$1,516,432.99
ORIGINAL

BID OF **INTEGRITY GRADING & EXCAVATING, INC.**

2023

PROPOSAL, CONTRACT, BOND AND SPECIFICATIONS

FOR

WEXFORD POND DREDGING

CONTRACT NO. 8876

PROJECT NO. 12750

MUNIS NO. 12750

IN

MADISON, DANE COUNTY, WISCONSIN

AWARDED BY THE COMMON COUNCIL
MADISON, WISCONSIN ON **AUGUST 1, 2023**

CITY ENGINEERING DIVISION
1600 EMIL STREET
MADISON, WISCONSIN 53713

https://bidexpress.com/login

WEXFORD POND DREDGING
CONTRACT NO. 8876

INDEX

This Proposal, and Agreement have
been prepared by:

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

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

JMW: enscl

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:	WEXFORD POND DREDGING
CONTRACT NO.:	8876
SBE GOAL	5%
BID BOND	5%
SBE PRE BID MEETING	See Pre Bid Meeting info below
PREQUALIFICATION APPLICATION DUE (2:00 P.M.)	6/29/2023
BID SUBMISSION (2:00 P.M.)	7/6/2023
BID OPEN (2:30 P.M.)	7/6/2023
PUBLISHED IN WSJ	6/22/20223, 6/29/2023

SBE PRE BID MEETING: Small Business Enterprise Pre-Bid Meetings are not being held in person at this time. Contractors can schedule one-on-one phone calls with Tracy Lomax in Affirmative Action to count towards good faith efforts. Tracy can be reached at (608) 266-6510 or by email, tlomax@cityofmadison.com.

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

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

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 - 2023 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 pre-qualified by the Board of Public Works for the type of construction on which they are bidding prior to the opening of the bid.

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

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

SECTION 102.4 PROPOSAL

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

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

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

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

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

SECTION 102.5: BID DEPOSIT (PROPOSAL GUARANTY)

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

MINOR DISCREPENCIES

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

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

Building Demolition

101 ☐ Asbestos Removal
120 ☐ House Mover
110 ☐ Building Demolition

Street, Utility and Site Construction

201 ☐ Asphalt Paving
205 ☐ Blasting
210 ☐ Boring/Pipe Jacking
215 ☐ Concrete Paving
220 ☐ Con. Sidewalk/Curb & Gutter/Misc. Flat Work
221 ☐ Concrete Bases and Other Concrete Work
222 ☐ Concrete Removal
225 ☒ Dredging
230 ☐ Fencing
235 ☐ Fiber Optic Cable/Conduit Installation
240 ☒ Grading and Earthwork
241 ☐ Horizontal Saw Cutting of Sidewalk
242 ☐ Hydro Excavating
243 ☐ Infrared Seamless Patching
245 ☐ Landscaping, Maintenance
246 ☐ Ecological Restoration
250 ☐ Landscaping, Site and Street
251 ☐ Parking Ramp Maintenance
252 ☐ Pavement Marking
255 ☐ Pavement Sealcoating and Crack Sealing
260 ☐ Petroleum Above/Below Ground Storage Tank Removal/Installation
262 ☐ Playground Installer
265 ☐ Retaining Walls, Precast Modular Units
270 ☐ Retaining Walls, Reinforced Concrete
275 ☐ Sanitary, Storm Sewer and Water Main Construction
276 ☐ Sawcutting
280 ☐ Sewer Lateral Drain Cleaning/Internal TV Insp.
285 ☐ Sewer Lining
290 ☐ Sewer Pipe Bursting
295 ☐ Soil Borings
300 ☐ Soil Nailing
305 ☐ Storm & Sanitary Sewer Laterals & Water Svc.
310 ☐ Street Construction
315 ☐ Street Lighting
318 ☐ Tennis Court Resurfacing
320 ☐ Traffic Signals
325 ☐ Traffic Signing & Marking
332 ☐ Tree pruning/removal
333 ☐ Tree, pesticide treatment of
335 ☐ Trucking
340 ☐ Utility Transmission Lines including Natural Gas, Electrical & Communications
399 ☐ Other_____

Bridge Construction

501 ☐ Bridge Construction and/or Repair

Building Construction

401 ☐ Floor Covering (including carpet, ceramic tile installation, rubber, VCT
402 ☐ Building Automation Systems
403 ☐ Concrete
404 ☐ Doors and Windows
405 ☐ Electrical - Power, Lighting & Communications
410 ☐ Elevator - Lifts
412 ☐ Fire Suppression
413 ☐ Furnishings - Furniture and Window Treatments
415 ☐ General Building Construction, Equal or Less than $250,000
420 ☐ General Building Construction, $250,000 to $1,500,000
425 ☐ General Building Construction, Over $1,500,000
428 ☐ Glass and/or Glazing
429 ☐ Hazardous Material Removal
430 ☐ Heating, Ventilating and Air Conditioning (HVAC)
433 ☐ Insulation - Thermal
435 ☐ Masonry/Tuck pointing
437 ☐ Metals
440 ☐ Painting and Wallcovering
445 ☐ Plumbing
450 ☐ Pump Repair
455 ☐ Pump Systems
460 ☐ Roofing and Moisture Protection
464 ☐ Tower Crane Operator
461 ☐ Solar Photovoltaic/Hot Water Systems
465 ☐ Soil/Groundwater Remediation
466 ☐ Warning Sirens
470 ☐ Water Supply Elevated Tanks
475 ☐ Water Supply Wells
480 ☐ Wood, Plastics & Composites - Structural & Architectural
499 ☐ Other_____
_____

State of Wisconsin Certifications

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

SECTION B: PROPOSAL

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

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

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

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

SECTION C: SMALL BUSINESS ENTERPRISE

Instructions to Bidders
City of Madison
SBE Program Information

2 Small Business Enterprise (SBE) Program Information

2.1 Policy and Goal

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

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

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

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

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

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

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

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

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

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

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

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

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

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

2.2 Contract Compliance

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

2.3 Certification of SBE by City of Madison

The Affirmative Action Division maintains a directory of SBEs which are currently certified as such by the City of Madison. Contact the Contract Compliance Officer as indicated in Section 2.2 to receive a copy of the SBE Directory or you may access the SBE Directory online at www.cityofmadison.com/civil-rights/contract-compliance/targeted-business-enterprise-programs/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 access the Targeted Business Certification Application online at www.cityofmadison.com/civil-rights/contract-compliance/targeted-business-enterprise-programs/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 bidder with the bid: This report is due by the specified bid closing time and date. Bids submitted without a completed SBE Compliance Report as outlined below may be deemed non-responsible and the bidder ineligible for award of this contract. 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 meets or exceeds the goal established for SBE utilization, the Small Business Enterprise Compliance Report shall consist of the following:

2.4.2.1.1 **Cover Page,** Page C-6; and
2.4.2.1.2 **Summary Sheet,** C-7.

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

2.4.2.2.1 **Cover Page,** Page C-6;
2.4.2.2.2 **Summary Sheet,** C-7; and
2.4.2.2.3 **SBE Contact Report,** C-8 and C-9. (A separate Contact Report must be completed for each applicable SBE which is not utilized.)

2.5 Appeal Procedure

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

2.6 SBE Requirements After Award of the Contract

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

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

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

2.7 SBE Definition and Eligibility Guidelines

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

A. An independent business operated under a single management. The business may not be a subsidiary of any other business and the stock or ownership may not be held by any individual or any business operating in the same or a similar field. In determining whether an entity qualifies as a SBE, the City shall consider all factors relevant to being an independent business including, but not limited to, the date the business was established, adequacy of its resources for the work in which it proposes to involve itself, the degree to which financial, equipment leasing and other relationships exist with other ineligible firms in the same or similar lines of work. SBE owner(s) shall enjoy the customary incidents of ownership and shall share in the risks and profits commensurate with their enjoyment interests, as demonstrated by an examination of the substance rather than form or arrangements that may be reflected in its ownership documents.

B. A business that has averaged no more than $4.0 million in annual gross receipts over the prior three year period and the principal owner(s) do not have a personal net worth in excess of $1.32 million.

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

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

WEXFORD POND DREDGING
CONTRACT NO. 8876

Small Business Enterprise Compliance Report

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

Cover Sheet

Prime Bidder Information

Company:_____

Address:_____

Telephone Number:_____ Fax Number:_____

Contact Person/Title:_____

Prime Bidder Certification

I, _____, _____ of
Name Title

_____ certify that the information
Company

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

_____ _____
Witness' Signature Bidder's Signature

_____
Date

WEXFORD POND DREDGING
CONTRACT NO. 8876

Small Business Enterprise Compliance Report

Summary Sheet

SBE Subcontractors Who Are NOT Suppliers

Name(s) of SBEs Utilized	Type of Work	% of Total Bid Amount
		%
		%
		%
		%
		%
		%
		%
		%
		%
		%
		%
		%
		%

Subtotal SBE who are NOT suppliers: _____ %

SBE Subcontractors Who Are Suppliers

Name(s) of SBEs Utilized	Type of Work	% of Total Bid Amount
		%
		%
		%
		%
		%
		%

Subtotal Contractors who are suppliers: _____ % x 0.6 = _____ % (discounted to 60%)

Total Percentage of SBE Utilization: _____%.

WEXFORD POND DREDGING
CONTRACT NO. 8876

Small Business Enterprise Compliance Report

SBE Contact Report

Submit separate copy of this form for each SBE which you are not able to utilize towards meeting the SBE goal for this project. Attach separate sheets if necessary.

SBE Information

Company:_____

Address:_____

Telephone Number:_____

Contact Person/Title:_____

1. Outline below all efforts to solicit a bid from the above SBE. Include date, means of contact, who from your company made this contact and the result.

   _____

   _____

   _____

2. Describe the information provided to the aforementioned SBE 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?

   ☐ Yes ☐ No

3. Did this SBE submit a bid? ☐ Yes ☐ No

4. Is the General Contractor pre-qualified to self-perform this category of work?

   ☐ Yes ☐ No

5. If you responded “Yes” to Question 3, please check the items below which apply and provide the requested detail. If you responded “No” to Question 3, please skip ahead to item 6 below.

☐ The SBE listed above is unavailable for work on this project for the following reasons. Provide specific detail for this conclusion.

_____

_____

☐ The SBE listed above is unqualified for work on this project. Provide specific details for this conclusion.

_____

_____

☐ The SBE listed above provided a price that was unreasonable (i.e. more than 5% above the lowest bidder). Provide specific detail for this conclusion including the SBE’s price and the price of the subcontractor you intend to utilize.

_____

_____

☐ A contract with the SBE listed above may constitute a breach of the bidder’s collective bargaining agreements. Provide specific detail for this conclusion including, but not limited to, correspondence from the SBE indicating it will not sign a project labor agreement and/or correspondence from the applicable trade union indicating a project labor agreement will not be allowed at the time of project bidding.

_____

_____

☐ Other; please specify reason(s) other than listed above which made it impossible for you to utilize this SBE on this project.

_____

_____

6. Describe any other good faith efforts:

_____

_____

SECTION D: SPECIAL PROVISIONS

WEXFORD POND DREDGING
CONTRACT NO. 8876

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

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

SECTION 102.8 EXAMINATION OF PLANS, SPECIFICATIONS, SPECIAL PROVISIONS AND SITE OF WORK

The bidder is required to examine carefully the work site, the proposal form, plans, Specifications, Supplemental Specifications, special provisions and contract forms for the work contemplated. It will be assumed that the bidder has investigated and is satisfied as to the conditions to be encountered for performing the work as scheduled, and as to the character, quality and quantities of work to be performed and materials to be furnished, and as to the requirements of the plans, specifications and special provisions and contract. The submission of a proposal shall be considered conclusive evidence that the bidder has made such examination and is satisfied as to all the conditions and contingencies

Sediment quantities were determined based on bathymetric surveying performed on November 1, 2022, cross referenced with sediment logs, and historical drawings.

Bathymetric surveys were conducted by City of Madison staff using Trimble GPS rover implemented with Seafloor Systems Hydrolite Single Beam Sonar, along with Hydrone Rov Boat.

Sediment quantities for Bid Item 90008 Dredge, Haul, and Dispose of Sediment shall not be disputed, increased, or decreased.

The Contractor may perform their own bathymetric survey prior to bidding, however regardless of the results of that survey the data provided with this contract shall prevail and shall be used for measurement and payment.

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 $74,000 for a single trade contract; or equal to or greater than $360,500 for a multi-trade contract pursuant to MGO 33.07(7).

SECTION 104 SCOPE OF WORK

This contract and associated plan set describes the work necessary to dredge, reconstruct and enlarge forebays at two stormwater ponds, located on a City of Madison owned parcel at 1005 N. High Point Road. This work also includes upsizing two existing storm sewer outfalls.

The Contractor shall be aware that sediment being removed from Wexford Pond has been deemed "clean" by the WDNR. See Attachment C email correspondence from WDNR.

The Contractor shall view the site prior to bidding to become familiar with the existing conditions. It shall be the responsibility of the Contractor to work with the utilities located within the project to resolve conflicts during the construction process.

The Contractor shall determine and submit a dredging Means and Methods plan to the Project Manager for review and approval. The Contractor is notified that hydraulic dredging and shall not be allowed, and that dewatering of the pond will be required for construction. Drying of the dredged material on the project site shall not be allowed. As detailed in the contract the Contractor shall be responsible for providing a disposal location, permitting that location, hauling (in sealed water-tight trucks) and disposal of the dredged material at that location. The Contractor shall be required to obtaining all permitting required for dewatering and disposing dredged material.

SECTION 104.1 LANDS FOR WORK

This project is located on the parcel at 1005 N. High Point Road. The Contractor shall be aware that this parcel is adjacent to several private parcels. All property irons were not surveyed prior to construction. Therefore, the property lines shown on the plan set are approximate. The project also includes a 30-foot-wide access easement for construction traffic on a private parcel at 7702 Old Sauk Road. This easement shall be staked for the Contractor prior to construction by the City of Madison. **The Contractor shall not work outside of the defined construction access limits shown on the plan set.**

SECTION 104.4 INCREASE OR DECREASE QUANTITIES

The Contractor shall note that some bid item quantities may increase or decrease based on conditions encountered in the field. The Engineer reserves the right to increase or decrease the quantities of any items of work, including increase or decrease of quantities by alteration of plans, as may be considered necessary or desirable during the progress of the work to satisfactorily complete the project. Such increases or decreases in quantities shall not be considered as a waiver of any conditions of the contract nor invalidate any of the provisions thereof. All terms of Section 104.5 Increase Items and Section 104.6 Decreased and Deleted Items of the Standard Specifications for Public Works Construction are applicable to this project. All bid items listed in the proposal page shall be paid for in accordance with the City Standard Specifications and the special provisions.

SECTION 105.1 AUTHORITY OF THE ENGINEER

The Engineer shall resolve all questions which arise as to the quality and acceptability of materials furnished, work performed, manner of performance, rate of progress of the work, interpretation of the plans and Specifications, acceptable fulfillment of the contract, compensation, and disputes and mutual rights between Contractors under the Specifications. The Engineer shall determine the amount and quantity of work performed and materials furnished.

All decisions of the Engineer shall, when so requested, be rendered in writing. They shall be final and conclusive in all matters unless within ten (10) days after such decision the Contractor applies in writing to the Board of Public Works for a review of such decision. Any change proposed by a Contractor in SBE subcontractors, vendors or suppliers from those SBEs indicated on the SBE Compliance Report must be approved by the Engineer and the City's Manager of the Affirmative Action Division (hereafter, AAD). When requested, such decision shall be rendered in writing. Such decisions shall be final and conclusive in all matters unless within ten (10) days after such decision the Contractor or the affected SBE applies in writing to the Board of Public Works for a review of such decision.

In the event the Engineer and the AAD disagree over the proper decision to be made regarding an SBE, the Mayor shall appoint a third person to resolve the disagreement, within 30 days of appointment. The decision thus rendered may be reviewed by the Board of Public Works upon request of the

Contractor or the affected SBE as set forth in Sections 105.1 and 105.2 of the City's standard specifications.

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

Project Manager:	Sarah Lerner, slerner@cityofmadison.com
Construction Engineer:	To be assigned, City of Madison Engineering Staff
Design Engineer:	Eric Vieth, Strand Engineering, Eric.Vieth@strand.com
Geotechnical Engineer	Eric Fair, CGC, Inc. 608-288-4100 (office) 608-712-0409 (cell) efair@cgcinc.net

SECTION 105.9: SURVEYS, POINTS, AND INSTRUCTIONS

The Contractor shall be responsible for setting all lines and/or grades required to complete all work. Surveys, Points, and Instructions shall be incidental to Bid Item 90005- CONSTRUCTION SURVEYING.

SECTION 105.12 COOPERATION OF THE CONTRACTOR

Private utilities existing within the project site. The Contractor shall perform a One Call through Digger's Hotline for the site at least three days prior to beginning construction. The Contractor shall allow access to utility companies and resolve any conflicts that may arise during construction. It shall be the responsibility of the Contractor to work with the utilities located in the project area to resolve conflicts during the construction process.

The Contractor shall secure materials/equipment at the end of each workday to deter any potential vandalism and theft.

The Contractor shall attend a pre-construction meeting prior to the start of construction.

Contractor shall confine their operations to work areas indicated on the plans and right-of-way. Contractor shall not trespass. Any damage to private property caused by access shall be restored in kind by Contractor at Contractor's expense. Contractor may NOT store materials, or stage equipment on private property.

Contractor is alerted that very little additional space is available within the project grading limits for material storage, staging, and other uses. Contractor may stage equipment, stockpile and store materials within the staging areas identified on the plans that will not affect existing trees to remain or protected vegetation. These areas will be restored in kind when construction is complete.

The Contractor shall use care when access the site and during construction not to damage existing trees, plantings, fences, utilities, structures, or other facilities that are to remain. Damage to these items during construction shall be repaired or replaced at the Contractor's expense per the City of Madison Standard Specifications and shall be considered incidental to this contract except as specified in the below paragraph. The Contractor shall protect existing elements within the approximate construction area available for Contractor's use as indicated on the drawings. The Contractor should be made aware that existing rip rap may exist in the existing pond within the proposed sediment dredging and pond excavation limits. The Contractor shall replace all existing riprap excavated at no additional cost. In addition, the Contractor may choose to install additional access roads, provide temporary stockpiles, and store material and equipment within the approximate construction area. Any additional site disturbance not indicated on the drawings or included in the bid item quantities shall be restored in accordance with the specifications at no additional cost.

CONSTRUCTION ACCESS ROUTE

Access to this site is limited. The Construction Access Plan shows the designated access route for this project which requires construction of a Temporary Access Road under BID ITEM 90006.

The City of Madison has obtained a temporary construction access easement from High Point Church (Appendix E). This easement includes the area from the Old Sauk Road Right of Way to the City of Madison Stormwater Utility Property.

Within the Temporary Construction Access Easement

Access to the ponds from Old Sauk Road shall be via the temporary construction access easement only.

It is anticipated that use of this easement will damage the existing parking lot and other paved surfaces on the private property within the easement. Damages to the private parking lot and associated sidewalk, curb and gutter, and asphalt base within the easement shall be paid respectively within each bid item as listed in these special provisions.

In the event that pavement and sidewalk are damaged within the easement, but the damage requires minor repair outside the easement limits related to approved use – these quantities will be included under each respective bid item and only as approved by the Construction Engineer. For example, if repair of the asphalt pavement requires removal of a 5'x5' section outside - but adjacent to the easement – as a result of use within the easement, this quantity will be paid under each respective bid items.

Outside of the parking lot, the Contractor is required to construct a temporary access road to traverse the existing lawn and temporary relocate a retaining wall. This work shall be paid under BID ITEM 90006 – TEMPORARY ACCESS ROAD. It is anticipated that this road shall take up the entire width of the easement in this section.

Any repairs outside of these bid items including repairs to utilities shall be considered incidental to the contract.

Photographs of these elements shall be taken before and after construction by the Contractor. If determined that these are not damaged, these bid item quantities may be reduced or eliminated.

The Contractor shall not drive, store, stage, or temporary place any materials on High Point Church Property outside of the easement. Any repair outside the easement not related to work within the easement shall be repaired at the Contractor's expense.

The condition of this agreement requires that the Contractor shall not occupy the easement within the school drop off times between 7:30 am and 8:00 am and 3:00 pm to 3:30 pm.

Outside the Temporary Construction Access Easement (City of Madison Stormwater Utility Property)

The designated construction access route to the ponds within the City of Madison Stormwater Utility Property are identified on the plans. The Contractor shall construct a temporary access road at the locations identified on plans. This temporary access road shall be paid under BID ITEM 90006 – TEMPORARY ACCESS ROAD.

Any work to repair areas outside of the temporary access road, including repairs to sidewalk and curb within the High Point Road and Old Sauk Road right of way, restoration and seeding of areas within the staging area, etc. shall be considered incidental to this contract and shall be repaired at the Contractors expense in accordance with the latest edition of the Standard Specifications for Public Works Construction.

UTILITIES
The Contractor is responsible for any coordination with the utility companies during construction and to resolve in conflict during the construction process.

Utility Contacts:
Verizon: Mark Fisher – 262-349-5861
TDS: Jerry Meyers – 608-664-4404

MGE Gas
Roger Ahles (rahles@mge.com)
Katie Bloomer (kbloomer@mge.com)

MGE Electrical
Mark Bohm (mbohm@mge.com)
Tony Sanfratello (asanfratello@mge.com)

SECTION 105.13 ORDER OF COMPLETION

The Contractor shall phase construction operations to minimize the amount of time that there is disturbance within the project. The Contractor is responsible for their construction staging and shall do so to minimize the impacts to the project site. The Contractor to note that the adjacent High Point Church serves High Point Christian School and children use the playground and fields adjacent to the project site on a daily basis throughout the school year. The Contractor shall be cognizant of this use and minimize the amount of time there is disturbance adjacent to the school.

SECTION 107.2 PROTECTION AND RESTORATION OF PROPERTY

The Contractor shall take extreme care to protect fencing, landscaping, and any structures located near the construction limits of this project.

The Contractor, with the Project Manager and Construction Engineer, shall walk the site and record the condition of existing adjacent items with photographs, to create a benchmark for restoration. Any private property damaged during the project shall be repaired by the Contractor at no additional cost to the City.

SECTION 107.4 CONTRACTOR'S LIABILITY INSURANCE

The Contractor shall be responsible for meeting all requirements in Article 107.4 Contractor's Liability Insurance in accordance with the latest edition of the Standard Specifications for Public Works Construction. **The Contractor shall list High Point Church as an additional insured under 107.4(b) General Liability, in addition to listing the City of Madison, it's officers, officials, agents and employees.**

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 Construction 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 project.

SECTION 107.7 MAINTENANCE OF TRAFFIC

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

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 non-permanent traffic signs, drums, barricades, and similar control devices, including arrow boards, for providing, placing, and maintaining work zone. Maintaining shall include replacing damaged or stolen traffic control devices. 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. Notify Madison Metro one week prior to traffic switches, street closures, and reopening the road to through traffic for bus routing. Madison Metro contact is Tim Sobota (608) 261-4289.

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. 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.

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 City of Madison Traffic Engineering Field Operations, 1120 Sayle Street, 266-4767, 8:00 a.m. to 4:00 p.m., a minimum of 2 working days in advance of when any existing signs need to be removed. This service is provided free of charge. If the Contractor removes the signs, the Contractor will be billed for the reinstallation of, and any damage to, the signing equipment. The Contractor shall notify The City of Madison Traffic Engineering Field Operations, 1120 Sayle Street, 266-4767 upon completion of final landscaping to have permanent signs reinstalled. The Contractor shall expect a minimum of seven working days to have permanent signs reinstalled. The Contractor shall leave in place all necessary traffic control until given notice by the construction engineer that permanent signing is in place and temporary traffic control may be removed.

Contact Ali Heinritz, City of Madison Traffic Engineering, at 266-6585 for questions on this specification.

SECTION 107.13 TREE PROTECTION

All existing trees on 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 liquidated damages.

Temporary fencing has been specified on plans to minimize impacts to trees and adjacent land disturbance. Temporary fencing shown on plans shall be paid under BID ITEM 21302 – CONSTRUCTION FENCE (PLASTIC). The Contractor may install additional temporary fencing to protect individual trees from damage. Additional temporary fencing for tree protection beyond quantities specified in this contract shall be incidental to this contract.

When encountering roots, the Contractor shall cleanly cut roots with lopping shears, chainsaw, sawzall or other means that provide a clean cut. Exposed roots shall be covered as soon as excavation is complete. The Contractor shall not rip or pull roots out wards the trunk of a tree while excavating with a backhoe. The use of a backhoe to clean cut roots is NOT acceptable.

