 502.3 of the State of Wisconsin Standard Specifications for Highway and Structure Construction, current edition. Concrete testing shall be

in accordance with Section 301.2 of the City of Madison Standard Specifications for Public Works Construction. Bar steel reinforcement construction methods shall be in accordance with Section 505.3 of Wisconsin Standard Specifications for Highway and Structure Construction, current edition.

C.2. Finishes. 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 in accordance 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.

D. Measurement. The City will measure Prefabricated Steel Truss Pedestrian Bridge LRFD as a single unit of work for each bridge, acceptably completed.

E. Payment. The City will pay for measured quantities at the contract unit price. Payment is full compensation for designing, manufacturing, transporting and erecting the pedestrian bridge; furnishing bearing plates, pads, bolts, anchors bolts, and grout. Providing and placing the concrete deck and curbs, and reinforcing steel for the concrete deck is included in this work.

BID ITEM 90110-STEEL PEDESTRIAN RAILING

A. Description. This special provision describes fabricating, galvanizing, painting and installing railing at the approaches to the bridges in accordance with Sections 506, 513, and 517 of the State of Wisconsin Standard Specifications for Highway and Structure Construction, and the plan details, and as hereinafter provided.

B. Materials. All materials for railing shall be new stock, free from defects impairing strength, durability and appearance. Railing assemblies shall be galvanized and receive a two-coat paint system. Bubbles, blisters and flaking in the coating will be a basis for rejection.

B1. Coating System.

B1.1. Galvanizing. After fabrication, blast clean steel railing assemblies per SSPC-SP6 and galvanize according to ASTM A123. Vent holes shall be drilled in members as required to facilitate galvanizing and drainage. Location and size of vent holes are to be shown on the shop drawings. All burrs at component edges, corners and at holes shall be removed and sharp edges chamfered before galvanizing. Condition any thermal cut edges before blast cleaning by shallow grinding or other cleaning to remove any hardened surface layer. Remove all evident steel defects exposed in accordance to AASHTO M 160 prior to blast cleaning. Lumps, projections, globules, or heavy deposits of galvanizing, which will provide surface conditions that when painted, will produce unacceptable aesthetic and/or visual qualities, will not be permitted.

B1.2. Two-Coat Paint System. After galvanizing, paint all exterior surfaces of steel railing assemblies and inside of rail elements at field erection and expansion joints as hereinafter provided. All galvanized surfaces to be painted shall be cleaned per SSPC-SP1 to remove chlorides, sulfates, zinc salts, oil, dirt, organic matter and other contaminants. The cleaned surface shall then be brush blast cleaned per SSPC-SP16 to create a slight angular surface profile per manufacturer's recommendation for adhesion of the tie coat. Blasting shall not fracture the galvanized finish or remove any dry film thickness. After cleaning, apply a tie coat from an approved coating system that is specifically intended to be used on a galvanized surface, per manufacturer's recommendations. The tie coat shall etch the galvanized rail and prepare the surface for the top coat. Apply a top coat per manufacturer's recommendations, matching the specified color shown on the plans. Use a preapproved top coat that is resistant to the effects of the sun and is suitable for a marine environment. The tie and top coats should be of contrasting colors, and come from the same manufacturer.

Ensure that the paint manufacturer reviews the process to be used for surface preparation and application of the paint coating system with the paint applier. The review shall include a visit to the facility performing the work if requested by the paint manufacturer. Provide written confirmation, from the paint manufacturer to Engineer, that the review has taken place and that issues raised have been addressed before beginning coating work under the contract.

Use one of the qualified paint manufacturers and products given below. An equivalent system may be used with the written approval of Engineer.

Manufacturer	Coat	Products	Dry Film Min. Thickness (mils)	Min. Time ¹ Between Coats (hours)
Sherwin Williams	Tie	Recoatable Epoxy Primer B67-5 Series/B67V5	2.0 to 4.0	6
Schaumburg, IL	Тор	Acrolon 218 HS Polyurethane, B65-650	2.0 to 4.0	NA
	Tie	Rustbond Sealer FC	1.0	36
Carboline	Tie	Carboguard 60	4.0 to 6.0	10
St. Louis, MO	Tie	Carboguard 635	4.0 to 6.0	1
	Тор	Carbothane 133 LH (satin)	4.0	NA
Wasser Corporation	Tie	MC-Ferrox B100	3.0 to 5.0	8
Auburn, WA	Тор	MC-Luster 100	2.0 to 4.0	NA
PPG Protective and	Tie	Amercoat 399	3.0 to 5.0	3
Marine Coatings Little Rock, AR	Тор	Amercoat 450H	2.0 to 4.0	NA

¹ Time is dependent on temperature and humidity. Contact manufacturer for more specific information.

B2. Shop Drawings. Submit shop drawings showing the details of railing construction. Show the railing height post spacing, rail location, weld sizes and locations and all dimensions necessary for the construction of the railing. Show location of shop rail splices, field erection joints and expansion joints. State the name of the paint manufacturer and the product name of the tie coat and top coat used along with the color. State the size and material type used for all components. Also show the size and location of any vent or drainage holes provided.

C. Construction Methods.

C1. Delivery, Storage and Handling. Deliver material to the site in an undamaged condition. Upon receipt at the job site, all materials shall be thoroughly inspected to ensure that no damage occurred during shipping or handling and conditions of materials is in conformance with these specifications. If coating is damaged, Contractor shall repair or replace railing assemblies to the approval of Engineer at no additional cost to the Owner. Carefully store the material off the ground to ensure proper ventilation and drainage. Exercise care so as not to damage the coated surface during railing installation. No field welding, field cutting or drilling will be permitted unless acceptable to Engineer.

C2. Touch-up and Repair. For minor damage caused by shipping, handling or installation to coated surfaces, touch-up the surface in conformance with the manufacturer's recommendations. If damage is excessive, the railing assembly shall be replaced at no additional cost to the City. Contractor shall provide Engineer with a copy of the manufacturer's recommended repair procedure and materials before repairing damaged coatings.

D. Measurement. The City will measure Steel Pedestrian Railing by the linear foot acceptably completed.

E. Payment. The City will pay for the measured quantity at the contract unit price. Payment is full compensation for fabricating, galvanizing, painting, transporting, and installing the railing, including any

touch-up and repairs; and for furnishing all labor, tools, equipment, materials and incidentals necessary to satisfactorily complete the work.

BID ITEM 90111-REINFORCED CONCRETE PAVEMENT APPROACH SLABS

A. **Description.** This special provision describes constructing reinforced concrete pavement approach slabs as shown in the drawings.

B. Materials. Materials shall be in accordance with Section 415.2 of the State of Wisconsin Standard Specifications for Highway and Structure Construction, Current Edition.

C. Construction Methods. Construction methods shall be in accordance with Section 415.3 of the State of Wisconsin Standard Specifications for Highway and Structure Construction, Current Edition.

D. Method of Measurement. The City will measure Reinforced Concrete Pavement Approach Slabs as a single lump sum unit. The single lump sum unit will include two separate reinforced concrete approach slabs, one at each end of the prefabricated steel truss bridge.

E. Basis of Payment. Reinforced Concrete Pavement Approach Slabs will be paid for at the contract unit price. Payment is full compensation for providing and placing the concrete, bar steel reinforcement and jointing materials.

ATTACHMENT A - TREE REMOVAL LIST

ATTACHMENT B – SPECIES LIST

ATTACHMENT C - EROSION CONTROL INSPECTION CHECKLIST

END OF SPECIAL PROVISIONS

GC. Inc

Construction • Geotechnical Consulting Engineering/Testing

> July 8, 2024 C23051-24

Ms. Joanna OBrien City of Madison – Engineering Department 210 Martin Luther King, Jr. Boulevard, Room 115 Madison, WI 53710 (Email: JObrien@cityofmadison.com)

Re: Geotechnical Exploration Report Proposed Greenway Improvements with Culverts, Pedestrian Bridge & Paths Old Sauk Trails Business Park Madison, Wisconsin

Dear Ms. OBrien,

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.

PROJECT AND SITE DESCRIPTIONS

We understand that an existing drainageway is to be reconstructed for the purpose of increased flow (and storage) capacity. The current greenway collects runoff within a commercial area and includes several ponds which are proposed to be deepened/enlarged/combined into a single retention basin. Additionally, existing paved pedestrian paths within the greenway may be reconstructed as multi-use and the addition of a bridge is possible near the confluence of two channels in the southern portion of the parcel. Furthermore, two box culverts along Deming Way and one box culvert along Fourier Drive are to be enlarged. Although final details were not available, we envision the culverts will be precast concrete structures with side, top and bottom thicknesses of about 12 in. Based on the understanding the channels may be deepened slightly, with no grade change to the pavement surfaces, the bases of the culverts are anticipated to be about 5 to 10 ft below the roadway surfaces. Although the paths and bridge would generally experience very light loads associated with pedestrian and bicycle traffic, occasional maintenance vehicle and motorized service traffic should also be expected.

SUBSURFACE CONDITIONS

A total of twelve Standard Penetration Test (SPT) soil borings were requested for this project. Note an additional boring was necessary at B11 where the initial attempt encountered practical refusal 32 ft below ground surface on a presumed large boulder. The second attempt was successfully advanced to 80 ft below grade and the two borings were combined into one log for convenience. Seven of the borings (2-7 and 9) were drilled to 15 ft below existing site grades along the existing channels, three of the borings (1, 8 and 12) were drilled from 15 ft to 25 ft below existing site grades for the culverts along Deming Way and



Fourier Drive, and two of the borings (10 and 11) were extended to 55 ft and 80 ft below existing grades for the proposed bridge. The borings were drilled by America's Drilling Co. (under subcontract to CGC) in March of 2024 using ATV-mounted drill rigs equipped with hollow-stem augers, mud-rotary tools and automatic SPT hammers. For the structure borings, the SPT N-values (i.e., blow counts) were corrected by CGC for hammer efficiency (i.e., to N₆₀) assuming an automatic hammer efficiency of 80 percent; further correction for overburden was completed using the computer program DRIVENTM during our analysis (detailed below). Boring locations were staked in the field by CGC and elevations were estimated using data obtained at Dane County DCi Map, which should be considered approximate. 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, with granular soils more common along the main north-south oriented channel, and cohesive soils more prevalent along the east-west oriented tributaries. A generalized profile included the following strata, in descending order:

- About 3 to 5 ft of variable *fill* (including topsoil or pavement layers and not detected at B3, B4 or B6-B9); over
- 3 to 24 ft of very soft to very stiff *silty to lean clay* (not present at B1-B5 or B11); followed by
- Very loose to very dense *sand* (not encountered at B8 or B9) with variable silt and gravel contents, occasionally interrupted by clay or silt seams/layers to the maximum depth explored.

Groundwater was encountered 23.5 ft to 37 ft below existing grades at B10 and B11, respectively. Note the use of mud-rotary techniques (recirculation of drilling fluid) at both of these boring locations yielded only preliminary detection of groundwater and prevented longer-term readings of stabilized conditions. Groundwater levels can be expected to fluctuate with seasonal variations in precipitation, infiltration, evapotranspiration, the level the existing ponds, 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 A.

DISCUSSION AND RECOMMENDATIONS

Subject to the limitations discussed below and based on the subsurface exploration, it is our opinion that although the site may present some challenging geotechnical conditions, it is suitable for the proposed construction, assuming appropriate measures are implemented. It is our opinion that the pedestrian bridge could be supported on conventional spread footing foundations with the understanding that undercutting and replacement of unsuitable existing fill and/or soft/loose native soils will be required. Depending on final foundation locations and elevations, helical piers may be more feasible for bridge support should undercut depths become too great or if foundation sizes become excessive due to bridge loads and the somewhat limited bearing capacity of the native soils. With the understanding that some construction layer placed over suitable native or existing fill soils. The following subsections provide our recommendations for bridge and box culvert foundation, as well as path pavement design and construction.



1. Bridge Foundation

While final details regarding bridge design and construction were not available at the time of this report, we anticipate that the new bridge would be situated along the same general vertical and horizontal alignment as an existing structure which crosses the waterway. However, we expect the new structure to be lengthened and widened to some degree. The bridge is expected to support mostly pedestrian traffic, but occasional maintenance and emergency vehicle traffic should also be expected.

For frost protection purposes, we have assumed that abutment foundation elevations will be founded at least 4 to 5 ft below existing site grades in the vicinity of Borings B-10 and B-11, which were completed near anticipated abutment locations. Based on the findings at these borings, foundation subgrades are expected to consist of existing fill comprised of very soft to stiff clay, very stiff native clay or very loose to loose native sands. The shallow existing clay fill and very loose to loose native sands are considered unsuitable for direct foundation support. Provided that unsuitable soils are undercut and replaced with engineered soils to restore abutment grades, where required, it is our opinion that the bridge could be supported by a conventional spread footing foundation system. However, depending on final foundation elevations and structure demands, undercut depths and foundation dimensions may become excessive. Therefore, helical piers could be considered as a feasible alternative to undercutting and replacement below conventional spread footings.

The following subsections provide more specific recommendations regarding both foundation support alternatives. Upon development of more preliminary plans, additional recommendations can be provided regarding each alternative, if desired. Note that while driven piles could also be considered for foundation support, it is our opinion that they are likely not feasible compared to the two alternatives discussed herein due to high mobilization costs, limited installation equipment accessibility to foundation locations and generally short driven pile length required based on the soil conditions encountered. If bridge structural demands require the use of driven piles, CGC can provide additional details regarding the use of driven piles.

A. Spread Footing Foundations with Undercutting and Replacement

Although detailed plans and foundation elevations were not available at the time of this report, we have assumed that bridge abutment foundations will bear at least 4 to 5 ft below existing site grades for frost protection purposes. Accordingly, with the understanding that undercutting of unsuitable existing fill, soft clay or very loose to loose sand will be required, it is our opinion that the bridge can be supported by conventional spread footing foundations bearing on engineered backfill placed to restore grade following undercutting. Based on borings B-10 and B-11, undercutting of at least 5 to 8 ft below existing grades will be required to expose suitable native soils. Actual undercut depths will depend on final foundation elevations, as well as observations at the time of construction.

Provided that foundations bear on engineered backfill following undercutting and replaced of unsuitable soils as outlined in further detail in this section, we recommend that abutment foundations be designed based on a maximum allowable soil bearing pressure of 3,000 psf. We recommend that abutment foundations bear at least below frost depth. However, depending on the proximity to the existing slope in



front of each abutment, adjustment to bearing pressure and bearing depth may be required. Further analysis may be necessary, including global stability, and CGC should be allowed to review final abutment locations and elevations.

Foundation subgrades should be carefully checked by a geotechnical engineer or qualified construction inspector to document that the conditions are suitable for the design pressure. Unsuitable material, including existing fill and soft/loose native soils, should be removed in order to expose suitable native soils. Granular soils exposed at footing grade or at the bottom of undercut excavations and well above the water table should be thoroughly recompacted with a large vibratory plate compactor or an excavator-mounted vibratory plate prior to backfilling and formwork/concrete placement to densify soils loosened during the excavation process. Soils potentially susceptible to disturbance from vibratory compaction (e.g., cohesive/fine-grained soils or sands with elevated moisture content) should be hand-trimmed. OSHA slope guidelines should be followed if workers need to enter footing excavations. In order to re-establish footing grades in undercut areas, we recommend using granular backfill compacted to at least 95% compaction based on modified Proctor methods (ASTM D1557), in accordance with the Recommended Compacted Fill Specifications presented in Appendix D. Alternatively, 3-in. DGB that is placed in loose 10-in. lifts and compacted until deflection ceases can also be used to restore foundation grades.

Although groundwater encountered in the borings was well below anticipated foundation elevations, dewatering may potentially be required pending on final foundation elevations and the time of year construction occurs. Additionally, subgrade stabilization may be required during construction. *Where groundwater control is difficult or if the subgrade remains slightly wet, we recommend a <u>thin</u> (i.e., about 6-in. to 1-ft thick) clear stone layer be included below the bottom of footings or the base of the undercut, as the stability of the natural clay, silt and sand soils may rapidly deteriorate upon exposure, making the soils unsuitable for foundation support. If such conditions occur, the final 1 ft of the excavations should occur in small sections and, once exposed, the subgrades should be promptly evaluated by CGC, followed by immediate placement of the clear stone stabilization layer. If the clear stone thickness exceeds 1 ft, it should be completely enveloped with non-woven geotextile fabric (e.g., Mirafi 160N or equivalent). Supplemental dewatering can also occur from filtered sump pits within the clear stone layer outside of the footing line.*

Provided the foundation design/construction recommendations discussed above are followed, we estimate that total and differential settlements should be on the order of 1.0 and 0.5 in., respectively.

B. Helical Pier Supported Foundations

If spread footing foundations are determined to not be preferrable due to depth of undercutting or foundation sizing, helical piers could be considered for abutment foundation support. Helical piers are a proprietary product that involves the design and installation of a deep foundation system which transfers loads through upper loose or soft zones to bear within more suitable bearing strata. At this site, helical piers can likely be designed to extend through the shallow fill, very loose to loose sands and clay layers, and bear within the underlying medium dense sand to dense sand soils. Helical pier capacity will vary depending on the number and size of helices, depth of installation and bearing stratum. Helical piers can often be installed using lightweight, mobile equipment (e.g., skidsteer or small excavator equipped with special attachments) and



are often used in applications where there is limited space available for access, such as this one. We recommend that the soil parameters included in Table 1 in Appendix B be used for helical pier design.

The installation torque is generally correlated with helical pier capacity, although static load tests can also be completed to confirm the ultimate and allowable capacities. A minimum factor of safety of 2.0 to 3.0 is generally used for helical pier design. If a factor of safety of 2.0 is used to determine the allowable helical pier capacity, we recommend that at least one static load test be performed *per abutment* to confirm the helical pier design satisfies the project requirements. Static load tests should be performed on piers installed to similar installation depths and torques as production piers. (If the critical loading condition is in tension, tension load tests should be performed to document adequate uplift capacity.) Additionally, the torque of each pier should be monitored during installation to document that each pier is torqued to the minimum torque established by the static load tests or empirical correlations to the ultimate capacity. If static load tests are not performed, we recommend using a minimum factor of safety of 2.5 to 3.0 in determining the allowable capacity, and the installation torque of each pier should be monitored, which is empirically correlated to the ultimate capacity. *Since there are multiple proprietary helical pier systems, as well as different methods for estimating helical pier capacity, it is the responsibility of the contractor to determine that their selected helical pier configuration, installation procedures and termination criteria satisfy the project requirements.*

Other helical pier considerations include the following:

- Prospective helical pier contractors should be aware of gravelly zones and the potential presence of cobbles/boulders within the sand soils, which could impact helical pier installation. The helical pier installer should have provisions to deal with the presence of potential obstructions. If obstructions are encountered at shallow depths, removal with an excavator would be one method to deal with the obstructions. Using a smaller-diameter helix configuration may also assist in the installation process but may require deeper piers to develop capacity. Specially-designed lead sections and heavy-duty shafts may be required where piers will extend into gravelly soils with cobbles/boulders to prevent "spin-off" of the piers, which will need to be evaluated by the pier installer/designer and structural engineer at the time of installation. If "spin-off" does occur, full scale load testing should be performed to better determine pier capacity, as torque-based estimates may not be accurate in "spin-off" situations.
- The shallow very loose to loose sand layers have relatively low lateral capacity. As such, round helical pier shafts, which have higher resistance to buckling, may be required instead of square shafts depending on the lateral loads the helical piers will need to resist. A buckling analysis should be completed to check that the pier shaft has adequate buckling resistance.
- Although not encountered in the borings performed, soils containing organics could be present and may be corrosive to steel, which may result in section loss over time. Similarly, portions of the piles within the zone of seasonal groundwater fluctuations should also be expected to experience a higher corrosion potential. Therefore, we recommend either



> increasing the steel section of the shaft to accommodate potential section loss or covering the upper part of the shaft with an anti-corrosion coating to reduce the corrosion potential. The final helical pier design should take into account the potentially corrosive nature of some of the soils at this site, and the groundwater levels.

We recommend that helical pier installation be monitored or contractor-prepared installation logs be reviewed by CGC and/or the helical pier designer to document that the piers are installed in accordance with design assumptions.

C. Lateral Earth Pressures

In accordance with WisDOT *Bridge Manual* procedures (Sections 12.4 and 12.8), wing walls should be designed as cantilever retaining walls extending from the abutments. An equivalent fluid pressure of 40 psf per foot of depth above the groundwater table, and 85 psf per foot of depth below the groundwater, and a surface surcharge of 240 psf (equivalent to 2 ft of soil) to represent traffic loading, should be used in design. These values are based on active earth pressure conditions in 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.

2. Box Culvert Design

A. General

Based on estimated bottom of culvert elevations and the soil conditions encountered in the borings, *some undercutting of unsuitable existing fill and/or loose/soft native soils should be anticipated to develop a firm subgrade prior to the placement of the new structure*. We recommend including a minimum 12-in. thick layer of compacted clear stone directly beneath the culvert to help protect the subgrade from disturbance and create more uniform bearing conditions, as well as to create a working platform. The clear stone should be enveloped in a non-woven geotextile fabric (e.g., Mirafi 160N or equivalent) to prevent soil migration into the clear stone layer.

We recommend that if groundwater (including isolated trapped or "perched" areas) are present at the time of excavation, dewatering be accomplished using pumps operating from filtered sumps. In addition, a plan to divert water from the upstream side of the crossings away from the excavation will also likely be necessary, especially during and after periods of precipitation. Dewatering means and methods are the responsibility of the contractor.

The foundation analysis for the culverts was completed in general accordance with procedures in Chapter 36 of the WisDOT *LRFD Bridge Manual*, which is largely based upon and references procedures in the AASHTO *LRFD Bridge Manual*.



Because the replacement structures will largely be constructed within the existing embankments and minimal grade change is expected, the weight of the new concrete structure and soil/pavement cover over (and around) is expected to be less than the weight of the removed embankment fill materials. Therefore, the subgrade soils will generally experience a minimal increase (potential net decrease) in pressure and bearing capacity thus settlement below the structures is generally not expected to be an issue. Further details regarding bearing resistance and settlement estimates are discussed in the following sections.

General geotechnical recommendations for design and installation of the structures include the following:

- The unit weight of soil placed above the culverts should be taken as 120 lb/cu ft (pcf), per WisDOT *Bridge Manual*, Chapter 36.
- Recommended parameters for calculating lateral earth pressures are as follow:
 - Coefficient of lateral earth pressure, $K_0 = 0.5$ for *at-rest* conditions.
 - Angle of internal friction = 30° for granular backfill
- Unit weight for a typical granular backfill would be the same as soil above the structure, 120 pcf.
- To control infiltrating surface water following installation of the culvert, standard drainage provisions should be included, such as backfilling with reasonably free-draining (similar to WisDOT Grade 1) granular backfill. The existing embankment fill soils which will be removed are not considered suitable for re-use as backfill. Therefore, importing of suitable granular backfill soils, which is a typical requirement for City projects, will be necessary.
- A minimum 12-in. thick layer of compacted 1-in. crushed clear stone is recommended below the base of the structures to protect the subgrade from disturbance, create more uniform bearing conditions, aid in potential dewatering efforts and act as a working platform during construction as previously discussed. The stone layer should be compacted and enveloped on the top, bottom and sides with non-woven geotextile fabric (e.g., Mirafi 160N or equivalent) to prevent migration of surrounding soil into the void spaces of the stone. The stone stabilization layer should be installed in small sections with the subgrade covered in fabric and stone shortly after the subgrades are exposed in order to reduce the potential for degradation from water.
- Appropriate scour protection should be provided to prevent undermining of the box culverts.

B. Calculated Bearing Resistance

Based on the assumed bottom of culvert elevations and the findings in soil borings B-1, B-8 and B-12, we generally expect that stiff to very stiff natural clay, medium dense sand, or medium dense silt will be



exposed below existing embankment fills and at the base of the recommended stabilization layer. However, existing embankment fill comprised of sand, silt and clay may also be present at subgrade elevations, depending on final culvert elevations. Although the natural soils, as well as more uniform portions of existing fill soils present at assumed culvert subgrade elevations could provide a higher factored bearing resistance, to account for potential variations in subgrade conditions during construction, and because the actual contact pressure of the culvert is anticipated to be relatively low, we recommend that a factored bearing resistance of **2,000 psf** be used for design. Note that this value is above the estimated increase in pressure below the new structures, as described above, so the Capacity to Demand Ratio (CDR) will exceed 1.0. The recommended bearing resistance is contingent on unsuitable existing fill and softer natural clay soils being removed as Excavation Below Subgrade (EBS), as well as the subgrade being effectively dewatered *in advance* of excavation (if required).

Based on the soil borings, and because only one boring was done per culvert location, we expect that subgrade conditions will likely vary along the length of each installation. Thus the quality and suitability of the soil exposed at box culvert subgrade elevations should be carefully evaluated for culvert support at the time of foundation excavation. We recommend that a CGC geotechnical engineer or a qualified construction inspector be present during culvert excavation to check whether suitable bearing conditions are present at the base of the culvert or EBS excavation, and to provide corrective measures, if necessary. Based on the borings and estimated bottom of culvert elevations, EBS of existing fill materials determined to be unsuitable, or loosened/disturbed natural silt, clay and sand soils may be required. The primary concern with both fill and natural clay and silt soils is the tendency to soften/loosen, lose bearing capacity and increase settlement potential when saturated. Therefore, the depth of EBS (where required) should be expected to vary and should be determined in the field at the time of construction.

The width of EBS should extend about 1 ft beyond the base of the structure on each side. Where the thickness of unsuitable soil removed below the culvert exceeds the recommended minimum of 12 in. of clear stone described above, the soil should be removed as EBS and the subgrade restored with additional clear stone (enveloped in geotextile) compacted with a large vibratory pate compactor (or hoe-pak) until no deflection is evident. As an alternative to the clear stone layer, a 4 to 6-in. thick layer of "lean mix" concrete having a minimum 28-day compressive strength of 1000 psi can be used to protect the subgrade during culvert installation, as well as to restore subgrade in areas where EBS is required. Similar to the fabric/clear stone alternative, lean mix should be applied to the subgrade shortly after being exposed to reduce the potential for subgrade disturbance. *In addition to the recommended minimum 12-in. stabilization layer, we recommend the project budget include a contingency for additional EBS/stabilization.*

C. Estimated Settlement

As noted previously, because the new structures will be installed within the existing roadway embankment and because the existing grades within and just outside of the road are expected to remain unchanged, minimal net increase in pressure is expected due to the weight of the new structures and soil/pavement cover above it. Because of this, and provided the subgrade is prepared as described in detail above, total settlement of less than about 1 in. is expected. Typically, differential settlement will be equal to about half of the total settlement, or less than about 0.5 in.



3. Path Pavement Design

We anticipate that paved path sections which will be constructed/reconstructed 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 support.

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 sand, clay and variable fill soils may be marginal to poor near the ground surface, we recommend that the project budget include a 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 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.

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 2.

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				

TABLE 2 - Recommended Pavement Design Para	ameters for At-Grade Trail Segments
--	-------------------------------------

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*)

4. Existing Roadway Reconstructions

A. Overview

For the sections of roadway where culvert replacements are planned, we anticipate that the new pavement surfaces will be constructed at/near existing grades and can generally be completed as described in the following paragraphs. Note that B1 and B8 were not performed within the paved portion of the right-of-way due to very narrow roadways and significant traffic volumes. 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 EBS, which may involve about 12 in. of additional coarse aggregate over biaxial geogrid (e.g., Tensar BX Type 1 or equivalent). Further, culverts 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. Pavement Subgrade Preparation

Significant construction traffic and exposure to wet weather has the potential to destabilize the existing materials 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).

C. Roadway Pavement Design

Clays will control the roadway pavement design, as we anticipate that the pavement subgrades will at times consist of fill materials containing clay or potentially native clay soils. The following *generalized* parameters presented in Table 3 should be used to develop the design pavement sections (which are considered conservative in sandy areas):



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

TABLE 3 – Recommended Pavement Design Parameters

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*)

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.
- Based on observations made during the field exploration, surface water infiltration into abutment excavations should be expected and dewatering with pumps operating from filtered sump pits or a stone (working mat) layer should be expected. As 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 along the channel may require low-ground pressure tracked equipment appropriate for such conditions.



• Special consideration should be given to creating a stable working platform for pile driving equipment along 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:

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

* * * * *



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.

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Eric S. Fair

Senior Staff Engineer/Geologist

Sincerely,

CGC, Inc.

Aly Bin

Alex J. Bina, P.E. Project Engineer

Necturel NSchulz

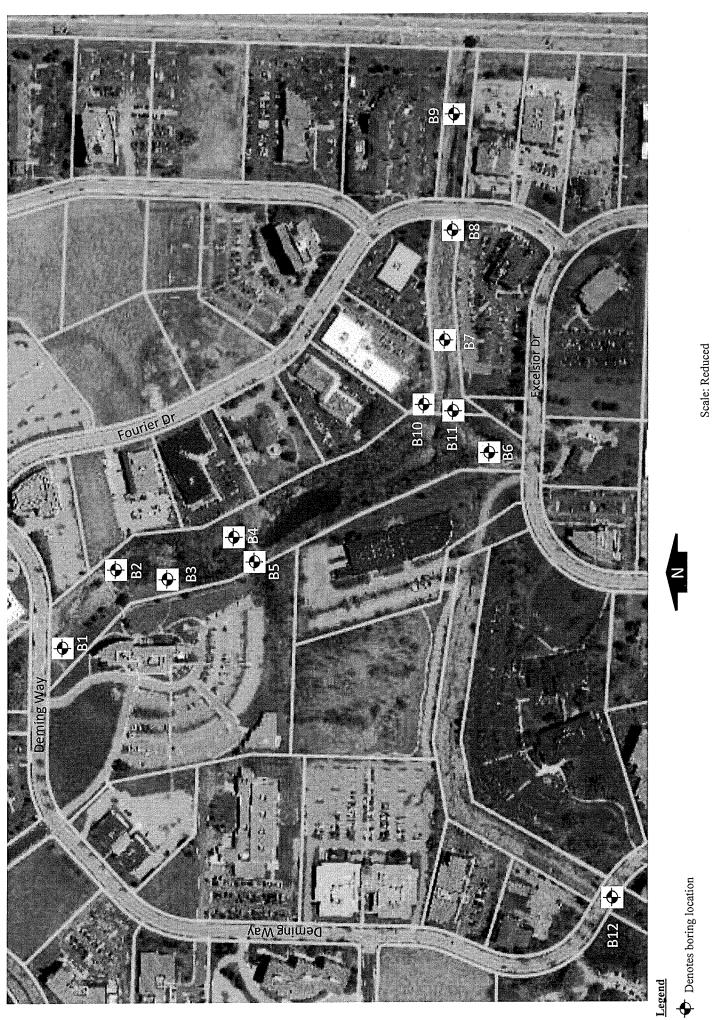
Michael N. Schultz, PE Principal/Senior Consulting Professional

Encl:	Appendix A -	Soil Boring Location Map
		Logs of Test Borings (12)
		Log of Test Boring-General Notes
		Unified Soil Classification System
	Appendix B -	Recommended Compacted Fill Specifications

Appendix C - Document Qualifications

APPENDIX A

SOIL BORING LOCATION MAP LOGS OF TEST BORINGS (12) LOG OF TEST BORING – GENERAL NOTES UNIFIED SOIL CLASSIFICATION SYSTEM



<u>Notes</u> 1. Soil borings performed by America's Drilling Co. in March 2024 2. Boring locations are approximate

CGC, Inc. **Job No.** C23051-24 **Date:** 3/2024

Soil Boring Location Map Old Sauk Trails Greenway Madison, WI

	G	CI	n		Lc	LOG OF TEST BORING oject Old Sauk Trails Greenway ocation Madison, WI	1							
	SA	MPL	E	292	1 Per	Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) VISUAL CLASSIFICATION		SOIL PROPERTIES						
No.	T Rec P (in.)	Moist	N	Depth (ft)		and Remarks	qu (qa)	w	LL	PL	LI			
	E (111.)			+ (10) +		√5 in. TOPSOIL	(tsf)							
1	3	M	7			FILL: Medium Stiff Brown Clay with Sand and Gravel	(0.75)							
2	14	M	12			Medium Dense, Brown Fine to Coarse SAND, Trace Silt and Gravel (SP)	-							
3	15	M	17	- 		Medium Dense, Light Brown Fine SAND, Some Silt, Scattered Silt Seams (SM)	-							
4	13	М	11			Medium Dense, Light Brown Fine SAND, Trace Silt (SP)		-						
5	16	М	16			Scattered Silty Seams								
				15- -		End of Boring at 15 ft								
						Backfilled with Bentonite Chips								
L	1		W	ATEF	R LE	VEL OBSERVATIONS	SENERA	L NC	TES	;				
Time Depth Depth	e Drill After h to W h to Ca	Drillir ater ave in	ıg	ines re		Driller A ↓ Logger 7	1/24 End DC Chief ZB Editor d 2.25" H	C. ES	I R F					

C	G	СІ	n		 Lo	LOG OF TEST BORING oject Old Sauk Trails Greenway ocation Madison, WI ry Street, Madison, WI 53713 (608) 288-4100, FAX (608)								
	SA	MPL				VISUAL CLASSIFICATION	SOIL PROPERTIES							
No.	T Rec Y Bec Depth Depth N (ft)					and Remarks	qu (qa)	w	LL	PL	LI			
1	E (1n.)			(IC) 		9 in. TOPSOIL	(tsf)							
1	10	М	3			FILL: Dark Brown Silty Sand with Gravel to 3'								
2	12	M	9			Loose, Light Brown Fine SAND, Some Silt (SM - Possible Fill)	••••••••••••••••••••••••••••••••••••••							
3	11	М	13	┾── ┝ ┝ ┝ ┝		Medium Dense, Light Brown Fine SAND, Trace Silt (SP)	-							
4	15	M	13			Medium Dense, Light Brown Fine SAND, Some Silt, Scattered Silt Seams (SM)								
5	14	M	18			Medium Dense, Light Brown Fine SAND, Trace Silt (SP)								
						End of Boring at 15 ft								
						Backfilled with Bentonite Chips								
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1	16	M	8			Loose, Brown Fine SAND, Little Silt (SP-SM)								
2	15	M	9			Loose, Light Brown Fine SAND, Little Silt (SP-SM)								
3	15	M	14			Medium Dense, Light Brown Fine SAND, Trace Silt (SP)								
4	13	M	12											
5	14	M	12											
				Г Г 15-		End of Boring at 15 ft								
						Backfilled with Bentonite Chips								
						EVEL OBSERVATIONS (GENERA	L NC	TES	5				
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No.	Y Rec P E (in.)	Moist	N	Depth (ft)		and Remarks	(qa) (tsf)	W	LL	PL	LI		
1	10	M	13			Medium Dense, Brown Fine to Medium SAND, Little to Some Gravel, Trace Silt (SP)							
2	13	M	17	⊥ └── ┝─				_					
				<u>↓</u> 5– ▶		Medium Dense, Light Brown Fine SAND, Little							
3	14	М	15	} - 		Silt (SP-SM)							
4	14	M	15			Medium Dense, Light Brown Fine SAND, Some Silt, Scattered Silt Seams (SM)]						
				L 10-									
				⊢ ├		Medium Dense, Light Brown Fine SAND, Trace	-						
				⊢ ┝─- ≠-		Silt (SP)							
5	12	M	16										
				т 15- Г	<u></u>	End of Boring at 15 ft							
						Backfilled with Bentonite Chips							
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	SA	MPL	E		VISUAL CLASSIFICATION	SOIL PROPERTIES						
No. F	Rec (in.)	Moist	ท	Depth (ft)	and Remarks	qu (qa)	w	LL	PL	LI		
				} ⊢	4 in. TOPSOIL	(tsf)	1					
1	15	M	32		FILL: Dense Brown Sand with Gravel, Cobbles and Silt							
2	7	M	12		Medium Dense, Brown Fine to Medium SAND, Little to Some Gravel, Trace Silt (SP)							
3	13	М	14		Medium Dense, Light Brown Fine SAND, Trace Silt (SP)	-						
					Loose to Medium Dense, Light Brown Fine SAND,							
4	15	M	10	Г 10-	Little Silt (SP-SM)							
5	16	M	14		Medium Dense, Light Brown Fine to Medium SAND, Trace Silt (SP)	-						
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					Backfilled with Bentonite Chips							
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No.	T Rec Depth P (in.) (ft)					and Remarks	qu (qa)	w	LL	PL	LI			
	E ()			 		∖3 in. TOPSOIL	(tsf)							
1	17	М	4			Stiff, Brown Lean CLAY, Trace Sand (CL)	(1.5)							
2	14	M	3			Very Loose, Dark Brown Fine SAND, Some Silt, Trace Gravel (SM)								
3	12	M	17			Medium Dense, Brown Fine to Medium SAND, Some Silt and Gravel, Scattered Cobbles and Boulders (SM)								
4	15	M	26											
				└ 10 └ └ └ └ └										
5	14	М	13											
						End of Boring at 15 ft								
						Backfilled with Bentonite Chips								
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SAMPLE					VISUAL CLASSIFICATION	SOIL PROPERTIES				
No.	T Rec	Moist	N	Depth	and Remarks	qu (qa)	W	LL	PL	LI
					17 in. TOPSOIL	(tsf)				
1	14	M	8		Very Stiff, Dark Brown Silty CLAY (CL-ML)	(2.25)				
2	16	M	2		Medium Stiff to Very Soft, Gray and Brown (Mottled) Lean CLAY, Trace Sand (CL)	(0.75)				
3	15	M/W	WOH	┝── 5─ ┝- ┠──						
	1.5	1411 44				(0.6)				
4	16	M/W	WOH	Y 10-		(<0.2)				
5	14	М	20		Medium Dense, Brown Fine to Medium SAND, Little to Some Silt and Gravel (SP-SM/SM) End of Boring at 15 ft					
				L L_ L	Backfilled with Bentonite Chips					
					WOH= Weight of Hammer					
l	_ _	l.,	W		LEVEL OBSERVATIONS	JENERA		TES	l	
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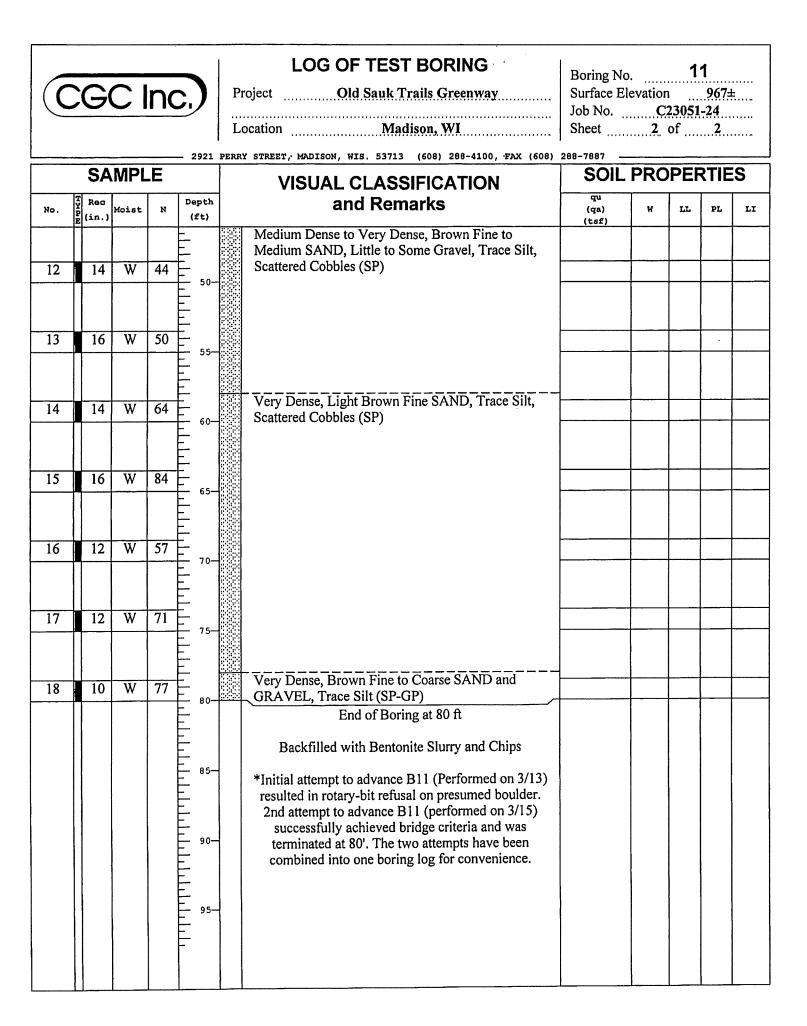
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	SA	MPL	. E .			VISUAL CLASSIFICATION			PRO			:S
No.	Y Rec P E (in.)	Moist	N	Depth (ft)		and Remarks		(qa) (tsf)	W	LL	PL	LI
				† -		11 in. TOPSOIL						
1	16	М	7			Very Stiff, Dark Brown Silty CLAY (CL-ML)		(2.25)				
2	17	M	5			Stiff to Soft, Gray and Brown (Mottled) Lean CLAY, Trace Sand (CL)		(1.25)				
3	16	M	3					(0.4)				
4	12	М	2					(0.75)				
5	16	M	2	┙ ┶ ┶ ┶ ┶ ┶ ┶								
	16							(0.4)				
	17					Soft to Medium Stiff, Gray Silty CLAY (CL-M	正)					
6	17	M	4	┣━ ┣ ╋━ 20━ ┣				(0.5)				
7	17	М	4					(0.5)				
				∔— 25— ⊢ └─		End of Boring at 25 ft						
						Backfilled with Bentonite Chips						
l			W			EVEL OBSERVATIONS	G	SENERAI		TES	l	
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No. Provide No. M	^c Moist N Depth and Remarks			qu (qa)	W	LL	PL	LI	
E ()			14 in. TOPSOIL	(tsf)					
1 16 M	M/W 5		Stiff, Dark Brown Silty CLAY (CL-ML)	(1.5)					
2 15	M 4	1 L 	Medium Stiff to Very Soft, Gray and Brown (Mottled) Lean CLAY, Trace Sand (CL)	(0.6)					
3 0	w wo								
4 17	w wo			(<0.2)					
5 16 N	M/W 4								
			Loose to Very Loose, Rust-Brown SILT, Trace to Little Clay (ML) End of Boring at 15 ft						
			Backfilled with Bentonite Chips WOH= Weight of Hammer						
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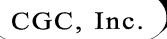
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	SA	MPL	E			VISUAL CLASSIFICATION	SOIL	PRC	PEF	RTIE	ES
No.	T Y P E (in.)	Moist	ท	Depth (ft)		and Remarks	qu (qa) (tsf)	w	LL	PL	LI
				 ⊢		11 in. TOPSOIL					
1	10	M	4			FILL: Very Soft Dark Brown Clay to 3'	(0.2)				
				Ļ				-			
2	17	M	7	<u>+</u> 		Stiff Brown Clay with Gravel and Sand to 5'	(1.25)				
				⊢ ┼─ 5─		Very Stiff, Gray and Brown (Mottled) Lean CLAY,					
3	14	M	9			Trace Sand (CL)					
							(2.25)				
						Stratified Loose Brown Silty SAND, and Medium			ļ		
4	16	М	9			Stiff Brown Clay (SM/CL)	(0.75)				
				L 10-							
						Loose, Brown Fine SAND, Some Silt (SM)					
5	12	M	6	⊢	111						
				r 15-							
				Ē	1.11						
					1.11	Loose, Brown Fine to Medium SAND, Some Silt					
				↓ ↓		and Gravel, Scattered Cobbles and Boulders (SM)					
6	10	M	8	┝ ┝-	1.11						
				┼─ 20─ ┢							
					i i i						
				E		Dense, Light Brown Fine SAND, Trace Silt (SP)					
7	14	W	36	<u>Г</u>							
				L 25-							
				⊢ ├─-							
						Dense, Brown Fine to Medium SAND, Some Silt					
						and Gravel, Scattered Cobbles and Boulders (SM)					
8	10	W	31		1.11						
			\٨/			VEL OBSERVATIONS	GENERA		TES		[
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	h to W h to Ca					□ Logger Drill Meth	LD Edito nod 4.25'' I			3751	RB
			ion l the +	ines re ransiti	prese		to 55' Autoh				·····

					LOG OF T	EST BORING	Boring No. 10						
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No.	T Rec	Moist	N	Depth		Remarks	qu (qa)	W	LL	PL	LI		
	E (in.)			(ft) 			(tsf)						
9	8	W	51			Brown Fine to Medium Gravel, Trace Silt, Scattered							
				35 									
10	12	W	46	- - - -									
11	10	W	31										
					SAND, Little to Some	Brown Fine to Medium Gravel, Trace Silt, Scattered							
12	12	W	34	50	Dense to Very Dense, Trace Silt, Scattered C	Light Brown Fine SAND, Cobbles (SP)							
13	14	W	59										
				- 55- -	End of	Boring at 55 ft							
				- - - - - - - - - -	Backfilled with B	entonite Slurry and Chips							

CGC Inc.					-	 Lo	LOG OF TEST BORING oject Old Sauk Trails Greenway ocation Madison, WI Street, Madison, WI 53713 (608) 288-4100, FAX (600)	Boring No.I ISauk Trails GreenwaySurface Elevation (ft)967±Job No.C23051-24Madison, WISheet1of2				
	SA	MPL	E		292		VISUAL CLASSIFICATION	SOIL	PRC	PEF	RTIE	S
	T Rec			De	pth		and Remarks	qu (qa)	W	LL	PL	LI
No.	<u>P</u> (in.)	Moist	N		Et)		10 in. TOPSOIL	(tsf)				
1	14	м	6	Ē			FILL: Medium Stiff Brown Clay with Sand and	(0.75)				
	16	M	5	+ +			Gravel to 3'					
2	16	M	5		5—		Loose Brown Silty Sand to 4' Loose to Very Loose, Brown Fine SAND, Some	/				
3	10	М	4			1.11	Silt, Scattered Clayey Seams (SM)					
4	15	M	14	F			Medium Dense, Brown Sandy SILT (ML)	· ·····			<u> </u>	
					10			······································		<u> </u>		
				E			Dense to Very Dense, Brown Fine to Medium					
5	12	M	65	Ē		i i i i i i	SAND, Some Silt and Gravel, Scattered Cobbles					
					15	i i i	and Boulders (SM)					
						H-U F-T						
6	12	M	41			i ri						
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7	12	W	31	Ē	25-	1.11			ļ	 		
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8	12	W	64/		30—							
			10									
			<i>(</i> 1			1.11	Rotary Bit Refusal at 32' on Presumed Boulder (Initial Attempt), Moved 7'S, Blind Drilled to 33.5		<u> </u>			
9	12	M	61	E	35—	ЬЦ БТТ	and Resumed Sampling.		<u> </u>			
						1411	Madium Dansa Brown Fine to Coarse SAND					
10	5	W					Medium Dense, Brown Fine to Coarse SAND, Some Gravel, Trace Silt (SP)					
10		••		ЧЧг	40-							
				Ч			Medium Dense to Very Dense, Brown Fine to	_				
11	4	W	21				Medium SAND, Little to Some Gravel, Trace Silt,					
				Ē	45		Scattered Cobbles (SP)			<u> </u>		
l			W	4T	ER		VEL OBSERVATIONS	GENERA	<u>L NC</u>	TES	5	
While	e Drill	ing	¥ 3	7.0	r		Jpon Completion of Drilling Start 3	/13/24 End	3/15):_ D 4	:0
Time	After	Drillir					Driller	ADC Chief LD Editor	ES	F	Rig <u>D</u> :	
Dent	Depth to Water Drill Method Drill Method HSA to 15; 2.375 RB						B					
The	strat	ificat s and	ion 1 the t	ine	s re siti	pres on m	ant the approximate boundary between with Muc					



CGC Inc.				 L	LOG OF TEST BORINGBoring No.12ProjectOld Sauk Trails GreenwaySurface Elevation (ft)9Job No.C23051-2LocationMadison, WISheet1			994= -24				
	S۸	MPL	F		292	1 Pe	rry Street, Madison, WI 53713 (608) 288-4100, FAX (608)	288-7887		DEC		:0
	m		- 6				VISUAL CLASSIFICATION					
No.	Y Rec P E (in.)	Moist	ท	Dep			and Remarks	(qa) (tsf)	W	LL	PL	LI
]			+ -		\boxtimes	4 in. Asphalt Pavement/6.5 in. Base Course	(001)				
1	13	M	10				FILL: Medium Dense to Loose Silty Sand to 2.5'					
						┝┥┥┥─ ┝┥┑┥╌	Loose Gray Silt with Sand and Clay to 5'					
2	15	M	5									
				⊢ ∔—	5—	┝┥╼┧╼╸ ┝┥╼┧┥╼ ┝┥╼┧┥╼						
3	16	M	13	⊢ +			Medium Dense, Dark Brown SILT, Trace Sand and Clay (ML)					
5	10		15									
				T T			Very Stiff to Stiff, Gray and Brown (Mottled) Lean	_				
4	14	М	7				CLAY, Trace Sand (CL)	(2.5)				
					. 0							
5	13	М	8	+ - 				(1.75)				
				┝── ┿ ┕──								
6	16	M	12	+		1.11. 1.11	Medium Dense, Brown Fine to Medium SAND, Some Silt and Gravel, Scattered Cobbles and					
				- 	.5	i i i	Boulders (SM)					
				Ľ		1.11. 1.11						
						111						
7	14	M/W	11									
				; 2 ┠	0	1.11						
				F			Loose, Light Brown Fine SAND, Trace Silt (SP)					
8	6	M	8									
				∟ ↓ 2	5		~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~					
				⊢ ├─			End of Boring at 25 ft					
				⊢ ┝─-			Backfilled with Bentonite Chips and Asphalt Patch					
												1
			127		0-							
					:K			SENERAL)	
While Time				W	-	t		2/24 End DC Chief	3/12/ CJ		jg 78 3	22рт
Depth	Depth to Water Logger Taylor Editor ESF											
			lon 1	ines	rep	orese	21' Drill Method	1 2.25 [°] H	5 A; A	utona	mme	r



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	³ ⁄4" 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

Relative Density

Physical Characteristics	Term	"N" Value
Color, moisture, grain shape, fineness, etc.	Very Loose	0 - 4
Major Constituents	Loose	4 - 10
Clay, silt, sand, gravel	Medium Den	se10 - 30
Structure	Dense	30 - 50
Laminated, varved, fibrous, stratified,	Very Dense	Over 50
cemented, fissured, etc.		
Geologic Origin		

Glacial, alluvial, eolian, residual, etc.

Relative Proportions Of Cohesionless Soils

Proportional	Defining Range by	Те
Term	Percentage of Weight	Ver
		Sof
Trace	0% - 5%	Mee
	5% - 12%	Stif
Some	12% - 35%	Ver
And	35% - 50%	Har

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%

Loose	4 - 10
Medium Dense	10 - 30
Dense	30 - 50
Very Dense	Over 50

Consistency

Term	q _u -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

Plasticity

<u>Term</u>	Plastic Index
None to Slight	0 - 4
Slight	5 - 7
Medium	8 - 22
High to Very Hig	h 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 1/2", 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 – Soundina 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, Ibs/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 SO	IL CL	ASSIF	ICATION AND SYMBOL CHART
	(COARSI	E-GRAINED SOILS
(more tha	n 50% (of mater	ial is larger than No. 200 sieve size)
		Clean G	Gravels (Less than 5% fines)
		GW	Well-graded gravels, gravel-sand mixtures, little or no fines
GRAVELS More than 50% of		GP	Poorly-graded gravels, gravel-sand mixtures, little or no fines
coarse fraction larger than No. 4		Gravels	with fines (More than 12% fines)
sieve size		GM	Silty gravels, gravel-sand-silt mixtures
		GC	Clayey gravels, gravel-sand-clay mixtures
		Clean S	ands (Less than 5% fines)
		SW	Well-graded sands, gravelly sands, little or no fines
SANDS 50% or more of		SP	Poorly graded sands, gravelly sands, little or no fines
coarse fraction smaller than No. 4		Sands v	vith fines (More than 12% fines)
sieve size		SM	Silty sands, sand-silt mixtures
		SC	Clayey sands, sand-clay mixtures
(50% or m	iore of r		GRAINED SOILS is smaller than No. 200 sieve size.)
SILTS AND		ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity
CLAYS Liquid limit less than 50%		CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
	and and an and a second a sec	OL	Organic silts and organic silty clays of low plasticity
SILTS AND		мн	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts
CLAYS Liquid limit 50% or		СН	Inorganic clays of high plasticity, fat clays
greater		ОН	Organic clays of medium to high plasticity, organic silts
HIGHLY ORGANIC SOILS	22 2 2 22 22	PT	Peat and other highly organic soils

Unified Soil Classification System

LABORATORY CLASSIFICATION CRITERIA $C_u = \frac{D_{60}}{D_{10}}$ greater than 4; $C_C = \frac{D_{30}}{D_{10} \times D_{60}}$ between 1 and 3 GW GP Not meeting all gradation requirements for GW Atterberg limts below "A" GM line or P.I. less than 4 Above "A" line with P.I. between 4 and 7 are borderline cases requiring Atterberg limts above "A" use of dual symbols GC line or P.I. greater than 7 $C_u = \frac{D_{60}}{D_{10}}$ greater than 4; $C_C = \frac{D_{30}}{D_{10} \times D_{60}}$ between 1 and 3 SW SP Not meeting all gradation requirements for GW Atterberg limits below "A" SM line or P.I. less than 4 Limits plotting in shaded zone with P.I. between 4 and 7 are borderline Atterberg limits above "A" cases requiring use of dual symbols sc 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), coarsegrained 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** PLASTICITY INDEX (PI) (56) CH A LINE: PI=0.73(LL-20) CL (CL-ML) ML&OL LIQUID LIMIT (LL) (%)

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	W	isDOT Section 3	05	WisDOT S	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 Pa	ssing by Weigh	t		
6 in.	100							T
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 2Compaction Guidelines

	Perce	ent Compaction (1)
Area	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)

Table 1 - Soil Parameters for Helical Pier Design Old Sauk Trails Greenway Pedestrian Bridge

Layer	Approx. Depth Below Existing Ground Surface (ft)	Angle of Internal Friction, Short-Term/ Undrained Loading Conditions (deg)	Angle of Internal Friction, Long-Term/ Drained Loading Conditions (deg)	Cohesion, Short-Term/ Undrained Loading Conditions (psf)	Cohesion, Long-Term/ Drained Loading Conditions (psf)	Moist Unit Weight (pcf)	Saturated Unit Weight (pcf)	Buoyant Unit Weight (pcf)
		Boring 10, Approx	timate Existing Grou	und Surface Elevati	on = EL 967 N			
Very Soft to Stiff Clay FILL	0 to 5 ft	0	25	250	0	115	120	58
Very Stiff Lean Clay	5 to 8 ft	0	26	2,000	0	115	120	58
Stratified Loose Silty Sand and Medium Stiff Clay	8 to 12 ft	26	26	0	0	115	120	58
Loose Sand	12 to 22 ft	30	30	0	0	120	125	63
Dense to Very Dense Sand	Below 22 ft	36	36	0	0	125	130	68
		Boring 11, Approx	imate Existing Grou	and Surface Elevation	an = EL 967 ∩			
Medium Stiff Clay FILL	0 to 4 ft	0	25	750	0	115	120	58
Loose to Very Loose Sand	4 to 8 ft	26	26	0	0	115	120	58
Medium Dense Silt	8 to 12 ft	32	32	0	0	120	125	63
Dense to Very Dense Sand	Below 12 ft	36	36	0	0	125	130	68

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 Proper implementation of the recommendations prevention. 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



Department of Public Works **Engineering Division** James M. Wolfe, P.E., City Engineer

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Principal Engineer 1 Mark D. Moder, P.E. Fadi El Musa Gonzalez, P.E Andrew J. Zwieg, P.E.

> Financial Manager Steven B. Danner-Rivers

NOTICE OF ADDENDUM ADDENDUM 1 CONTRACT NO. 9517 PHEASANT BRANCH GREENWAY ENHANCEMENT PROJECT

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

SPECIFICATIONS:

REPLACE:

- Page i
- Page A-1
- Section C in its entirety

PROPOSAL: NO CHANGES MADE TO THE PROPOSAL

<u>PLANS:</u> NO CHANGES MADE TO THE PLANS

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,

James M. Wolfe, P.E., City Engineer

October 31, 2024

PHEASANT BRANCH GREENWAY ENHANCEMENT PROJECT CONTRACT NO. 9517

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This Proposal, and Agreement have been prepared by:

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

James M. Wolfe, P.E., City Engineer

JMW: jo

SECTION A: ADVERTISEMENT FOR BIDS AND INSTRUCTIONS TO BIDDERS

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

A BEST VALUE CONTRACTING MUNICIPALITY

PROJECT NAME:	Pheasant Branch Greenway Enhancement
CONTRACT NO.:	9517
TBE GOAL	10%
BID BOND	5%
TBE PRE BID MEETING (1:00 P.M.)	10/31/2024
PREQUALIFICATION APPLICATION DUE (2:00 P.M)	11/7/2024
BID SUBMISSION (2:00 P.M.)	11/14/2024
BID OPEN (2:30 P.M.)	11/14/2024
PUBLISHED IN WSJ	10/24/2024, 10/31/2024, & 11/7/2024

<u>TBE PRE BID MEETING</u>: Pre-Bid Meetings are being held virtually. Advance registration is required. Visit the TBE Meeting web page on Engineering's web site:

https://www.cityofmadison.com/engineering/developers-contractors/contractors/how-to-bid-public-workscontracts/small-business.

Questions regarding TBE Program requirements may be directed to Tracy Lomax, Affirmative Action Division. Tracy may be reached at (608) 267-8634, or by email, <u>TLomax@cityofmadison.com</u>.

<u>PREQUALIFICATION</u> <u>APPLICATION</u>: Forms are available on our website, <u>www.cityofmadison.com/engineering/developers-contractors/contractors/how-to-get-prequalified</u>. If not currently prequalified in the categories listed in Section A, an amendment to your Prequalification will need to be submitted prior to the same due date. Postmark is not applicable.

<u>SAM UNIQUE ENTITY ID REQUIRED</u>: Prior to bid award, all bidders for this project must submit a SAM Unique Entity ID to the City for all proposed prime and subcontractors listed in the bid. Go to <u>SAM.gov</u> for information on getting a SAM ID.

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

Bids may be submitted on line through Bid Express or in person at 1600 Emil St. 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 - 2024 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/engineering/developers-contractors/standard-specifications.

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 C: TARGETED BUSINESS ENTERPRISE Instructions to Bidders City of Madison TBE Information

2 Targeted Business Enterprise (TBE) Information

2.1 Policy and Goal

This contract is subject to the federal targeted business enterprise (TBE) requirements set forth in Sec. 200.321 of 2 CFR Part 200, Subpart D, which reads as follows:

§ 200.321 Contracting with small and minority businesses, women's business enterprises, and labor surplus area firms.

(a) The non-Federal entity must take all necessary affirmative steps to assure that minority businesses, women's business enterprises, and labor surplus area firms are used when possible.

(b) Affirmative steps must include:

(1) Placing qualified small and minority businesses and women's business enterprises on solicitation lists;

(2) Assuring that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources;

(3) Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority businesses, and women's business enterprises;

(4) Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority businesses, and women's business enterprises;

(5) Using the services and assistance, as appropriate, of such organizations as the Small Business Administration and the Minority Business Development Agency of the Department of Commerce; and

(6) Requiring the prime contractor, if subcontracts are to be let, to take the affirmative steps listed in paragraphs (b)(1) through (5) of this section.

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

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

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

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

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

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

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

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

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

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

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

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

Concerning transportation or delivery services: if an TBE trucking company picks up a product from a manufacturer or a qualified vendor / supplier and delivers the product to the Contractor, the commercially useful function it is performing is not that of a supplier, but simply that of a transporter

of goods. Unless the trucking company is itself the manufacturer or a qualified vendor / supplier in the product, credit cannot be given based on a percentage of the cost of the product. Rather, credit would be allowed for the cost of the transportation service.

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

2.2 Contract Compliance

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

2.3 Certification of TBE by City of Madison

The Affirmative Action Division maintains a directory of TBEs which are currently certified as such by the City of Madison. Contact the Contract Compliance Officer as indicated in Section 2.2 to receive a copy of the TBE Directory or you may access the TBE Directory online at

https://www.cityofmadison.com/civil-rights/contract-compliance/targeted-business-enterprise-programs/directories.

All contractors, subcontractors, vendors and suppliers seeking TBE status must complete and submit the **Targeted Business Certification Application** to the City of Madison Affirmative Action Division by the time and date established for receipt of bids. A copy of the Targeted Business Certification Application is available by contacting the Contract Compliance Officer at the address and telephone indicated in Section 2.2 or you may access the Targeted Business Certification Application online at

https://www.cityofmadison.com/civil-rights/contract-compliance/targeted-business-enterpriseprograms/directories.

. Submittal of the Targeted Business Certification Application by the time specified does not guarantee that the applicant will be certified as a TBE eligible to be utilized towards meeting the TBE goal for this project.

2.4 Targeted Business Enterprise Compliance Report

2.4.1 Good Faith Efforts

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

- 2.4.1.1 Attendance at the pre-bid meeting.
- 2.4.1.2 Using the City of Madison's directory of certified TBEs to identify TBEs from which to solicit bids.
- 2.4.1.3 Assuring that TBEs are solicited whenever they are potential sources.
- 2.4.1.4 Referring prospective TBEs to the City of Madison Affirmative Action Division for certification.
- 2.4.1.5 Dividing total project requirements into smaller tasks and/or quantities, where economically feasible, to permit maximum feasible TBE participation.
- 2.4.1.6 Establishing delivery schedules, where requirements permit, which will encourage participation by TBEs.
- 2.4.1.7 Providing TBEs with specific information regarding the work to be performed.

- 2.4.1.8 Contacting TBEs in advance of the deadline to allow such businesses sufficient time to prepare a bid.
- 2.4.1.9 Utilizing the bid of a qualified and competent TBE when the bid of such a business is deemed reasonable (i.e. 5% above the lowest bidder), although not necessarily low.
- 2.4.1.10 Contacting TBEs which submit a bid, to inquire about the details of the bid and confirm that the scope of the work was interpreted as intended.
- 2.4.1.11 Completion of Cover Page (page C-6), Summary Sheet (page C-7) and TBE Contact Reports (pages C-8 and C9) if applicable.

2.4.2 **Reporting TBE Utilization and Good Faith Efforts**

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

- 2.4.2.1 If the Bidder <u>meets or exceeds</u> the goal established for TBE utilization, the Targeted Business Enterprise Compliance Report shall consist of the following:
 - 2.4.2.1.1 Cover Page, Page C-6; and
 - 2.4.2.1.2 **Summary Sheet,** C-7.
- 2.4.2.2 If the bidder <u>does not meet</u> the goal established for TBE utilization, the Targeted Business Enterprise Compliance Report shall consist of the following:
 - 2.4.2.2.1 Cover Page, Page C-6;
 - 2.4.2.2.2 Summary Sheet, C-7; and
 - 2.4.2.2.3 **TBE Contact Report,** C-8 and C-9. (A <u>separate</u> Contact Report must be completed for <u>each applicable</u> TBE which is <u>not</u> utilized.)

2.5 Appeal Procedure

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

2.6 TBE Requirements After Award of the Contract

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

No change in TBE subcontractors, vendors and/or suppliers from those TBEs indicated in the TBE Compliance Report will be allowed without prior approval from the Engineer and the Affirmative

Action Division. The contractor shall submit in writing to the City of Madison Affirmative Action Division a request to change any TBE citing specific reasons which necessitate such a change. The Affirmative Action Division will use a general test of reasonableness in approving or rejecting the contractor's request for change. If the request is approved, the Contractor will make every effort to utilize another TBE if available.

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

2.7 TBE Definition and Eligibility Guidelines

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

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

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

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

CONTRACT NO. 9517

Targeted Business Enterprise Compliance Report

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

Cover Sheet

Prime Bidder Information	
Company:	
Address:	
Telephone Number:	Fax Number:
Contact Person/Title:	
Prime Bidder Certification	
l,	_, of
Name	Title
	certify that the information
Company	
contained in this TBE Compliance Report is true and co	prrect to the best of my knowledge and belief.
Witness' Signature	Bidder's Signature
Date	

C-6

CONTRACT NO. 9517

Targeted Business Enterprise Compliance Report

Summary Sheet

TBE Subcontractors Who Are NOT Suppliers

Name(s) of TBEs Utilized	Type of Work	% of Total Bid Amount
		%
		%
		%
		%
		%
		%
	,	%
		%
		%
		%
		%
		%
		%
Subtotal TBE who are NOT suppliers:		%

TBE Subcontractors Who Are Suppliers

Name(s) of TBEs Utilized	Type of Work	% of Total Bid Amount
		%
		%
		%
		%
		%
		%
Subtotal Contractors who are suppliers:	% x 0.6 =	% (discounted to 60%)
Total Percentage of TBE Utilization:	<u>%</u> .	

CONTRACT NO. 9517

Targeted Business Enterprise Compliance Report

TBE Contact Report

Submit <u>separate</u> copy of this form for <u>each</u> TBE which you are not able to utilize towards meeting the TBE goal for this project. Attach separate sheets if necessary.

TBE Information

Company:_____

Address:_____

Telephone Number:_____

Contact Person/Title:_____

1. Outline below all efforts to solicit a bid from the above TBE. Include date, means of contact, who from your company made this contact and the result.

2. Describe the information provided to the aforementioned TBE regarding the scope of work for which he/she was to provide a bid.

Is this the same scope of work on which the subcontractor you intend to utilize based his/her bid?

3. Did this TBE submit a bid? Yes No

4. Is the General Contractor pre-qualified to self-perform this category of work?

Yes No



Department of Public Works Engineering Division

James M. Wolfe, 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

November 8, 2024

Assistant City Engineer Bryan Cooper, AIA Gregory T. Fries, P.E. Chris Petykowski, P.E.

Deputy Division Manager Kathleen M. Cryan

Principal Engineer 2 John S. Fahrney, P.E. Janet Schmidt, P.E.

Principal Engineer 1 Mark D. Moder, P.E. Fadi El Musa Gonzalez, P.E. Andrew J. Zwieg, P.E.

> Financial Manager Steven B. Danner-Rivers

NOTICE OF ADDENDUM ADDENDUM 2 CONTRACT NO. 9517 PHEASANT BRANCH GREENWAY ENHANCEMENT

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:

ADD PARAGRAPH TO SECTION 105.12 COOPERATION BY THE CONTRACTOR

To help coordinate work efforts on this project, the Contractor will be expected to attend bi-weekly coordination meetings. At these meetings, the Contractor shall provide information on their work schedule for the following 3 weeks and help coordinate work areas with private utility companies, their contractor(s), the City-hired arborist, and businesses. The day, time, and meeting type (virtual or in person) will be determined at the preconstruction meeting.

REMOVE AND REPLACE SECOND PARAGRAPH UNDER <u>SECTION 109.2 PROSECUTION OF WORK</u> WITH THE FOLLOWING:

The Contractor shall complete the street work stages sufficient to reopen the streets to all traffic within the following windows of time:

- Deming Way (North) ONE HUNDRED TWENTY (120) CALENDAR DAYS
 - Intersection of Deming Way and Fourier Dr- FOURTEEN (14) CALENDAR DAYS
- Fourier Drive NINETY (90) CALENDAR DAYS
 - Intersection of Fourier Drive and Excelsior Dr FOURTEEN (14) CALENDAR DAYS
- Deming Way at Blackhawk Rd SEVENTY-SEVEN (77) CALENDAR DAYS
- Deming Way (Southwest) FORTY-FOUR (44) CALENDAR DAYS

REMOVE AND REPLACE THE TITLE OF THE SECOND <u>BID ITEM 50503 – PRECAST REINFORCED CONCRETE BOX</u> <u>CULVERT B-13-943</u> WITH THE FOLLOWING:

BID ITEM 50504 – PRECAST REINFORCED CONCRETE BOX CULVERT (12'X6' FOR B-13-942)

REMOVE AND REPLACE BID ITEM 90064 - CONSTRUCTION SURVEYING WITH THE FOLLOWING:

BID ITEM 90064 - CONSTRUCTION SURVEYING

DESCRIPTION

Work under this item includes all necessary labor, materials, equipment, and incidentals required for the Contractor to perform construction surveying. The Contractor shall be responsible for all surveying and staking required for layout, construction and accurate completion of the project in accordance with the plans or any field changes directed by the Engineer. This includes staking all objects shown in the plans, limits, lines, contours, fencing, sanitary sewer, storm sewer, streets, paths, lighting, electrical, ULOs, bid items, additional control, and grades required for construction of the project. An AutoCAD (.dwg) file will be provided by the City upon request. The Contractor shall be responsible for configuring the file to a usable format in order to create nodes, alignments, or other useful data to facilitate surveying and staking.

The Contractor shall be responsible for staking out the layout of all plantings, including shrubs, trees, plugs, seeding areas, as shown on plans with either spray paint or flags. The Contractor shall notify the Stormwater Vegetation Coordinator 48 hours prior to staking planting areas and plants. The Contractor shall give the Stormwater Vegetation Coordinator at least ten (10) business days after staking to review plant locations prior to or planting.

The Contractor shall also be responsible for staking locations of shrubs and trees for review and approval by the Stormwater Vegetation Coordinator.

Final approval for the staking locations shall be required by the Stormwater Vegetation Coordinator prior to planting.

Contractor shall provide a topographic survey of the pond bottom after completion of grading and clay liner construction to confirm construction in accordance with the drawings. Two-dimensional CAD files and three-dimensional CAD files containing the digital terrain models are available for Contractor's use.

The City of Madison shall provide initial local horizontal control (coordinates) and initial vertical control (benchmarks) for use during construction. The City will verify the bottom, safety shelf and top of pond or basin segments during construction. Contractor shall coordinate verification of the basin layout and elevations with the City. If it is found during verification that the grading is not set to the correct limits or elevation the contractor shall contractor shall correct elevations are met at no additional cost to the City.

The Contractor shall use the established horizontal and vertical control points as provided by the City of Madison as initial control. The Contractor may need to set additional control for completion of the project. Additional control set by the Contractor shall be incidental to this bid item. It is the Contractor's responsibility to check for accuracy of set control.

The City of Madison will check the accuracy of the pond grading in order to provide quality control. The Contractor shall contact the City surveyor assigned to this project at least 48 hours prior to requesting storm sewer staking, elevation checks of subgrades and finished grades.

METHOD OF MEASUREMENT

Construction Surveying shall be measured as a Lump Sum.

BASIS OF PAYMENT

Construction Surveying shall be measured as described above, and shall be paid at the contract unit price, which shall be considered full compensation for work as defined in this bid item.

PROPOSAL:

Items have been revised in the proposal. See Bid Express.

REVISE	20217	CLEAR STONE
REVISE	20303	SAWCUT ASPHALT PAVEMENT
REVISE	21017	SILT SOCK (8 INCH) - COMPLETE
REMOVE	21041	INLET PROTECTION TYPE D, COMPLETE
ADD	21049	INLET PROTECTION, RIGID FRAME - PROVIDE AND INSTALL
ADD	21050	INLET PROTECTION, RIGID FRAME – MAINTAIN
ADD	21051	INLET PROTECTION, RIGID FRAME – REMOVE
REVISE	21063	EROSION MATTING, CLASS I, TYPE A - ORGANIC
ADD	40201	HMA PAVEMENT 3 LT 58-28S
REVISE	40202	HMA PAVEMENT 4 LT 58-28
REMOVE	40203	HMA PAVEMENT 3 MT 58-28S (LOWER)
REMOVE	40205	HMA PAVEMENT 4 MT 58-28S (UPPER)
REVISE	40301	FULL WIDTH GRINDING
REMOVE	40311	PULVERIZE AND SHAPE
REVISE	50225	UTILITY TRENCH PATCH TYPE III
REVISE TITLE	50504	PRECAST CONCRETE BOX CULVERT (12'X6' FOR B-13-942)
REVISE	50514	BOX CULVERT WINGWALLS FOR BOXES 101-103
REVISE	90047	CHANNEL BOTTOM SEED MIX
REVISE	90048	SHORELINE SEED MIX AREAS
REVISE	90049	UPLAND MESIC PRAIRIE SEED MIX AREAS
REVISE	90050	WET-MESIC PRAIRIE SEED MIX AREAS

PLANS:

D1: Revised legend to include additional utilities

D2-D3: Removed seeding requirements from greenway and channel typical sections based on slope.