SECTION 108.2 PERMITS

The following permits are required (and have been or will be obtained by the City) for this project:

- Army Corps of Engineers Permit Letter of Permission – See Attached Permit Conditions
- WI-DNR Chapter 30 Individual Permit – See Attached Permit Conditions
- WI-DNR Chapter 30 General Permit, Municipal Wetland Discharge - See Attached Permit Conditions
- WI-DNR WRAPP/NOI (Notice of Intent) for the Wexford Pond Construction Site
- City of Madison Erosion Control Permit

Dredging/Dewatering-Related Permits: Contractor shall obtain all necessary dewatering/dredging permits necessary for construction activities associated with the pond construction, including but not limited to the following after determining the need with the DNR. Provide copies of correspondence with the DNR regarding need for these permits to the City of Madison.

- Carriage and/or Interstitial Water Resulting From Dredging Operations Permit (WPDES Permit No. WI -0046558-06-0).
- Pit/Trench Dewatering Permit (WPDES Permit No. WI-0049344-4).
- Short Duration Discharge Permit (WPDES Permit No. WI-0059137-4).
- High- Capacity Dewatering Well Permit. This permit is generally needed when dewatering at a rate over 70 gpm.

- WI-DNR WRAPP/NOI (Notice of Intent) for the Contractor's chosen fill site (if the site exceeds 1 acre of disturbance).

Any permits required for dewatering operations beyond those covered by the NR-151 permit that the City has obtained as part of this project shall be obtained and paid for by Contractor.

a. For dewatering operations, if dewatering wells singly or in aggregate produce 70 or more gallons per minute, Contractor shall obtain from the Wisconsin Department of Natural Resources, in accordance with Paragraph 281.17(1), Wisconsin Statutes, a permit for dewatering. The Department's private water supply section's address for Well Permits is: Wisconsin Department of Natural Resources, Private Water Supply Section, Box 7921, Madison, Wisconsin 53707. All wells shall be drilled and closed in accordance with DNR requirements for installing and abandoning wells.
b. Contractor shall comply with the provisions of Chapter 283, Wisconsin Statutes, regulating the discharge of effluent from construction pit trench dewatering. These provisions provide for the removal of suspended solids from dewatering effluent prior to the direct discharge to surface waters or wetlands. Contractor shall apply as necessary to the Department of Natural Resources for a permit to discharge effluent from construction pit or trench dewatering. This discharge may be covered by an existing state general permit for discharging contaminated stormwater runoff/or construction pit dewatering. Information about and application forms for this permit(s) may be obtained at the address shown below.

South Central Region
Department of Natural Resources
3911 Fish Hatchery Road
Fitchburg, WI 53711
(608) 275-3266

The City's listing of the above 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.

All permit costs shall be considered included with the Site Dewatering/Groundwater Control bid item.

The Contractor shall be responsible for knowing, understanding, and meeting the conditions of all permits and must keep a copy of each individual permit on site at all times throughout construction. Any questions pertaining to permit compliance shall be immediately brought to the attention of the Project or Construction Engineer.

The Contractor shall meet the conditions of the permits including 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 bid items, or if appropriate items are not included in the contract, they shall be paid for as Extra Work.

A City of Madison Erosion Control permit has been issued and weekly inspections will be completed by City Staff. Contractor may be required to complete additional inspections following storm events on weekends and holidays, and this work will be paid for under the appropriate bid item. A copy of the permit will be provided to the Contractor prior to construction.

Disposal Site Permitting: The Contractor shall provide a disposal site for the dredged material which has been determined to be "clean" by the WDNR. This disposal site shall either be a WDNR permitted clean fill site, a site which has received a WPDES discharge permit from the WDNR or a site that is not subject

to conditions of NR-151 or WPDES discharge permits. The Contractor shall provide documentation prior to construction that the disposal location meets these requirements.

The City's obtaining 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 THE WORK

The Contractor shall begin work on this project on **November 1, 2023**, weather permitting. Work shall begin only after the start work letter is received. If it is desirable to begin work before the above-mentioned date, the contract must be fully executed and the Contractor shall establish a mutually acceptable date with the Construction Engineer.

The time of completion shall be **June 1, 2024.** The completion date includes any time necessary to accommodate pavement replacements and native restoration of disturbed areas. The Contractor shall limit the workdays from 7:00 a.m. to 7:00 p.m., Monday through Saturday per MGO 24.08(3)(f), unless approved by the Construction Engineer in writing and no work shall be performed on holidays.

The clay liner shall not be placed until the required subgrade preparation has been completed and the subgrade has been inspected and approved by the City's Geotechnical Consultant. The clay liner shall meet the criteria in WDNR SOC Standard 1001 Wet Detention Pond. Frozen clay cannot be utilized to create the liner. 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 Construction Engineer. The clay liner shall not be placed upon a frozen surface, nor shall snow, ice, or frozen material be incorporated in the clay liner.

SECTION 109.5 METHODS AND EQUIPMENT

The Contractor shall submit a Methods and Equipment Plan for approval by the Project Manager prior to starting construction. The Methods and Equipment plan shall include information on project staging and phasing, and erosion control implementation plans.

The Contractor shall note that neither hydraulic dredging nor dredging with ponded water above the dredge activities shall be allowed. The pond shall be dewatered prior to dredging the portion of the dredging that the Contractor is working on. The Contractor shall not stage or dewater the dredged sediment at the project site. All dredged sediment must be directly transported to the permitted Contractor Fill Site.

SECTION 110.1: MEASUREMENT OF QUANTITIES

All bid items listed in the proposal page will be paid for at the quantity listed in the proposal page, and will not be measured in the field unless otherwise indicated in these special provisions. The Contractor is reminded that the quantity for dredging shall be as calculated using the bathymetric survey provided by the City.

ARTICLE 500 SEWER AND SEWER STRUCTURES GENERAL

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.

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

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

BID ITEM 10911- MOBILIZATION

DESCRIPTION

Work under this item shall include all costs associated with mobilization of the Contractor to the site in accordance with Article 109 of the latest edition of the Standard Specifications for Public Works Construction. Parking of equipment and staging is permitted only on the project site within the City of Madison Stormwater Utility property. The Contractor shall not stage equipment or materials outside of the approximate construction staging area shown on the drawings. Staging of materials within the street shall not be allowed.

Mobilization related repair of any Contractor damaged areas and to the shall be considered incidental to this bid item.

Mobilization related to hauling, dewatering, and disposal of sediment shall be included in BID ITEM 90008 – DREDGE, HAUL, AND DISPOSE OF SEDIMENT. No additional compensation shall be provided for de or re-mobilization.

METHOD OF MEASUREMENT

Mobilization shall be measured as a Lump Sum.

BASIS OF PAYMENT

Mobilization 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 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. Excavation cut shall be in accordance with Article 201 of the Standard Specifications.

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, placing four (4) inches of topsoil, existing surface used was the top of the existing conditions surface. No expansion or shrinkage factors have been or will be applied to the earthwork quantities. Three-dimensional CAD files containing the digital terrain models used for the earthwork calculations are available.

The following Excavation Cut activities and amount shall be paid at the "Plan Quantity" without measurement thereof:

- Clay Liner and Over-Excavation: 7,026 CY
- Topsoil Stripping: 322 CY (includes topsoil stripping related to construction of the proposed vegetated access,retaining wall, and storm sewer piping and structures)
- Vegetated Access: 214 CY
- Riprap Excavation: 26 CY
- Retaining Wall: 154 CY
- Forebay Excavation to Finished Pond Bottom: 3,607 CY (over excavation for clay liner included above)

Total: 11,349 CY

No changes to the above shall be approved unless there are modifications to the plan design or significantly differing conditions encountered at the site. No expansion or shrinkage factors have been applied to the earthwork quantities.

Suitable materials (to be determined by the Engineer) may be reused as fill within the project limits. Placement of these fill materials shall be considered incidental to this bid item and shall not be compensated separately. All double handling and subsoil placement is included in this bid item.

Excess material generated during pond construction shall hauled off-site and disposed of by the Contractor at a site provided by the Contractor at no additional charge to the City of Madison.

Contractor to note all excavated areas shall be filled at the end of each work day. No excavated areas shall be “open” during non-work hours.

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 90008 - DREDGE, HAUL, AND DISPOSE OF SEDIMENT.
- Additional sediment removal based on field conditions shall be paid under Bid Item 90009 – AUTHORIZED SEDIMENT REMOVAL.
- Placement of clay liner shall be paid under Bid Item 90003 – CLAY LINER PROVISION AND PLACEMENT.
- Any excavation cut related to the construction of the Temporary Access Road including temporary grading, retaining wall removal and reconstruction, topsoil stripping, and repair of facilities with the Temporary Construction Access Easement shall be incidental to BID ITEM – 90006 TEMPORARY ACCESS ROAD.

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

EXCAVATION CUT above 11,349 CY shall only be paid for excavation cut related removal of aggregate base in order to repair damaged asphalt within the temporary construction easement at High Point Church. The proposal page includes 380 CY of addition EXCAVATION CUT related to repair of these facilities for bidding purposes. These quantities may be eliminated, increased or decreased.

Temporary Stockpiles

Any and all on-site stockpiles the Contractor deems necessary shall be enclosed with a silt sock provided at no additional cost. No material is permitted to be stockpiled in the partially constructed pond. The Contractor shall not store Excavation Cut on site, with the exception of topsoil that is planned to be reused, for periods longer than 48 hours. The Contractor shall be mindful of predicted weather events and remove cut material accordingly.

See the Attachment B for site soil boring information.

METHOD OF MEASUREMENT

Excavation Cut within the limits shown in the plan set, or as defined in these Special Provisions, shall be paid based on the "Plan Quantity" without measurement thereof, except as identified above for excavation cut for pavement and aggregate base course excavation within the temporary easement. No changes to this quantity shall be approved unless there are modifications to the plan design or significantly differing conditions encountered at the site. No expansion or shrinkage factors have been applied to the earthwork quantities.

Excavation Cut related to repair of repair/replacement of pavement and base course within the temporary access easement at High Point Church as described above shall be measured based in the field and determined by the Construction Engineer.

BASIS OF PAYMENT

Excavation Cut shall be paid at the "Plan Quantity" contract unit price for all excavation cut, except as defined above for pavement and aggregate base course excavation within the temporary easement. This shall include full compensation for all labor, materials, equipment, and incidentals necessary to complete this item of work.

BID ITEM 20221 - TOPSOIL

DESCRIPTION

Work under this bid item shall include all labor, material, double handling, equipment, and incidentals required to segregate, temporarily stockpile topsoil, prepare topsoil for site restoration, and redistribute six (6) inches of topsoil over disturbed. Topsoil shall be distributed over areas that are not below the water level in the pond for restoration of temporary access roads, restoration of storm sewer construction, restoration adjacent to the vegetated access and retaining wall, and any additional staging areas, to provide and place that topsoil from offsite locations, or a combination of these approaches

Topsoil placement quantities were calculated by quantifying the areas to be excavated and restored outside of the permanent wet pool including the storm sewer piping and structure construction, the grading/restoration adjacent to the vegetated access and proposed retaining wall, and in the eroded area upstream of the spillway structure.

It is anticipated that all necessary topsoil to complete this bid item can be generated on-site. It is assumed the site will average 6 inches of existing topsoil excavation. It is estimate that 322 cubic yards of topsoil shall be made available through Excavation Cut. Topsoil shall be installed at a minimum of 6" depth. The final contours shown on the plan set include six (6) inches of topsoil. Grading shall be planned accordingly. No topsoil shall be placed on, or below, the safety bench. Temporary access roads shall be topped with approximately 6 inches of topsoil.

All salvaged topsoil shall be stored in an appropriate manner, which includes storing the material in an upland area and surrounding the stockpile with silt fence or silt sock.

The Contractor and Construction Engineer shall agree on a method and location for topsoil stockpiling. All areas with the project site are prone to flooding; the stockpile location and erosion control shall take this into consideration.

Topsoil shall be shredded, pulverized and/or finely raked to remove all clods. Prior to seeding and/or placing erosion control matting the Contractor shall contact the Construction Engineer to inspect and approve the topsoil.

Topsoil placement related to restoration of the temporary construction access roads shall be paid under BID ITEM 90006 – TEMPORARY ACCESS ROAD.

METHOD OF MEASUREMENT

Topsoil shall be measured by the Square Yard based on "Plan Quantity" without measurement thereof. No expansion or shrinking factors have been or will be applied to this quantity.

BASIS OF PAYMENT

Topsoil 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.

BID ITEM 20450 – HEAVY RIPRAP-GLACIAL FIELD STONE

DESCRIPTION

Work under this item shall include all labor, materials, equipment and incidentals to provide and install glacial field stone as shown in the plan set and described in these Special Provisions and in accordance with the City of Madison Standard Specifications for Public Works Construction. The stone shall be sized between 6.5 and 20 inches in diameter. The intent of the varied stone sizes is to create graded stone stabilization at outfalls. Therefore, well graded material, approximately 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 Construction Engineer. The Construction Engineer may choose to evaluate the material at the source prior to acceptance. Heavy Riprap shall be placed do a depth of 24 inches, unless otherwise stated. The material shall be underlain with Type HR filter fabric – which shall be paid separately under BID ITEM 20256 - RIPRAP FILTER FABRIC, TYPE HR.

Loosening, loading, hauling and disposal of existing heavy riprap that shall not be reused shall be incidental to bid item 20101 – EXCAVATION CUT.

Min. Diameter	Median Diameter	Max. Diameter
6.5"	13"	20"

All stone on site shall be placed so that it keeps the top of the stone at the flow line or bank grade. Stone shall not be elevated from adjacent features.

METHOD OF MEASUREMENT

Heavy Riprap – Glacial Field Stone shall be measured per cubic yard of material provided, transported, and placed onsite based on quantities listed in the proposal page.

BASIS OF PAYMENT

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

BID ITEM 20303 – SAWCUT ASPHALT PAVEMENT

Work under this bid item shall include all labor, equipment, and incidentals necessary to sawcut asphalt pavement as necessary to repair asphalt within the Temporary Construction Access Easement at High Point Church. Quantities included in the proposal page are for bidding purposes and may be increased, reduced or eliminated.

METHOD OF MEASUREMENT

Sawcut Asphalt Pavement shall be measured per linear foot.

BASIS OF PAYMENT

Sawcut Asphalt Pavement 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.

BID ITEM 20322 – REMOVE CONCRETE CURB & GUTTER

Work under this bid item shall include all labor, equipment, and incidentals necessary to remove concrete curb & gutter damaged during construction within the Temporary Construction Access Easement at High Point Church. Quantities included in the proposal page are for bidding purposes and may be increased, reduced or eliminated.

Placement of new concrete curb and gutter shall be paid under BID ITEM 30208 – Hand Formed Concrete Curb & Gutter.

METHOD OF MEASUREMENT

Remove Concrete Curb & Gutter shall be measured per linear foot.

BASIS OF PAYMENT

Remove Concrete Curb & Gutter 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.

BID ITEM 20323 – REMOVE SIDEWALK

Work under this bid item shall include all labor, equipment, and incidentals necessary to remove sidewalk as necessary to remove sidewalk damaged during construction within the Temporary Construction Access Easement at High Point Church. Quantities included in the proposal page are for bidding purposes and may be increased, reduced or eliminated. There is no removal of drive included in this bid item.

Placement of new sidewalk shall be paid under bid item 30301 – 5 Inch Concrete Sidewalk.

METHOD OF MEASUREMENT

Remove Sidewalk shall be measured per square foot.

BASIS OF PAYMENT

Remove Sidewalk 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.

BID ITEM 20701 - TERRACE SEEDING

Work under this bid item shall include all labor, materials, equipment and incidentals required for terrace seeding. Seeding for all areas disturbed on the High Point Church Property for construction of the temporary access road shall be seeded with the Sun Terrace Mix identified in the City Standard Specification Section 2.07 (a) 2.

METHOD OF MEASUREMENT

Terrace Seeding within the limits shown in the plan set, or as defined in these Special Provisions, shall be paid based on the "Plan Quantity" without measurement thereof. The plan quantity was computed estimating the areas to be disturbed by construction activities identified in the plans. No changes to this quantity shall be approved unless there are modifications to the plan design.

BASIS OF PAYMENT

Terrace Seeding 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 21011 - CONSTRUCTION ENTRANCE

Work under this bid item shall include all labor, equipment, and incidentals necessary to provide, install, maintain, and remove a Construction Entrance, as shown. The construction entrances shall be constructed in accordance with the City of Madison Standard Specifications for Public Works Construction.

The Contractor shall maintain all construction entrances as part of this bid item. This shall include replacement in the event of failure or at the discretion of the Construction Engineer based on sedimentation of entrance.

METHOD OF MEASUREMENT

Construction Entrance shall be measured per Each unit constructed, maintained, and removed in the field. Clear Stone used to construct the Construction Entrances shall be paid separately under BID ITEM - 20217 CLEAR STONE.

BASIS OF PAYMENT

Construction Entrance 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 construct, maintain, and remove the construction entrance.

BID ITEM 21014 - CLEAR STONE BERM (DITCH CHECK)

Work under this bid item shall include all labor, equipment, and incidentals necessary to provide, install, maintain, and remove a Clear Stone Ditch Checks, as shown. The ditch checks shall be constructed in accordance with City of Madison Standard Specifications for Public Works Construction.

The Contractor shall maintain all ditch checks as part of this bid item. This shall include replacement in the event of failure.

METHOD OF MEASUREMENT

Clear Stone Berm (Ditch Check) shall be measured per Each unit constructed, maintained, and removed in the field. Materials used to construct the berm, including Clear Stone and Filter Fabric, shall be paid separately under BID ITEM - 20217 CLEAR STONE and BID ITEM 20256 - RIP RAP FILTER FABRIC, TYPE HR.

BASIS OF PAYMENT

Clear Stone Berm (Ditch Check) 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 construct, maintain, and remove the ditch check.

BID ITEM 21063 - EROSION CONTROL MATTING, CLASS I, TYPE A- ORGANIC

DESCRIPTION

Work under this bid item shall include all labor, equipment, and incidentals necessary to provide, install, maintain and remove Erosion Control Matting, Class I, Type A – Organic in accordance with the City of Madison Standards Specifications for Public Works Construction. Erosion Control Matting Class I Type A-Organic shall be placed in areas of disturbance with slopes greater than 4:1 shall be provided with Erosion Control Matting WisDOT Class I, Type A. Disturbed areas with slopes less than 4:1 shall be restored with mulch in accordance with these special provisions, applicable sections of Article 207-Seeding of the City Standard Specifications for Public Works Construction and as shown on plans.

METHOD OF MEASUREMENT

Erosion Control Matting Class I Type A-Organic shall be measured by the Square Yard based on “Plan Quantity” without measurement thereof including overlap and runoff.

BASIS OF PAYMENT

Erosion Control Matting Class I Type A-Organic 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.

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

DESCRIPTION

Work under this bid item shall include all labor, equipment and incidentals necessary to provide, install, maintain and remove Erosion Control Matting, Class II, Type C – Organic in accordance with the City of Madison Standard Specifications for Public Works Construction. Erosion Control Matting Class II, Type C-Organic shall be provided over the vegetated access and fill areas adjacent to the vegetated access according to the Vegetated Access detail in the plans.

METHOD OF MEASUREMENT

Erosion Control Matting Class II, Type C- Organic shall be measured by the Square Yard based on “Plan Quantity” without measurement thereof including overlap and runoff.

BASIS OF PAYMENT

Erosion Control Matting Class II, Type C- Organic 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.

BID ITEM 21084 - EROSION CONTROL MATTING, CLASS III, TYPE D

DESCRIPTION

Work under this bid item shall include all labor, equipment and incidentals necessary to provide, install, maintain and remove Erosion Control, Class III, Type D in accordance with the City of Madison Standard Specifications for Public Works Construction. Erosion Control Matting Class III, Type D shall be provided as detailed in the plans as Turf Reinforcement Mat.

METHOD OF MEASUREMENT

Erosion Control Matting Class III, Type D shall be measured by the Square Yard based on “Plan Quantity” without measurement thereof.

BASIS OF PAYMENT

Erosion Control Matting Class III, Type D 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.

BID ITEM 30208 – HAND FORMED CONCRETE CURB & GUTTER

Work under this bid item shall include all materials, labor, equipment, and incidentals necessary to install curb and gutter for the High Point Church parking lot pavement replacement. Photographs of the curb and gutter shall be taken before and after construction by the Contractor. Contractor shall review the curb and gutter with Construction Engineer prior to replacement. If determined that these are not damaged, this bid item quantity may be reduced or eliminated.

METHOD OF MEASUREMENT

Hand Formed Concrete Curb and Gutter, shall be measured per linear foot installed determined by the Construction Engineer

BASIS OF PAYMENT

Hand FormedConcrete Curb and Gutter,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.

BID ITEM 30301 - 5 INCH CONCRETE SIDEWALK

Work under this bid item shall include all materials, labor, equipment, and incidentals necessary to replace existing 5-inch sidewalk that was damaged within the temporary construction easement at High Point Church. Contractor shall review the sidewalk with Construction Engineer prior to replacement. If determined that these are not damaged, this bid item quantity may be reduced or eliminated.

Damage to any other sidewalk outside of easement shall be incidental to this contract.

METHOD OF MEASUREMENT

5 Inch Concrete Sidewalk, shall be measured per square foot installed determined by the Construction Engineer.

BASIS OF PAYMENT

5 Inch Concrete Sidewalkshall 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.

BID ITEM 40102 - CRUSHED AGGREGATE BASE COURSE, GRADATION NO. 2

Work under this bid item shall include all labor, equipment, and incidentals necessary to provide and install crushed aggregate base course for the High Point Church parking lot pavement replacement in accordance with the City of Madison Standard Specifications for Public Works Contracts. Photographs of the pavement shall be taken before and after construction by the Contractor. Contractor shall review the pavement with the Construction Engineer prior to replacement. If determined that these are not damaged, this bid item quantity may be reduced or eliminated.

METHOD OF MEASUREMENT

Crushed Aggregate Base Course, Gradation No. 3 shall be measured per Ton installed as determined by the Construction Engineer.

BASIS OF PAYMENT

Crushed Aggregate Base Course, Gradation No. 3 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.

BID ITEM 40202 - HMA PAVEMENT 4 LT 58-28 S

Work under this bid item shall include all labor, equipment, and incidentals necessary to provide and install hot mix asphalt for the High Point Church parking lot pavement replacement in accordance with the City of Madison Standard Specifications for Public Works Contracts. Photographs of the pavement shall be taken before and after construction by the Contractor. Contractor shall review the pavement with the Construction Engineer prior to replacement. If determined that these are not damaged, this bid item quantity may be reduced or eliminated.

METHOD OF MEASUREMENT

HMA Pavement 4 LT 58-28 S, shall be measured per Ton installed as determined by the Construction Engineer.

BASIS OF PAYMENT

HMA Pavement 4 LT 58-28 S 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.

BID ITEM 90001 - STORMWATER CONTROL

DESCRIPTION

Work under this item shall include all labor, materials, equipment, and incidentals required to control dry and wet weather flow within the channel and pond area for the duration of the project, including any storm sewer rerouting necessary for the storm sewer installation and pond construction.

The existing storm channel receives a large amount of water during rain events. Overland flow is estimated to be approximately 170 cfs during a 100-year storm event. The Contractor shall be prepared to manage storm flow and secure construction and grading during rain events. The Contractor's approach for Stormwater Control shall be included in the Methods and Equipment Plan and shall include any additional equipment, erosion control devices, stone, piping, etc. required to manage storm events which shall be included with this bid item. The drawings identify the 2-year, 10-year, and 100-year peak flows at various entry points to the pond.

The Contractor shall be prepared to discuss their storm control plan in detail at the pre-construction meeting. Work under this bid item shall include all labor, materials, equipment, and incidentals necessary to manage dry and wet weather flow and conditions within the project, channel and proposed storm sewer.

METHOD OF MEASUREMENT

Storm Control shall be measured as a Lump Sum for all storm control necessary throughout construction.

BASIS OF PAYMENT

Storm Control shall be measured as described above and shall be paid at the contract unit price, which shall be considered full compensation for all labor, materials, equipment, and incidentals necessary to control storm flows, divert stormwater, and treat stormwater prior to discharge for the duration of the project.

BID ITEM 90002 - SITE DEWATERING/GROUNDWATER CONTROL

DESCRIPTION

Work under this item shall include all labor, materials, equipment, 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 accordance with these plans and specifications and the City of Madison Standard Specifications for Public Works Construction.

The Contractor shall be responsible for designing a construction dewatering plan to fit their construction methods. The Contractor shall submit a dewatering plan for approval to the Project Manager prior to beginning dewatering activities. The plan shall include proposed sediment control measures to be used during dewatering.

If the Contractor determines groundwater dewatering is necessary they are solely responsible for choosing a method of groundwater control that is compatible with the constraints defined in this section and with their proposed method of construction. 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.

If necessary the Contractor shall obtain permit(s), from the Wisconsin Department of Natural Resources (WDNR) and pay any fees required for permitting as part of this bid item, The Contractor shall be solely responsible for choosing a method of groundwater control that is compatible with the constraints defined by the WDNR and City of Madison. The Contractor shall be responsible for the adequacy of the groundwater control system until construction is complete 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 the pond construction is completed.

Soil Borings are provided in the Appendices to assist the Contractor in determining what methods are required to dewater the site. See Section 108.2 Permits for dewatering permit requirements.