EC1-EC4: Updated seeding hatching and quantities table. Added reinforced check dam detail. Modified legend.

GI3: Added FO line to plan.

GI5: Changed tree size description.

GI12: Moved proposed trees on north side of channel 6' to the south.

P1-P-19: Revised legend, added private utility labels, added profile labels throughout. Modified profile of trail sheets P9-P15.

P21: Added private utility labels.

P24-P27: Updated legend.

U1-U18: Updated legend, added private utility labels.

U22: Updated inverts for structure S-17 and pipe S16A.

E1-E6: Updated basemap with proposed contours.

PM1: Revised pavement marking locations.

X32A: Revised sheet name and number.

X33: Revised sheet name.

X34: Revised sheet name. Adjusted grading at parking lot to match existing.

X45-X48: Revised trail cross slope

INFORMATIONAL DOCUMENTS:

CAD files were uploaded.

THE CAD DATA IS FOR INFORMATIONAL PURPOSES ONLY. THE CITY DOES NOT GUARANTEE THE ACCURACY OF THE DATA CONTAINED WITHIN THIS CAD FILE. THE CITY OF MADISON ASSUMES NO LIABILITY FOR ANY ERRORS, OMISSIONS, INACCURACIES, COMPLETENESS OR USEFULNESS OF THE CAD INFORMATION PROVIDED. ALL WORK SHALL BE BID AND COMPLETED PER THE ISSUED PLANS, CONTRACT, ADDENDA AND ANY ISSUED REVISIONS. IF A DISCREPENCY IS FOUND, THE BIDDING CONTRACTOR SHALL DISCLOSE THAT TO THE PROJECT MANAGER IMMEDIATELY. THIS INFORMATION IS SUBJECT TO CHANGE DURING CONSTRUCTION AND SHOULD NOT BE USED UNLESS EXPLICITLY DIRECTED BY THE PROJECT ENGINEER.

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

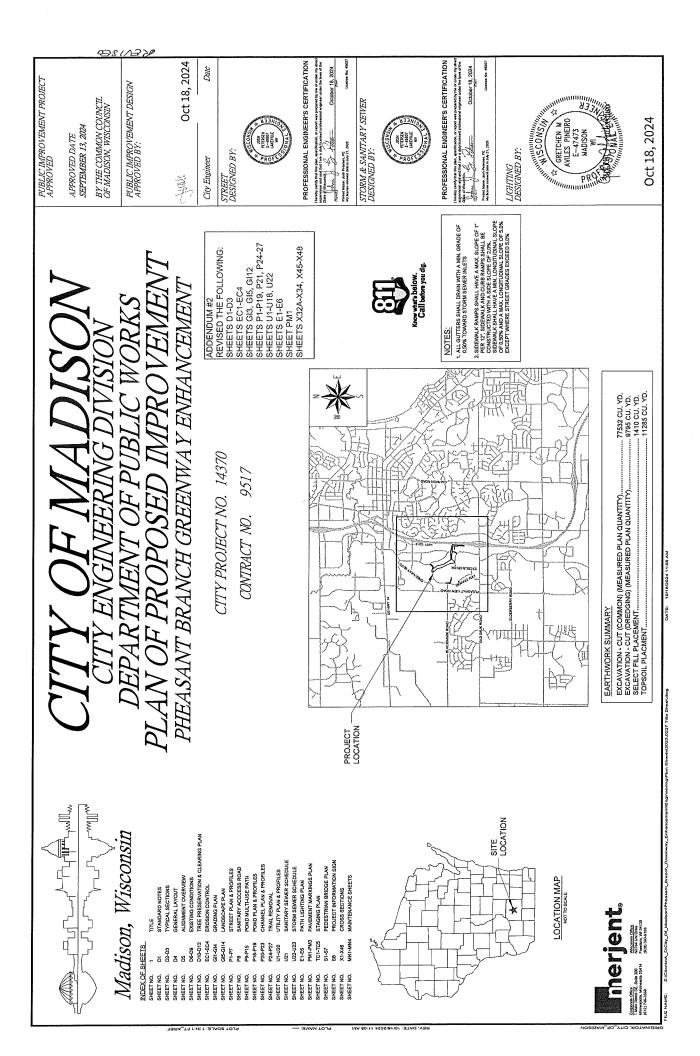
Electronic version of these documents can be found on the Bid Express web site at:

http://www.bidexpress.com

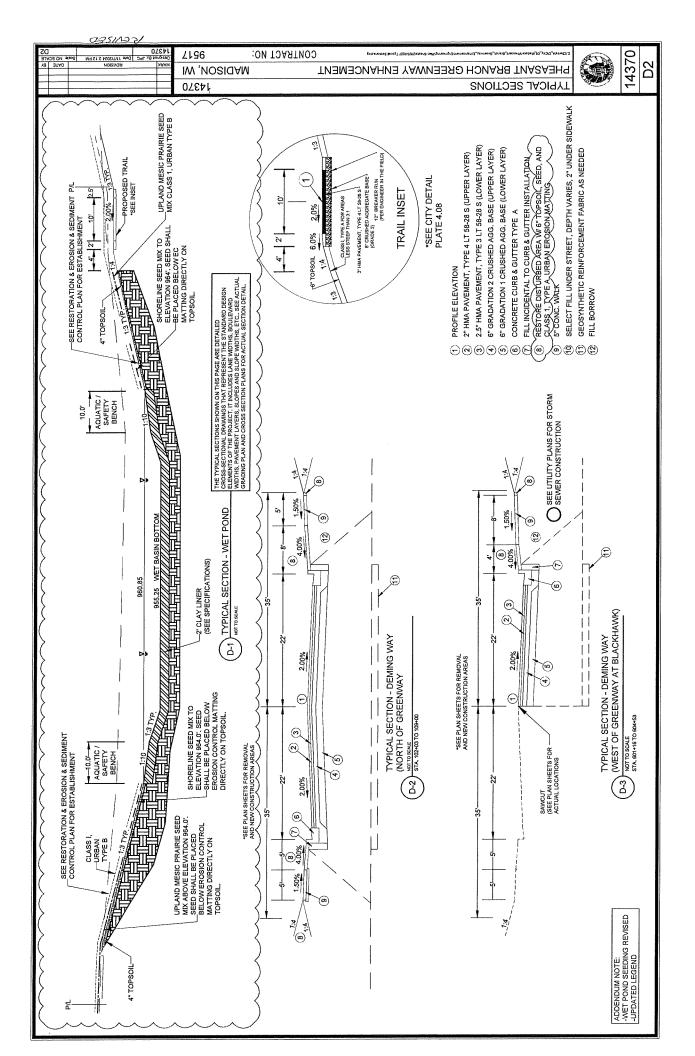
If you are unable to download plan revisions associated with the addendum, please contact the Engineering office at 608-266-4751 receive the material by another route.

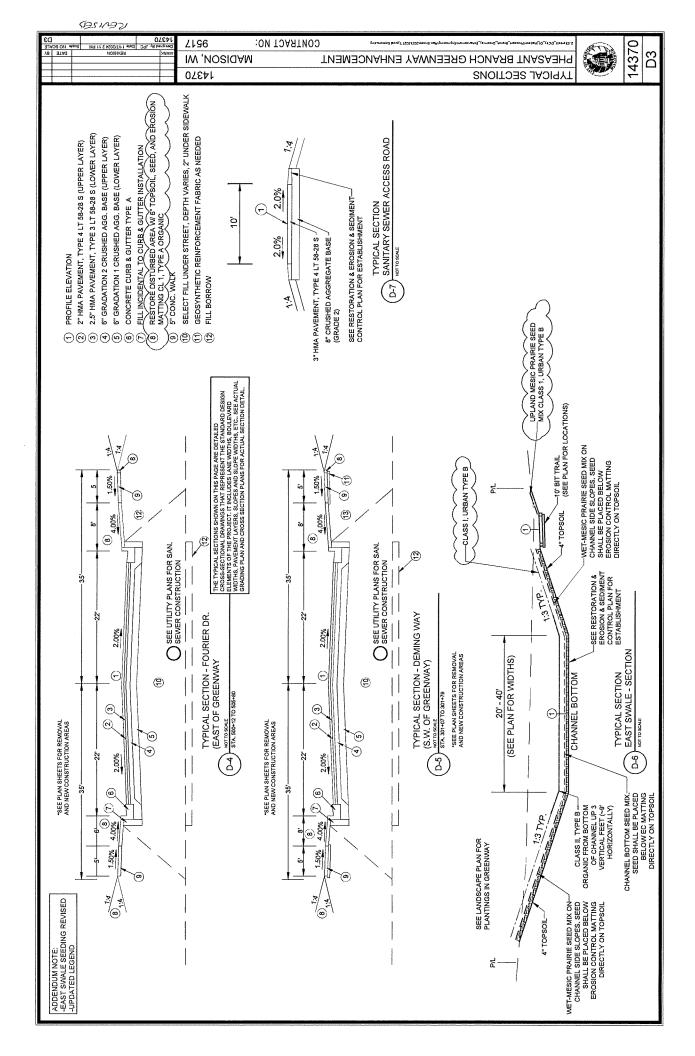
Sincerely,

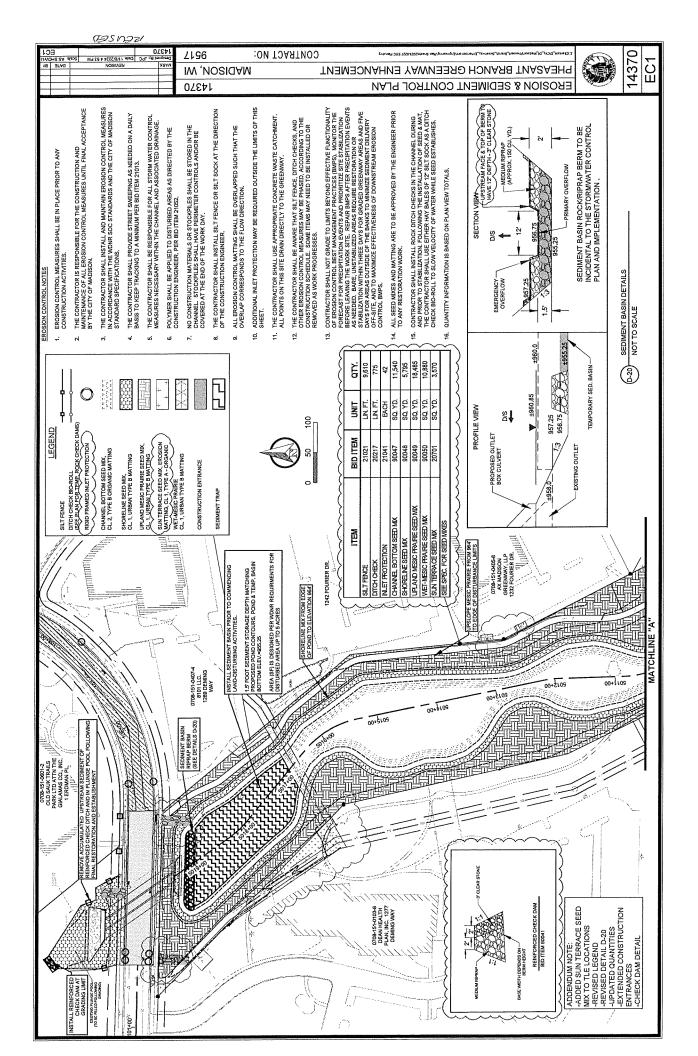
James M. Wolfe, P.E., City Engineer

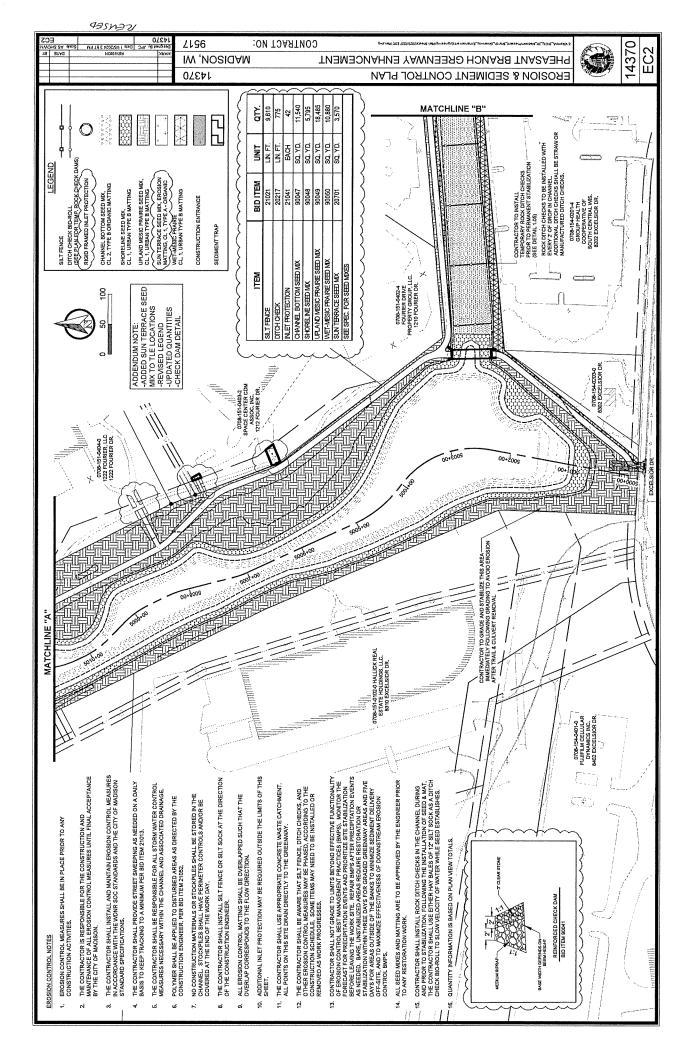


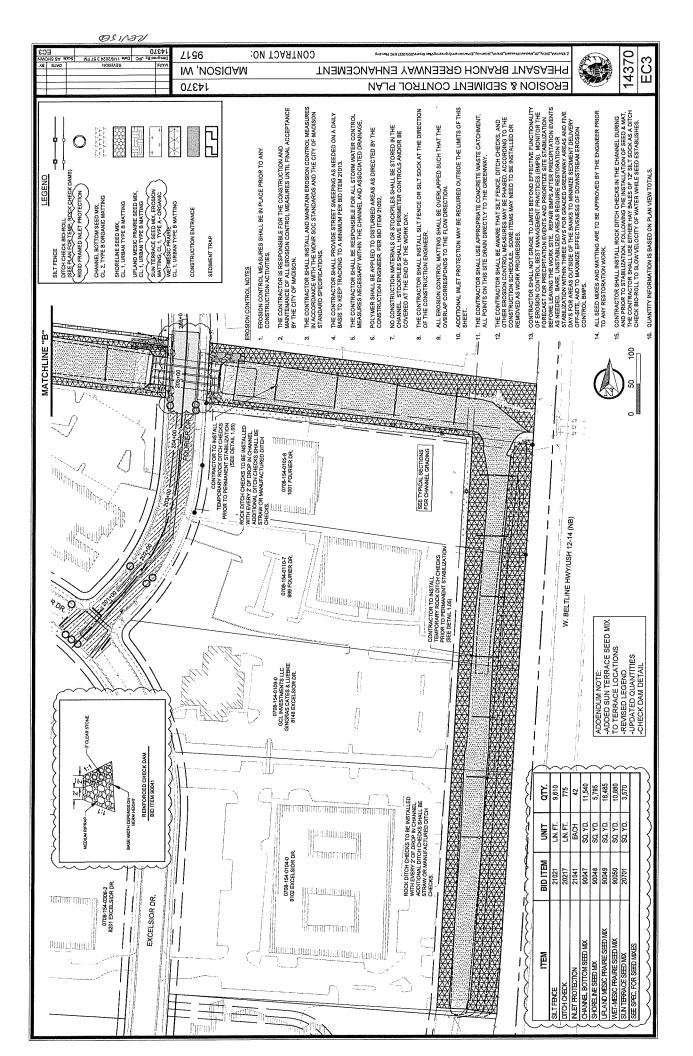
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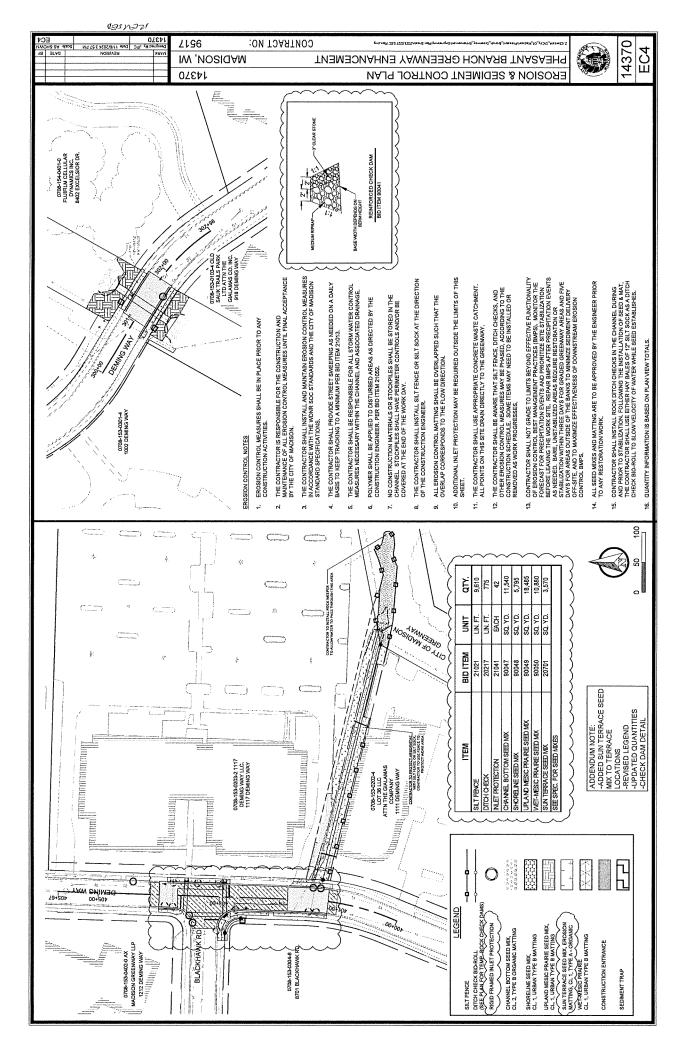


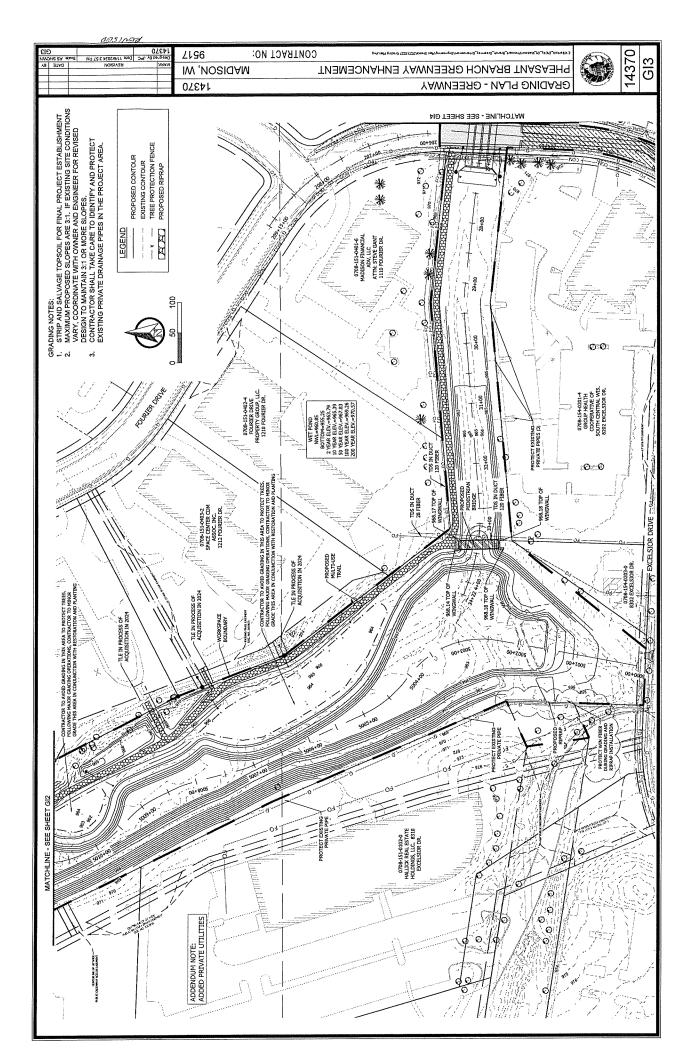




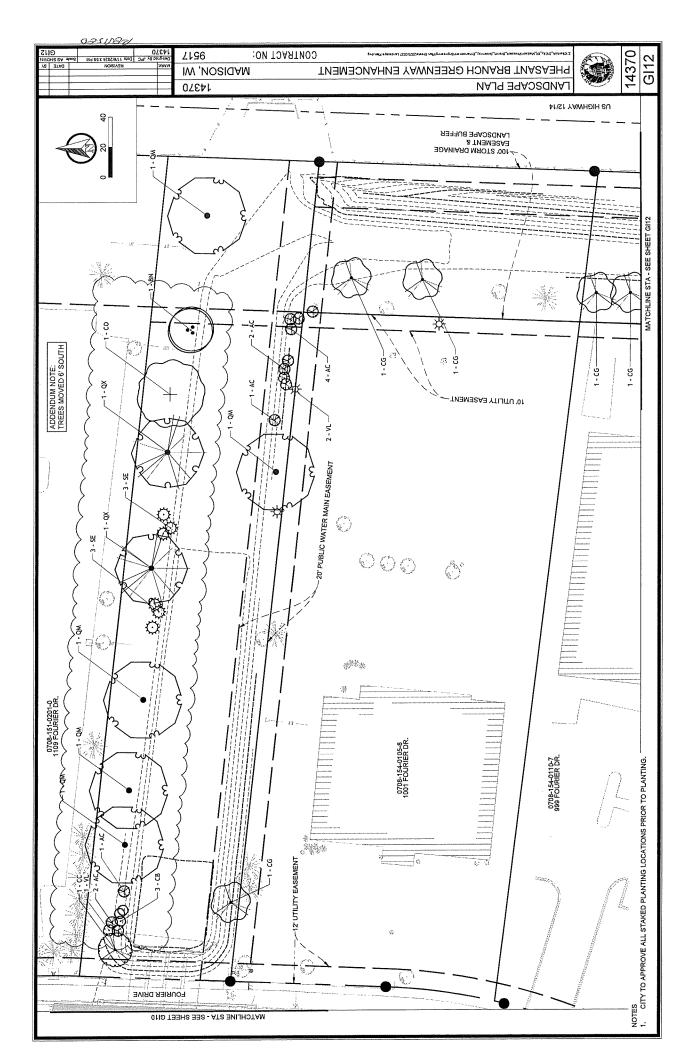


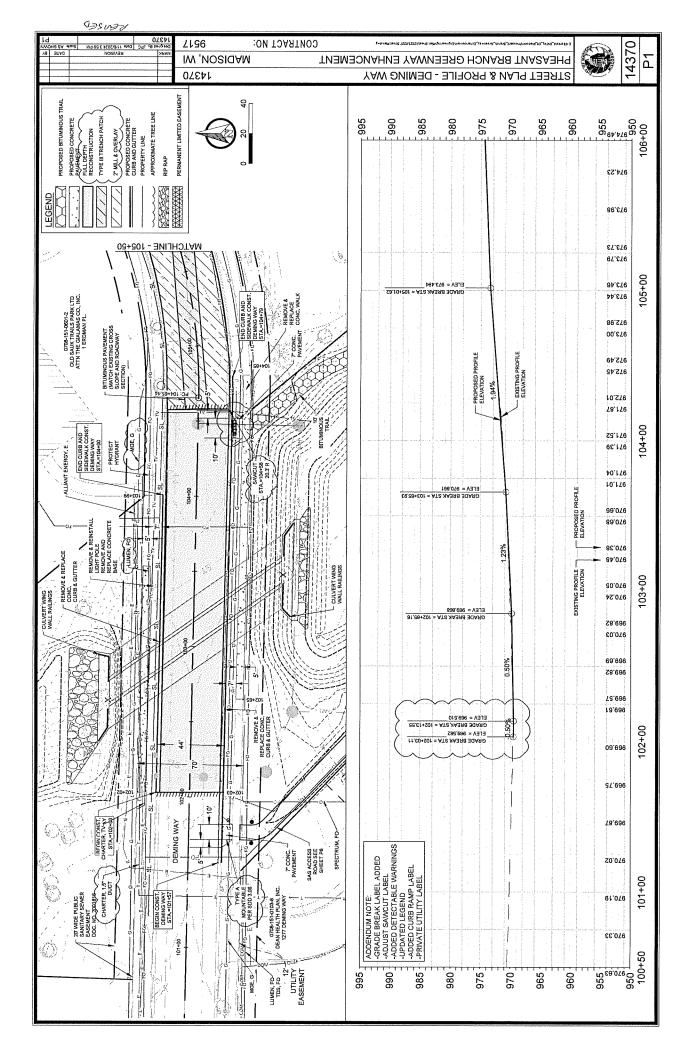


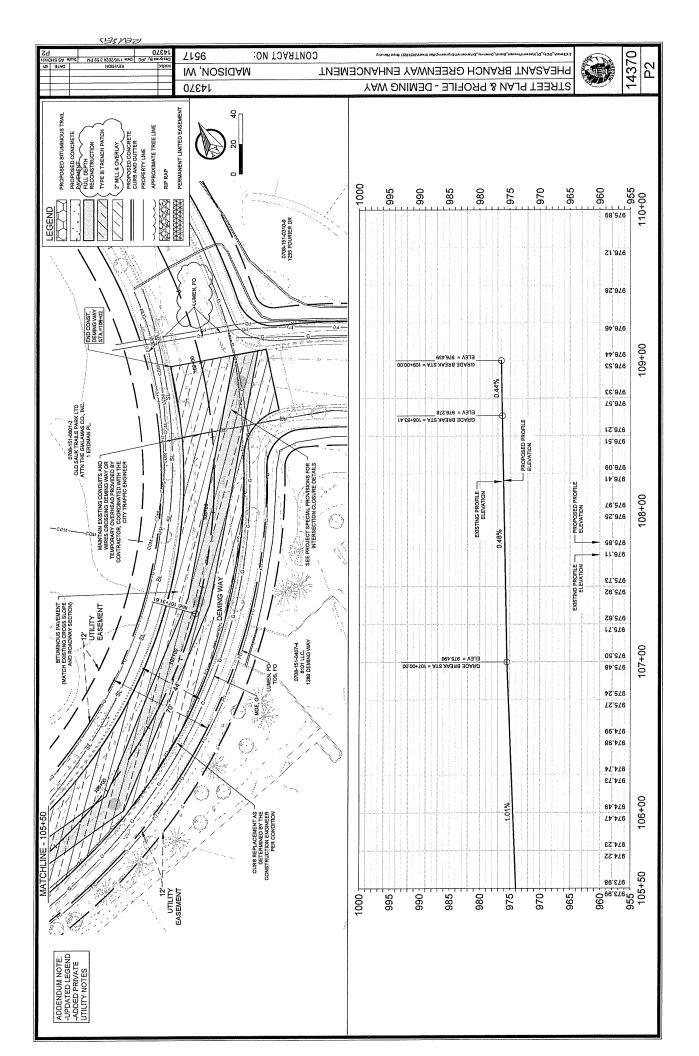


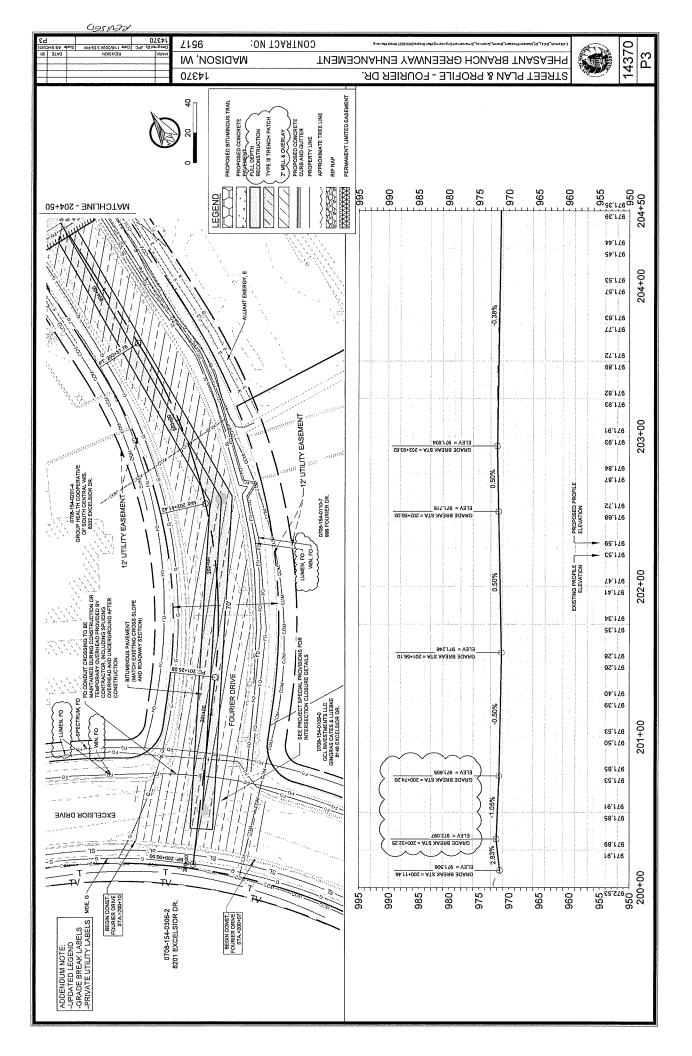


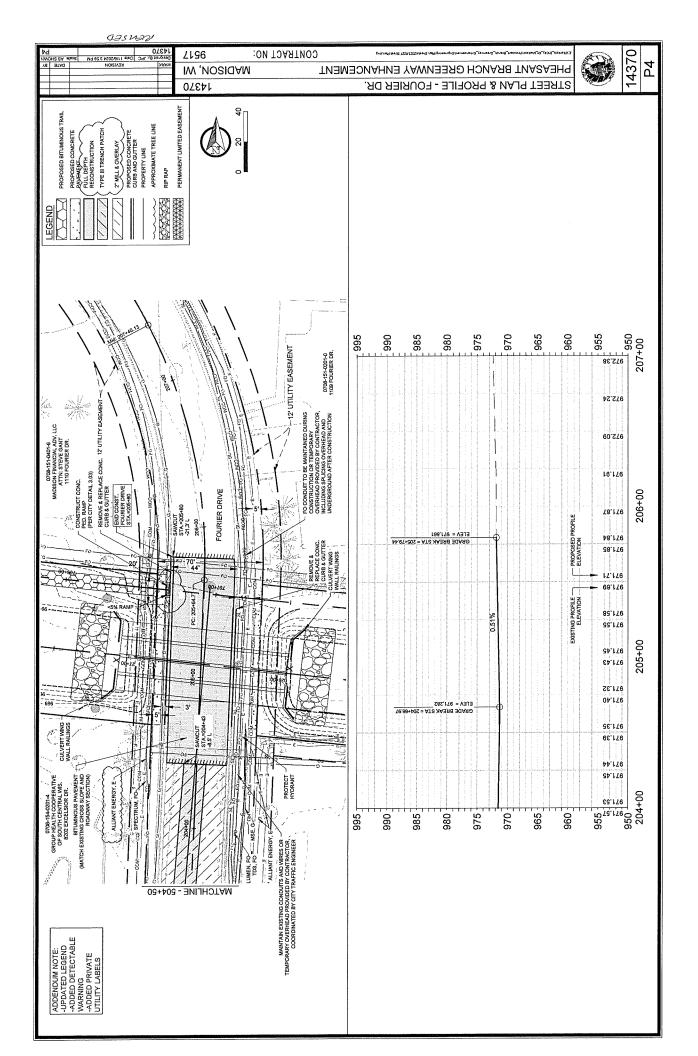
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REVISED TREE SIZE	SYMBOL CODE BOTANICAL / COMMONIAMME TREES	AC Amolanchler canadomic / Shadblow Sevicabemy	BN Beula rigar / River Bich Mulli: Trunk	CC Carphrus carolinium / American Hombeam	C Carya ovata / Stuggautik Hideory	CD Cargo confidentia / Bitternut Hickory	CG Catalages creagall / Thombas Hawthom	OM Quurcus macrocarps / Bur Oxk	CX Quertus x achiveli / Sweinp Bur Oak	SHRUBS AM Aronia malanocarpa / Black Chokoborry	CB Cephalanthus accidentalis / Buttonbuck CP Company avaet Fam	చ	RB Ream blunda / Smooth Reca Sembucus canadantis / Amavican Elderbeiny		VB. Vibumun prunisikun / Blackhaw Vibumun	PI ANT I IST							JTES	 CITY TO APPROVE ALL STAKED PLANTING LOCATIONS PRIOR TO PLANTING.