The Contractor shall be aware that any 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.

METHOD OF MEASUREMENT

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

BASIS OF PAYMENT

Site Dewatering/Groundwater Control 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 - CLAY LINER PROVISION AND PLACEMENT

DESCRIPTION

Work under this item includes all materials, work/labor necessary equipment and incidentals required to provide material and install a 2-foot clay liner (finish depth) below the permanent pool as identified on the plans, typical sections, and as identified in these Special Provisions. Excavation of the in-situ soil to accommodate the clay liner placement is paid under BID ITEM 20101 – EXCAVATION CUT.

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.

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.

MATERIALS

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.

All areas that fall within native clays, per DNR criteria below, with a suitable thickness do not need to receive additional clay liner, but must be set at finish grade.

Clay liner shall be per Wisconsin DNR Type A Clay liner requirements. The City's geotechnical consultant shall verify that soils meet the requirements below prior to installing clay liner.

The material used shall meet the following specifications:

Wisconsin DNR Type A Clay liner criteria is as follows:

a. 50% fines (200 sieve) or more.
b. An in-place hydraulic conductivity of 1 x 10 -7 cm./sec. or less.
c. Average liquid limit value of 25 or greater, with no value less than 20.
d. Average PI of 12 or more with no values less than 10.
e. Clay compaction and documentation as specified in NRCS Wisconsin Construction Specification 300, Clay Liners
f. Minimum thickness of two feet.

If the Contractor determines to place new clay liner during winter months the clay shall be kept in an unfrozen condition prior to placement and moisture adjustment shall be completed prior to bringing the borrow to the site for placement. It is possible to place and compact clay on frozen ground, however the clay being placed shall be unfrozen and at a suitable moisture content to allow compaction.

The Contractor shall maintain dewatering activities until all sediment dredging and clay liner construction is completed.

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 shall be compacted and bonded with the first layer of the clay liner as specified for subsequent layers of clay liner.

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 Construction Engineer. The clay liner shall not be placed upon snow, ice, and no frozen material shall be incorporated in the clay liner.

The clay liner shall be placed in lifts. The thickness of each lift before compaction shall not exceed 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 hard and smooth for proper bond with the succeeding layer, it shall be scarified to a depth of not less than two (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 D-698) or Modified Proctor Test (ASTM D-1557).
The application of water to the clay shall be accomplished at the borrow areas insofar as practicable. Water may be applied by sprinkling the clay after placement and before compaction of the liner, if necessary. 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 D-698) or to a minimum of 90% of modified proctor dry density (ASTM D-1557), at a moisture content above optimum moisture.

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

Compaction of Clay shall be per NRCS Wisconsin Construction Specification 204 “Soil Liners”. Which requires one pass over the entire surface of fill per lift by specific methods. Smooth rollers are not suitable for compaction of fine-grained liners.

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 requirements of the specifications shall be reworked to meet the specifications or removed and replaced by acceptable clay. The replacement clay and the foundation and 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 engineering firm 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.

Liner construction shall be tested and documented as specified below. Copies of the documentation report, including test locations and test results, shall be provided to Construction Engineer.

Standard Proctor test:
ASTM D-698 - 1 per 500 cubic yards of clay liner or

Modified Proctor Test
ASTM D-1557 - 1 per 500 cubic yards of clay liner

Field Density Tests
ASTM D-2922, D-2167, D-1556, or D-2937 - 1 test per 100 square foot of clay liner

Atterberg Limit tests
ASTM D-4318 - 1 per 500 cubic yards of clay liner

Grain Size Distribution
ASTM D-422 - 1 per 500 cubic yards of clay liner

Permeability
ASTM D-5084 - 1 per 500 cubic yards of clay liner

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

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 proposed digital terrain models for bottom of pond surface and bottom of two (2) foot clay layer in the forebay areas. The limits of the clay liner can be found in the typical section drawn and plan.

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 90004 - POLYMER SETTLING

DESCRIPTION

Work under this item shall include all labor, materials, equipment, and incidentals to providing provide a portable “settlement treatment tank” (often a modified dumpster) and provision and proper application of polymer flocculants to settle sediment from stormwater pumped from the pond area during construction. The Contractor shall use this system and bid item as part of the dewatering to allow initial construction and as needed in coordination with their groundwater and stormwater control plans.

The selected polymer shall be environmentally benign; harmless to fish, wildlife, and plants; as well as non-toxic and non-combustible at the rate of application specified by the manufacturer. Asphalt based products will not be approved for use. Only products approved for field-testing, and field-tested by WDOT will be approved for use.

Polyacrylamide Soil Stabilizers shall conform to the WDOT’s Product Acceptability List (PAL) for Soil Stabilizers, Type B.

Polymer shall be applied in conformance with WDNR Storm Water Construction Technical Standard 1051 for Water Application of Polymers. Application shall be completed using conventional hydraulic seeding equipment or dry spreading. Application rates shall be as recommended by the manufacturer and shall meet the approval of the Construction Engineer. In general, rate of application shall be 1.35 lbs./ac-ft.

- Estimated Quantity: 15 Pounds

METHOD OF MEASUREMENT

Polymer Settling shall be measured by Pounds of material supplied and applied.

BASIS OF PAYMENT

Polymer Settling shall be measured as described above and paid for at the contract price shall be full compensation for all work, materials and incidentals to complete the work in accordance with the description.

BID ITEM 90005 - 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.

Contractor shall provide a topographic survey of the pond bottom after completion of dredging 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 90006 - TEMPORARY ACCESS ROAD

Work under this item shall include all labor, materials, equipment, and incidentals necessary to construct temporary access roads for Contractors use at locations identified on the plans. This bid item includes the temporary access roads from the High Point Church parking lot, as well as the temporary access road from North High Point Road. Work includes but is not limited to; excavation cut, temporary grading; removal and replacement of existing retaining wall; and placement, removal, and disposal of temporary aggregate, restoration including regrading to grade, topsoiling, seeding and matting.

Construction of the portion of the temporary access road on High Point Church Property shall include removal of the existing retaining wall, installation of temporary pipes as necessary to provide positive drainage to the pond, and installation of temporary slope stabilization. This shall be considered incidental to this bid item. **The Contractor shall provide a temporary access road work plan for review and approval prior to construction.**

All temporary side slopes greater than 4:1 shall be stabilized with Erosion Control Matting WisDOT Class I, Type A at no additional cost. The Contractor shall remove, salvage, and replace the existing boulder retaining wall as necessary for temporary access road construction. Any existing wall materials that are damaged during construction shall be replaced with equal or better wall materials. Photographs of the boulder retaining wall shall be taken before and after construction by the Contractor.

This bid item includes repair to the entire area within the easement, to pre-construction conditions or to new conditions that are called out on plans.

Aggregate used for temporary access roads shall follow specification section 40102 Crushed Aggregate Base Course and shall be incidental to this bid item.

METHOD OF MEASUREMENT

Temporary Access Road shall be measured as a Lump Sum for construction of the two temporary access roads shown on plans (one from the construction entrance off the parking lot of High Point Church and one from the construction entrance off of North High Point Road).

BASIS OF PAYMENT

Temporary Access Road 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 90007 - VEGETATED ACCESS

Work under this item shall include all labor, materials, equipment, and incidentals necessary to install the Vegetated Access including compaction of subgrade, placement of the load bearing grass paver system and placement of clean, sharp sand utilized inside the grass paver system. The grass paver system shall be GrassPave2 Porous Grass Paver (or equal). All materials shall be installed in accordance with manufacturer specifications and recommendations.

Payment for stripping of topsoil and excavation for placement of Vegetated Access Road shall be paid under BID ITEM - 20101 EXCAVATION CUT. Payment for the placement and compaction of the dense graded base course shall be paid under BID ITEM 90011 – CRUSHED AGGREGATE BASE COURSE, VEGETATED ACCESS.

Payment for seeding and erosion mat shall be paid under BID ITEM 20701 – TERRACE SEEDING and BID ITEM 21073 – Class II, Type C – Organic. Payment for Topsoil Placement shall be paid under BID ITEM 20221 – TOPSOIL.

METHODS OF MEASUREMENT

Vegetated Access shall be measured by the Square Foot, based on plan quantity, without measurement thereof.

BASIS OF PAYMENT

Vegetated Access 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 Vegetated Access in accordance with the Standard Specifications and supplier's recommendations.

BID ITEM 90008 - 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 Wexford Pond does not require landfill disposal. The sediment sampling report with analytical results is provided as an attachment to these specifications. Results are included in Attachment A.

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 conference, whichever comes first. 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. The city will assist with appropriate sections of Form 4400-248.

The disposal site at a minimum shall meet the following NR 528.04(2) Performance Standards:
(1) No person may use or dispose of accumulated sediment at a site if there is a reasonable probability that the sediment end use will 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 that will cause or exacerbate an exceedance of any preventive action limit or enforcement standards at a point of standards application as defined in ch. NR 140. The point of standards application is defined by s. NR 140.22(1).

See the Permits sections for additional requirements related to the disposal site.

- Total Estimated Sediment Dredging 4,439 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 90005 – CONSTRUCTION SURVEYING verifying that plan depths were met.

BID ITEM 90009 - AUTHORIZED ADDITIONAL SEDIMENT REMOVAL

DESCRIPTION

Work under this bid item shall include all labor, materials, equipment and incidentals necessary to excavate, remove, haul, and dispose of additional sediment as authorized by Project Manager after the site had been dewatered. Contractor shall notify the Project Manager after the site has been dewatered to identify areas for additional sediment removal prior to starting sediment removal identified under BID ITEM - 90008 DREDGE, HAUL AND DISPOSE OF SEDIMENT.

METHOD OF MEASUREMENT

Authorized Additional Sediment Removal shall be measured by the Cubic Yard based on the Construction Engineer survey of the additional sediment dimensions and depth as approved by the Project Manager.

BASIS OF PAYMENT

Authorized Additional Sediment Removal 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.

BID ITEM 90010 - GRAVITY BLOCK RETAINING WALL

DESCRIPTION

Work under this item shall include all design, labor, materials, equipment, and incidentals necessary to install and stain the Gravity Block Retaining wall in accordance with drawings, including retaining wall blocks, leveling pad, filter fabric, clear stone backfill material, and stain.

Design References:

1. AASHTO LRFD Bridge Design Specification, current edition.
2. FHWA-NHI-10-024 Volume I and GEC 11 Design of Mechanically Stabilized Earth Walls and Reinforced Soil Slopes.

Precast Modular Block Units:

1. AASHTO M 194–Standard Specification for Chemical Admixtures for Concrete.
2. ASTM C94–Standard Specification for Ready-Mixed Concrete.
3. ACI 211.1–Standard Practice for Selecting Proportions for Normal, Heavyweight, and Mass Concrete
4. ASTM C136–Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates.
5. ASTM C140–Standard Test Method of Sampling and Testing Concrete Masonry Units.
6. ASTM C143–Standard Test Method for Slump of Hydraulic-Cement Concrete.
7. ASTM C260–Standard Specification for Air-Entraining Admixtures for Concrete.
8. ASTM C666–Standard Test Method for Concrete Resistance to Rapid Freezing and Thawing.
9. ASTM C920–Standard Specification for Elastomeric Joint Sealants.
10. ASTM C1116–Standard Specification for Fiber-Reinforced Concrete.
11. ASTM C1611–Standard Test Method for Slump Flow of Self-Consolidating Concrete.

12. ASTM D 6916-Standard Test Method for Determining Shear Strength Between Segmental Concrete Units (Modular Concrete Blocks).

SUBMITTALS:
The following information shall be provided:

1. Manufacturer's product data and installation instructions.
2. Manufacturer's test reports certifying that the retaining wall units meet the requirements of this specification and the requirements of the construction drawings.
3. Construction drawings for the retaining wall system. The engineering designs, techniques, and material evaluations shall be in accordance with the manufacturer's requirements. Construction drawings shall include all details necessary for construction of the retaining wall, including typical wall sections, elevations and steps in top and bottom of wall, locations, sizes, types of block, cap sizes, and any other required information.
4. The design of the Gravity Block Retaining Wall shall be prepared by a licensed Professional Engineer. Wall design shall consider internal and external stability of the wall in accordance with AASHTO LRFD specifications. The external stability analysis shall include evaluation of sliding, eccentricity, and bearing capacity at critical wall locations. The design calculations shall be included in the stability analysis checks.
5. Gradation reports for aggregates used for leveling pad, unit/drainage fill, and for select reinforced fill if required in the final engineering construction drawings.
6. All submittals must be provided and reviewed prior to the start of retaining wall construction. The detailed plans and shop drawings shall include all details, dimensions, quantities, and cross-sections necessary to construct the walls.

QUALITY ASSURANCE:

1. Qualifications: Contractor shall have successfully installed at least three similar projects within the last five years. Contractor shall maintain at least one supervisor on the site at all times that worked on one or more of these projects.
2. Retaining Wall Design Engineer: The Retaining Wall Design Engineer shall be licensed to practice in the State of Wisconsin. Additionally, the Retaining Wall Design Engineer shall be independently capable of performing all retaining wall analysis calculations (internal and external stability, seismic analysis, water analysis, and global stability) and have designed at least three wall projects similar to that of this project. The wall designer is responsible for all stability checks and the full engineering analysis and design of the walls.
3. Geotechnical Information: No soil borings were taken for this project near the proposed retaining wall. Contractor shall conduct its own investigation if deemed necessary by the wall supplier, to determine physical conditions at the site which may affect the work. Subgrade shall be observed by the Construction Engineer or the City's geotechnical engineering consultant to confirm that the actual foundation soil conditions meet or exceed assumed design strength. Soils not meeting required strength shall be removed and replaced with acceptable material. Costs for removing and replacing this material shall be resolved via a contract change order.

MANUFACTURERS:

1. All retaining wall units shall be obtained from the same manufacturer. Acceptable manufacturer's for this project are RediRock, ReCon - Series 50, Versa-Lok - Bronco, or equal. Other proprietary wall systems may be used for this work, but must conform to the requirements of this specification and be pre-approved for use by the City of Madison.

DESIGN REQUIREMENTS:

It is the responsibility of Contractor to submit a design and supporting documentation as required by this specification section, for review and acceptance by ENGINEER, to show the proposed wall design is in compliance with the design specifications. The submittal shall include the following items for review: detailed plans and shop drawings, complete design

calculations, explanatory notes, supporting materials, and specifications. The detailed plans and shop drawings shall include all details, dimensions, quantities and cross-sections necessary to construct the walls. Submit shop drawings to ENGINEER no later than 60 days from the date of notification to proceed with the project and a minimum of 30 days prior to the date proposed to begin wall construction. All plans, shop drawings, and calculations shall be signed, sealed and dated by a professional engineer licensed in the State of Wisconsin. The design of the wall shall be in compliance with the current American Association of State Highway and Transportation Officials LRFD (AASHTO LRFD) Bridge Design Specifications with latest interim specifications. Loads, load combinations, load and resistance factors shall be as specified in AASHTO LRFD Section 11. The associated resistance factors shall be defined in accordance with Table 11.5.7-1 in AASHTO LRFD.

Walls shall be designed for a minimum live load surcharge of 100 psf. A maximum value of the angle of internal friction of the wall backfill material used for design shall be assumed to be 30 degrees without a certified report of tests. If a certified report of tests yields an angle of internal friction greater than 30 degrees, the larger test value may be used for design, up to a maximum value of 36 degrees. The design must include analyses at critical sections that clearly show the Capacity Demand Ratio (CDR) for sliding, eccentricity, and bearing check. The minimum embedment of the wall shall be 6 inches below finished grade, or as given on the drawings. All walls shall be provided with a concrete leveling pad. Minimum wall embedment does not include the leveling pad depth. Step the leveling pad to follow the general slope of the ground line. Frost depth shall not be considered in designing the wall for depth of leveling pad.

WALL SYSTEM COMPONENTS:

Concrete used in the production of the retaining wall units shall not consist of returned, reconstituted, surplus, or waste concrete. It shall be an original production mix meeting the following:

1. Minimum 28-day compressive strength of 4,000 psi.
2. Shall be free of water soluble chlorides and chloride based accelerator admixtures.
3. Maximum water/cement ratio of 0.45.
4. Air entrainment in conformance with ASTM C94 Table 1.
5. Maximum slump of 5 inches ±1.5 inches per ASTM C143 for conventional concrete mix designs.
6. Slump flow for self-consolidating concrete mix designs shall be between 18 inches and 32 inches

All units shall incorporate a mechanism or devices that develop a mechanical connection between vertical block layers. Units that are broken, have cracks wider than 0.02 inches and longer than 25% of the nominal height of the unit, chips larger than 1 inch, have excessive efflorescence, or are otherwise deemed unacceptable by the City, shall not be used within the wall. A single block front face style shall be used throughout each wall. The color and surface texture of the block shall be as given on the plan.

The top course shall be a full height top block. A cap of this type shall have texture, color, and appearance, as noted on the drawings. Block dimensions may vary no more than ±1/8 inch from the standard values published by the manufacturer. Erect wall facing units and other associated elements according to the wall manufacturer's construction guide and to the lines, elevations, batter, and tolerances as shown on the drawings. Center the initial layer of facing units on the leveling pad, then properly level and align them. Fill formed voids or openings in the facing units with wall backfill, Type A. Remove all debris on the top of each layer of facing units, before placing the next layer of facing units. Install all pins, rods, clips, or other devices used to develop mechanical interlock between facing unit layers in accordance with the manufacturer's directions.

Wall texture shall be a simulated limestone appearance.

LEVELING PAD AND BACKFILL:

Provide a unreinforced cast-in-place concrete leveling pad. The minimum width of the leveling pad shall be as wide as the proposed blocks plus 6 inches, with 6 inches of the leveling pad extending beyond the front face of the blocks. The minimum thickness of the leveling pad shall be 6-inches. The leveling pad shall step to follow the general slope of the ground line. The leveling pad steps shall keep the bottom of the wall below the minimum embedment. The bottom row of wall facing units shall be horizontal and 100% of the unit surface shall bear on the leveling pad.

Furnish and place backfill for the wall as shown on the drawings and as hereinafter provided. All backfill placed within a zone from the top of the leveling pad to the top of the final layer of wall facing units and within 1 foot behind the back face of the wall shall be Coarse Aggregate Size No. 57 per ASTM C33. This includes all material used to fill openings in the wall facing units.

A layer of geotextile (Mirafi 140N, or equal) shall be placed vertically between the wall and the backfill. The geotextile shall extend from the top of the leveling pad to 6 inches below the surface of the retained soil. Place backfill materials in the areas as indicated on the drawings and as detailed in this specification. Backfill lifts shall be no more than 8-inches in depth, after compaction. Backfilling shall closely follow erection of each course of wall facing units. Conduct backfilling operations in such a manner as to prevent damage or misalignment of the wall facing units or other wall components. At no expense to OWNER, correct any such damage or misalignment. A field representative of the wall supplier shall be available during wall construction to provide technical assistance to Contractor. Compact wall backfill with at least three passes of lightweight manually operated compaction equipment to at least 95 percent of the maximum dry density per ASTM D698. Adequate moisture shall be present in the backfill during placement and compaction to prevent segregation and to help achieve compaction. Compaction of backfill within 3 feet of the back face of the wall should be accomplished using lightweight compaction devices. Use of heavy compaction equipment or vehicles should be avoided within 3 feet of the modular blocks.

METHOD OF MEASUREMENT

Gravity Block Retaining Wall shall be paid based on installed vertical square footage of the wall face as measured from the top of the leveling pad to the top of the wall. The bid quantities of the Gravity Block Retaining Wall shall be the basis for determination of the final payment quantity.

BASIS OF PAYMENT

Gravity Block Retaining Wall 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, excluding excavation. Payment for excavation related to Gravity Block Retaining Wall construction shall be paid for under Bid Item 20101 - Excavation Cut.

BID ITEM 90011 - CRUSHED AGGREGATE BASE COURSE, VEGETATED ACCESS

Work under this bid item shall include all labor, materials equipment, and incidentals necessary to install crushed aggregate base course for the Vegetated Access.

Compacted dense graded base shall follow manufacturer recommendations. For reference, manufacturer recommendations for dense graded base using the GrassPave2 Porous Grass Pave system can be found at:

https://www.invisiblestructures.com/wpcontent/uploads/Base_Course_Material_Recomendation_2020.pdf

METHOD OF MEASUREMENT

Crushed Aggregate Base Course, Vegetated Access shall be measured per Ton installed.

BASIS OF PAYMENT

Crushed Aggregate Base Course, Vegetated Access 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.

BID ITEM 90012- SHORELINE SEED MIX

Work under this bid item shall include all labor, materials, equipment and incidentals necessary to provide and place shoreline seed mix as defined in these special provisions and Article 207 of the City of Madison Standard Specifications for Public Works Construction.

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.

Seed Mix shall be custom mixed or a modified pre-designed mix from an approved native seed supplier as specified below. Seed at the rate recommended by the manufacturer. Submit additions or substitutions and final mix to Project Manager for approval. The Project Manager shall inspect and approve the seed prior to placement.

Shoreline Seed Mix shall be applied at 18 oz. per acre.

DESCRIPTION	% BY WEIGHT
GRASSES, SEDGES, AND RUSHES	
Carex vulpinoidea	44.44
Glyceria striata	44.44
Scirpus atrovirens	11.11
TOTALS	**99.99**

METHOD OF MEASUREMENT

Shoreline Seed Mix shall be paid based on the “Plan Quantity” without measurement thereof. The plan quantity was computed estimating the areas to be disturbed by construction activities. No changes to this quantity shall be approved unless there are modifications to the plan design.

BASIS OF PAYMENT

Shoreline Seed Mix 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 90013 - UPLAND GRASS AND NON STRAT FORB MIX

Seeding for all areas disturbed outside of 5 foot from the pond perimeter on City property shall be seeded with the Upland Grass and Non Strat Forb Mix seed mix as defined in these special provisions and Article 207 of the City of Madison Standard Specifications for Public Works Construction.

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.

Seed Mix shall be custom mixed or a modified pre-designed mix from an approved native seed supplier as specified below. Seed at the rate recommended by the manufacturer. Submit additions or substitutions and final mix to Project Manager for approval. The Project Manager shall inspect and approve the seed prior to placement.

Upland Grass and Non Strat Seed Mix shall be applied at 5.28 lbs per acre.

DESCRIPTION	% BY WEIGHT
FORBS	
Coreopsis tripteris	1.2
Echinacea purpurea	14.2
Monarda fistulosa	2.4
Physostegia virginiana	1.2
Rudbecka subtomentosa	3.6
Solidago graminifolia	.06
Veronicastrum virginicum	1.2
Total of FORBS:	23.86
GRASSES, SEDGES & RUSHES	
Andropogon gerardii	37.9
Sorghastrum nutans	37.9
Totals of GRASSES, SEDGES & RUSHES :	75.8
TOTALS	**100**

METHOD OF MEASUREMENT

Upland Grass and Non Strat Seed Mix shall be paid based on the “Plan Quantity” without measurement thereof. The plan quantity was computed estimating the areas to be disturbed by construction activities identified in the plans. No changes to this quantity shall be approved unless there are modifications to the plan design.

BASIS OF PAYMENT

Upland Grass and Non Strat Seed Mix 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.

END OF SPECIAL PROVISIONS

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

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.
Andrew J. Zwieg, P.E.

Financial Manager
Steven B. Danner-Rivers

June 28, 2023

NOTICE OF ADDENDUM
ADDENDUM 1
CONTRACT NO. 8876
WEXFORD POND DREDGING

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

SECTION D: SPECIAL PROVISIONS

- **REVISE:** Revise SECTION 105.12 COOPERATION OF THE CONTRACTOR 5th paragraph to to clarify that dredged material may not be temporarily stockpiled. The paragraph should read as follows.

  Contractor is alerted that very little additional space is available within the project grading limits for material storage, staging, and other uses. Contractor may stage equipment, temporary stockpile topsoil and store materials within the staging areas identified on the plans that will not affect existing trees to remain or protected vegetation. **The Contractor SHALL NOT temporarily stockpile dredged material. Dredge material must be directly loaded and hauled via watertight haul trucks with tailgate seals to eliminate the loss of water during hauling operations.** These areas will be restored in kind when construction is complete.

- **REVISE:** Revise SECTION 105.12 COOPERATION OF THE CONTRACTOR 6th paragraph to to clarify that dredged material may not be be temporarily stockpiled. The paragraph should reas as follows:

  The Contractor shall use care when access the site and during construction not to damage existing trees, plantings, fences, utilities, structures, or other facilities that are to remain. Damage to these items during construction shall be repaired or replaced at the Contractor's expense per the City of Madison Standard Specifications and shall be considered incidental to this contract except as specified in the below paragraph. The Contractor shall protect existing elements within the approximate construction area available for Contractor's use as indicated on the drawings. The Contractor should be made aware that existing rip rap may exist in the existing pond within the proposed sediment dredging and pond excavation limits. The Contractor shall replace all existing riprap excavated at no additional cost. In addition, the Contractor may choose to install additional access roads, provide temporary stockpiles **(excluding stockpiling dredged material or excavation cut),** and store material and equipment within the approximate construction area. Any additional site disturbance not indicated on the drawings or included in the bid item quantities shall be restored in accordance with the specifications at no additional cost.

- **REVISE:** Revise SECTION 109.2 PROSECUTION OF THE WORK, 3rd paragraph to clarify that the clay liner may be placed on frozen foundation. The paragraph shall be revised to read:

  The clay liner shall not be placed until the required subgrade preparation has been completed and the subgrade has been inspected and approved by the City's Geotechnical Consultant. The clay liner shall meet the criteria in WDNR SOC Standard 1001 Wet Detention Pond. Frozen clay cannot be utilized to create the liner. 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 Construction Engineer. **The clay liner shall not be placed upon snow or ice.**

- **REVISE:** Revise BID ITEM 90003 – CLAY LINER PROVISION AND PLACEMENT, 1st paragraph under CONSTRUCTION – PLACEMENT to clarify that the clay liner may be placed on frozen foundation. The paragraph shall be revised to read as follows:

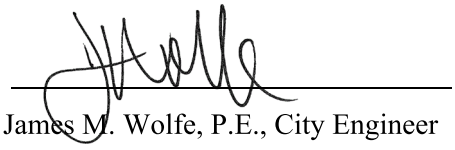
  The clay liner shall not be placed until the required foundation preparation has been completed and the foundation has been inspected and approved by the Construction Engineer. The clay liner shall not be placed upon snow, ice, and no frozen material shall be incorporated in the clay liner. **The clay liner MAY BE PLACED on frozen foundation subgrade free of snow and ice.**

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 website 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.



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

JMW:scl

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

Deputy 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
Christina M. Bachmann, P.E.
Mark D. Moder, P.E.

Financial Manager
Steven B. Danner-Rivers

6/29/2023

NOTICE OF ADDENDUM
ADDENDUM 2

CONTRACT NO. 8876
WEXFORD POND DREDGING

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

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

Remove and replace with attached Page A-1

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 website 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.

James M. Wolfe, City Engineer

CC:
enscl

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:	WEXFORD POND DREDGING
CONTRACT NO.:	8876
SBE GOAL	5%
BID BOND	5%
SBE PRE BID MEETING	See Pre Bid Meeting info below
PREQUALIFICATION APPLICATION DUE (2:00 P.M.)	7/6/2023
BID SUBMISSION (2:00 P.M.)	7/13/2023
BID OPEN (2:30 P.M.)	7/13/2023
PUBLISHED IN WSJ	6/22/20223, 6/29/2023, 7/6/2023

SBE PRE BID MEETING: Small Business Enterprise Pre-Bid Meetings are not being held in person at this time. Contractors can schedule one-on-one phone calls with Tracy Lomax in Affirmative Action to count towards good faith efforts. Tracy can be reached at (608) 267-8634 or by email, tlomax@cityofmadison.com.

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

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

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 - 2023 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.

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

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.
Andrew J. Zwieg, P.E.

Financial Manager
Steven B. Danner-Rivers

7/10/2023

NOTICE OF ADDENDUM
ADDENDUM 3

CONTRACT NO. 8876
WEXFORD POND DREDGING

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

PLANS

- **REPLACE: Sheet 16 with revised Sheet 16.**
- **REPLACE: Sheet 17 with revised Sheet 17.**

ATTACHMENT B: SOIL BORINGS AND GEOTECHNICAL ANALYSIS

- **REPLACE:** Sediment Core Logs with New Sediment Core Logs changing soil properties column heading to tsf (tons per square foot) showing compressive strength of the clay.

SECTION D: SPECIAL PROVISIONS

- **REPLACE: BID ITEM 20101 – EXCAVATION CUT with the following:**

  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. Excavation cut shall be in accordance with Article 201 of the Standard Specifications.

  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, placing four (4) inches of topsoil, existing surface used was the top of the existing conditions surface. No expansion or shrinkage factors have been or will be applied to the

earthwork quantities. Three-dimensional CAD files containing the digital terrain models used for the earthwork calculations are available.

The following Excavation Cut activities and amount shall be paid at the "Plan Quantity" without measurement thereof:

- Clay Liner and Over-Excavation: 7,026 CY(includes a mixture of existing clay and native material below existing clay liner)
- Topsoil Stripping: 322 CY (includes topsoil stripping related to construction of the proposed vegetated access,retaining wall, and storm sewer piping and structures)
- Vegetated Access: 214 CY
- Riprap Excavation: 26 CY
- Retaining Wall: 154 CY
- Forebay Excavation to Finished Pond Bottom: 3,607 CY (over excavation for clay liner included above)

  Total: 11,349 CY

No changes to the above shall be approved unless there are modifications to the plan design or significantly differing conditions encountered at the site. No expansion or shrinkage factors have been applied to the earthwork quantities. Quantities for clay liner excavation were calculated based on typical design depth, and were not measured. It is anticipated that actual clay line depths and quantities may vary. The Contractor shall not receive any increase in payment beyond the plan quantity included in the proposal page for removal of clay liner.

Suitable materials (to be determined by the Engineer) may be reused as fill within the project limits. Placement of these fill materials shall be considered incidental to this bid item and shall not be compensated separately. All double handling and subsoil placement is included in this bid item.

Excess material generated during pond construction shall hauled off-site and disposed of by the Contractor at a site provided by the Contractor at no additional charge to the City of Madison.

Contractor to note all excavated areas shall be filled at the end of each work day. No excavated areas shall be "open" during non-work hours.

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 90008 - DREDGE, HAUL, AND DISPOSE OF SEDIMENT.
- Additional sediment removal based on field conditions shall be paid under Bid Item 90009 – AUTHORIZED SEDIMENT REMOVAL.
- Placement of clay liner shall be paid under Bid Item 90003 – CLAY LINER PROVISION AND PLACEMENT.
- Any excavation cut related to the construction of the Temporary Access Road including temporary grading, retaining wall removal and reconstruction, topsoil stripping, and repair of facilities with the Temporary Construction Access Easement shall be incidental to BID ITEM – 90006 TEMPORARY ACCESS ROAD.

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

EXCAVATION CUT above 11,349 CY shall only be paid for excavation cut related removal of aggregate base in order to repair damaged asphalt within the temporary construction easement at High Point Church. The proposal page includes 380 CY of addition EXCAVATION CUT related to repair of these facilities for bidding purposes. These quantities may be eliminated, increased or decreased.

Temporary Stockpiles

Any and all on-site stockpiles the Contractor deems necessary shall be enclosed with a silt sock provided at no additional cost. No material is permitted to be stockpiled in the partially constructed pond. The Contractor shall not store Excavation Cut on site, with the exception of topsoil that is planned to be reused, for periods longer than 48 hours. The Contractor shall be mindful of predicted weather events and remove cut material accordingly.

See the Attachment B for site soil boring information.

METHOD OF MEASUREMENT

Excavation Cut within the limits shown in the plan set, or as defined in these Special Provisions, shall be paid based on the "Plan Quantity" without measurement thereof, except as identified above for excavation cut for pavement and aggregate base course excavation within the temporary easement. No changes to this quantity shall be approved unless there are modifications to the plan design No expansion or shrinkage factors have been applied to the earthwork quantities. Quantities for clay liner excavation were calculated based on typical design depth, and were not measured. It is anticipated that actual clay liner depths and quantities may vary. The Contractor shall not receive any increase in payment beyond the plan quantity included in the proposal page for removal of clay liner.

Excavation Cut related to repair of repair/replacement of pavement and base course within the temporary access easement at High Point Church as described above shall be measured based in the field and determined by the Construction Engineer.

BASIS OF PAYMENT

Excavation Cut shall be paid at the "Plan Quantity" contract unit price for all excavation cut, except as defined above for pavement and aggregate base course excavation within the temporary easement. This shall include full compensation for all labor, materials, equipment, and incidentals necessary to complete this item of work.

- **REPLACE: BID ITEM 90003 – CLAY LINER PROVISION AND PLACEMENT with the following:**

BID ITEM 90003 - CLAY LINER PROVISION AND PLACEMENT

DESCRIPTION

Work under this item includes all materials, work/labor necessary equipment and incidentals required to provide material and install a 2-foot clay liner (finish depth) below the permanent pool as identified on the plans, typical sections, and as identified in these Special Provisions. Excavation of the in-situ soil to accommodate the clay liner placement is paid under BID ITEM 20101 – EXCAVATION CUT.

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.

This bid item includes construction of the clay underwater berm separating forebays from the main pool as shown in the plans and drawings. The underwater berm liner compaction shall be 95% (ASTMD698) similar to clay liners.

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.

MATERIALS

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 Contractor shall not be allowed to re-use existing clay soils for the Type A Clay liner.

All areas that fall within native clays, per DNR criteria below, with a suitable thickness do not need to receive additional clay liner, but must be set at finish grade.

Clay liner shall be per Wisconsin DNR Type A Clay liner requirements below. Type B or synthetic HDPE or GCL liners shall under no circumstance be allowed.

The City's geotechnical consultant shall verify that soils meet the requirements below prior to installing clay liner.

The material used shall meet the following specifications:

Wisconsin DNR Type A Clay liner criteria is as follows:

a. 50% fines (200 sieve) or more.
b. An in-place hydraulic conductivity of 1 x 10 -7 cm./sec. or less.
c. Average liquid limit value of 25 or greater, with no value less than 20.
d. Average PI of 12 or more with no values less than 10.

e. Clay compaction and documentation as specified in NRCS Wisconsin Construction Specification 300, Clay Liners
f. Minimum thickness of two feet.

If the Contractor determines to place new clay liner during winter months the clay shall be kept in an unfrozen condition prior to placement and moisture adjustment shall be completed prior to bringing the borrow to the site for placement. It is possible to place and compact clay on frozen ground, however the clay being placed shall be unfrozen and at a suitable moisture content to allow compaction.

The Contractor shall maintain dewatering activities until all sediment dredging and clay liner construction is completed.

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 shall be compacted and bonded with the first layer of the clay liner as specified for subsequent layers of clay liner.

There are 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 Construction Engineer. The clay liner shall not be placed upon snow, ice, and no frozen material shall be incorporated in the clay liner.

The clay liner shall be placed in lifts. The thickness of each lift before compaction shall not exceed 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 hard and smooth for proper bond with the succeeding layer, it shall be scarified to a depth of not less than two (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 D-698) or Modified Proctor Test (ASTM D-1557).

The application of water to the clay shall be accomplished at the borrow areas insofar as practicable. Water may be applied by sprinkling the clay after placement and before compaction of the liner, if necessary. 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 D-698) or to a minimum of 90% of modified proctor dry density (ASTM D-1557), at a moisture content above optimum moisture.

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

Compaction of Clay shall be per NRCS Wisconsin Construction Specification 204 "Soil Liners". Which requires one pass over the entire surface of fill per lift by specific methods. Smooth rollers are not suitable for compaction of fine-grained liners.

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 requirements of the specifications shall be reworked to meet the specifications or removed and replaced by acceptable clay. The replacement clay and the foundation and 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 engineering firm 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.

Liner construction shall be tested and documented as specified below. Copies of the documentation report, including test locations and test results, shall be provided to Construction Engineer.

Standard Proctor test:

ASTM D-698 - 1 per 500 cubic yards of clay liner or

Modified Proctor Test

ASTM D-1557 - 1 per 500 cubic yards of clay liner

Field Density Tests
ASTM D-2922, D-2167, D-1556, or D-2937 - 1 test per 100 square foot of clay liner

Atterberg Limit tests
ASTM D-4318 - 1 per 500 cubic yards of clay liner

Grain Size Distribution
ASTM D-422 - 1 per 500 cubic yards of clay liner

Permeability
ASTM D-5084 - 1 per 500 cubic yards of clay liner

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

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 proposed digital terrain models for bottom of pond surface and bottom of two (2) foot clay layer in the forebay areas. The limits of the clay liner can be found in the typical section drawn and plan.

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.

- **REPLACE: BID ITEM 90008 – DREDGE, HAUL, AND DISPOSE OF SEDIMENT Sediment with the following:**

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.

At least one month prior to construction, the Contractor shall submit a Methods and Equipment Plan per Section 109.5 Methods and Equipment. The Contractor shall note that this shall include detailed information regarding plans for dredging, hauling and disposing of sediment.

The Contractor shall take into consideration uplift of the existing liner from water pressure to prevent damage to the clay liner during construction.

The Contractor shall be responsible for any damage to the existing clay liner. The Contractor shall be required to repair any damaged areas from the clay liner to their original condition including but not limited to dewatering the site to repair damaged clay liner, removing existing damaged clay liner, importing new clay liner, regrading portions of clay bottom to original conditions to the Engineer's satisfaction.

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 Wexford Pond does not require landfill disposal. The sediment sampling report with analytical results is provided as an attachment to these specifications. Results are included in Attachment A. Additionally, the Contractor shall note that low-contact pressure equipment shall be required.

The Contractor is responsible for accounting for uplift of the existing liner after dewatering.

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 conference, whichever comes first. 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. The city will assist with appropriate sections of Form 4400-248.

The disposal site at a minimum shall meet the following NR 528.04(2) Performance Standards:

(1) No person may use or dispose of accumulated sediment at a site if there is a reasonable probability that the sediment end use will 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 that will cause or exacerbate an exceedance of any preventive action limit or enforcement standards at a point of standards application as defined in ch. NR 140. The point of standards application is defined by s. NR 140.22(1).

See the Permits sections for additional requirements related to the disposal site.

- Total Estimated Sediment Dredging 4,439 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 90005 – CONSTRUCTION SURVEYING verifying that plan depths were met.

QUESTION AND ANSWER

Q. We were wondering if either a Type B clay or a synthetic liner can be substituted?

A. No, Type A Clay Liner is required. No other liner shall be allowed or approved.

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 website 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

JMW:scl

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

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.
Andrew J. Zwieg, P.E.

Financial Manager
Steven B. Danner-Rivers

July 11, 2023

NOTICE OF ADDENDUM
ADDENDUM 4

CONTRACT NO. 8876
WEXFORD POND DREDGING

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

QUESTION AND ANSWER

Q. Can you provide CAD data for bidding?

A. CAD LANDXML of proposed and existing surfaces, as well as surface files of bathymetric data are available upon request

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 website 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,

For:

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

SECTION E: BIDDERS ACKNOWLEDGEMENT

WEXFORD POND DREDGING
CONTRACT NO. 8876

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

1. The undersigned having familiarized himself/herself with the Contract documents, including Advertisement for Bids, Instructions to Bidders, Form of Proposal, City of Madison Standard Specifications for Public Works Construction - 2023 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. 2 through 4 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.
4. I hereby certify that I have met the Bid Bond Requirements as specified in Section 102.5. *(IF BID BOND IS USED, IT SHALL BE SUBMITTED ON THE FORMS PROVIDED BY THE CITY. FAILURE TO DO SO MAY RESULT IN REJECTION OF THE BID).*
5. I hereby certify that all statements herein are made on behalf of Integrity Grading & Excavating, Inc. (name of corporation, partnership, or person submitting bid) a corporation organized and existing under the laws of the State of Wisconsin a partnership consisting of _____; an individual trading as _____; of the City of Schofield State of _____; that I have examined and carefully prepared this Proposal, from the plans and specifications and have checked the same in detail before submitting this Proposal; that I have fully authority to make such statements and submit this Proposal in (its, their) behalf; and that the said statements are true and correct.

Chris Wendt

SIGNATURE

President

TITLE, IF ANY

Sworn and subscribed to before me this 10 day of July, 20 23.

Ashley Bohman

(Notary Public or other officer authorized to administer oaths)

ASHLEY BOHMAN NOTARY PUBLIC STATE OF WISCONSIN

My Commission Expires August 3, 2025

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

Contract 8876 – Integrity Grading & Excavating, Inc.

Section E: Bidder's Acknowledgement
This section is a required document for the bid to be considered complete. There are two methods for completing the Bidder Acknowledgement Report. Method one: The report can be downloaded, completed, and uploaded to this site to be included with your electronic bid. Method two: The report can be downloaded from the site and submitted by hand to the City of Madison. Either method of submission requires that the Bidder Acknowledgement Report be received by the bid due date.

Method of Submittal for Bidder Acknowledgement (click in box below to choose) *
I will download Bidder Acknowledgement Downloadable Document, complete, and upload online.

The bidder acknowledges receipt of the following addenda to the contract for the above designated project. Please check the appropriate box for each addendum reviewed. If no addenda have been issued, then no boxes are required to be checked.

Any addenda issues after 12:00 P.M. on the Tuesday proceeding the bid due date shall include a provision extending the bid due date.

Addendum Acknowledgement

Acknowledge each Addenda reviewed by checking the appropriate checkboxes below.

- [x] Addendum 1*
- [x] Addendum 2*
- [x] Addendum 3*
- [x] Addendum 4*
- [ ] Addendum 5
- [ ] Addendum 6

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

Method of Submittal for BVC (click in box below to choose) *
I will submit Bid Express fillable online form (BVC).

Section F: Best Value Contracting (BVC) Fillable Online Form
Best Value Contracting
1. The Contractor shall indicate the non-apprenticeable trades used on this contract.

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

☐ Contractor has a total skilled workforce of four or less individuals in all apprenticeable trades combined.

☐ No available trade training program; The Contractor has been rejected by the only available trade training program, or there is no trade training program within 90 miles.

☐ Contractor is not using an apprentice due to having a journey worker on layoff status, provided the journey worker was employed by the contractor in the past six months.

☐ First time contractor on City of Madison Public Works contract requests a onetime exemption but intends to comply on all future contracts and is taking steps typical of a "good faith" effort.

☐ Contractor has been in business less than one year.

☐ Contractor doesn't have enough journeyman trade workers to qualify for a trade training program in that respective trade.

☐ An exemption is granted in accordance with a time period of a "Documented Depression" as defined by the State of Wisconsin.

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

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

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

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

WEXFORD POND DREDGING
CONTRACT NO. 8876

Small Business Enterprise Compliance Report

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

Cover Sheet

Prime Bidder Information

Company: Integrity Grading & Excavating, Inc.

Address: 605 Grossman Dr., Schofield, WI 54476

Telephone Number: 715-359-4042 Fax Number: 715-359-4142

Contact Person/Title: Sarah Janis/Executive Assistant to the President

Prime Bidder Certification

I, Daniel Weinkauf (Name), President (Title) of

Integrity Grading & Excavating, Inc. (Company) certify that the information contained in this SBE Compliance Report is true and correct to the best of my knowledge and belief.

Witness' Signature

Bidder's Signature

07/13/2023
Date

WEXFORD POND DREDGING
CONTRACT NO. 8876

Small Business Enterprise Compliance Report

Summary Sheet

SBE Subcontractors Who Are NOT Suppliers

Name(s) of SBEs Utilized	Type of Work	% of Total Bid Amount
Burse Surveying & Engineering	Survey	.5 %
Schlobohm Trucking	Trucking	.07 %
		%
		%
		%
		%
		%
		%
		%
		%
		%
		%
		%
Subtotal SBE who are NOT suppliers:		0.57 %

SBE Subcontractors Who Are Suppliers

Name(s) of SBEs Utilized	Type of Work	% of Total Bid Amount
		%
		%
		%
		%
		%
		%

Subtotal Contractors who are suppliers: _____ % x 0.6 = _____ % (discounted to 60%)

Total Percentage of SBE Utilization: 0.57 %.

WEXFORD POND DREDGING

CONTRACT NO. 8876
DATE: 7/13/23

Item	Quantity	Integrity Grading & Excavating, Inc. Price	Extension
Section B: Proposal Page			
10701 - Traffic Control - LS	1.00	$5,050.00	$5,050.00
10911 - Mobilization - LS	1.00	$113,000.00	$113,000.00
20101 - Excavation Cut - CY	11729.00	$26.31	$308,589.99
20217 - Clear Stone - TN	165.00	$45.78	$7,553.70
20221 - Topsoil - SY	1305.00	$3.42	$4,463.10
20256 - Rip Rap Filter Fabric, Type HR - SY	39.00	$2.11	$82.29
20303 - Sawcut Asphalt Pavement - LF	123.00	$2.25	$276.75
20314 - Remove Pipe - LF	63.00	$50.42	$3,176.46
20322 - Remove Concrete Curb & Gutter - LF	74.00	$17.78	$1,315.72
20323 - Remove Concrete Sidewalk - SF	240.00	$5.03	$1,207.20
20450 - Heavy Riprap - Glacial Field Stone - CY	26.00	$246.95	$6,420.70
20701 - Terrace Seeding - SY	1464.44	$1.10	$1,610.88
21002 - Erosion Control Inspection - EA	7.00	$100.00	$700.00
21011 - Construction Entrance - EA	2.00	$1,000.00	$2,000.00
21013 - Street Sweeping - LS	1.00	$44,502.53	$44,502.53
21014 - Clear Stone Berm - EA	2.00	$827.46	$1,654.92
21021 - Silt Fence - Complete - LF	1412.00	$1.65	$2,329.80
21049 - Inlet Protection, Type D-RF (Rigid Frame), Provide and Install - EA	34.00	$225.00	$7,650.00
21050 - Inlet Protection, Type D-RF (Rigid Frame), Maintain - EA	34.00	$75.00	$2,550.00
21051 - Inlet Protection, Type D-RF (Rigid Frame), Remove - EA	34.00	$25.00	$850.00
21063 - Erosion Matting, Class I, Type A - Organic - SY	113.00	$2.00	$226.00
21073 - Erosion Matting, Class II, Type C - Organic - SY	825.00	$4.00	$3,300.00
21084 - Erosion Matting, Class III, Type D - SY	19.00	$15.00	$285.00
21302 - Construction Fence (Plastic) - LF	3841.00	$4.00	$15,364.00
30208 - Hand Formed Concrete Curb and Gutter - LF	74.00	$50.00	$3,700.00
30301 - 5-Inch Concrete Sidewalk - SF	240.00	$15.00	$3,600.00
40102 - Crushed Aggregate Base Course, Gradation No.2 - TN	600.00	$23.31	$13,986.00
40202 - HMA Pavement 4 LT 58-28 S - T	230.00	$107.83	$24,800.90
50409 - 48-Inch Type 1 RCP Storm Sewer Pipe - LF	18.00	$386.51	$6,957.18
50415 - 72-Inch Type 1 RCP Storm Sewer Pipe - LF	45.00	$601.34	$27,060.30
50468 - 48-Inch RCP AE - EA	1.00	$4,688.06	$4,688.06
50474 - 72-Inch RCP AE - EA	1.00	$7,206.15	$7,206.15
50608 - 48-Inch RCP AE Gate - EA	1.00	$3,454.90	$3,454.90
50614 - 72-Inch RCP AE Gate - EA	1.00	$6,566.96	$6,566.96
50737 - 5'x5' Storm SAS - EA	1.00	$8,641.51	$8,641.51
50738 - 8'x8' Storm SAS - EA	1.00	$77,740.79	$77,740.79
90001 - Stormwater Control - LS	1.00	$1,000.00	$1,000.00
90002 - Site Dewatering/Groundwater Control - LS	1.00	$53,457.29	$53,457.29
90003 - Clay Liner Provision and Placement - CY	7026.00	$49.99	$351,229.74
90004 - Polymer Settling - LBS	15.00	$309.84	$4,647.60
90005 - Construction Surveying - LS	1.00	$7,636.00	$7,636.00
90006 - Temporary Access Road - LS	1.00	$16,461.98	$16,461.98
90007 - Vegetated Access - SF	7257.00	$7.00	$50,799.00
90008 - Dredge, Haul, and Dispose of Sediment - CY	4439.00	$43.81	$194,472.59
90009 - Authorized Sediment Removal - CY	400.00	$43.81	$17,524.00
90010 - Gravity Block Retaining Wall - SF	1440.00	$52.00	$74,880.00
90011 - Crushed Aggregate Base Course, Vegetated Access - TN	400.00	$40.59	$16,236.00
90012 - Shoreline Seed Mix - SY	156.00	$2.00	$312.00
90013 - Upland Grass and Non Strat Seed Mix - SY	2086.00	$2.50	$5,215.00
49 Items	Totals		$1,516,432.99

SECTION G: BID BOND

LET ALL KNOW BY THESE DOCUMENTS PRESENTED, THAT Principal and Surety, as identified below, are held and firmly bound unto the City of Madison, (hereinafter referred to as the "Obligee"), in the sum of five per cent (5%) of the amount of the total bid or bids of the Principal herein accepted by the Obligee, for the payment of which the Principal and the Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

The conditions of this obligation are such that, whereas the Principal has submitted, to the City of Madison a certain bid, including the related alternate, and substitute bids attached hereto and hereby made a part hereof, to enter into a contract in writing for the construction of:

WEXFORD POND DREDGING
CONTRACT NO. 8876

1. If said bid is rejected by the Obligee, then this obligation shall be void.

2. If said bid is accepted by the Obligee and the Principal shall execute and deliver a contract in the form specified by the Obligee (properly completed in accordance with said bid) and shall furnish a bond for his/her faithful performance of said contract, and for the payment of all persons performing labor or furnishing materials in connection therewith, and shall in all other respects perform the agreement created by the acceptance of said bid, then this obligation shall be void.