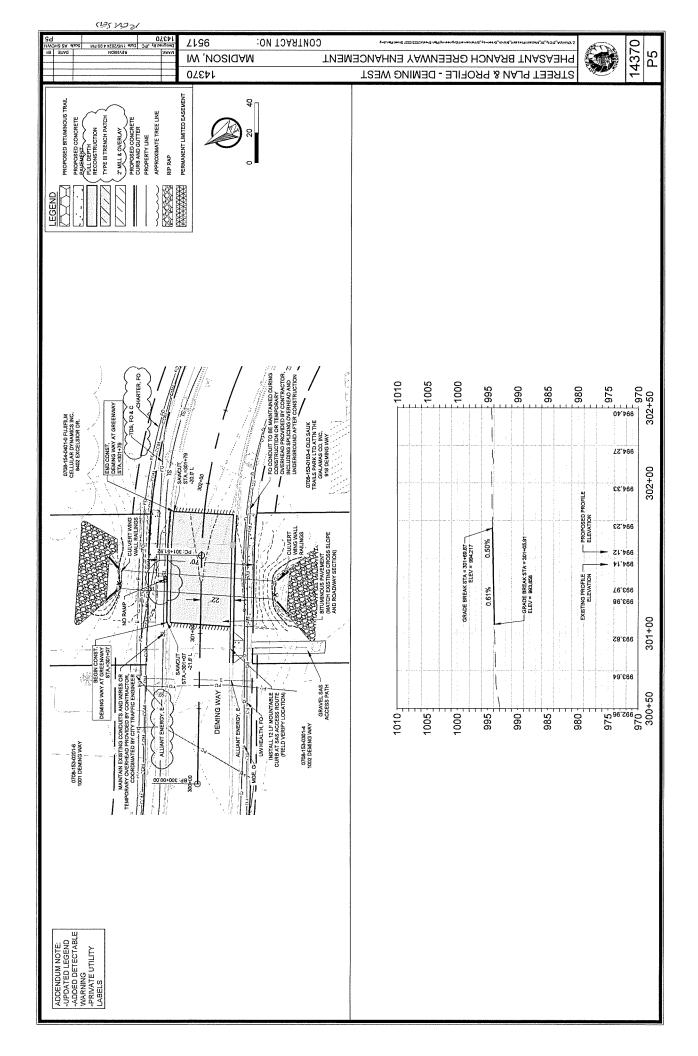


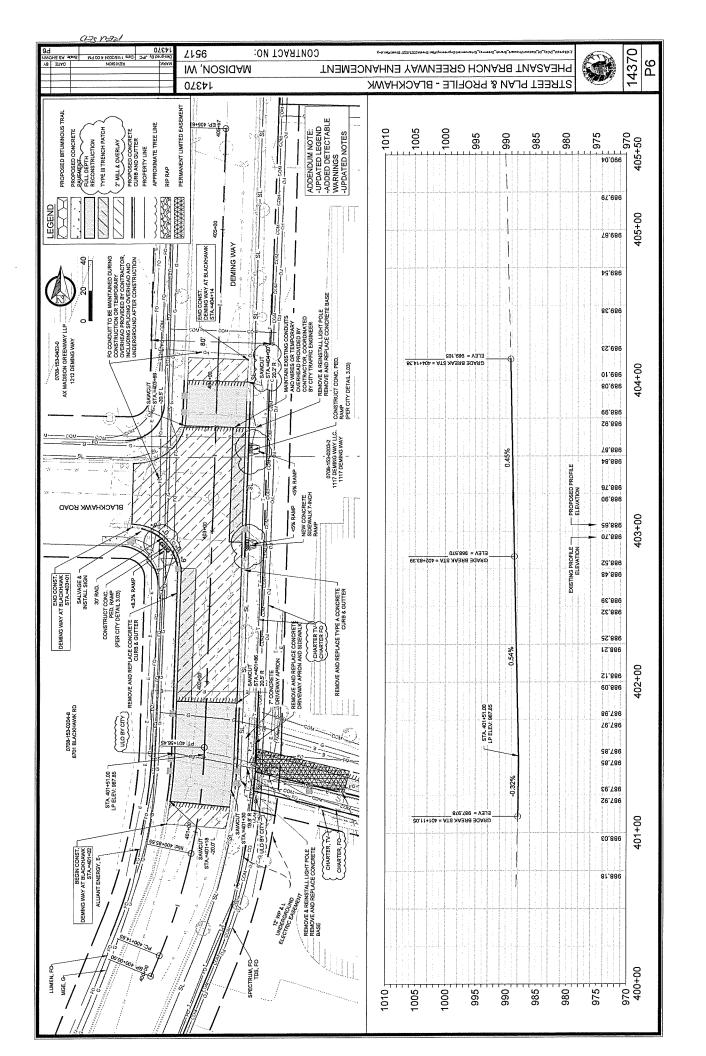


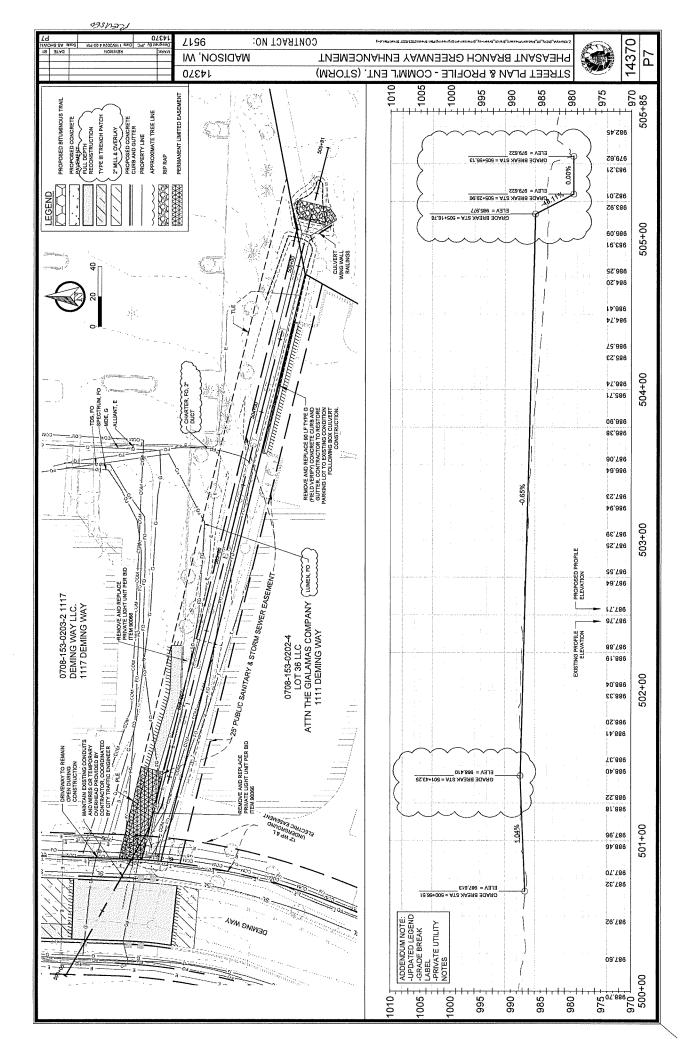


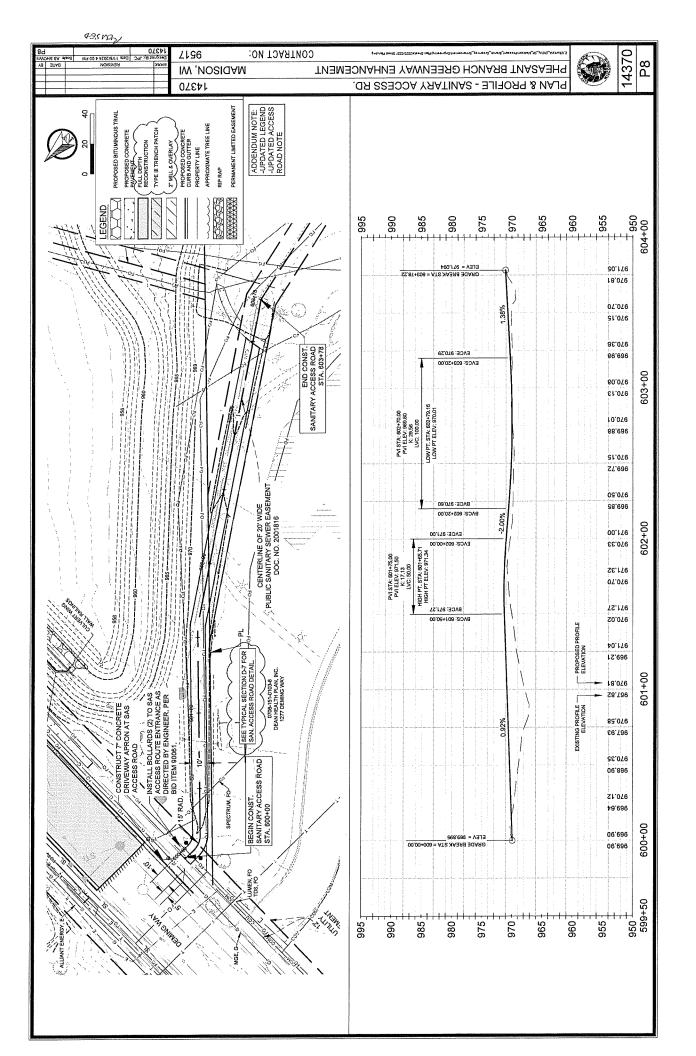


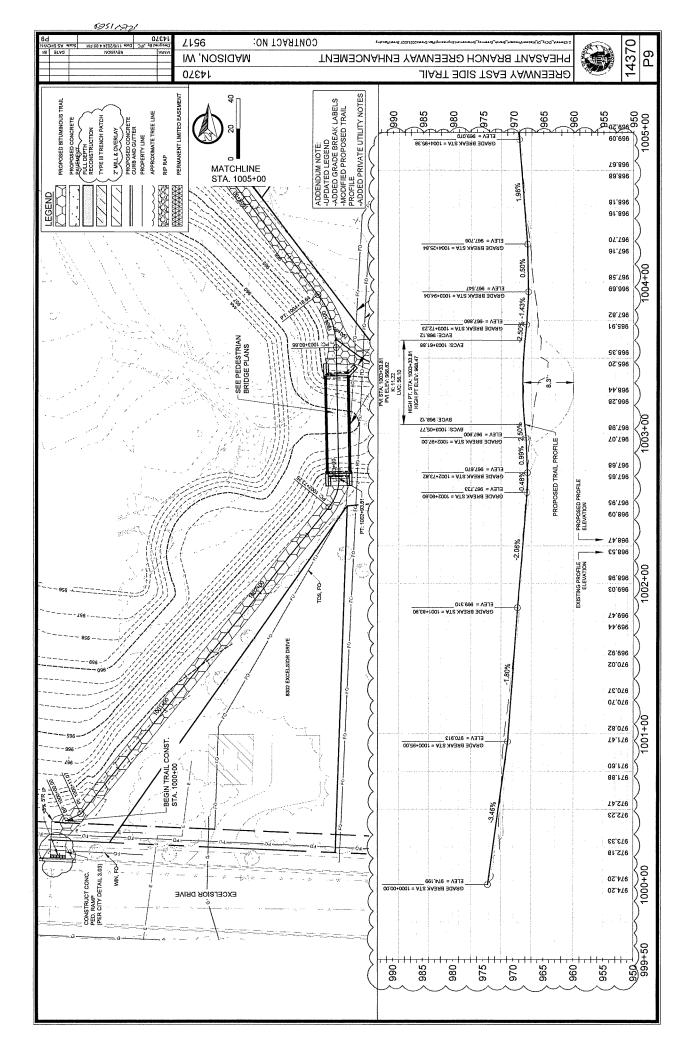


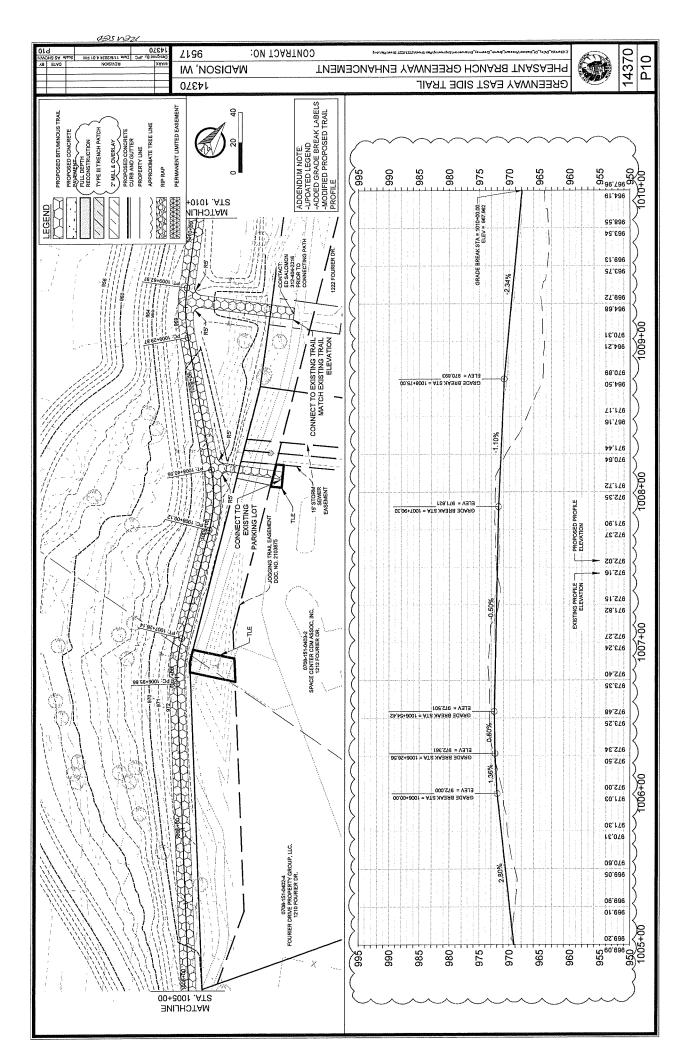


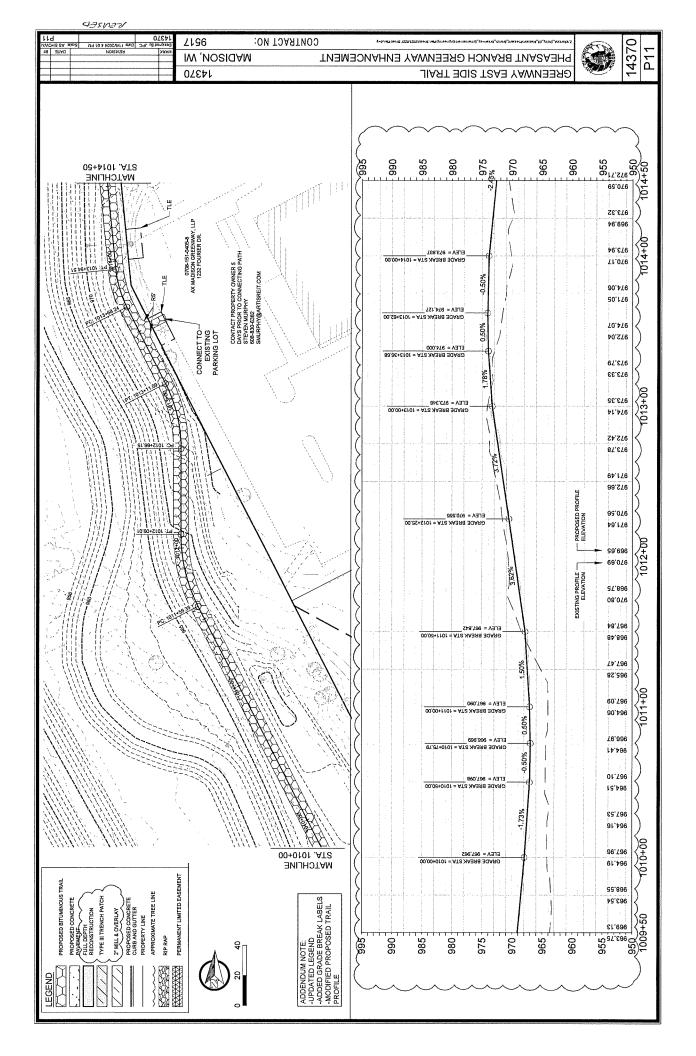


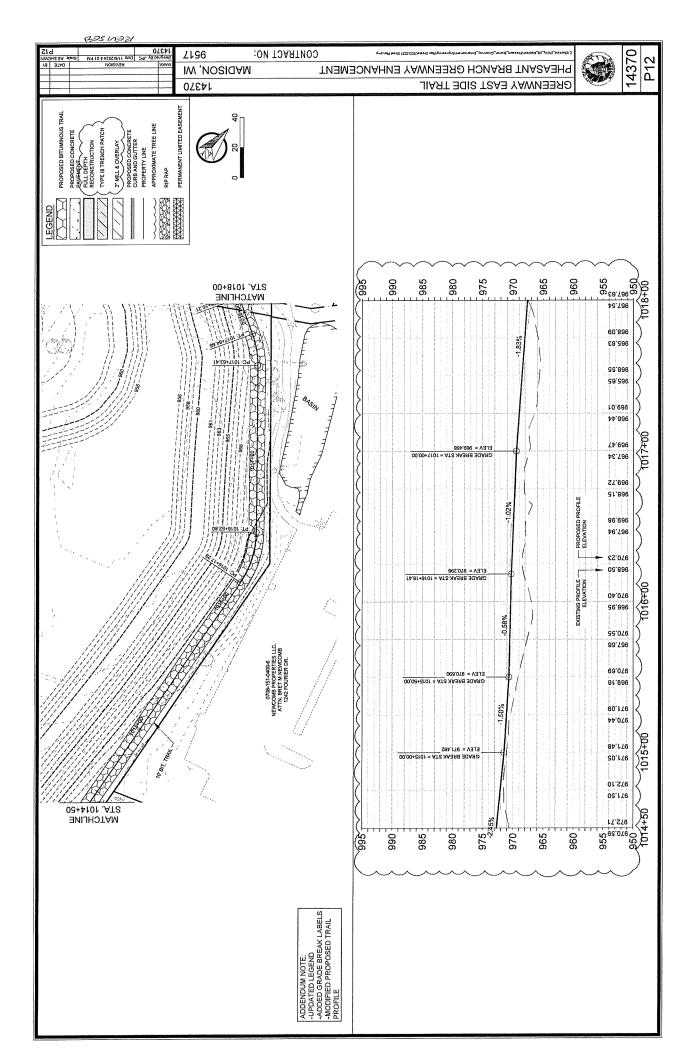


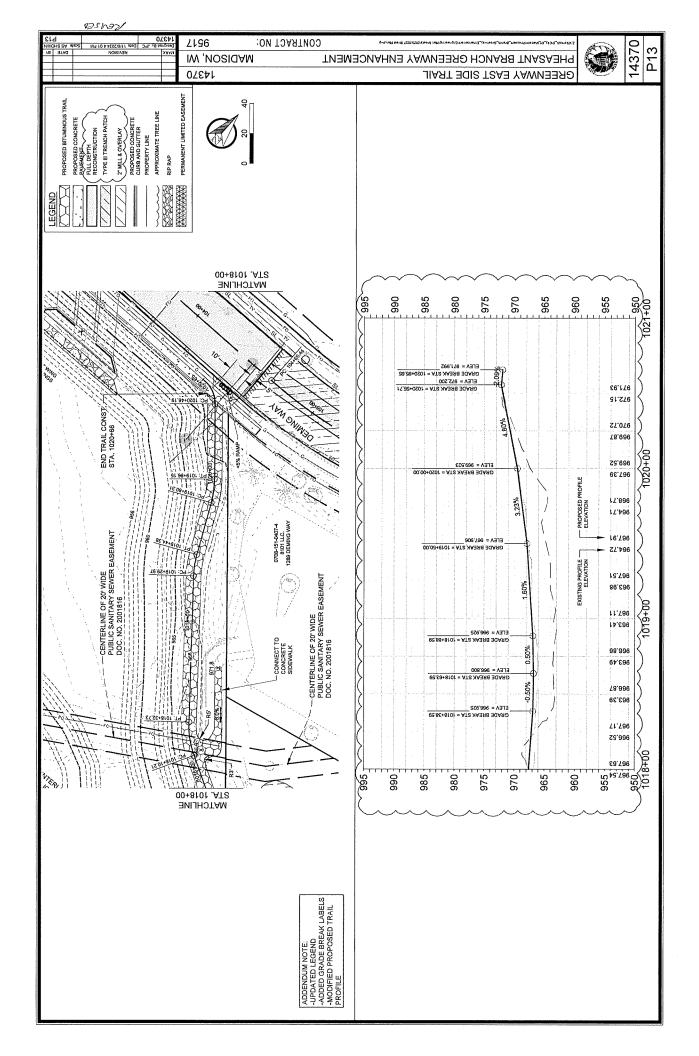


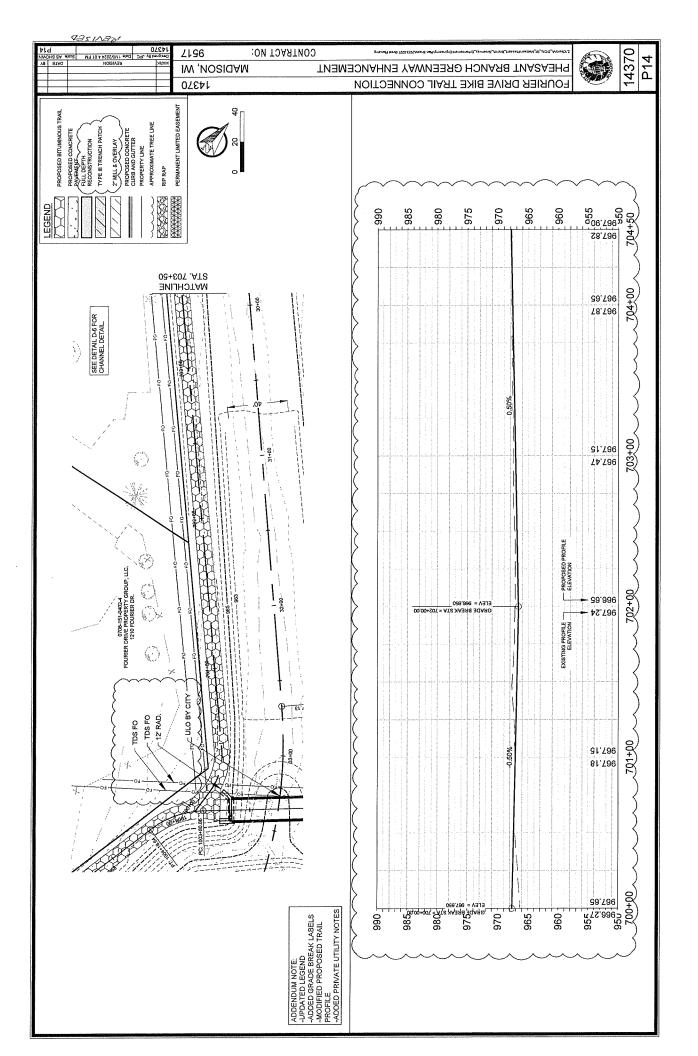


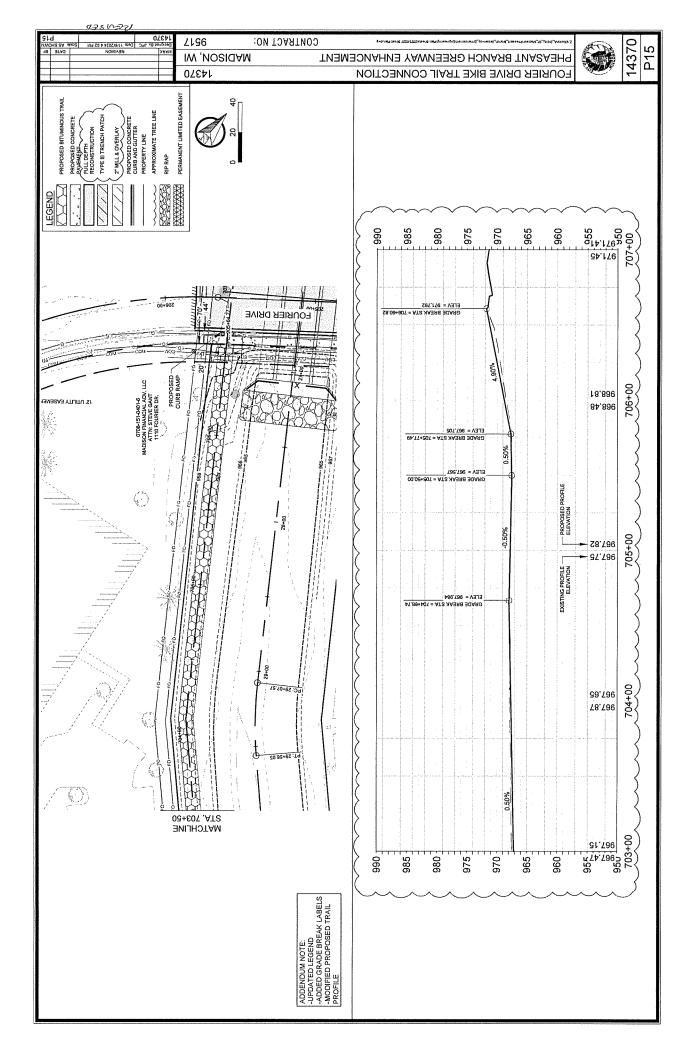


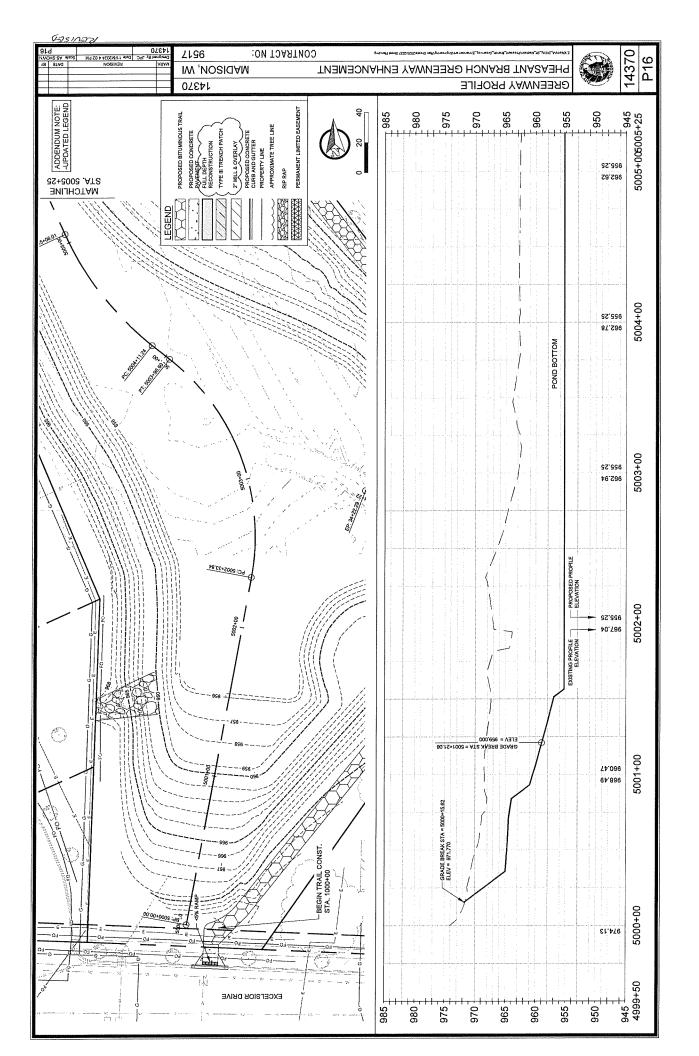


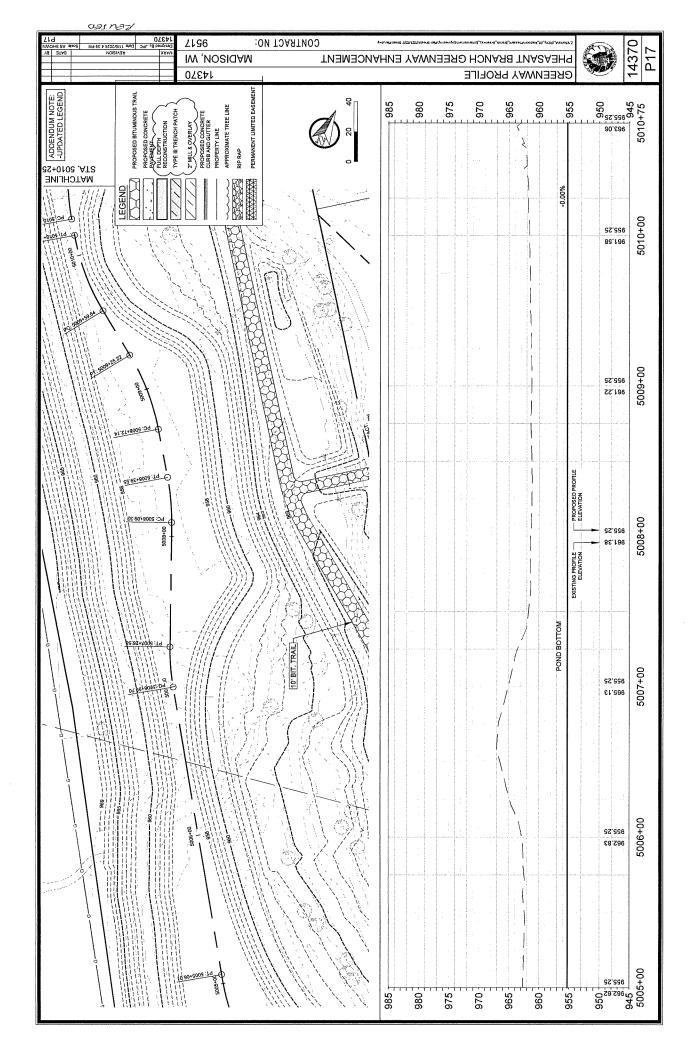


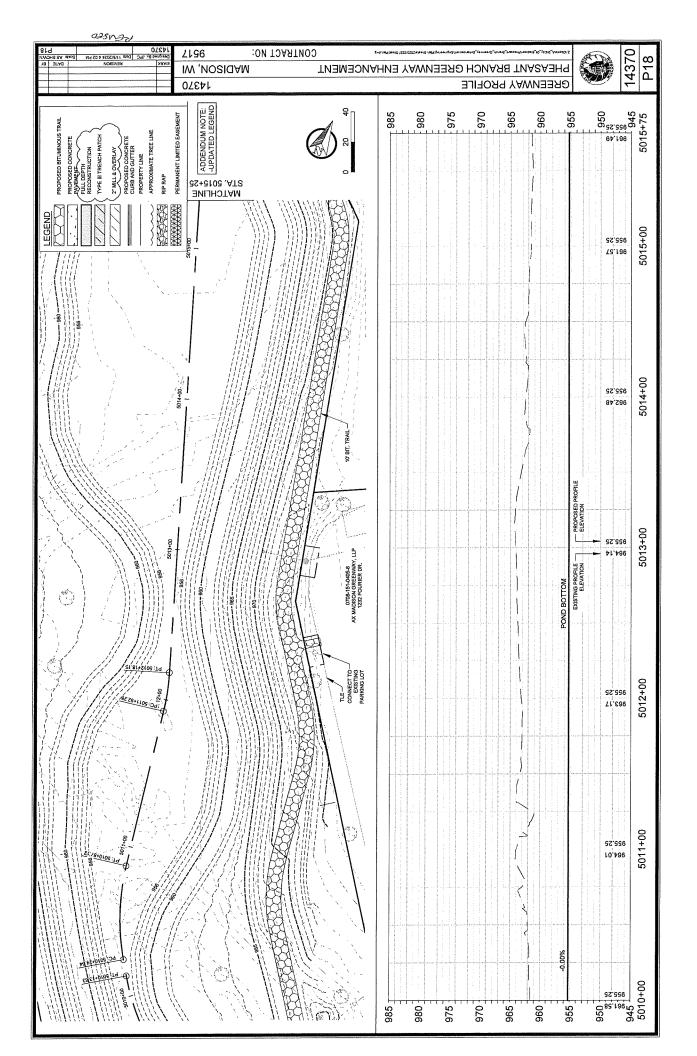


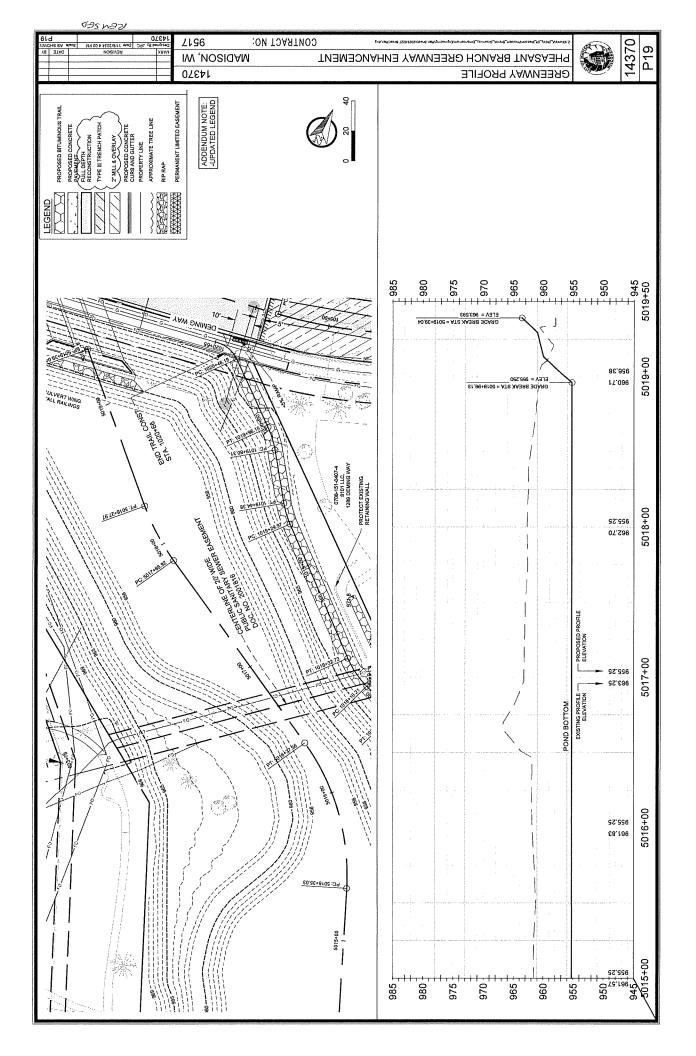


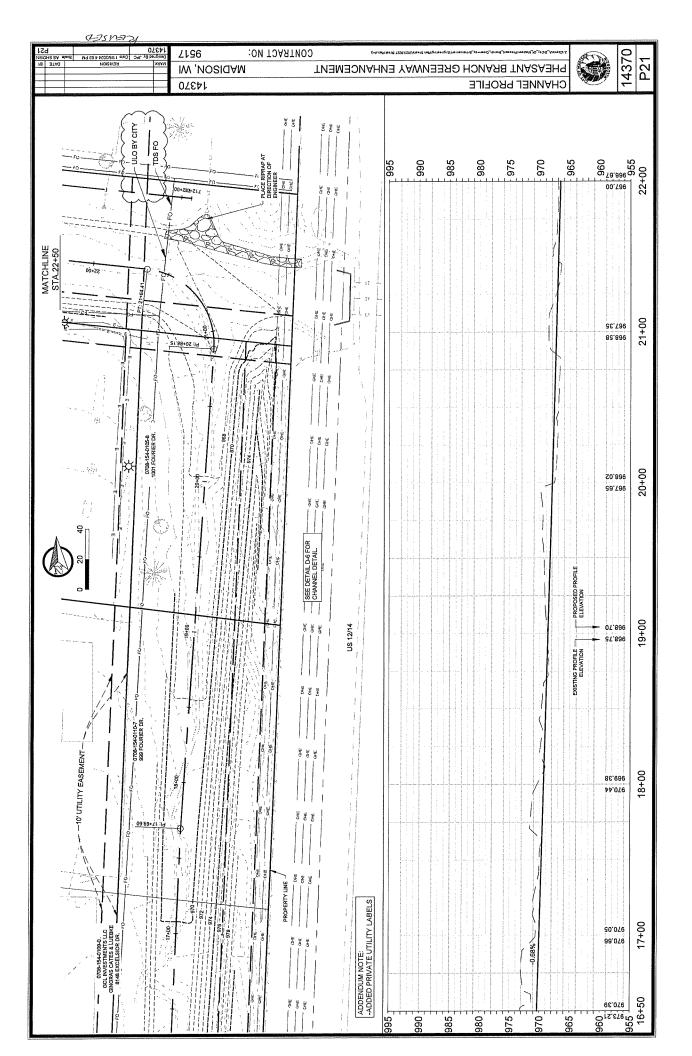


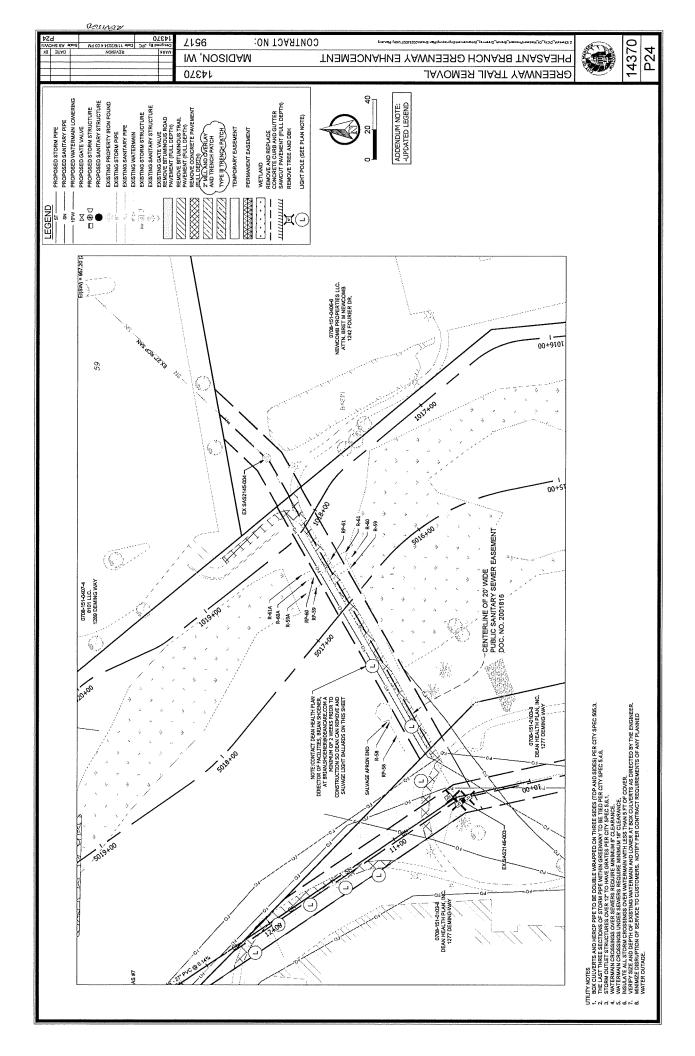


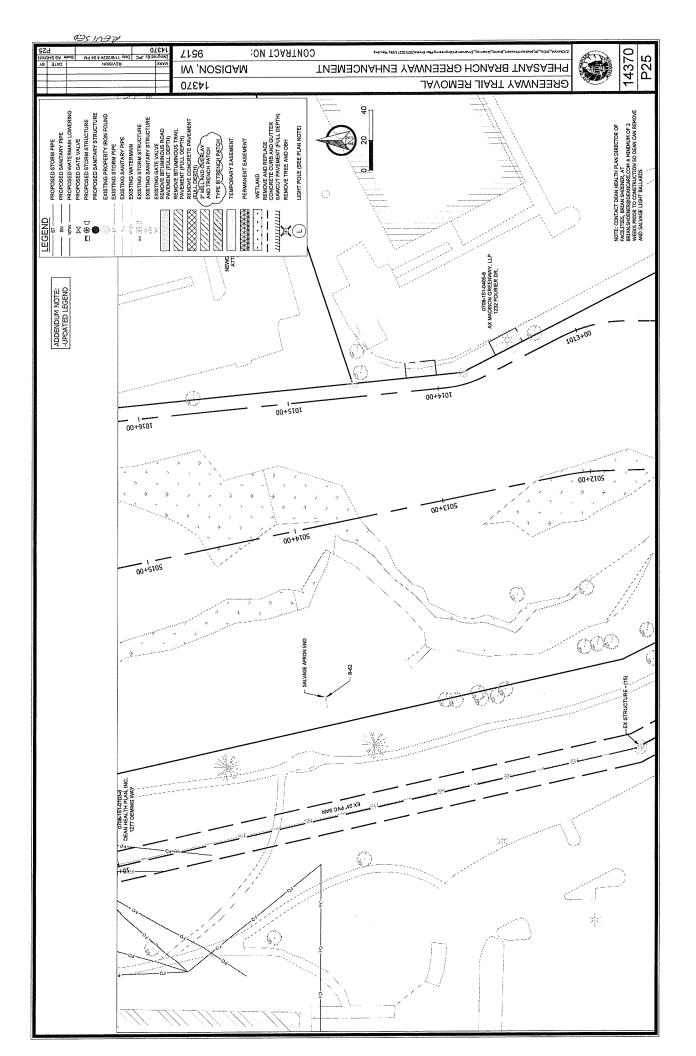


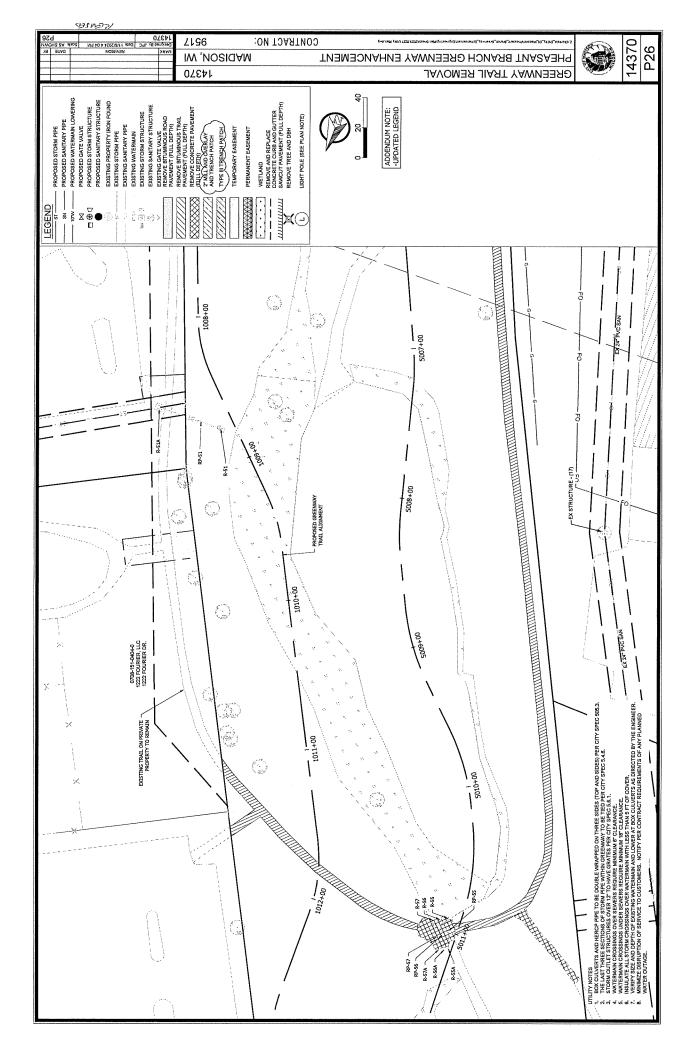


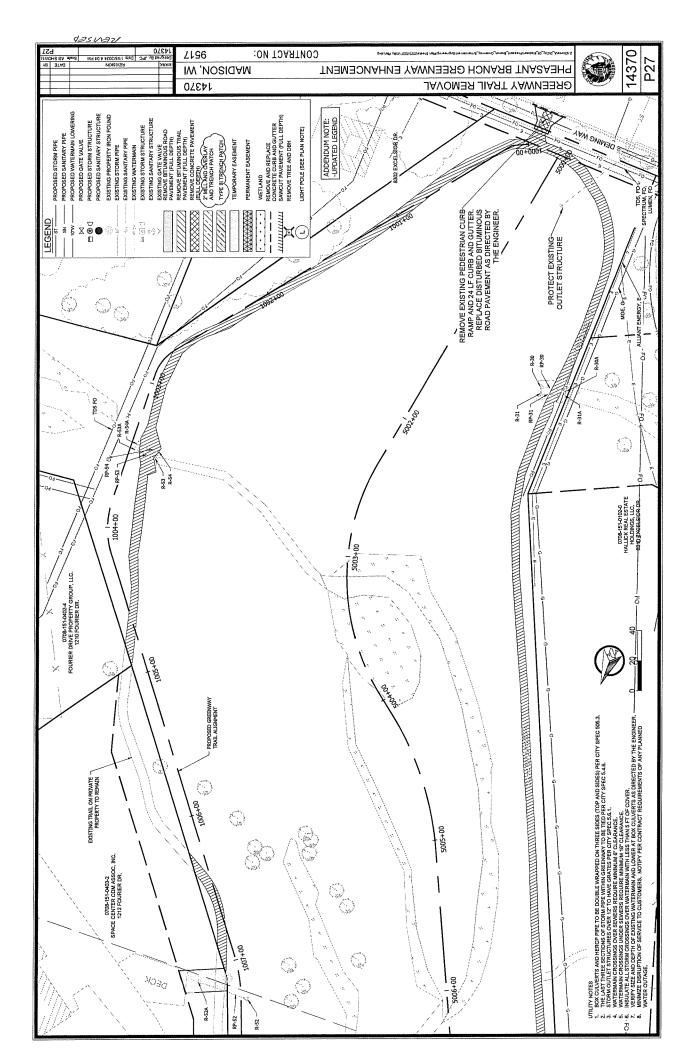


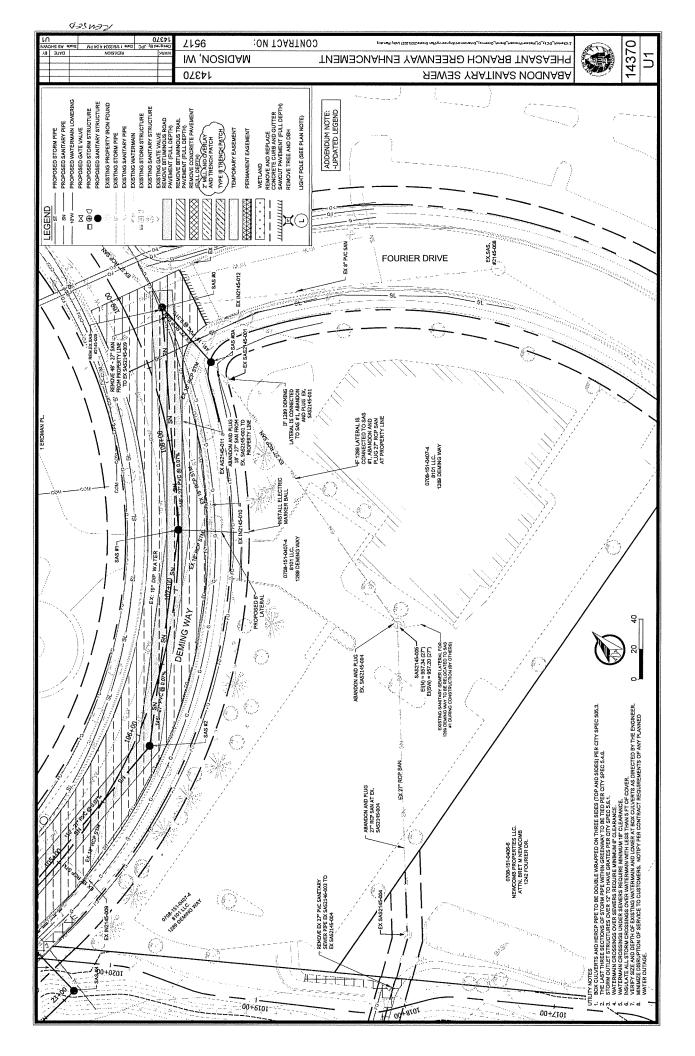


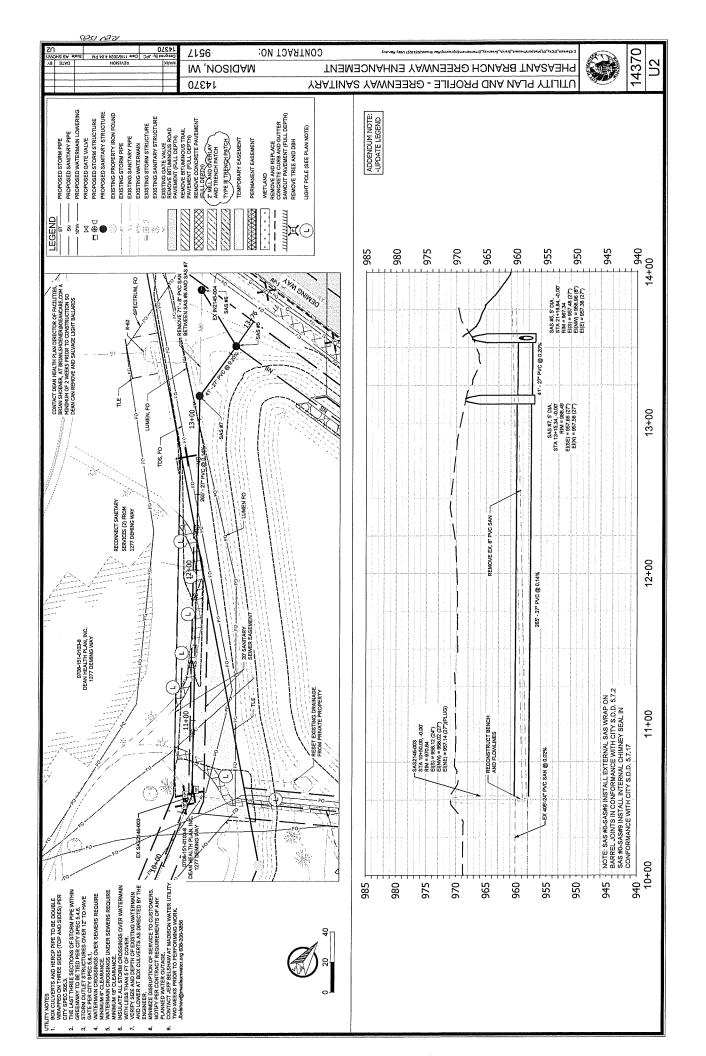


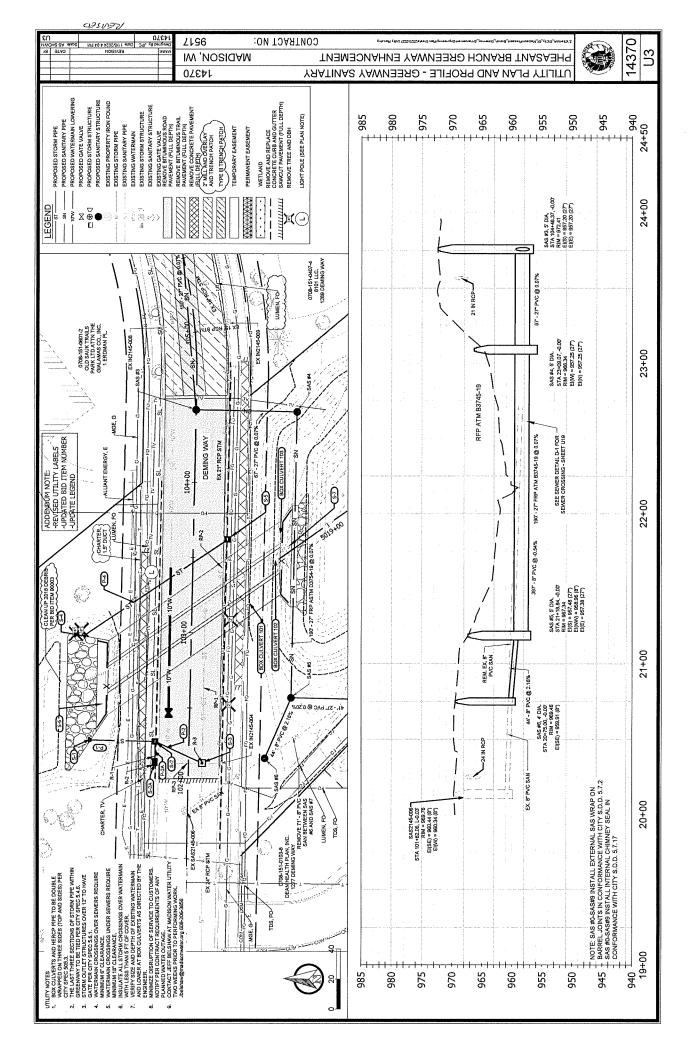


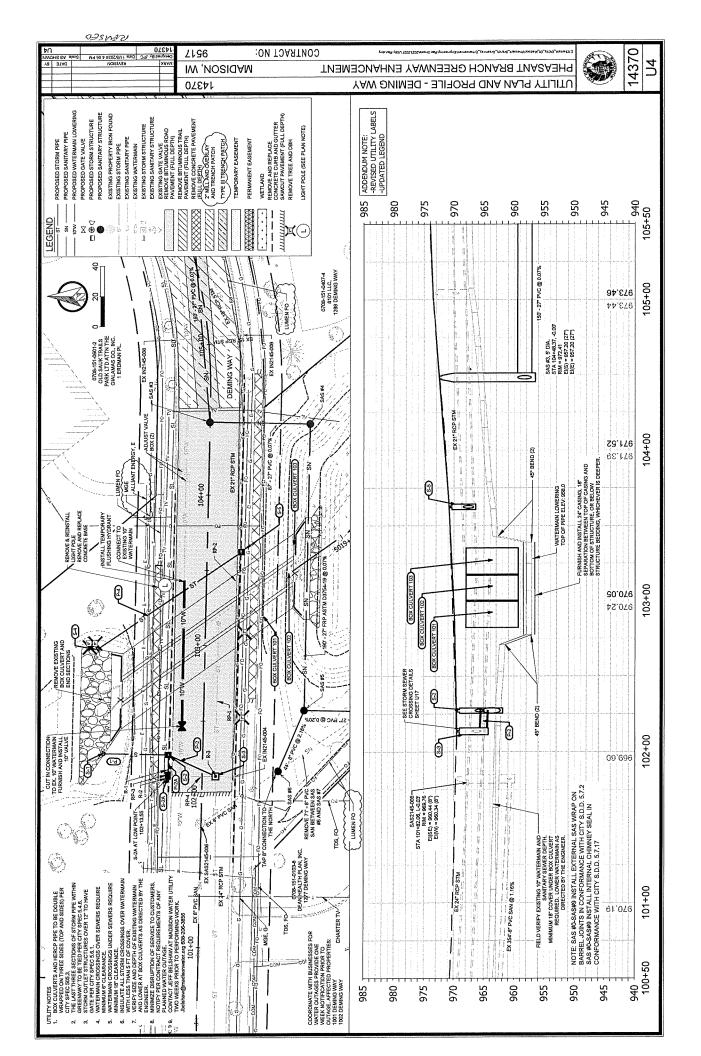


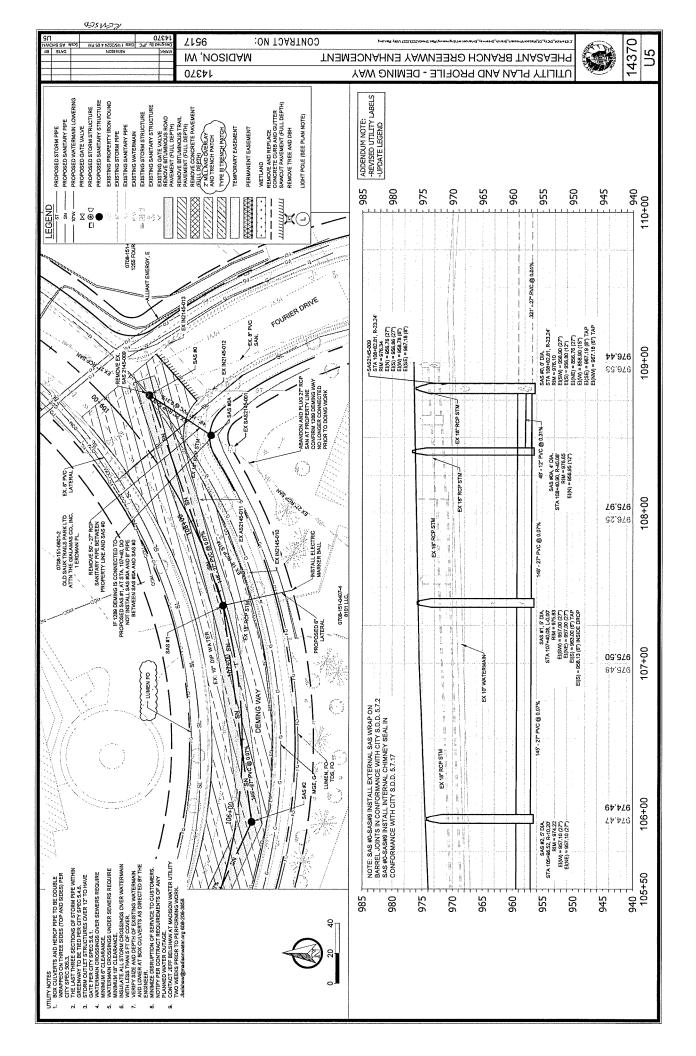


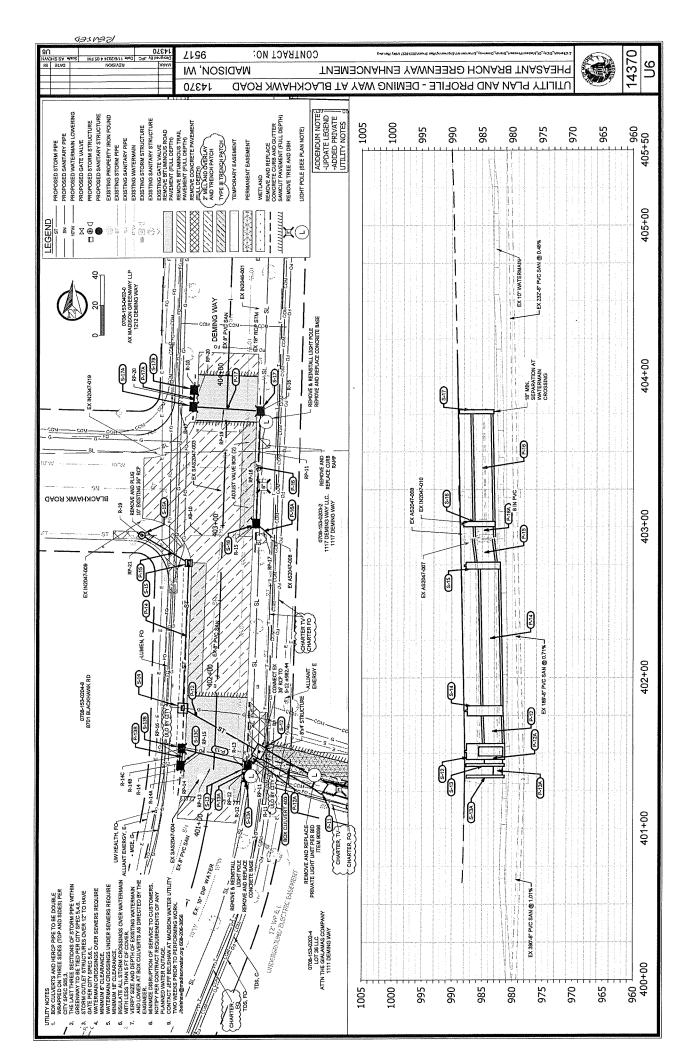


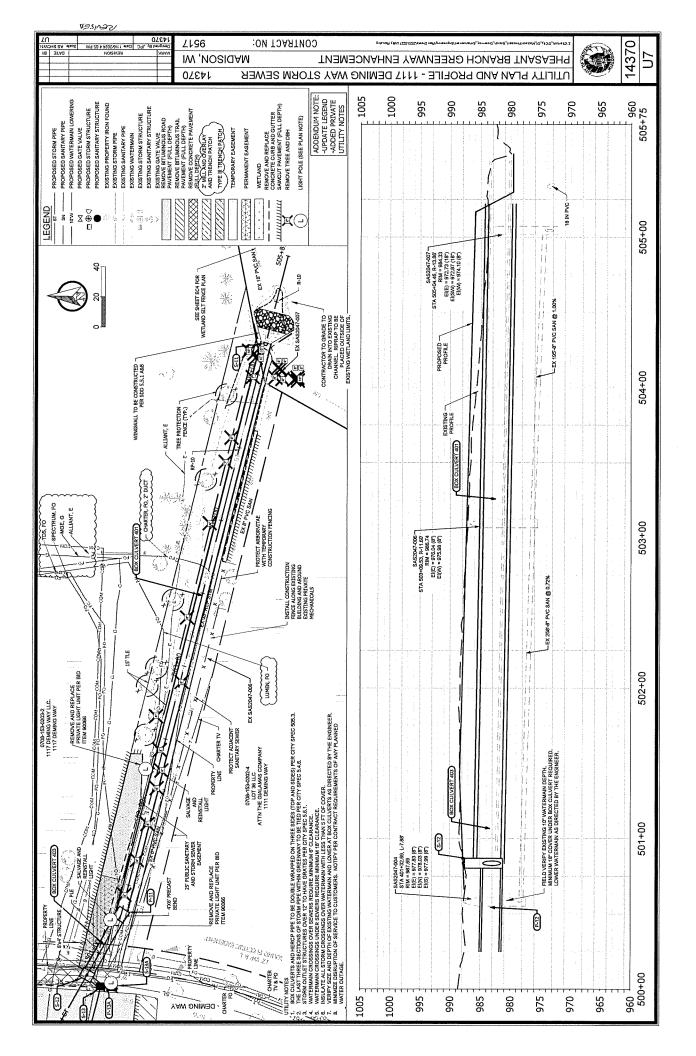


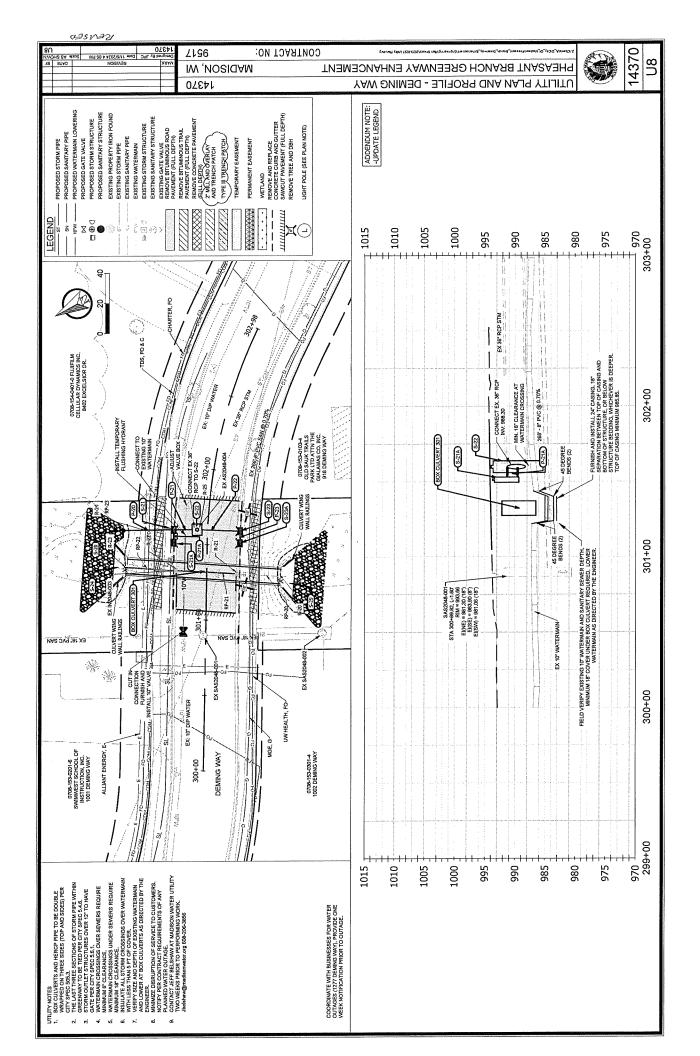


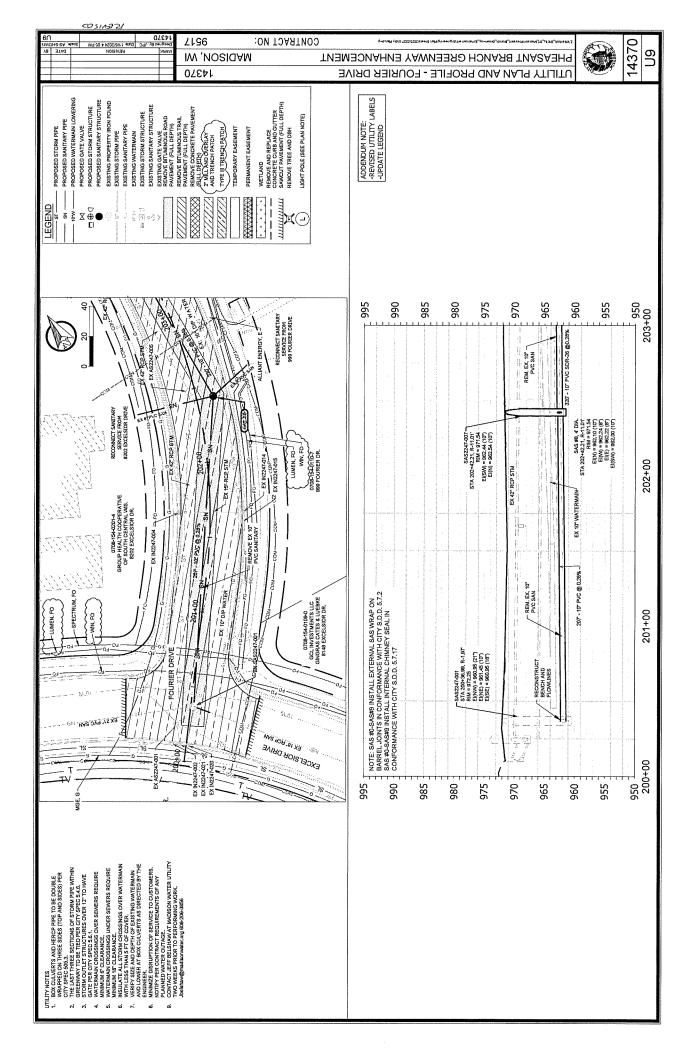


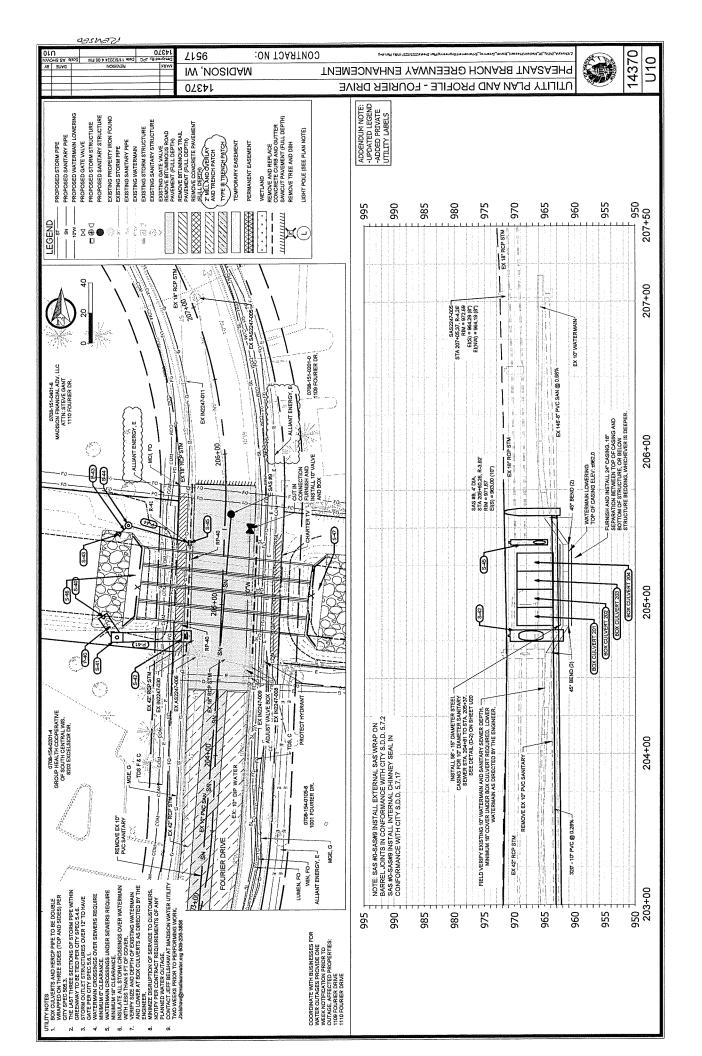


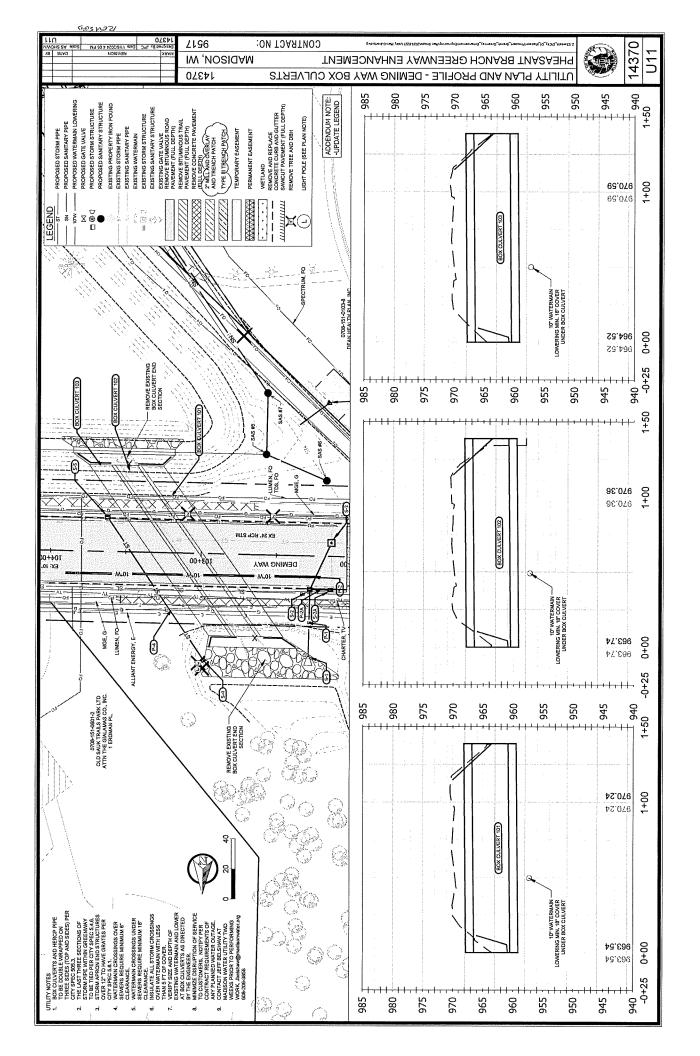


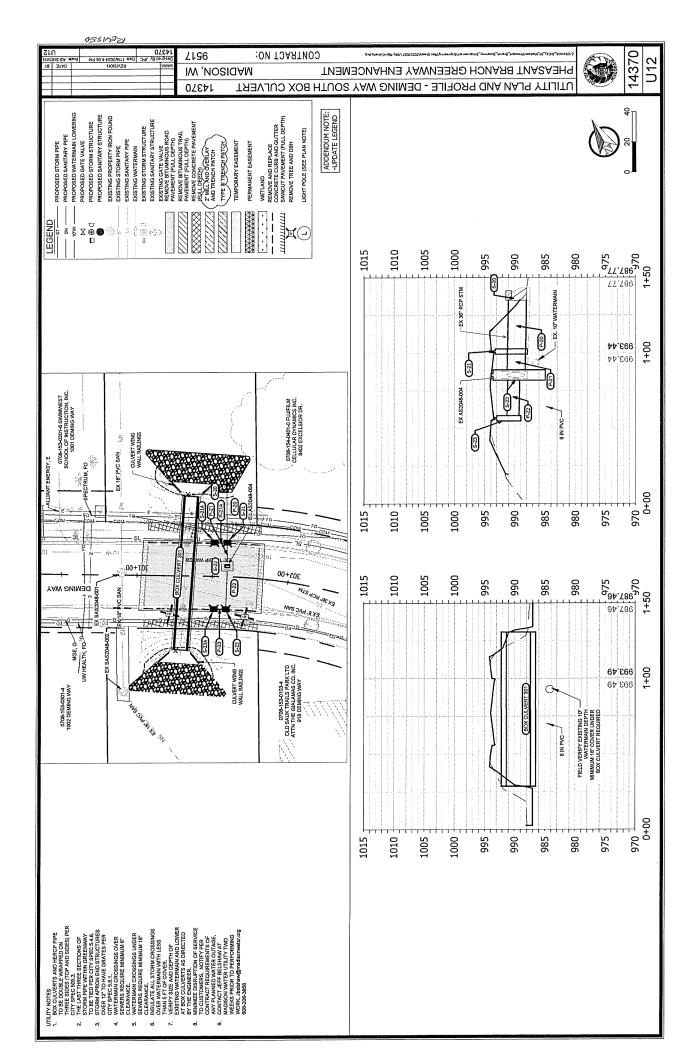


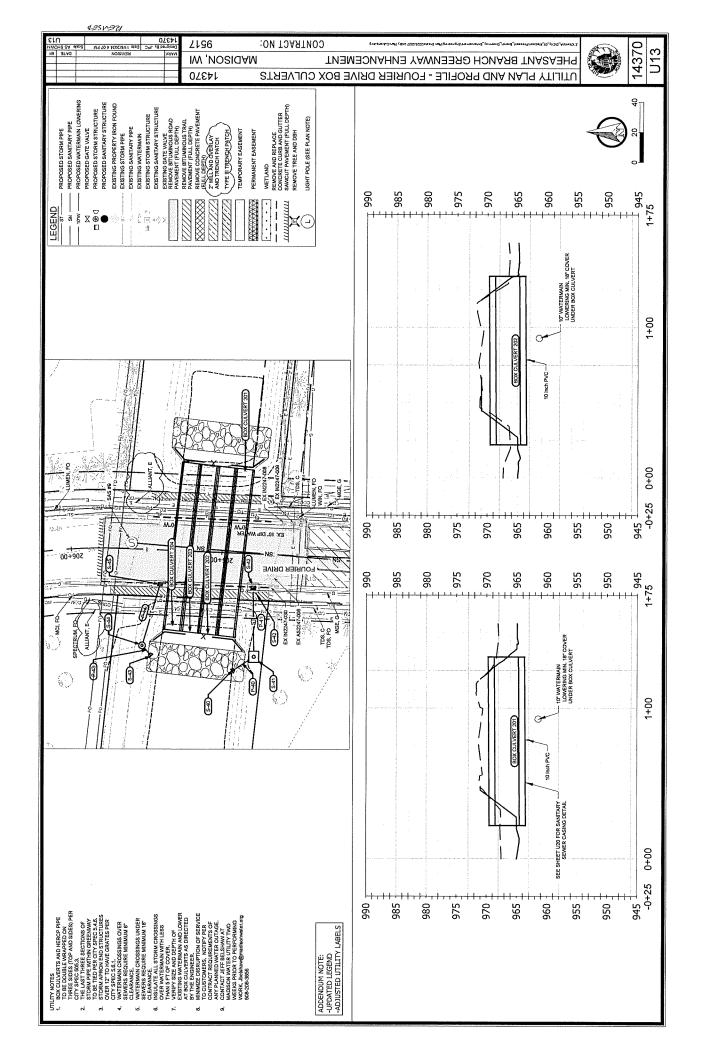


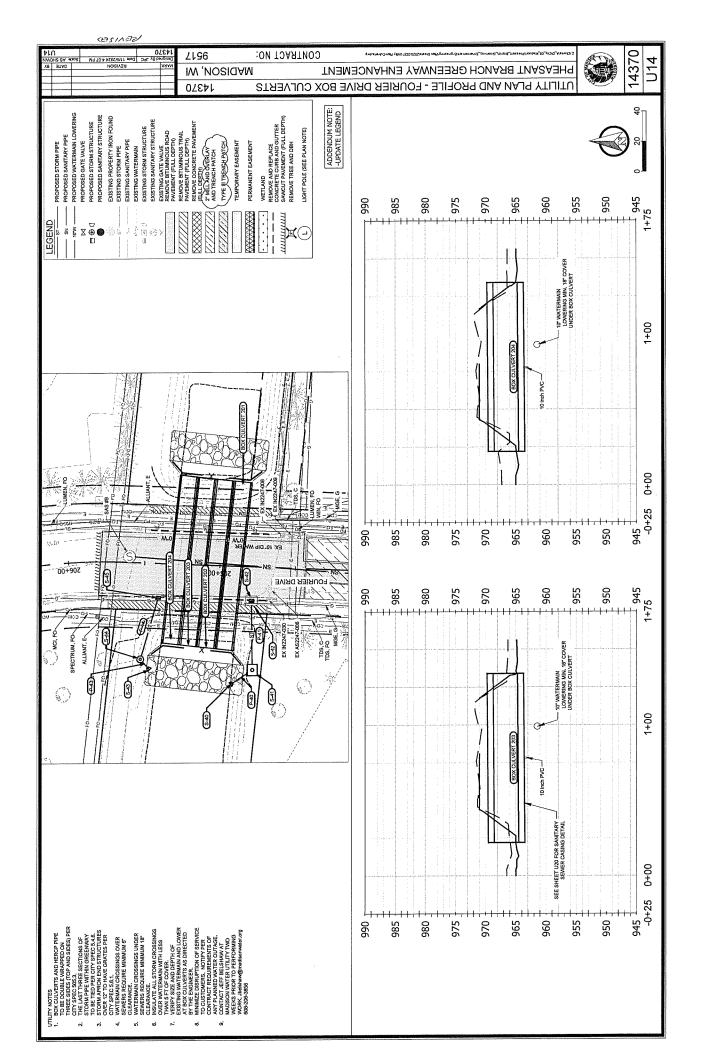


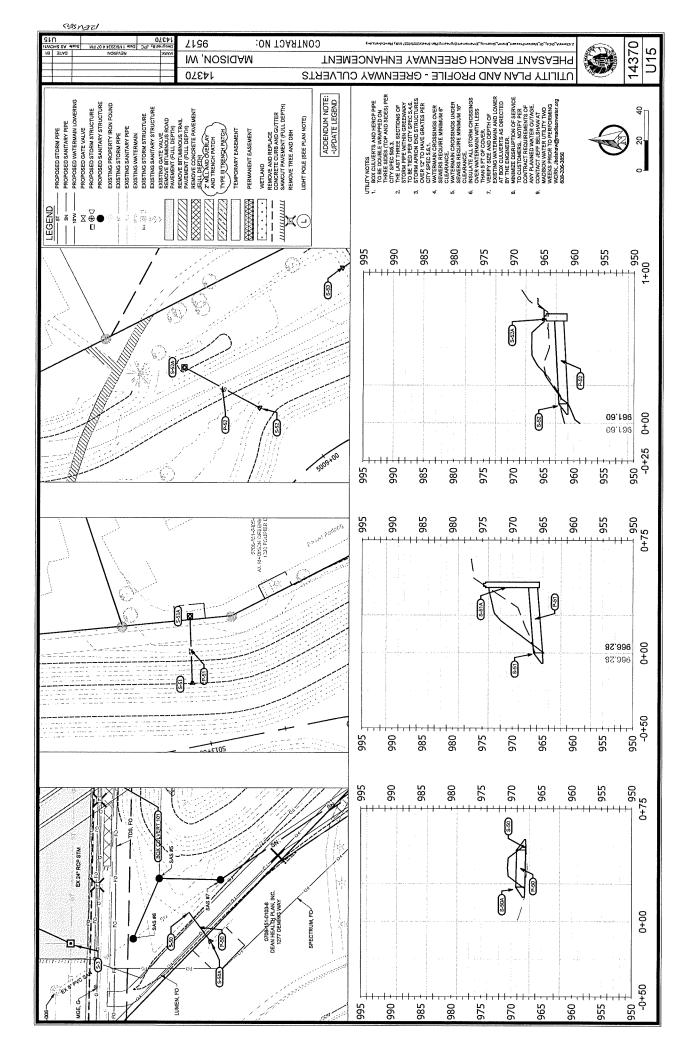


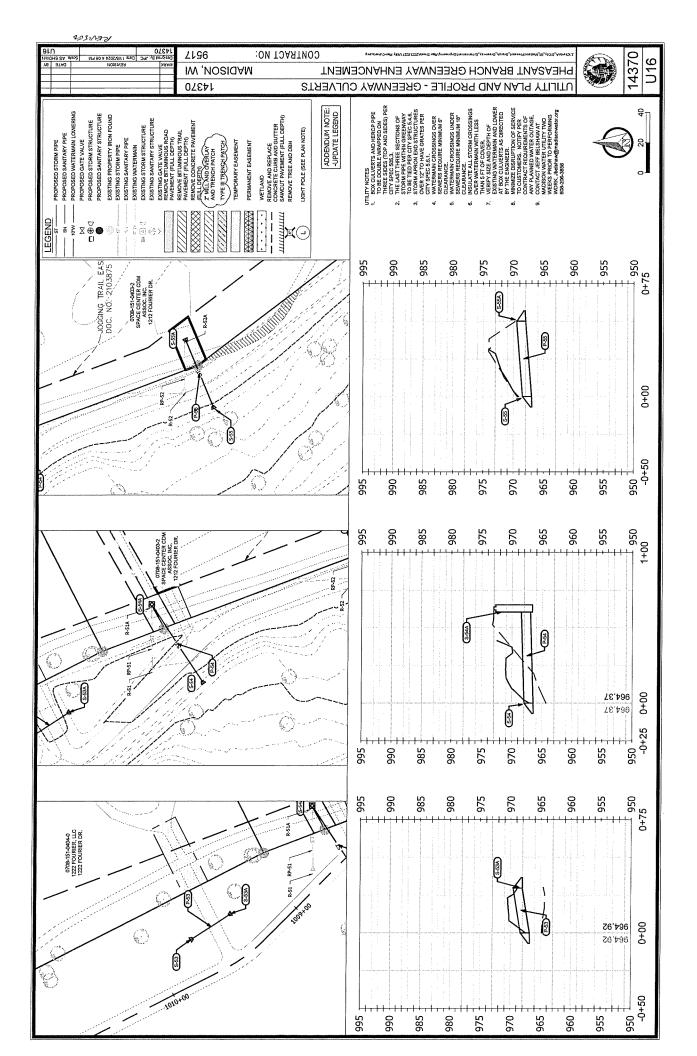


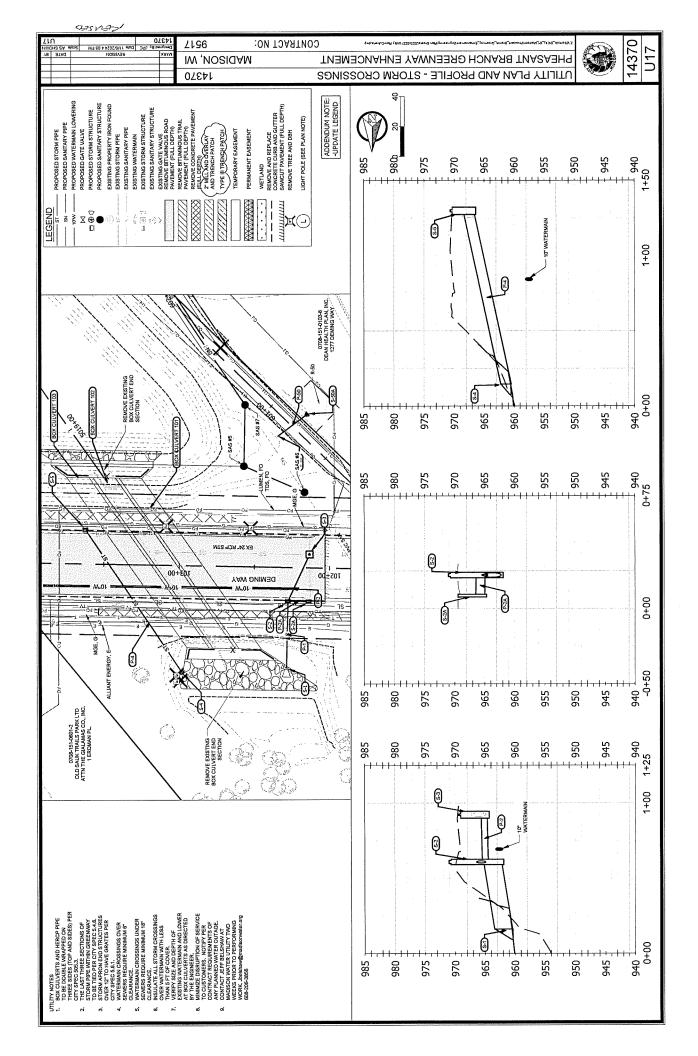


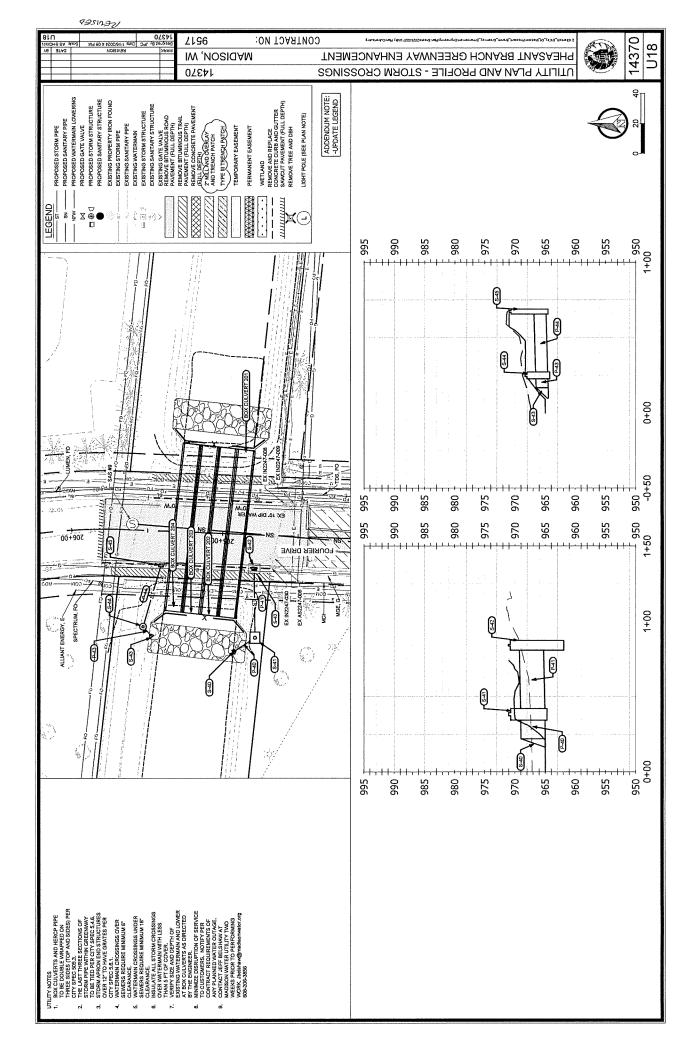




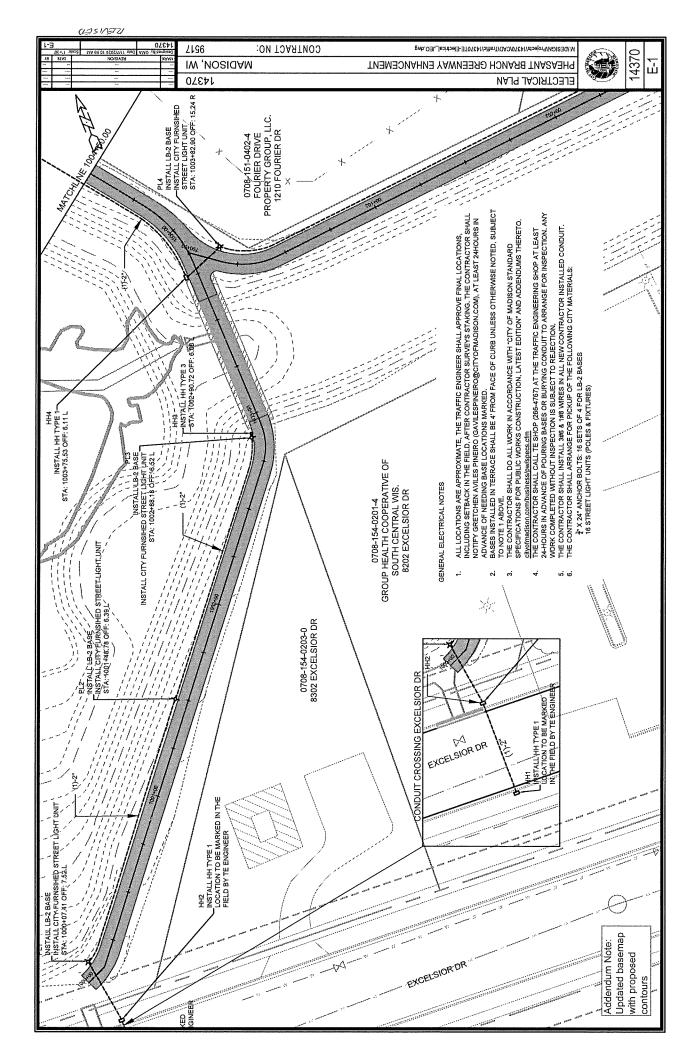


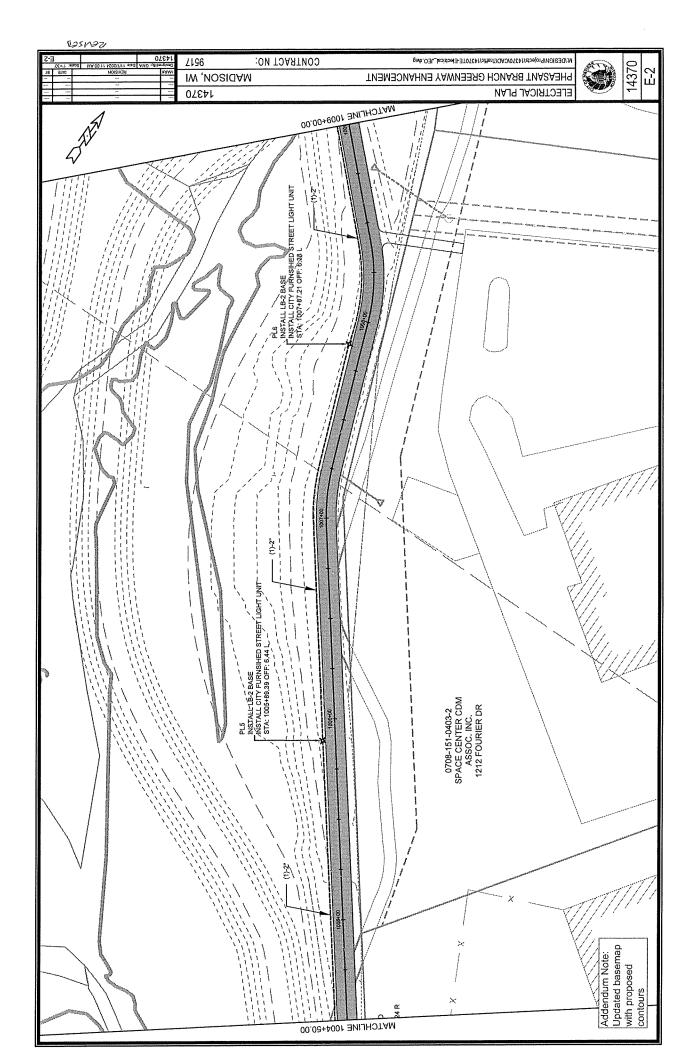


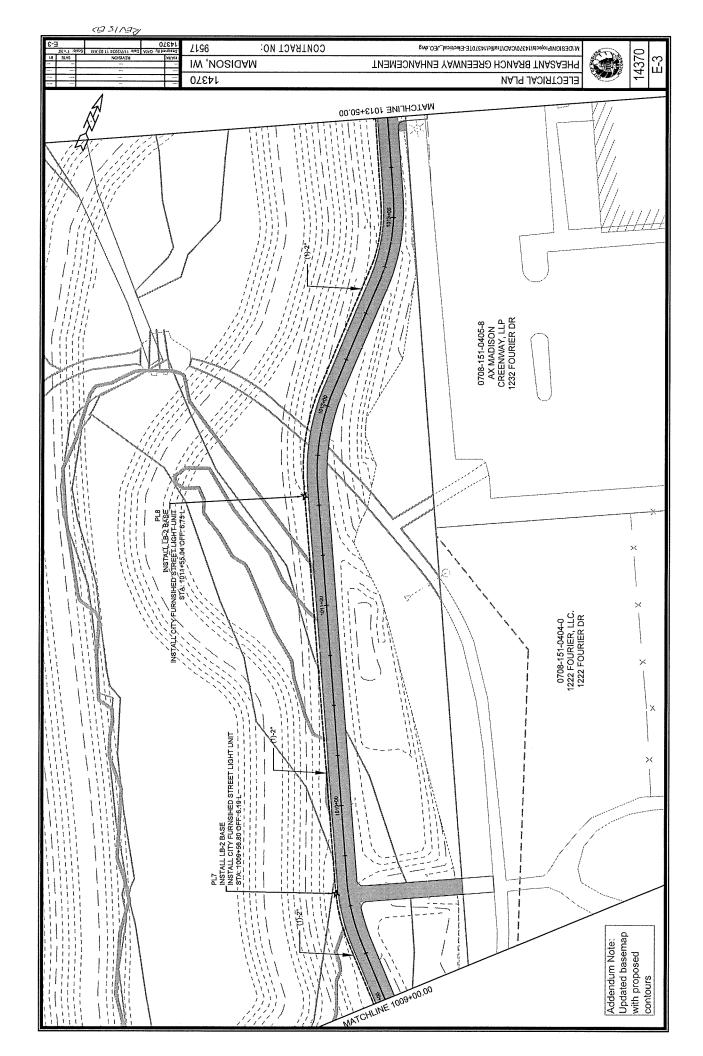


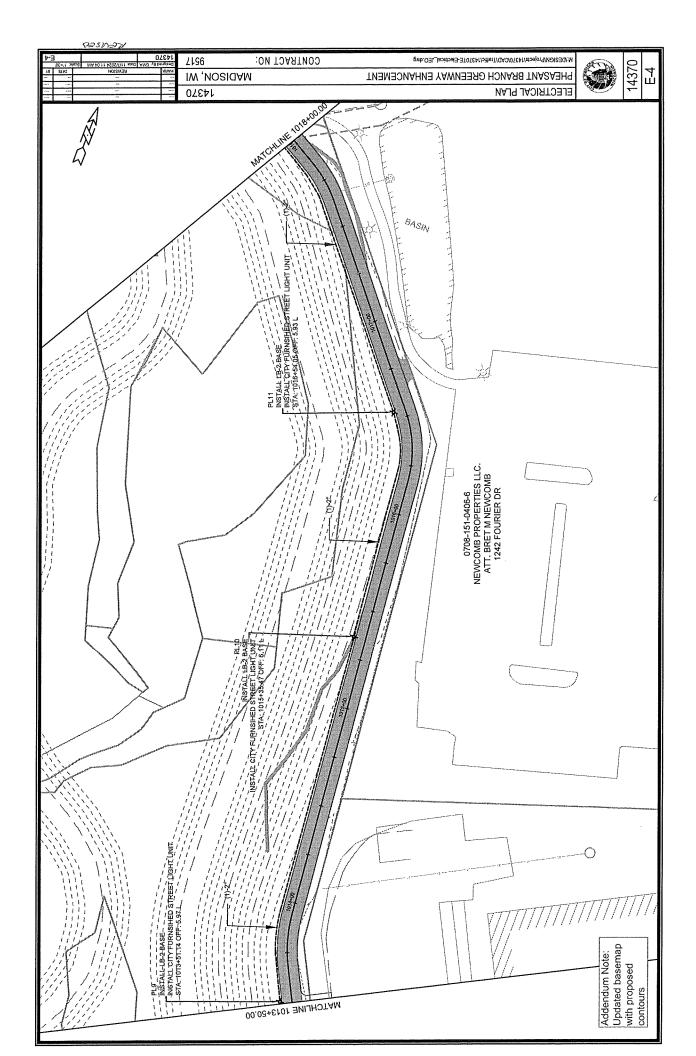


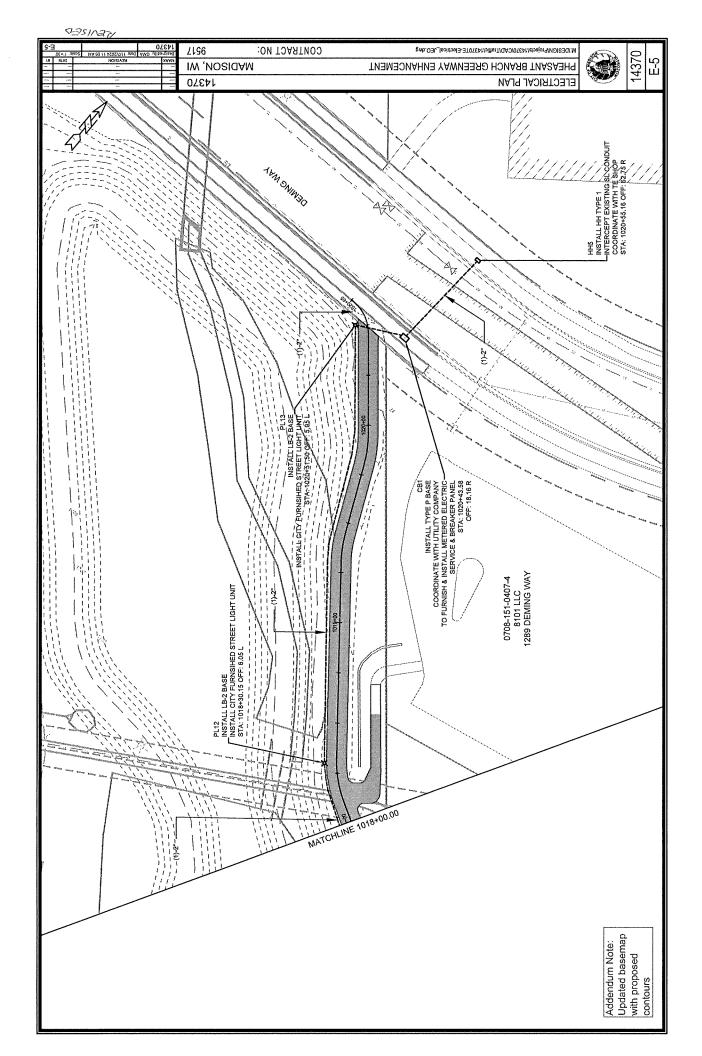
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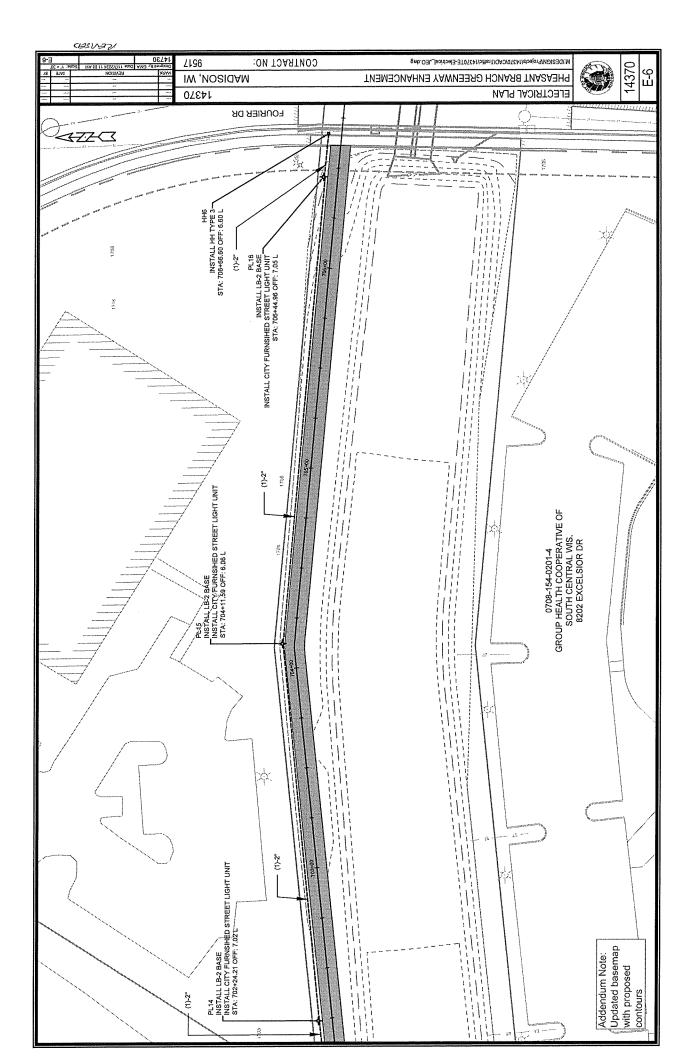


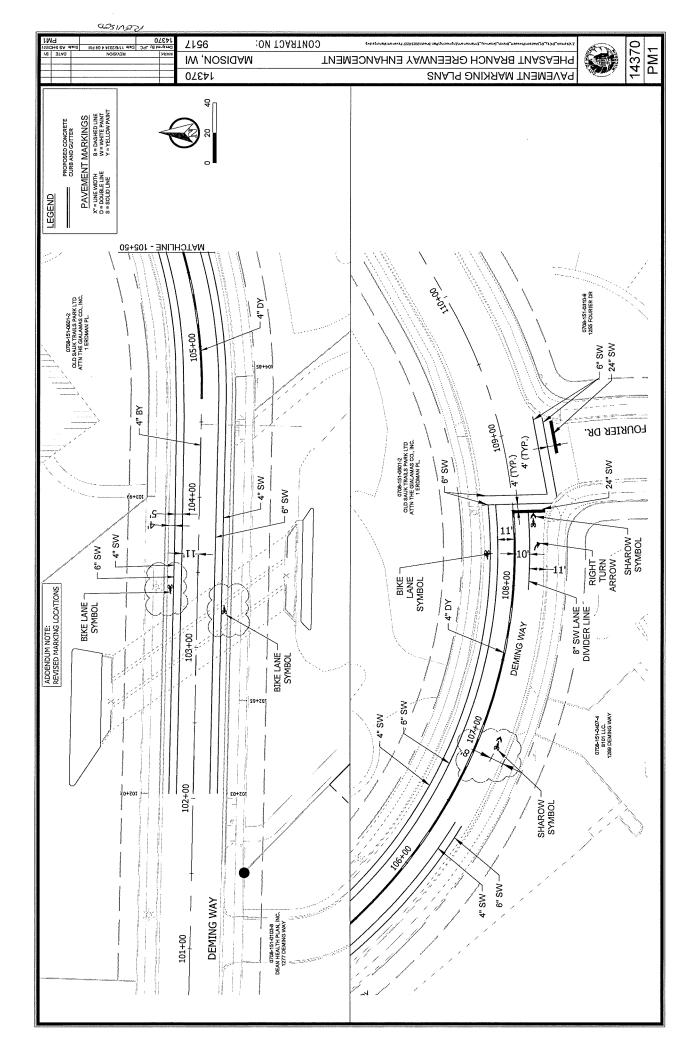


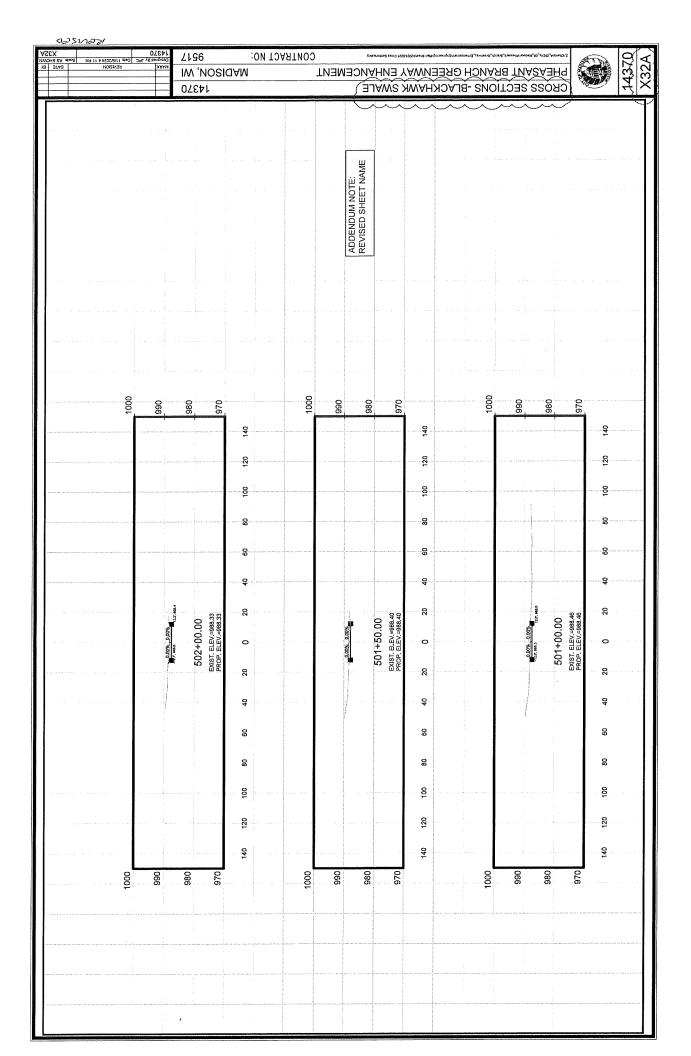


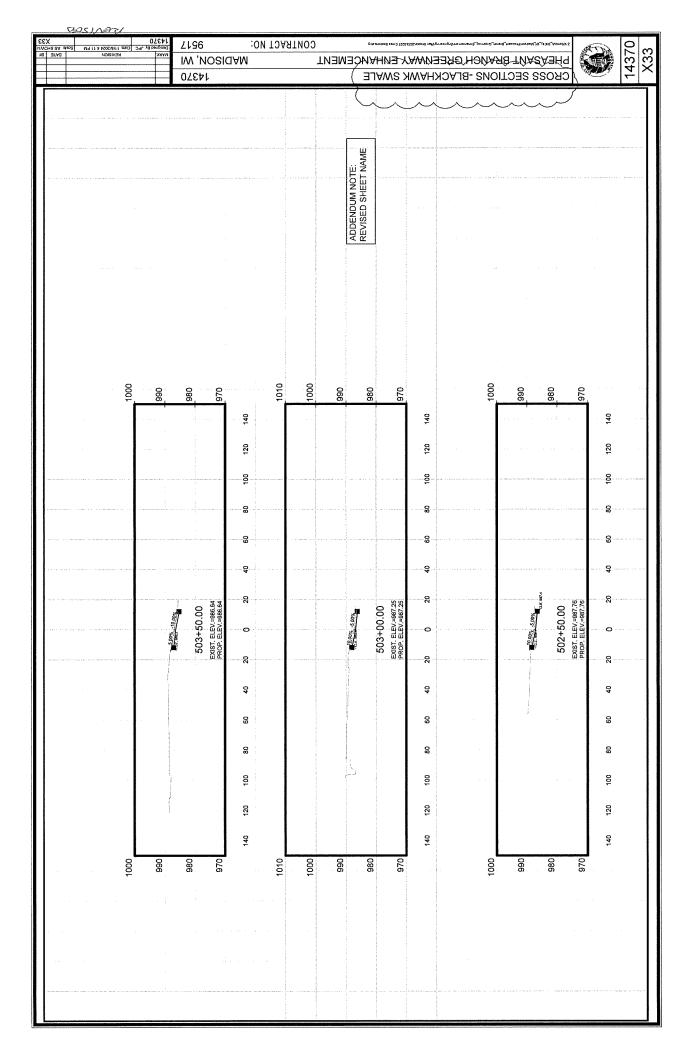


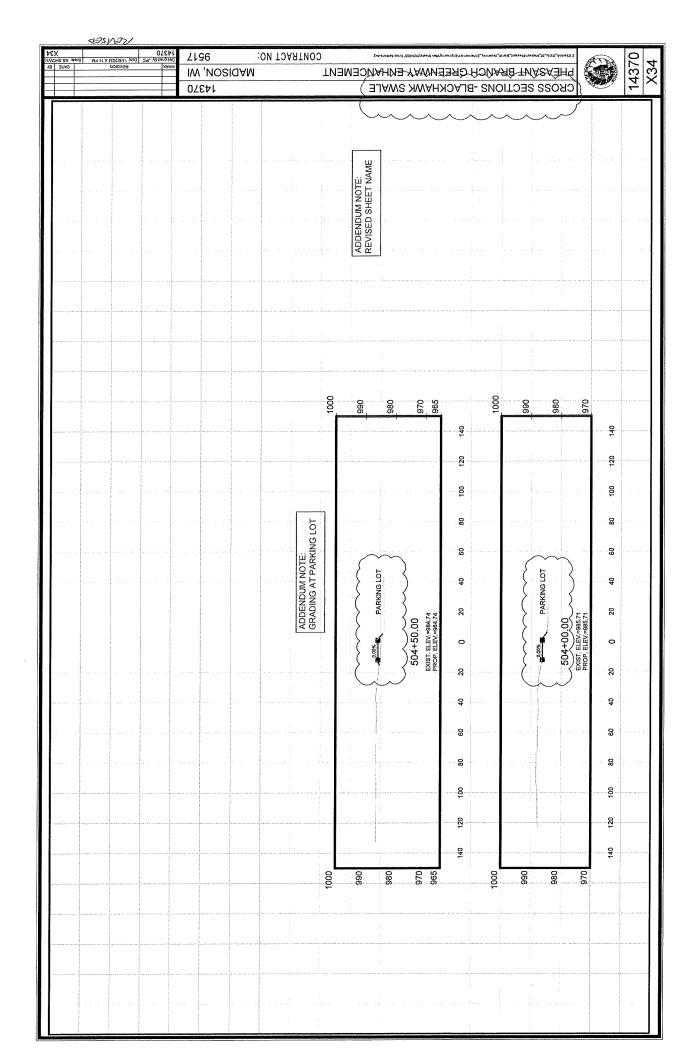


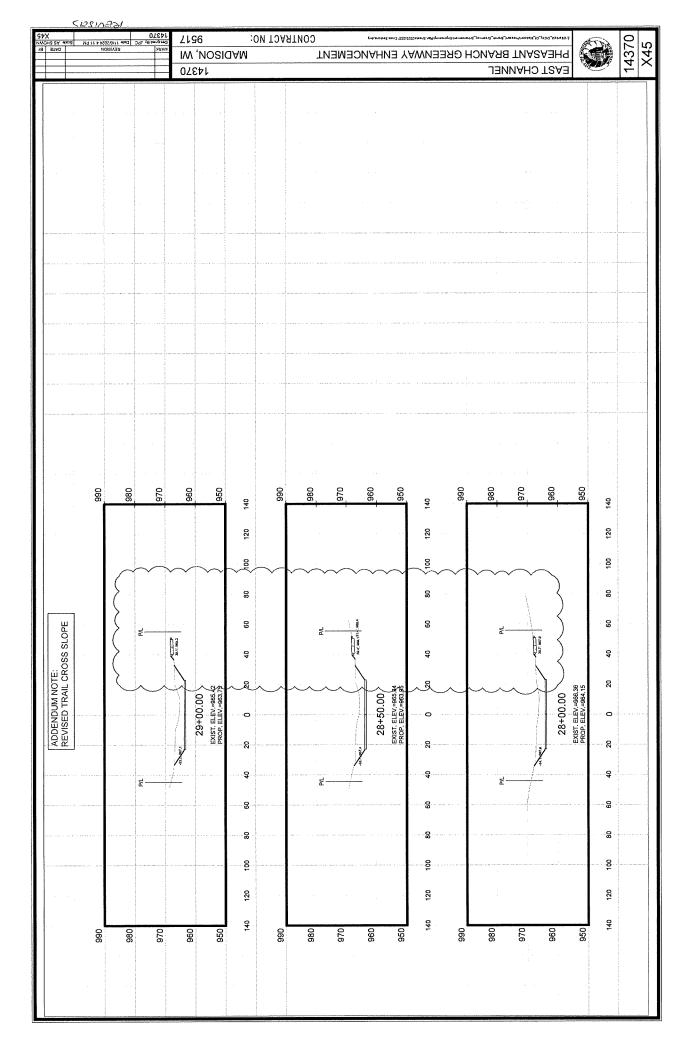




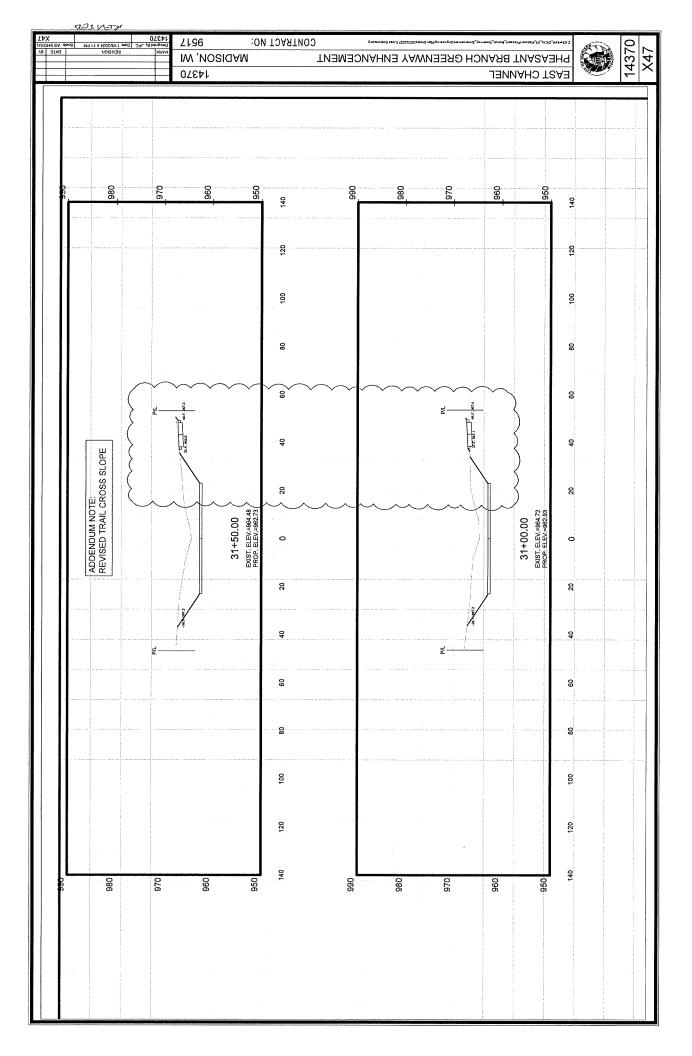




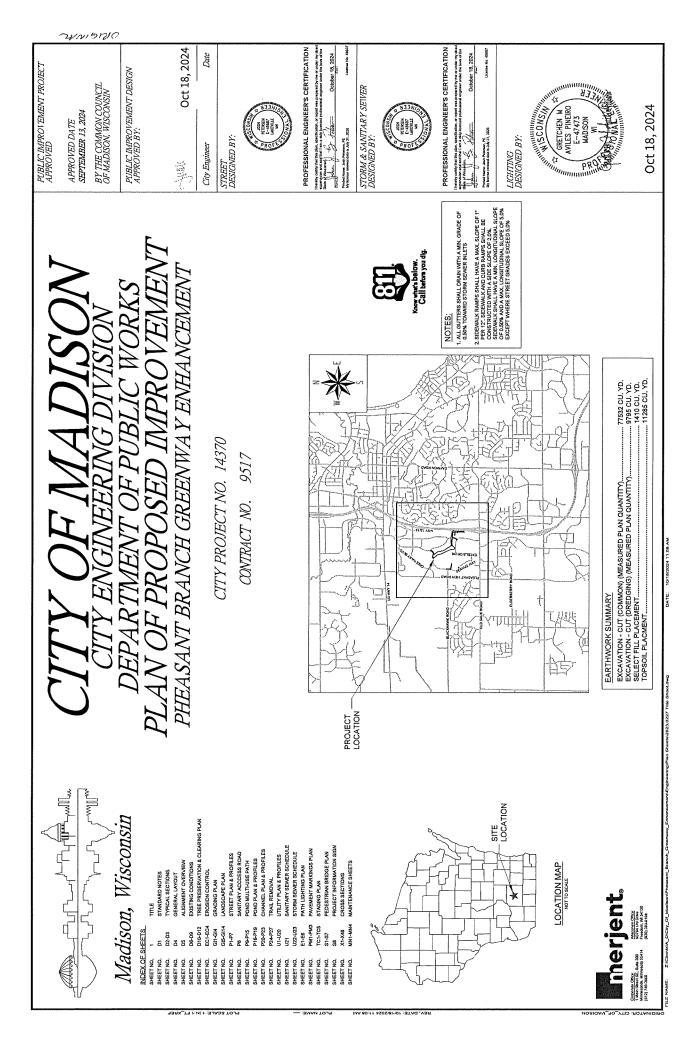




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 UNDERDRANS SHALL BE INSTALLED PER STANDARD DETAIL DRAWING 4.05 FOR 75 ON EACH SIDE OF THE LOW POINT, OR TO THE NEAREST CURB HIGH POINT. ALL UNDERDRAIN SHALL BE WRAPPED.

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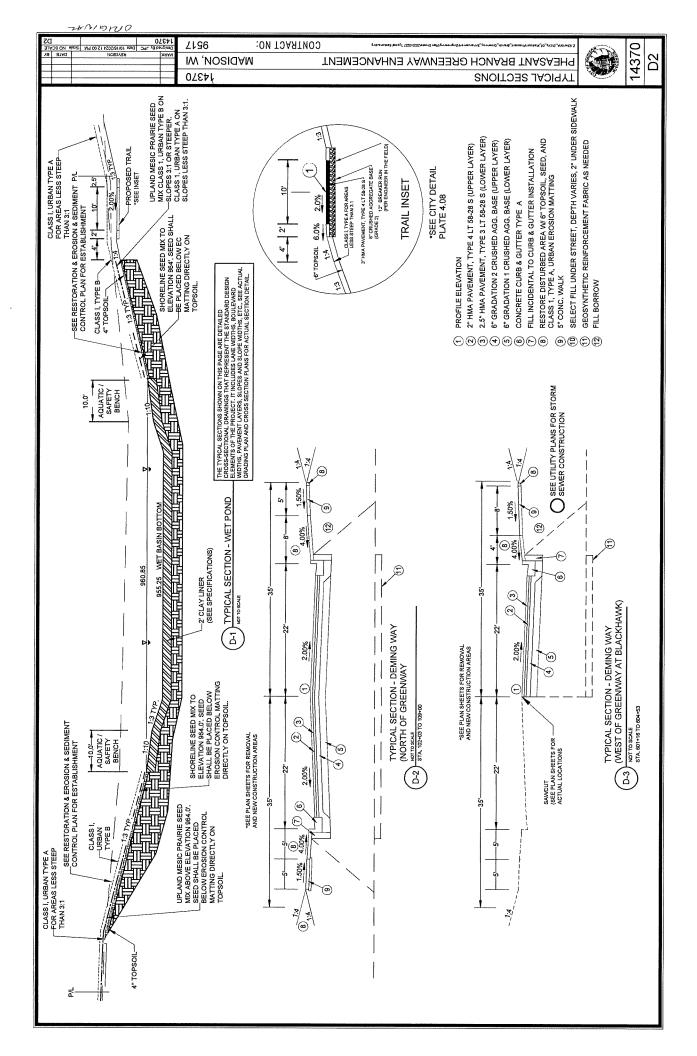
- 2. THE CROSS SLOPE OF SIDEWALKS AND BARRIER FREE SIDEWALK CURB RAMPS SHALL TVPICALLY BE 1.5%. THE LONGTUDINAL GRADE CF BARRIER FREE SIDEWALK CURB RAMPS SHALL ONT EXCEED 8.33%. ALI SIDEWALK RAMPS SHALL BOT EXCERTED ACCORDING TO S.D. 3,04. AT ALI OTHER LOCATIONS THE LONGTUDINAL GRADE CF SIDEWALK SHALL NOT EXCEED 8.3% SLIT BADACKATI STREET GRADE WHO HAVEN TO SHALL BADAT STATU FS TO SUBMALK SHALL NOT EXCEED 8.0% ON THE ADAXOCHT STREET GRADE WHO HAVEN TO SHALL DRAW TO SHALL DRAW TO SHALL DRAW TO SHALL DRAW TOWAND STREMS AND SHALL DRAW TO SHALL DRAW STAULOR STAUDOR STAUDOR SHALL DRAW TO SHALL DRAW SHALL DRAW TO SH
- 3. ALL CURB RAMPS AND DRIVEWAY CONCRETE TO BE 7" DEPTH.
- ALL PERMANENT SIGNING AND POSTING WILL BE DETERMINED AND PROVIDED BY THE TRAFFIC ENGINEERING DIVISION, FOLLOWING CONSTRUCTION OF THESE IMPROVEMENTS.
- 5. PAVEMENT SAWCUTS SHALL BE AS DIRECTED BY THE CITY CONSTRUCTION ENGINEER. SAWCUTS SHOWN ON THE PLAN ARE APPROXIMATE.
 - 6. THE CONTRACTOR SHALL VERIFY ALL FIELD CONDITIONS PRIOR TO WORK COMMENCING.
- 7. CONTRACTOR SHALL CONTACT UTILITY LOCATION SERVICES 5 DAYS PRIOR TO STARTING WORK
- PRIVATE UTILITIES SHOWN IN PLAN SET HAVE VARYING LEVELS OF ACCURACY. UTILITIES SHOWN ARE DEVELOPED FROM UTILITY MAY MARKUUPS. & FIELD SURVEY DATA, CONTRACTOR TO VERIEY PRIVATE UTILITY LOCATIONS PRIOR TO CONSTRUCTION.
- PRIOR TO CONSTRUCTION. 9. STOP WORK IF ENCOUNTERING ANY SUBSURFACE LATENT CONDITIONS, PIPE LINE BREAKS, DAMAGED UTILITIES,
 - STOP WORK IF ENCOUNTERING ANY SUBSURFACE LATENT CONDITIONS, PIPE LINE BREAKS, DAMAGED UTILITIES, OR OTHER UNKNOWN OR UNFORESEN INFRASTRUCTURE DAMAGE.
 ANY PRODUCT SPECIFIED SHOULD COMPLY WITH MANUFACTURERS RECOMMENDATIONS AND REQUIREMENTS
 - ANY PRODUCT SPECIFIED SHOULD COMPLY WITH MANUFACTURERS RECOMMENDATIONS AND REQUIREMENTS AND COMPLY WITH MANUFACTURERS INSTALLATION PROCEDURES.
 THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING EROSION CONTROL PROTECTION DURING
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING EROSION CONTROL PROTECTION DURING CONSTRUCTION AS WELL AS PROVIDING PROTECTION TO ADJOINING STREETS FROM POLUTED RUNOFF AS WELL AS REFINED RSITING PAREMENT CLEAN OF MUD AND DEBRIS. PAVEMENT SWEEPING OF CITY ROADS SHALL BE PERFORMED AS NECESSARY.
- 12. CONTRACTORS SHALL BE RESONSIBLE FOR INSTALLATION AND MAINTENANCE OF TEMPORARY SIGNS, BRIDGES, BARRIADES, FLAGSING PERSONNEL, AND OTHER FACILITIES TO ADEQUATELY SAELARD THE EXERVATURE THE EXERVATURE AND WORK, AND TO FERSONNEL, AND OTHER FACILITIES TO ADECUATELY SAED SUBJECT SAED.

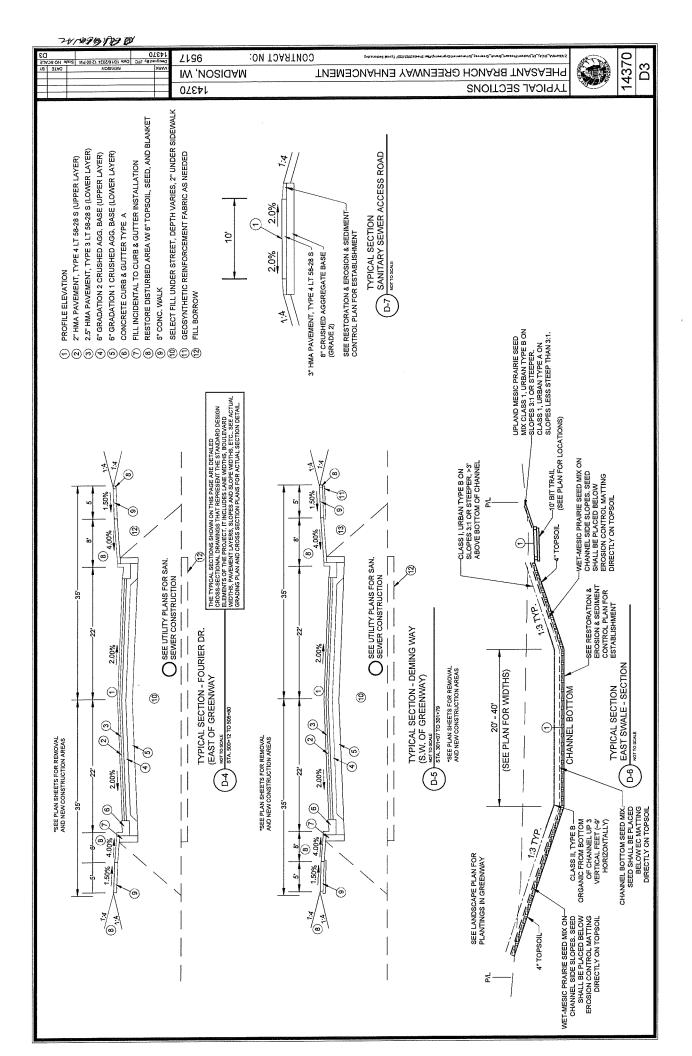
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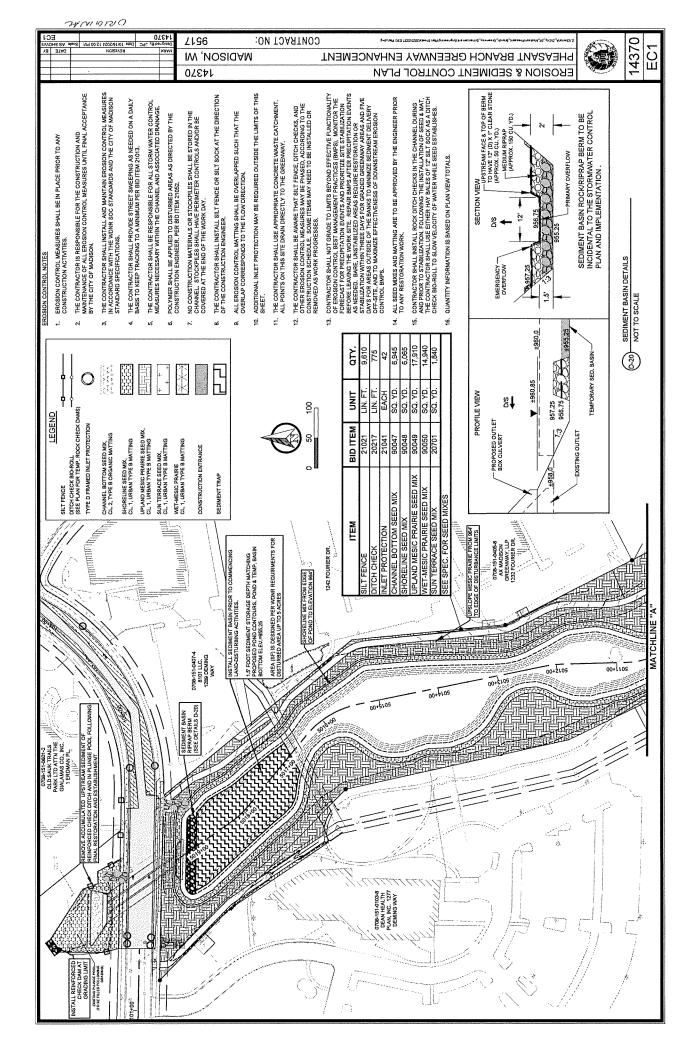
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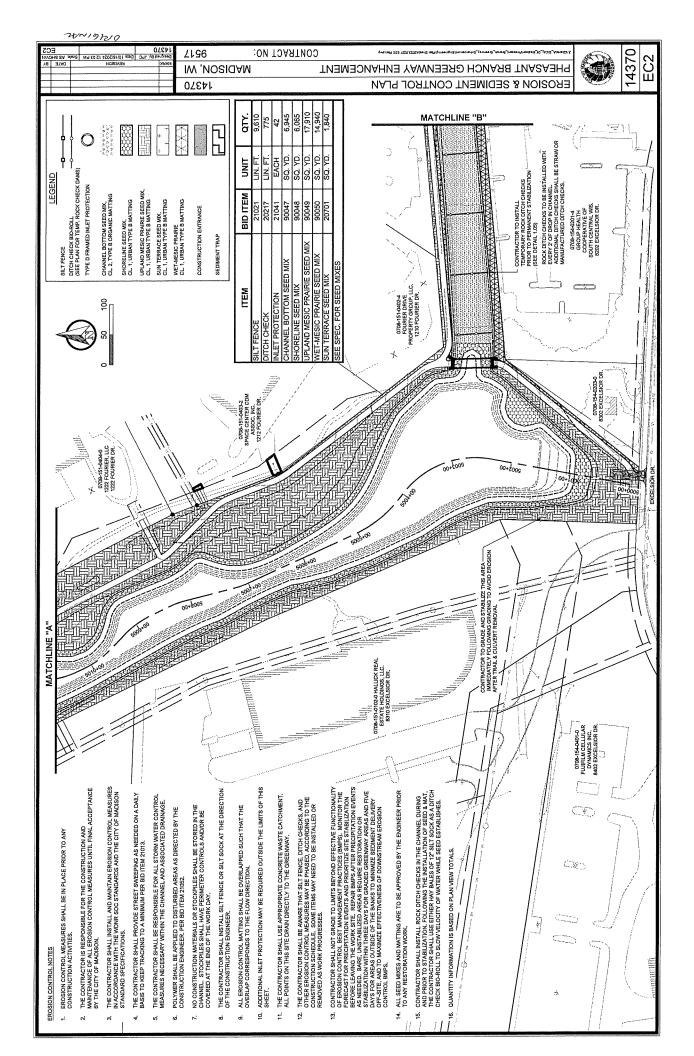
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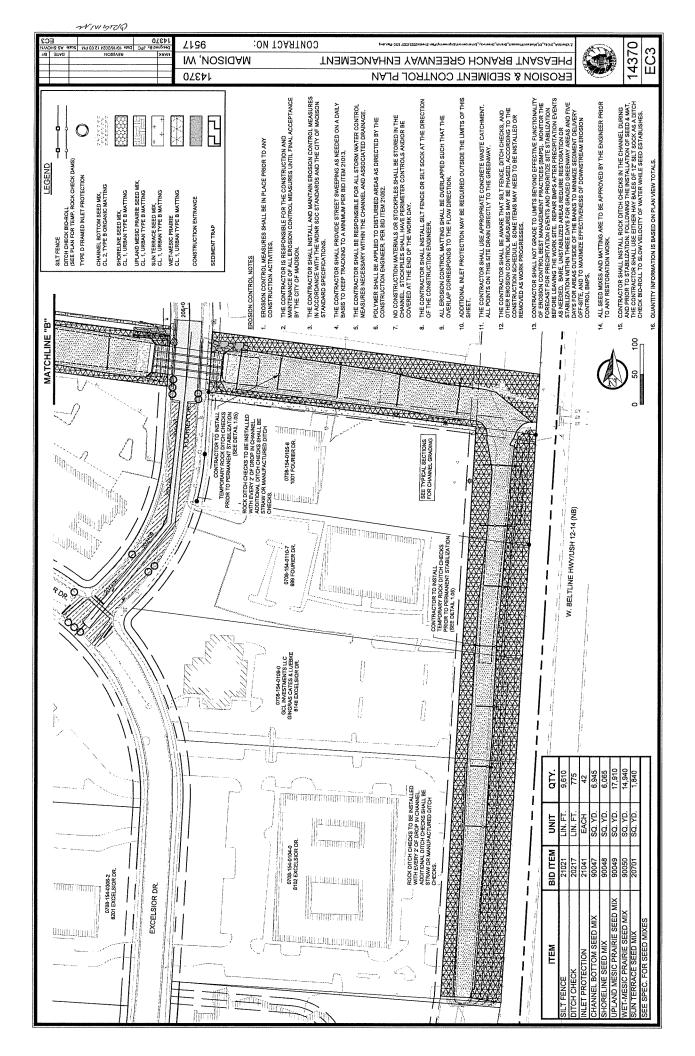
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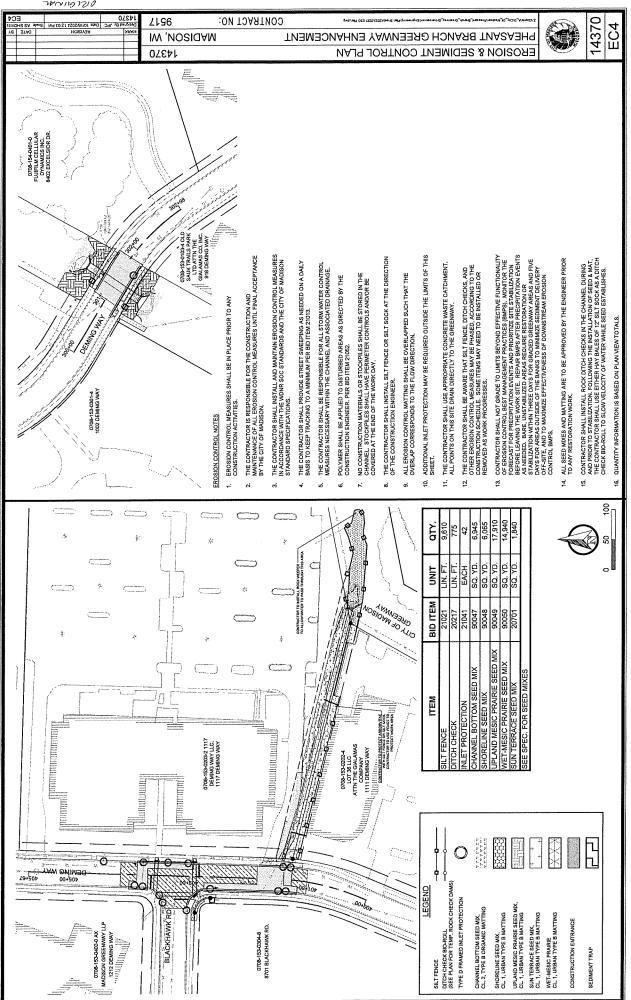


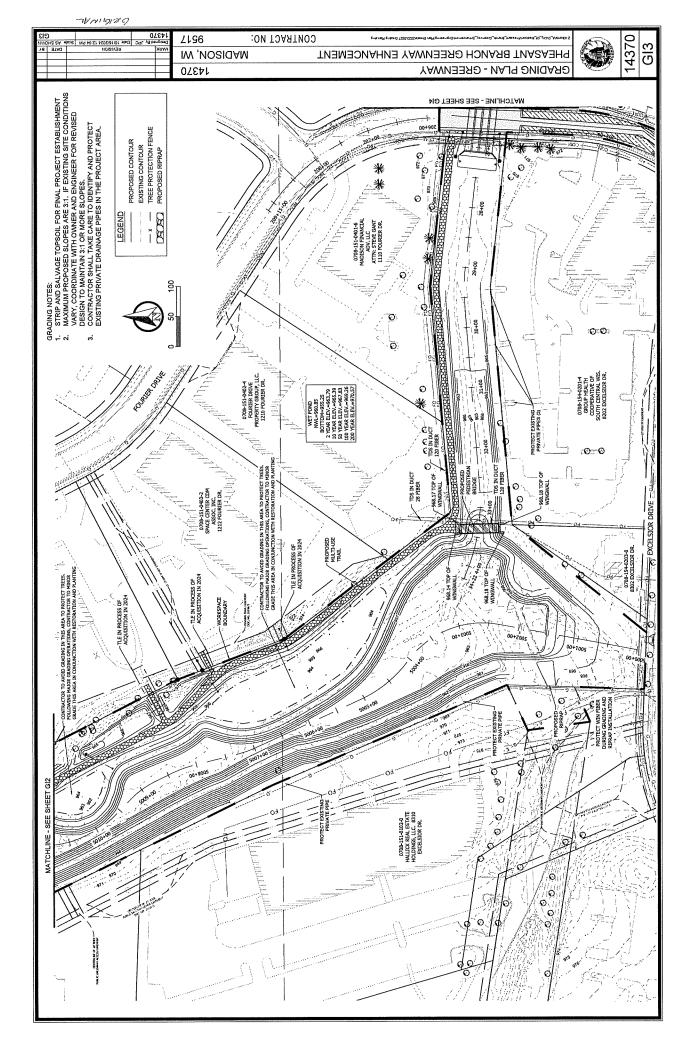






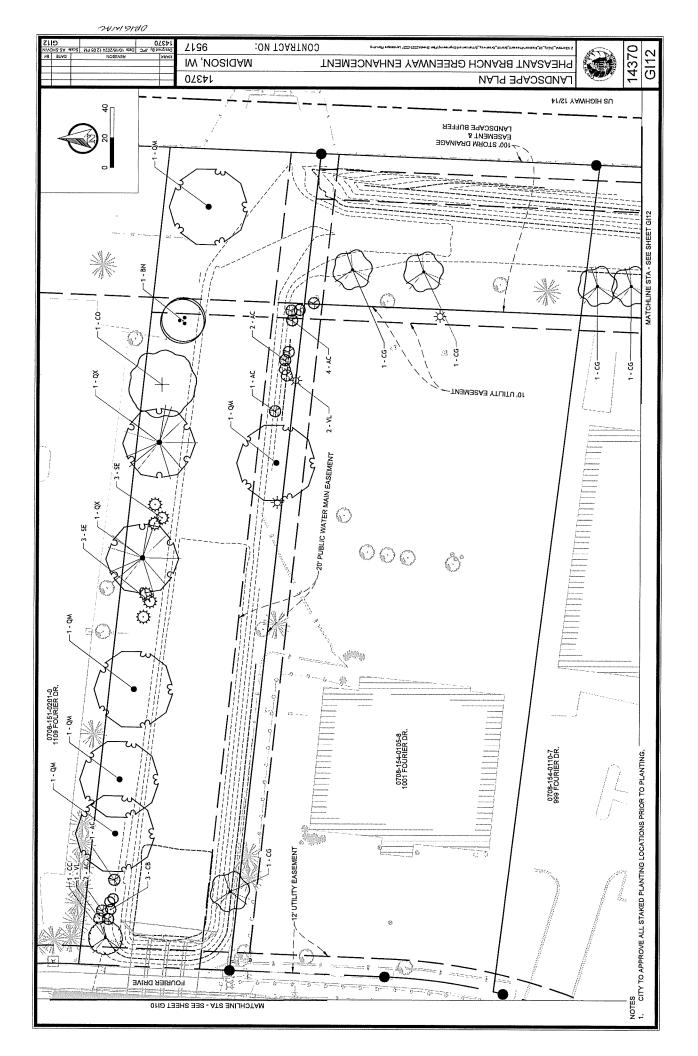


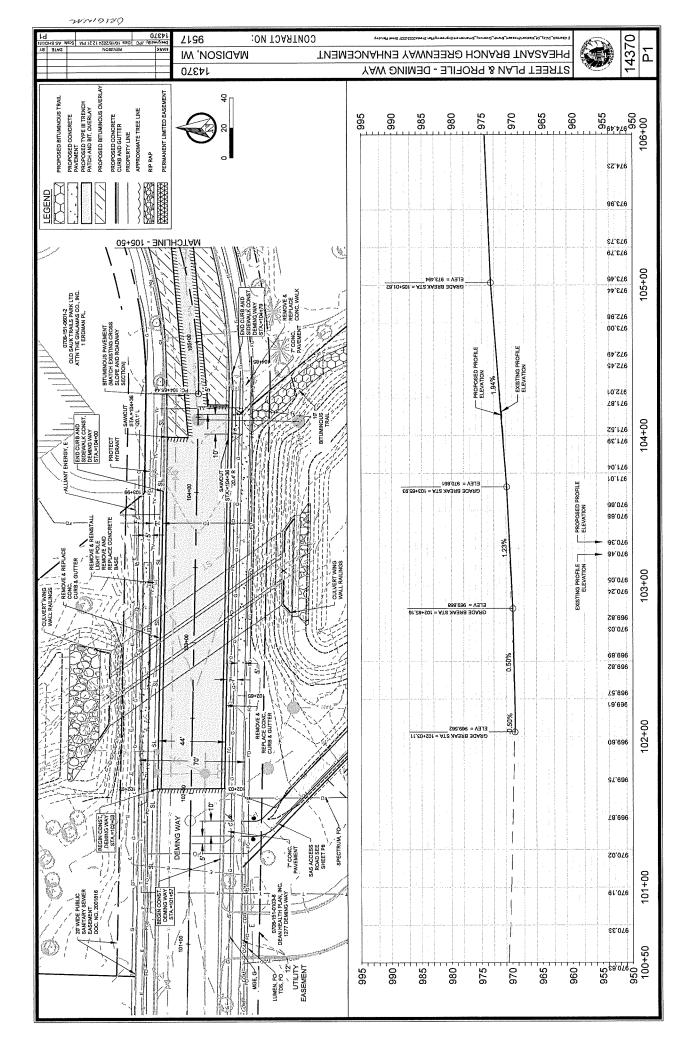


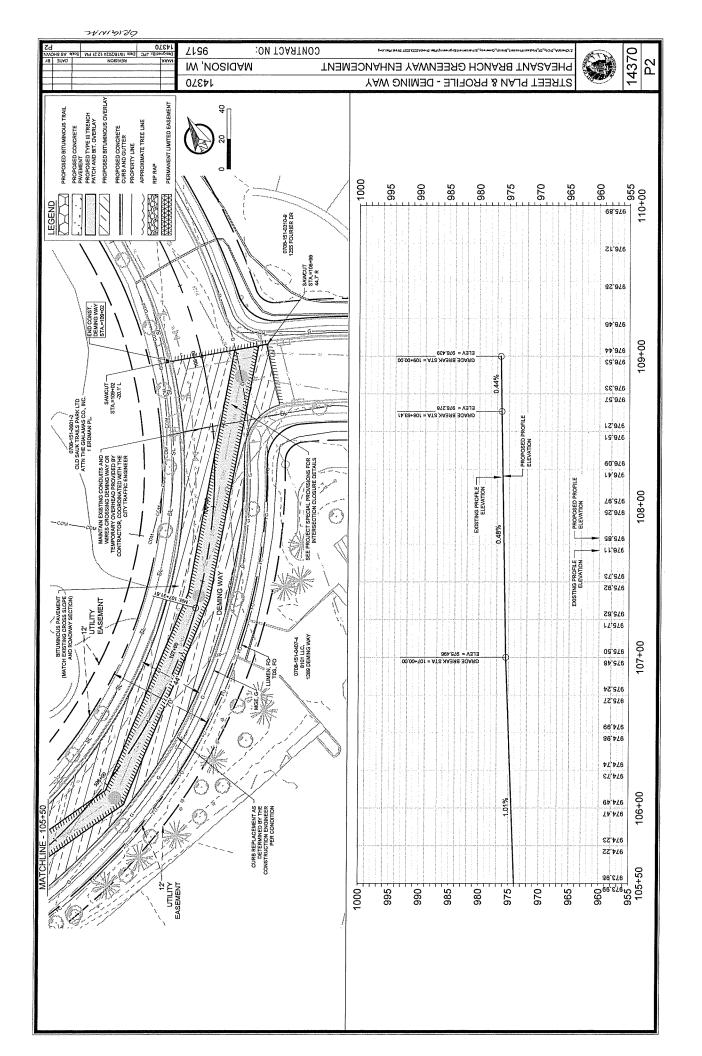


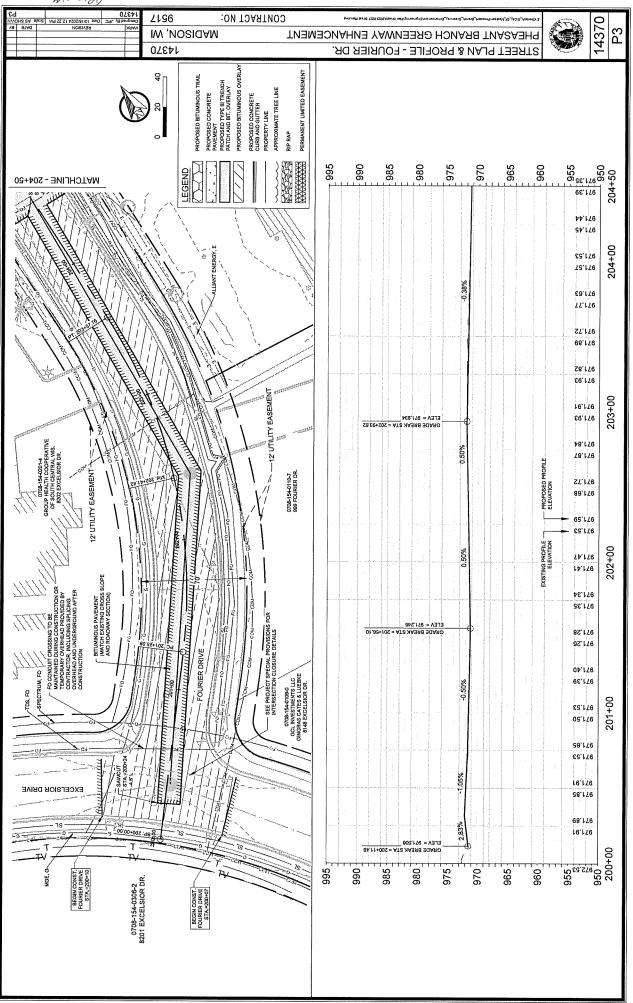
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MON NA	onsis / Sh	Birch Mult	a / Amoric	bark Hicke	Bitternut H	li / Thornko	Quercus macrocarpa / Bur Oak	Quercus x schuetti / Swamp Bur Oak	a / Black C	fortațis / A	Comptonia perogrina / Sweet Fern	/ American	oth Rose	omA / sist	Umerican E	Vibumum jenage / Nannyberry Vibumum prunifollum / Blackhav		Ł								NS PRI
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EBOTANIC	Amelanch	Botula nigra / Rivor Birch Multi-Trunk	Carpinus	Carya ovata / Shagbark Hickory	Carya cordiformis / Bitternut Hickory	Crataegu	Quercus I	Quercus	Aronia m	Cephalan	Compton	Corylus a	Rosa blar	Sambucu	Staphylos	winnindin Vilbumum		L.L.							(NG LO
PLANT SCHEDULE SYMBOL CODE BOTANICAL/COMMON NAME	AC	R	ដ	8	C	8	MQ	ă	W				82	8		2 B									Notes	PLANT
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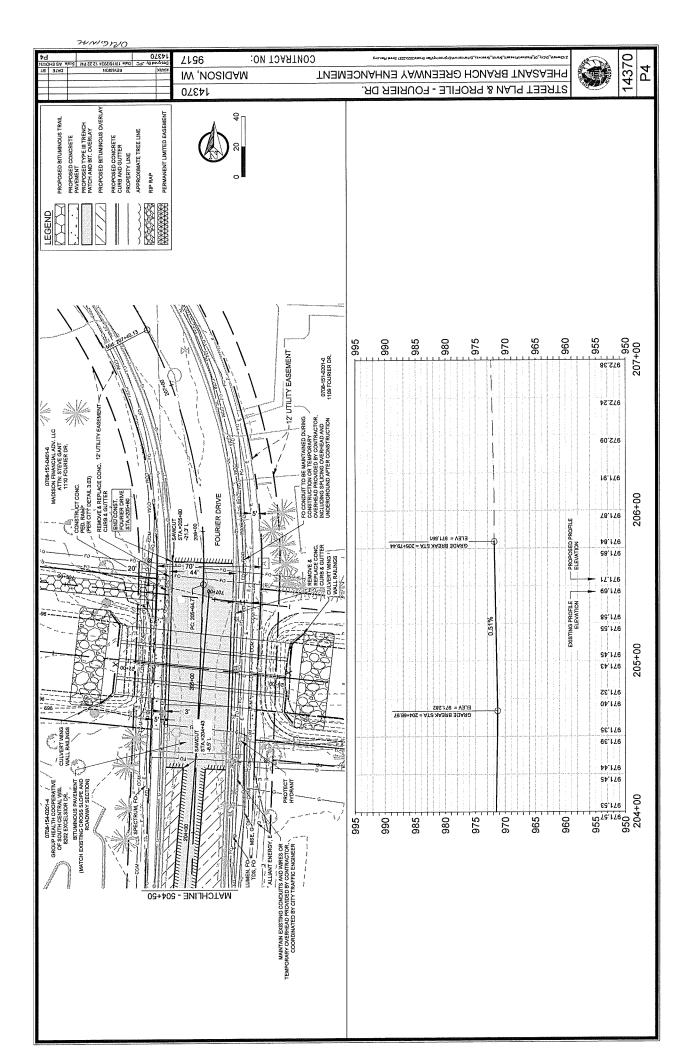


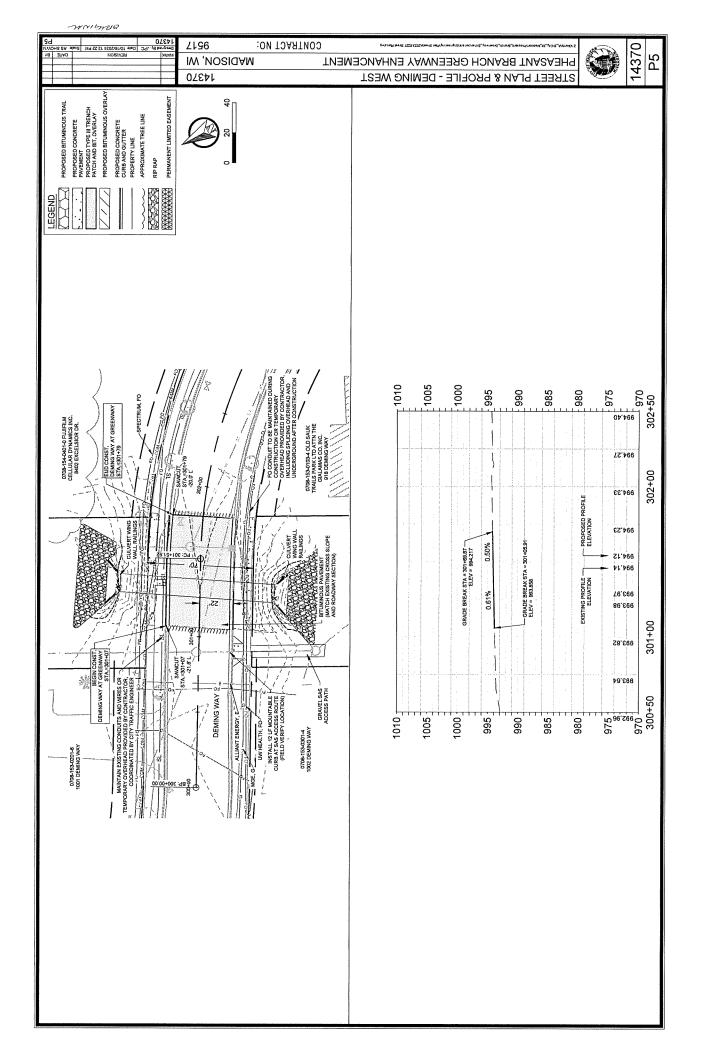


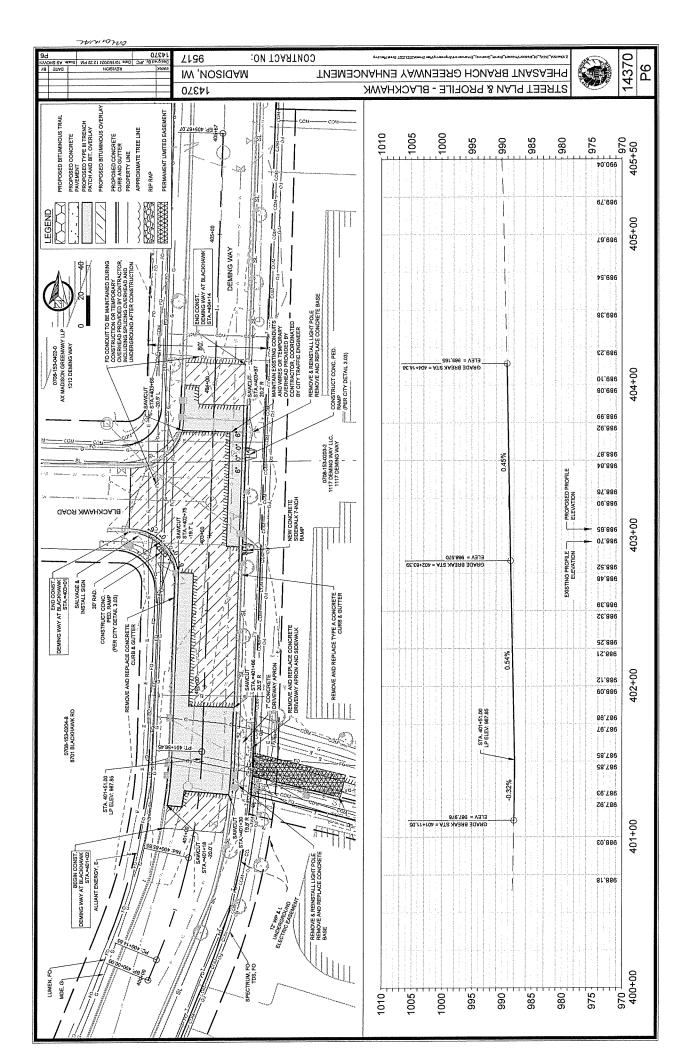


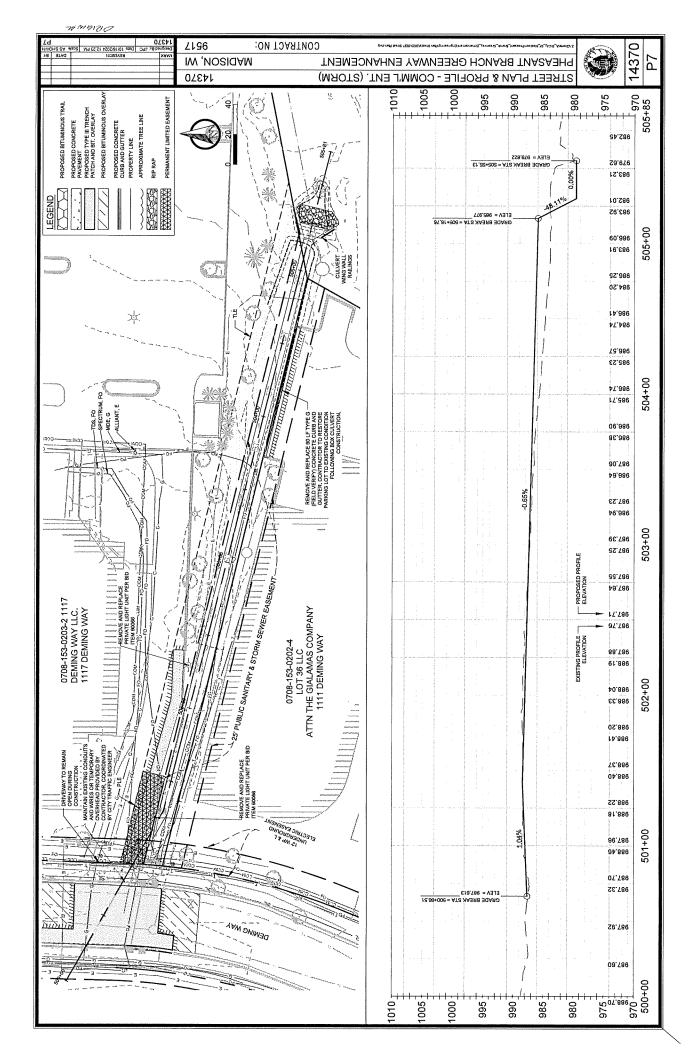


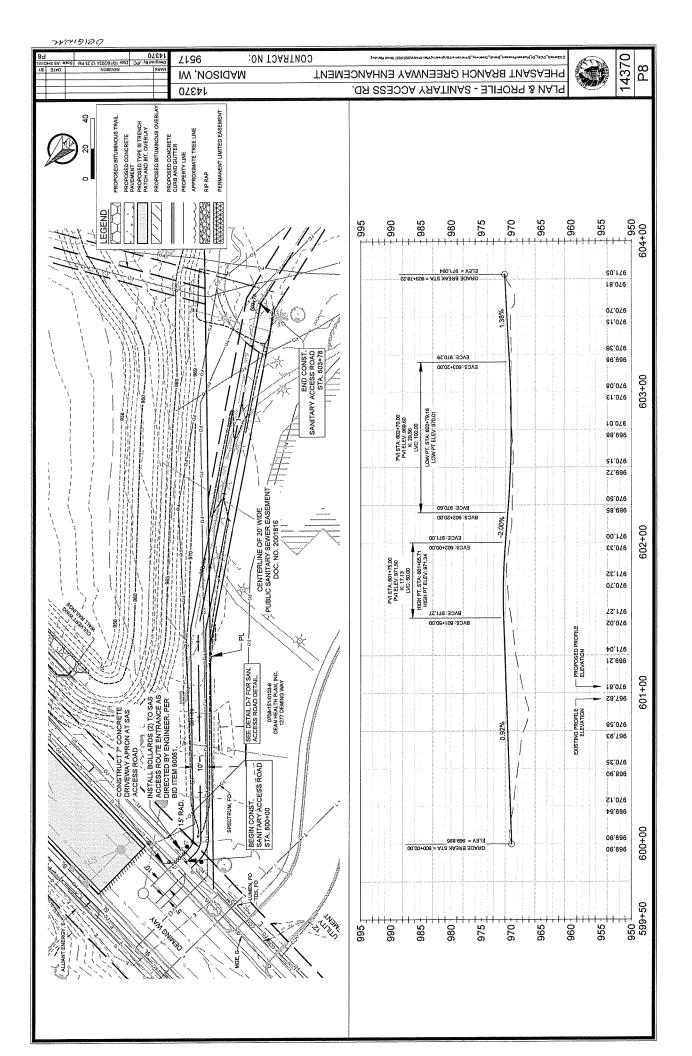
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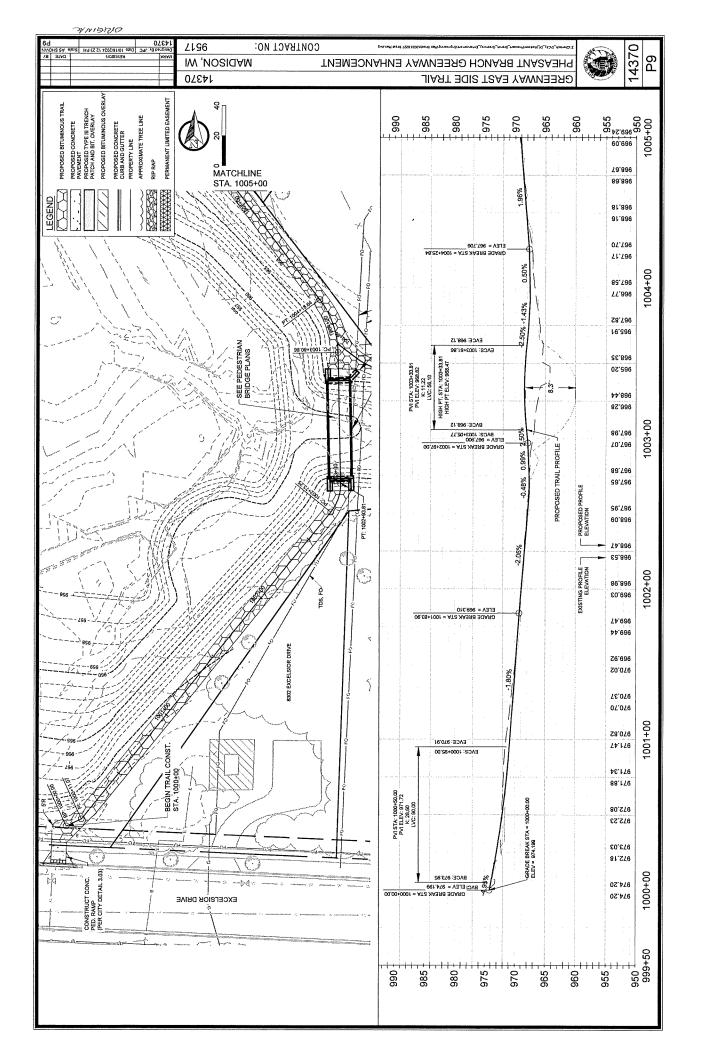


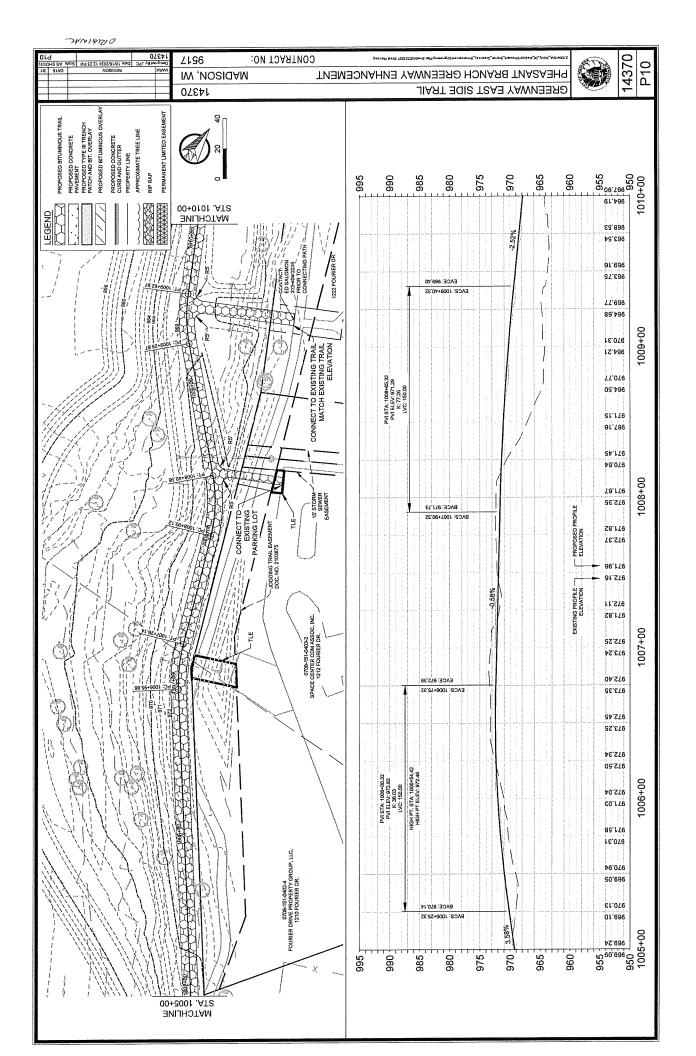


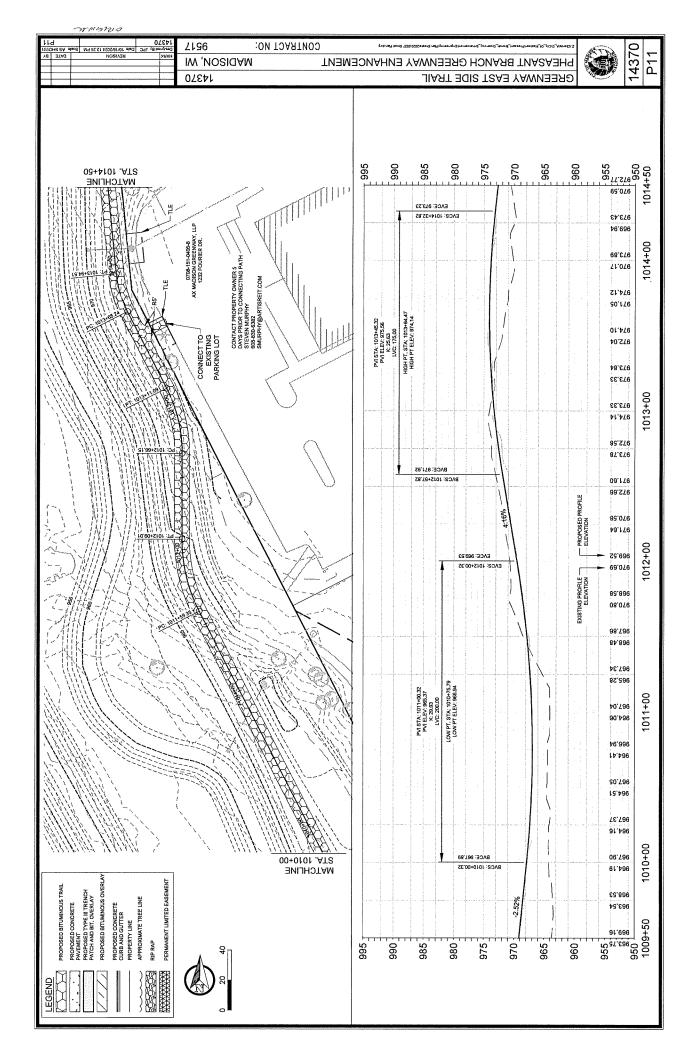


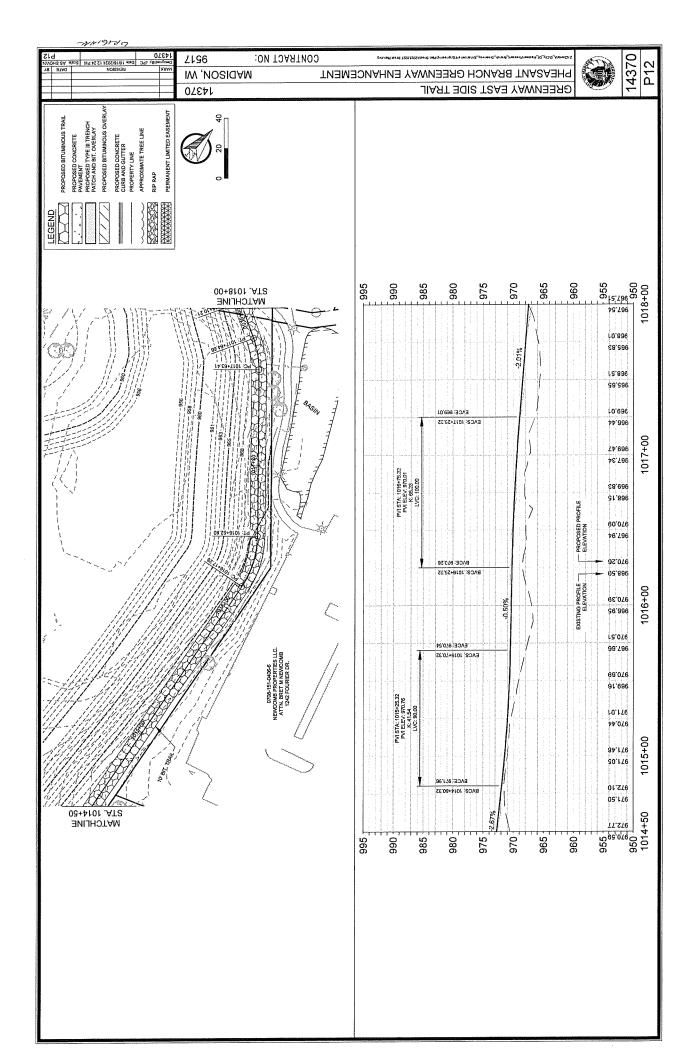


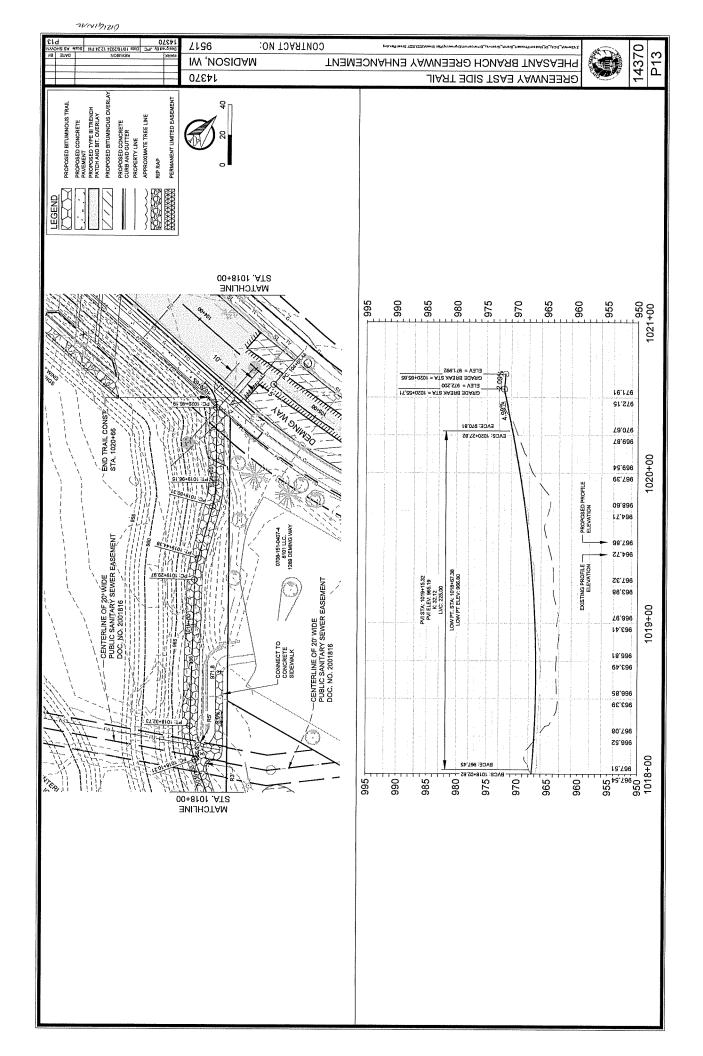


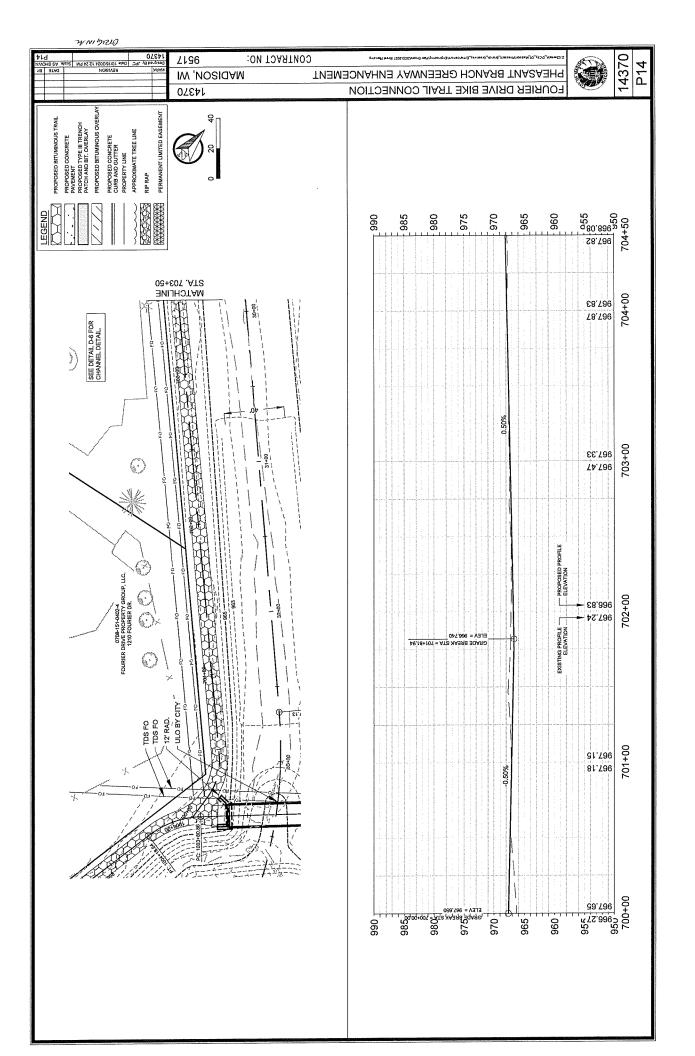


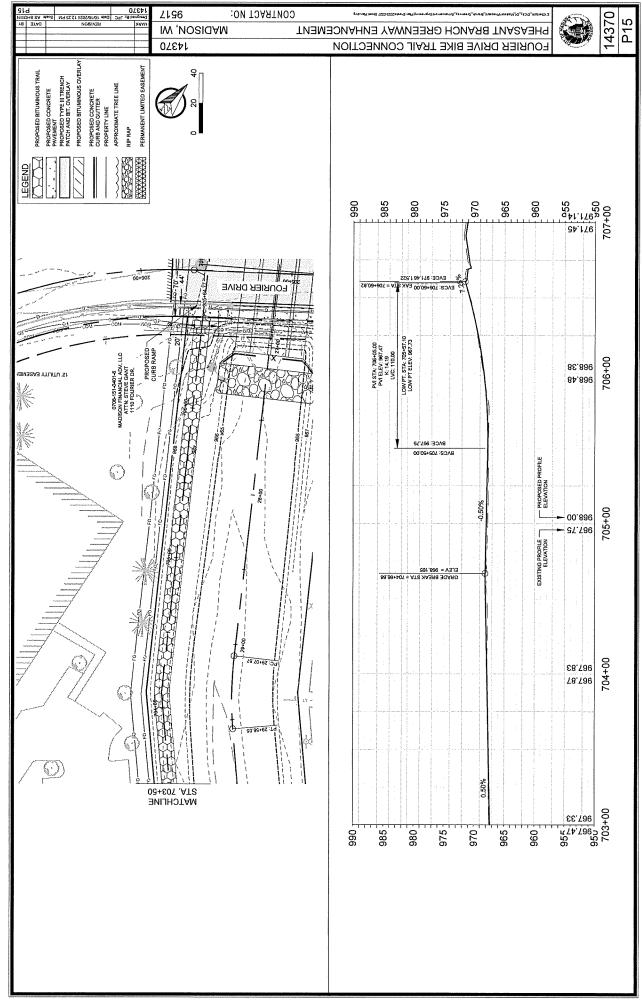




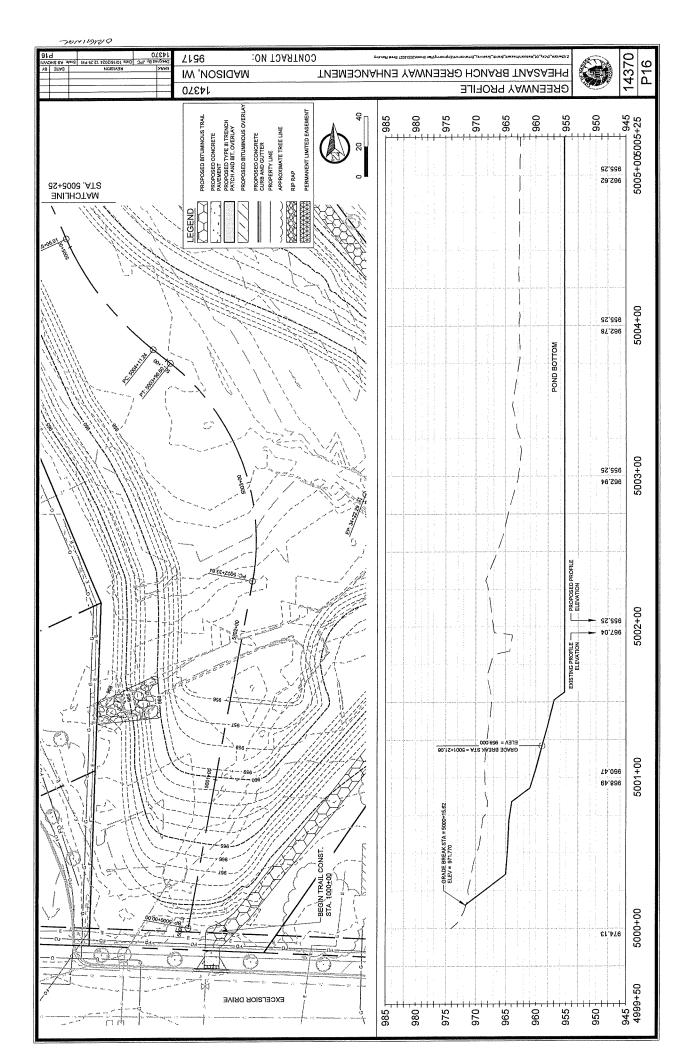


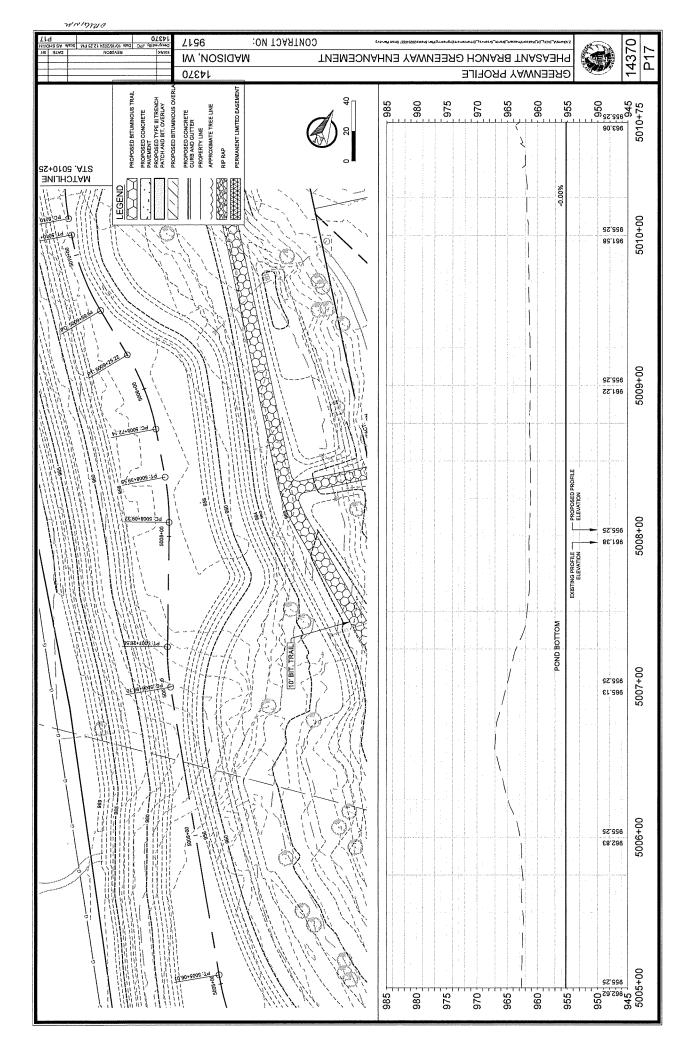


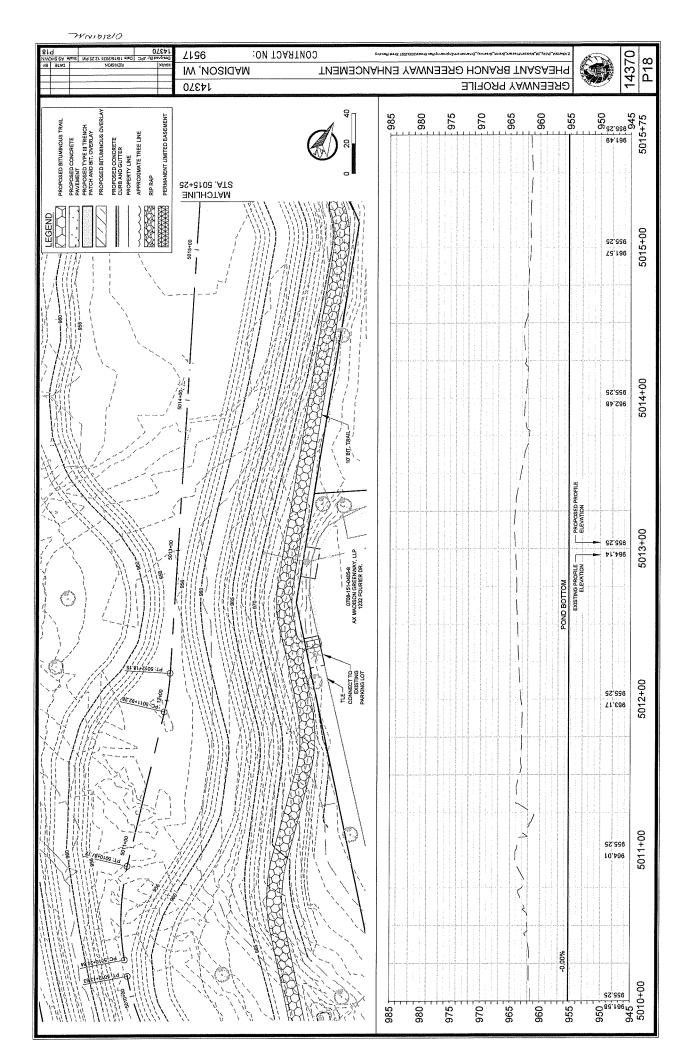


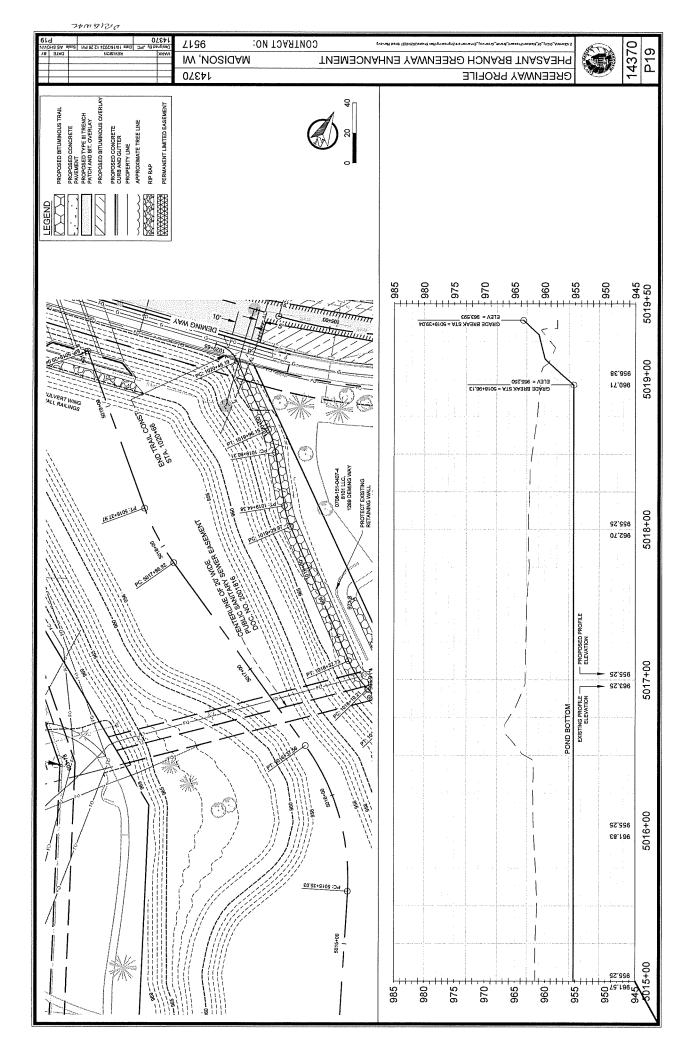


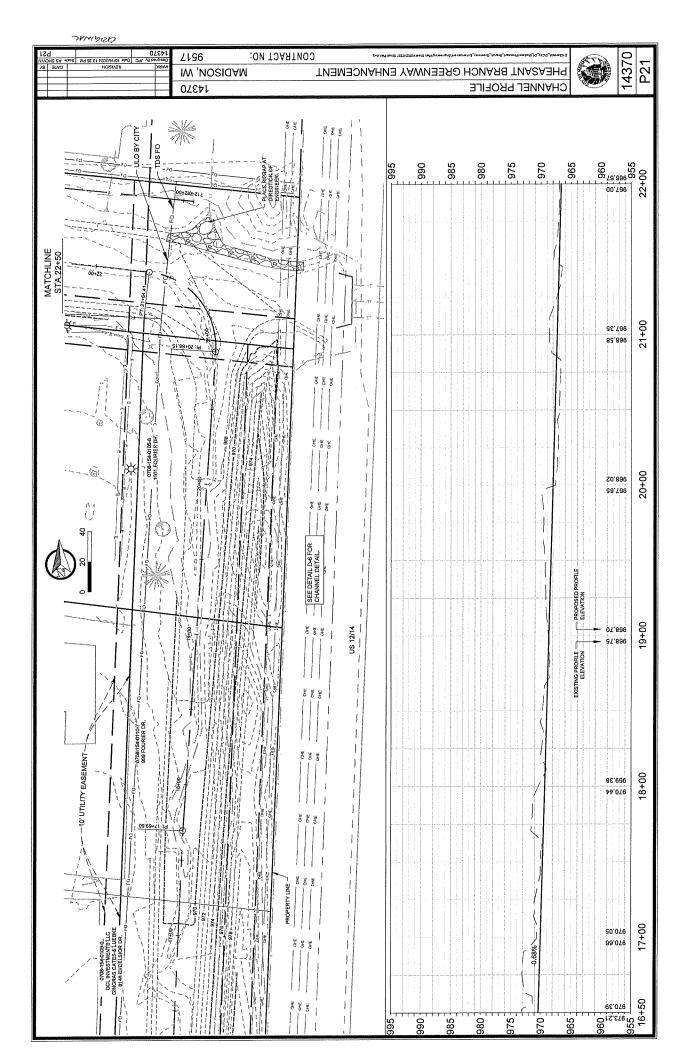
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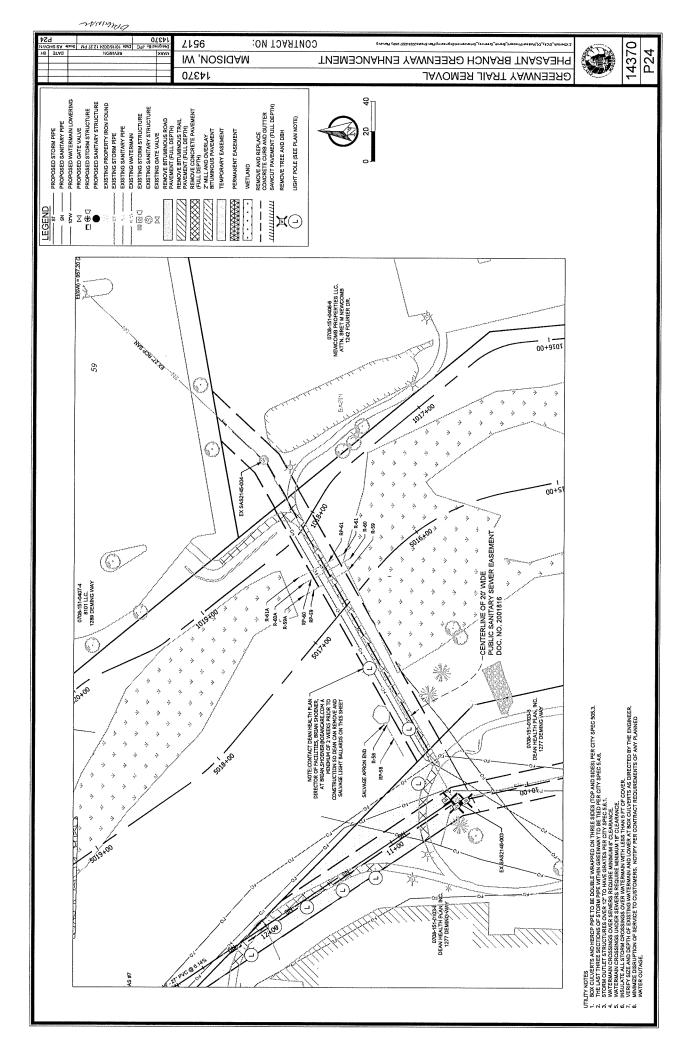