   If said bid is accepted by the Obligee and the Principal shall fail to execute and deliver the contract and the performance and payment bond noted in 2. above executed by this Surety, or other Surety approved by the City of Madison, all within the time specified or any extension thereof, the Principal and Surety agree jointly and severally to forfeit to the Obligee as liquidated damages the sum mentioned above, it being understood that the liability of the Surety for any and all claims hereunder shall in no event exceed the sum of this obligation as stated, and it is further understood that the Principal and Surety reserve the right to recover from the Obligee that portion of the forfeited sum which exceed the actual liquidated damages incurred by the Obligee.

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

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

Seal PRINCIPAL

Integrity Grading & Excavating, Inc.
Name of Principal

By

6/29/2023
Date

Daniel Weinkauf, President
Name and Title

Seal SURETY

Liberty Mutual Insurance Company
Name of Surety

By

6/29/2023
Date

Attorney-In-Fact: Connie Smith
Name and Title

This certifies that I have been duly licensed as an agent for the above company in Wisconsin under National Provider No. 16492915 for the year 2023, and appointed as attorney in fact with authority to execute this bid bond and the payment and performance bond referred to above, which power of attorney has not been revoked.

6/29/2023
Date

Agent Signature

2920 Enloe St STE 103
Address

Hudson, WI 54016
City, State and Zip Code

(715)377-8230
Telephone Number

NOTE TO SURETY & PRINCIPAL

The bid submitted which this bond guarantees shall be rejected if the following instrument is not attached to this bond:

Power of Attorney showing that the agent of Surety is currently authorized to execute bonds on behalf of the Surety, and in the amounts referenced above.

This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated.

Liberty Mutual Insurance Company
The Ohio Casualty Insurance Company
West American Insurance Company

Certificate No: 8206417- 354057

POWER OF ATTORNEY

KNOWN ALL PERSONS BY THESE PRESENTS: That The Ohio Casualty Insurance Company is a corporation duly organized under the laws of the State of New Hampshire, that Liberty Mutual Insurance Company is a corporation duly organized under the laws of the State of Massachusetts, and West American Insurance Company is a corporation duly organized under the laws of the State of Indiana (herein collectively called the "Companies"), pursuant to and by authority herein set forth, does hereby name, constitute and appoint, Chris Steinagel; Christopher M. Kemp; Connie Smith; Eliot Motu; Kory Mortel; Michael J. Douglas; Robert Downey; Sam Duchow

all of the city of Hudson state of WI each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents and shall be as binding upon the Companies as if they have been duly signed by the president and attested by the secretary of the Companies in their own proper persons.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 6th day of October, 2021.

Liberty Mutual Insurance Company
The Ohio Casualty Insurance Company
West American Insurance Company

By: _____
David M. Carey, Assistant Secretary

State of PENNSYLVANIA
County of MONTGOMERY ss

On this 6th day of October, 2021 before me personally appeared David M. Carey, who acknowledged himself to be the Assistant Secretary of Liberty Mutual Insurance Company, The Ohio Casualty Company, and West American Insurance Company, and that he, as such, being authorized so to do, execute the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at King of Prussia, Pennsylvania, on the day and year first above written.

Commonwealth of Pennsylvania - Notary Seal
Teresa Pastella, Notary Public
Montgomery County
My commission expires March 28, 2025
Commission number 1126044
Member, Pennsylvania Association of Notaries

By: _____
Teresa Pastella, Notary Public

This Power of Attorney is made and executed pursuant to and by authority of the following By-laws and Authorizations of The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company which resolutions are now in full force and effect reading as follows:

ARTICLE IV – OFFICERS: Section 12. Power of Attorney.
Any officer or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and subject to such limitation as the Chairman or the President may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Corporation by their signature and execution of any such instruments and to attach thereto the seal of the Corporation. When so executed, such instruments shall be as binding as if signed by the President and attested to by the Secretary. Any power or authority granted to any representative or attorney-in-fact under the provisions of this article may be revoked at any time by the Board, the Chairman, the President or by the officer or officers granting such power or authority.

ARTICLE XIII – Execution of Contracts: Section 5. Surety Bonds and Undertakings.
Any officer of the Company authorized for that purpose in writing by the chairman or the president, and subject to such limitations as the chairman or the president may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Company by their signature and execution of any such instruments and to attach thereto the seal of the Company. When so executed such instruments shall be as binding as if signed by the president and attested by the secretary.

Certificate of Designation – The President of the Company, acting pursuant to the Bylaws of the Company, authorizes David M. Carey, Assistant Secretary to appoint such attorneys-in-fact as may be necessary to act on behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.

Authorization – By unanimous consent of the Company's Board of Directors, the Company consents that facsimile or mechanically reproduced signature of any assistant secretary of the Company, wherever appearing upon a certified copy of any power of attorney issued by the Company in connection with surety bonds, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

I, Renee C. Llewellyn, the undersigned, Assistant Secretary, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy of the Power of Attorney executed by said Companies, is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this 29th day of June, 2023.

By: _____
Renee C. Llewellyn, Assistant Secretary

Not valid for mortgage, note, loan, letter of credit, currency rate, interest rate or residual value guarantees.

For bond and/or Power of Attorney (POA) verification inquiries, please call 610-832-8240 or email HOSUR@libertymutual.com.

SECTION H: AGREEMENT

THIS AGREEMENT made this 2nd day of August in the year Two Thousand and Twenty-Three between **INTEGRITY GRADING & EXCAVATING, INC.** hereinafter called the Contractor, and the City of Madison, Wisconsin, hereinafter called the City.

WHEREAS, the Common Council of the said City of Madison under the provisions of a resolution adopted **AUGUST 1, 2023**, and by virtue of authority vested in the said Council, has awarded to the Contractor the work of performing certain construction.

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

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

WEXFORD POND DREDGING
CONTRACT NO. 8876

2. **Completion Date/Contract Time.** Construction work must begin within seven (7) calendar days after the date appearing on mailed written notice to do so shall have been sent to the Contractor and shall be carried on at a rate so as to secure full completion SEE SPECIAL PROVISIONS, the rate of progress and the time of completion being essential conditions of this Agreement.

3. **Contract Price.** The City shall pay to the Contractor at the times, in the manner and on the conditions set forth in said specifications, the sum of **ONE MILLION FIVE HUNDRED SIXTEEN THOUSAND FOUR HUNDRED THIRTY-TWO AND 99/100** (**$1,516,432.99**) Dollars being the amount bid by such Contractor and which was awarded to him/her as provided by law.

4. **Affirmative Action.** In the performance of the services under this Agreement the Contractor agrees not to discriminate against any employee or applicant because of race, religion, marital status, age, color, sex, disability, national origin or ancestry, income level or source of income, arrest record or conviction record, less than honorable discharge, physical appearance, sexual orientation, gender identity, political beliefs, or student status. The Contractor further agrees not to discriminate against any subcontractor or person who offers to subcontract on this contract because of race, religion, color, age, disability, sex, sexual orientation, gender identity or national origin.

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

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

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

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

Articles of Agreement
Article I

The Contractor shall take affirmative action in accordance with the provisions of this contract to insure that applicants are employed, and that employees are treated during employment without regard to race, religion, color, age, marital status, disability, sex, sexual orientation, gender identity or national 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.

WEXFORD POND DREDGING
CONTRACT NO. 8876

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

Countersigned:

Witness 7/20/23 Date

Witness 7/20/23 Date

INTEGRITY GRADING & EXCAVATING, INC.
Company Name

President 7/20/2023 Date

Secretary 7/20/2023 Date

Integrity Grading and Excavating, Inc. Feb. 26, 2006 CORPORATE SEAL Wisconsin

CITY OF MADISON, WISCONSIN

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

Finance Director 8/21/2023 Date

Witness 8/23/2023 Date

Witness 8/14/23 Date

Approved as to form:

City Attorney 8/23/2023 Date

Mayor 8/23/23 Date

City Clerk for 8/24.23 Date

DAN FAULTERSACK NOTARY PUBLIC STATE OF WISCONSIN

SECTION I: PAYMENT AND PERFORMANCE BOND

LET ALL KNOW BY THESE DOCUMENTS PRESENTED, that we **INTEGRITY GRADING & EXCAVATING, INC.**, as principal, and Liberty Mutual Insurance Company Company of MA as surety, are held and firmly bound unto the City of Madison, Wisconsin, in the sum of **ONE MILLION FIVE HUNDRED SIXTEEN THOUSAND FOUR HUNDRED THIRTY-TWO AND 99/100 ($1,516,432.99)** 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:

WEXFORD POND DREDGING
CONTRACT NO. 8876

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 2nd day of August, 2023

Integrity Grading and Excavating, Inc. Feb. 26, 2006 CORPORATE SEAL Wisconsin

Countersigned:

INTEGRITY GRADING & EXCAVATING INC.
Company Name (Principal)

Witness

President CEO

Seal

Secretary

Approved as to form:

Liberty Mutual Insurance Company
Surety Seal

☒ Salary Employee ☐ Commission

Michael Haas
City Attorney

By
Attorney-In-Fact Connie Smith

This certifies that I have been duly licensed as an agent for the above company in Wisconsin under National Producer Number 16492915 for the year 2023, and appointed as attorney-in-fact with authority to execute this payment and performance bond which power of attorney has not been revoked.

08/02/2023
Date

Agent Signature Connie Smith

IGE INTEGRITY GRADING & EXCAVATING

605 Grossman Drive • Schofield, WI 54476 • TEL 715.359.4042 • FAX 715.359.4142 • www.integrityge.com
4001 Felland Road, Suite 113 • Madison, WI 53718

UNANIMOUS CONSENT TO ACTION BY THE SHAREHOLDER OF INTEGRITY GRADING & EXCAVATING, INC.

The undersigned, Daniel Weinkauf, being the sole shareholder (the "Shareholder") of Integrity Grading & Excavating, Inc., a Wisconsin corporation (the "Company"), does hereby consent in writing and hereby adopts the following resolutions effective the 1st of January, 2023, pursuant to the provisions of Wisconsin Statutes:

RESOLVED, that the Shareholder does hereby appoint Kyle Beld to act as Chief Financial Officer and Treasurer of the Company; and be it further

RESOLVED, that both Daniel Weinkauf, President and Shareholder of this Company, and Kyle Beld, Chief Financial Officer and Treasurer of this Company, are authorized, empowered and directed to execute and deliver, in the name and on behalf of this Company, or otherwise, any and all such agreements, documents and instruments, and to take and do or cause to be taken and done, in the name and on behalf of this Company, or otherwise, any and all such actions and things, to make any and all filings and give all notices, to make payments and to execute and deliver all such other agreements, instruments, bonds and other documents as he may deem necessary or appropriate to consummate the matters and transactions necessary to operate the Company; all such actions or determinations to be performed and made in such manner, and all such certificates, instruments, notices and documents to be executed and delivered in such form, as they shall approve, the performance or execution thereof by them to be conclusive evidence of the approval thereof by them; and be it further

RESOLVED, that all acts and deeds heretofore done by Daniel Weinkauf or Kyle Beld for and on behalf of this Company in entering into, executing, acknowledging or attesting any arrangements, agreements, instruments or documents in connection with the operations of the Company as contemplated by the foregoing resolutions, or in carrying out the terms and intentions of these resolutions are, in all respects, hereby ratified, confirmed, approved and adopted as acts on behalf of this Company; and be it further

RESOLVED, that both Daniel Weinkauf and Kyle Beld shall, on behalf of the Company, have the authority to execute any and all documents further required to allow the Company to conduct its business.

Daniel Weinkauf, Shareholder and President

This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated.

Liberty Mutual Insurance Company
The Ohio Casualty Insurance Company
West American Insurance Company

Certificate No: **8206417- 354057**

POWER OF ATTORNEY

KNOWN ALL PERSONS BY THESE PRESENTS: That The Ohio Casualty Insurance Company is a corporation duly organized under the laws of the State of New Hampshire, that Liberty Mutual Insurance Company is a corporation duly organized under the laws of the State of Massachusetts, and West American Insurance Company is a corporation duly organized under the laws of the State of Indiana (herein collectively called the "Companies"), pursuant to and by authority herein set forth, does hereby name, constitute and appoint, Chris Steinagel; Christopher M. Kemp; Connie Smith; Eliot Motu; Kory Mortel; Michael J. Douglas; Robert Downey; Sam Duchow

all of the city of Hudson state of WI each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents and shall be as binding upon the Companies as if they have been duly signed by the president and attested by the secretary of the Companies in their own proper persons.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 6th day of October, 2021.

Liberty Mutual Insurance Company
The Ohio Casualty Insurance Company
West American Insurance Company

By: _____
David M. Carey, Assistant Secretary

State of PENNSYLVANIA
County of MONTGOMERY ss

On this 6th day of October, 2021 before me personally appeared David M. Carey, who acknowledged himself to be the Assistant Secretary of Liberty Mutual Insurance Company, The Ohio Casualty Company, and West American Insurance Company, and that he, as such, being authorized so to do, execute the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at King of Prussia, Pennsylvania, on the day and year first above written.

Commonwealth of Pennsylvania - Notary Seal
Teresa Pastella, Notary Public
Montgomery County
My commission expires March 28, 2025
Commission number 1126044
Member, Pennsylvania Association of Notaries

By: _____
Teresa Pastella, Notary Public

This Power of Attorney is made and executed pursuant to and by authority of the following By-laws and Authorizations of The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company which resolutions are now in full force and effect reading as follows:

ARTICLE IV – OFFICERS: Section 12. Power of Attorney.
Any officer or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and subject to such limitation as the Chairman or the President may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Corporation by their signature and execution of any such instruments and to attach thereto the seal of the Corporation. When so executed, such instruments shall be as binding as if signed by the President and attested to by the Secretary. Any power or authority granted to any representative or attorney-in-fact under the provisions of this article may be revoked at any time by the Board, the Chairman, the President or by the officer or officers granting such power or authority.

ARTICLE XIII – Execution of Contracts: Section 5. Surety Bonds and Undertakings.
Any officer of the Company authorized for that purpose in writing by the chairman or the president, and subject to such limitations as the chairman or the president may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Company by their signature and execution of any such instruments and to attach thereto the seal of the Company. When so executed such instruments shall be as binding as if signed by the president and attested by the secretary.

Certificate of Designation – The President of the Company, acting pursuant to the Bylaws of the Company, authorizes David M. Carey, Assistant Secretary to appoint such attorneys-in-fact as may be necessary to act on behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.

Authorization – By unanimous consent of the Company's Board of Directors, the Company consents that facsimile or mechanically reproduced signature of any assistant secretary of the Company, wherever appearing upon a certified copy of any power of attorney issued by the Company in connection with surety bonds, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

I, Renee C. Llewellyn, the undersigned, Assistant Secretary, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy of the Power of Attorney executed by said Companies, is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this 1st day of August, 2023.

By: _____
Renee C. Llewellyn, Assistant Secretary

Not valid for mortgage, note, loan, letter of credit, currency rate, interest rate or residual value guarantees.

For bond and/or Power of Attorney (POA) verification inquiries, please call 610-832-8240 or email HOSUR@libertymutual.com.

Attachment A: Permits

State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
1500 N Johns Street
Dodgeville, WI 53533-2116

Tony Evers, Governor
Adam N. Payne, Secretary
Telephone 608-266-2621
Toll Free 1-888-936-7463
TTY Access via relay - 711

January 19, 2023

IP-SC-2022-13-03573, 03580, 03581 & 03582

City of Madison Engineering Division
James Wolfe
210 Martin Luther King Jr. Blvd. Room 115
Madison, WI 53703
[sent electronically]

Dear Mr. Wolfe:

The Department of Natural Resources has completed its review of your applications to construct an artificial waterbody, place outfall structures and install a miscellaneous structure on the unnamed tributaries (WBIC 5035724 & 5035617) to Pheasant Branch Creek, City of Madison, Dane County. You will be pleased to know your application is approved.

I am attaching a copy of your permit, which lists the many important conditions that must be followed to protect water quality and habitat. A copy of the permit must be posted for reference at the project site. Please read your permit conditions carefully so that you are fully aware of what is expected of you.

Before you start your project, you must first obtain any permit or approval that may be required for your project by local zoning ordinances and by the U.S. Army Corps of Engineers. You are responsible for contacting these local and federal authorities to determine if they require permits or approvals for your project. These local and federal authorities are responsible for determining if your project complies with their requirements.

Please note you are required to submit photographs of the completed project within 7 days after you've finished construction. This helps both of us to document the completion of the project and compliance with the permit conditions.

Your next step will be to notify me of the date on which you plan to start construction and again after your project is complete.

If you have any questions about your permit, please call me at (715) 460-4089 or email weston.matthews@wisconsin.gov.

Sincerely,

Weston Matthews
Water Management Specialist

cc: U.S. Army Corps of Engineers
Strand Associates, Inc. – Eric Vieth
City of Madison – Sarah Lerner
WDNR – Will Disser

STATE OF WISCONSIN **Outfall/Waterbody/Structure PERMIT**
DEPARTMENT OF NATURAL RESOURCES **IP-SC-2022-13-03573,03580,03581&03582**

The City of Madison Engineering Division c/o James Wolfe is hereby granted under Section 30.12(3m) and 30.19 Wisconsin Statutes, a permit to construct an artificial waterbody, place outfall structures and install a miscellaneous structure on the unnamed tributaries (WBIC 5035724 & 5035617) to Pheasant Branch Creek, also described as being in the SW 1/4, Section 14 Township 07N, Range 08E, subject to the following conditions:

PERMIT

1. You must notify Weston Matthews at phone (715) 460-4089 or email weston.matthews@wisconsin.gov before starting construction and again not more than 5 days after the project is complete.

2. You must complete the project as described on or before 01/19/2026. If you will not complete the project by this date, you must submit a written request for an extension prior to expiration of the initial time limit specified in the permit. Your request must identify the requested extension date. The Department shall extend the time limit for an individual permit or contract for no longer than an additional 5 years if you request the extension before the initial time limit expires. You may not begin or continue construction after the original permit expiration date unless the Department extends the permit in writing or grants a new permit.

3. This permit does not authorize any work other than what you specifically describe in your application and revised plans received by the Department on 11/17/2022 (titled *Additional Information_Plans & Specs_03573, 03580, 03581 & 03582* in the Department ePermit docket), and as modified by the conditions of this permit. If you wish to alter the project or permit conditions, you must first obtain written approval of the Department.

4. Upon reasonable notice, you shall allow access to your project site during reasonable hours to any Department employee who is investigating the project's construction, operation, maintenance or permit compliance.

5. The Department may modify or revoke this permit for good cause, including if the project is not completed according to the terms of the permit or if the Department determines the activity is detrimental to the public interest.

6. You must post a copy of this permit at a conspicuous location on the project site, visible from the waterway, for at least five days prior to construction, and remaining at least five days after construction. You must also have a copy of the permit and approved plan available at the project site at all times until the project is complete.

7. Your acceptance of this permit and efforts to begin work on this project signify that you have read, understood and agreed to follow all conditions of this permit.

8. You must submit a series of photographs to the Department, within one week of completing work on the site. The photographs must be taken from different vantage points and depict all work authorized by this permit.

9. You must supply a copy of this permit to every contractor associated with this project.

10. You, your agent, and any involved contractors or consultants may be considered a party to the violation pursuant to Section 30.292, Wis. Stats., for any violations of Chapter 30, Wisconsin Statutes, or this permit.

11. Construction shall be accomplished in such a manner as to minimize erosion and siltation into surface waters. Erosion control measures (such as silt fence and straw bales) must meet or exceed the technical standards of ch. NR 151, Wis. Adm. Code. The technical standards are found at: http://dnr.wi.gov/topic/stormwater/standards/const_standards.html.

12. The project shall be conducted in a manner that prevents dispersal of sediment away from the project site.

13. Appropriate erosion control measures must be in-place and effective during every phase of this project and at the end of each working day.

14. All temporary erosion and sediment control practices shall be removed upon final site stabilization. Areas disturbed during construction or structure installation shall be restored.

15. All equipment used for the project including but not limited to tracked vehicles, barges, boats, hoses, sheet pile and pumps shall be de-contaminated for invasive and exotic viruses and species prior to use and after use.

    The following steps must be taken *every time* you move your equipment to avoid transporting invasive and exotic viruses and species. To the extent practicable, equipment and gear used on infested waters shall not be used on other non-infested waters.

    1. **Inspect and remove** aquatic plants, animals, and mud from your equipment.

    2. **Drain all water** from your equipment that comes in contact with infested waters, including but not limited to tracked vehicles, barges, boats, hoses, sheet pile and pumps.

    3. **Dispose** of aquatic plants, animals in the trash. Never release or transfer aquatic plants, animals or water from one waterbody to another.

4. **Wash your equipment** with hot (>140º F) and/or high pressure water,

   - OR -

   Allow your equipment to **dry thoroughly for 5 days**.

16. Bottom materials must be removed by equipment, which is designed to minimize the amount of sediment that can escape into the water. Equipment must be properly sized so that excavation conforms to the plans submitted.

17. Bottoms materials must be transported off-site by equipment, which is designed to minimize the amount of sediment that can escape into and onto the road right of way.

18. You must not deposit or store any of the graded or excavated materials in any wetland or below the ordinary high water mark of any waterway. All graded or excavated materials must be placed out of the floodway of any stream.

19. The applicant must comply with laws for platting of land and sanitation, and with local zoning ordinances, and with standards developed for shorelands and floodplains NR 115 and NR 116, Wisconsin Administrative Codes.

20. The pond must not be associated with any metallic or non-metallic mining project.

21. This waterway, as authorized under Section 30.19, Wisconsin Statutes, is a public waterway.

22. You shall follow all required actions described in your project's Endangered Resources Review (ERR Log #22-627).

FINDINGS OF FACT

1. The City of Madison Engineering Division c/o James Wolfe, 210 Martin Luther King, Jr. Blvd. Room 115, Madison, WI 53703 has filed an application for permits to construct an artificial waterbody, place outfall structures and install a miscellaneous structure on the unnamed tributaries (WBIC 5035724 & 5035617) to Pheasant Branch Creek. The project is located in the SW 1/4, Section 14 Township 07N, Range 08E located in City of Madison, Dane County.

2. The proposed project consists of maintenance to the existing "Wexford" stormwater ponds that are located on the unnamed tributaries (WBIC 5035724 & 5035617) to Pheasant Branch Creek, including dredging of existing sediment, forebay excavation/deepening including clay liner construction and storm sewer outfall replacements (48" and 72" reinforced concrete pipes). The pond footprints will remain the same as existing however the ponds will be deepened and reconfigured to include forebays (with proposed clay liner). The project is focused on addressing the immediate public concerns of water quality and sediment removal within the existing

pond footprints and looking at long-term future maintenance. Erosion control measures and best management practices will be utilized throughout every phase of the project; construction is expected to take place between November 2023-June 2024.

3. In the early 2000's, the City of Madison constructed the Wexford Pond (permanent pools) on the intermittent streams for stormwater management. The Wexford greenway was first installed by the City of Madison in the 1980's and as the surrounding land use changed/ was developed throughout the years, so was the greenway with several design alterations before the creation of the permanent pool pond.

4. The concrete outlet structure of the main pond impounds water across a range of flow conditions and meets the definition of a dam in NR 333.03(3), Wisconsin Administrative Code. This structure has not yet obtained authorization as a dam under Ch. 31, Wisconsin Statutes. Issuance of the permit for a pond on a navigable waterway as authorized herein does not constitute authorization of the outlet structure under Ch. 31.

5. The Department has completed an investigation of the project site and has evaluated the project as described in the application and plans.

6. The unnamed tributaries within the project area are considered navigable streams (and no bulkhead exists at the project site).

7. The proposed project, if constructed in accordance with this permit will not adversely affect water quality, will not increase water pollution in surface waters and will not cause environmental pollution as defined in s. 283.01(6m), Wis. Stats.

8. The proposed project will not impact wetlands beyond those previously authorized by the Department if constructed in accordance with this permit. The City of Madison Engineering Division c/o James Wolfe received a Department wetland statewide general permit (GP-SC-2022-13-03752) to impact wetlands for municipal activities on 11/14/2022.

9. The Department of Natural Resources has determined that the agency's review of the proposed project constitutes an integrated analysis action under s. NR 150.20(2), Wis. Adm. Code. The Department has considered the impacts on the human environment, alternatives to the proposed projects and has provided opportunities for public disclosure and comment. The Department has completed all procedural requirements of s. 1.11(2)(c), Wis. Stats., and NR 150, Wis. Adm. Code for this project.

10. The Department of Natural Resources has completed all procedural requirements and the project as permitted will comply with all applicable requirements of section 30.12 and 30.19 Wisconsin Statutes and Chapters NR 102, 103, 329, 343 and 347 of the Wisconsin Administrative Code.

The applicant was responsible for fulfilling the procedural requirements for publication of notices under s. 30.208(5)(c)1m., Stats., and was responsible for publication of the notice of pending application under s.30.208(3)(a), Stats. or the notice of public informational hearing under s.30.208(3)(c), Stats., or both. S. 30.208(3)(e), Stats., provides that if no public hearing is held, the Department must issue its decision within 30 days of the 30-day public comment period, and if a public hearing is held, the Department must issue its decision within 20 days after the 10-day period for public comment after the public hearing. S. 30.208(5)(bm), Stats., requires the Department to consider the date on which the department publishes a notice on its web site as the date of notice.

11. The structures will not materially obstruct navigation if installed according to the terms of this permit.

12. The activities will not be detrimental to the public interest because the proposed construction methods have been designed to (along with conditions of this permit) minimize impacts to fish and wildlife habitat, water quality, navigation, recreation, and natural scenic beauty.

13. The structures will not materially reduce the flood flow capacity of a stream.

14. The project will not cause environmental pollution as defined in s.299.01(4).

15. The proposal complies with all of the laws relating to platting of land and sanitation if constructed according to the terms of this permit.

16. No material injury will result to the riparian rights of any riparian owners of real property that abuts any water body that is affected by the activity.

CONCLUSIONS OF LAW

1. The Department has authority under the above indicated Statutes and Administrative Codes, to issue a permit for the construction and maintenance of this project.

NOTICE OF APPEAL RIGHTS

If you believe that you have a right to challenge this decision, you should know that the Wisconsin statutes and administrative rules establish time periods within which requests to review Department decisions shall be filed. For judicial review of a decision pursuant to sections 227.52 and 227.53, Wis. Stats., you have 30 days after the decision is mailed, or otherwise served by the Department, to file your petition with the appropriate circuit court and serve the petition on the Department. Such a petition for judicial review shall name the Department of Natural Resources as the respondent.

To request a contested case hearing of any individual permit decision pursuant to section 30.209, Wis. Stats., you have 30 days after the decision is mailed, or otherwise served by the Department, to serve a petition for hearing on the Secretary of the Department of Natural Resources, P.O. Box 7921, Madison, WI, 53707-7921. The petition shall be in writing, shall be dated and signed by the petitioner, and shall include as an attachment a copy of the decision for which administrative review is sought. If you are not the applicant, you must simultaneously provide a copy of the petition to the applicant. If you wish to request a stay of the project, you must provide information, as outlined below, to show that a stay is necessary to prevent significant adverse impacts or irreversible harm to the environment. If you are not the permit applicant, you must provide a copy of the petition to the permit applicant at the same time that you serve the petition on the Department.

The filing of a request for a contested case hearing is not a prerequisite for judicial review and does not extend the 30 day period for filing a petition for judicial review.

A request for contested case hearing must meet the requirements of section 30.209, Wis. Stats., and sections NR 2.03, 2.05, and 310.18, Wis. Admin. Code, and if the petitioner is not the applicant the petition must include the following information:

1. A description of the objection that is sufficiently specific to allow the department to determine which provisions of this section may be violated if the proposed permit or contract is allowed to proceed.
2. A description of the facts supporting the petition that is sufficiently specific to determine how the petitioner believes the project, as proposed, may result in a violation of Chapter 30, Wis. Stats;.
3. A commitment by the petitioner to appear at the administrative hearing and present information supporting the petitioner's objection.

If the petition contains a request for a stay of the project, the petition must also include information showing that a stay is necessary to prevent significant adverse impacts or irreversible harm to the environment.

Dated at Dodgeville Service Center, Wisconsin on 01/19/2023.

STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES
For the Secretary

By 
Weston Matthews
Water Management Specialist

State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
3911 Fish Hatchery Rd.
Fitchburg, WI, 53711

Tony Evers, Governor
Preston D. Cole, Secretary
Telephone 608-266-2621
Toll Free 1-888-936-7463
TTY Access via relay - 711

11/14/2022

James Wolfe
City-County Building, Room 115 210 Martin Luther King, Jr. Blvd.
Madison, WI 53703

GP-SC-2022-13-03752

RE: Coverage under the wetland statewide general permit to impact wetlands for municipal activities, located in the City of MADISON, Dane County, docket GP-SC-2022-13-03752.

Dear Mr. Wolfe:

Thank you for submitting an application for a General Permit to impact wetlands for municipal activities located in the NE 1/4, SW 1/4, Sec. 14, T07N, R08E, City of MADISON, Dane County.

You have certified that your project meets the eligibility criteria for this activity. Based upon your signed certification you may proceed with your project. Please take this time to re-read the permit standards and conditions. The eligibility standards can be found on your application checklist or in the statewide general permit (found at http://dnr.wi.gov/topic/waterways/ - keyword: general permits). The permit conditions are attached to this letter. **You are responsible for meeting all general permit eligibility standards and permit conditions.** This includes notifying the Department before starting the project and submitting photographs within one week of project completion. Please note your coverage is valid for 5 years from the date of the department's determination or until the activity is completed, whichever occurs first.

The Department conducts routine and annual compliance monitoring inspections. Our staff may follow up and inspect your project to verify compliance with state statutes and codes. If you need to modify your project please contact your local Water Management Specialist, Allen Ramminger at (608) 228-4067 or email Allen.Ramminger@wisconsin.gov to discuss your proposed modifications.

The Department of Natural Resources appreciates your willingness to comply with wetland regulations, which help to protect the water quality, fish and wildlife habitat, recreational value and other functions and values wetlands provide to current and future generations. You are responsible for obtaining any other local, state or federal permits that are required before starting your project.

Sincerely,

Allen Ramminger
Water Management Specialist

Copy to: USACE Project Manager
County Zoning Administrator

The applicant agrees to comply with the following conditions:

1. Application. You shall submit a complete application package to the Department as outlined in the application materials and Section 2 of this permit. If requested, within a reasonable timeframe, you shall furnish the Department any information it needs to verify compliance with the terms and conditions of this permit.

2. Certification. Acceptance of general permit WDNR-GP11-2021, and efforts to begin work on the activities authorized by this general permit, signifies that you have certified the project meets all eligibility standards outlined above and that you have read, understood, and agreed to follow all terms and conditions of this general permit.

NOTE: You are responsible for obtaining any other permit or approval that may be required for your project by local zoning ordinances, other local authority, other state permits, and by the U.S. Army Corps of Engineers before starting your project.

3. Reliance on Applicant's Data. The determination by this office that a confirmation of authorization is not contrary to wetland water quality standards will be based upon the information provided by the applicant and any other information required by the Department.

4. Project Plans. This permit does not authorize any work other than what is specifically described in the notification package and plans submitted to the Department and is certified by you to comply with the terms and conditions of WDNR-GP11-2021.

5. Expiration. This WDNR-GP11-2021 expires on 05/31/2026. The time limit for completing an activity authorized by the provisions of WDNR-GP11-2021 ends 5 years after the date on which the activity is considered to be authorized under WDNR-GP11-2021 or until the activity is completed, whichever occurs first, regardless of whether WDNR-GP11-2021 expired before the activity is completed.

6. Authorization Distribution. You must supply a copy of the permit coverage authorization to every contractor working on the project.

7. Project Start. You shall notify the Department before starting construction.

8. Permit Posting. You must post a copy of this permit coverage letter at a conspicuous location on the project site before beginning the permitted activity. The copy of the permit coverage letter must remain posted at that location until at least five days after the area where the activity took place is stabilized. You must also keep a copy of the permit coverage letter and the approved plan available at the project site at all times until the project is complete.

9. Permit Compliance. The department may modify or revoke coverage of this permit if it is not constructed in compliance with the terms and conditions of this permit, or if the Department determines the project will be detrimental to wetland water quality standards. Any act of noncompliance with this permit constitutes a permit violation and is grounds for enforcement action. Additionally, if any applicable conditions of this permit are found to be invalid or unenforceable, authorization for all activities to which that condition applies is denied.

10. Construction Timing. Once wetland work begins, all wetland construction activities must be continuous to the extent practicable. During periods of inactivity in wetlands, the site must be stabilized until the work is resumed and completed.

11. Construction. No other portion of the wetland may be disturbed except the area designated in the submitted plans.

12. Project Completion. Within one week after completing the regulated activity, you shall submit to the Department a statement certifying the project complied with all the terms and conditions of this permit, and photographs of the activities authorized by this permit. This statement must reference the Department-issued docket number and be submitted to the Department staff member that authorized coverage.

13. Proper Maintenance. You must maintain the activity authorized by WDNR-GP11-2021 in good condition and in conformance with the terms and conditions of this permit using best management practices. Any structure or fill authorized shall be properly maintained to ensure no additional impacts to the remaining wetlands.

14. Site Access. Upon reasonable notice, you shall allow access to the site to any Department employee who is investigating the project's construction, operation, maintenance or permit compliance with the terms and conditions of WDNR-GP11-2021 and applicable laws.

15. Erosion and Siltation Controls. The project site shall implement erosion and sediment control measures that adequately control or prevent erosion and prevent damage to wetlands as outlined in s. NR 151.11(6m), Wis. Admin. Code. These standards can be found at the following website: http://dnr.wi.gov/topic/stormwater/standards/const_standards.html. Any area where topsoil is exposed during the project should be immediately seeded and mulched to stabilize disturbed areas and prevent soils from being eroded and washed into waterways or wetlands.

16. Equipment Use. The equipment used in the wetlands must be low ground weight equipment as specified by the manufacturer specifications.

17. Wetland Protection. You shall not store any vegetation, material, or equipment in wetlands unless authorized to do so through an approved project design. The project will be constructed in a manner that will maintain wetland hydrology in the remaining wetland complex, if applicable.

18. Invasive Species. All project equipment shall be decontaminated for removal of invasive species prior to and after each use on the project site by using best management practices to avoid the spread of invasive species as outlined in ch. NR 40, Wis. Adm. Code. For more information, refer to http://dnr.wi.gov/topic/Invasives/bmp.html. Keyword: "equipment operator" or "invasive bmp".

19. Federal and State Threatened and Endangered Species. WDNR-GP11-2021 does not affect the DNR's responsibility to ensure that all authorizations comply with Section 7 of the Federal Endangered Species Act, s. 29.604, Wis. Stats., and applicable state laws. No DNR authorization under this permit will be granted for projects found not to comply with these acts/laws. No activity is authorized which is likely to jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act and/or state law or which is likely to destroy or adversely modify the critical habitat of a species as identified under the Federal Endangered Species Act. Documentation options include:

a. An ER Review Verification Form showing that the project is covered by the Broad Incidental Take Permit for no/low impact activities and therefore does not require a review.

b. An ER Preliminary Assessment from the NHI Public Portal stating that no further actions are necessary or that further actions are recommended. The NHI Public Portal is located here: http://dnr.wi.gov/topic/erreview/publicportal/html.

c. If the ER Preliminary Assessment from the NHI Public Portal shows that "Further actions are required" then submit one of the following:

i. A DNR ER Review letter. This request form for an ER Review letter is located here:
http://dnr.wi.gov/topic/erreview/review.html.

ii. A Certified ER Review letter. The list of Certified Reviewers is located here:
http://dnr.wi.gov/topic/ERReview/Documents/CertifiedReviewers.pdf.

20. Special Concern Species. If the Wisconsin National Heritage Inventory lists a known special concern species to be present in the project area you will take reasonable action to prevent significant adverse impacts or to enhance the habitat for the species of concern.

21. Historic Properties and Cultural Resources. WDNR-GP11-2021 does not affect the DNR's responsibility to ensure that all authorizations comply with Section 106 of the National Historic Preservation Act and s. 44.40, Wis. Stats. No DNR authorization under this permit will be granted for projects found not to comply with these acts/laws. Information on the location and existence of historic resources can be obtained from the State Historic Preservation Office and the National Register of Historic Places. If cultural, archaeological, or historical resources are unearthed during activities authorized by this permit, work must be stopped immediately and the State Historic Preservation Officer must be contacted for further instruction.

22. Preventive Measures. Measures must be adopted to prevent potential pollutants from entering a wetland or waterbody. Construction materials and debris, including fuels, oil, and other liquid substances, will not be stored in the construction area in a manner that would allow them to enter a wetland or waterbody as a result of spillage, natural runoff, or flooding. If a spill of any potential pollutant should occur, it is the responsibility of the permittee to remove such material, to minimize any contamination resulting from this spill, and to immediately notify the State Duty Officer at 1-800-943-0003.

23. Suitable Fill Material. All fill authorized under this permit must consist of clean suitable soil, as defined by s. NR 500.03(214), Wis. Admin. Code, free from hazardous substances as defined by s. 289.01(11), Wis. Stats., and free from solid waste as defined by s. 289.01(33), Wis. Stats.

24. Standard for Coverage. Wetland impacts from the project will cause only minimal adverse environmental impacts as determined by the Department.

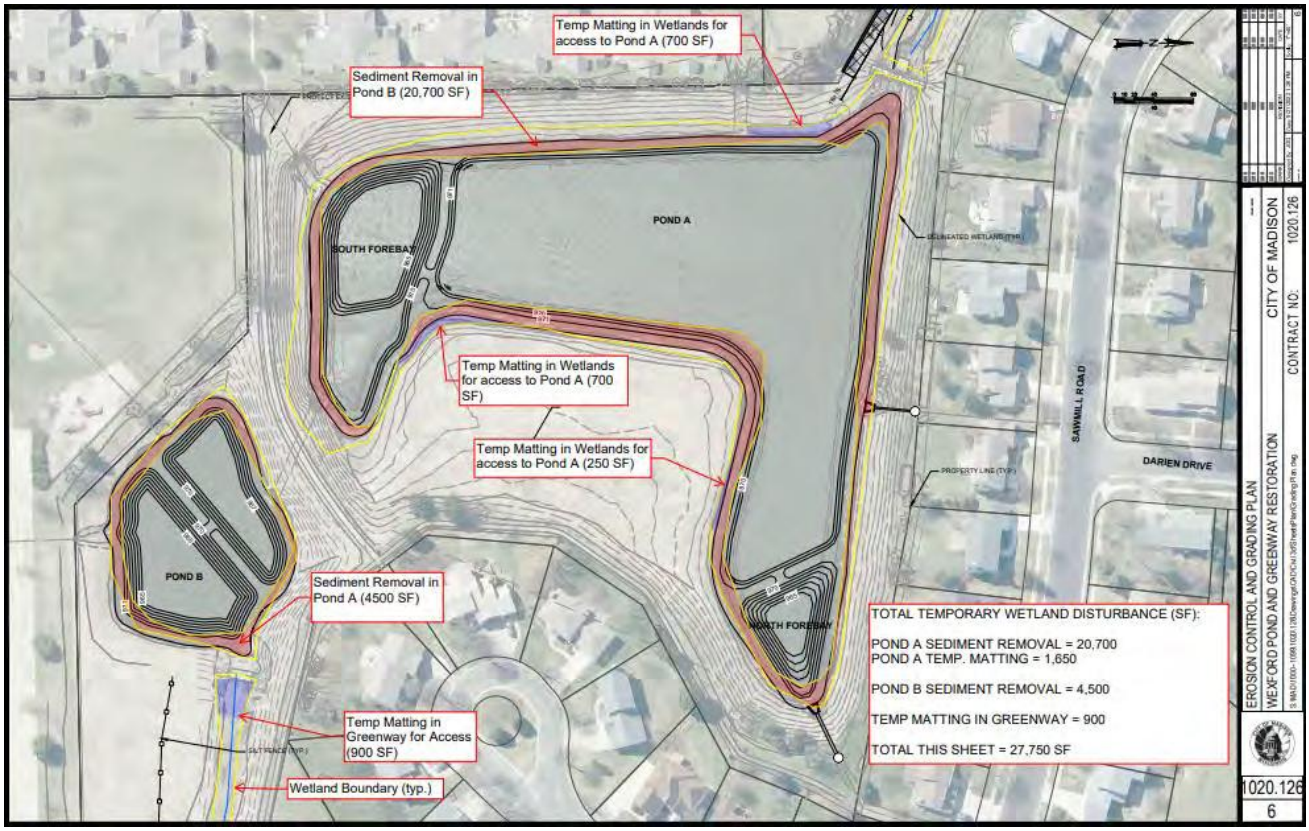
25. Transfers. Coverage under this permit is transferable to any person upon prior written approval of the transfer by the Department.

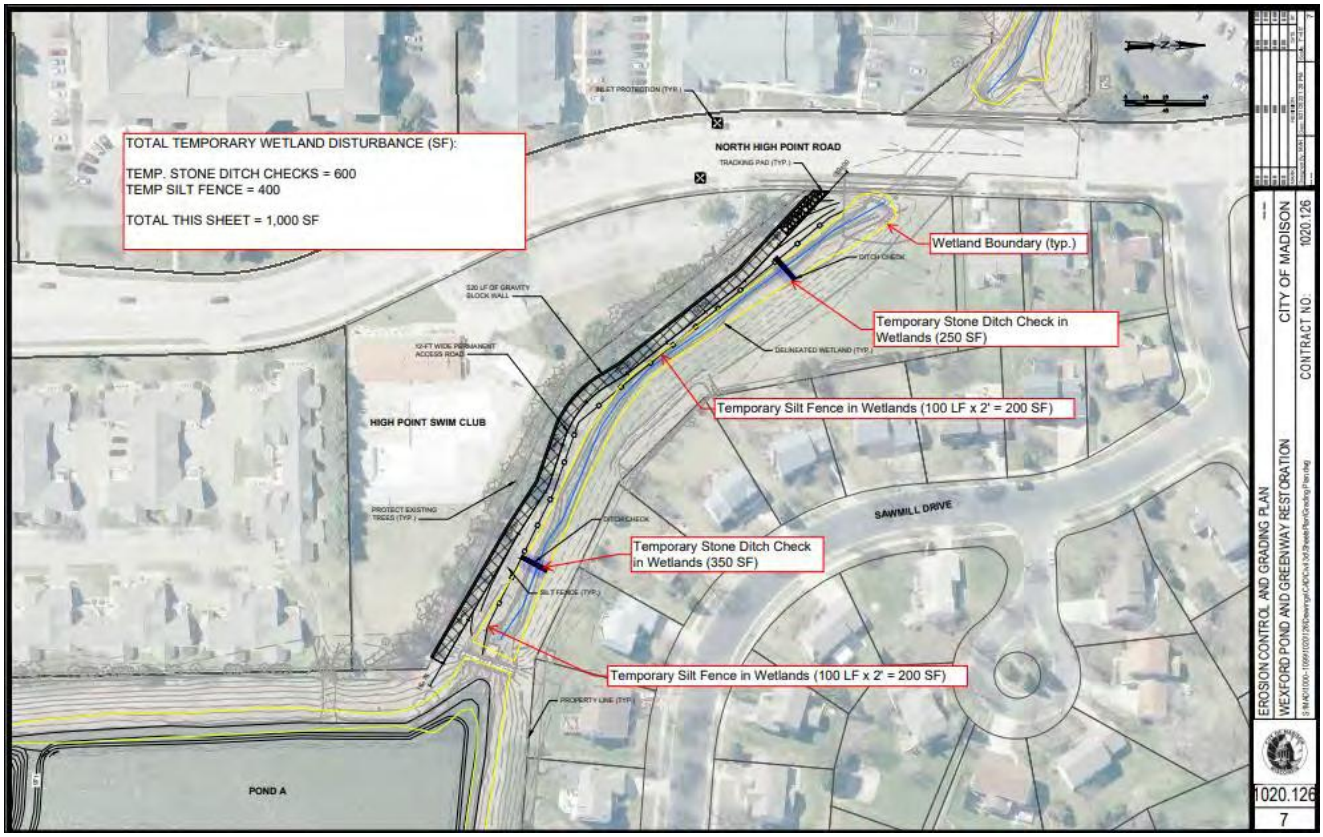
26. Reevaluation of Decision. The Department may suspend, modify or revoke authorization of any previously authorized activity and may take enforcement action if the following occur:

a. The applicant fails to comply with the terms and conditions of WDNR-GP11-2021.

b. The information provided by the applicant in support of the permit application proves to have been false, incomplete, or inaccurate.

c. Significant new information surfaces which the Department did not consider in reaching the original public interest decision.




TOTAL TEMPORARY WETLAND DISTURBANCE (SF):
TEMP. STONE DITCH CHECKS = 600
TEMP SILT FENCE = 400
TOTAL THIS SHEET = 1,000 SF
NORTH HIGH POINT ROAD
HIGH POINT SWIM CLUB
SAWMILL DRIVE
POND A
Wetland Boundary (typ.)
Temporary Stone Ditch Check in Wetlands (250 SF)
Temporary Silt Fence in Wetlands (100 LF x 2' = 200 SF)
Temporary Stone Ditch Check in Wetlands (350 SF)
Temporary Silt Fence in Wetlands (100 LF x 2' = 200 SF)
EROSION CONTROL AND GRADING PLAN
WEXFORD POND AND GREENWAY RESTORATION
CITY OF MADISON
CONTRACT NO. 1020.126
1020.126
7

City of Madison Engineering Division

EROSION CONTROL PERMIT

Permit Number: ENG100-2023-00460
City Engineering: (608) 266-4751

Location of Work: 1005 N High Point RD **Parcel: 070814300962**

Permittee: Eric Vieth **Telephone:** (608) 251-4843 **Email:** eric.vieth@strand.com

Owner: CITY OF MADISON ENGINEER **Telephone:**

FEE SCHEDULE	
Full Plan Base Fee	200.00
Total Disturbed Area Fee	1,306.80
Total Fee Amount	1,506.80
Total Invoiced Amount	1,506.80
Paid	1,506.80
Balance Due	0.00

APPROVALS	
Plan Review:	MAE
Issuance:	MAE

DIGGERS HOTLINE

Call 811 or (800) 242-8511
(262) 432-7910
(877) 500-9592 (emergency only)

PROPOSED WORK: Wexford Pond Dredging and Forebay Construction

Project Description:

Permit Type: Full Plan

Construction Start Date: 10/1/2023 **Permit Expiration Date:** 8/1/2024 **Seed Sod Restore Date:** 6/1/2024

USLE Rate: 2.4 **Total Disturbed Area:** 261,360

☐ **EC Checklist Attached** ☒ **EC Plan Attached** ☐ **Pumping Plan Attached**

FOR CITY OF MADISON USE ONLY: **APPROVED**

Megan Eberhardt 02/16/2023

- Erosion Control Permit Reviewer Date Full Plan

See page two of this permit for Permit Conditions and Requirements.

City of Madison Engineering Division

EROSION CONTROL PERMIT

Permit Number: ENG100-2023-00460
City Engineering: (608) 266-4751

Location of Work: 1005 N High Point RD **Parcel: 070814300962**

Permittee: Eric Vieth **Telephone:** (608) 251-4843 **Email:** eric.vieth@strand.com

Owner: CITY OF MADISON ENGINEER **Telephone:**

Permit Conditions and Requirements:

Failure to abide by any of the following permit conditions will be considered a violation of the City's Erosion Control Ordinance (MGO Ch. 37) and can result in the issuance to the permittee and/or the property owner of Official Notices, citations, and/or referral to the City Attorney for resolution of non-compliance.

Erosion & Sediment Control Measures are to be installed prior to any land disturbance activities.

Within ten (10) days of the completion of the project or site stabilization the applicant shall submit an Erosion Control Notice of Termination (ECNOT). The ECNOT should be sent to the administrative authority that initially approved your permit.

The Erosion Control Permit applicant shall conduct a pre-construction meeting attended by a Professional Engineer responsible for initial implementation certification of the erosion control plan. The Professional Engineer shall document and submit minutes of this meeting to City Engineering.

A Professional Engineer currently licensed in the State of Wisconsin shall certify the initial installation and implementation of the measures shown on the approved erosion control plan. Documentation on the City's Installation Certification form shall be submitted to the administrative authority within one (1) week of the installation. The certification form can be found on the City's webpage at http://www.cityofmadison.com/engineering/Permits.cfm.

As part of the Erosion Control Permit requirements this construction project requires erosion control inspections and reporting by the permittee (or by their authorized inspector). Inspections shall be conducted a minimum of once per week and also after every 24-hour rain event of 0.5" or more precipitation. The results of these inspections shall be entered on the City's permit and inspection tracking system.

Dust Control, if applicable shall be provided, per WDNR Conservation Practice Standard 1068.

Trench Dewatering, if applicable shall be provided, per WDNR Conservation Practice Standard 1061.

All BMP's installed for erosion control shall be in accordance with the applicable WDNR Conservation Practice Standards found at: http://dnr.wi.gov/topic/stormwater/standards/const_standards.html

City of Madison Engineering Erosion Control Enforcement
Standard Operation Procedures & Common Requirements (Updated 6/16/2015)

To better provide uniform oversight and obtain erosion control compliance on projects under the City Engineering's jurisdiction for inspection and enforcement.

1. Warnings will be provided twice during the duration of a project for erosion control violations of MGO Ch 37. Any violations after the two warnings will result in the issuance of a citation.