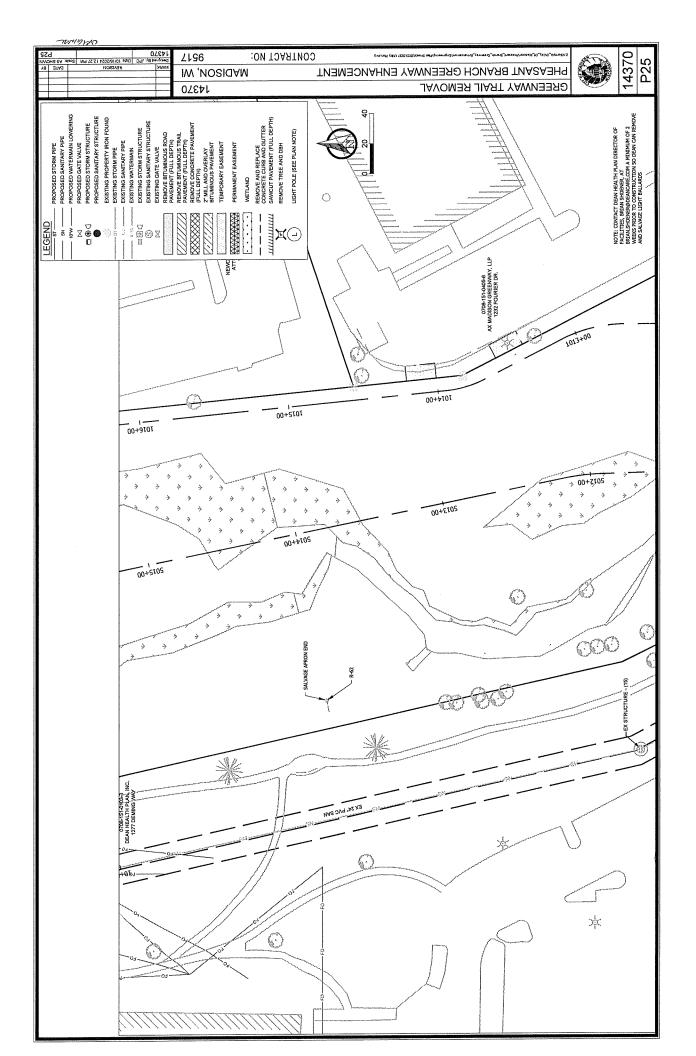


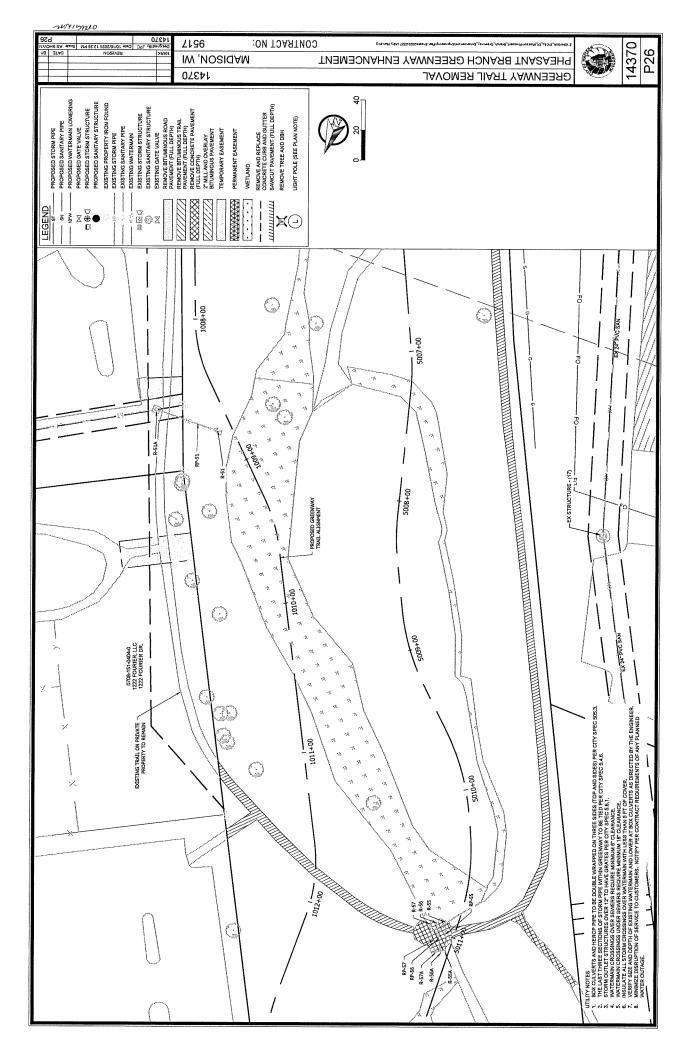


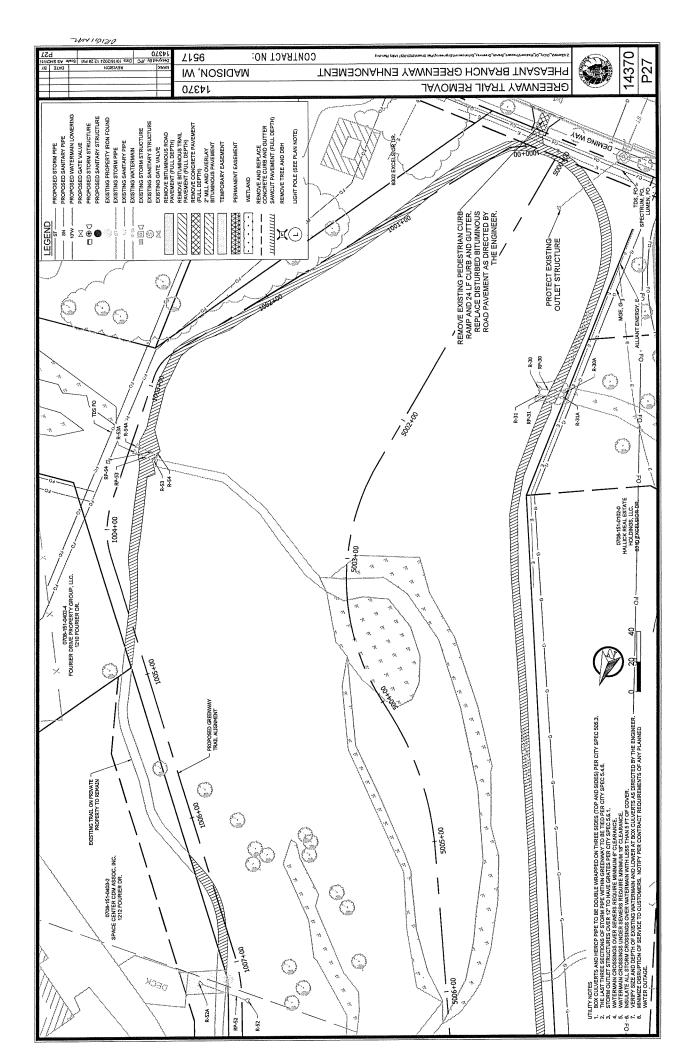


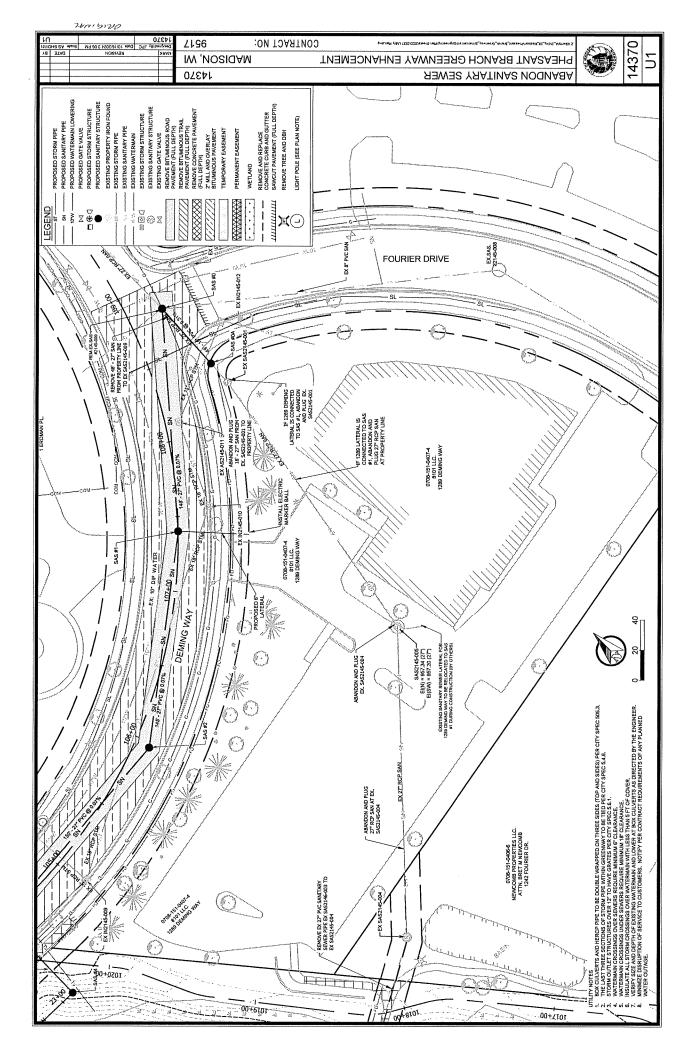


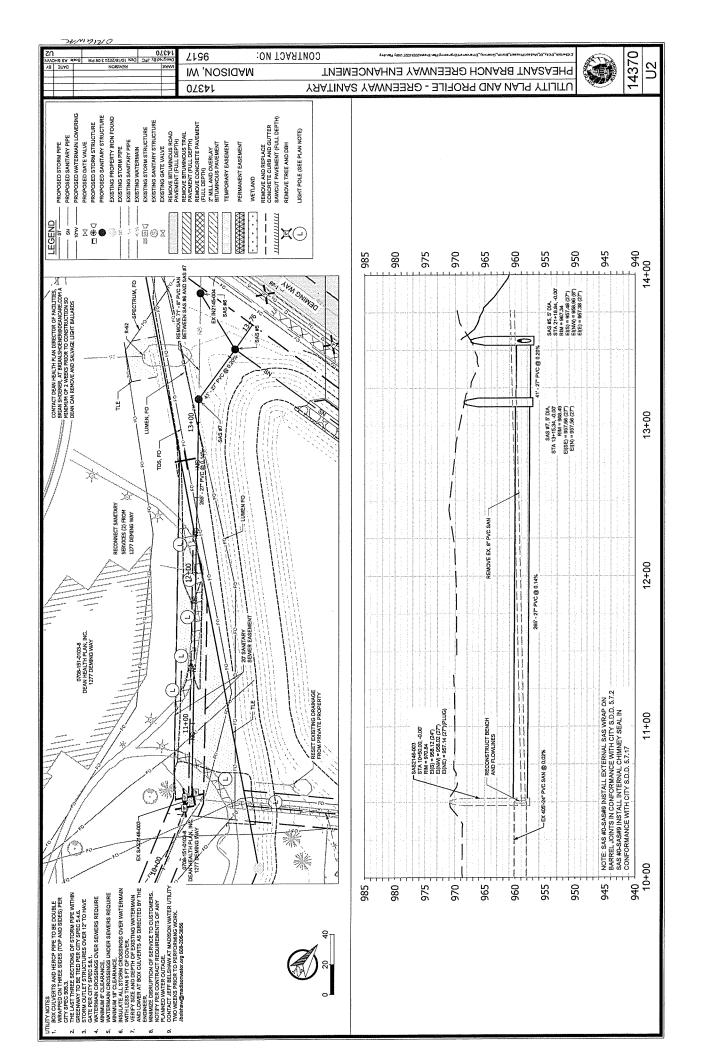


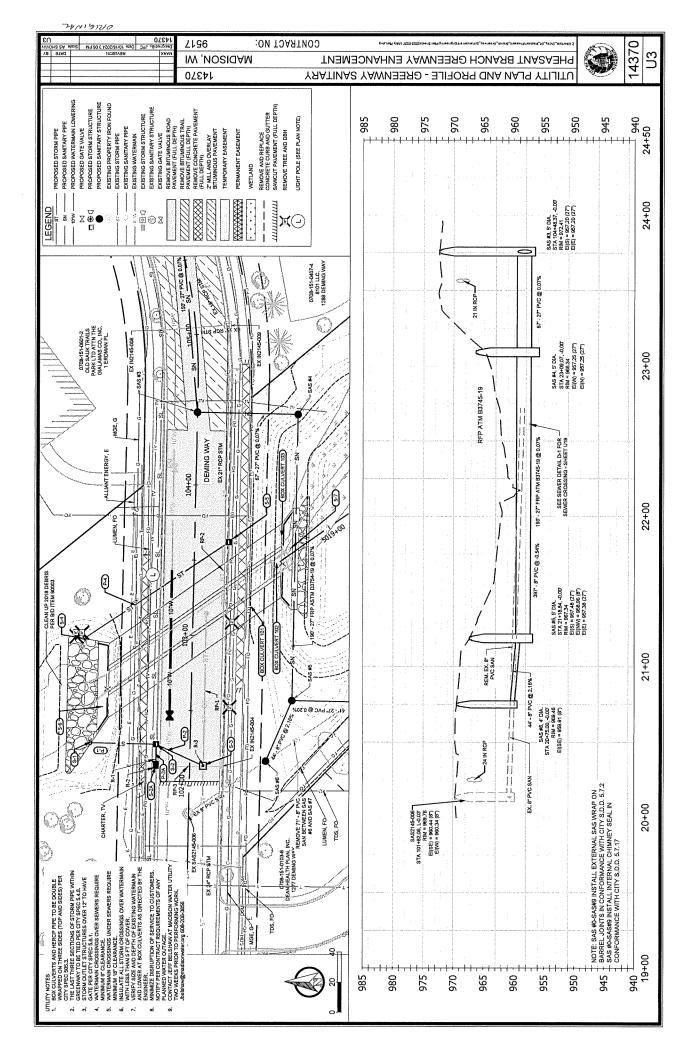


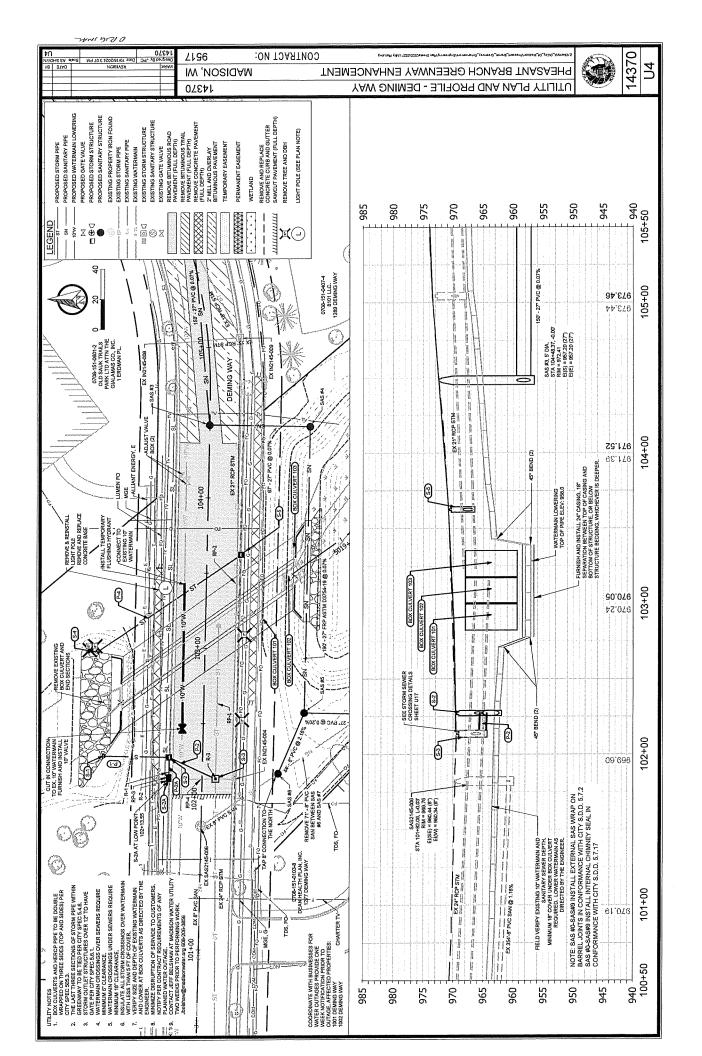


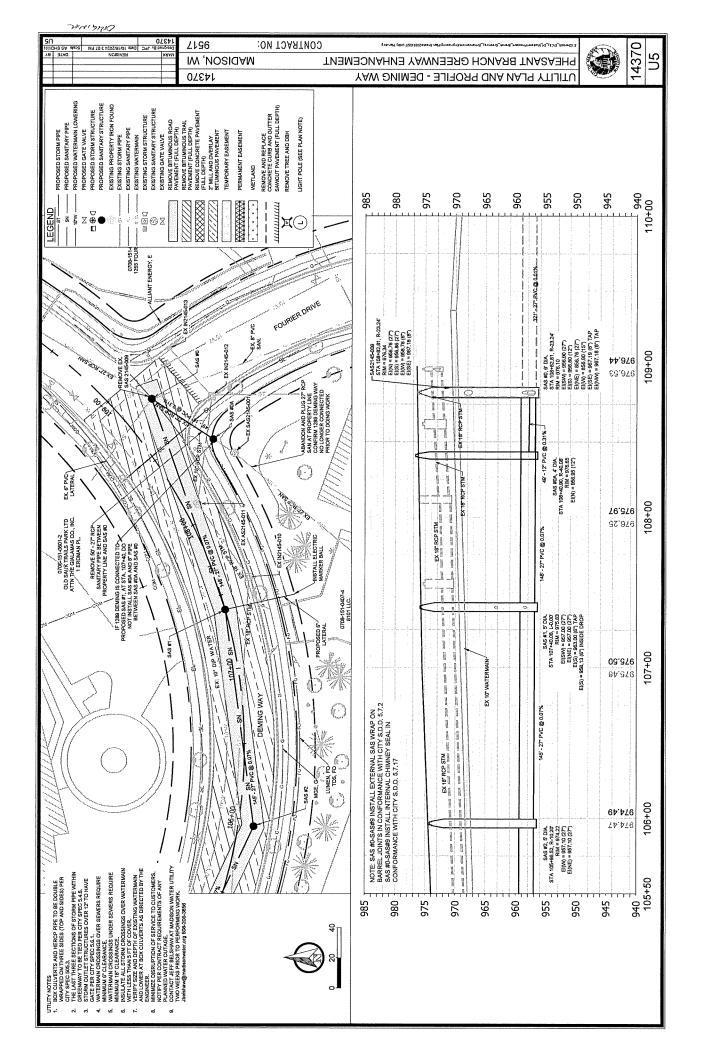


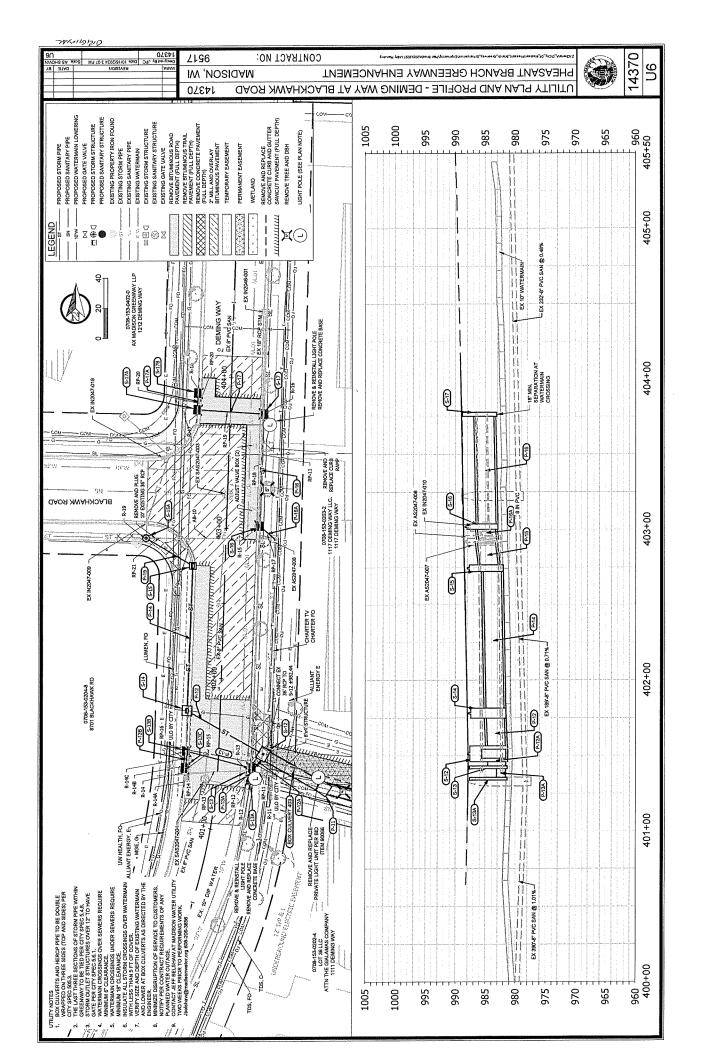


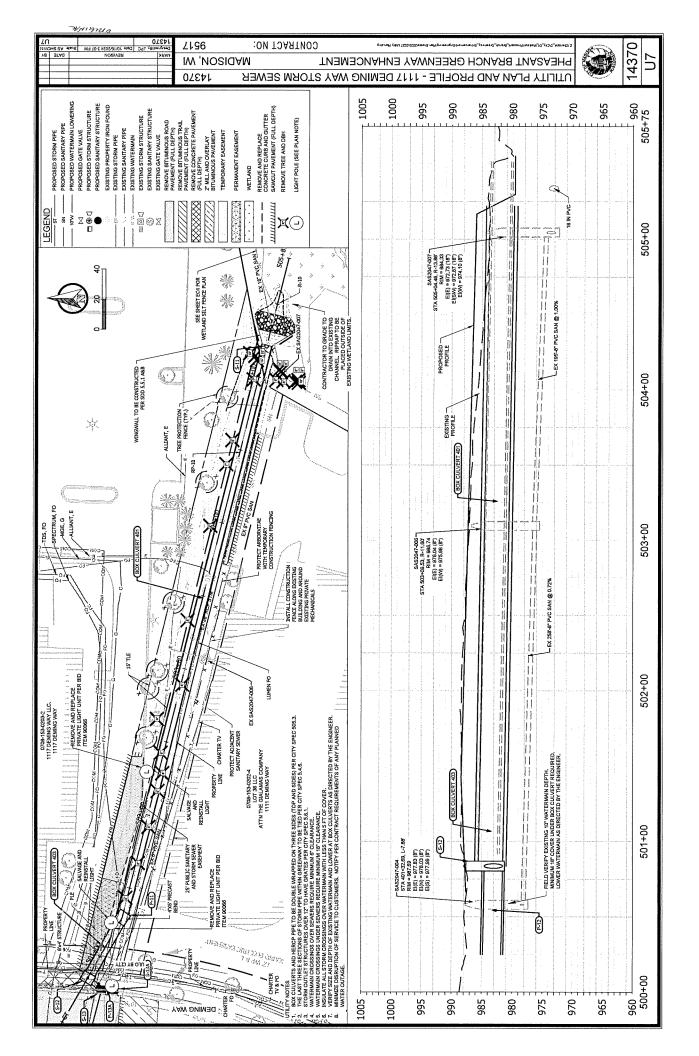


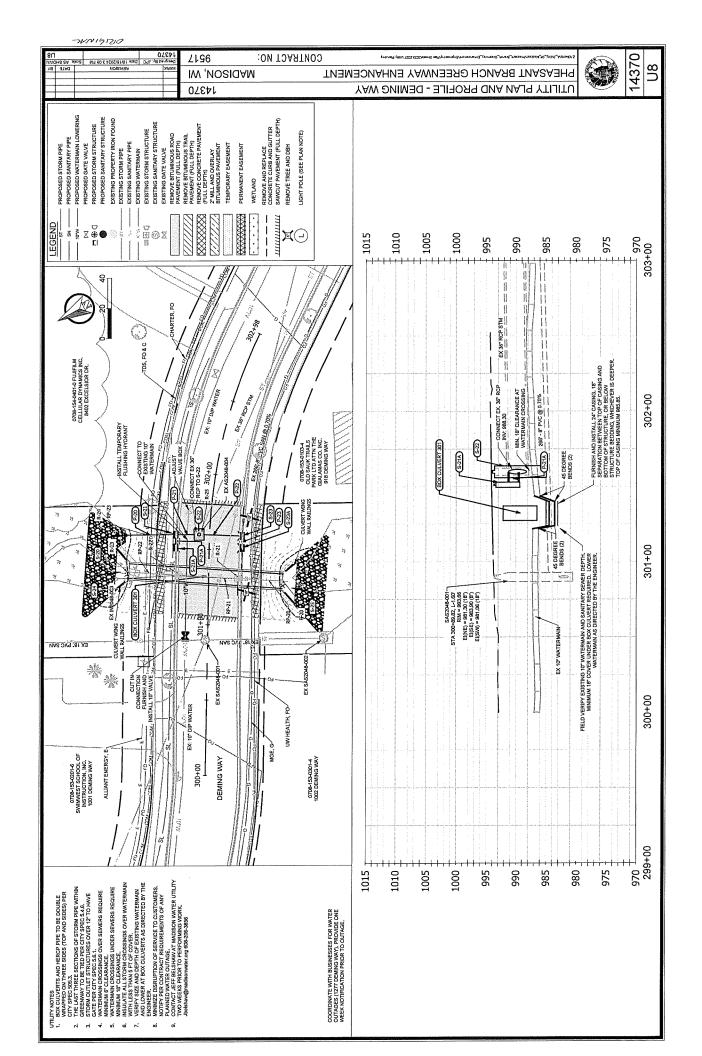


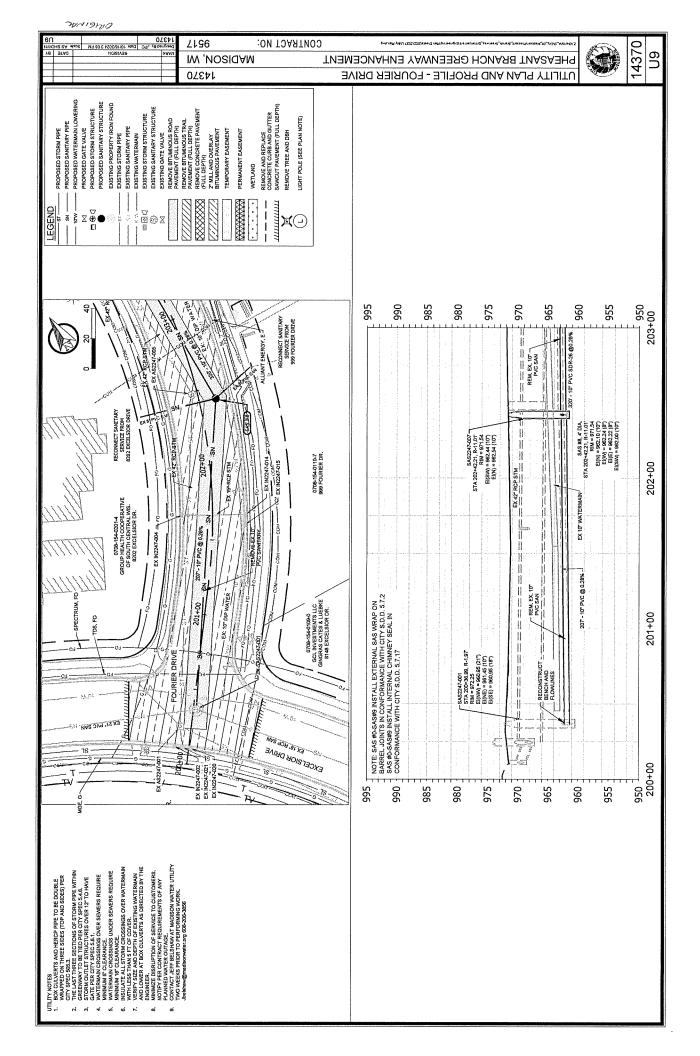


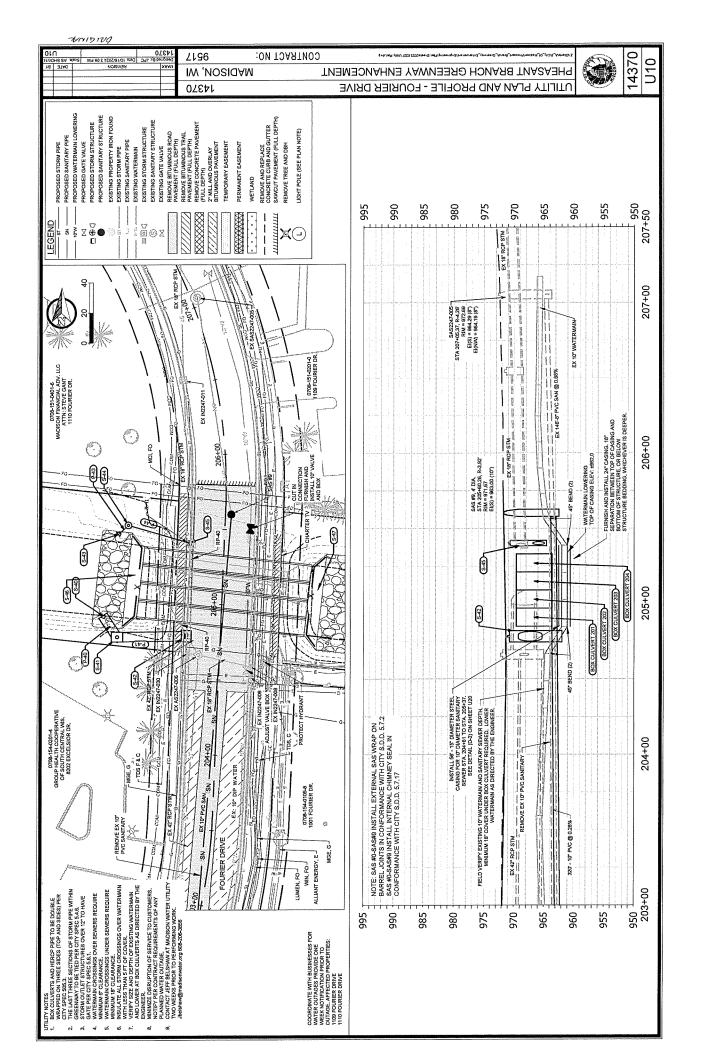


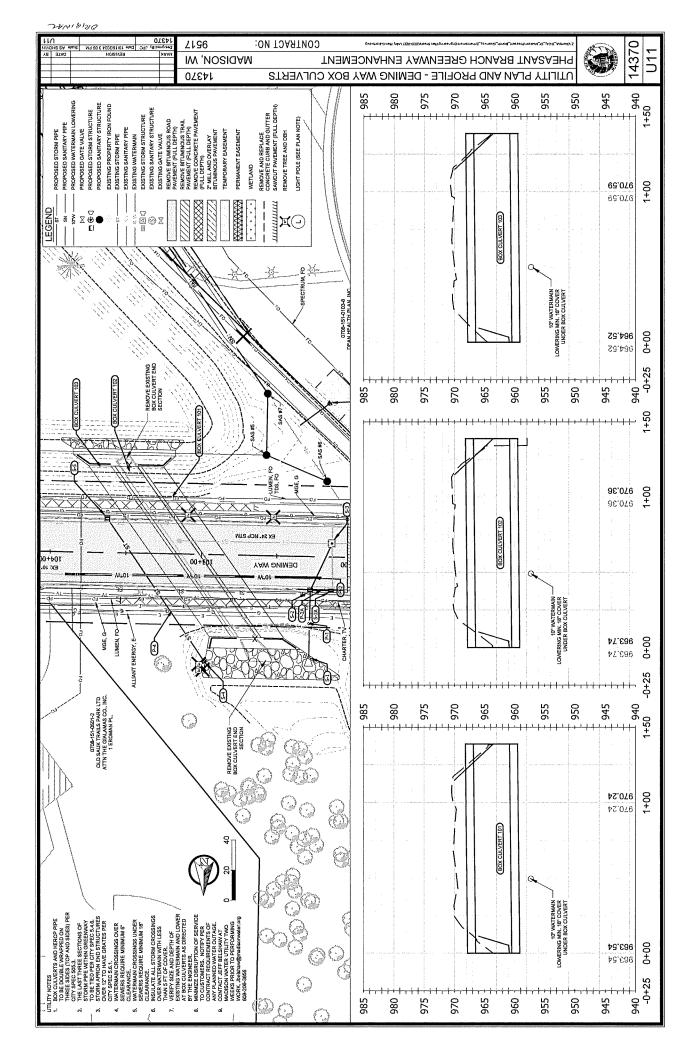


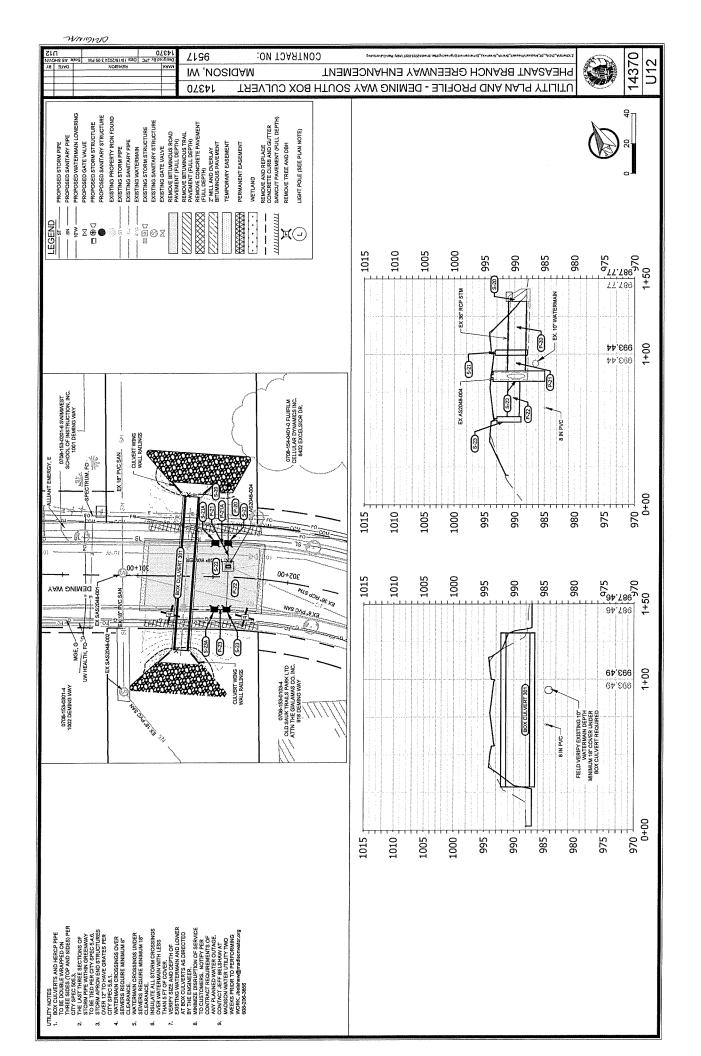


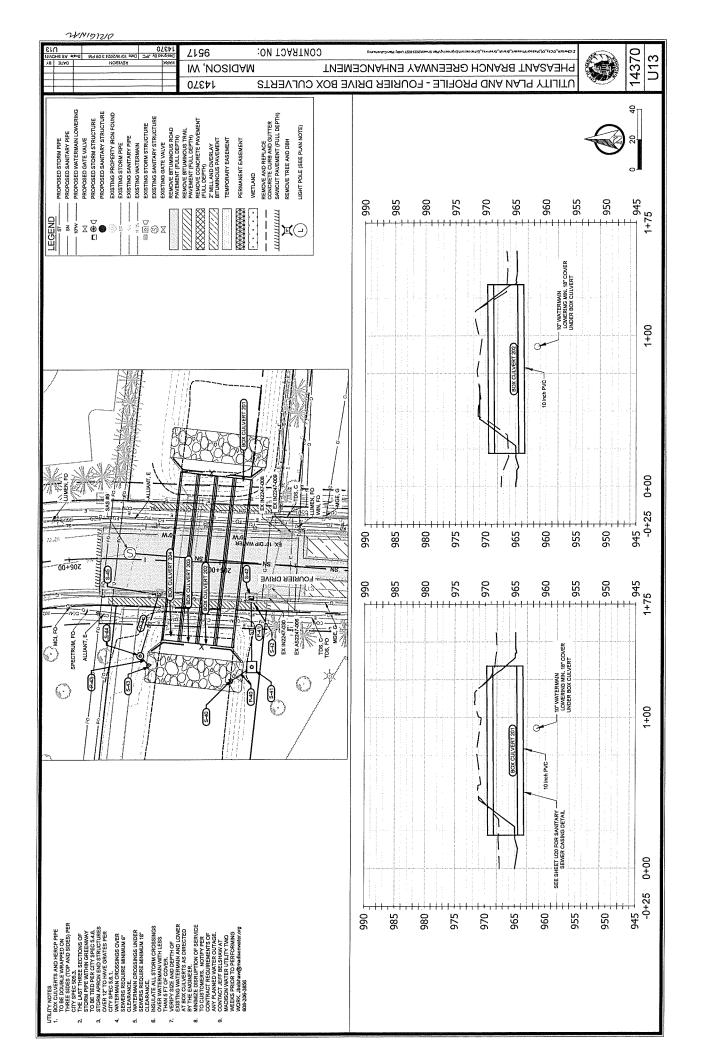


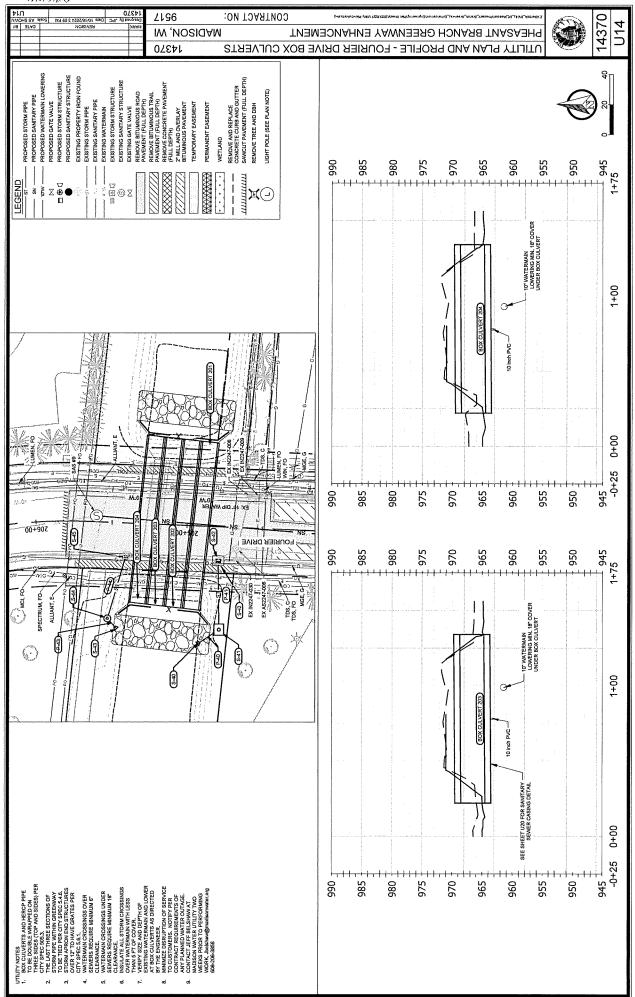




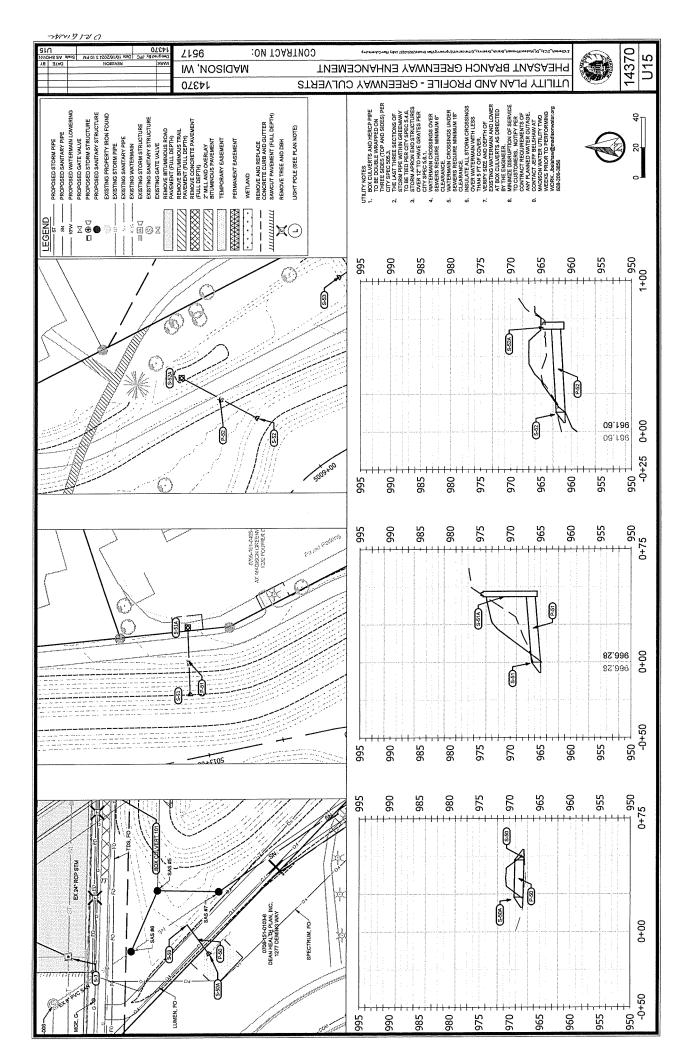


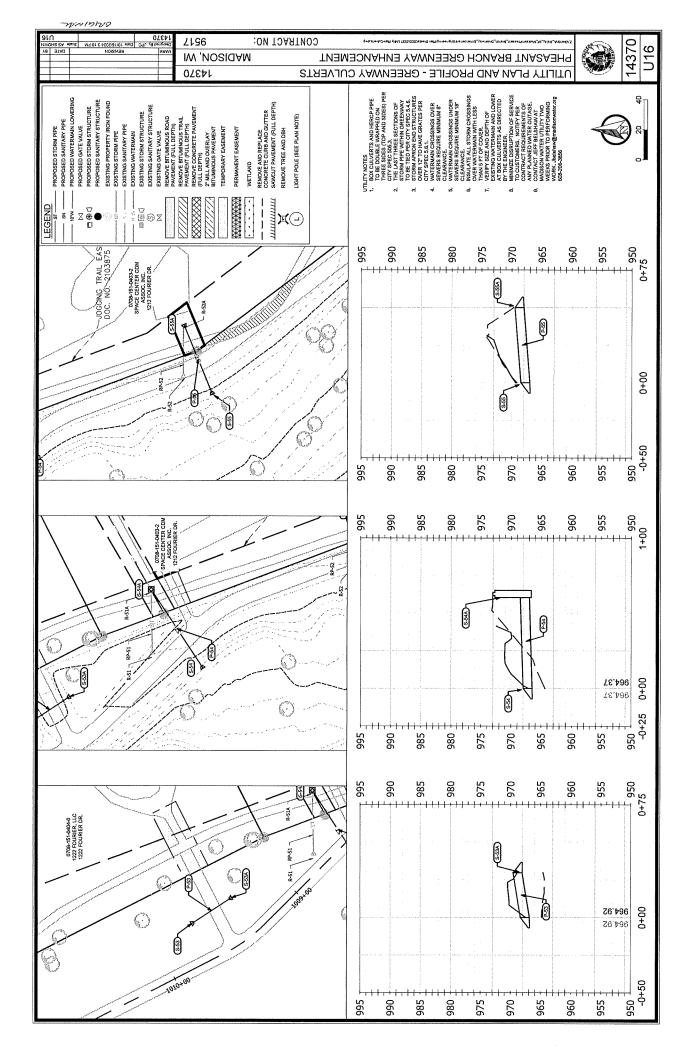


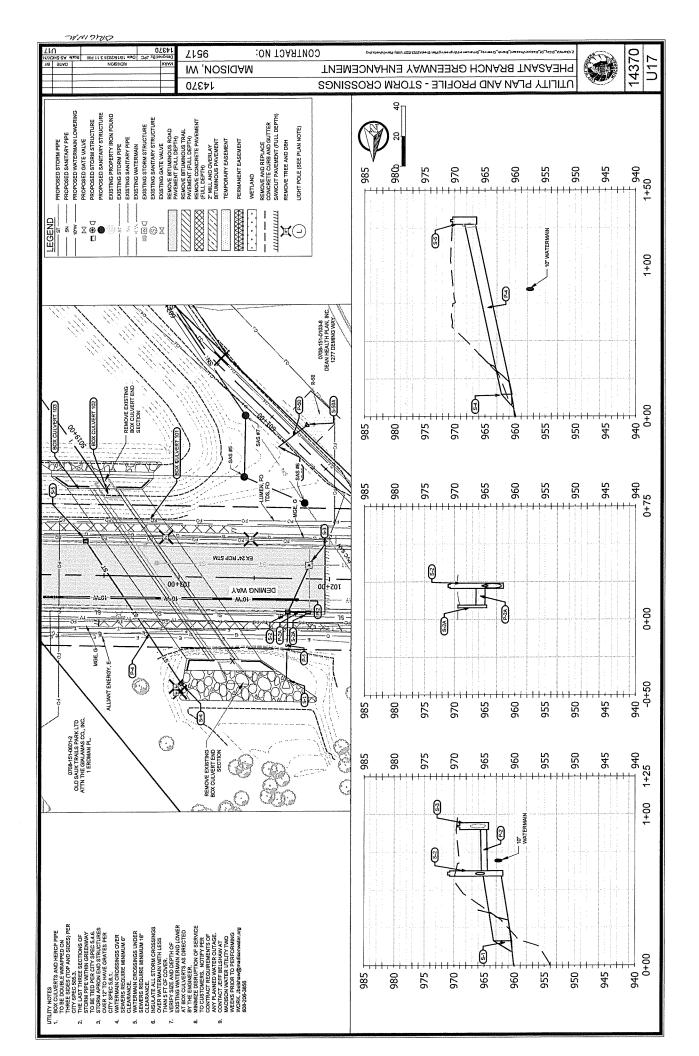


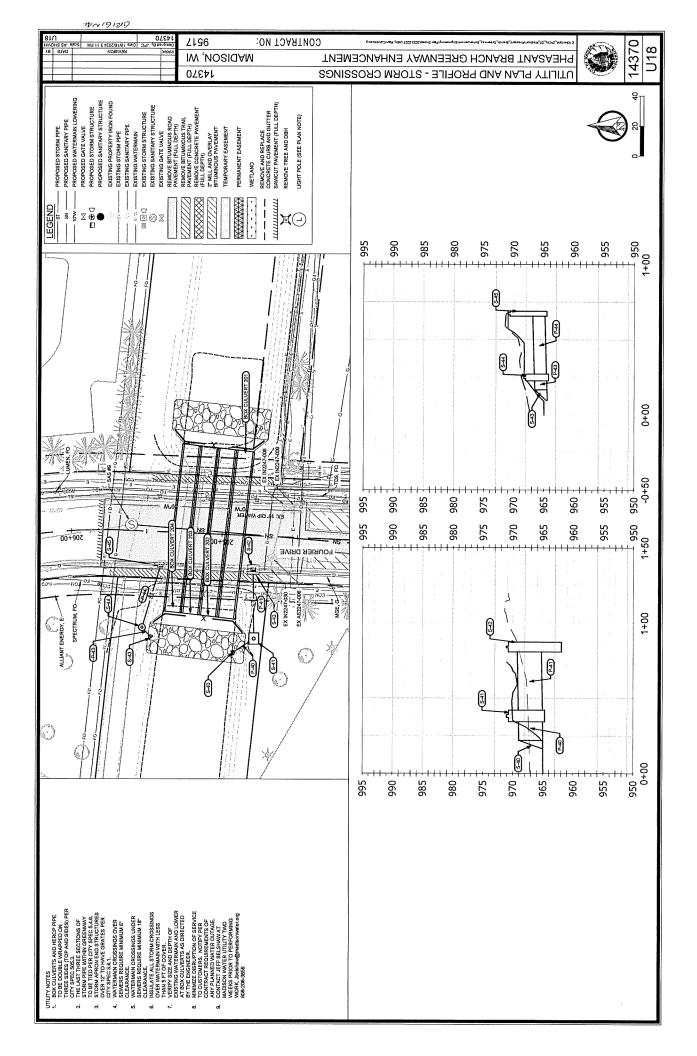


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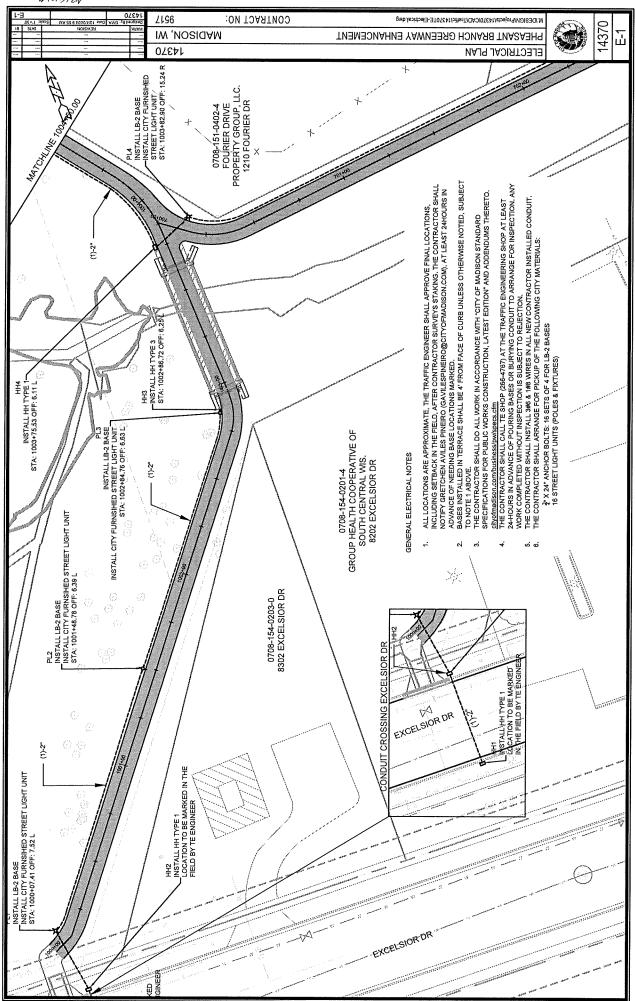




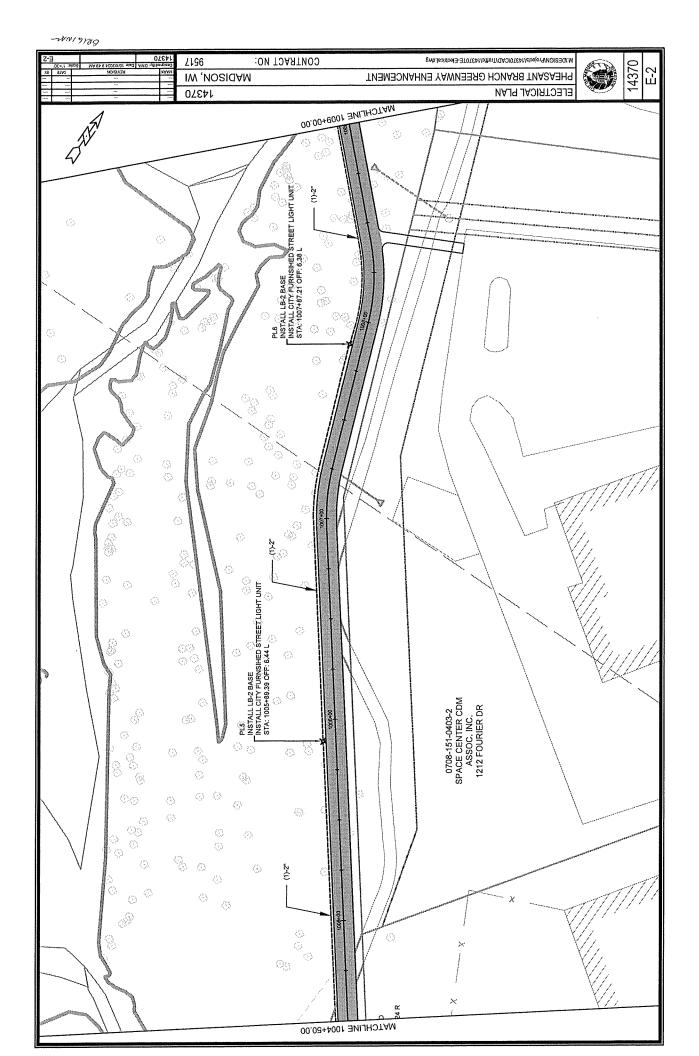


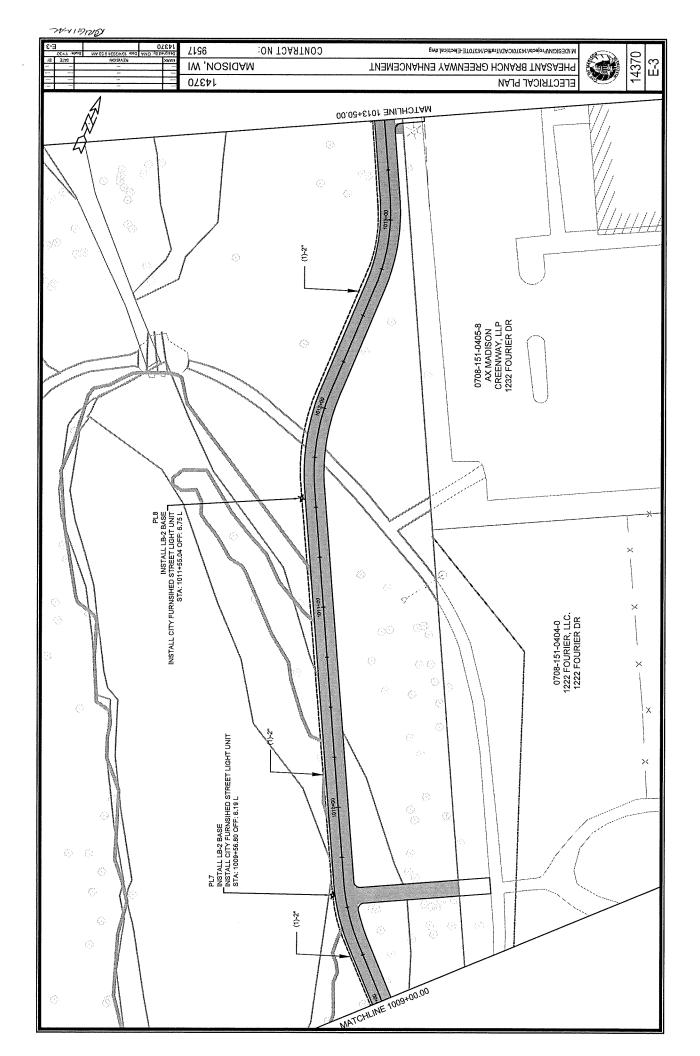


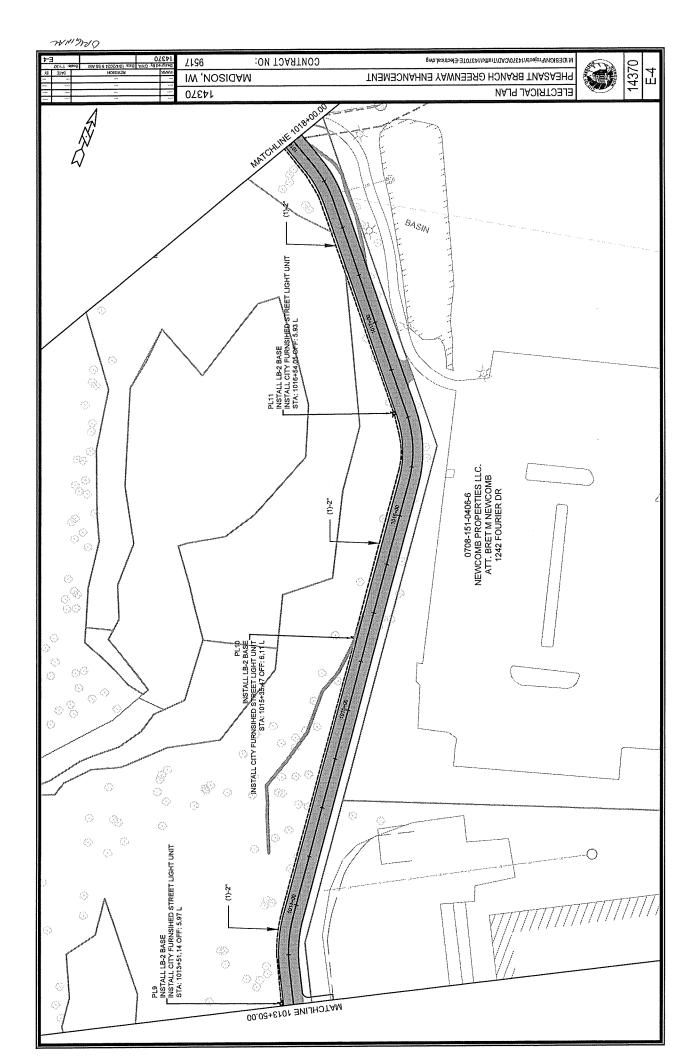
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	SHEET NO. U-STM CITY OF MADISON							SEWER RAIN	VEERING FOR
	EASANT BRANCH DISTRICT - 2023 PROLECT NO. 14370 STORM SEWER SCHEDULE	NOTES	2000 2000 2000 2000 2000 2000 2000 200	15.5 DE 3.7 BOC 15.5 DE GREES, RCBC RCBC RCBC RCBC RCBC RCBC RCBC RCBC	BID ITEM S0487 BID ITEM 50487 RCBC	BID ITEM 50488 BID ITEM 50488 - - RCBC RCBC RCBC RCBC		3. INJURTOR IN CLARCE INCLUES FRANCINCED CONCRETE PRE, HERCP. HERCP. HORZONTAL ELLIPTICAL REINFORCED CONCRETE PRE, DAN = DOES NOT APPLY, SAS = SEWER ADDRESS STRUCTURE; LP = LOW POINT INLET STRUCTURE; FP = FIELD POINTED STRUCTURE; TR = TOP OF CONCRETE ROOF, NCM = NO GROWN MATCH FOR PRES; UD = UNDERDRAIN ACCESS STRUCTURE; LP = LOW POINT INLET STRUCTURE; FP = FIELD POINTED STRUCTURE; TR = TOP OF CONCRETE ROOF, NCM = NO GROWN MATCH FOR PRES; UD = UNDERDRAIN LOP OF CONCRETE ROOF FIELD POINT INLET STRUCTURES AND THE FLOWLINE OF THE CLOSED CASTING FOR SASa. - LOP OF CONCRETE ROOF FIELD POINT OF CLASTING UNLESS OTHERWISE NOTE: - ALL REINFORCED CONCRETE ROOF FIELD FOR CLASTING INTERSIS INTER INTER- - SURVERIANCED CONCRETE ROOF STRUCTURES STRUCTURES INTERVIER NOTED. - SURVERIANCED CONCRETE ROOF STRUCTURES STRUCTURES INTERVIER NOTED. - SURVERIANCED CONCRETE ROOF STRUCTURES STRUCTURES STRUCTURES INTER NOTED. - SURVERIANCED CONCRETE ROOF STRUCTURES STRUCTURES STRUCTURES AND THE FLOWLINE OF THE CLOSED CLASED CASTING FOR SASa. - ALL REINFORCED CONCRETE ROOF STRUCTURES STRUCTURES STRUCTURES AND THE RULATION FOR THE CLOSED CLASE OF CLASES IN UNLESS OTHERWISE NOTED. - SURVERIANCE ROOF STRUCTURES STRUCTURES STRUCTURES STRUCTURES AND THE CLOSED CLASE AND THE CLASED OF STRUCTURES STRUCTURES STRUCTURES STRUCTURES STRUCTURES STRUCTURES AND THE ROOF CLASE AND THE RULATION FOR THE CLASED CLASED CLASE AND THE ROOF STRUCTURES STRUCTURES STRUCTURES STRUCTURES STRUCTURES STRUCTURES STRUCTURES STRUCTURES STRUCTURES AND THE ROOF CLASE AND THE RULATION FOR	RECONTER PORA TO USE THORA TO USE THE OF FIELD POURED. ALL OTHER STRUCTURES (NOT NOLCATED AS FIELD POURED) SHALL BE SUBMITTED TO CITY ENGINEERING FOR ADARDANL IF PRECAST STRUCTURES ARE PREFERRED. CONTACT JOJO OBRIEN OF CITY ENGINEERING AT (608) 266-9731 FOR PRECAST APPROVALS, EMAL SHOP DRAWINGS TO JOBREN@CITYOFAMOISON COM.
	PHEASANT BRANCH DISTRICT - 2023 PROJECT NO. STORM SEWER S	TYPE	55555555555555555555555555555555555555	RCP RCP RCP RCP RCP RCP RCP RCP RCP RCP	HERCP RCP RCP RCP RCP RCP	H H F F F F F F F F F F F F F F F F F F	522 525 525 525 525 525 525 525 525 525	RETE PIPE; DNA CROWN MATCH 8.	T APPROVALS, I
		SIZE	36" 36" 18" 21" 21" 144"x72" 144"x72" 144"x72"	72° 448° 72° 448° 72° 448° 78° 78° 78° 38° 38° 38° 38° 38° 38° 38° 38° 38° 3	43°x68° 43°x68° 18° 24° 58° x48°	48*x/6* 48*x/6* 24* 24* 120*x48* 120*x48* 120*x48* 120*x48*	8 8 8 8 8 8 8 8 8 8	DRCED CONCF DF, NCM = NO (DF, NCM =	AS FIELD POUR
		(FT) (%)		0.40% 0.57% 0.57% 0.57% 0.59% 0.54% 0.54% 0.54% 0.54% 0.54% 0.54% 0.54%	0.51% 0.55% 0.55% 0.58% 0.74%	0.92% 0.35% 0.74% 0.20% 0.20% 0.20%	0.96% 2.10% 1.41% 4.08% 0.82% 1.99%	PTICAL REINFO DNCRETE ROC CLOSED CAS' CLOSED UP OR ICHED UP OR	1T INDICATED / (608) 266-9721
		PLAN (PAY) PIPE LGTH (FT) LGTH (FT)		389,0 4 2.2 4 4 54,5 9 4,5 9 4,5 1,0 1,1 2 88,8 81,8 2 88,8 1,1 4 10 2 88,8 2 83,8 1,1 4 10 4 10 4 10 4 10 4 10 4 10 5 4,5 5 4,5 6 4,5 7 4,	9 33.5 6 12.46 7.3 24.2 5.4 24.2 24.2 24.2 24.2 24.2	8 10.9 3 43.2 8 12.9 112.0 112.0 112.0 112.0	11 31.3 56.7 56.7 60.8 16 50.2 50.2	rizontal Elli R = TOP OF CC WLINE OF THE B AND GUTTEF SHALL BE TOL	RUCTURES (NC SINEERING AT
		INLET PLA		981.34 392 981.57 46.19 981.57 46.19 981.68 1968 45.09 981.88 45.09 981.81 11.24 981.91 11.24 983.56 74.62 983.56 74.62 984.56 74.56	988.23 34.09 989.20 15.56 989.72 8.5 989.31 28.7 989.35 8.5	964.60 12.88 964.60 12.88 964.60 14.81 964.80 12.23 964.73 112 964.73 112 964.73 112	967.20 33.31 965.91 45.3 965.180 57.5 961.80 32.05 967.00 52.81 968.00 50.2	REACP = HOI STRUCTURE, T AND THE FLO ANISE NOTED ED. COPOSED CUR POSED STEEL	LL OTHER STF
		DISCH. INL E.I. E.I.		919,277,214 981,577 981,577 981,577 981,577 981,557 981,557 981,557 981,557 981,557 981,557 981,577 981,577 981,577 981,577 982,778 983,778 983,778 993,978 994,978 995,978 995,978 995,978 995,978 995,9785,9785 995,9785,9778 995,9756,9756,9756,9756,9756,9756,97566,9756,975	988.05 988.23 989.63 989.68 989.17 989.17 989.31 989.31 987.34	84 84 84 84 84 84 84 84 84 84 84 84 84 8	966.50 966.50 961.00 961.00 966.80 966.80 96 966.30 96	IELD POURED : STRUCTURES UNLESS OTHEI HERWISE NOT 4E UP WITH PA	LD POURED. A
			8888888	BOX CLIVERT 422 99 BOX CLIVERT 422 99 S-13 CLIVERT 423 99 S-14 49 S-14 49 S-14 49 S-10 49 S-10 49 S-15 49 S-17 50 S-17 50 S-1000 S-1000S-1000S-1000S-1000S-1000S-1000S-1000S-1000S-1000S-1000S-1000S-1000S-1000S-1000S-1000S-1000S-1000S-100S-	8888888	ō ö ö ö ö ö ö ō	ō ō ō ā ā ō ō	EINFORCED CC CTURE; FP = FI IRB FOR INLET OF CASTING I III UNLESS OTT III UNLESS OTT III UNLESS OTT III UNLESS OTT III UNLESS OTT III OFFSETS LIN BE EPOXY CO.	I SHALL BE FIEL RED. CONTAC
		TO (UPSTM)		5	r area S-21 S-22 S-23 S-23 S-23 S-23 S-23	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	S:51A S:51A S:52A S:52A S:52A S:54 S:54 S:54	WALL; RCP = R UT INLET STRU HE TOP OF CL 25 BELOW TOF 1 TO BE CLASS INLET STATION TURES SHALL	S ARE PREFER
	ORM PIPE	FROM (DNSTM)	%1 %2 \$52 \$54 %6 %1 %1AWK ROAD	80X CULVERT 401 P-11 P-12 S-12 S-13 S-13 S-13 S-13 S-13 S-14 S-14 S-15 S-15 S-15 S-17 A M 2005	- SOUTHWEST CULVERT AFEA 5-20 5-21 5-21 5-22 5-22 5-22 5-23 5-23 5-24 5-24 5-24 5-24 5-24 5-24 5-24 5-24	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	8 5 8 8 8 8 9 8 9 8 9 8 9 8 9 8 9 8 9 8	LP = LOW POIN LP = LOW POIN ADE GIVEN IS 1. ADE GIVEN IS 1.	USE. ALLED OUT AS I T STRUCTURE DISON.COM.
	PROPOSED STORM PIPES	PIPE NO.	DEMING WAY P-1 P-2 P-2 P-2 B-2 B-4 B-2 CULVERT 101 B-0X CULVERT 102 B-0X CULVERT 102 B-0X CULVERT 103 B-0X C	PLICALVERTAIN - PLICALVERTAIN - PLICARSTBEND BOX CULVERTA PLICARSTBEND B	P.20 P.21 P.21 P.21 P.23 P.23 P.23 P.23 P.23 P.23 P.23 P.23	FOURIER DRIVE P-40 P-41 P-43 B-43 BOX CULVERT 201 BOX CULVERT 203 BOX CULVERT 203 BOX CULVERT 204	POND CULVERTS P-50 P-52 P-52 P-55 P-55 P-55 P-55	3. I AUVALING INCLEASE AND LESS. A REVEACE WOLLESS - REVEATED AND LESS - REVEATED FOR CREETE PIPE, HERGP = HORZONTAL ELLIPTICAL REINFORCED CONCRE ACCESS STRUCTURE, LP = LOW POINT INLET STRUCTURE, IP = FIELD POURDE STRUCTURE, ITR = TOP OF CONCRETE POOF, MCM = NO CI ACCESS STRUCTURE, LP = LOW POINT INLET STRUCTURE, IF = FIELD POURDE D'AND IN FELOWLINE OF THE CLOSED CANCRETE POOF, MCM = NO CI ACCESS STRUCTURE, LP = LOW POINT INLET STRUCTURE, IF = FIELD POURDE D'AND IN FELOWLINE OF THE CLOSED CASTING FOR SASS. TOP OF CONCRETE PRIES TO BE CLASS III UNLESS OFTERWISE NOTED. - ALL REINFORCED CONCRETE PRES TO BE CLASS III UNLESS OFTERWISE NOTED. - SURPORT TO CONFIRM IN TAL INLET STRUCTURES INSE UNIT PROPOSED CURE AND GUTTER. - ALL REUNATOR TO CONFIRM IN TAL INLET STRUCTURES INSE UNITED.	RECOATED PRIOR TO USE - ALL STRUCTURES CALLEI APPROVALI F PRECAST ST JOBRIEN@CITYOFMADISO
				30. FP J.MP	dWr	dWD		POUR	
		NOTES	RCP AE GATE 3067-V 3061(1), LP, FP R-1550, FP R-1550, FP R-1550, FP R-1550, FP NOTES 1, 3 NOTES 1, 3	MOTES 1, 2, 3 P. 1554, W.Z. 1550, FP 200427,	RCP AE GATE 3808(1), FP 3808(1), FP R-1550, W3 FT SUMP 3908(1), FP 3908(1), FP	WORLES 1, 3 NOTES 1, 3 RCP AE GATE R-152 NP R-253 NP R-253 P R-256 P R-256 P N-256 P	NOTES 1, 3 NOTES 1, 3 RCP AE GATE RCP AE GATE RCP AE GATE R1550	RCP AE GATE 2566-D1W, FIELD POUR - RCP AE GATE R-1550 -	
		DEPTH	7,24 4,41 4,78 - 4,05	, 8, 9, 9, 9, 9, 9, 9, 9, 9, 9, 9, 9, 9, 9,	- 555 555 445 46	537 537 537 54	83	2000 61 1 2 3 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	z
		TOP OF E.I. CASTING	- 960,45 969,48 962,24 969,41 965,00 965,4 964,64 965,7 965,00 - 966,73	97.5 97.5 97.5 97.5 97.5 97.47 997.54 991.67 991.67 991.69 992.78 992.32 992.50 993.50 903.50	- 993.82.05 993.82 988.05 993.82 988.23 993.96 989.30 993.81 989.33			- 961.00 865.01 961.80 - 966.180 - 966.10 973.04 965.700 973.04 967.700 - 967.700	D PIPE LOCATI
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	STORM SEWER SCHEDULE	TYPE	35" APRON END 242 SAS TERRACE INLET TYPE 3 244 SAS 21" APRON END BOX CULVERT WINGWALL BOX CULVERT WINGWALL	4X6 BOX WINGWALLS 8X4 STRUCTINE E1840AGE INLET TYPE 2 TERRAAGE INLET TYPE 2 TERRAAGE INLET TYPE 2 TERRAAGE INLET TYPE 2 3X3 SAS 3X3 SA	43"X88" RCP APRON END TERAAGE INLET TYPE 3 TERRACE INLET TYPE 3 6X7 TERRACE INLET TYPE 3 TERRACE INLET TYPE 3 TERRAGE INLET TYPE 3	4X8 BOX WINGWALLS 4X8 BOX WINGWALLS 487X15 RCP APRON END 6X7 MIET 24 RCP APRON END 23 SAS	BOX CULVERT WINGWALL BOX CULVERT WINGWALL BOX CULVERT WINGWALL 18" RCP APRON END 18" RCP APRON END 333 SAS	16 YEF APPON END 3X3 SAS 18 YEF APPON END 18 YEF APPON END 18 YEF APPON END 3X3 SAS 18 YEF APPON END 18 YEF APPON END 18 YEF APPON END	SPECIFIC NOTES II string and press of wisewall structures taken at connection to pipe location (a varte ecoured pres sod s s and s s s s s s s and (i) wingwall to be constructed [er sod s s s 1 and
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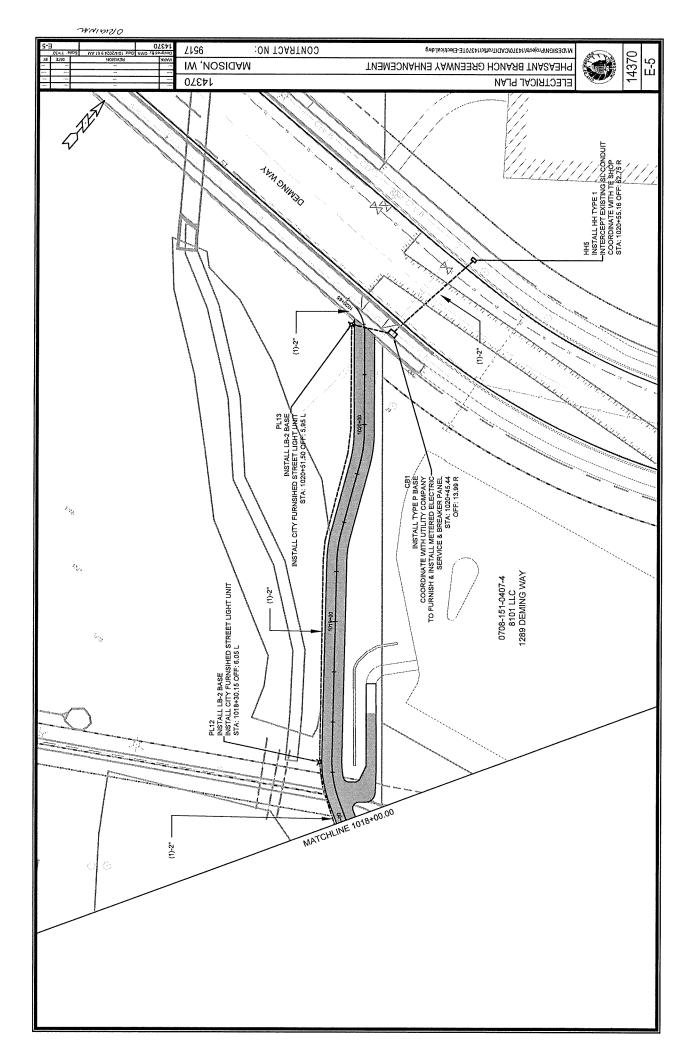


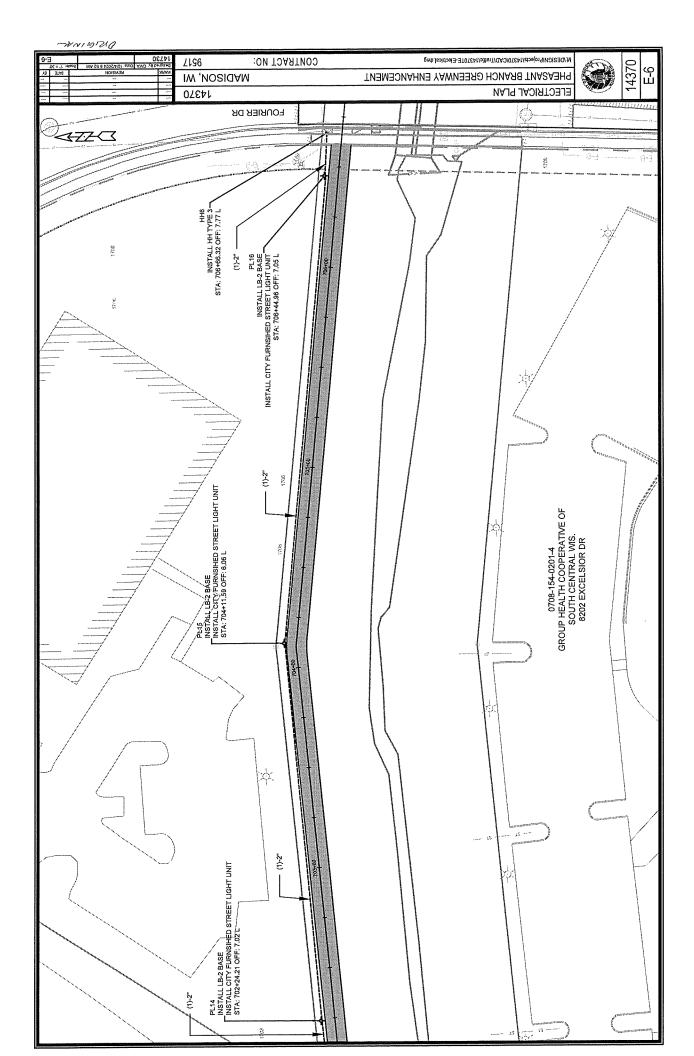
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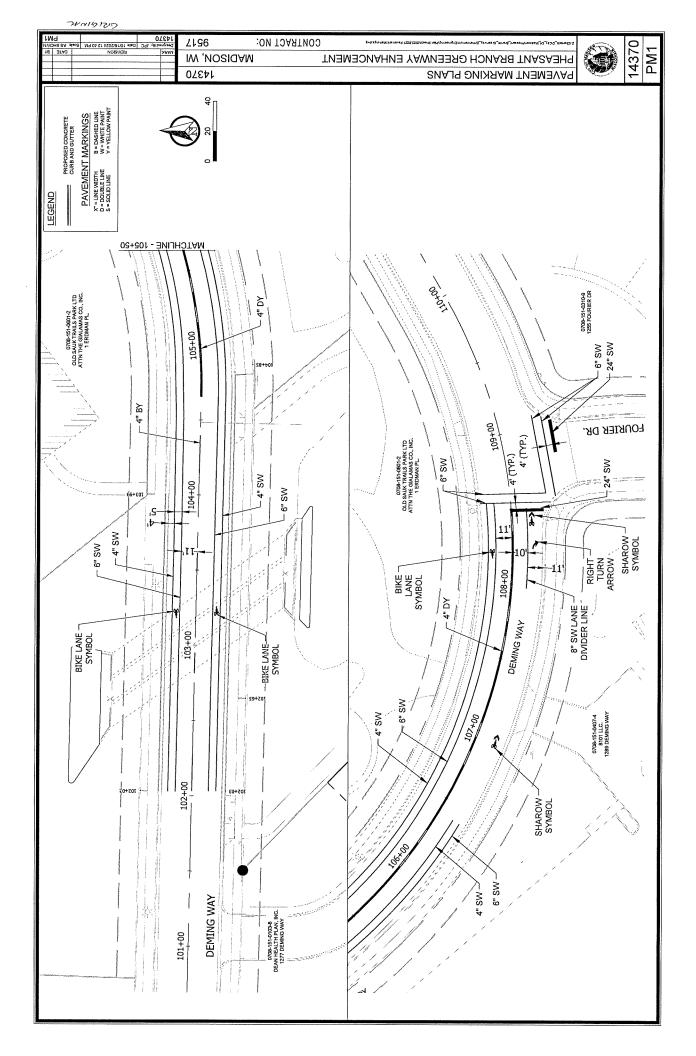


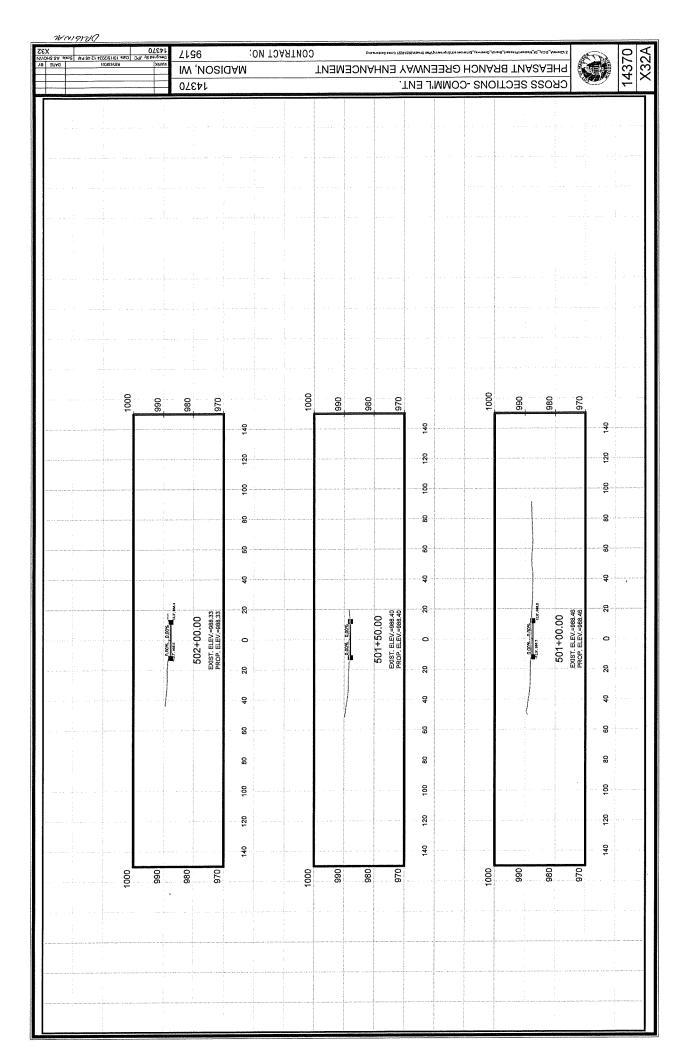


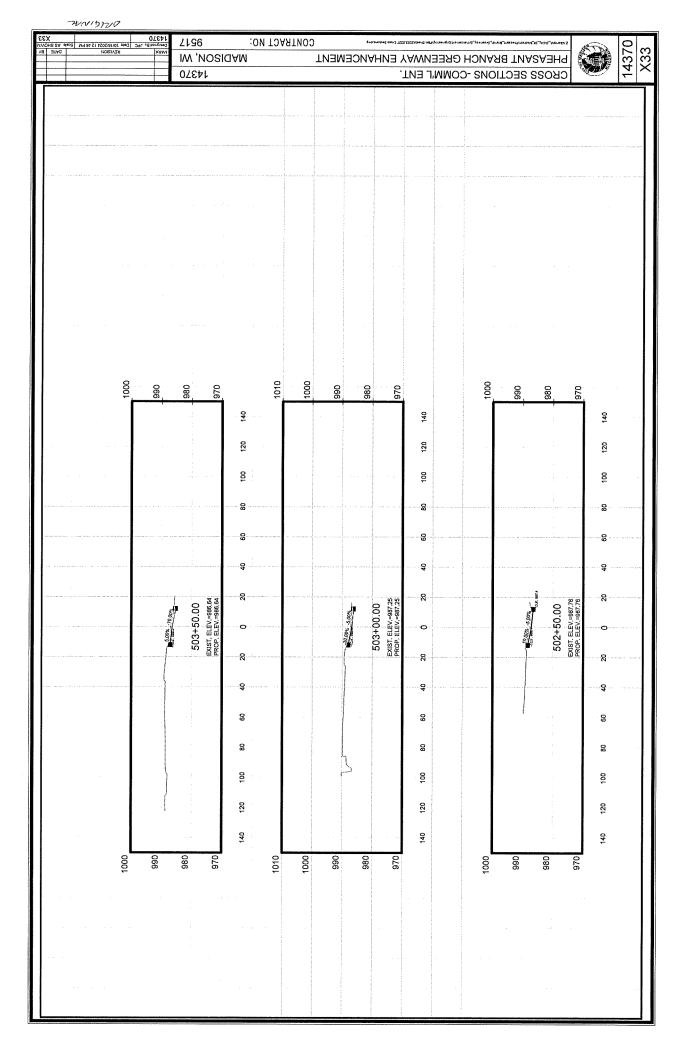




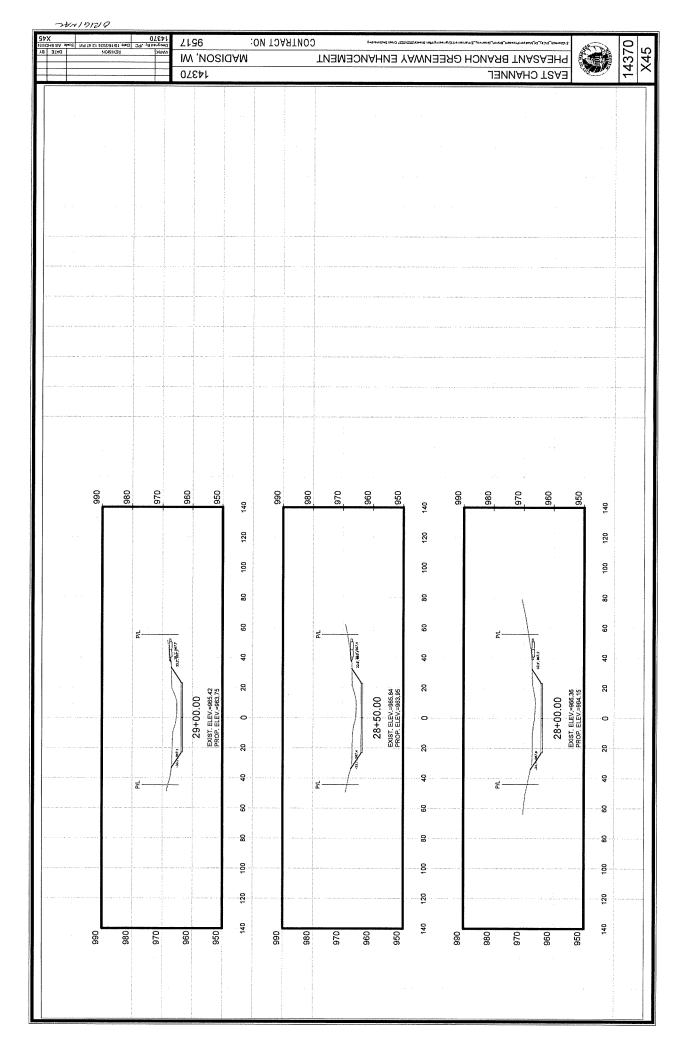


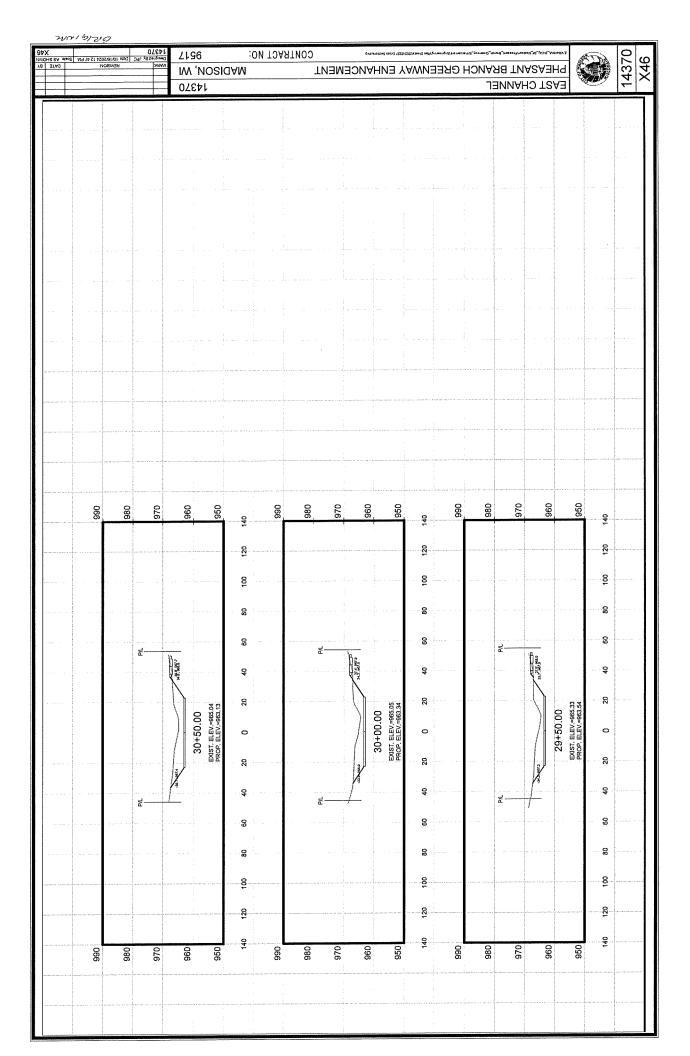


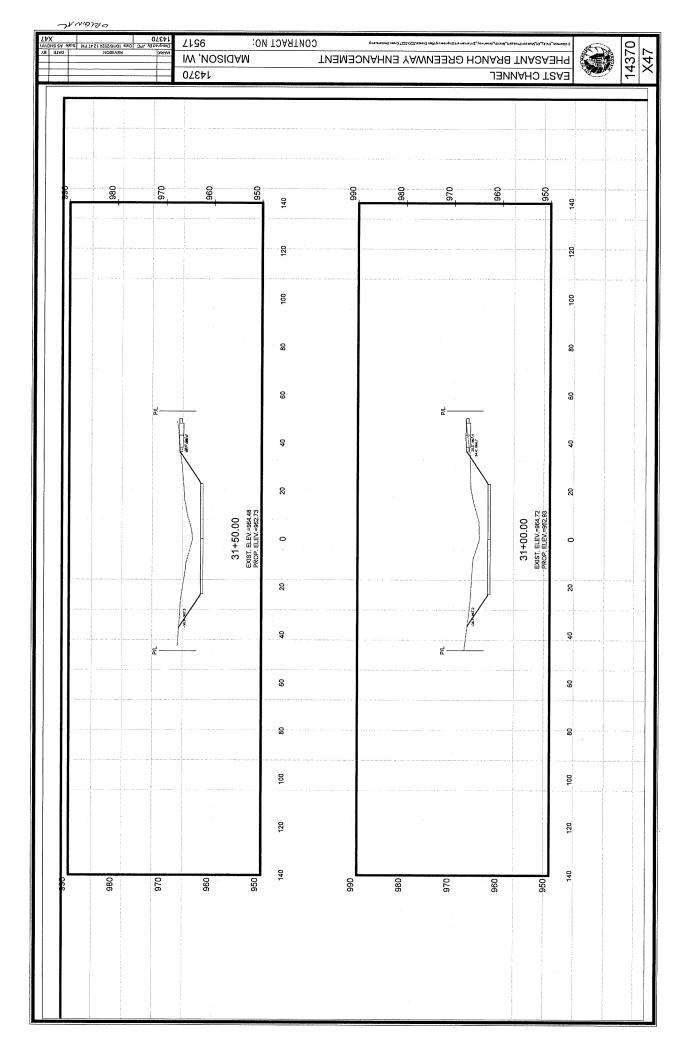




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SECTION E: BIDDERS ACKNOWLEDGEMENT

PHEASANT BRANCH GREENWAY ENHANCEMENT PROJECT

CONTRACT NO. 9517

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

- The undersigned having familiarized himself/herself with the Contract documents, including 1. Advertisement for Bids, Instructions to Bidders, Form of Proposal, City of Madison Standard Specifications for Public Works Construction - 2024 Edition thereto, Form of Agreement, Form of Bond, and Addenda issued and attached to the plans and specifications on file in the office of the City Engineer, hereby proposes to provide and furnish all the labor, materials, tools, and expendable equipment necessary to perform and complete in a workmanlike manner the specified construction on this project for the City of Madison; all in accordance with the plans and specifications as prepared by the City Engineer, including Addenda Nos. 1 through 2 to the Contract, at the prices for said work as contained in this proposal. (Electronic bids submittals shall acknowledge addendum under Section E and shall not acknowledge here)
- 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.
- I hereby certify that I have met the Bid Bond Requirements as specified in Section 102.5. 4. (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).
- that all statements herein made on behalf of 5. hereby certify are R.G. Huston Co., Inc. (name of corporation, partnership, or person submitting bid) a corporation organized and existing under the laws of the State of Wiscosnin -;-an individual trading as a partnership consisting of

-State of of the City of from the plans and specifications and have examined and carefully prepared this Proposal, Proposal; that I have fully authonity to make such statements and submit this Proposal in (its, their)

behalt; and that the said statements are true and correct.

CORPORATE ${\mathfrak O}^{*}$ SEAL ď SHUTTER ST SIGNATURE 975Brad Huston - President "INCONT TITLE, IF ANY Sworn and subscribed to before me this DENNIS RICHARDSON 14th day of November 20 24 Notary Public State of Wisconsin ms (Notary Public or other officer authorized to administer oaths) My Commission Expires 1/10/28

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

Section F: Best Value Contracting (BVC) Fillable Online Form 9517

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. EFirst 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

CEMENT MASON / CONCRETE FINISHER

CEMENT MASON (HEAVY HIGHWAY)

CONSTRUCTION CRAFT LABORER

DATA COMMUNICATION INSTALLER

ENVIRONMENTAL SYSTEMS TECHNICIAN / HVAC SERVICE TECH/HVAC INSTALL / SERVICE

HEAVY EQUIPMENT OPERATOR / OPERATING ENGINEER

INSULATION WORKER (HEAT and FROST)

□IRON WORKER (ASSEMBLER, METAL BLDGS)

PAINTER and DECORATOR

PLASTERER

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

Pheasant Branch Greenway Enhancement Contract No. 9517

Targeted Business Enterprise Compliance Report

Cover Sheet

This information **MUST** be submitted in a separate sealed envelope marked "ENVELOPE NO. 2 - TBE COMPLIANCE REPORT".

Prime Bidder Information:

Company: R.G. Huston Company, Inc.

Address: 2561 Coffeytown Road Cottage Grove, WI 53527

Telephone Number: (608) 255-9223 Fax Number: (608) 839-5936

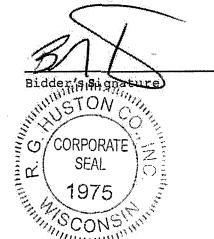
Contact Person/Title: Brad Huston, President

Prime Bidder Certification:

I, Brad Huston, President of R.G. Huston Company, Inc. certify that the information contained in this TBE Compliance Report is true and correct to the best of my knowledge and belief.

Witness' Signature

<u>11/14/2024</u> Date



TBE-1

Pheasant Branch Greenway Enhancement Contract No. 9517

Targeted Business Enterprise Compliance Report

Summary Sheet

This information $\ensuremath{\text{MUST}}$ be submitted in a separate sealed envelope marked

"ENVELOPE NO. 2 - THE COMPLIANCE REPORT".

TBE SUBCONTRACTORS WHO ARE NOT SUPPLIERS

Name(S) of TBEs Utilized	Type of Work	% of Total Bid Amount						
Red Arrow Jr's Construction & Landscaping CA Brumm Trucking -RG Huston is awarding CA Brumm a portion of our own trucking.	Electrical Landscaping Trucking	2.4% 2.6% 3.8%						
Subtotal TBE who are not supplie	rs:	<u>8.8</u>						
TBE SUBCONTRACTORS WHO ARE	SUPPLIERS							
Name(S) of TBEs Utilized	Type of Work	% of Total Bid Amount						
Utility Sales and Supply	Casting/Railing Supplier	2.1%						
Subtotal TBE who are suppliers:	<u> 2.1 </u> % x 0.6 = <u> 1.2</u>	%(discounted to 60%)						
Total Percentage of TBE Utilization: <u>10.0</u> %								

TBE-2

CONTRACT NO. 9517 DATE: 11/14/24

		R. G. Husi	.011 00., 110.
Item	Quantity	Price	Extension
Section B: Proposal Page	1.00	£11 000 00	¢11 000 00
10701 - TRAFFIC CONTROL - LUMP SUM	1.00	\$11,000.00	\$11,000.00
10720 - TRAFFIC CONTROL SIGN - PORTABLE ARROW BOARD - DAYS	60.00	\$15.00	\$900.00
10721 - TRAFFIC CONTROL SIGN - PORTABLE CHANGEABLE MESSAGE - DAYS	60.00	\$25.00	\$1,500.00
10911 - MOBILIZATION/DEMOBILIZATION - LUMP SUM	1.00	\$236,173.56	\$236,173.56
20101 - EXCAVATION - CUT (COMMON) - C.Y.	77532.00	\$17.55	\$1,360,686.60
20109 - FINISH GRADING - LUMP SUM	1.00	\$22,000.00	\$22,000.00
20130 - UNDERDRDRAIN - L.F.	200.00	\$20.00	\$4,000.00
20140 - GEOTEXTILE FABRIC TYPE SAS NON WOVEN (UNDISTRIBUTED) - S.Y.	500.00	\$2.40	\$1,200.00
20141 - GEOSYNTHETIC REINFORCEMENT FABRIC - S.Y.	990.00	\$7.75	\$7,672.50
20205 - SELECT FILL - C.Y.	1410.00	\$6.00	\$8,460.00
20208 - SELECT FILL SAND - C.Y.	156.00	\$18.20	\$2,839.20
20217 - CLEAR STONE - TON	837.00	\$18.00	\$15,066.00
20221 - TOPSOIL - S.Y.	67234.00	\$4.95	\$332,808.30
20227 - TOFSOIL - S.T. 20247 - MEDIUM RIPRAP (GLACIER FIELD STONE) - TON	198.00	\$64.00	\$12,672.00
2021 - HEAVY RIPRAP (GLACIER FIELD STONE) - TON	705.00	\$70.00	\$49,350.00
	2236.00	\$4.30	\$9,614.80
20256 - RIPRAP FILTER FABRIC, TYPE HR - S.Y.		\$4.30 \$1.75	\$1,146.25
20303 - SAWCUT ASPHALT PAVEMENT - L.F.	655.00		
20301 - SAWCUT CONCRETE PAVEMENT, FULL DEPTH - L.F.	84.00	\$2.35	\$197.40
20311 - REMOVE SEWER ACCESS STRUCTURES - EACH	5.00	\$430.00	\$2,150.00
20313 - REMOVE INLET - EACH	15.00	\$390.00	\$5,850.00
20314.1 - REMOVE PIPE (STORM) - L.F.	1263.00	\$0.01	\$12.63
20314.2 - REMOVE PIPE (SANITARY) - L.F.	1286.00	\$0.01	\$12.86
20321.1 - REMOVING CONCRETE PAVEMENT - S.Y.	800.00	\$8.50	\$6,800.00
20321.2 - REMOVE ASPHALTIC SURFACE - S.Y.	4132.00	\$3.00	\$12,396.00
20321.3 - REMOVE ASPHALTIC TRAIL - S.Y.	1165.00	\$4.20	\$4,893.00
20322 - REMOVE CONCRETE CURB & GUTTER - L.F.	1450.00	\$3.35	\$4,857.50
20323 - REMOVE SIDEWALK AND DRIVE (GREENWAY) - S.Y.	365.00	\$1.50	\$547.50
20328 - REMOVE APRON END AND GATES - EACH	13.00	\$210.00	\$2,730.00
20336 - PIPE PLUG - EACH	4.00	\$200.00	\$800.00
20401 - CLEARING - I.D.	471.00	\$24.00	\$11,304.00
20404 - CLEARING - LUMP SUM	1.00	\$86,500.00	\$86,500.00
	251.00	\$18.00	\$4,518.00
20406 - GRUBBING - I.D.	1.00	\$21,000.00	\$21,000.00
20409 - GRUBBING - LUMP SUM	2300.00	\$4.00	\$9,200.00
20701 - TERRACE SEEDING - S.Y.			\$31,515.12
20970 - TREES, SHRUBS, PERENENIALS AND GRASS DROUGHT WATERING - EACH	8.00	\$3,939.39	
21002 - EROSION CONTROL INSPECTION - EACH	60.00	\$500.00	\$30,000.00
21011 - CONSTRUCTION ENTRANCE - EACH	6.00	\$620.00	\$3,720.00
21013 - STREET SWEEPING - LUMP SUM	1.00	\$14,000.00	\$14,000.00
21021 - SILT FENCE - COMPLETE - L.F.	1300.00	\$3.00	\$3,900.00
21017 - SILT SOCK (8 INCH) - COMPLETE - LF	775.00	\$8.00	\$6,200.00
21049 - INLET PROTECTION, RIGID FRAME - PROVIDE AND INSTALL - EACH	42.00	\$350.00	\$14,700.00
21050 - INLET PROTECTION, RIGID FRAME – MAINTAIN - EACH	42.00	\$100.00	\$4,200.00
21051 - INLET PROTECTION, RIGID FRAME - REMOVE - EACH	42.00	\$50.00	\$2,100.00
21052 - POLYMER STABILIZATION (UNDISTRIBUTED) - S.Y.	200.00	\$5.00	\$1,000.00
21062 - EROSION MATTING, CLASS I, URBAN TYPE B - S.Y.	49240.00	\$2.40	\$118,176.00
21063 - EROSION MATTING, CLASS I, TYPE A - ORGANIC - S.Y.	3570.00	\$2.00	\$7,140.00
21302 - CONSTRUCTION FENCE (PLASTIC) - L.F.	4385.00	\$4.00	\$17,540.00
	1220.00	\$44.90	\$54,778.00
30201.1 - TYPE "A" CONCRETE CURB & GUTTER - L.F.		\$39.90	\$3,591.00
30201.2 - TYPE "G" CONCRETE CURB & GUTTER - L.F.	90.00		
30302 - 5 INCH CONCRETE SIDEWALK - S.F.	4740.00	\$9.20	\$43,608.00
30304 - 7 INCH CONCRETE SIDEWALK & DRIVE - S.F.	835.00	\$10.40	\$8,684.00
30340 - CURB RAMP DETECTABLE WARNING FIELDS - S.F.	90.00	\$55.00	\$4,950.00
40101 - CRUSHED AGGREGATE BASE COURSE, GRADATION NO. 1 - TON	1400.00	\$18.75	\$26,250.00
40102 - CRUSHED AGGREGATE BASE COURSE, GRADATION NO. 2 - TON	2780.00	\$18.75	\$52,125.00
40105 - CRUSHED AGGREGATE BASE COURSE, GRADATION NO. 5 (BREAKER RUN) -			
TON	214.00	\$20.00	\$4,280.00

R. G. Huston Co., Inc.

CONTRACT NO. 9517 DATE: 11/14/24

		R. G. Hus	ton Co., Inc.
ltem	Quantity	Price	Extension
40201 - HMA PAVEMENT 3 LT 58-28S - TON	580.00	\$86.06	\$49,914.80
40202 - HMA PAVEMENT 4 LT 58-28 - TON	1355.00	\$88.84	\$120,378.20
40218 - TACK COAT - GAL	50.00	\$3.03	\$151.50
40301 - FULL WIDTH GRINDING - S.Y.	5397.00	\$3.84	\$20,724.48
50103 - RECONSTRUCT BENCH & FLOWLINES - EACH	1.00	\$3,400.00	\$3,400.00
50211 - SELECT BACKFILL FOR STORM SEWER - T.F.	2510.00	\$0.01	\$25.10
50212 - SELECT BACKFILL FOR SANITARY SEWER - T.F.	1674.00	\$0.01	\$16.74
50225 - UTILITY TRENCH PATCH TYPE III - T.F.	1040.00	\$79.00	\$82,160.00
50227 - UTILITY TRENCH PATCH TYPE IV (UNDISTRIBUTED) - T.F.	300.00	\$41.00	\$12,300.00
50301 - 8 INCH PVC SANITARY SEWER PIPE - L.F.	44.00	\$102.00	\$4,488.00
50302 - 10 INCH PVC SANITARY SEWER PIPE - L.F.	527.00	\$146.00	\$76,942.00
50304 - 15 INCH PVC SANITARY SEWER PIPE - L.F.	49.00	\$409.00	\$20,041.00
50308 - 27 INCH PVC SANITARY SEWER PIPE - L.F.	816.00	\$321.00	\$261,936.00
50352 - 6 INCH SANITARY SEWER LATERAL - L.F.	48.00	\$98.00	\$4,704.00
50390 - SEWER ELECTRONIC MARKERS - EACH	1.00	\$255.00	\$255.00
50361 - WASTEWATER CONTROL - LUMP SUM	1.00	\$16,200.00	\$16,200.00
50401 - 12 INCH TYPE 1 RCP STORM SEWER PIPE (UNDISTRIBUTED) - L.F.	20.00	\$85.00	\$1,700.00
50403 - 18-INCH TYPE 1 RCP STORM SEWER PIPE - L.F.	338.00	\$86.00	\$29,068.00
50404 - 21-INCH TYPE 1 RCP STORM SEWER PIPE - L.F.	115.00	\$112.00	\$12,880.00
50405 - 24-INCH TYPE 1 RCP STORM SEWER PIPE - L.F.	131.00	\$133.00	\$17,423.00
50409 - 36-INCH TYPE 1 RCP STORM SEWER PIPE - L.F.	414.00	\$170.00	\$70,380.00
50424 - 43 INCH X 68 INCH TYPE I HERCP STORM SEWER PIPE - L.F. 50413 - 48 INCH X 76 INCH TYPE I HERCP STORM SEWER PIPE - L.F.	50.00	\$303.00	\$15,150.00
	59.00	\$380.00	\$22,420.00
50461 - 12 INCH RCP AE (UNDISTRIBUTED) - EACH 50463 - 18 INCH RCP AE - EACH	2.00	\$1,300.00	\$2,600.00
50464 - 21 INCH RCP AE - EACH	8.00	\$1,400.00	\$11,200.00
50465 - 24 INCH RCP AE - EACH	1.00	\$1,500.00	\$1,500.00
50468 - 36 INCH RCP AE - EACH	1.00 1.00	\$1,600.00 \$2,100.00	\$1,600.00 \$2,100.00
50487 - 43 INCH X 68 INCH HERCP AE - EACH	1.00	\$2,100.00 \$3,200.00	\$3,200.00
50488 - 48 INCH X 76 INCH HERCP AE - EACH	1.00	\$3,200.00 \$3,800.00	\$3,800.00
50501 - PRECAST CONCRETE BOX CULVERT (6' X 4') - L.F.	436.00	\$775.00	\$337,900.00
50502 - PRECAST CONCRETE BOX CULVERT (8' X 4') - L.F.	102.00	\$1,245.00	\$126,990.00
50503 - PRECAST CONCRETE BOX CULVERT (10 X 4' FOR B-13-943) - L.F.	448.00	\$1,210.00	\$542,080.00
50504 - PRECAST CONCRETE BOX CULVERT (12'X6' FOR B-13-942) - L.F.	417.00	\$1,520.00	\$633,840.00
50511 - BOX CULVERT WINGWALLS FOR BOXES 401-403 - EACH	1.00	\$21,000.00	\$21,000.00
50512 - BOX CULVERT WINGWALLS FOR BOXES 201-204 - EACH	2.00	\$33,000.00	\$66,000.00
50513 - BOX CULVERT WINGWALLS FOR BOX 301 - EACH	2.00	\$21,000.00	\$42,000.00
50514 - BOX CULVERT WINGWALLS FOR BOXES 101-103 - EACH	1.00	\$41,000.00	\$41,000.00
50601 - 12 INCH RCP AE GATE (UNDISTRIBUTED) - EACH	2.00	\$1,000.00	\$2,000.00
50603 - 18 INCH RCP AE GATE - EACH	4.00	\$1,100.00	\$4,400.00
50604 - 21 INCH RCP AE GATE - EACH	1.00	\$1,500.00	\$1,500.00
50605 - 24 INCH RCP AE GATE - EACH	1.00	\$2,000.00	\$2,000.00
50608 - 36 INCH RCP AE GATE - EACH	1.00	\$3,500.00	\$3,500.00
50611 - 54 INCH RCP AE GATE - EACH	1.00	\$5,100.00	\$5,100.00
50612 - 60 INCH RCP AE GATE - EACH	1.00	\$6,400.00	\$6,400.00
50627 - 43 INCH X 68 INCH HERCP AE GATE - EACH	1.00	\$5,100.00	\$5,100.00
50628 - 48 INCH X 76 INCH HERCP AE GATE - EACH	1.00	\$6,400.00	\$6,400.00
50651 - 6X4 BOX CULVERT OUTLET GATE - EACH	1.00	\$3,500.00	\$3,500.00
50701 - 4' DIA. SANITARY SAS - EACH	3.00	\$4,800.00	\$14,400.00
50702 - 5' DIA, SANITARY SAS - EACH	6.00	\$10,100.00	\$60,600.00
50703 - 6' DIA. SANITARY SAS - EACH	1.00	\$11,800.00	\$11,800.00
50722 - 6'X6' CATCHBASIN - EACH	2.00	\$11,150.00	\$22,300.00
50723 - 3' X 3' STORM SAS - EACH	8.00	\$3,850.00	\$30,800.00
50724 - 4' X 4' STORM SAS - EACH	2.00	\$5,750.00	\$11,500.00
50741 - TYPE "H" INLET - EACH	1.00	\$3,290.00	\$3,290.00
50767 - TERRACE INLET TYPE 2 - EACH	9.00	\$9,350.00	\$84,150.00
50768 - TERRACE INLET TYPE 3 - EACH	4.00	\$5,800.00	\$23,200.00

CONTRACT NO. 9517 DATE: 11/14/24

	Quantity 4.87	Price \$245.00	Extension \$1,193.15
50783 - INSIDE DROP - V.F.	4.07 6.00	\$2,350.00	\$14,100.00
50791 - SANITARY SEWER TAP - EACH	2.00	\$1,800.00	\$3,600.00
50792 - STORM SEWER TAP - EACH 50797 - EXTERNAL SEWER ACCESS STRUCTURE JOINT SEAL - EACH	10.00	\$530.00	\$5,300.00
	10.00	\$950.00 \$950.00	\$9,500.00
50801 - UTILITY LINE OPENING (ULO) - UNDISTRIBUTED - EACH		\$950.00 \$14.00	\$9,500.00
60230 - FURNISH & INSTALL 2 INCH PVC (SCHEDULE 80) CONDUIT - L.F.	100.00		
60232 - FURNISH & INSTALL 2 INCH PVC (SCHEDULE 40) CONDUIT - L.F.	2945.00	\$13.00 \$50.00	\$38,285.00 \$5,000.00
60241 - GOPHER RACEWAY FOR ELECTRICAL CONDUIT - L.F.	100.00	\$50.00	\$5,000.00
60255 - FURNISH & INSTALL 3 #6 AND 1 #8 WIRES IN EXISTING OR	2420.00	¢00.00	\$75 4CO 00
CONTRACTORINSTALLED CONDUIT - L.F.	3430.00	\$22.00	\$75,460.00
60261 - ELECTRICAL TRENCH - L.F.	3045.00	\$5.00	\$15,225.00
60402 - CONSTRUCT LB-2 BASE - EACH	16.00	\$1,200.00	\$19,200.00
60413 - CONSTRUCT TYPE "P' BASE - EACH	1.00	\$2,300.00	\$2,300.00
60415 - CONSTRUCT LB-3R BASE - EACH	3.00	\$1,400.00	\$4,200.00
60421 - REMOVE STREET LIGHT BASE - EACH	3.00	\$450.00	\$1,350.00
60422 - REMOVE STREET LIGHT POLE - EACH	3.00	\$750.00	\$2,250.00
60501 - INSTALL CITY FURNISHED STREET LIGHT UNIT - EACH	19.00	\$500.00	\$9,500.00
60702 - CONSTRUCT ELECTRICAL HANDHOLE TYPE 1 - EACH	4.00	\$1,600.00	\$6,400.00
60704 - CONSTRUCT ELECTRICAL HANDHOLE TYPE 3 - EACH	2.00	\$900.00	\$1,800.00
60800 - PAVEMENT MARKING EPOXY, LINE, 4-INCH - L.F.	4120.00	\$0.38	\$1,565.60
60801 - PAVEMENT MARKING EPOXY, DOUBLE LINE, 4-INCH - L.F.	1000.00	\$0.70	\$700.00
60813 - PAVEMENT MARKING EPOXY, CROSSWALK, 6-INCH - L.F.	584.00	\$12.31	\$7,189.04
60814 - PAVEMENT MARKING EPOXY, CROSSWALK, 8-INCH - L.F.	200.00	\$12.31	\$2,462.00
60818 - PAVEMENT MARKING EPOXY, STOP LINE, 24-INCH - L.F.	180.00	\$13.40	\$2,412.00
60822 - PAVEMENT MARKING EPOXY, SYMBOL, BIKE SHARROW - EACH	4.00	\$307.00	\$1,228.00
60823 - PAVEMENT MARKING EPOXY, SYMBOL, BIKE LANE - EACH	4.00	\$301.00	\$1,204.00
60829 - PAVEMENT MARKING EPOXY, SYMBOL, LEFT ARROW - EACH	1.00	\$312.10	\$312.10
60830 - PAVEMENT MARKING EPOXY, SYMBOL, RIGHT ARROW - EACH	2.00	\$312.10	\$624.20
70004 - FURNISH AND INSTALL 10 INCH PIPE & FITTINGS - L.F.	230.00	\$183.00	\$42,090.00
70022 - FURNISH AND INSTALL 24 INCH CASING PIPE - L.F.	135.00	\$222.00	\$29,970.00
70033 - FURNISH AND INSTALL 10 INCH WATER VALVE - EACH	3.00	\$4,700.00	\$14,100.00
70080 - CUT-IN OR CONNECT TO EXISTING WATER SYSTEM - EACH	5.00	\$2,125.00	\$10,625.00
70101 - FURNISH AND INSTALL INSULATION - EACH	17.00	\$120.00	\$2,040.00
70104 - ADJUST WATER VALVE BOX - EACH	6.00	\$180.00	\$1,080.00
70111 - FURNISH AND INSTALL ANODE - EACH	6.00	\$560.00	\$3,360.00
90001 - STORMWATER CONTROL PLAN AND IMPLEMENTATION - LUMP SUM	1.00	\$100.00	\$100.00
90002 - GROUNDWATER CONTROL/SITE DEWATERING - LUMP SUM	1.00	\$18,000.00	\$18,000.00
90003 - REMOVAL OF EXCESS DEBRIS (DEMING WAY - NORTH) - TON	5.00	\$262.00	\$1,310.00
90004 - DREDGE, HAUL, AND DISPOSE OF SEDIMENT - C.Y.	9795.00	\$22.20	\$217,449.00
90005 - CLAY LINER PROVISION AND PLACEMENT - C.Y.	14685.00	\$38.30	\$562,435.50
90021 - PRIVATE OUTFALL PROTECTION (UNDISTRIBUTED) - EACH	10.00	\$115.00	\$1,150.00
90022 - APRON ENDWALL FOR CULVERT PIPE SALVAGED - EACH	2.00	\$725.00	\$1,450.00
90023 - 4' x 8' STORM STRUCTURE - EACH	1.00	\$13,000.00	\$13,000.00
90024 - 6' X 7' CATCHBASIN - EACH	2.00	\$12,500.00	\$25,000.00
90025 - CULVERT WINGWALL RAILINGS - L.F.	390.00	\$453.00	\$176,670.00
90030 - ENCASEMENT - SANITARY SEWER - LUMP SUM	1.00	\$56,400.00	\$56,400.00
90031 - SANITARY CONCRETE ENCASEMENT AND WING WALL AT DEMING WAY - LUMP			
SUM	1.00	\$54,000.00	\$54,000.00
90032 - 27 INCH FIBERGLASS REINFORCED SEWER PIPE - L.F.	190.00	\$347.00	\$65,930.00
90033 - MANHOLE 9-FT DIAMETER - EACH	1.00	\$28,500.00	\$28,500.00
90034 - FURNISH AND INSTALL TEMPORARY FLUSHING HYDRANT - EACH	2.00	\$1,000.00	\$2,000.00
90041 - REINFORCED CHECK DAM - EACH	1.00	\$800.00	\$800.00
90042 - EROSION MATTING, CLASS II, TYPE B - ORGANIC - S.Y.	11040.00	\$2.95	\$32,568.00
90043 - INITIAL INVASIVE SPECIES MANAGEMENT - LUMP SUM	1.00	\$12,020.20	\$12,020.20
90044 - YEAR 1 RESTORATION MAINTENANCE - LUMP SUM	1.00	\$16,161.62	\$16,161.62
90045 - YEAR 2 RESTORATION MAINTENANCE - LUMP SUM	1.00	\$17,474.75	\$17,474.75
90046 - PLUGS - EACH	10000.00	\$5.74	\$57,400.00

R. G. Huston Co., Inc.

CONTRACT NO. 9517 DATE: 11/14/24

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	Quantity		Extension
90047 - CHANNEL BOTTOM SEED MIX - S.Y.	23080.00	\$0.41	\$9,462.80
90048 - SHORELINE SEED MIX AREAS - S.Y.	11590.00	\$0.42	\$4,867.80
90049 - UPLAND MESIC PRAIRIE SEED MIX AREAS - S.Y.	36970.00	\$0.99	\$36,600.30
90050 - WET-MESIC PRAIRIE SEED MIX AREAS - S.Y.	21760.00	\$0.45	\$9,792.00
90051 - NON-STRAT SUMMER SEED - S.Y.	10695.00	\$0.25	\$2,673.75
90061 - BOLLARDS - EACH	2.00	\$1,100.00	\$2,200.00
90062 - PROJECT INFORMATION SIGN (4' x 6') - EACH	6.00	\$300.00	\$1,800.00
90063 - BOUNDARY STAKING - EACH	40.00	\$100.00	\$4,000.00
90064 - CONSTRUCTION SURVEYING - LUMP SUM	1.00	\$35,000.00	\$35,000.00
90065 - FURNISH & INSTALL METERED ELECTRIC SERVICE & BREAKER PANEL - EACH	1.00	\$5,000.00	\$5,000.00
90066 - REMOVE & REPLACE PRIVATE LIGHT UNIT - EACH	2.00	\$4,000.00	\$8,000.00
90067 - TEMPORARY CROSSWALK ACCESS - EACH	5.00	\$571.44	\$2,857.20
90070 - AMELANCHIER CANADENSIS / SHADBLOW SERVICEBERRY - EACH	74.00	\$567.68	\$42,008.32
90071 - BETULA NIGRA / RIVER BIRCH MULTI-TRUNK - EACH	17.00	\$714.14	\$12,140.38
90072 - CARPINUS CAROLINIANA / AMERICAN HORNBEAM - EACH	13.00	\$835.35	\$10,859.55
90073 - CARYA OVATA / SHAGBARK HICKORY - EACH	13.00	\$1,048.48	\$13,630.24
90074 - CARYA CORDIFORMIS / BITTERNUT HICKORY - EACH	11.00	\$912.12	\$10,033.32
90075 - CRATAEGUS CRUS-GALLI / THORNLESS HAWTHORN - EACH	22.00	\$964.65	\$21,222.30
90076 - QUERCUS MACROCARPA / BUR OAK - EACH	34.00	\$785.86	\$26,719.24
90077 - QUERCUS X SCHUETTI / SWAMP BUR OAK - EACH	18.00	\$846.46	\$15,236.28
90078 - ARONIA MELANOCARPA / BLACK CHOKEBERRY - EACH	11.00	\$148.48	\$1,633.28
90079 - CEPHALANTHUS OCCIDENTALIS / BUTTONBUSH - EACH	67.00	\$148.48	\$9,948.16
90080 - COMPTONIA PEREGRINA / SWEET FERN - EACH	42.00	\$148.48	\$6,236.16
90081 - CORYLUS AMERICANA / AMERICAN HAZELNUT - EACH	48.00	\$148.48	\$7,127.04
90082 - ROSA BLANDA / SMOOTH ROSE - EACH	41.00	\$148.48	\$6,087.68
90083 - SAMBUCUS CANADENSIS / AMERICAN ELDERBERRY - EACH	67.00	\$148.48	\$9,948.16
90084 - STAPHYLEA TRIFOLIA / AMERICAN BLADDERNUT - EACH	17.00	\$148.48	\$2,524.16
90085 - VIBURNUM LENTAGO / NANNYBERRY - EACH	56.00	\$148.48	\$8,314.88
90086 - VIBURNUM PRUNIFOLIUM / BLACKHAW VIRURNUM - EACH	20.00	\$148.49	\$2,969.80
90101 - EXCAVATION FOR STRUCTURES BRIDGES - EACH	1.00	\$3,600.00	\$3,600.00
90102 - CONCRETE MASONRY BRIDGES - C.Y.	72.00	\$958.00	\$68,976.00
90103 - EXPANSION DEVICE - L.F.	28.00	\$620.00	\$17,360.00
90104 - PROTECTIVE SURFACE TREATMENT - S.Y.	152.00	\$6.25	\$950.00
90105 - BAR STEEL REINFORCEMENT HS STRUCTURES - LB	5500.00	\$3.90	\$21,450.00
90106 - BAR STEEL REINFORCEMENT HS COATED STRUCTURES - LB	1270.00	\$4.20	\$5,334.00
90107 - RUBBERIZED MEMBRANE WATERPROOFING - S.Y.	9.00	\$88.00	\$792.00
90108 - PIPE UNDERDRAIN WRAPPED 6-INCH - L.F.	120.00	\$4.95	\$594.00
90109 - PREFABRICATED STEEL TRUSS PEDESTRIAN BRIDGE - EACH	1.00	\$157,000.00	
90110 - STEEL PEDESTRIAN RAILING - L.F.	31.00	\$664.00	\$20,584.00
90111 - CONCRETE PAVEMENT APPROACH SLAB - LUMP SUM	1.00	\$10,000.00	\$10,000.00
207 Items	Totals		\$8,017,100.00

R. G. Huston Co., Inc.



Department of Public Works Engineering Division

James M. Wolfe, 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

BIENNIAL BID BOND

Deputy City Engineer Bryan Cooper, AlA Gregory T. Fries, P.E. Chris J. Petykowski, P.E.

Deputy City Engineer Kathleen M. Cryan

Principal Engineer 2 John S. Fahrney, P.E. Janet Schmidt, P.E.

Principal Engineer 1 Mark D. Moder, P.E. Andrew J. Zwieg, P.E.

Financial Manager Sleven B. Danner-Rivers

R.G. Huston Co., Inc.

(a corporation of the State of <u>Wisconsin</u> (individual), (partnership), (hereinafter referred to as the "Principal") and

Travelers Casualty and Surety Company of America

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

The condition of this obligation is that the Principal has submitted to the City certain bids for projects from the time period of <u>February 1, 2024</u> through <u>January 31, 2026</u>.

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

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

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

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

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

PRINCIPAL	December 20, 2023	
R.G. Huston Co., Inc. COMPANY NAME	EATFIX SEARPORAL DATE	······
By: SIGNATURE AND TITLE	SEAL OF SEAL O	
SURETY	SCONSIL SCONSIL	
Travelers Casualty and Surety Company COMPANY NAME	f America December 20, 2023 AFFIX SEAL DATE	
By:	ney-in-Fact	

This certifies that I have been duly licensed as an agent for the Surety in Wisconsin under National Provider No. <u>6523593</u> for the year <u>2023</u> and appointed as attorney in fact with authority to execute this bid bond, which power of attorney has not been revoked.

December 20, 2023

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AGENT SIGNATURE

740 Regent St., Ste 400 ADDRESS

Madison, WI 53715 CITY, STATE AND ZIP CODE

608-257-3795 TELEPHONE NUMBER

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

TRAVELERS

Travelers Casualty and Surety Company of America Travelers Casualty and Surety Company St. Paul Fire and Marine Insurance Company

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS: That Travelers Casualty and Surety Company of America, Travelers Casualty and Surety Company, and St. Paul Fire and Marine Insurance Company are corporations duly organized under the laws of the State of Connecticut (herein collectively called the "Companies"), and that the Companies do hereby make, constitute and appoint JENNY L HIRTH of MADISON Wisconsin their true and lawful Attorney(s)-in-Fact to sign, execute, seal and

MADISON , Wisconsin , their true and lawful Attorney(s)-In-Fact to sign, execute, seal and acknowledge any and all bonds, recognizances, conditional undertakings and other writings obligatory in the nature thereof on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

IN WITNESS WHEREOF, the Companies have caused this instrument to be signed, and their corporate seals to be hereto affixed, this 21st day of April, 2021.



State of Connecticut

City of Hartford ss.

On this the 21st day of April, 2021, before me personally appeared Robert L. Raney, who acknowledged himself to be the Senior Vice President of each of the Companies, and that he, as such, being authorized so to do, executed the foregoing instrument for the purposes therein contained by signing on behalf of said Companies by himself as a duly authorized officer.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

My Commission expires the 30th day of June, 2026

NOTARY PUBLIO Anna P. Nowik, Notary Public

This Power of Attorney is granted under and by the authority of the following resolutions adopted by the Boards of Directors of each of the Companies, which resolutions are now in full force and effect, reading as follows:

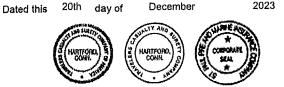
RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President, any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary may appoint Attorneys-in-Fact and Agents to act for and on behalf of the Company and may give such appointee such authority as his or her certificate of authority may prescribe to sign with the Company's name and seal with the Company'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 or the Board of Directors at any time may remove any such appointee and revoke the power given him or her; and it is

FURTHER RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President may delegate all or any part of the foregoing authority to one or more officers or employees of this Company, provided that each such delegation is in writing and a copy thereof is filed in the office of the Secretary; and it is

FURTHER RESOLVED, that any bond, recognizance, contract of indemnity, or writing obligatory in the nature of a bond, recognizance, or conditional undertaking shall be valid and binding upon the Company when (a) signed by the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary and duly attested and sealed with the Company's seal by a Secretary or Assistant Secretary; or (b) duly executed (under seal, if required) by one or more Attorneys-in-Fact and Agents pursuant to the power prescribed in his or her certificate or their certificates of authority or by one or more Company officers pursuant to a written delegation of authority; and it is

FURTHER RESOLVED, that the signature of each of the following officers: President, any Executive Vice President, any Senior Vice President, any Vice President, any Assistant Vice President, any Secretary, any Assistant Secretary, and the seal of the Company may be affixed by facsimile to any Power of Attorney or to any certificate relating thereto appointing Resident Vice Presidents, Resident Assistant Secretaries or Attorneys-in-Fact for purposes only of executing and attesting bonds and undertakings and other writings obligatory in the nature thereof, and any such Power of Attorney or certificate bearing such facsimile signature or facsimile seal shall be valid and binding upon the Company and any such power so executed and certified by such facsimile signature and facsimile seal shall be valid and binding on the Company in the future with respect to any bond or understanding to which it is attached.

I, Kevin E. Hughes, the undersigned, Assistant Secretary of each of the Companies, do hereby certify that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies, which remains in full force and effect.



Kevin E. Hughes, Assistant Secretary

To verify the authenticity of this Power of Attorney, please call us at 1-800-421-3880. Please refer to the above-named Attorney(s)-in-Fact and the details of the bond to which this Power of Attorney is attached.

SECTION H: FEDERAL AND LOCAL CERTIFICATIONS

The following Certifications and forms must be executed and submitted at the time of the bid submission:

1. AFFIDAVIT AND INFORMATION REQUIRED OF BIDDERS - (Include in all bids)

ş

I hereby declare and affirm under the penalty for perjury:

A. That I am the Bidder (if the Bidder is an individual), a partner in the Bidder (if the Bidder is a partnership), or an officer or employee of the bidding corporation (if the Bidder is a corporation or limited liability company);

B. That the attached Bid have been arrived at by the Bidder independently and have been submitted without collusion or sham [fraud] and without any agreement, understanding, or planned common course of action with any other vendor of materials, supplies, equipment, or services described in the request for proposals, designed to limit independent proposing or competition;

C. That the contents of the Bid have not been communicated, directly or indirectly, by the Bidder or its employees or agents to any person not an employee or agent of the Bidder or its surety or any bond furnished with the Bid, and will not be communicated to any such person prior to the official opening of the proposal(s); and

D.	That I have fully informed myself regarding	the accuracy of the statements made in the affidavit.
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		- with Brow Com
	RN	ECT/CORPORATE
SIGNATURE	- hr [] -	SEAL OF
NAME	Brad Huston	<u><u> </u></u>
TITLE	President	1975 1975
FIRM NAME	R.G. Huston Co., Inc.	WIND MARKE
DATE	11/14/24	ale water and the state of the

2. COMPLIANCE WITH SPECIFICATIONS/SCOPE OF WORK - (Include in all bids)

The Bidder hereby certifies that it will comply with the specifications/scope of work issued by the City of Madison, WI. <u>The Bidder warrants and certifies that of the following three paragraphs, paragraph A or B or C is true (check one ONLY)</u>:

A. X ____ The Bidder hereby states that it will comply with the specifications/scope of work in <u>all</u> areas. (This means that there are no exceptions to the City's specifications/scope of work, no matter how minor. If you have any doubts, check paragraph C or call the Procuring Agency, for assistance.)

B.____ The Bidder hereby states that it will comply with the specifications/scope of work in all areas except those where requests for clarification were approved by the City prior to Bid submission.

C.____ The Bidder hereby states that it will comply with the specifications/scope of work in all areas except those noted in its response as not being granted by the City in the requests for clarification process. The Bidder understands that those exceptions to the specifications/scope of work may be considered not responsive and may be rejected by the City.

	51	CORPORATE SEAL
SIGNATURE	B/K	EL 1076
NAME	Brad Huston	SCONS MULTING
TITLE	President	WIND DIRK.
FIRM NAME	R.G. Huston Co., Inc.	
DATE	11/14/24	

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Instructions for Certification:

1. By signing and submitting this Offer or proposal, the prospective lower tier participant is providing the signed certification set out below.

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3. 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 when submitted or has become erroneous by reason of changed circumstances.

4. 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 rules assistance in obtaining a copy of those regulations.

5. 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 proposed for debarment under 48 GFR part 9, subpart 9.4, debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by in writing by the department or agency with which this transaction originated.

6. 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.

7. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not proposed for debarment under 48 CFR part 9, subpart 9.4, debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant agrees to review the "Excluded Parties Listing System" at <u>http://www.sam.gov</u>, before entering into any third party contract or subagreement.

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The prospective lower tier participant certifies, by submission of this Proposal that neither it nor its "principals" as defined in 2. C.F.R. § 180.995 is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

THE SUBCONTRACTOR OR LOWER-TIER PARTICIPANT, CERTIFIES OR AFFIRMS THE TRUTHFULNESS AND ACCURACY OF EACH STATEMENT OF ITS CERTIFICATION AND EXPLANATION, IF ANY. IN ADDITION, THE BIDDER OR OFFEROR UNDERSTANDS AND AGREES THAT THE PROVISIONS OF 31 U.S.C. §§ 3801 ET SEQ. APPLY TO THIS CERTIFICATION AND EXPLANATION, IF ANY.

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SIGNATURE	Chilling and the second	
NAME	Lowm	
TITLE	Prosidit	
FIRM NAME	Bullet Transit Co Inc	_
DATE	11/19/24	

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H-4

SIGNATURE	AB_
NAME	Charles Brumm
TITLE	President
FIRM NAME	CA Brumm Trucking Inc
DATE	11/19/24

Instructions for Certification:

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SIGNATURE	Jost Z
NAME	Josh Kraemer
TITLE	Operations Manager- WI
FIRM NAME	HGS, LLC
DATE	11/14/2024

Instructions for Certification:

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6. 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.

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The prospective lower tier participant certifies, by submission of this Proposal that neither it nor its "principals" as defined in 2. C.F.R. § 180.995 is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective lower tier participant shall attach an explanation to this proposal, and indicate that it has done so, by placing an X in the following space: _____

Furthermore, the prospective lower tier participant certifies that it will provide immediate written notice to the Procuring Agency if, at any time during the course of the proposed Offer, it learns that this certification was erroneous when submitted or has been erroneous by reason of changed circumstances.

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	M. C. Jerdill
SIGNATURE	Nenry Ankein fr
NAME	HENRY CONKLIN Jr
TITLE	President
FIRM NAME	Jrs Const, I Candiscoping
DATE	

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SIGNATURE	Hittel dur	
NAME	Michael Aders	
TITLE	Vice President	
FIRM NAME	Higa kentals UL	
DATE	11/14/24	

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SIGNATURE	2 W
NAME	JOC WIEK
TITLE	PRESIDENT
FIRM NAME	<u>RATMOND P. CATTELL INC.</u>
DATE	11/14/24

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SIGNATURE	
NAME	TAN EVENU
TITLE	PRESIDENT
FIRM NAME	Roo Arnau
DATE	11/14/24

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	D = M -
SIGNATURE	Jan that
NAME	Dustin Gradel
TITLE	Vice President
FIRM NAME	Tri-Caunty Paving Inc
DATE	11/13/24

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3. 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 when submitted or has become erroneous by reason of changed circumstances.

4. 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 rules implementing Executive Order 12549. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations.

5. 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 proposed for debarment under 48 CFR part 9, subpart 9.4, debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by in writing by the department or agency with which this transaction originated.

6. 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.

7. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not proposed for debarment under 48 CFR part 9, subpart 9.4, debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant agrees to review the "Excluded Parties Listing System" at http://www.sam.gov, before entering into any third party contract or subagreement.

8. Nothing contained in the foregoing shall be construed to require establishment of system of records in order to render in good faith the certification required by this clause. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

9. Except for transactions authorized under Paragraph 5 of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is proposed for debarment under 48 CFR part 9, subpart 9.4, 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.

The prospective lower tier participant certifies, by submission of this Proposal that neither it nor its "principals" as defined in 2. C.F.R. § 180.995 is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

THE SUBCONTRACTOR OR LOWER-TIER PARTICIPANT, CERTIFIES OR AFFIRMS THE TRUTHFULNESS AND ACCURACY OF EACH STATEMENT OF ITS CERTIFICATION AND EXPLANATION, IF ANY. IN ADDITION, THE BIDDER OR OFFEROR UNDERSTANDS AND AGREES THAT THE PROVISIONS OF 31 U.S.C. §§ 3801 ET SEQ. APPLY TO THIS CERTIFICATION AND EXPLANATION, IF ANY.

SIGNATURE	Cining & Marking-
NAME	Craig Mathews
TITLE	Principal
FIRM NAME	Vierbicher Assoiciates, Inc
DATE	November 19, 2024

4. DEBARMENT AND SUSPENSION CERTIFICATION - PRIMARY (Only Proposals Exceeding \$25,000)

Instructions for Certification:

1. By signing and submitting this Offer or proposal, the prospective primary participant is providing the signed 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 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 primary participant to furnish a certification 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 or agency determined to enter into this. If it is later determined that the prospective primary participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

4. The prospective primary participant shall provide immediate written notice to the department or agency to which this proposal is submitted if at any time the prospective primary participant 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 rules implementing Executive Order 12549. You may contact the department or agency to which this proposal is submitted for assistance in obtaining a copy of those regulations.

6. The prospective primary 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 proposed for debarment under 48 CFR part 9, subpart 9.4, debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by in writing by the department or agency entering into this transactions.

7. The prospective primary 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", provided by the department or agency entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.

8. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not proposed for debarment under 48 CFR part 9, subpart 9.4, debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant agrees to review the "Excluded Parties Listing System" at <u>http://www.sam.gov</u>, before entering into any third party contract or subagreement.

9. Nothing contained in the foregoing shall be construed to require establishment of system of records in order to render in good faith the certification required by this clause. The knowledge and information of a participant 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 participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is proposed for debarment under 48 CFR part 9, subpart 9.4, 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.

The prospective primary participant certifies, by submission of this Proposal, to the best of its knowledge and belief, that neither it nor its "principals," as defined in 2. C.F.R. Part 180.995:

Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;

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.

Are not presently indicted for or otherwise criminally or civilly charges by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (2) of this certification.

Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State, local) terminated for cause or default.

If the prospective primary participant is unable to certify to any of the statements in this certification, such prospective primary participant shall attach an explanation to this proposal, and indicate that it has done so, by placing an "X" in the following space: _____.

Furthermore, the Offeror certifies that it will provide immediate written notice to the Procuring Agency if, at any time during the course of the proposed contract, it learns that this certification was erroneous when submitted or has been erroneous by reason of changed circumstances.

THE BIDDER OR OFFEROR, CERTIFIES OR AFFIRMS THE TRUTHFULNESS AND ACCURACY OF EACH STATEMENT OF ITS CERTIFICATION AND EXPLANATION, IF ANY. IN ADDITION, THE BIDDER OR OFFEROR UNDERSTANDS AND AGREES THAT THE PROVISIONS OF 31 U.S.C. §§ 3801 ET SEQ. APPLY TO THIS CERTIFICATION AND EXPLANATION, IF ANY.

		CORPORATE
SIGNATURE	\$AD_	CO CORPORATE SEAL
NAME	Brad Huston	1975
TITLE	President	THE OCONSTITUTE
FIRM NAME	R.G. Huston Co., Inc.	and the market
DATE	11/14/24	

SECTION I: AGREEMENT

THIS AGREEMENT made this <u>23rd</u> day of <u>December</u> in the year Two Thousand and Twenty-Four between <u>**R. G. HUSTON CO., INC.**</u> 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 **DECEMBER 10, 2024**, 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, this Agreement, and the Federal Funding Compliance Requirements set forth in Addendum A to this Agreement; 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:

PHEASANT BRANCH GREENWAY ENHANCEMENT CONTRACT NO. 9517

- 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 <u>SEE SPECIAL PROVISIONS</u>, 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 <u>EIGHT MILLION SEVENTEEN THOUSAND</u> <u>ONE HUNDRED AND NO/100</u> (\$8,017,100.00) Dollars being the amount bid by such Contractor and which was awarded to him/her as provided by law.
- 4. **A. Non-Discrimination.** During the term of 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.

B. Affirmative Action. 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 original 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.

- 7. **Choice of Law and Forum Selection.** This Contract shall be governed by and construed, interpreted and enforced in accordance with the laws of the State of Wisconsin. The parties agree, for any claim or suit or other dispute relating to this Contract that cannot be mutually resolved, the venue shall be a court of competent jurisdiction within the State of Wisconsin and the parties agree to submit themselves to the jurisdiction of said court, to the exclusion of any other judicial district that may have jurisdiction over such a dispute according to any law.
- 8. **Counterparts, Electronic Signature and Delivery.** This Contract may be signed in counterparts, each of which shall be taken together as a whole to comprise a single document. Signatures on this Contract may be exchanged between the parties by facsimile, electronic scanned copy (.pdf) or similar technology and shall be as valid as original; and this Contract may be converted into electronic format and signed or given effect with one or more electronic signature(s) if the electronic signature(s) meets all requirements of Wis. Stat. ch. 137 or other applicable Wisconsin or Federal law. Executed copies or counterparts of this Contract may be delivered by facsimile or email and upon receipt will be deemed original and binding upon the parties hereto, whether or not a hard copy is also delivered. Copies of this Contract, fully executed, shall be as valid as an original.

PHEASANT BRANCH GREENWAY ENHANCEMENT CONTRACT NO. 9517

IN WITNESS WHEREOF, the Contractor has hereunto set their 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.