2. Non-compliance violations and warnings for administrative and field items will be tracked separately.

3. Administrative non-compliance shall include, but not be limited to: failure to hold a required preconstruction meeting, failure to submit erosion control plan initial implementation certification form, failure to complete weekly inspection report, or failure to complete a post-rain event inspection report.

4. For permitted projects that are required to submit weekly inspection reports, compliance checks are run automatically every Monday morning at 6:00 AM. To be considered in compliance, an online inspection report must be completed before this automatic compliance check is performed. Property owners, applicants, and authorized inspectors will receive an automatic email notice that the required inspection report has not been completed. ***This is not to be considered a reminder system; if this email notice is sent, the site is already in non-compliance.***

5. Post-rain event inspection report compliance will be run manually by City Engineering 48 hours after the rain event day. Notices of non-compliance will be sent to property owners, applicants, and authorized inspectors for permitted projects that have not completed the required inspection report.

6. Property owners, applicants, and their authorized inspectors will **NOT** be reminded by City Engineering when a rain event requiring inspection occurs (0.5 inches or larger). The permit holder or their authorized inspector(s) will need to check for rainfall amounts. The rain gauge closest to the construction site should be used to determine rainfall amount.
   West Side: http://infosyahara.org/rainfallgauges_station2
   East Side: http://w1.weather.gov/data/obhistory/KMSN.html

   In the event the closest rain gauge is out of order, the gauge for the other side of town shall be referenced. If both gauges are out of order, default to the "Madison Area" Location on the National Weather Service website: http://www.nws.noaa.gov/climate/xmacis.php?wfo=mkx

   Rain gauges at the construction site or any other location will not be acceptable, as they cannot be verified by City inspection staff in a timely manner.

7. Field non-compliance shall include, but is not limited to: land disturbance work without a permit, working without erosion control measures installed, improperly installed erosion control measures, failure to maintain erosion control measures, tracking of sediment onto adjacent streets or property, discharge of silt laden runoff or pump discharge from the site, etc.

8. Field violations will generate warnings from the City inspector that will be conveyed on-site to the project superintendant (if available) and by email notice to the property owner, applicant, and authorized inspector.

9. If the usual notice and citation methods fail to result in the permitted site being brought into compliance with MGO Ch 37 requirements, additional enforcement measures such as, but not limited to, stop work orders or referral to the City Attorney will be used.

10. In the case of a safety hazard, City inspection staff will attempt to obtain immediate corrective action to remedy on the part of the contractor, property owner, or applicant. If immediate action is not available (unable to contact, or parties refuse to comply immediately), then City Engineering will take measures necessary to correct the hazard. These costs will be billed to the property owner as a special charge per Madison General Ordinances. In the case of a refusal to comply, this will result in an immediate field violation and issuance of a citation as well.

DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, ST. PAUL DISTRICT
332 MINNESOTA STREET, SUITE E1500
ST. PAUL, MN 55101-1323

December 1, 2022

Regulatory File No. MVP-2022-01944-DDP

City of Madison Engineering Division
c/o James Wolfe
210 Martin Luther King Jr. Blvd. Room 115
Madison, Wisconsin 53703

Dear Mr. Wolfe:

We are responding to your request for authorization to remove accumulated sediment and regrade an existing stormwater management pond (The Wexford Pond and Greenway) in the City of Madison. The proposed work is located in Section 14, Township 07 North, Range 08 East, Dane County, Wisconsin.

Project authorization:

The regulated activities associated with this project include the permanent discharge of fill material below the plane of the ordinary high-water mark (OHWM) of 1.97 acres of Wexford Pond to replace the existing clay liner. Additionally, the project would involve the temporary discharge of fill material into 28,750 square feet of one unnamed wetland for construction access and sediment removal. We have determined that these activities are authorized by a Nationwide Permit (NWP) or a Regional General Permit (RGP), specifically, NWP 43, Stormwater Management Facilities. This work is shown on the enclosed figures, labeled MVP-2022-01944-DDP Project Figures Pages 1 - 20.

Conditions of your permit:

You must ensure the authorized work is performed in accordance with the enclosed General Permit terms, General Conditions, and St. Paul District Regional Conditions. In addition, this verification is subject to the following Special Conditions:

You are also required to complete and return the enclosed Compliance Certification form within 30 days of completing your project. Please email the completed form to the contact identified in the last paragraph.

A change in location or project plans may require re-evaluation of your project. Proposed changes should be coordinated with this office prior to construction. Failure to comply with all terms and conditions of this permit invalidates this authorization and could result in a violation of Section 301 of the Clean Water Act or Section 10 of the Rivers and Harbors Act. You must also obtain all local, State, and other Federal permits that apply to this project.

Water Quality Certification:

You must also comply with the enclosed Water Quality Certification conditions associated with this General Permit.

Permit expiration:

The 2021 NWP is valid until March 14, 2026 unless modified, suspended, or revoked. If the work has not been completed by that time, you should contact this office to verify that the permit is still valid. Furthermore, if you commence or are under contract to commence this activity

before the date of General Permit expiration, modification, or revocation, you have 12 months to complete the activity under the present terms and conditions of the General Permit.

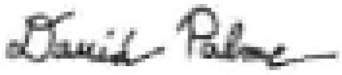
Jurisdictional determination:

No jurisdictional determination was requested or prepared for this project. While not required, you may request a jurisdictional determination from the contact identified in the last paragraph.

Contact Information:

If you have any questions, please contact me in our Stevens Point office at (651) 290-5880 or by email at David.D.Palme@usace.army.mil.

Sincerely,



David Palme
Project Manager

Enclosures:
Project Figures, General Conditions, 401 Water Quality Certification, and GP Compliance Certification Form

CC:
Weston Matthews, Wisconsin Department of Natural Resources (IP-SC-2022-13-03573, 03580, 03581 & 03582)
Allen Ramminger, Water Management Specialist
Sarah Lerner, City of Madison
Eric Vieth, Strand Associates

Madison, Wisconsin

CITY OF MADISON

CITY ENGINEERING DIVISION
DEPARTMENT OF PUBLIC WORKS
PLAN OF PROPOSED IMPROVEMENT
WEXFORD POND DREDGE AND FOREBAY CONSTRUCTION
90% DRAWINGS

PUBLIC IMPROVEMENT PROJECT APPROVED

APPROVED DATE

BY THE COMMON COUNCIL OF MADISON, WISCONSIN

PUBLIC IMPROVEMENT DESIGN APPROVED BY:

City Engineer — Date

POND & STORM DESIGNED BY:

INDEX OF SHEETS

CITY PROJECT NO. 12750
CONTRACT NO. 987654

PROJECT LOCATION

PLOT SCALE: 1:2_XREF
PLOT NAME: 11X17
REV. DATE: 11/15/2022 2:01 PM
ORIGINATOR: CITY_OF_MADISON

FILE NAME: S:\MAD\1000–1099\1020\126\Drawings\CAD\Civil 3d\SheetsPlan\Title.dwg
DATE: 11/15/2022 2:07 PM

APPLICABLE CITY OF MADISON STANDARD DETAILS

SERIES 1 - EROSION CONTROL

1.01	SILT FENCE
1.02	EROSION MAT
1.05	CLEAR STONE BERM FOR EROSION CONTROL
1.07	CONSTRUCTION ENTRANCE
1.11	RIGID FRAME INLET PROTECTION

SERIES 5 - SEWER AND SEWER STRUCTURES

5.1.3	TYPICAL SECTION SAS ACCESS ROAD TEMPORARY
5.2.3	TYPICAL TRENCH COMPACTION (GREENWAY/PARK)
5.4.1	APRON ENDWALLS FOR PIPES AND PIPE ARCHES
5.4.4	RIPRAP AT APRON ENDWALLS
5.6.1	RCP AE GATE
5.7.5	STORM SEWER PRECAST SAS (THROUGH SECTION VIEW)
5.7.6	STORM SEWER PRECAST SAS (TOP VIEW)
5.7.15	SAS CHIMNEY AND CASTING
5.7.16	SAS FRAME AND COVER

LEGEND

EXISTING	PROPOSED
EXISTING RIGHT OF WAY	PROPOSED GAS LINE
EXISTING PROPERTY LINE	PROPOSED SANITARY SEWER
EXISTING GAS LINE	PROPOSED WATER MAIN
EXISTING SANITARY SEWER	PROPOSED WATER MAIN W/ CASING
EXISTING WATER MAIN	PROPOSED STORM SEWER
EXISTING STORM SEWER	PROPOSED TELEPHONE LINE
EXISTING TELEPHONE LINE	PROPOSED UNDERGROUND ELECTRIC LINE
EXISTING UNDERGROUND ELECTRIC LINE	PROPOSED FIBER OPTIC LINE
EXISTING OVERHEAD ELECTRIC LINE	PROPOSED FENCE
EXISTING FIBER OPTIC LINE	PROPOSED SILT FENCE
EXISTING FENCE	PROPOSED SHEET PILING
CONTROL POINT	PROPOSED INLET PROTECTION
EXISTING BENCHMARK	PROPOSED END CAP
SOIL BORING	PROPOSED WATER VALVE
EXISTING DECIDUOUS/CONIFEROUS TREE	PROPOSED FIRE HYDRANT
EXISTING TREE STUMP	PROPOSED SANITARY SEWER MANHOLE
EXISTING MANHOLE	PROPOSED STORM SEWER MANHOLE
EXISTING INLET	PROPOSED INLET
EXISTING CATCH BASIN	FUTURE PROJECT BY OTHERS
EXISTING POWER POLE	MAJOR CONTOUR
EXISTING LIGHT POLE	MINOR CONTOUR
EXISTING GAS VALVE	CULVERT
EXISTING SIGN	
EXISTING WATER VALVE	
EXISTING WATER MANHOLE	
EXISTING FIRE HYDRANT	
WETLAND DELINEATION	
WETLAND BUFFER	
APRON END WALL	
IRON PIPE	
PROPERTY LINE	
MAINTENANCE PATH	
FUTURE MUTLI-USE PATH	
EXISTING SAND BAGS	

MARK	REVISION	DATE	BY
###	###	###	###

Designed By: TAW | Date: 11/15/2022 1:44 PM | Scale: 1"=40' | 2

1020.126

GENERAL NOTES & LEGEND

WEXFORD POND DREDGING AND FOREBAY CONSTRUCTION

CITY OF MADISON

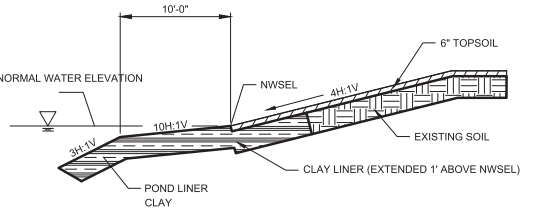
CONTRACT NO: XXXX.XX

1020.126

S:\MAD\1000--1099\1020\126\Drawings\CAD\Civil 3d\Sheets\Other\General Notes & Legend.dwg

1020.126

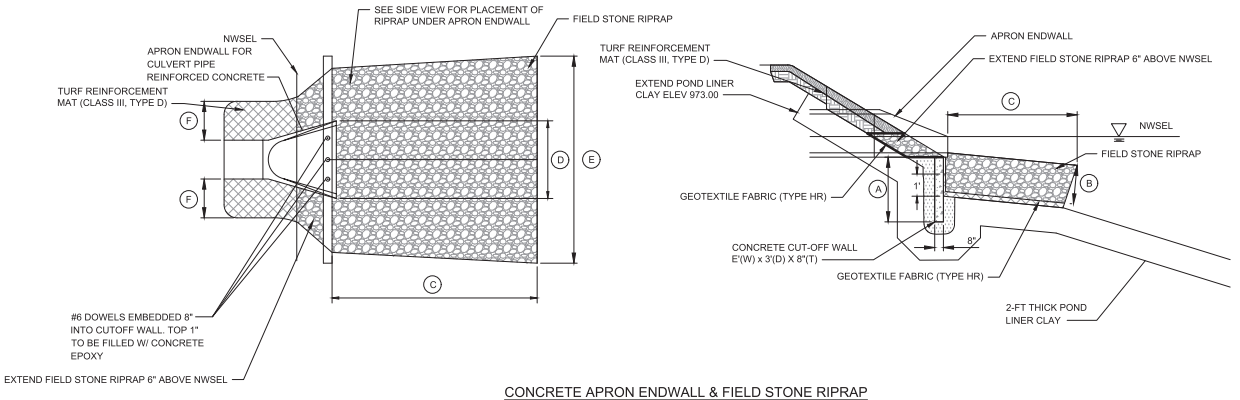
2



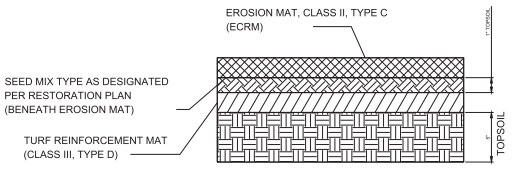
CLAY/TOPSOIL INTERFACE AT TOP OF SAFETY SHELF
NO SCALE

PIPE DIAMETER	A	B	C	D	E	F
48"	3'-0"	2'-0"	9'-0"	7'-0"	10'	3'-0"
72"	3'-0"	2'-0"	11'-0"	9'-0"	15'-6"	3'-0"

* PROVIDE CONCRETE JOINT TIES AT APRON ENDWALL AND NEXT UPSTREAM JOINT.

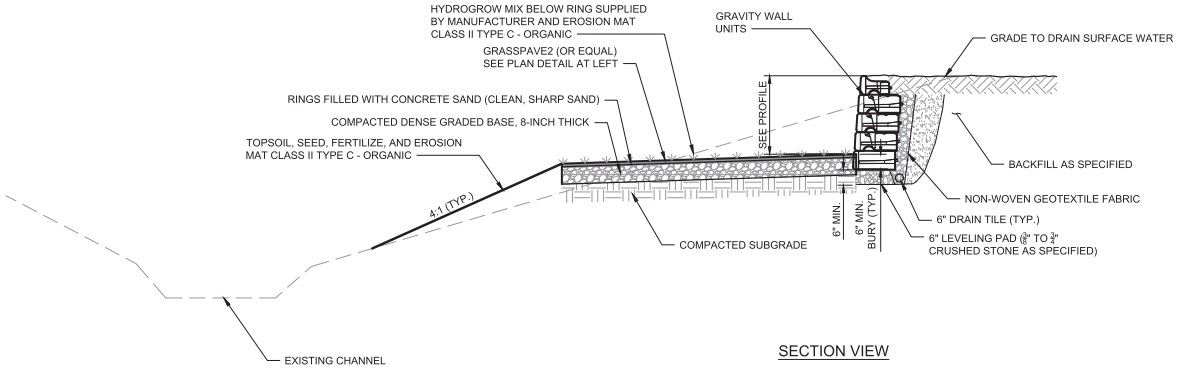


CONCRETE APRON ENDWALL & FIELD STONE RIPRAP



NOTE:
1.
TOPSOIL CAN BE EXISTING TOPSOIL OR PARTIALLY NEW/PARTIALLY EXISTING.
2.
SEE DRAWINGS AND CROSS SECTIONS FOR LOCATIONS AND USE.

TURF REINFORCEMENT MAT (TRM) SYSTEM
NO SCALE



SECTION VIEW

VEGETATED ACCESS ROAD DETAIL

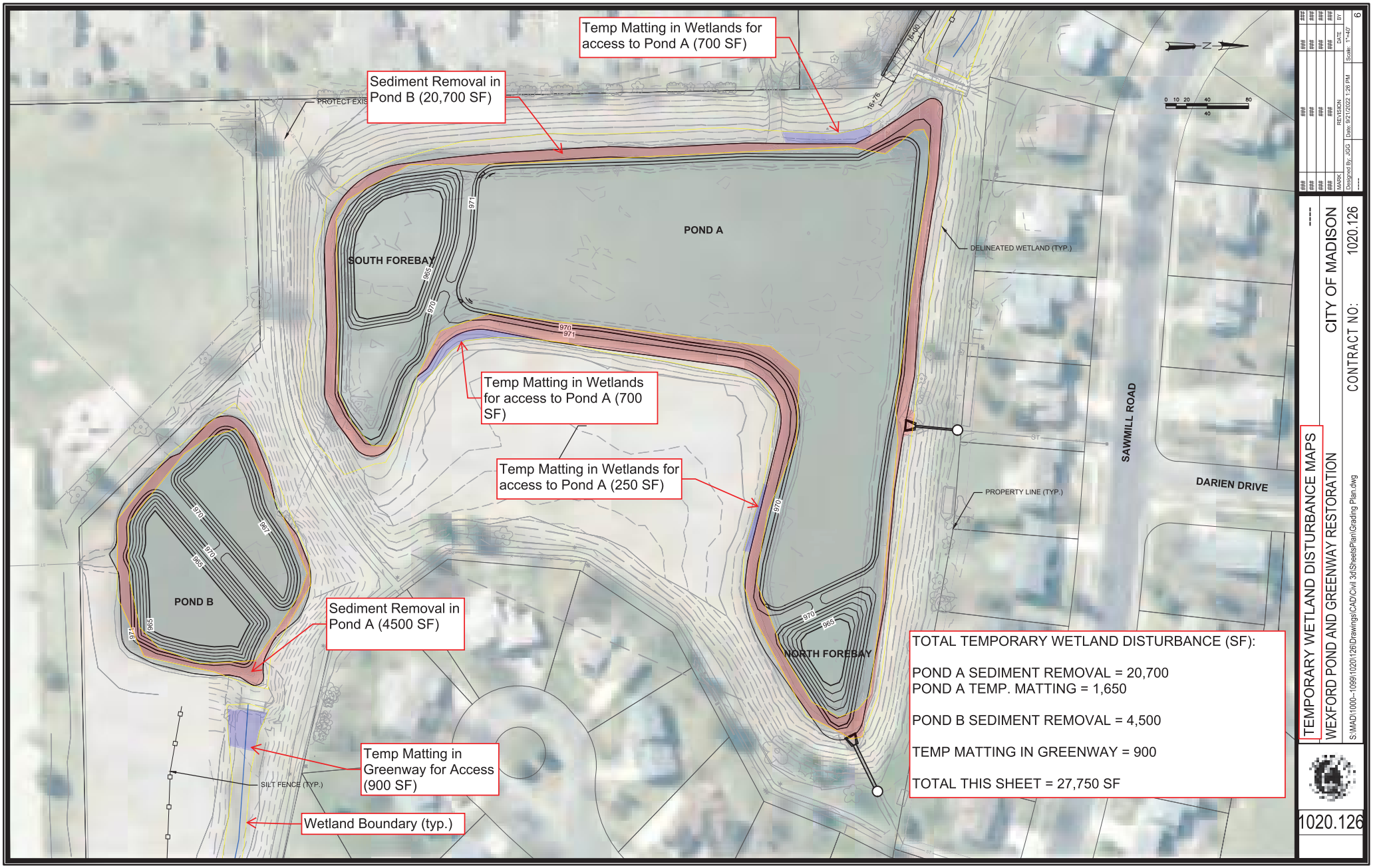
MARK	REVISION	DATE	BY
###	###	###	###

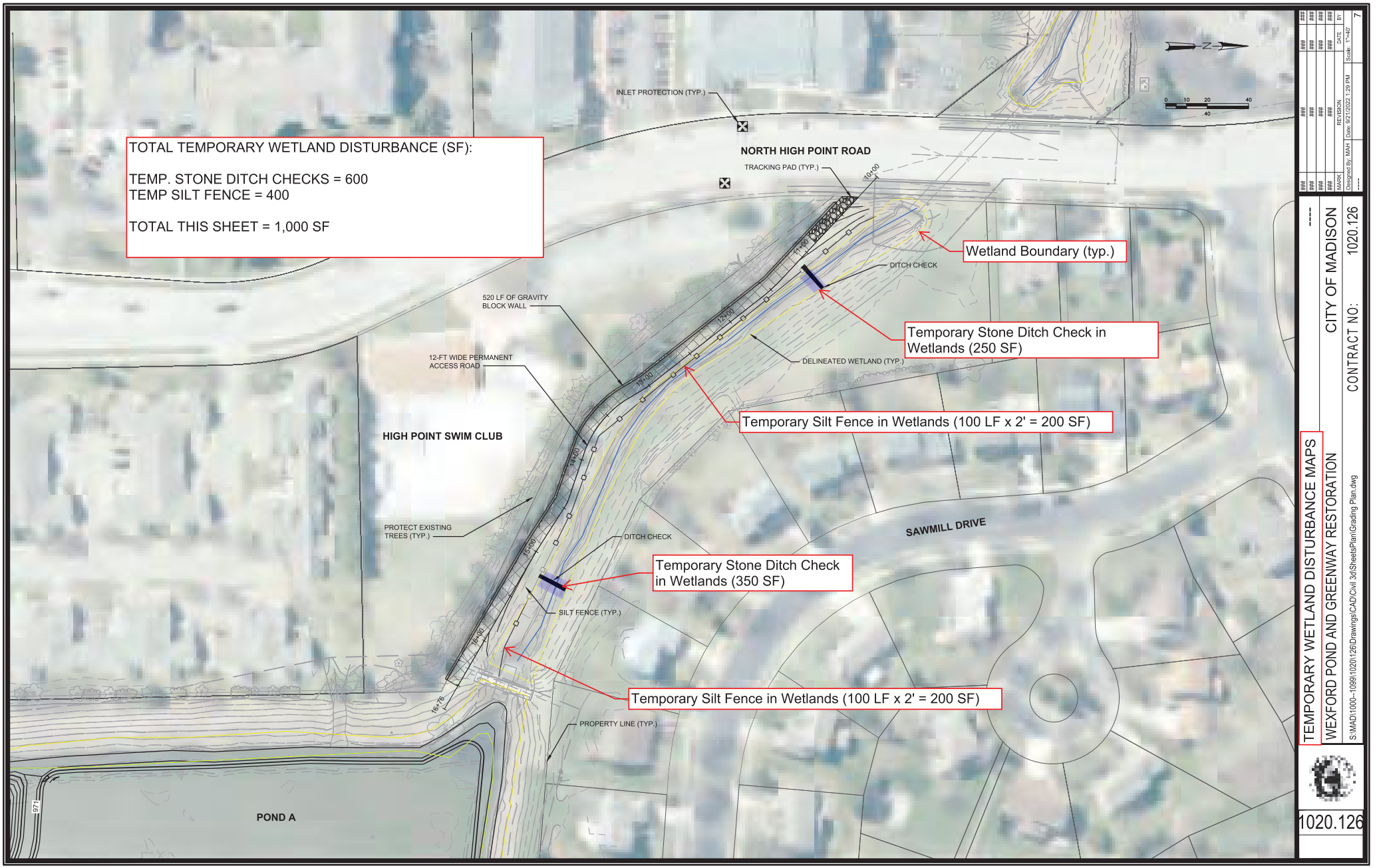
Designed By: TAW | Date: 11/15/2022 4:48 PM | Scale: 1"=40' | 3