R. G. HUSTON CO., INC. Countersigned: Company Name UNI President litness Secretary itness

CITY OF MADISON

Satya Rhodes-Conway, Mayor

Maribeth Witzel-Behl Maribeth Witzel-Behl, City Clerk

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

David Schmisdicks

David P. Schmiedicke, Finance Director

Approved as to form:

Michael Haas

Michael Haas, City Attorney

Execution of this Agreement by City was authorized by Resolution Enactment No. RES -24-00714, ID No. ____, adopted by the Common Council of the City of Madison on Dec. 10 , 2024. 86069

12/23/24

Date

12/20/2024 Date

12/20/2024

12/20/2024

Date

Date

ADDENDUM A TO AGREEMENT: FEDERAL FUNDING COMPLIANCE REQUIREMENTS

The Contract will be funded, in part, by Building Resilient Infrastructure and Communities (BRIC) program administered by the Federal Emergency Management Agency (FEMA) through the Wisconsin Division of Emergency Management (WEM). Due to the federal funding, Contractor agrees to comply with applicable federal requirements, and follow applicable federal guidance as applicable. In addition, the following federal funding compliance requirements, set forth in this Addendum A, are incorporated into and made a part of this Agreement:

1. Notice to Contractor; Changes in Applicable Federal Law.

- a. This is an acknowledgement that FEMA financial assistance will be used to fund all or a portion of the contract. The contractor will comply with all applicable federal law, regulations, executive orders, FEMA policies, procedures, and directives.
- b. Federal requirements that apply to the City, this Contract, and any Amendments thereto may change due to changes in federal law, regulation, other requirements, or guidance, or changes in the City's underlying agreements with the United States, including information incorporated by reference and made part of any such agreements; and
- c. Applicable changes to those federal requirements will apply to this Contract and any subcontracts entered into by Contractor.

2. No Federal Government Obligation to Third Parties.

- a. Contractor acknowledges and agrees that, notwithstanding any concurrence by the Federal Government in or approval of the solicitation or award of the Contract, absent the express written consent by the Federal Government, the Federal Government is not a party to this Contract and shall not be subject to any obligations or liabilities to City, Contractor, or any other party (whether or not a party to the Contract) pertaining to any matter resulting from the Contract. Contractor agrees to include the above clause in each subcontract financed in whole or in part with Federal assistance provided by FEMA. It is further agreed that the clause shall not be modified, except to identify the subcontractor who will be subject to its provisions.
- 3. Termination for Default.
 - a. The City may, by written notice of default to the Contractor, terminate the whole or any part of this Contract if the Contractor fails to make delivery of the supplies and/or work including, but not limited to materials, equipment, and any other components provided for under this contract, or to perform the services within the time specified herein or any extension thereof; or if the Contractor fails to perform any of the other provisions of the Contract, or so fails to make progress as to endanger performance of this Contract in accordance with its terms, and in either of these two circumstances does not cure such failure within a period of 10 (ten) calendar days (or such longer period as the City may authorize in writing) after receipt of notice from the City specifying such failure.
 - b. In the event the City elects to waive its remedies for any breach by Contractor of any covenant, term or condition of this Contract, such waiver by the City shall not limit the City's remedies for any succeeding breach of that or of any other term, covenant, or condition of this Contract.

- c. If the Contract is terminated in whole or in part for default, the City may procure, upon such terms and in such manner as the City may deem appropriate, including all articles supplies or services similar to those so terminated. The Contractor shall be liable to the City for any excess costs for such similar work including all materials, services and supplies, and shall continue the performance of this Contract to the extent not terminated under the provisions of this clause. Except with respect to defaults of subcontractors, the Contractor shall not be liable for any excess costs if the failure to perform the Contractor. If the failure to perform is caused by the default of a subcontractor, and if such default arises out of causes beyond the control of both the Contractor and subcontractor, and without the fault or negligence of either of them, the Contractor shall not be liable for any excess costs for such the contractor shall not be liable for any excess costs for such a subcontractor and subcontractor, and without the fault or negligence of either of them, the Contractor shall not be liable for any excess costs for failure to perform, unless the materials or services to be furnished by the subcontractor were obtainable from other sources in sufficient time to permit the Contractor to meet the required delivery or performance schedule.
- d. Payment for completed work including all articles delivered to and accepted by the City shall be at the Contract price. The City may withhold from amounts otherwise due the Contractor for such completed work including all articles such sum as the City determines to be necessary to protect the City against loss because of outstanding liens or claims of former lien holders.
- e. If, after notice of termination of this Contract under the provisions of this clause, it is determined for any reason that the Contractor was not in default under the provisions of this clause, or that the default was excusable under the provisions of this clause, the rights and obligations of the parties shall be the same as if the notice of termination had been issued pursuant to termination for convenience of the City.
- f. The rights and remedies of the City provided in this clause shall not be exclusive and are in addition to any other rights and remedies provided by law or under this Contract.

4. <u>Termination for Convenience</u>.

- a. The performance of work under this Contract may be terminated at any time upon seven (7)-calendar days written notice to the Contractor, by the City in accordance with this clause in whole, or from time to time in part, whenever the City shall determine that such termination is in the best interest of the City. Any such termination shall be effected by delivery to the Contractor of a notice of termination specifying the extent to which performance of work under the Contract is terminated, and the date upon which such termination becomes effective.
- After receipt of a notice of termination, and except as otherwise directed by the City, the b. Contractor shall: stop work under the Contract on the date and to the extent specified in the notice of termination; place no further orders or subcontracts for materials, services, or facilities, except as may be necessary for completion of such portion of the work under the Contract as is not terminated; terminate all orders and subcontracts to the extent that they relate to the performance of work terminated by the notice of termination; assign to the City in the manner, at the times, and to the extent directed by the City, all of the right, title, and interest of the Contractor under the orders and subcontracts so terminated, in which case the City shall have the right, in its discretion, to settle or pay and or all claims arising out of the termination of such orders and subcontracts; settle all outstanding liabilities and all claims arising out of such termination of orders and subcontracts, with the approval or ratification of the City, to the extent it may require, which approval or ratification shall be final for all the purposes of this clause; transfer title to the City and deliver in the manner. at the times, and to the extent, if any, directed by the City the fabricated or unfabricated parts, work in process, completed work, supplies, and other material produced as part of

or acquired in connection with the performance of, the work terminated, and the completed or partially completed plans, drawings, information and other property which, if the Contract had been completed, would have been required to be furnished to the City; use its best efforts to sell, in the manner, at the times, to the extent, and at the price(s) directed or authorized by the City, any property of the types referred to above, provided, however, that the Contractor shall not be required to extend credit to any purchaser, and may acquire any such property under the conditions prescribed by and at a price(s) approved by the City, and provided further, that the proceeds of any such transfer or disposition shall be applied in reduction of any payments to be made by the City to the Contractor under this Contract or shall otherwise be credited to the price or cost of the work covered by this Contract or paid in such other manner as the City may direct; complete performance of such part of the work as shall not have been terminated by the notice of termination; and take such action as may be necessary, or as the City may direct, for the protection or preservation of the property related to this Contract which is in the possession of the Contractor and in which the City has or may acquire an interest.

- c. The Contractor shall promptly submit its claim for payment to the City to be paid to the Contractor. Settlement of claims by the Contractor under this termination for convenience clause shall be in accordance with the provisions set forth in 48 C.F.R. Part 31.2 except that wherever the word "Government" appears it shall be deleted and the word "the City" shall be substituted in lieu thereof.
- 5. <u>Equal Employment Opportunity</u>. During the performance of this Contract, the contractor agrees as follows:
 - a. The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, sexual orientation, gender identity, or national origin. 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. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

- b. The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.
- c. The contractor will not discharge or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This provision shall not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or is consistent with the contractor's legal duty to furnish information.

- d. The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- e. The contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
- f. The contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.
- g. In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.
- h. The contractor will include the provisions of paragraphs a through h of this section in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance:

Provided, however, that in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency, the contractor may request the United States to enter into such litigation to protect the interests of the United States.

The applicant further agrees that it will be bound by the above equal opportunity clause with respect to its own employment practices when it participates in federally assisted construction work: Provided, That if the applicant so participating is a State or local government, the above equal opportunity clause is not applicable to any agency, instrumentality or subdivision of such government which does not participate in work on or under the contract.

The applicant agrees that it will assist and cooperate actively with the administering agency and the Secretary of Labor in obtaining the compliance of contractors and subcontractors with the equal opportunity clause and the rules, regulations, and relevant orders of the Secretary of Labor, that it will furnish the administering agency and the Secretary of Labor such information as they may require for the supervision of such compliance, and that it will otherwise assist the administering agency in the discharge of the agency's primary responsibility for securing compliance.

The applicant further agrees that it will refrain from entering into any contract or contract modification subject to Executive Order 11246 of September 24, 1965, with a contractor debarred from, or who has not demonstrated eligibility for, Government contracts and

federally assisted construction contracts pursuant to the Executive Order and will carry out such sanctions and penalties for violation of the equal opportunity clause as may be imposed upon contractors and subcontractors by the administering agency or the Secretary of Labor pursuant to Part II, Subpart D of the Executive Order. In addition, the applicant agrees that if it fails or refuses to comply with these undertakings, the administering agency may take any or all of the following actions: Cancel, terminate, or suspend in whole or in part this grant (contract, loan, insurance, guarantee); refrain from extending any further assistance to the applicant under the program with respect to which the failure or refund occurred until satisfactory assurance of future compliance has been received from such applicant; and refer the case to the Department of Justice for appropriate legal proceedings.

6. Davis-Bacon Act.

- (a) Contractor shall comply with the requirements of the Davis-Bacon Act (as codified at 29 CFR parts 1 et seq.), with respect to the payment of wages and fringe benefits to laborers for the Work on the Project, and this Acts is incorporated by reference in this Contract. Contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5. Contractor and its subcontractors shall insert in any subcontracts the clauses contained in 29 CFR 5.5(a)(1) through (11) of the Davis-Bacon Act, as follows, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. For the purposes of this Section 6, the "contracting officer" is the City Engineer, or designee. The Federal Wage Decision applicable to this Project is attached as Attachment 3 to Addendum A to the Agreement. Note—the Wage Decision is subject to change and does not lock in until the bid's due date.
 - (1) Minimum wages
 - (i) Wage rates and fringe benefits. All laborers and mechanics employed or working upon the site of the work (or otherwise working in construction or development of the project under a development statute), 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 basic hourly 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. As provided in paragraphs (d) and (e) of this section, the appropriate wage determinations are effective by operation of law even if they have not been attached to the contract. Contributions made or costs reasonably anticipated for bona fide fringe benefits under the Davis-Bacon Act (40 U.S.C. 3141(2)(B)) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (a)(1)(v) 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 must be paid the appropriate wage rate and fringe benefits on the wage determination for the classification(s) of work actually performed, without regard to skill, except as provided in paragraph (a)(4) of this section. 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 classifications and wage rates conformed under paragraph (a)(1)(iii) of this

section) and the Davis-Bacon poster (WH-1321) must 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.

- (ii) Frequently recurring classifications.
 - (A) In addition to wage and fringe benefit rates that have been determined to be prevailing under the procedures set forth in 29 CFR part 1, a wage determination may contain, pursuant to § 1.3(f), wage and fringe benefit rates for classifications of laborers and mechanics for which conformance requests are regularly submitted pursuant to paragraph (a)(1)(iii) of this section, provided that:
 - (1) The work performed by the classification is not performed by a classification in the wage determination for which a prevailing wage rate has been determined;
 - (2) The classification is used in the area by the construction industry; and
 - (3) The wage rate for the classification bears a reasonable relationship to the prevailing wage rates contained in the wage determination.
 - (B) The Administrator will establish wage rates for such classifications in accordance with paragraph (a)(1)(iii)(A)(3) of this section. Work performed in such a classification must be paid at no less than the wage and fringe benefit rate listed on the wage determination for such classification.
- (iii) Conformance.
 - (A) The contracting officer must 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 be classified in conformance with the wage determination. Conformance of an additional classification and wage rate and fringe benefits is appropriate only when the following criteria have been met:
 - (1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
 - (2) The classification is used in the area by the construction industry; and
 - (3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.
 - (B) The conformance process may not be used to split, subdivide, or otherwise avoid application of classifications listed in the wage determination.
 - (C) 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 will be sent by the contracting officer by email to DBAconformance@dol.gov. 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.

- (D) 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 will, by email to DBAconformance@dol.gov, refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The 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.
- (E) The contracting officer must promptly notify the contractor of the action taken by the Wage and Hour Division under paragraphs (a)(1)(iii)(C) and (D) of this section. The contractor must furnish a written copy of such determination to each affected worker or it must be posted as a part of the wage determination. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph (a)(1)(iii)(C) or (D) of this section must 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.
- (iv) Fringe benefits not expressed as an hourly rate. 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 may either pay the benefit as stated in the wage determination or may pay another bona fide fringe benefit or an hourly cash equivalent thereof.
- (v) Unfunded plans. 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, in accordance with the criteria set forth in § 5.28, 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.
- (vi) Interest. In the event of a failure to pay all or part of the wages required by the contract, the contractor will be required to pay interest on any underpayment of wages.
- (2) Withholding ---
 - (i) Withholding requirements. The [write in name of Federal agency or the recipient of Federal assistance] may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for the full amount of wages and monetary relief, including interest, required by the clauses set forth in paragraph (a) of this section for violations of this contract, or to satisfy any such liabilities required by any other Federal contract, or federally assisted contract subject to Davis-Bacon labor standards, that is held by the same prime contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to Davis-Bacon labor standards requirements and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld.

In the event of a contractor's failure to pay any laborer or mechanic, including any apprentice or helper working on the site of the work (or otherwise working in construction or development of the project under a development statute) all or part of the wages required by the contract, or upon the contractor's failure to submit the required records as discussed in paragraph (a)(3)(iv) of this section, the [Agency] may on its own initiative and after written notice to the contractor, sponsor, applicant, owner, or other entity, as the case may be, 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.

- (ii) Priority to withheld funds. The Department has priority to funds withheld or to be withheld in accordance with paragraph (a)(2)(i) or (b)(3)(i) of this section, or both, over claims to those funds by:
 - A. A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;
 - B. A contracting agency for its reprocurement costs;
 - C. A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;
 - D. A contractor's assignee(s);
 - E. A contractor's successor(s); or
 - F. A claim asserted under the Prompt Payment Act, 31 U.S.C. 3901-3907.
- (3) Records and certified payrolls
 - (i) Basic record requirements
 - (A) Length of record retention. All regular payrolls and other basic records must be maintained by the contractor and any subcontractor during the course of the work and preserved for all laborers and mechanics working at the site of the work (or otherwise working in construction or development of the project under a development statute) for a period of at least 3 years after all the work on the prime contract is completed.
 - (B) Information required. Such records must contain the name; Social Security number; last known address, telephone number, and email address of each such worker; each worker's correct classification(s) of work actually performed; 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 40 U.S.C. 3141(2)(B) of the Davis-Bacon Act); daily and weekly number of hours actually worked in total and on each covered contract; deductions made; and actual wages paid.
 - (C) Additional records relating to fringe benefits. Whenever the Secretary of Labor has found under paragraph (a)(1)(v) of this section 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 40 U.S.C. 3141(2)(B) of the Davis-Bacon Act, the contractor must 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.

- (D) Additional records relating to apprenticeship. Contractors with apprentices working under approved programs must maintain written evidence of the registration of apprenticeship programs, the registration of the apprentices, and the ratios and wage rates prescribed in the applicable programs.
- (ii) Certified payroll requirements ----
 - (A) Frequency and method of submission. The contractor or subcontractor must submit weekly, for each week in which any DBA- or Related Acts-covered work is performed, certified payrolls to the FEMA if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the certified payrolls to the applicant, sponsor, owner, or other entity, as the case may be, that maintains such records, for transmission to the City of Madison. The prime contractor is responsible for the submission of all certified payrolls by all subcontractors. A contracting agency or prime contractor may permit or require contractors to submit certified payrolls through an electronic system, as long as the electronic system requires a legally valid electronic signature; the system allows the contractor, the contracting agency, and the Department of Labor to access the certified payrolls upon request for at least 3 years after the work on the prime contract has been completed; and the contracting agency or prime contractor permits other methods of submission in situations where the contractor is unable or limited in its ability to use or access the electronic system.
 - (B) Information required. The certified payrolls submitted must set out accurately and completely all of the information required to be maintained under paragraph (a)(3)(i)(B) of this section, except that full Social Security numbers and last known addresses, telephone numbers, and email addresses must not be included on weekly transmittals. Instead, the certified payrolls need only include an individually identifying number for each worker (e.g., the last four digits of the worker's Social Security number). The required weekly certified payroll information may be submitted using Optional Form WH-347 or in any other format desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division website at https://www.dol.gov/sites/dolgov/files/WHD/legacy/files/wh347/.pdf or its successor website. It is not a violation of this section for a prime contractor to require a subcontractor to provide full Social Security numbers and last known addresses, telephone numbers, and email addresses to the prime contractor for its own records, without weekly submission by the subcontractor to the sponsoring government agency (or the applicant, sponsor, owner, or other entity, as the case may be, that maintains such records).
 - (C) Statement of Compliance. Each certified payroll submitted must be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor, or the contractor's or subcontractor's agent who pays or supervises the payment of the persons working on the contract, and must certify the following:
 - (1) That the certified payroll for the payroll period contains the information required to be provided under paragraph (a)(3)(ii) of this section, the appropriate information and basic records are being maintained under paragraph (a)(3)(i) of this section, and such information and records are correct and complete;

- (2) That each laborer or mechanic (including each helper and apprentice) working 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 29 CFR part 3; and
- (3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification(s) of work actually performed, as specified in the applicable wage determination incorporated into the contract.
- (D) Use of Optional Form WH-347. The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 will satisfy the requirement for submission of the "Statement of Compliance" required by paragraph (a)(3)(ii)(C) of this section.
- (E) Signature. The signature by the contractor, subcontractor, or the contractor's or subcontractor's agent must be an original handwritten signature or a legally valid electronic signature.
- (F) Falsification. The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under 18 U.S.C. 1001 and 31 U.S.C. 3729.
- (G) Length of certified payroll retention. The contractor or subcontractor must preserve all certified payrolls during the course of the work and for a period of 3 years after all the work on the prime contract is completed.
- (iii) Contracts, subcontracts, and related documents. The contractor or subcontractor must maintain this contract or subcontract and related documents including, without limitation, bids, proposals, amendments, modifications, and extensions. The contractor or subcontractor must preserve these contracts, subcontracts, and related documents during the course of the work and for a period of 3 years after all the work on the prime contract is completed.
- (iv) Required disclosures and access
 - (A) Required record disclosures and access to workers. The contractor or subcontractor must make the records required under paragraphs (a)(3)(i) through (iii) of this section, and any other documents that FEMA or the Department of Labor deems necessary to determine compliance with the labor standards provisions of any of the applicable statutes referenced by § 5.1, available for inspection, copying, or transcription by authorized representatives of FEMA or the Department of Labor, and must permit such representatives to interview workers during working hours on the job.
 - (B) Sanctions for non-compliance with records and worker access requirements. If the contractor or subcontractor fails to submit the required records or to make them available, or refuses to permit worker interviews during working hours on the job, the Federal agency may, after written notice to the contractor, sponsor, applicant, owner, or other entity, as the case may be, that maintains such records or that employs such workers, 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, or to permit worker interviews during working hours on the job, may be

grounds for debarment action pursuant to § 5.12. In addition, any contractor or other person that fails to submit the required records or make those records available to WHD within the time WHD requests that the records be produced will be precluded from introducing as evidence in an administrative proceeding under 29 CFR part 6 any of the required records that were not provided or made available to WHD. WHD will take into consideration a reasonable request from the contractor or person for an extension of the time for submission of records. WHD will determine the reasonableness of the request and may consider, among other things, the location of the records and the volume of production.

- (C) Required information disclosures. Contractors and subcontractors must maintain the full Social Security number and last known address, telephone number, and email address of each covered worker, and must provide them upon request to FEMA if the agency is a party to the contract, or to the Wage and Hour Division of the Department of Labor. If the Federal agency is not such a party to the contract, the contractor, subcontractor, or both, must, upon request, provide the full Social Security number and last known address, telephone number, and email address of each covered worker to the applicant, sponsor, owner, or other entity, as the case may be, that maintains such records, for transmission to the City of Madison, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or other compliance action.
- (4) Apprentices and equal employment opportunity ---
 - (i) Apprentices
 - (A) Rate of pay. Apprentices will be permitted to work at less than the predetermined rate for the work they perform 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 (OA), or with a State Apprenticeship Agency recognized by the OA. A person who is not individually registered in the program, but who has been certified by the OA or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice, will be permitted to work at less than the predetermined rate for the work they perform in the first 90 days of probationary employment as an apprentice in such a program. In the event the OA or a State Apprenticeship Agency recognized by the OA withdraws approval of an apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.
 - (B) Fringe benefits. Apprentices must 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, fringe benefits must be paid in accordance with that determination.
 - (C) Apprenticeship ratio. The allowable ratio of apprentices to journeyworkers on the job site in any craft classification must not be greater than the ratio permitted to the contractor as to the entire work force under the registered program or the ratio applicable to the locality of the project pursuant to paragraph (a)(4)(i)(D) of this section. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated in paragraph (a)(4)(i)(A) of this section,

must 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 this section must be paid not less than the applicable wage rate on the wage determination for the work actually performed.

- (D) Reciprocity of ratios and wage rates. Where a contractor is performing construction on a project in a locality other than the locality in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyworker's hourly rate) applicable within the locality in which the construction is being performed must be observed. If there is no applicable ratio or wage rate for the locality of the project, the ratio and wage rate specified in the contractor's registered program must be observed.
- (ii) Equal employment opportunity. The use of apprentices and journeyworkers under this part must be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.
- (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 must insert in any subcontracts the clauses contained in paragraphs (a)(1) through (11) of this section, along with the applicable wage determination(s) and such other clauses or contract modifications as the [write in the name of the Federal agency] may by appropriate instructions require, and a clause requiring the subcontractors to include these clauses and wage determination(s) in any lower tier subcontracts. The prime contractor is responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in this section. In the event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and may be subject to debarment, as appropriate.
- (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.

(i) By entering into this contract, the contractor certifies that neither it 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 40 U.S.C. 3144(b) or § 5.12(a).

- (ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of 40 U.S.C. 3144(b) or § 5.12(a).
- (iii) The penalty for making false statements is prescribed in the U.S. Code, Title 18 Crimes and Criminal Procedure, 18 U.S.C. 1001.

7. Compliance with the Copeland "Anti-Kickback" Act.

- a. <u>Contractor</u>. The contractor shall comply with 18 U.S.C. § 874, 40 U.S.C. § 3145, and the requirements of 29 C.F.R. Part 3 as may be applicable, which are incorporated by reference into this contract.
- b. <u>Subcontracts</u>. The contractor or subcontractor shall insert in any subcontracts the clause above and such other clauses as FEMA may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all of these contract clauses.
- c. <u>Breach</u>. A breach of the contract clauses above may be grounds for termination of the contract, and for debarment as a contractor and subcontractor as provided in 29 C.F.R. § 5.12.

8. <u>Contract Work Hours and Safety Standards Act</u>.

- a. To the extent applicable to the Work provided by Contractor under this Contract, Contractor shall comply with the following:
 - (1) <u>Overtime requirements</u>. 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) <u>Violation; liability for unpaid wages; liquidated damages</u>. 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 \$27 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) <u>Withholding for unpaid wages and liquidated damages</u>. The City of Madison 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) <u>Subcontracts</u>. 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.

9. <u>Clean Air Act</u>.

- a. The contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq.
- b. The contractor agrees to report each violation to the City of Madison and understands and agrees that the City of Madison will, in turn, report each violation as required to assure notification to the Federal Emergency Management Agency (FEMA), and the appropriate Environmental Protection Agency Regional Office.
- c. The contractor agrees to include these requirements in each subcontract exceeding \$150,000 financed in whole or in part with federal assistance provided by FEMA.

10. Federal Water Pollution Control Act.

- a. The contractor agrees to comply with all applicable standards, orders, or regulations issued pursuant to the federal Water Pollution Control Act, as amended, 33 U.S.C. § 1251 et seq.
- b. The contractor agrees to report each violation to the City of Madison and understands and agrees that the City of Madison will, in turn, report each violation as required to assure notification to the WEM, Federal Emergency Management Agency (FEMA), and the appropriate Environmental Protection Agency Regional Office.
- c. The contractor agrees to include these requirements in each subcontract exceeding \$150,000 financed in whole or in part with federal assistance provided by FEMA.

11. <u>Suspension and Debarment</u>.

- a. This contract is a covered transaction for purposes of 2 C.F.R. Part 180 and 2 C.F.R. Part 3000. As such, the contractor is required to verify that none of the contractor's principals (defined at 2 C.F.R. § 180.995) or its affiliates (defined at 2 C.F.R. § 180.905) are excluded (defined at 2 C.F.R. § 180.940) or disqualified (defined at 2 C.F.R. § 180.935).
- b. The contractor must comply with 2 C.F.R. Part 180, subpart C and 2 C.F.R. Part 3000, subpart C, and must include a requirement to comply with these regulations in any lower tier covered transaction it enters into.
- c. This certification is a material representation of fact relied upon by the City of Madison. If it is later determined that the contractor did not comply with 2 C.F.R. Part 180, subpart C and 2 C.F.R. Part 3000, subpart C, in addition to remedies available to the City of Madison, the federal government may pursue available remedies, including but not limited to suspension and/or debarment.

d. The bidder or proposer agrees to comply with the requirements of 2 C.F.R. Part 180, subpart C and 2 C.F.R. Part 3000, subpart C while this offer is valid and throughout the period of any contract that may arise from this offer. The bidder or proposer further agrees to include a provision requiring such compliance in its lower tier covered transactions.

12. Byrd Anti-Lobbying.

- a. Byrd Anti-Lobbying Amendment, 31 U.S.C. § 1352 (as amended).
 - (1) Contractors who apply or bid for an award of more than \$100,000 shall file the required certification. Each tier certifies to the tier above that it will not and has not used federally appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, officer or employee of Congress, or an employee of a Member of Congress in connection with obtaining any federal contract, grant, or any other award covered by 31 U.S.C. § 1352. Each tier shall also disclose any lobbying with non-federal funds that takes place in connection with obtaining any federal award. Such disclosures are forwarded from tier to tier up to the recipient who in turn will forward the certification(s) to the federal awarding agency.

b. <u>Required Certification</u>.

- (1) Contractor will submit for itself the form entitled "Certification of Restrictions on Lobbying" and if applicable, the form entitled "Disclosure of Lobbying", and obtain and retain from all consultants and subcontractors whose contracts will exceed \$100,000 the certification entitled "Certification of Restrictions on Lobbying", and obtain from all consultants and subcontractors, at any tier, whose agreements will exceed \$100,000, and submit to the City, if applicable, the form entitled "Disclosure of Lobbying". An example of such a form is attached to this Addendum A as Attachment 1.
- c. Contractor and its consultants and subcontractors shall file a disclosure form at the end of each calendar quarter in which there occurs any event that requires disclosure or that materially affects the accuracy of the information contained in any disclosure form previously filed by such Contractor, consultants and subcontractors under this Sec. 12. An event that materially affects the accuracy of the information reported includes:
 - (i) A cumulative increase of \$25,000 or more in the amount paid or expected to be paid for influencing or attempting to influence a covered Federal action; or
 - (ii) A change in the person(s) or individual(s) influencing or attempting to influence a covered Federal action; or
 - (iii) A change in the officer(s), employee(s), or Member(s) contacted to influence or attempt to influence a covered Federal action.
- d. Contractor will ensure that certifications completed by lower tier consultants and subcontractors are attached to and incorporated into their contracts or agreements.

13. <u>Recovered Materials</u>.

a. In the performance of this contract, the Contractor shall make maximum use of products containing recovered materials that are EPA-designated items unless the product cannot be acquired—

- (1) Competitively within a timeframe providing for compliance with the contract performance schedule;
- (2) Meeting contract performance requirements; or
- (3) At a reasonable price.
- b. Information about this requirement, along with the list of EPA-designated items, is available at EPA's Comprehensive Procurement Guidelines webpage: <u>https://www.epa.gov/smm/comprehensive-procurement-guideline-cpg-program</u>.
- c. The Contractor and its subcontractors also agree to comply with all other applicable requirements of Section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act. The requirements of Section 6002 include procuring only items designated in guidelines of the Environmental Protection Agency (EPA) at 40 CFR Part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds \$10,000 or the value of the quantity acquired during the preceding fiscal year exceeded \$10,000; procuring solid waste management services in a manner that maximizes energy and resource recovery; and establishing an affirmative procurement program for procurement of recovered materials identified in the EPA guidelines.
- 14. Prohibition on Contracting for Covered Telecommunications Equipment or Services.
 - a. <u>Definitions</u>. As used in this clause, the terms backhaul; covered foreign country; covered telecommunications equipment or services; interconnection arrangements; roaming; substantial or essential component; and telecommunications equipment or services have the meaning as defined in FEMA Policy 405-143-1, Prohibitions on Expending FEMA Award Funds for Covered Telecommunications Equipment or Services (Interim), as used in this clause—
 - b. <u>Prohibitions</u>.
 - (1) Section 889(b) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019, Pub. L. No. 115-232, and 2 C.F.R. § 200.216 prohibit the head of an executive agency on or after Aug.13, 2020, from obligating or expending grant, cooperative agreement, loan, or loan guarantee funds on certain telecommunications products or from certain entities for national security reasons.
 - (2) Unless an exception in paragraph c of this clause applies, the contractor and its subcontractors may not use grant, cooperative agreement, loan, or loan guarantee funds from the Federal Emergency Management Agency to:
 - Procure or obtain any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology of any system;
 - Enter into, extend, or renew a contract to procure or obtain any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology of any system;

- (iii) Enter into, extend, or renew contracts with entities that use covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system; or
- (iv) Provide, as part of its performance of this contract, subcontract, or other contractual instrument, any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system.
- c. <u>Exceptions</u>.
 - (1) This clause does not prohibit contractors from providing—
 - (i) A service that connects to the facilities of a third-party, such as backhaul, roaming, or interconnection arrangements; or
 - (ii) Telecommunications equipment that cannot route or redirect user data traffic or permit visibility into any user data or packets that such equipment transmits or otherwise handles.
 - (2) By necessary implication and regulation, the prohibitions also do not apply to:
 - (i) Covered telecommunications equipment or services that:
 - i. Are not used as a substantial or essential component of any system; and
 - ii. Are not used as critical technology of any system.
 - (ii) Other telecommunications equipment or services that are not considered covered telecommunications equipment or services.
- d. <u>Reporting requirement</u>.
 - (1) In the event the contractor identifies covered telecommunications equipment or services used as a substantial or essential component of any system, or as critical technology as part of any system, during contract performance, or the contractor is notified of such by a subcontractor at any tier or by any other source, the contractor shall report the information in paragraph d(2) of this clause to the recipient or subrecipient, unless elsewhere in this contract are established procedures for reporting the information.
 - (2) The Contractor shall report the following information pursuant to paragraph d(1) of this clause:
 - (i) Within one business day from the date of such identification or notification: The contract number; the order number(s), if applicable; supplier name; supplier unique entity identifier (if known); supplier Commercial and Government Entity (CAGE) code (if known); brand; model number (original equipment manufacturer number, manufacturer part number, or wholesaler number); item description; and any readily available information about mitigation actions undertaken or recommended.

- (ii) Within 10 business days of submitting the information in paragraph d(2)(i) of this clause: Any further available information about mitigation actions undertaken or recommended. In addition, the contractor shall describe the efforts it undertook to prevent use or submission of covered telecommunications equipment or services, and any additional efforts that will be incorporated to prevent future use or submission of covered telecommunications equipment or services.
- e. <u>Subcontracts</u>. The Contractor shall insert the substance of this clause, including this paragraph (e), in all subcontracts and other contractual instruments.

15. <u>Domestic Preference for Procurements</u>.

- a. As appropriate, and to the extent consistent with law, the contractor should, to the greatest extent practicable, provide a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States. This includes, but is not limited to iron, aluminum, steel, cement, and other manufactured products.
- b. For purposes of this clause:
 - (1) Produced in the United States means, for iron and steel products, that all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States.
 - (2) Manufactured products mean items and construction materials composed in whole or in part of non-ferrous metals such as aluminum; plastics and polymer-based products such as polyvinyl chloride pipe; aggregates such as concrete; glass, including optical fiber; and lumber.

16. <u>Government Access to Records and Reports</u>.

- a. The Contractor agrees to provide the City of Madison, WEM, the FEMA Administrator, the Comptroller General of the United States, or any of their authorized representatives access to any books, documents, papers, and records of the Contractor which are directly pertinent to this contract for the purposes of making audits, examinations, excerpts, and transcriptions.
- b. The Contractor agrees to permit any of the foregoing parties to reproduce by any means whatsoever or to copy excerpts and transcriptions as reasonably needed.
- c. The Contractor agrees to provide the FEMA Administrator or his authorized representatives access to construction or other work sites pertaining to the work being completed under the contract.
- d. Contractor agrees to maintain all books, records, accounts and reports required under this Contract for a period of not less than three (3) years after the date of termination or expiration of this Contract, except in the event of litigation or settlement of claims arising from the performance of this Contract, in which case the Contractor agrees to maintain same until the City, the FTA Administrator, the Comptroller General, or any of their duly authorized representatives, have disposed of all such litigation, appeals, claims or exceptions related thereto.
- e. The Contractor further agrees to include in all their subcontracts hereunder a provision to the effect that the subcontractor agrees to the requirements of this Section 16. The term

"subcontractor" as used in this clause excludes subcontracts or purchase orders for public utility services at rates established for uniform applicability to the general public.

- 17. DHS Seal, Logo, and Flags.
 - a. The contractor shall not use the DHS seal(s), logos, crests, or reproductions of flags or likenesses of DHS agency officials without specific FEMA pre-approval. The contractor shall include this provision in any subcontracts.
- 18. False Statements or Claims.
 - a. The contractor acknowledges that 31 U.S.C. Chap. 38 (Administrative Remedies for False Claims and Statements) applies to the contractor's actions pertaining to this contract.
- 19. Affirmative Socioeconomic Steps.
 - a. If subcontracts are to be let, the prime contractor is required to take all necessary steps identified in 2 C.F.R. § 200.321(b)(1)-(5) to ensure that small and minority businesses, women's business enterprises, and labor surplus area firms are used when possible.

20. Build America, Buy America Act Requirements.

a. Contractors and their subcontractors who apply or bid for an award for an infrastructure project subject to the domestic preference requirement in the Build America, Buy America Act (BABAA) shall file the required certification to the non-federal entity with each bid or offer for an infrastructure project, unless a domestic preference requirement is waived by FEMA. Contractors and subcontractors certify that no federal financial assistance funding for infrastructure projects will be provided unless all the iron, steel, manufactured projects, and construction materials used in the project are produced in the United States. BABAA, Pub. L. No. 117-58, §§ 70901-52. Contractors and subcontractors shall also disclose any use of federal financial assistance for infrastructure projects that does not ensure compliance with BABAA domestic preference requirement. Such disclosures shall be forwarded to the recipient who, in turn, will forward the disclosures to FEMA, the federal awarding agency; subrecipients will forward disclosures to the pass-through entity, who will, in turn, forward the disclosures to FEMA. An example of such a form is attached to this Addendum A as Attachment 2.

ATTACHMENT 1 to ADDENDUM A: CERTIFICATION REGARDING LOBBYING

31 CFR Part 21 – New Restrictions on Lobbying

The undersigned certifies, to the best of their knowledge and belief, that:

- 1. 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 an 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.
- 2. 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 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 <u>Standard Form-LLL</u>, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all contractors shall certify and disclose accordingly.

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 section 1352, title 31, U.S. Code. 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.

The Contractor certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the Contractor understands and agrees that the provisions of 31 U.S.C. Ch. 38, Administrative Remedies for False Claims and Statements, apply to this certification and disclosure, if any.

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DIA	E CORPORATE E Date:	11/14/24
Signature of Contractor authorized of	official SEAL	
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(Print name of person signing above)	Manual Manua	
President		

(Print title of person signing above)

ATTACHMENT 2 to ADDENDUM A: CERTIFICATION REGARDING BUILD AMERICA BUY AMERICA REQUIREMENTS

The undersigned certifies, to the best of their knowledge and belief, that:

The Build America, Buy America Act (BABAA) requires that no federal financial assistance for "infrastructure" projects is provided "unless all of the iron, steel, manufactured products, and construction materials used in the project are produced in the United States." Section 70914 of Public Law No. 117-58, §§ 70901-52.

The undersigned certifies that for the _____ (Project Name and Location) ____ that the iron, steel, manufactured products, and construction materials used in this contract are in full compliance with the BABAA requirements including:

- 1. All iron and steel used in the project are produced in the United States. This means all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States.
- 2. All manufactured products purchased with FEMA financial assistance must be produced in the United States. For a manufactured product to be considered produced in the United States, the cost of the components of the manufactured product that are mined, produced, or manufactured in the United States is greater than 55% of the total cost of all components of the manufactured product, unless another standard for determining the minimum amount of domestic content of the manufactured product has been established under applicable law or regulation.
- 3. All construction materials are manufactured in the United States. This means that all manufacturing processes for the construction material occurred in the United States.

The [Contractor or Subcontractor], ______, certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the [Contractor or Subcontractor] understands and agrees that the provisions of 31 U.S.C. Chap. 38, Administrative Remedies for False Claims and Statements, apply to this certification and disclosure, if any.

Date: _____

Signature of Contractor's authorized official

(Print name of person signing above)

(Print title of person signing above)

ATTACHMENT 3 TO ADDENDUM A: FEDERAL WAGE DECISION

"General Decision Number: WI20240015 09/27/2024

Superseded General Decision Number: WI20230015

State: Wisconsin

Construction Type: Heavy

Counties: Wisconsin Statewide.

HEAVY CONSTRUCTION PROJECTS (Excluding Tunnel, Sewer, and Water Lines).

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(1).

 Executive Order 14026 generally applies to the contract. The contractor must pay all covered workers at least \$17.20 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2024. 	 Executive Order 13658 <pre>generally applies to the contract.</pre> The contractor must pay all covered workers at least \$12.90 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2024.
If the contract is entered	If the contract was awarded on
into on or after January 30,	lor between January 1, 2015 and
2022, or the contract is	January 29, 2022, and the
renewed or extended (e.g., an	contract is not renewed or
option is exercised) on or	extended on or after January
after January 30, 2022:	30, 2022:

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at http://www.dol.gov/whd/govcontracts.

Date															
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BOIL0107-001 01/01/2021

Fringes

Rates

BOILERMAKER Boilermaker\$ 39.52 Small Boiler Repair (under	31.50
25,000 LDS/NT)	
CRAWFORD, JACKSON, JUNEAU, LA CROSSE, MONROE, TREMPEALEAU, AND VERNON COUNTIES	TREMPEALEAU, AND
Rates	Fringes

25.88	
BRICKLAYER\$ 40.18	06/01/2023
BRICKLAYER	BRWI0002-002 06/01/2023

ASHLAND, BAYFIELD, DOUGLAS, AND IRON COUNTIES

	Rates	Fringes
BRICKLAYER	\$ 47.10	25.16
BRWI0002-005 06/01/2023	6 6 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	
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	BURNETT, CALUMET, CHIPPEWA, DUNN, FLORENCE, FOND DU LAC, ERSON, KEWAUNEE, LANGLADE, MARINETTE, MARQUETTE, MENOMI (, PORTAGE, RUSK, ST CROIX, LAS, WALWORTH, WAUPACA, WAUS	RON, BROWN, BURNETT, CALUMET, CHIPPEWA, DGE, DOOR, DUNN, FLORENCE, FOND DU LAC, IRON, JEFFERSON, KEWAUNEE, LANGLADE, MARATHON, MARINETTE, MARQUETTE, MENOMINEE, GAMIE, POLK, PORTAGE, RUSK, ST CROIX, SAUK, TAYLOR, VILAS, WALWORTH, WAUPACA, WAUSHARA, COUNTIES
	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER	\$ 39.97	25.02
BRWI0003-002 06/01/2023		
BROWN, DOOR, FLORENCE, KEWAUNEE, MARINETTE, AND OCONTO COUNTIES	MARINETTE, AND	OCONTO COUNTIES
	Rates	Fringes
BRICKLAYER	.\$ 40.00	26.06
	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	
KENOSHA, RACINE, AND WALWORTH COUNTIES	NTIES	
	Rates	Fringes
	.\$ 44.50	26.96
BRWI0006-002 06/01/2023		
ADAMS, CLARK, FOREST, LANGLADE, L ONEIDA, PORTAGE, PRICE, TAYLOR, V	LINCOLN, MARATHON, MENOMINEE, VILAS AND WOOD COUNTIES	NN, MENOMINEE, COUNTIES
	Rates	Fringes
BRICKLAYER	.\$ 40.08	25.98

https://sam.gov/wage-determination/WI20240015/13

GREEN, LAFAYETTE, AND ROCK COUNTIES

	Rates	Fringes
BRICKLAYERBRICKLAYER.	.\$ 40.95	26.80
BRWI0008-002 06/05/2023	; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;	
MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES	and maukes	HA COUNTIES
	Rates	Fringes
2	.\$ 44.96	25.67
BRWI0009-001 06/01/2023	1 1 1 1 1 1	
GREEN LAKE, MARQUETTE, OUTAGAMIE AND WINNEBAGO COUNTIES	, SHAWANO,	OUTAGAMIE, SHAWANO, WAUPACA, WASHARA,
	Rates	Fringes
	5	0
BRICKLAYER	.\$ 40.00	26.06
BRWI0011-002 06/01/2023	1 1 1 1 1 1 1 1 1	
CALUMET, FOND DU LAC, MANITOWOC,	AND SHEBO	AND SHEBOYGAN COUNTIES
	Rates	Fringes
BRICKLAYER	.\$ 40.00	26.06
BRWI0013-002 06/01/2023	1 1 1 1 1 1 1	
DANE, GRANT, IOWA, AND RICHLAND COUNTIES	COUNTIES	
	Rates	Fringes
BRICKLAYERBRICKLAYER.	.\$ 41.56	26.19
BRWI0019-002 06/01/2023	1 1 1 1 1 1 1 1	
BARRON, BUFFALO, BURNETT, CHIPPE PIERCE, POLK, RUSK, ST. CROIX, S	CHIPPEWA, DUNN, ROIX, SAWYER AND	EAU CLAIRE, PEPIN, WASHBURN COUNTIES

Fringes

Rates

10/17/24, 3:20 PM BRICKLAYER\$ 39.32	26.74
BRWI0021-002 06/01/2023	
DODGE AND JEFFERSON COUNTIES	
Rates	Fringes
• • • • • • •	27.24
BRWI0034-002 06/01/2023	
COLUMBIA AND SAUK COUNTIES	
Rates	Fringes
BRICKLAYER\$ 41.56	26.19
CARP0068-011 05/02/2022	
BURNETT (W. of Hwy 48), PIERCE (W. of Hwy 29), POLK 35, 48 & 65), AND ST. CROIX (W. of Hwy 65) COUNTIES	, POLK (W. of Hwys UNTIES
Rates	Fringes
Carpenter & Piledrivermen\$ 41.19	27.05
CARP0231-002 06/05/2023	
KENOSHA, MILWAUKEE, OZAUKEE, RACINE, WASHINGTON, COUNTIES	ON, AND WAUKESHA
Rates	Fringes
CARPENTER\$ 41.91	29.72
CARP0310-002 06/03/2024	
ADAMS, ASHLAND, BAYFIELD (Eastern 2/3), FOREST, IRON LANGLADE, LINCOLN, MARATHON, ONEIDA, PORTAGE, PRICE, (Western Portion of the County), TAYLOR, VILAS, AND COUNTIES	T, IRON, JUNEAU, PRICE, SHAWANO S, AND WOOD
Rates	Fringes
CARPENTER\$ 42.44	28.44

10/17/24,3:20 PM Piledriver\$ 42.44	28.44
CARP0314-001 06/05/2023	
COLUMBIA, DANE, DODGE, GRANT, GREEN, IOWA, JEFFERSON, LAFAYETTE, RICHLAND, ROCK, SAUK, AND WALWORTH COUNTIES	FERSON, COUNTIES
Rates	Fringes
CARPENTER\$ 38.86 Piledriver\$ 39.43	27.06 27.02
CARP0361-004 05/01/2018	
BAYFIELD (West of Hwy 63) AND DOUGLAS COUNTIES	
Rates	Fringes
CARPENTER\$ 36.15	20.43
CARP0731-002 06/03/2024	
CALUMET (Eastern Portion of the County), FOND DU LAC (Eastern Portion of the County), MANITOWOC, AND SHEBOYGAN COUNTIES	DU LAC (Eastern AN COUNTIES
Rates	Fringes
CARPENTER\$ 42.44 Piledriver\$ 42.44	28.44 28.44

CALUMET (western Portion of the County), FOND DU LAC (western Portion of the County), GREEN LAKE, MARQUETTE, OUTAGAMIE, WAUPACA, WAUSHARA, AND WINNEBAGO

CARP0955-002 06/03/2024

Fringes	28.44 28.44	
Rates	ARPENTER	CARP1056-002 06/01/2024

ADAMS, ASHLAND, BARRON, BAYFIELD , BROWN, BUFFALO, BURNETT ,CALUMET, CHIPPEWA, CLARK, COLUMBIA, CRAWFORD, DANE, DODGE, DOOR, DUNN, EAU CLAIRE, FLORENCE, FOND DU LAC, FOREST, GRANT,

SAM.gov

GREEN, GREEN LAKE, IOWA, IRON, JACKSON, JEFFERSON, JUNEAU, KEWAUNEE, LA CROSSE, LAFAYETTE, LANGLADE, LINCOLN, MANITOWOC, MARATHON, MARINETTE, MARQUETTE, MENOMINEE, MONROE, OCONTO, ONEIDA, OUTAGAMIE, PEPIN, PIERCE (E. of HWY. 29 & 65), POLK (E. of HWY. 35, 48 & 65), PORTAGE, PRICE, RICHLAND, ROCK, RUSK, SAUK, SAWYER, SHAWANO, SHEBOYGAN, ST. CROIX (E. of HWY. 65), TAYLOR, TREMPEALEAU, VERNON, VILAS, WALWORTH, WASHBURN, WAUPACA, WAUSHARA, WINNEBAGO, AND WOOD COUNTIES

Fringes	28.85	
Rates	ILLWRIGHT\$ 42.00	CARP1074-002 06/03/2024

BARRON, BURNETT, CHIPPEWA, CLARK, DUNN, EAU CLAIRE, PEPIN, PIERCE (E. of Hwy. 29 & 65), POLK (E. of Hwy. 35, 48 & 65), RUSK, SAWYER, ST. CROIX (E. of Hwy. 65), AND WASHBURN

Rates	Fringes
CARPENTER\$ 42.44 PILEDRIVER\$ 42.44	28.44 28.44
CARP1143-002 06/03/2024	

BUFFALO, CRAWFORD, JACKSON, LA CROSSE, MONROE, TREMPEALEAU AND VERNON COUNTIES

Fringes	28.44 28.44	
Rates	CARPENTER\$ 42.44 PILEDRIVER\$ 42.44	CARP1146-002 06/03/2024

BROWN, DOOR, FLORENCE, KEWAUNEE, MARINETTE, MENOMINEE, OCONTO, AND SHAWANO (Western Portion of the County) COUNTIES

Rates	Fringes
CARPENTER\$ 42.44 PILEDRIVER\$ 42.44	28.44 28.44
CARP2337-009 06/03/2024	

KENOSHA, MILWAUKEE, OZAUKEE, RACINE, WASHINGTON, AND WAUKESHA

Rates	Fringes
ILEDRIV	34.07
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KENOSHA, MILWAUKEE, OZAUKEE, RACINE, WASHINGTON, AND WAUKESHA	NN, AND WAUKESHA
Rates	Fringes
LWRIGHT	32.21
ELEC0014-002 05/26/2024	
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, TREMPEALEAU, VERNON, AND WASHBURN COUNTIES	:HIPPEWA, CLARK Jont, Lynn & IRON, JACKSON, LA CCHLAND, RUSK, ST ID WASHBURN
Rates	Fringes
Electricians:\$ 42.73	23.99

Rates Fringes
Teledata System Installer
Installer/Technician.....\$ 30.27 19.11
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).

ELEC0014-007 05/26/2024

REMAINING COUNTIES

ELEC0127-002 06/01/2023

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	159-003 05/26/2024	ICIAN\$ 36.14 29.75%+10.26	Rates Fringes	BROWN, DOOR, KEWAUNEE, MANITOWOC (except Schleswig), MARINETTE(Wausuakee and area South thereof), OCONTO, MENOMINEE (East of a ine 6 miles West of the West boundary of Oconto County), SHAWANO (Except Area North of Townships of Aniwa and Hutchins) COUNTIES	1 1 1 1 1 1 1	•	Rates Fringes
COUNTLES	UMBIA, DANE, DODGE (Area West of Hwy 26, except Ch et Townships), GREEN, LAKE (except Townships of Be eca, and St. Marie), IOWA, MARQUETTE (except Towns hkoka, Crystal Lake, Newton, and Springfield), and	ELEC0159-003 05/26/2024 OLUMBIA, DANE, DODGE (Area West of Hwy 26, except Ch mmet Townships), GREEN, LAKE (except Townships of Be eneca, and St. Marie), IOWA, MARQUETTE (except Townsl eshkoka, Crystal Lake, Newton, and Springfield), and	ELECTRICIAN\$ 36.14 29.75%+1(ELEC0159-003 05/26/2024 COLUMBIA, DANE, DODGE (Area West of Hwy 26, except Ch Emmet Townships), GREEN, LAKE (except Townships of Be Seneca, and St. Marie), IOWA, MARQUETTE (except Townsl Neshkoka, Crystal Lake, Newton, and Springfield), and	RatesFrinCTRICIAN\$ 36.1429.75%+16EC0159-00305/26/2024UMBIA, DANE, DODGE (Area West of Hwy 26, except Chiet Townships), GREEN, LAKE (except Townships of Beleca, and St. Marie), IOWA, MARQUETTE (except Townships of Beleved, Crystal Lake, Newton, and Springfield), and	<pre>BROWN, DOOR, KEWAUNEE, MANITOWOC (except Schleswig), MARINETTE(Wausuakee and area South thereof), OCONTO, N (East of a ine 6 miles West of the West boundary of Oc County), SHAWANO (Except Area North of Townships of Ar Hutchins) COUNTIES</pre> Rates Fring Rates Fring ELECTRICIAN\$ 36.14 29.75%+10 ELEC0159-003 05/26/2024 COLUMBIA, DANE, DODGE (Area West of Hwy 26, except Ch Emmet Townships), GREEN, LAKE (except Townships of Be Seneca, and St. Marie), IOMA, MARQUETTE (except Townships of Be Seneca, and St. Marie), IOMA, MARQUETTE (except Townships of Be Seneca, and St. Marie), IOMA, MARQUETTE (except Townships of Be Seneca, and St. Marie), IOMA, MARQUETTE (except Townships of Be Seneca, and St. Marie), IOMA, MARQUETTE (except Townships of Be Seneca, and St. Marie), IOMA, MARQUETTE (except Townships of Be Seneca, and St. Marie), IOMA, MARQUETTE (except Townships of Be Seneca, and St. Marie), IOMA, MARQUETTE (except Townships of Be Seneca, and St. Marie), IOMA, MARQUETTE (except Townships of Be Seneca, and St. Marie), IOMA, MARQUETTE (except Townships of Be Seneca, Crystal Lake, Newton, and Springfield), and	ELEC0158-002 05/30/2021 ROWN, DOOR, KEWAUNEE, MANITOWOC (except Schleswig), ARINETTE(Wausuakee and area South thereof), OCONTO, N East of a ine 6 miles West of the West boundary of 00 ounty), SHAWANO (Except Area North of Townships of Ar utchins) COUNTIES Rates Fring LECTRICIAN\$ 36.14 29.75%+10 ELEC0159-003 05/26/2024 OLUMBIA, DANE, DODGE (Area West of Hwy 26, except Ch ammet Townships), GREEN, LAKE (except Townships of Be eneca, and St. Marie), IOWA, MARQUETTE (except Townshi eschkoka, Crystal Lake, Newton, and Springfield), and	Electricians:\$ 46.05 30%+13 ELEC0158-002 05/30/2021 BROWN, DOOR, KEWAUNEE, MANITOWOC (except Schleswig), MARINETTE(Wausuakee and area South thereof), OCONTO, h (East of a ine 6 miles West of the West boundary of 0 county), SHAWANO (Except Area North of Townships of Ar Hutchins) COUNTIES Rates Fring ELECTRICIAN\$ 36.14 29.75%+10 ELECTRICIAN\$ 36.14 29.75%+10 ELECTRICIAN\$ 36.14 29.75%+10 COLUMBIA, DANE, DODGE (Area West of Hwy 26, except Ch EMmet Townships), GREEN, LAKE (except Townships of Bel Seneca, and St. Marie), IOMA, MARQUETTE (except Townships of Bel Seneca, and St. Marie), IOMA, MARQUETTE (except Townships of Bel Seneca, and St. Marie), IOMA, MARQUETTE (except Townships of Bel Seneca, and St. Marie), IOMA, MARQUETTE (except Townships of Bel Seneca, Crystal Lake, Newton, and Springfield), and

FLORENCE COUNTY (Townships of Aurora, Commonwealth, Fern, Florence and Homestead) AND MARINETTE COUNTY (Township of Niagara)

Rates Fringes

Electricians:

\$180,000\$ 33.94	21.80
Electrical contracts under	
\$180,000\$ 31.75	21.73
	1 1 1 1 1 1
ELEC0242-005 06/02/2024	

11111

Rates Electricians:\$ 46.23	Fringes 69.19%
ELEC0388-002 06/01/2023	
ADAMS, CLARK (Colby, Freemont, Lynn, Mayville, Sherman,	, Sherman,

ADAMS, CLAKK (COLDY, FREEMORT, LYNN, MAYVILLE, SNEFMAN, 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:\$ 38.74	26%+11.76
ELEC0430-002 06/01/2023	
RACINE COUNTY (Except Burlington Township)	
Rates	Fringes
Electricians: 46.70	25.02
ELEC0494-005 05/26/2024	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES	HA COUNTIES
Rates	Fringes
	27.34
ELEC0494-006 05/26/2024	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
CALUMET (Township of New Holstein), DODGE including Chester Township), FOND DU LAC, (Schleswig), and SHEBOYGAN COUNTIES	(East of Hwy 26 MANITOWOC
Rates	Fringes
Electricians: 42.77	24.66

ELEC0494-013 05/26/2024

DODGE (East of Hwy 26 including Chester Twp, excluding Emmet Twp), FOND DU LAC (Except Waupuin), MILWAUKEE, OZAUKEE, MANITOWOC (Schleswig), WASHINGTON, AND WAUKESHA COUNTIES

Rates Fringes

Sound & Communications

18.87	18.87
\$ 36.03	\$ 36.03
<pre>Installer\$ 36</pre>	Technician

external electric power is supplied to any of the foregoing where required for the protection of the wire or cable, but Installation, testing, maintenance, operation and servicing antenna distribution systems, clock and program systems and low-voltage systems such as visual nurse call, audio/visual installation of conduit, wiremold, or raceways in existing structures that have been occupied for six months or more work Includes all wire and cable carrying audio, visual, data, wiremold or any raceways in any new construction, or the installation of power supply outlets by means of which of all sound, intercom, telephone interconnect, closed nurse call systems, doctors entrance register systems. covered does not include the installation of conduit, systems, language laboratories, electronic carillion, does not mean a complete conduit or raceway system. circuit TV systems, radio systems, background music light and radio frequency signals. Includes the equipment or products

ELEC0577-003 05/26/2024

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

 DODGE (Emmet Township only), GREEN, JEFFERSON, LAFAYETTE, RACINE (Burlington Township), ROCK AND WALWORTH COUNTIES

https://sam.gov/wage-determination/WI20240015/13

11/30

Rates	Fringes
Electricians: 43.65	25.95%+12.26
ELEC0953-001 06/02/2019	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Rates	Fringes
<pre>Line Construction: (1) Lineman\$ 47.53 (2) Heavy Equipment Operator\$ 42.78 (3) Equipment 00erator\$ 38.02</pre>	21.43 19.80 18.40
<pre>(4) Heavy Groundman Driver.\$ 33.27 (5) Light Groundman Driver \$ 30.89</pre>	16.88 16.11
(6) Groundsman\$ 26.14	14.60
* ENGI0139-001 06/01/2024	

KENOSHA, MILWAUKEE, OZAUKEE, RACINE, WASHINGTON, AND WAUKESHA COUNTIES

Fringes	27.60 27.60	27.60	27.60 27.60	
Rates	Power Equipment Operator Group 1\$ 52.66 Group 2	Group 3\$ 51.66 Group 4\$ 50.37	Group 5\$ 46.39 Group 6\$ 41.24	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

GROUP 1: Cranes, Tower Cranes, Pedestal Tower Cranes and Derricks with or w/o attachments with a lifting capacity of over 100 tons; or Cranes, Tower Cranes, Pedestal Tower Cranes and Derricks with boom, leads, and/or jib lengths measuring 176 feet or longer; Self-Erecting Tower Cranes over 4000 lbs lifting capacity; All Cranes with Boom. Dollies; Boring Machines (directional); Master Mechanic. \$0.50 additional per hour per 100 tons or 100 ft of boom

SAM.gov

over 200 ft or lifting capacity of crane over 200 tons to a maximum of 300 tons or 300 ft. Thereafter an increase of \$0.01 per ft or ton, whichever is greater.

GROUP 2: Cranes, Tower Cranes, Pedestal Tower Cranes and Derricks with or without attachments with a lifting capacity of 100 tons or less; or Cranes, Tower Cranes Portable Tower Cranes, Pedestal Tower Cranes and Derricks with boom, leadsand/or jib lengths measuring 175 feet or less; Backhoes (excavators) 130,000 lbs and over; Caisson Rigs; Pile Drivers; Boring Machines (vertical or horizontal), Versi-Lift, Tri-Lift, Gantry 20,000 lbs & over. GROUP 3: Backhoe (excavator) under 130,000 lbs;Self-erecting Tower Crane 4000 lbs & under lifting capacity;Traveling Crane (bridge type); Skid Rigs; Dredge Operator; Mechanic; Concrete Paver (over 27E); Concrete Spreader and Distributor; Forklift/ Telehandler (machinery- moving / steel erection); Hydro Blaster, 10,000 psi and over

GROUP 4: Material Hoists; Stack Hoists; Hydraulic Backhoe (tractor or truck mounted); Hydraulic Crane, 5 tons or under (tractor or truck mounted); Hoist (tuggers 5 tons & over); Hydro-Excavators/Daylighters; Concrete Pumps Rotec type Conveyors; Tractor/Bulldozer/End Loader (over 40 hp); Motor Patrol; Scraper Operator; Sideboom; Straddle Carrier; Welder; Bituminous Plant and Paver Operator; Roller over 5 tons; Rail Leveling Machine (Railroad); Tie Placer; Tie Extractor; Tie Tamper; Stone Leveler; Rotary Drill Operator and Blaster; Percussion Drill Operator; Air Track Drill and/or Hammers; Gantrys (under 20,000 lbs); Tencher (wheel type or chain type having 8 inch or larger bucket); Milling Machine; Off-Road Material Haulers. GROUP 5: Backfiller; Concrete Auto Breaker (large); Concrete Finishing Machines (road type); Rubber Tired Roller; Concrete Batch Hopper; Concrete Conveyor Systems; Grout Pumps; Concrete Mixers (14S or over); Screw Type Pumps and Gypsum Pumps; Tractor, Bulldozer, End Loader (under 40 hp); Trencher (chain type, bucket under 8 inch); Industrial Locomotives; Rollers under 5 tons; Stump Grinder/Chipper (Large); Timber Equipment; Firemen (pile drivers and derricks); Personnel Hoist, Telehandler over 8000 lbs; Robotic Tool Carrier with or without attachments

GROUP 6: Tampers - Compactors (riding type); Assistant Engineer; A-Frames and Winch Trucks; Concrete Auto Breaker; Hydrohammers (small); Brooms and Sweepers; Hoist (tuggers under 5 tons); Boats (Tug, Safety, Work Barges, Launch);

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Shouldering Machine Operator; Prestress Machines; Screed Operator; Stone Crushers and Screening Plants; Screed Operators (milling machine), Farm or Industrial Tractor Mounted Equipment; Post Hole Digger; Fireman (asphalt plants); Air Compressors over 400 CFM; Generators, over 150 KW; Augers (vertical and horizontal); Air, Electric, Hydraulic Jacks (slipform); Skid Steer Loaders (with or without attachments); Boiler Operators (temporary heat); Refrigeration Plant/Freeze Machines; Power Pack Vibratory/Ultra Sound Drivers and Extractors; Welding Machines; Heaters (mechanical); Pumps; Winches (small electric); Oiler and Greaser; Rotary Drill Tender; Conveyor; Forklifts/Telehandler 8000 lbs & under; Elevators: Automatic Hoists; Pumps (well points); Elevators: Automatic Hoists; Pumps (well points);

ENGI0139-003 06/03/2024

REMAINING COUNTIES

Rates	Fringes
Power Equipment Operator	
Group 1\$ 48.78	27.14
Group 2\$ 47.53	27.14
Group 3\$ 44.23	27.14
Group 4\$ 43.70	27.14
Group 5\$ 41.63	27.14
Group 6\$ 40.10	27.14
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

GROUP 1: Cranes, Tower Cranes and Derricks with or without attachments with a lifting capacity of over 100 tons; Cranes, Tower Cranes, and Derricks with boom, leads and/or jib lengths 176 ft or longer.

GROUP 2: Backhoes (Excavators) weighing 130,00 lbs and over; Cranes, Tower Cranes and Derricks with or without attachments with a lifting capacity of 100 tons or less; Cranes, Tower Cranes, and Derricks with boom, leads, and/or jib lengths 175 ft or less; Caisson Rigs; Pile Driver

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GROUP 3: Backhoes (Excavators) weighing under 130,000 lbs; Travelling Crane (bridge type); Milling Machine; Concrete Paver over 27 E; Concrete Spreader and Distributor; Concrete Laser Screed; Concrete Grinder and Planing Machine; Slipform Curb and Gutter Machine; Boring Machine (Directional); Dredge Operator; Skid Rigs; over 46 meter Concrete Pump. GROUP 4: Hydraulic Backhoe (tractor or truck mounted); Hydraulic Crane, 10 tons or less; Tractor, Bulldozer, or End Loader (over 40 hp); Motor Patrol; Scraper Operator; Bituminous Plant and Paver Operator; Screed-Milling Machine; Roller over 5 tons; Concrete pumps 46 meter and under; Grout Pumps; Roter type machine; Hydro Blaster, 10,000 psi and over; Rotary Drill Operator; Percussion Drilling Machine; Air Track Drill with or without integral hammer; Blaster; Boring Machine (vertical or horizontal); Side Boom; Trencher, wheel type or chain type having 8 inch or larger bucket; Rail Leveling Machine (Railroad); Tie Placer; Tie Extractor; Tie Tamper; Stone Leveler; Straddle Carrier; Material Hoists; Stack Hoist; Man Hoists; Mechanic and Welder; Off Road Material Haulers. GROUP 5: Tractor, Bulldozer, or Endloader (under 40 hp); Tampers -Compactors, riding type; Stump Chipper, large; Roller, Rubber Tire; Backfiller; Trencher, chain type (bucket under 8 inch); Concrete Auto Breaker, large; Concrete Finishing Machine (road type); Concrete Batch Hopper; Concrete Conveyor Systems; Concrete Mixers, 14S or over; Pumps, Screw Type and Gypsum); Hydrohammers, small; Brooms and Sweeeprs; Lift Slab Machine; Roller under 5 tons; Industrial Locomotives; Fireman (Pile Drivers and Derricks); Pumps (well points); Hoists, automatic; A-Frames and Winch Trucks; Hoists (tuggers); Boats (Tug, Safety, Work Barges and Launches); Assistant Engineer GROUP 6: Shouldering Machine Operator; Farm or Industrial Tractor mounted equipment; Post Hole Digger; Auger (vertical and horizontal); Skid Steer Loader with or without attachments; Robotic Tool Carrier with or without attachments; Power Pack Vibratory/Ultra Sound Driver and Extractor; Fireman (Asphalt Plants); Screed Operator; Stone Crushers and Screening Plants; Air, Electric, Hydraulic Jacks (Slip Form); Prestress Machines; Air Compressor, 400 CFM or over; Refrigeration Plant/Freese Machine; Boiler Operators; Pumps over 3""; Heaters, Mechanical; Combination small equipment operator; Winches, small electric; Oiler; Greaser; Rotary Drill Tender; Conveyor; Elevator Operator

IRON0008-002 06/02/2024

BROWN, CALUMET, DOOR, FOND DU LAC, KEWAUNEE, MANITOWOC, MARINETTE, OCONTO, OUTAGAMI, SHAWANO, SHEBOYGAN, AND WINNEBAGO COUNTIES:

Paid Holidays: New Year's Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day & Christmas Day.

IRON0008-003 06/02/2024

KENOSHA, MILWAUKEE, OZAUKEE, RACINE, WALWORTH (N.E. 2/3), WASHINGTON, AND WAUKESHA COUNTIES

Paid Holidays: New Year's Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day & Christmas Day.

IRON0383-001 06/02/2024

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

BARRON, BUFFALO, CHIPPEWA, CLARK, DUNN, EAU CLAIRE, JACKSON, PEPIN, PIERCE, POLK, RUSK, ST CROIX, TAYLOR, AND TREMPEALEAU

Fringes	•	4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	.INCOLN, ONEIDA,	Fringes	34.00	
Rates	•	IRON0512-021 04/30/2023	ASHLAND, BAYFIELD, BURNETT, DOUGLAS, IRON, LINCOLN, ONEIDA, PRICE, SAWYER, VILAS AND WASHBURN COUNTIES	Rates	RONWORKER\$ 3	LABO0113-002 06/03/2024

34.00		
\$	LABO0113-002 06/03/2024	

MILWAUKEE AND WAUKESHA COUNTIES

Fringes

Rates

	25.01	25.01	25.01	25.01	25.01	25.01
ABORER	Group 1\$ 35.61	Group 2\$ 35.76	Group 3\$ 35.96	Group 4\$ 36.11	Group 5\$ 36.26	Group 6\$ 32.10

LABORERS CLASSIFICATIONS

GROUP 1: General Laborer; Tree Trimmer; Conduit Layer; Demolition and Wrecking Laborer; Guard Rail, Fence, and Bridge Builder; Landscaper; Multiplate Culvert Assembler; Bituminous Worker (Dumper, Ironer, Smoother, and Tamper); Stone Handler; Bituminous Worker (Shoveler, Loader, and Utility Man); Batch Truck Dumper or Cement Handler; Concrete Handler

(Pavement); Vibrator or Tamper Operator (Mechanical Hand Operated); Chain Saw Operator; Demolition Burning Torch GROUP 2: Air Tool Operator; Joint Sawer and Filler Laborer GROUP 3: Bituminous Worker (Raker and Luteman); Formsetter (Curb, Sidewalk, and Pavement); Strike Off Man

SAM.gov

GROUP 4: Line and Grade Specialist

GROUP 5: Blaster and Powderman

GROUP 6: Flagperson; traffic control person

LAB00113-003 06/03/2024

OZAUKEE AND WASHINGTON COUNTIES

Rates	Fringes
LABORER	
Group 1\$ 34.86	25.01
Group 2\$ 34.96	25.01
Group 3\$ 35.01	25.01
Group 4\$ 35.21	25.01
Group 5\$ 35.06	25.01
	25.01

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 Sawer 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

LABO0113-011 06/03/2024

KENOSHA AND RACINE COUNTIES

PM
3:20 F
10/17/24,

SAM.gov

Fringes		25.01	25.01	25.01	25.01	25.01	25.01	
Rates	LABORER	Group 1\$ 34.67	2\$	Group 3\$ 35.02	Group 4\$ 34.99	Group 5\$ 35.32	Group 6\$ 31.81	

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 Sawer 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

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, TREMPEALEAU, VERNON, VILLAS, WALWORTH, WASHBURN, WAUPACA, WAUSHARA, WINNEBAGO, AND WOOD COUNTIES

Fringes

Rates

	1\$	2\$	3\$
	1	5.	:
LABORER	Group	Group	Group

19.45 19.45 19.45 19.45

40.57 40.67

LABORER CLASSIFICATIONS

Group 6.....\$ 37.20

Group 5.....\$ 40.77

19.45 19.45

40.72 40.92

\$....

Group 4.....

GROUP 1: General Laborer; Tree Trimmer; Conduit Layer; Demolition and Wrecking Laborer; Guard Rail, Fence, and Bridge Builder; Landscaper; Multiplate Culvert Assembler; Stone Handler; Bitminous 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 Sawer 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 Secialist

GROUP 5: Blaster; powderman

GROUP 6: Flagperson; Traffic Control

LAB00464-003 06/03/2024

DANE COUNTY

Rates	Fringes
LABORER	
Group 1\$ 40.85	5 19.45
Group 2\$ 40.95	5 19.45
Group 3\$ 41.00	0 19.45
Group 4\$ 41.20	0 19.45
5.	5 19.45
Group 6\$ 37.20	0 19.45

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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; Bituminious Worker (Dumper, Ironer, Smoother, and Tamper); Concrete Handler

GROUP 2: Air Tool Operator; Joint Sawer 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 and Traffic Control Person

ASHLAND, BAYFIELD, BURNETT, AND DOUGLAS COUNTIES

Rates Fringes

Painters:

New:
 Brush, Roller.....\$ 36.16 26.27
 Brush, Sandblast, Steel....\$ 36.76 26.27
 Repaint:
 Brush, Roller.....\$ 34.66 26.27
 Spray, Sandblast, Steel....\$ 35.26 26.27
 PAIN0108-002 06/01/2024

RACINE COUNTY

RatesFringesPainters:8Brush, Roller.....\$ 42.0422.95Spray & Sandblast.....\$ 43.0422.95

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BARRON. CHIPPEWA. DUNN. EAU CLAIRE. PEPIN.

BARRON, CHIPPEWA, DUNN, EAU CLAIRE, PEPIN, PIERCE, POLK, RUSK, SAWYER, ST. CROIX, AND WASHBURN COUNTIES

Rates Fringes	4.11 12.15		BUFFALO, CRAWFORD, JACKSON, LA CROSSE, MONROE, TREMPEALEAU, AND VERNON COUNTIES
Ra [.]	PAINTER\$ 24.11	01/2015	JACKSON, LA CROSSI
	PAINTER	PAIN0259-004 05/01/2015	BUFFALO, CRAWFORD, VERNON COUNTIES

Fringes	12.45	
Rates	AINTER\$ 22.03	PAIN0781-002 06/01/2024

JEFFERSON, MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES

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ates

Painters:

Painters:	
Bridge 41.39	24.92
Brush\$ 40.64	24.92
Spray & Sandblast\$ 41.39	24.92
PAIN0802-002 06/01/2024	

COLUMBIA, DANE, DODGE, GRANT, GREEN, IOWA, LAFAYETTE, RICHLAND, ROCK, AND SAUK COUNTIES

Fringes	20.87	\$1.00 additional per
Rates	PAINTER Brush\$ 36.35	<pre>PREMIUM PAV: Structural Steel, Spray, Bridges = \$1.00 hour.</pre>

PAIN0802-003 06/01/2024

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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\$ 36.35	20.87
PAIN0934-001 06/01/2024	L I I I I I I I I I I I I I I I I I I I
KENOSHA AND WALWORTH COUNTIES	
Rates	Fringes
\$	26.32
<pre>Spray\$ 39.67 Structural Steel\$ 38.82</pre>	26.32 26.32
PAIN1011-002 06/02/2024	* * * * * * * * * * * * * * * * * * * *
FLORENCE COUNTY	
Rates	Fringes
Painters:\$ 29.95	15.89
PLAS0599-002 06/01/2023	
Rates	Fringes
CEMENT MASON/CONCRETE FINISHER Area A\$ 45.17 Area B\$ 39.97 Area C\$ 40.40	27.27 25.02 25.25

AREA DESCRIPTIONS

24.49 25.14 28.67

Area D.....\$ 41.16 Area E.....\$ 40.50 Area F.....\$ 36.98

AREA A: ASHLAND, BURNETT, BAYFIELD, DOUGLAS, IRON, PRICE, SAWYER, AND WASHBURN COUNTIES AREA B: ADAMS, BARRON, BROWN, CALUMET, CHIPPEWA, CLARK, COLUMBIA, DODGE, DOOR, DUNN, FLORENCE, FOND DU LAC, FOREST,

https://sam.gov/wage-determination/WI20240015/13

GREEN LAKE, 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 C: BUFFALO, CRAWFORD, EAU CLAIRE, JACKSON, JUNEAU, LA CROSSE, MONROE, PEPIN, PIERCE, RICHLAND, TREMPEALEAU, AND VERNON COUNTIES

AREA D: MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES

AREA E: DANE, GRANT, GREEN, IOWA, LAFAYETTE, AND ROCK COUNTIES

AREA F: KENOSHA AND RACINE COUNTIES

ASHLAND, BAYFIELD, BURNETT, DOUGLAS, IRON, SAWYER, AND WASHBURN COUNTIES

Rates Fringes PLUMBER......\$49.32 27.18 PLUM0075-002 06/01/2024

MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES

Rates Fringes

DODGE (Watertown), GREEN, JEFFERSON, LAFAYETTE, AND ROCK COUNTIES Rates Fringes
PLUMBER.....\$57.60 26.90
PLUM0075-009 06/01/2024

COLUMBIA, DANE, IOWA, MARQUETTE, RICHLAND AND SAUK COUNTIES

Rates
Niagara), MENOMINEE, OCONTO, OUTAGAMIE, S WAUPACA, WAUSHARA, AND WINNEBAGO COUNTIES
ADAMS,BROWN, CALUMET, DODGE (except Water LAC, GREEN LAKE,KEWAUNEE, MANITOWOC, MARI
PLUM0400-003 05/31/2024
•
Rates
KENOSHA, RACINE, AND WALWORTH COUNTIES
24
PLUMBER/PIPEFITTER\$ 43.90
Rates
MARINETTE COUNTY (Niagara only)

26.12

Fringes

27.53

Fringes

Watertown), DOOR, FOND DU IE, SHAWANO, SHEBOYGAN, MARINETTE (except NTIES

Fringes	21.84	
Rates	MBER/PIPEFITTER\$ 49.00	PLUM0434-002 06/16/2024

FLORENCE, FOREST, GRANT, JACKSON, JUNEAU, LA CRÔSSE, LANGLAĎE, LINCOLN, MARATHON, MONROE, ONEIDA, PEPIN, PIERCE, POLK, PORTAGE, PRICE, RUSK, ST. CROIX, TAYLOR, TREMPEALEAU, VERNON, VILAS, AND WOOD COUNTIES BARON, BUFFALO, CHIPPEWA, CLARK, CRAWFORD, DUNN, EAU CLAIRE,

24.38 Fringes PIPEFITTER..... 49.24 Rates

Zone 1

PLUM0601-003 06/03/2024

https://sam.gov/wage-determination/WI20240015/13

26.34

PLUMBER.....\$ 58.12

PLUM0111-007 06/03/2024

Fringes

Rates

10/17/24, 3:20 PM

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DODGE (Watertown), GREEN, JEFFERSON, LAFAYETTE, MILWAUKEE, OZAUKEE, ROCK, WASHINGTON AND WAUKESHA COUNTIES

	Rates	Fringes
R	\$ 55.67	31.19
PLUM0601-009 06/03/2024	1 1 1 1 1 1 1 1	
COLUMBIA, DANE, IOWA, MARQUETTE,	RICHLAND AND	SAUK COUNTIES
	Rates	Fringes
R	\$ 56.88	30.01
TEAM0039-002 06/01/2024	, ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;	
	Rates	Fringes
TRUCK DRIVER 1 & 2 Axle Trucks 3 or more axles; Euclids	\$ 37.57	27.41
mptor, Articulated , Mechanic	.\$ 37.72	27.41
* SUWI2011-001 11/16/2011		
	Rates	Fringes
WELL DRILLER	\$ 16.52 **	
WELDERS - Receive rate prescribec operation to which welding is inc	ţ	performing
** Workers in this classification may be entitled to a hig minimum wage under Executive Order 14026 (\$17.20) or 13658 (\$12.90). Please see the Note at the top of the wage determination for more information. Please also note that minimum wage requirements of Executive Order 14026 are not currently being enforced as to any contract or subcontract which the states of Texas, Louisiana, or Mississippi, incl their agencies, are a party.	on may be entitled der 14026 (\$17.20) at the top of the v ion. Please also no (coutive Order 14026 any contract or sub siana, or Mississip	ication may be entitled to a higher ve Order 14026 (\$17.20) or 13658 Vote at the top of the wage ormation. Please also note that the of Executive Order 14026 are not s to any contract or subcontract to Louisiana, or Mississippi, including V.

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 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

https://www.dol.gov/agencies/whd/government-contracts.

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) (iii)).

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,

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2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing 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; however, 100% of the rate 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.

State Adopted Rate Identifiers

Classifications listed under the ""SA"" identifier indicate that the prevailing wage rate set by a state (or local) government was adopted under 29 C.F.R �1.3(g)-(h). Example: SAME2023-007 01/03/2024. SA reflects that the rates are state adopted. ME

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refers to the State of Maine. 2023 is the year during which the state completed the survey on which the listed classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 01/03/2024 reflects the date on which the classifications and rates under the ?SA? identifier took effect under state law in the state from which the rates were adopted.

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 for summaries of surveys, should be with the Wage and Hour National Office because National Office has 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

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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.

END OF GENERAL DECISION"

AND PAGE

SECTION J: PAYMENT AND PERFORMANCE BOND

LET ALL KNOW BY THESE DOCUMENTS PRESENTED, that we R. G. HUSTON CO., INC. as principal, and Travelers Casually and Surely Company of America

Company of <u>Hartford, CT</u> as surety, are held and firmly bound unto the City of Madison, Wisconsin, in the sum of <u>EIGHT MILLION SEVENTEEN THOUSAND ONE HUNDRED AND</u> <u>NO/100 (\$8,017,100.00)</u> 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:

PHEASANT BRANCH GREENWAY ENHANCEMENT CONTRACT NO. 9517

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 <u>11th</u>	_day of	December, 2024	<u> annon anno a</u>
Countersigned Cums Richarch Witness	•	R. G. HUSTON CO., INC.	CORPORATE SEAL 197 Seal
Secretary			"MITTER DAY
]	Fravelers Casualty and Surety Company	of America
	_	Surety IX Salary Employee · □ C	Seal Commission
		By Attorney-in-Fact (Jenny)) L. Hirth)
This cartifies that I have been duly licensed a	as an ao	ent for the above company ir	Wisconsin under

This certifies that I have been duly licensed as an agent for the above company in Wisconsin under National Producer Number <u>6523593</u> for the year <u>2024</u>, and appointed as attorney-in-fact with authority to execute this payment and performance bond which power of attorney has not been revoked.

December 11, 2024

Date

The foregoing Bond has been approved as to form:

12/20/2024

Date

Michael Haas

City Attorney

TRAVELERS

Travelers Casualty and Surety Company of America Travelers Casualty and Surety Company St. Paul Fire and Marine Insurance Company

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS: That Travelers Casualty and Surety Company of America, Travelers Casualty and Surety Company, and St. Paul Fire and Marine Insurance Company are corporations duly organized under the laws of the State of Connecticut (herein collectively called the "Companies"), and that the Companies do hereby make, constitute and appoint JENNY L HIRTH of MADISON , Wisconsin , their true and lawful Attorney(s)-in-Fact to sign, execute, seal and

MADISON , Wisconsin , their true and lawful Attorney(s)-in-Fact to sign, execute, seal and acknowledge any and all bonds, recognizances, conditional undertakings and other writings obligatory in the nature thereof on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

IN WITNESS WHEREOF, the Companies have caused this instrument to be signed, and their corporate seals to be hereto affixed, this 21st day of April, 2021.



State of Connecticut

City of Hartford ss.

y: ______Robert L. Raney Senior Vice President

On this the 21st day of April, 2021, before me personally appeared Robert L. Raney, who acknowledged himself to be the Senior Vice President of each of the Companies, and that he, as such, being authorized so to do, executed the foregoing instrument for the purposes therein contained by signing on behalf of said Companies by himself as a duly authorized officer.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

My Commission expires the 30th day of June, 2026

PHALIC Anna P. Nowik, Notary Public

This Power of Attorney is granted under and by the authority of the following resolutions adopted by the Boards of Directors of each of the Companies, which resolutions are now in full force and effect, reading as follows:

RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President, any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary may appoint Attorneys-in-Fact and Agents to act for and on behalf of the Company and may give such appointee such authority as his or her certificate of authority may prescribe to sign with the Company's name and seal with the Company'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 or the Board of Directors at any time may remove any such appointee and revoke the power given him or her; and it is

FURTHER RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President may delegate all or any part of the foregoing authority to one or more officers or employees of this Company, provided that each such delegation is in writing and a copy thereof is filed in the office of the Secretary; and it is

FURTHER RESOLVED, that any bond, recognizance, contract of indemnity, or writing obligatory in the nature of a bond, recognizance, or conditional undertaking shall be valid and binding upon the Company when (a) signed by the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary and duly attested and sealed with the Company's seal by a Secretary or Assistant Secretary; or (b) duly executed (under seal, if required) by one or more Attorneys-in-Fact and Agents pursuant to the power prescribed in his or her certificate or their certificates of authority or by one or more Company officers pursuant to a written delegation of authority; and it is

FURTHER RESOLVED, that the signature of each of the following officers: President, any Executive Vice President, any Senior Vice President, any Vice President, any Assistant Vice President, any Secretary, any Assistant Secretary, and the seal of the Company may be affixed by facsimile to any Power of Attorney or to any certificate relating thereto appointing Resident Vice Presidents, Resident Assistant Secretaries or Attorneys-in-Fact for purposes only of executing and attesting bonds and undertakings and other writings obligatory in the nature thereof, and any such Power of Attorney or certificate bearing such facsimile signature or facsimile seal shall be valid and binding upon the Company and any such power so executed and certified by such facsimile signature and facsimile seal shall be valid and binding on the Company in the future with respect to any bond or understanding to which it is attached.

I, Kevin E. Hughes, the undersigned, Assistant Secretary of each of the Companies, do hereby certify that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies, which remains in full force and effect.

2024

Dated this 11th day of December,



Kevin E. Hughes, Assistant Secretary

To verify the authenticity of this Power of Attorney, please call us at 1-800-421-3880. Please refer to the above-named Attorney(s)-in-Fact and the details of the bond to which this Power of Attorney is attached.

ATTACHMENT A - TREE REMOVAL LIST

	Tag #	DBH	Species
1	1183	4.5	Box Elder- Acer Negundo
2	1184	4.5	Buckthorn- Rhamnus cathartica
3	1185	4	Buckthorn- Rhamnus cathartica
4	1186	4.5	Buckthorn- Rhamnus cathartica
5	1187	6	Box Elder- Acer Negundo
6	2001	6, 6, 5.5, 4, 4, 4.5	Buckthorn- Rhamnus cathartica
7	2002	28.5	Box Elder- Acer Negundo
8	2003	14	White Ash- Fraxinus americana
9	2004	12.5	White Ash- Fraxinus americana
10	2005	10	Box Elder- Acer Negundo
11	2006	15.5	Mulberry- Morus sp.
12	2007	12, 8	Box Elder- Acer Negundo
13	2008	6.5	Box Elder- Acer Negundo
14	2009	10	Mulberry- Morus sp.
15	2010	7.5	Box Elder- Acer Negundo
16	2011	8.5	Box Elder- Acer Negundo
17	2012	12.5	Box Elder- Acer Negundo
18	2013	6.5	Mulberry- Morus sp.
19	2014	10.5	Box Elder- Acer Negundo
20	2015	11.5	Box Elder- Acer Negundo
21	2016	11	Box Elder- Acer Negundo
22	2017	12.5, 3	Box Elder- Acer Negundo
23	2018	6	Box Elder- Acer Negundo
24	2019	8.5	Box Elder- Acer Negundo

	Tag #	DBH	Species
25	2020	5	Box Elder- Acer Negundo
26	2021	10	Box Elder- Acer Negundo
27	2022	8	Mulberry- Morus sp.
28	2023	5.5	Box Elder- Acer Negundo
29	2024	5, 3	Buckthorn- Rhamnus cathartica
30	2025	16.5, 8.5	Box Elder- Acer Negundo
31	2026	20	Mulberry- Morus sp.
32	2027	4.5	Buckthorn- Rhamnus cathartica
33	2028	6.5	Box Elder- Acer Negundo
34	2029	6	Bur Oak- Quercus macrocarpa
35	2030	7, 5.5	Buckthorn- Rhamnus cathartica
36	2031	10	Box Elder- Acer Negundo
37	2032	5.5	Buckthorn- Rhamnus cathartica
38	2033	9.5	Box Elder- Acer Negundo
39	2034	7, 4	Mulberry- Morus sp.
40	2035	6.5, 4.5	Box Elder- Acer Negundo
41	2036	7.5	Black Cherry- Prunus serotina
42	2037	5, 5	Buckthorn- Rhamnus cathartica
43	2038	5	Box Elder- Acer Negundo
44	2039	6	Bur Oak- Quercus macrocarpa
45	2040	15	Red Oak- Quercus rubra
46	2041	8	Box Elder- Acer Negundo
47	2042	20	Box Elder- Acer Negundo
48	2043	6.5	Box Elder- Acer Negundo

	Tag #	DBH	Species
49	2044	14	Black Cherry- Prunus serotina
50	2045	10	Black Cherry- Prunus serotina
51	2046	5.5	Buckthorn- Rhamnus cathartica
52	2047	43	Bur Oak- Quercus macrocarpa
53	2048	6	Black Cherry- Prunus serotina
54	2049	5	Black Cherry- Prunus serotina
55	2050	14.5	Black Cherry- Prunus serotina
56	2051	5	Box Elder- Acer Negundo
57	2052	7.5, 4.5	Box Elder- Acer Negundo
58	2053	7	Box Elder- Acer Negundo
59	2054	12.5	Mulberry- Morus sp.
60	2055	11.5	Box Elder- Acer Negundo
61	2056	8	Box Elder- Acer Negundo
62	2057	7.5	Box Elder- Acer Negundo
63	2058	5.5	Box Elder- Acer Negundo
64	2059	12	Box Elder- Acer Negundo
65	2060	5	Buckthorn- Rhamnus cathartica
66	2061	17.5	Box Elder- Acer Negundo
67	2062	16	Black Cherry- Prunus serotina
68	2063	9.5	Box Elder- Acer Negundo
69	2064	12	Box Elder- Acer Negundo
70	2065	6, 4.5	Box Elder- Acer Negundo
71	2066	11	Box Elder- Acer Negundo

oecies		Tag #	DBH	Species
erry- Prunus	72	2067	9.5, 4.5	Box Elder- Acer Negundo
erry- Prunus	73	2068	10	Box Elder- Acer Negundo
n- Rhamnus a	74	2069	6	Bur Oak- Quercus macrocarpa
Quercus pa	75	2070	10	Box Elder- Acer Negundo
erry- Prunus	76	2071	5.5, 4.5	Box Elder- Acer Negundo
erry- Prunus	77	2072	7	Box Elder- Acer Negundo
erry- Prunus	78	2073	6.5	Black Cherry- Prunus serotina
r- Acer	79	2074	5	Black Cherry- Prunus serotina
r- Acer	80	2075	5.5	Buckthorn- Rhamnus cathartica
r- Acer	81	2076	11, 4.5, 6.5	Box Elder- Acer Negundo
Morus sp. r- Acer	82	2077	13	Box Elder- Acer Negundo
- Acer	83	2078	9, 8.5	Black Cherry- Prunus serotina
- Acer	84	2079	7.5	Black Cherry- Prunus serotina
- Acer	85	2080	7.5	Buckthorn- Rhamnus cathartica
- Acer	86	2081	9	Box Elder- Acer Negundo
n- Rhamnus	87	2082	6	Box Elder- Acer Negundo
- Acer	88	2083	8, 7.5	Box Elder- Acer Negundo
erry- Prunus	89	2084	8.5	Box Elder- Acer Negundo
- Acer	90	2085	18.5	Red Oak- Quercus rubra
- Acer	91	2086	8.5	Box Elder- Acer Negundo
- Acer	92	2087	5.5	Box Elder- Acer Negundo
- Acer	93	2088	6.5, 8	Box Elder- Acer Negundo
	94	2089	8	Box Elder- Acer Negundo

	Tag #	DBH	Species
95	2090	17	Box Elder- Acer Negundo
96	2091	8	Box Elder- Acer Negundo
97	2092	7.5	Box Elder- Acer Negundo
98	2093	9.5	Mulberry- Morus sp.
99	2094	10	Box Elder- Acer Negundo
100	2095	6.5	Mulberry- Morus sp.
101	2096	14	Box Elder- Acer Negundo
102	2097	12.5	Box Elder- Acer Negundo
103	2098	22.5	Box Elder- Acer Negundo
104	2099	7.5	Box Elder- Acer Negundo
105	2100	5, 5,	Silver Maple- Acer sacchirinum
106	2101	16	Box Elder- Acer Negundo
107	2102	15	Box Elder- Acer Negundo
108	2103	24.5	Box Elder- Acer Negundo
109	2104	8.5	Mulberry- Morus sp.
110	2105	10,5	Box Elder- Acer Negundo
111	2106	5	Buckthorn- Rhamnus cathartica
112	2107	8, 7, 4.5	Box Elder- Acer Negundo
113	2108	5	Buckthorn- Rhamnus cathartica
114	2109	8.5, 15	Mulberry- Morus sp.
115	2110	20	Red Elm- Ulmus rubra
116	2112	8	Box Elder- Acer Negundo
117	2113	8.5	Box Elder- Acer Negundo
118	2114	10	Box Elder- Acer Negundo

	Tag #	DBH	Species
119	2115	10	Box Elder- Acer Negundo
120	2117	8.5	Box Elder- Acer Negundo
121	2118	15	Mulberry- Morus sp.
122	2119	14	Box Elder- Acer Negundo
123	2120	9	Box Elder- Acer Negundo
124	2121	10.5	Box Elder- Acer Negundo
125	2122	8.5	Box Elder- Acer Negundo
126	2123	6.5	Buckthorn- Rhamnus cathartica
127	2124	8	Box Elder- Acer Negundo
128	2125	7	Box Elder- Acer Negundo
129	2126	6	Box Elder- Acer Negundo
130	2127	8	Box Elder- Acer Negundo
131	2128	7.5	Buckthorn- Rhamnus cathartica
132	2129	6.5, 5	Box Elder- Acer Negundo
133	2130	12.5, 11.5	Box Elder- Acer Negundo
134	2131	10	Box Elder- Acer Negundo
135	2132	13	Mulberry- Morus sp.
136	2133	8	Mulberry- Morus sp.
137	2134	7	Red Elm- Ulmus rubra
138	2135	7.5, 12.5	Mulberry- Morus sp.
139	2136	11	Mulberry- Morus sp.
140	2137	12.5	Box Elder- Acer Negundo
141	2138	16	Box Elder- Acer Negundo
142	2139	9.5	Box Elder- Acer Negundo
143	2140	6, 4.5	Mulberry- Morus sp.
144	2141	14	Box Elder- Acer Negundo

	Tag #	DBH	Species
145	2142	15	Box Elder- Acer Negundo
146	2143	10	Box Elder- Acer Negundo
147	2144	5	Box Elder- Acer Negundo
148	2145	18	Mulberry- Morus sp.
149	2146	8.5	Mulberry- Morus sp.
150	2147	5	Mulberry- Morus sp.
151	2148	9	Box Elder- Acer Negundo
152	2149	6.5	Box Elder- Acer Negundo
153	2150	4, 6, 6,	Box Elder- Acer Negundo
154	2151	6	Box Elder- Acer Negundo
155	2152	8, 8	Box Elder- Acer Negundo
156	2153	5	Box Elder- Acer Negundo
157	2154	5	BOx Elder- Acer Negundo
158	2155	7.5, 3	Box Elder- Acer Negundo
159	2156	7	Box Elder- Acer Negundo
160	2157	6	Box Elder- Acer Negundo
161	2158	8.5	Box Elder- Acer Negundo
162	2159	9, 6	Box Elder- Acer Negundo
163	2160	8	American Elm- Ulmus americana
164	2161	5, 5.5	Box Elder- Acer Negundo
165	2162	5	Box Elder- Acer Negundo
166	2163	5	Box Elder- Acer Negundo
167	2164	7.5, 4, 4	Box Elder- Acer Negundo
168	2165	9, 7	Box Elder- Acer Negundo

		Tag #	DBH	Species
	169	2166	10, 9,	Box Elder- Acer Negundo
	170	2167	9	Red Elm- Ulmus rubra
	171	2168	4	Red Elm- Ulmus rubra
sp. sp.	172	2169	5	Box Elder- Acer Negundo
sp.	173	2170	6, 6	Box Elder- Acer Negundo
	174	2171	5.5	Box Elder- Acer Negundo
	175	2172	14	Black Oak- Quercus velutina
	176	2173	4.5	Box Elder- Acer Negundo
	177	2174	6	Box Elder- Acer Negundo
	178	2175	5, 5.5, 7, 7	Box Elder- Acer Negundo
	179	2176	5, 5.5	Box Elder- Acer Negundo
	180	2177	5, 6	Box Elder- Acer Negundo
	181	2178	5.5	Box Elder- Acer Negundo
	182	2179	4.5, 7, 7	Box Elder- Acer Negundo
	183	2180	5.5	Mulberry- Morus sp.
	184	2181	4, 5.5, 6.5	Mulberry- Morus sp.
	185	2182	5.5	Box Elder- Acer Negundo
nus	186	2183	12.5	Norway Spruce - Picea abies
	187	2184	11.5	Norway Spruce - Picea abies
	188	2185	6.5, 6.5	Box Elder- Acer Negundo
	189	2186	6.5, 10.5, 17.5	Box Elder- Acer Negundo
	190	2187	10	Black Oak- Quercus velutina
	191	2189	11.5	Box Elder- Acer Negundo

	Tag #	DBH	Species
192	2190	12.5	Box Elder- Acer Negundo
193	2191	13.5	Box Elder- Acer Negundo
194	2192	10.5	Box Elder- Acer Negundo
195	2193	5.5	Box Elder- Acer Negundo
196	2194	6, 11	Box Elder- Acer Negundo
197	2195	6.5	Box Elder- Acer Negundo
198	2196	14.5	Box Elder- Acer Negundo
199	2197	11	Box Elder- Acer Negundo
200	2198	15	Box Elder- Acer Negundo
201	2199	16	Box Elder- Acer Negundo
202	2200	7.5	Black Cherry- Prunus serotina
203	2201	6	Box Elder- Acer Negundo
204	2202	6	Box Elder- Acer Negundo
205	2203	10	Box Elder- Acer Negundo
206	2204	6.5, 10	Box Elder- Acer Negundo
207	2205	34	Bur Oak- Quercus macrocarpa
208	2206	5.5	Box Elder- Acer Negundo
209	2207	4.5	Box Elder- Acer Negundo
210	2212	17.5	Box Elder- Acer Negundo
211	2213	8, 13	Box Elder- Acer Negundo
212	2214	5	Buckthorn- Rhamnus cathartica
213	2216	18	Mulberry- Morus sp.
214	2217	8.5	Scotts Pine- Pinus sylvestris

	Tag #	DBH	Species
215	2218	11	Box Elder- Acer Negundo
216	2219	18.5	Box Elder- Acer Negundo
217	2220	6.5	Bur Oak- Quercus macrocarpa
218	2222	5.5	Box Elder- Acer Negundo
219	2223	5	Buckthorn- Rhamnus cathartica
220	2224	10	Box Elder- Acer Negundo
221	2225	6.5, 6.5	Box Elder- Acer Negundo
222	2226	8	Box Elder- Acer Negundo
223	2227	12.5	Bur Oak- Quercus macrocarpa
224	2228	10	Box Elder- Acer Negundo
225	2229	11	Box Elder- Acer Negundo
226	2230	13.5	Box Elder- Acer Negundo
227	2231	8	American Elm- Ulmus americana
228	2232	10	Box Elder- Acer Negundo
229	2233	9.5	Box Elder- Acer Negundo
230	2234	13	Box Elder- Acer Negundo
231	2235	15.5	Mulberry- Morus sp.
232	2237	5.5	Box Elder- Acer Negundo
233	2238	17	Box Elder- Acer Negundo
234	2239	9.5	Box Elder- Acer Negundo
235	2240	13	Box Elder- Acer Negundo
236	2241	10	Box Elder- Acer Negundo
237	2242	5	Box Elder- Acer Negundo

	Tag #	DBH	Species
238	2243	10.5	Box Elder- Acer Negundo
239	2244	12.5	Box Elder- Acer Negundo
240	2245	5.5, 12	Box Elder- Acer Negundo
241	2247	6	Box Elder- Acer Negundo
242	2249	9.5	Box Elder- Acer Negundo
243	2250	5	Buckthorn- Rhamnus cathartica
244	2251	7.5	Box Elder- Acer Negundo
245	2252	7.5	Box Elder- Acer Negundo
246	2253	8	Box Elder- Acer Negundo
247	2254	5	Box Elder- Acer Negundo
248	2255	8	Box Elder- Acer Negundo
249	2256	6	Box Elder- Acer Negundo
250	2257	8.5	Box Elder- Acer Negundo
251	2258	4.5	Box Elder- Acer Negundo
252	2259	4.5, 11	Box Elder- Acer Negundo
253	2261	5.5, 6.5	Box Elder- Acer Negundo
254	2262	5	Box Elder- Acer Negundo
255	2263	5.5, 8.5	Box Elder- Acer Negundo
256	2264	8	Box Elder- Acer Negundo
257	2265	7	Box Elder- Acer Negundo
258	2266	4.5, 7	Box Elder- Acer Negundo
259	2267	13.5	Box Elder- Acer Negundo
260	2268	17	Box Elder- Acer Negundo

	Tag #	DBH	Species
261	2269	12	Bur Oak- Quercus macrocarpa
262	2270	7, 12.5	Box Elder- Acer Negundo
263	2271	3, 7	Box Elder- Acer Negundo
264	2272	17	Box Elder- Acer Negundo
265	2273	9, 9.5	Box Elder- Acer Negundo
266	2274	10, 9.5	Box Elder- Acer Negundo
267	2275	4.5	Bur Oak- Quercus macrocarpa
268	2276	19	Box Elder- Acer Negundo
269	2277	5.5	Box Elder- Acer Negundo
270	2278	7.5	Box Elder- Acer Negundo
271	2279	7	Box Elder- Acer Negundo
272	2280	7	Box Elder- Acer Negundo
273	2281	6	Box Elder- Acer Negundo
274	2282	6	Box Elder- Acer Negundo
275	2283	7.5	Box Elder- Acer Negundo
276	2284	9	Box Elder- Acer Negundo
277	2285	7	Box Elder- Acer Negundo
278	2286	8.5	Box Elder- Acer Negundo
279	2287	4.5, 4.5	Box Elder- Acer Negundo
280	2288	11	Box Elder- Acer Negundo
281	2289	6	Box Elder- Acer Negundo
282	2290	7	Mulberry- Morus sp.
283	2291	8	Box Elder- Acer Negundo

	Tag #	DBH	Species
284	2292	5	Box Elder- Acer Negundo
285	2293	5	Box Elder- Acer Negundo
286	2294	7	Box Elder- Acer Negundo
287	2295	6.5	Box Elder- Acer Negundo
288	2297	5	Box Elder- Acer Negundo
289	2298	6.5	Box Elder- Acer Negundo
290	2299	5	Box Elder- Acer Negundo
291	2300	5.5	Box Elder- Acer Negundo
292	2301	5	Box Elder- Acer Negundo
293	2302	12	Box Elder- Acer Negundo
294	2303	4.5, 6.5	Box Elder- Acer Negundo
295	2304	12	Box Elder- Acer Negundo
296	2305	5, 7.5	Buckthorn- Rhamnus cathartica
297	2306	9.5	Mulberry- Morus sp.
298	2308	15	Box Elder- Acer Negundo
299	2309	10.5	Box Elder- Acer Negundo
300	2310	6	Box Elder- Acer Negundo
301	2311	6.5	Box Elder- Acer Negundo
302	2313	5	Box Elder- Acer Negundo
303	2314	5.5	Box Elder- Acer Negundo
304	2315	7	Box Elder- Acer Negundo
305	2316	8	Box Elder- Acer Negundo
306	2317	8.5	Box Elder- Acer Negundo

	Tag #	DBH	Species
307	2318	4	Box Elder- Acer Negundo
308	2319	7.5	Box Elder- Acer Negundo
309	2320	4.5	Box Elder- Acer Negundo
310	2321	5.5	Box Elder- Acer Negundo
311	2322	5	Norway Spruce - Picea abies
312	2323	8	Box Elder- Acer Negundo
313	2324	7	Box Elder- Acer Negundo
314	2325	5.5	Box Elder- Acer Negundo
315	2326	7.5	Box Elder- Acer Negundo
316	2327	6	Box Elder- Acer Negundo
317	2328	6	Box Elder- Acer Negundo
318	2329	7	Box Elder- Acer Negundo
319	2330	6.5	Box Elder- Acer Negundo
320	2331	6	Norway Spruce - Picea abies
321	2332	5.5	Box Elder- Acer Negundo
322	2333	6.5	Box Elder- Acer Negundo
323	2334	7.5	Box Elder- Acer Negundo
324	2335	5	Red Pine- Pinus resinosa
325	2337	7.5	Box Elder- Acer Negundo
326	2338	5.5	Box Elder- Acer Negundo
327	2339	12	Mulberry- Morus sp.
328	2340	7	Box Elder- Acer Negundo
329	2341	16.5	Black Cherry- Prunus serotina

	Tag #	DBH	Species
330	2342	6	Box Elder- Acer Negundo
331	2343	4	Box Elder- Acer Negundo
332	2344	6	Mulberry- Morus sp.
333	2345	7.5	American Elm- Ulmus americana
334	2346	21.5	Box Elder- Acer Negundo
335	2347	6.5	Box Elder- Acer Negundo
336	2348	13	Black Cherry- Prunus serotina
337	2349	14	Box Elder- Acer Negundo
338	2350	7	Box Elder- Acer Negundo
339	2351	13	Box Elder- Acer Negundo
340	2352	9	Box Elder- Acer Negundo
341	2353	5.5	Mulberry- Morus sp.
342	2354	17	Black Cherry- Prunus serotina
343	2355	6	Box Elder- Acer Negundo
344	2356	7	Box Elder- Acer Negundo
345	2357	6	Bur Oak- Quercus macrocarpa
346	2358	5.5, 8	Box Elder- Acer Negundo
347	2359	6	Box Elder- Acer Negundo
348	2360	13.5	Box Elder- Acer Negundo
349	2361	11.5	Box Elder- Acer Negundo
350	2362	8	Box Elder- Acer Negundo
351	2363	9	Box Elder- Acer Negundo
352	2364	5.5, 8.5	Box Elder- Acer Negundo
353	2365	8	Box Elder- Acer Negundo

	Tag #	DBH	Species
354	2366	8	Box Elder- Acer Negundo
355	2367	10	Box Elder- Acer Negundo
356	2368	6, 7	Box Elder- Acer Negundo
357	2369	11, 12	Box Elder- Acer Negundo
358	2370	7.5	Box Elder- Acer Negundo
359	2371	6.5, 9	Mulberry- Morus sp.
360	2372	8.5	Box Elder- Acer Negundo
361	2373	11	Black Cherry- Prunus serotina
362	2374	11.5	American Elm- Ulmus americana
363	2375	20	Box Elder- Acer Negundo
364	2376	6	Buckthorn- Rhamnus cathartica
365	2377	8	Box Elder- Acer Negundo
366	2378	6.5	Box Elder- Acer Negundo
367	2379	5	American Elm- Ulmus americana
368	2380	10	Black Cherry- Prunus serotina
369	2381	9.5	Black Cherry- Prunus serotina
370	2382	28.5	Bur Oak- Quercus macrocarpa
371	2383	7	Hackberry- Celtis occidentalis
372	2384	12.5	American Elm- Ulmus americana
373	2385	5, 7	Box Elder- Acer Negundo
374	2386	16	American Elm- Ulmus americana
375	2387	6.5	Black Cherry- Prunus serotina
376	2388	4.5	Black Cherry- Prunus serotina

	Tag #	DBH	Species
377	2389	4.5	Buckthorn- Rhamnus cathartica
378	2391	7.5	American Elm- Ulmus americana
379	2392	9.5	Black Cherry- Prunus serotina
380	2393	5.5	Box Elder- Acer Negundo
381	2395	16	Black Cherry- Prunus serotina
382	2397	6	Black Cherry- Prunus serotina
383	2398	5.5	Box Elder- Acer Negundo
384	2399	11	Box Elder- Acer Negundo
385	2400	5.5	Box Elder- Acer Negundo
386	2401	5.5	Mulberry- Morus sp.
387	2402	6.5	Mulberry- Morus sp.
388	2403	7	Box Elder- Acer Negundo
389	2404	5, 7	Box Elder- Acer Negundo
390	2405	17.5	Box Elder- Acer Negundo
391	2406	13	Black Cherry- Prunus serotina
392	2408	11.5	Box Elder- Acer Negundo
393	2409	5	Mulberry- Morus sp.
394	2411	7	Box Elder- Acer Negundo
395	2412	8	Box Elder- Acer Negundo
396	2413	7	Box Elder- Acer Negundo
397	2414	7.5	Box Elder- Acer Negundo
398	2415	7	Box Elder- Acer Negundo
399	2416	10.5	Box Elder- Acer Negundo
400	2417	5	American Elm- Ulmus americana

	Tag #	DBH	Species
401	2418	13.5	Black Willow - Salix nigra
402	2419	13.5	Box Elder- Acer Negundo
403	2420	7	Box Elder- Acer Negundo
404	2421	5	Box Elder- Acer Negundo
405	2422	7	Box Elder- Acer Negundo
406	2423	6.5	Box Elder- Acer Negundo
407	2424	8.5	Box Elder- Acer Negundo
408	2425	5	Box Elder- Acer Negundo
409	2426	8.5	Box Elder- Acer Negundo
410	2427	7.5	Box Elder- Acer Negundo
411	2428	9	Box Elder- Acer Negundo
412	2429	6.5	Box Elder- Acer Negundo
413	2430	5.5	Box Elder- Acer Negundo
414	2431	9	Box Elder- Acer Negundo
415	2432	26	Cottonwood- Populus deltoides
416	2433	10.5	American Elm- Ulmus americana
417	2434	7	Box Elder- Acer Negundo
418	2435	6	American Elm- Ulmus americana
419	2436	6	Box Elder- Acer Negundo
420	2437	5.5	Box Elder- Acer Negundo
421	2438	8	Box Elder- Acer Negundo
422	2439	7	Box Elder- Acer Negundo
423	2440	4.5	Box Elder- Acer Negundo

	Tag #	DBH	Species
424	2441	9	Box Elder- Acer Negundo
425	2442	9.5	Box Elder- Acer Negundo
426	2443	4.5	Box Elder- Acer Negundo
427	2444	7	Box Elder- Acer Negundo
428	2445	6	Box Elder- Acer Negundo
429	2446	7	Box Elder- Acer Negundo
430	2447	12, 14, 15	Black Willow - Salix nigra
431	2448	6	Box Elder- Acer Negundo
432	2449	6	Box Elder- Acer Negundo
433	2450	12	Box Elder- Acer Negundo
434	2451	16.5	Black Cherry- Prunus serotina
435	2452	7, 9.5	Black Cherry- Prunus serotina
436	2453	8, 10.5	Box Elder- Acer Negundo
437	2454	25	Box Elder- Acer Negundo
438	2455	19.5	Box Elder- Acer Negundo
439	2456	6	Box Elder- Acer Negundo
440	2457	6.5	Mulberry- Morus sp.
441	2458	5.5	Box Elder- Acer Negundo
442	2459	5.5	Mulberry- Morus sp.
443	2460	4	Buckthorn- Rhamnus cathartica
444	2461	7.5	Mulberry- Morus sp.
445	2462	24	Box Elder- Acer Negundo
446	2463	7.5	Box Elder- Acer Negundo
447	2464	7.5, 11	Black Cherry- Prunus serotina

	Tag #	DBH	Species
448	2465	13	Box Elder- Acer Negundo
449	2466	5	Buckthorn- Rhamnus cathartica
450	2467	5.5	Box Elder- Acer Negundo
451	2468	5.5	Black Cherry- Prunus serotina
452	2469	14.5	Box Elder- Acer Negundo
453	2470	10	Box Elder- Acer Negundo
454	2471	16.5	Box Elder- Acer Negundo
455	2472	11.5	Black Cherry- Prunus serotina
456	2473	17	Box Elder- Acer Negundo
457	2474	5, 8	Mulberry- Morus sp.
458	2475	6.5	Box Elder- Acer Negundo
459	2476	4.5	American Elm- Ulmus americana
460	2477	6.5	Box Elder- Acer Negundo
461	2480	8.5	Box Elder- Acer Negundo
462	2481	5.5	Box Elder- Acer Negundo
463	2482	6.5	Box Elder- Acer Negundo
464	2483	6.5	Box Elder- Acer Negundo
465	2484	7	Box Elder- Acer Negundo
466	2485	4.5	Buckthorn- Rhamnus cathartica
467	2486	5, 6.5	Box Elder- Acer Negundo
468	2487	7	American Elm- Ulmus americana
469	2488	36	Bur Oak- Quercus macrocarpa
470	2489	9.5	American Elm- Ulmus americana

	Tag #	DBH	Species
471	2491	22.5	Red Oak- Quercus rubra
472	2493	10.5	Box Elder- Acer Negundo
473	2495	13	Box Elder- Acer Negundo
474	2497	9.5	American Elm- Ulmus americana
475	2498	5	Buckthorn- Rhamnus cathartica
476	2499	13.5	Box Elder- Acer Negundo
477	2500	7.5	Hackberry- Celtis occidentalis
478	2502	12	American Elm- Ulmus americana
479	2503	4.5	Black Cherry- Prunus serotina
480	2504	7, 15	Box Elder- Acer Negundo
481	2505	22.5	Hackberry- Celtis occidentalis
482	2506	6	Black Cherry- Prunus serotina
483	2507	37	Bur Oak- Quercus macrocarpa
484	2508	6	Black Cherry- Prunus serotina
485	2509	6	Box Elder- Acer Negundo
486	2510	6.5	Box Elder- Acer Negundo
487	2511	5.5	Mulberry- Morus sp.
488	2512	6	Box Elder- Acer Negundo
489	2513	5	Buckthorn- Rhamnus cathartica
490	2514	17.5	Box Elder- Acer Negundo
491	2515	25	White Oak- Quercus alba
492	2516	26.5	Bur Oak- Quercus macrocarpa
493	2517	10	American Elm- Ulmus americana

	Tag #	DBH	Species
494	2518	22.5	Box Elder- Acer Negundo
495	2519	21.5	Black Cherry- Prunus serotina
496	2520	13.5	American Elm- Ulmus americana
497	2521	25.5	Bur Oak- Quercus macrocarpa
498	2522	10	Cottonwood- Populus deltoides
499	2523	5	Box Elder- Acer Negundo
500	2524	10.5, 16, 18	Black Willow - Salix nigra
501	2525	6.5	Box Elder- Acer Negundo
502	2526	8	Box Elder- Acer Negundo
503	2527	7.5	Box Elder- Acer Negundo
504	2528	5	Box Elder- Acer Negundo
505	2529	16.5, 19.5	Black Willow - Salix nigra
506	2530	12, 13.5	Black Willow - Salix nigra
507	2531	5	Box Elder- Acer Negundo
508	2532	5	Box Elder- Acer Negundo
509	2533	5	Box Elder- Acer Negundo
510	2534	8	American Elm- Ulmus americana
511	2535	14	American Elm- Ulmus americana
512	2536	4.5	Hackberry- Celtis occidentalis
513	2537	9	Box Elder- Acer Negundo
514	2538	14.5	Box Elder- Acer Negundo
515	2539	10.5	Black Cherry- Prunus serotina
516	2540	5	Buckthorn- Rhamnus cathartica

	Tag #	DBH	Species
517	2541	11	Black Cherry- Prunus serotina
518	2542	6	Box Elder- Acer Negundo
519	2543	4.5	Buckthorn- Rhamnus cathartica
520	2544	8	Black Cherry- Prunus serotina
521	2545	4.5	Black Cherry- Prunus serotina
522	2546	24.5	Box Elder- Acer Negundo
523	2547	7	Black Cherry- Prunus serotina
524	2548	11	Black Cherry- Prunus serotina
525	2549	20	Crabapple-Malus spp.
526	2550	8, 8.9, 9	Crabapple-Malus spp.
527	2551	10.5	Crabapple-Malus spp.
528	2552	17.5	Red Oak- Quercus rubra
529	2553	9, 11, 17	Box Elder- Acer Negundo
530	2554	21.5	Black Cherry- Prunus serotina
531	2555	14	Black Cherry- Prunus serotina
532	2556	14.5	Black Cherry- Prunus serotina
533	2557	8	Box Elder- Acer Negundo
534	2558	9.5	Box Elder- Acer Negundo
535	2559	4.5	Buckthorn- Rhamnus cathartica
536	2560	5.5	Black Cherry- Prunus serotina
537	2561	5	Black Cherry- Prunus serotina
538	2562	4.5, 5	Buckthorn- Rhamnus cathartica
539	2563	5.5	American Elm- Ulmus americana

	Tag #	DBH	Species
540	2564	8.5	American Elm- Ulmus americana
541	2565	6.5	Black Cherry- Prunus serotina
542	2566	12.5	Box Elder- Acer Negundo
543	2567	6, 6, 6	Amur Maple- Acer ginnala
544	2568	6, 6.5	Amur Maple- Acer ginnala
545	2569	10	Black Cherry- Prunus serotina
546	2570	12.5	Box Elder- Acer Negundo
547	2571	5	Buckthorn- Rhamnus cathartica
548	2572	4.5	Box Elder- Acer Negundo
549	2573	4, 5	Amur Maple- Acer ginnala
550	2574	6	Box Elder- Acer Negundo
551	2575	6, 6, 7, 11	Amur Maple- Acer ginnala
552	2576	4.5	Amur Maple- Acer ginnala
553	2577	4.5	American Elm- Ulmus americana
554	2578	8	American Elm- Ulmus americana
555	2579	4.5	American Elm- Ulmus americana
556	2580	5	Box Elder- Acer Negundo
557	2582	4.5, 7	Box Elder- Acer Negundo
558	2583	5.5, 5.5	Box Elder- Acer Negundo
559	2584	6, 8	Box Elder- Acer Negundo
560	2586	6.5	Mulberry- Morus sp.
561	2587	13	Black Cherry- Prunus serotina
562	2588	16	Black Cherry- Prunus serotina

	Tag #	DBH	Species
563	2589	5	Blue Spruce - Picea pungens
564	2590	5.5	American Elm- Ulmus americana
565	2591	5	Box Elder- Acer Negundo
566	2592	9.5	Box Elder- Acer Negundo
567	2593	4, 6, 6.5, 8	Box Elder- Acer Negundo
568	2594	5	American Elm- Ulmus americana
569	2595	13.5	Blue Spruce - Picea pungens
570	2596	8.5	Blue Spruce - Picea pungens
571	2597	4.5	Redcedar - Juniperus virginiana
572	2598	8.5	Blue Spruce - Picea pungens
573	2599	17	Norway Spruce - Picea abies
574	2600	6.5	Crabapple-Malus spp.
575	2601	8	Box Elder- Acer Negundo
576	2602	8.5	Box Elder- Acer Negundo
577	2603	7	Box Elder- Acer Negundo
578	2604	7	Box Elder- Acer Negundo
579	2605	5.5, 6	Box Elder- Acer Negundo
580	2606	6	Box Elder- Acer Negundo
581	2607	7, 7.6	Box Elder- Acer Negundo
582	2608	6.5	American Elm- Ulmus americana
583	2609	5	Mulberry- Morus sp.
584	2610	4.5	Mulberry- Morus sp.
585	2611	5	Mulberry- Morus sp.
586	2612	6	Mulberry- Morus sp.

	Tag #	DBH	Species
587	2613	10	Box Elder- Acer Negundo
588	2614	5	Buckthorn- Rhamnus cathartica
589	2615	4.5, 5	Box Elder- Acer Negundo
590	2616	4.5	Box Elder- Acer Negundo
591	2617	7	Box Elder- Acer Negundo
592	2618	3, 6.5	Box Elder- Acer Negundo
593	2619	7, 7, 11	Box Elder- Acer Negundo
594	2620	5	Box Elder- Acer Negundo
595	2621	10	Black Cherry- Prunus serotina
596	2622	4, 5	Box Elder- Acer Negundo
597	2623	6.5	Black Cherry- Prunus serotina
598	2624	3, 5	Box Elder- Acer Negundo
599	2625		Cottonwood- Populus deltoides
600	2626	3, 3	Box Elder- Acer Negundo
601	2627	5	Box Elder- Acer Negundo
602	2628	7	Mulberry- Morus sp.
603	2629	4, 5.5	Box Elder- Acer Negundo
604	2630	5.5	Box Elder- Acer Negundo
605	2631	5.5	Box Elder- Acer Negundo
606	2632	6, 11	Box Elder- Acer Negundo
607	2633	6, 9	Box Elder- Acer Negundo
608	2634	9	Box Elder- Acer Negundo
609	2635	5.5	Box Elder- Acer Negundo

	Tag #	DBH	Species
610	2636	8.5	Box Elder- Acer Negundo
611	2637	8	Box Elder- Acer Negundo
612	2638	6.5	American Elm- Ulmus americana
613	2639	4.5, 7	Box Elder- Acer Negundo
614	2640	5, 8	Box Elder- Acer Negundo
615	2641	9.5, 10	Box Elder- Acer Negundo
616	2642	16.5	Other
617	2643	9	Box Elder- Acer Negundo
618	2644	11	Box Elder- Acer Negundo
619	2645	11	American Elm- Ulmus americana
620	2646	10.5	Mulberry- Morus sp.
621	2647	7.5	Mulberry- Morus sp.
622	2648	6.5	Mulberry- Morus sp.
623	2649	4, 5	Box Elder- Acer Negundo
624	2650	5	Box Elder- Acer Negundo
625	2651	4	Box Elder- Acer Negundo
626	2652	7.5	Box Elder- Acer Negundo
627	2653	8.5	Box Elder- Acer Negundo
628	2654	7.5	Box Elder- Acer Negundo
629	2655	7.5	Box Elder- Acer Negundo
630	2656	5.5	Box Elder- Acer Negundo
631	2657	7.6	Box Elder- Acer Negundo
632	2658	7.5	Box Elder- Acer Negundo
633	2659	7	Box Elder- Acer Negundo

	Tag #	DBH	Species
634	2660	6	Box Elder- Acer Negundo
635	2661	5	Box Elder- Acer Negundo
636	2662	4.5, 7	Box Elder- Acer Negundo
637	2663	13	Box Elder- Acer Negundo
638	2664	4.5	Mulberry- Morus sp.
639	2665	7.5	Box Elder- Acer Negundo
640	2666	5	Box Elder- Acer Negundo
641	2667	8	Box Elder- Acer Negundo
642	2668	8	Box Elder- Acer Negundo
643	2669	10	Box Elder- Acer Negundo
644	2670	4, 5	Box Elder- Acer Negundo
645	2671	4, 9.5	Black Willow - Salix nigra
646	2672	8.5	Black Willow - Salix nigra
647	2673	19.5	Cottonwood- Populus deltoides
648	2674	5	Box Elder- Acer Negundo
649	2675	7.5, 14	Black Willow - Salix nigra
650	2676	13	Cottonwood- Populus deltoides
651	2677	15	Cottonwood- Populus deltoides
652	2678	5	Cottonwood- Populus deltoides
653	2679	6.5	Box Elder- Acer Negundo
654	2680	7	Box Elder- Acer Negundo
655	2681	7	Box Elder- Acer Negundo
656	2682	4.5, 6.5, 8	Box Elder- Acer Negundo

	Tag #	DBH	Species
657	2683	5	Box Elder- Acer Negundo
658	2684	4, 7	Box Elder- Acer Negundo
659	2685	5	Box Elder- Acer Negundo
660	2686	6.5	Box Elder- Acer Negundo
661	2687	9.5	Box Elder- Acer Negundo
662	2688	8.5	Box Elder- Acer Negundo
663	2689	5	Box Elder- Acer Negundo
664	2690	8.5	Box Elder- Acer Negundo
665	2691	4, 8.5, 9	Box Elder- Acer Negundo
666	2692	10.5	Box Elder- Acer Negundo
667	2693	5.5	Box Elder- Acer Negundo
668	2694	5.5	Box Elder- Acer Negundo
669	2695	4.5, 6	Silver Maple- Acer sacchirinum
670	2696	4.5, 5	Box Elder- Acer Negundo
671	2697	7.5	Box Elder- Acer Negundo
672	2698	15	Green Ash- Fraxinus pennsylvanica
673	2699	5.5	Box Elder- Acer Negundo
674	2700	5.5	Box Elder- Acer Negundo
675	2701	3.5, 5.5	Box Elder- Acer Negundo
676	2702	5.5	Box Elder- Acer Negundo
677	2703	15.5	Green Ash- Fraxinus pennsylvanica
678	2704	8	Box Elder- Acer Negundo
679	2705	4.5, 6, 6	Amur Maple- Acer ginnala

	Tag #	DBH	Species
680	2706	16	Green Ash- Fraxinus pennsylvanica
681	2707	6	Box Elder- Acer Negundo
682	2708	5	Box Elder- Acer Negundo
683	2709	7.5	Black Willow - Salix nigra
684	2710	8, 13, 14.5, 16	Black Willow - Salix nigra
685	2711	6	Box Elder- Acer Negundo
686	2712	5	Box Elder- Acer Negundo
687	2713	6, 8	Box Elder- Acer Negundo
688	2714	6	Box Elder- Acer Negundo
689	2715	13.5, 13.5, 15	Green Ash- Fraxinus pennsylvanica
690	2716	7.5	Box Elder- Acer Negundo
691	2717	15	Willow- Salix spp.
692	2718	4.5, 6.5	Box Elder- Acer Negundo
693	2719	4, 5.5	Crabapple-Malus spp.
694	2720	12.5	Green Ash- Fraxinus pennsylvanica
695	2721	9.5	Box Elder- Acer Negundo
696	2722	5, 5.5	Box Elder- Acer Negundo
697	2723	8	Box Elder- Acer Negundo
698	2724	26	Cottonwood- Populus deltoides
699	2725	4,5	Box Elder- Acer Negundo
700	2726	8	Box Elder- Acer Negundo
701	2727	7, 11.5	Green Ash- Fraxinus pennsylvanica
702	2728	6	Box Elder- Acer Negundo

	Tag #	DBH	Species
703	2729	7, 10.5, 12	Box Elder- Acer Negundo
704	2730	5, 5.5	Box Elder- Acer Negundo
705	2731	6, 9, 10.5	Box Elder- Acer Negundo
706	2732	5	Box Elder- Acer Negundo
707	2733	13	Black Willow - Salix nigra
708	2734	7	Box Elder- Acer Negundo
709	2735	6.5	Box Elder- Acer Negundo
710	2736	8.5	Box Elder- Acer Negundo
711	2737	8, 9.5, 10	Box Elder- Acer Negundo
712	2738	6	Box Elder- Acer Negundo
713	2739	5.5	Box Elder- Acer Negundo
714	2740	16	Box Elder- Acer Negundo
715	2741	8	Box Elder- Acer Negundo
716	2742	5	Box Elder- Acer Negundo
717	2743	7	Box Elder- Acer Negundo
718	2744	6, 9.5, 10.5	Mulberry- Morus sp.
719	2745	8, 8.5	Box Elder- Acer Negundo
720	2746	5.5, 6	Mulberry- Morus sp.
721	2747	16	Red Pine- Pinus resinosa
722	2748	5	Box Elder- Acer Negundo
723	2749	5	Red Elm- Ulmus rubra
724	2750	11	Red Pine- Pinus resinosa
725	2751	4.5	Crabapple-Malus spp.

	Tag #	DBH	Species
726	2752	8.5	Box Elder- Acer Negundo
727	2753	8.5	Box Elder- Acer Negundo
728	2754	5, 6, 6.5	Box Elder- Acer Negundo
729	2755	11	Box Elder- Acer Negundo
730	2756	4, 5	Box Elder- Acer Negundo
731	2757	6, 7	Red Elm- Ulmus rubra
732	2758	10	Box Elder- Acer Negundo
733	2759	6.5	Box Elder- Acer Negundo
734	2760	6	Box Elder- Acer Negundo
735	2761	5	Box Elder- Acer Negundo
736	2762	5	Box Elder- Acer Negundo
737	2763	5, 8	Box Elder- Acer Negundo
738	2765	5, 6.5, 7	American Elm- Ulmus americana
739	2766	5	American Elm- Ulmus americana
740	2767	5, 5	American Elm- Ulmus americana
741	2768	4.5, 5	American Elm- Ulmus americana
742	2769	5.5	American Elm- Ulmus americana
743	2770	5.5	American Elm- Ulmus americana
744	2771	5	American Elm- Ulmus americana
745	2772	6	Redcedar - Juniperus virginiana
746	2773	6	American Elm- Ulmus americana
747	2774	6, 6	Black Willow - Salix nigra
748	2775	4, 8	Black Willow - Salix nigra

	Tag #	DBH	Species
749	2776	4.5	American Elm- Ulmus americana
750	2777	6	American Elm- Ulmus americana
751	2778	4, 8.5	Box Elder- Acer Negundo
752	2779	5.5	Box Elder- Acer Negundo
753	2780	6.5	Box Elder- Acer Negundo
754	2781	7	Box Elder- Acer Negundo
755	2782	5	Box Elder- Acer Negundo
756	2783	5, 6.5	Box Elder- Acer Negundo
757	2784	7	Red Elm- Ulmus rubra
758	2785	9	Box Elder- Acer Negundo
759	2786	5.5	American Elm- Ulmus americana
760	2787	5.5	Box Elder- Acer Negundo
761	2788	5	Box Elder- Acer Negundo
762	2789	4.5, 5.5	Box Elder- Acer Negundo
763	2790	9.5	Box Elder- Acer Negundo
764	2791	6	Box Elder- Acer Negundo
765	2792	9.5	Silver Maple- Acer sacchirinum
766	2793	6, 7, 10	Box Elder- Acer Negundo
767	2794	5	Box Elder- Acer Negundo
768	2795	5, 5.5	Box Elder- Acer Negundo
769	2796	7.5	Box Elder- Acer Negundo
770	2797	6.5, 17.5	Box Elder- Acer Negundo
771	2798	4, 12.5	Mulberry- Morus sp.

	Tag #	DBH	Species
772	2799	4, 6.5	Box Elder- Acer Negundo
773	2800	8	Buckthorn- Rhamnus cathartica
774	2801	5.5	Box Elder- Acer Negundo
775	2802	9.5	Box Elder- Acer Negundo
776	2803	6	Box Elder- Acer Negundo
777	2804	7.5	Box Elder- Acer Negundo
778	2805	7.5	Buckthorn- Rhamnus cathartica
779	2807	8.5	Mulberry- Morus sp.
780	2808	9.5, 13.5	Mulberry- Morus sp.
781	2810	10.5	Box Elder- Acer Negundo
782	2811	11	Green Ash- Fraxinus pennsylvanica
783	2812	5	Buckthorn- Rhamnus cathartica
784	2813	5	Box Elder- Acer Negundo
785	2814	10	Black Cherry- Prunus serotina
786	2815	7	Box Elder- Acer Negundo
787	2816	3.5	Black Cherry- Prunus serotina
788	2818	5.5, 8.5	Buckthorn- Rhamnus cathartica
789	2821	21	American Elm- Ulmus americana
790	2823	33	Bur Oak- Quercus macrocarpa
791	2824	12.5	Mulberry- Morus sp.
792	2825	5.5	Box Elder- Acer Negundo
793	2826	4.5	Buckthorn- Rhamnus cathartica
794	2827	32	Bur Oak- Quercus macrocarpa
795	2828	4.5	Buckthorn- Rhamnus cathartica

	Tag #	DBH	Species
796	2829	10	Black Cherry- Prunus serotina
797	2830	8	Black Cherry- Prunus serotina
798	2831	10.5	Box Elder- Acer Negundo
799	2832	15	Mulberry- Morus sp.
800	2833	25, 28	Bur Oak- Quercus macrocarpa
801	2834	4, 5	Buckthorn- Rhamnus cathartica
802	2835	9.5	Red Oak- Quercus rubra
803	2836	11.5	Box Elder- Acer Negundo
804	2837	9	Red Oak- Quercus rubra
805	2838	7.5	Box Elder- Acer Negundo
806	2839	6.5	Black Cherry- Prunus serotina
807	2840	6, 14	Box Elder- Acer Negundo
808	2841	9.5	Black Cherry- Prunus serotina
809	2842	5.5	Box Elder- Acer Negundo
810	2843	4.5, 5	Buckthorn- Rhamnus cathartica
811	2844	9	Box Elder- Acer Negundo
812	2845	7	Black Cherry- Prunus serotina
813	2846	5	Box Elder- Acer Negundo
814	2847	5, 5	Buckthorn- Rhamnus cathartica
815	2848	11	Black Cherry- Prunus serotina
816	2849	5.5	Box Elder- Acer Negundo
817	2850	7.5	Mulberry- Morus sp.
818	2851	12	Mulberry- Morus sp.
819	2852	4.5, 6	Mulberry- Morus sp.
820	2853	8.5	American Elm- Ulmus americana

	Tag #	DBH	Species
821	2854	5.5	Box Elder- Acer Negundo
822	2855	6	American Elm- Ulmus americana
823	2856	5.5	Box Elder- Acer Negundo
824	2857	5.5	Box Elder- Acer Negundo
825	2858	8	American Elm- Ulmus americana
826	2859	5.5	Box Elder- Acer Negundo
827	2860	6	Box Elder- Acer Negundo
828	2861	6	Box Elder- Acer Negundo
829	2862	4.5	Box Elder- Acer Negundo
830	2863	5	Box Elder- Acer Negundo
831	2864	8.5	Box Elder- Acer Negundo
832	2865	6	Box Elder- Acer Negundo
833	2866	9	Box Elder- Acer Negundo
834	2867	4, 5	Box Elder- Acer Negundo
835	2868	6	Box Elder- Acer Negundo
836	2869	5	Box Elder- Acer Negundo
837	2870	18	American Elm- Ulmus americana
838	2871	4, 4.5, 5.5	Red Elm- Ulmus rubra
839	2872	4, 5.5	Mulberry- Morus sp.
840	2873	5.5	Box Elder- Acer Negundo
841	2874	9	Box Elder- Acer Negundo
842	2875	5	Box Elder- Acer Negundo
843	2876	6	Box Elder- Acer Negundo

	Tag #	DBH	Species
844	2877	5	Box Elder- Acer Negundo
845	2878	5.5	Box Elder- Acer Negundo
846	2879	6	American Elm- Ulmus americana
847	2880	6	Box Elder- Acer Negundo
848	2881	9.5	American Elm- Ulmus americana
849	2882	10	American Elm- Ulmus americana
850	2883	7.5, 8.5	Box Elder- Acer Negundo
851	2884	8.5, 9.5	Box Elder- Acer Negundo
852	2885	5.5	Box Elder- Acer Negundo
853	2886	6	Box Elder- Acer Negundo
854	2887	12	Mulberry- Morus sp.

		Tag #	DBH	Species
	855	2888	5.5, 7	Box Elder- Acer Negundo
	856	2889	7	Box Elder- Acer Negundo
nus	857	2890	8	Box Elder- Acer Negundo
	858	2891	7, 9	Black WIllow - Salix nigra
nus	859	2895	5, 6.5	Box Elder- Acer Negundo
nus	860	2896	8.5, 14	Red Pine- Pinus resinosa
	861	2897	21	Scotts Pine- Pinus sylvestris
	862	2898	15	Blue Spruce- Picea pungens
	863	2899	8	Blue Spruce- Picea pungens
	864	2900	14	Norway Spruce- Picea abies

Other Tree Removals			
Street	STA	DBH (IN)	
8102 Excelsior Drive	13+65	16	
1111 Deming Way	501+43	8	
1111 Deming Way	501+68	8	
1111 Deming Way	501+92	8	
1111 Deming Way	502+17	6	
1111 Deming Way	502+29	8	
1111 Deming Way	502+42	8	
1111 Deming Way	502+64	8	
1111 Deming Way	502+89	8	
1111 Deming Way	503+32	8	
1111 Deming Way	503+95	8	
1111 Deming Way	504+38	7	
1111 Deming Way	504+55	8	
1111 Deming Way	504+98	7	
1111 Deming Way	505+02	6	
1111 Deming Way	505+02	8	
1111 Deming Way	505+03	10	
1111 Deming Way	505+04	8	
1111 Deming Way	505+04	8	
1111 Deming Way	505+08	8	
1111 Deming Way	505+08	6	
1111 Deming Way	505+11	15	
1111 Deming Way	505+13	10	
1111 Deming Way	505+14	10	
1277 Deming Way	5017+17	10	
1277 Deming Way	5017+23	12	
1277 Deming Way	5017+25	10	
1277 Deming Way	5019+13	4	

Other Tree Removals

ROW Tree Removals

Street	STA	DBH (IN)
Deming Way	102+53	2
Deming Way	103+09	2
Deming Way	300+23	10
Deming Way	301+73	10
Deming Way	403+27	6

Abutilon theophrasti	Velvet Leaf
Acer negundo	Boxelder
Acer platanoides	Norway Maple
Acer saccharinum	Silver Maple
Acer tartaricum	Amur Maple
Achyranthes japonica	Japanese Chaff Flower
Aegopodium podagraria	Goutweed
Ageratina altissima	White snakeroot
Akebia quianata	Chocolate vine
Ailanthus altissima	Tree of Heaven
Alliaria petiolata	Garlic Mustard
Alnus glutinosa	Black/ European Alder
Ambrosia artemisiifolia	Common Ragweed
Ambrosia trifida	Giant Ragweed
Ampelopsis brevipedunculata	Porcelain berry
Anthriscus sylvestris	Wild Chervil
Arctium minus	Common Burdock
Artemesia absinthium	Wormwood
Arundo donax	Giant Reed
Berberis spp.	Barberry
Berberis thunbergii	Japanese Barberry
Butomus umbellatus	Flowering Rush
Bunias orientalis	Hill Mustard
Campanula rapunculoides	Bellflower
Caragana arborescens	Siberian Peashrub
Cardamine impatiens	Narrow Leaf Bittercress
Carduus acanthoides	Plumeless Thistle
Carduus nutans	Musk Thistle
Celastrus orbiculatus	Oriental Bittersweet
Celastrus loeseneri	Asian Bittersweet
Centaurea biebersteinii	Spotted Knapweed
Centaurea diffusa	Diffuse Knapweed
Centaurea jacea	Brown Knapweed
Centaurea nigra	Black Knapweed
Centaurea nigrescens	Tyrol Knapweed
Centaurea repens	Russian Knapweed
Centaurea solstitialis	Yellow star-thistle
Chelidonium majus	Celandine Poppy
	Lamb's Quarters
Chenopodium album Circaea lutetiana	Enchanter's Nightshade
	Canada Thistle
Cirsium arvense	Marsh Thistle
Cirsium palustre	Bull Thistle
Cirsium vulgare	
Conium maculatum	Poison Hemlock
Convallaria majalis	Lily-of-the-Valley
Convolvulus arvensis	Field Bindweed
Convolvulus sepium	Hedge Bindweed
Cornus racemosa	Grey dogwood
Coronilla varia	Crown Vetch
Cynoglossum officinale	Hound's Tongue
Cytisus scoparius	Scotch Broom
Daucus carota	Queen Anne's Lace
Digitalis lanata	Gregian Foxglove

Dipsacus laciniatus	Cutleaf Teasel
Elaeagnus angustifolia	Russian Olive
Elaeagnus umbellata	Autumn Olive
Elytrigia repens	Quack Grass
Epilobium hirsutum	Hairy Willow Herb
Epipactis helleborine	Broad Leaved Helleborine
Euonymous alatus	Burning Bush
Euphorbia cyparissias	Cypress Spurge
Euphorbia esula	Leafy Spurge
Fallopia japonica (Polygonum cuspidatum)	Japanese Knotweed
Fallopia x bohemica	Bohemian Knotweed
Filipendula ulmaria	Queen of the Meadow
Galeopsis tetrahit	Hempnettle
Galium mollugo	White Bedstraw
Geum canadense	White Avens
Glechoma hederacea	Creeping Charlie
Glyceria maxima	Tall or Reed Manna Grass
Hackelia virginiana	Stickseed
Hedera helix	English Ivy
Hemerocallis fulva	Daylily
Heracleum mantegazzianum	Giant Hogweed
Hesperis matronalis	Dame's Rocket
Humulus japonicus	Japanese Hops
Impatiens glandulifera	Policeman's Helmet
Impatiens balfourii	Balfour's Touch-Me-Not
Iris pseudacorus	Yellow Flag Iris
Juglans nigra	Black Walnut
Knautia arvensis	Field Scabious
Lactuca canadensis	Wild Lettuce
Lactuca serriola	Prickly Lettuce
Lamiastrum galeobdolon	Yellow Archangel
Lamium spp.	Deadnettle
Leonurus cardiaca	Motherword
Lepidium latifolium	Perennial Pepperweed
Lespedeza cuneata	Chinese Lespedeza
Leymus arenarius	Lyme or Sand Ryegrass
Ligustrum obtusifolium	Border Privet
Ligustrum vulgare	Common Privet
Linaria dalmatica	Dalmation Toadflax
Lonicera spp.	Honeysuckle
Lotus corniculatus	Birdsfoot Trefoil
Lysimachia nummularia	Moneywort
Lysimachia vulgaris	Garden Yellow Loosestrife
Lythrum salicaria	Purple loosestrife
Lythrum virgatum	Wand Loosestrife
Melilotus sp.	Sweet Clover
Microstegium vimineum	Japanese Stilt Grass
Morus alba	White Mulberry
Myosotis sylvatica	Woodland Forget-Me-Not
Nasturtium officinale	Watercress
	Wavy Leaf Basket Grass
Jolismenus nirtelius ssp. lindulatitolius	Ittaty con Dusker Oldss
Oplismenus hirtellus ssp. undulatifolius Poa pratensis	Kentucky Bluegrass

Phalaris arundinacea	Reed Canary Grass
Phellodendron amurense	Amur Cork Tree
Phragmites australis	Common Reed
Phytolacca acinosa	Himalayan Pokeweed
Phytolacca americana	American Pokeweed
Pimpinella saxifraga	Burnet Saxifrage
Polygonum perfoliatum	Mile-a-minute Vine
Polygonum sachalinense	Giant Knotweed
Populus alba	White Poplar
Populus deltoides	Eastern Cottonwood
Populus grandidentata	Big-tooth aspen
Populus tremuloides	Quaking Aspen
Pueraria lobata	Kudzu
Quercus acutissima	Sawtooth Oak
Ranunculus ficaria	Fig Buttercup
Rhamnus cathartica	Common Buckthorn
Rhamnus frangula	Glossy Buckthorn
Ribes spp.	Gooseberry
Robinia hispida	Rose Acacia
Robinia pseudoacacia	Black Locust
Rosa multiflora	Multiflora Rose
Rubus armeniacus	Himalayan blackberry
Rubus phoenicolasius	Wineberry
Rubus spp.	Rasberries
Rumex crispus	Curly Dock
Salix interior	Sandbar Willow
Setaria spp.	Foxtail Grasses
Solanum dulcamara	Deadly Nightshade
Solidago canadensis	Canada Goldenrod
Solidago sempervirens	Seaside Goldenrod
Sonchus spp.	Sow Thistle
Sorbaria sorbifolia	False Spirea
Sorghum halepense	Johnsongrass
Symphyotrichum subulatum	Annual Saltmarsh Aster
Taeniatherum caput-medusae	Medusahead
Tanacetum vulgare	Tansy
Torilis arvensis	Spreading hedgeparsley
Torilis japonica	Hedge Parsley
Toxicodendron radicans	Poison Ivy
	Coltsfoot
Tussilago farfara	Cattails
Typha spp.	Siberian Elm
Ulmus pumila	Stinging Nettle
Urtica dioica	Garden Heliotripe
Valeriana officinalis	Mullein
Verbascum thapsus	
Viburnum opulus	European Cranberry Bush
Vinca minor	Vinca
Vincetoxicum nigrum	Black Swallow-wort
Vincetoxicum rossicum	European Swallow-wort
Vitis spp.	Wild Grape
Wisteria floribunda/sinensis	Japanese/Chinese wisteria
Zanthoxylum americanum	Prickly Ash

ATTACHMENT C--EROSION CONTROL INSPECTION CHECKLIST—Pheasant Branch Enhancement

Inspector Name:	Inspection Date:	Weather:	
Reason for inspection: Weekly	≥ 0.5 in. rain in 24 hours		

Greenway, Upstream of Fourier

Modifications Required:	YES	NO	N/A	Modifications Required:	YES	NO	N/A
Silt Fence	:			Erosion Mat			
Ditch Checks (rock, pre- construction)				Temporary Seeding			
Construction Entrance				Permanent Seeding			
Street Sweeping				Ditch Checks (post-construction)			
Inlet Protection				Other:			
Other:				Other:			

<u>Note</u>: BMPs checked yes must complete "Description and Location of Issue" table

Greenway, Fourier to Pond Parcel

Modifications Required:	YES	NO	N/A	Modifications Required:	YES	NO	N/A
Silt Fence				Erosion Mat			
Ditch Checks (rock, pre- construction)				Temporary Seeding			
Construction Entrance				Permanent Seeding			
Street Sweeping				Ditch Checks (post-construction)			
Inlet Protection				Other:			

Note: BMPs checked yes must complete "Description and Location of Issue" table

Pond, between Excelsior Dr and Deming Way

Modifications Required:	YES	NO	N/A	Modifications Required:	YES	NO	N/A
Silt Fence				Erosion Mat			
Ditch Checks (rock, pre- construction)				Temporary Seeding			
Construction Entrance				Permanent Seeding			
Street Sweeping				Sediment Basin			
Inlet Protection				Other:			

<u>Note</u>: BMPs checked yes must complete "Description and Location of Issue" table

Culvert-Deming Way (North)

Modifications Required:	YES	NO	N/A	Modifications Required:	YES	NO	N/A
Silt Fence				Bypass Pumping Operation			
Ditch Checks				Erosion Mat			
Silt Sock				Temporary Seeding			
Riprap				Permanent Seeding			
Dewatering Operation				Temporary Diversion Channel			
Inlet Protection				Temporary Settling Trap/Basin			
Tracking Pads				Other:			
Reinforced check dam				Other:			

Note: BMPs checked yes must complete "Description and Location of Issue" table

Culvert-Fourier Dr

Modifications Required:	YES	NO	N/A	Modifications Required:	YES	NO	N/A
Silt Fence			4	Bypass Pumping Operation			
Ditch Checks				Erosion Mat			
Silt Sock				Temporary Seeding			
Riprap				Permanent Seeding			
Dewatering Operation				Temporary Diversion Channel			
Inlet Protection				Temporary Settling Trap/Basin			
Tracking Pads				Other:			
Other:				Other:			
Other:				Other:			

Note: BMPs checked yes must complete "Description and Location of Issue" table

Culvert-Deming Way (Southwest)

Modifications Required:	YES	NO	N/A	Modifications Required:	YES	NO	N/A
Silt Fence				Bypass Pumping Operation			
Ditch Checks				Erosion Mat			
Silt Sock				Temporary Seeding			
Riprap				Permanent Seeding			
				Temporary Diversion Channel			
Inlet Protection				Temporary Settling Trap/Basin			
Tracking Pads				Dewatering Operation			
Other:				Other:			
Other:				Other:			

Note: BMPs checked yes must complete "Description and Location of Issue" table

Storm sewer-Deming Way/Blackhawk + Easement

Modifications Required:	YES	NO	N/A	Modifications Required:	YES	NO	N/A
Silt Fence				Bypass Pumping Operation			
Ditch Checks				Erosion Mat			
Silt Sock				Temporary Seeding			
Riprap				Permanent Seeding			
				Temporary Diversion Channel			
Inlet Protection				Temporary Settling Trap/Basin			
Tracking Pads				Dewatering Operation			
Other:				Other:			
Other:				Other:			

Note: BMPs checked yes must complete "Description and Location of Issue" table