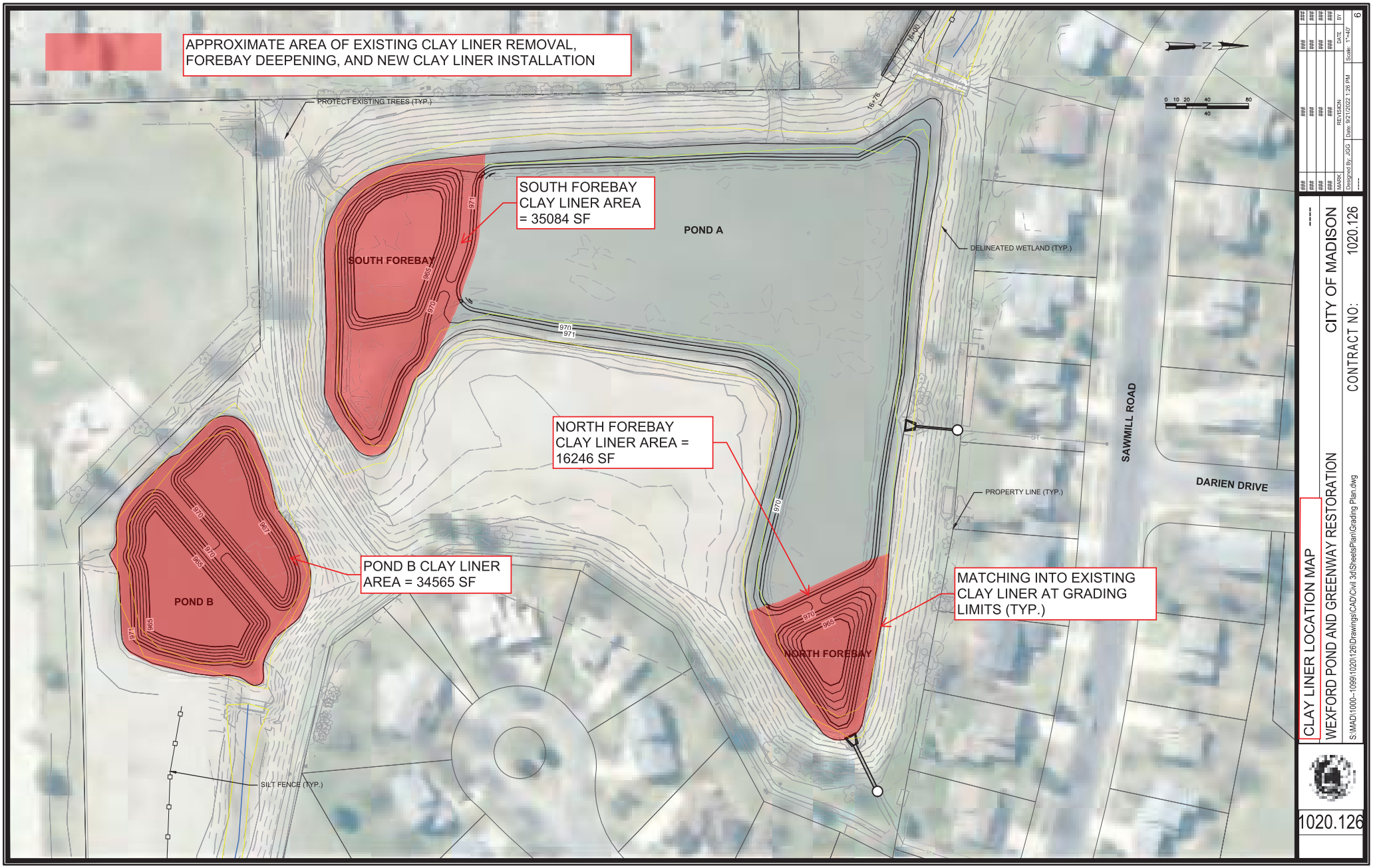
1020.126

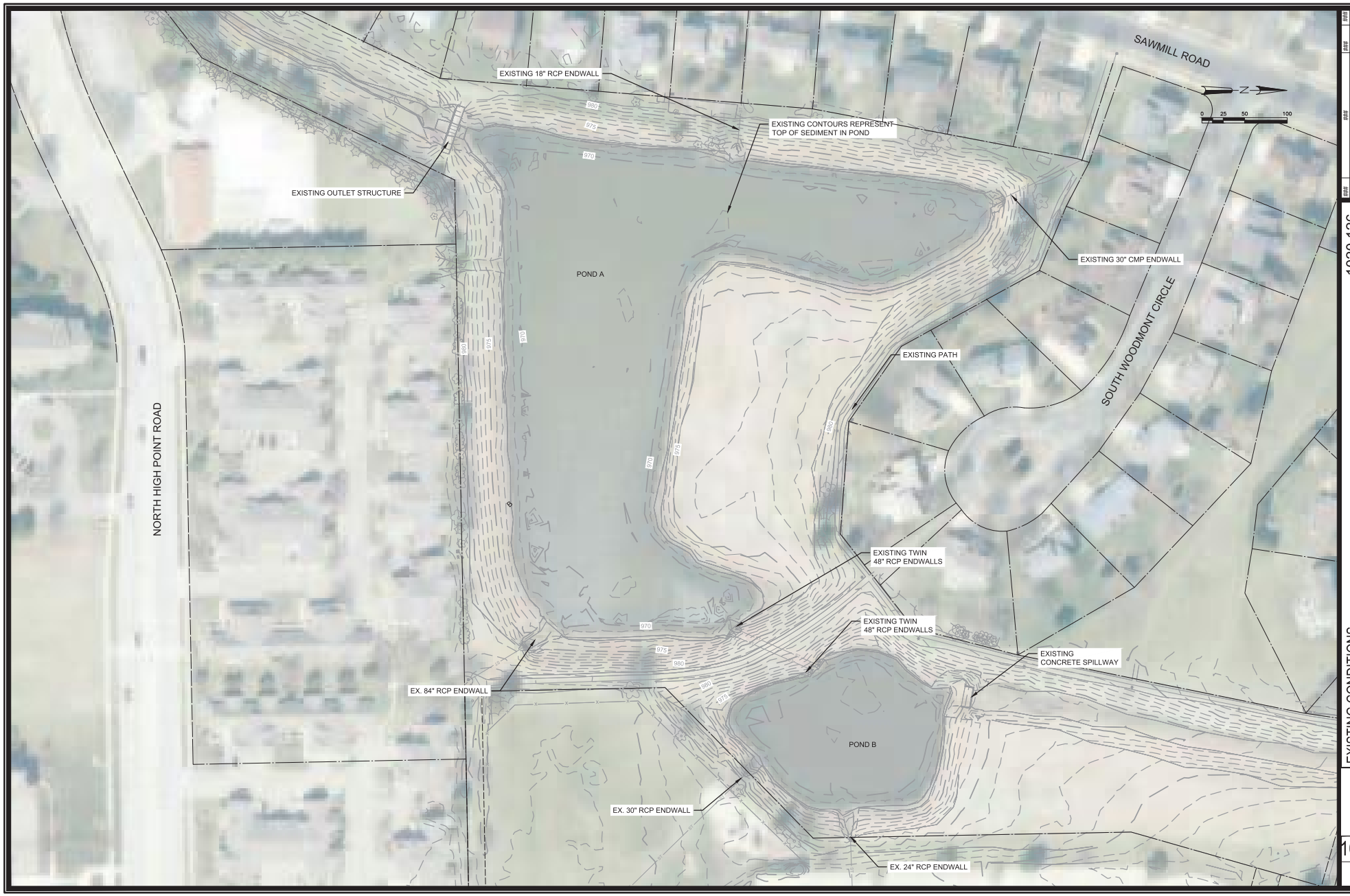
CONSTRUCTION DETAILS
WEXFORD POND DREDGING AND FOREBAY CONSTRUCTION
CITY OF MADISON
CONTRACT NO: ########
S:\MAD\1000--1099\1020\126\Drawings\CAD\Civil 3d\Sheets\Plan\Pond Plan Sheets.dwg

1020.126
3

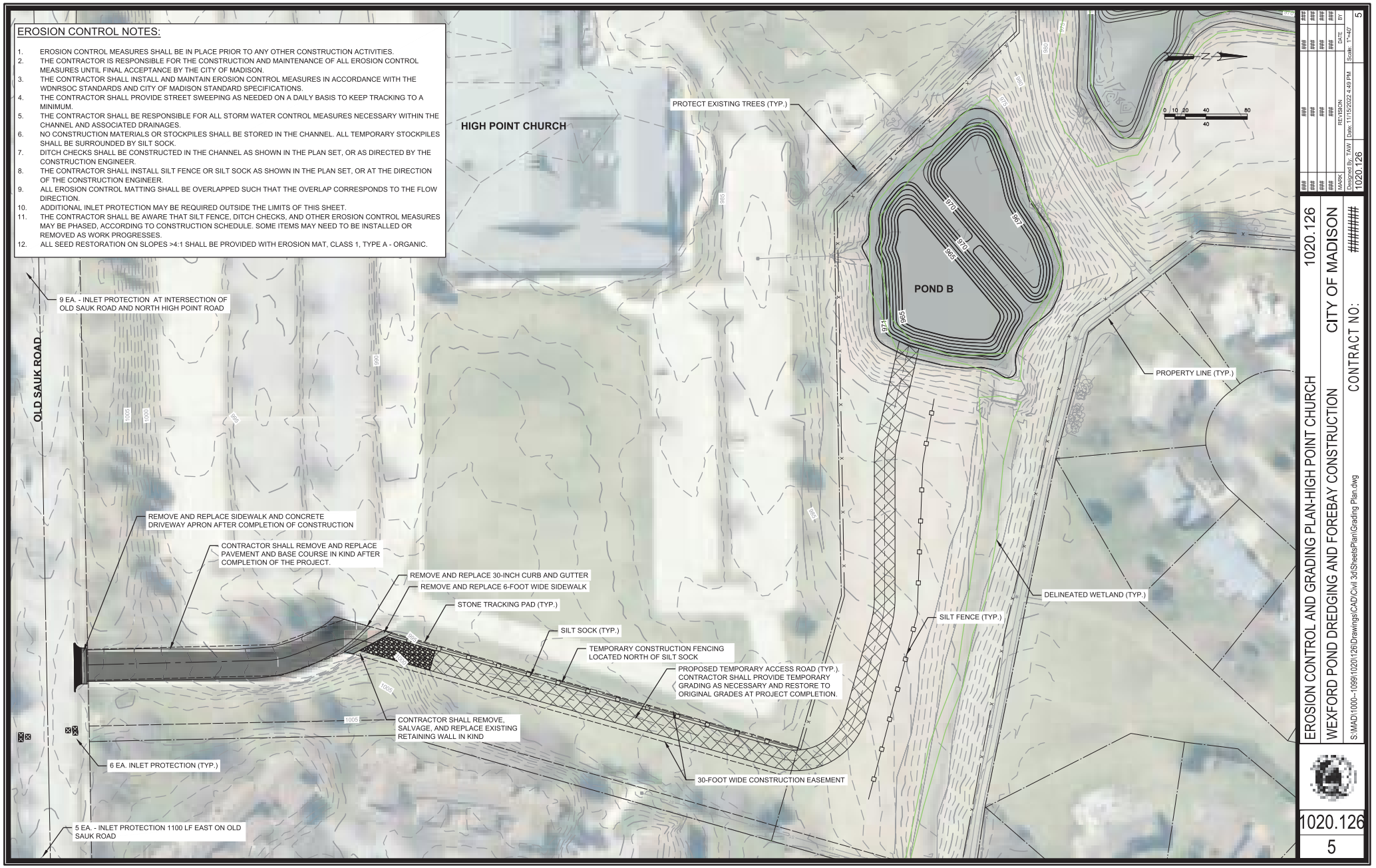

Temp Matting in Wetlands for access to Pond A (700 SF)
Sediment Removal in Pond B (20,700 SF)
PROTECT EXIS
POND A
SOUTH FOREBAY
DELINEATED WETLAND (TYP.)
Temp Matting in Wetlands for access to Pond A (700 SF)
Temp Matting in Wetlands for access to Pond A (250 SF)
SAWMILL ROAD
DARIEN DRIVE
PROPERTY LINE (TYP.)
POND B
Sediment Removal in Pond A (4500 SF)
NORTH FOREBAY
Temp Matting in Greenway for Access (900 SF)
SILT FENCE (TYP.)
Wetland Boundary (typ.)
TOTAL TEMPORARY WETLAND DISTURBANCE (SF):
POND A SEDIMENT REMOVAL = 20,700
POND A TEMP. MATTING = 1,650
POND B SEDIMENT REMOVAL = 4,500
TEMP MATTING IN GREENWAY = 900
TOTAL THIS SHEET = 27,750 SF
TEMPORARY WETLAND DISTURBANCE MAPS
WEXFORD POND AND GREENWAY RESTORATION
CITY OF MADISON
CONTRACT NO: 1020.126
1020.126

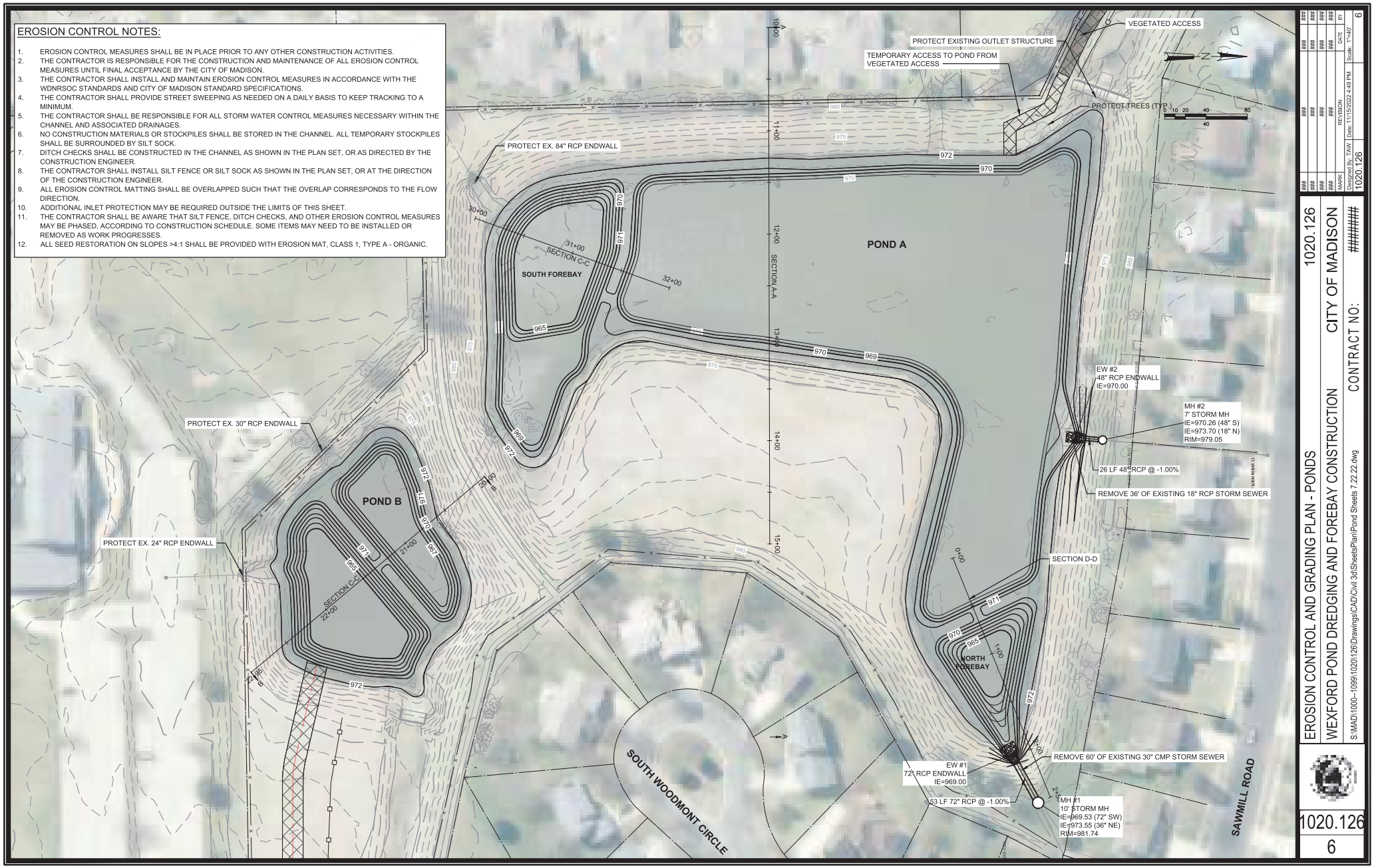

TOTAL TEMPORARY WETLAND DISTURBANCE (SF):
TEMP. STONE DITCH CHECKS = 600
TEMP SILT FENCE = 400
TOTAL THIS SHEET = 1,000 SF
INLET PROTECTION (TYP.)
NORTH HIGH POINT ROAD
TRACKING PAD (TYP.)
Wetland Boundary (typ.)
DITCH CHECK
520 LF OF GRAVITY BLOCK WALL
Temporary Stone Ditch Check in Wetlands (250 SF)
12-FT WIDE PERMANENT ACCESS ROAD
DELINEATED WETLAND (TYP.)
Temporary Silt Fence in Wetlands (100 LF x 2' = 200 SF)
HIGH POINT SWIM CLUB
PROTECT EXISTING TREES (TYP.)
SAWMILL DRIVE
DITCH CHECK
Temporary Stone Ditch Check in Wetlands (350 SF)
SILT FENCE (TYP.)
Temporary Silt Fence in Wetlands (100 LF x 2' = 200 SF)
PROPERTY LINE (TYP.)
POND A
971
CITY OF MADISON
CONTRACT NO: 1020.126
TEMPORARY WETLAND DISTURBANCE MAPS
WEXFORD POND AND GREENWAY RESTORATION
S:\MAD\1000--1099\1020\126\Drawings\CAD\Civil 3d\SheetsPlan\Grading Plan.dwg
1020.126

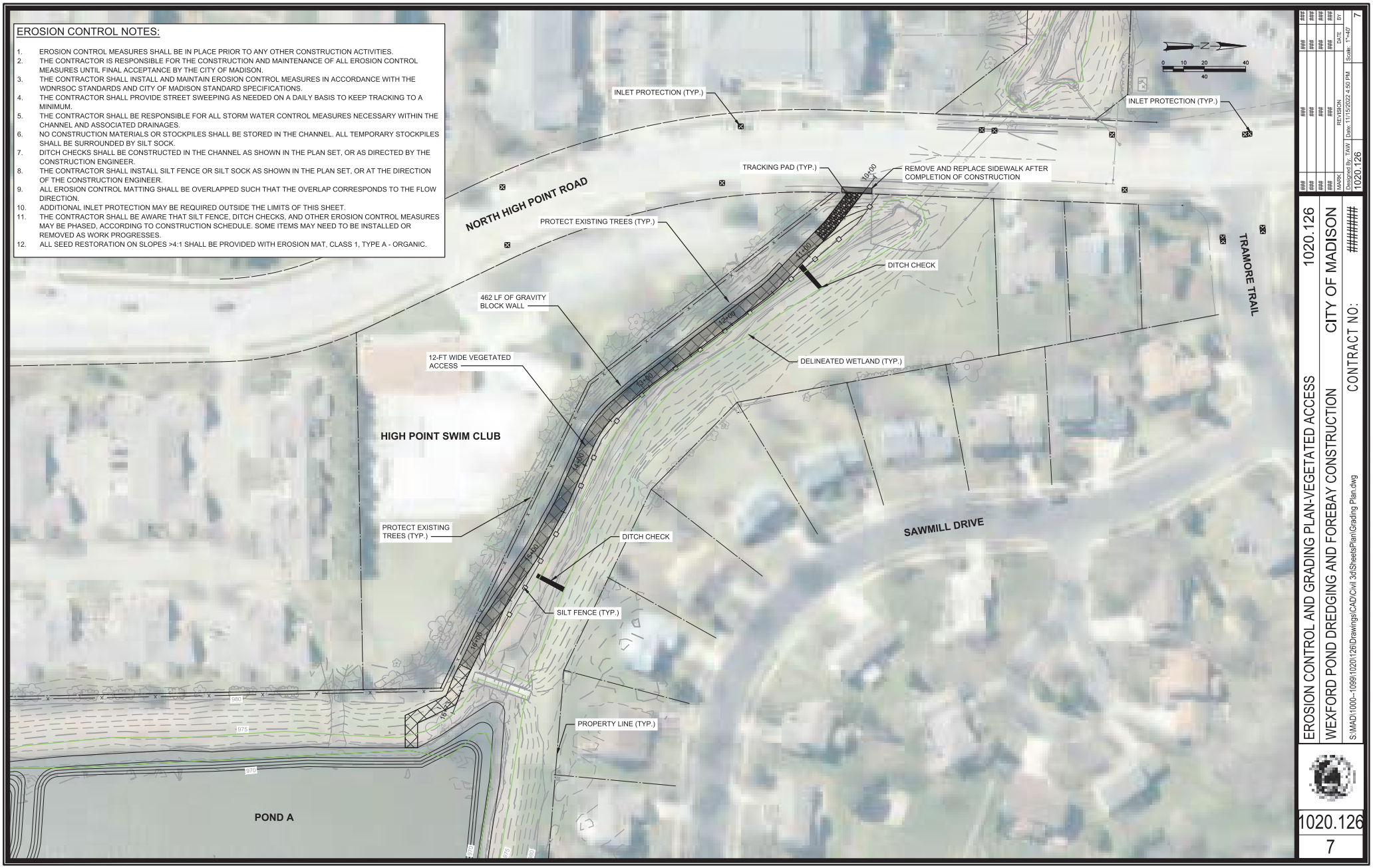

APPROXIMATE AREA OF EXISTING CLAY LINER REMOVAL, FOREBAY DEEPENING, AND NEW CLAY LINER INSTALLATION
PROTECT EXISTING TREES (TYP.)
SOUTH FOREBAY CLAY LINER AREA = 35084 SF
POND A
SOUTH FOREBAY
DELINEATED WETLAND (TYP.)
NORTH FOREBAY CLAY LINER AREA = 16246 SF
SAWMILL ROAD
DARIEN DRIVE
PROPERTY LINE (TYP.)
POND B CLAY LINER AREA = 34565 SF
POND B
MATCHING INTO EXISTING CLAY LINER AT GRADING LIMITS (TYP.)
NORTH FOREBAY
SILT FENCE (TYP.)
CLAY LINER LOCATION MAP
WEXFORD POND AND GREENWAY RESTORATION
CITY OF MADISON
CONTRACT NO: 1020.126
1020.126



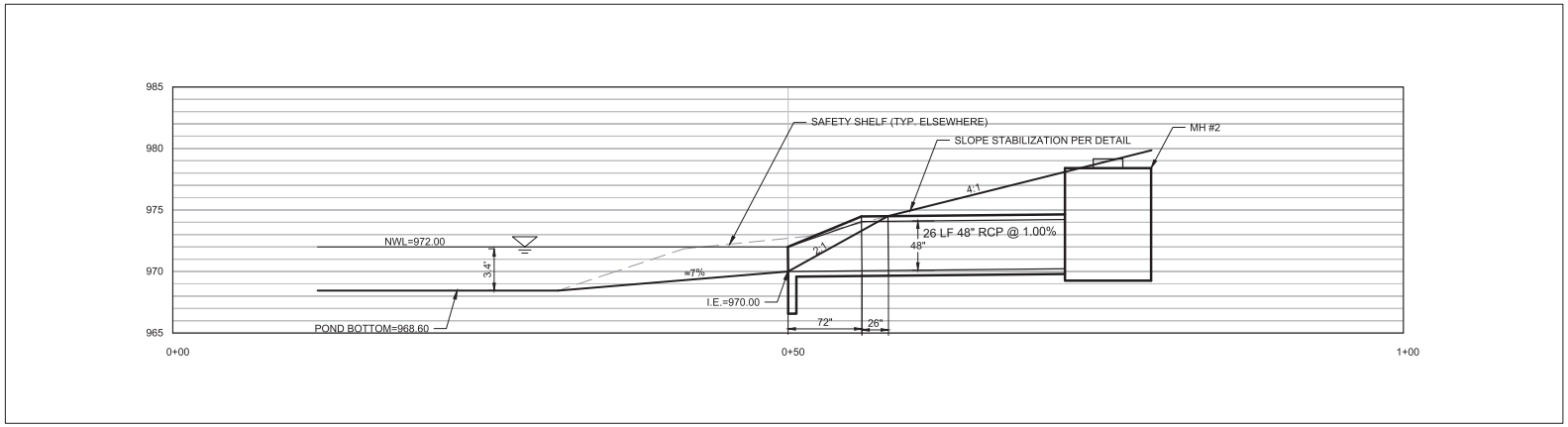
EXISTING CONDITIONS
WEXFORD POND DREDGING AND FOREBAY CONSTRUCTION
CITY OF MADISON
1020.126
CONTRACT NO: ########
S:\MAD\1000--1099\1020\126\Drawings\CAD\Civil 3d\Sheets\Plan\Pond Sheets 7.22.22.dwg
Designed By: TAW | Date: 11/15/2022 1:45 PM | Scale: 1"=40'
MARK | REVISION | DATE | BY
1020.126
4
1020.126
4


EROSION CONTROL NOTES:
1. EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO ANY OTHER CONSTRUCTION ACTIVITIES.
2. THE CONTRACTOR IS RESPONSIBLE FOR THE CONSTRUCTION AND MAINTENANCE OF ALL EROSION CONTROL MEASURES UNTIL FINAL ACCEPTANCE BY THE CITY OF MADISON.
3. THE CONTRACTOR SHALL INSTALL AND MAINTAIN EROSION CONTROL MEASURES IN ACCORDANCE WITH THE WDNRSOC STANDARDS AND CITY OF MADISON STANDARD SPECIFICATIONS.
4. THE CONTRACTOR SHALL PROVIDE STREET SWEEPING AS NEEDED ON A DAILY BASIS TO KEEP TRACKING TO A MINIMUM.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL STORM WATER CONTROL MEASURES NECESSARY WITHIN THE CHANNEL AND ASSOCIATED DRAINAGES.
6. NO CONSTRUCTION MATERIALS OR STOCKPILES SHALL BE STORED IN THE CHANNEL. ALL TEMPORARY STOCKPILES SHALL BE SURROUNDED BY SILT SOCK.
7. DITCH CHECKS SHALL BE CONSTRUCTED IN THE CHANNEL AS SHOWN IN THE PLAN SET, OR AS DIRECTED BY THE CONSTRUCTION ENGINEER.
8. THE CONTRACTOR SHALL INSTALL SILT FENCE OR SILT SOCK AS SHOWN IN THE PLAN SET, OR AT THE DIRECTION OF THE CONSTRUCTION ENGINEER.
9. ALL EROSION CONTROL MATTING SHALL BE OVERLAPPED SUCH THAT THE OVERLAP CORRESPONDS TO THE FLOW DIRECTION.
10. ADDITIONAL INLET PROTECTION MAY BE REQUIRED OUTSIDE THE LIMITS OF THIS SHEET.
11. THE CONTRACTOR SHALL BE AWARE THAT SILT FENCE, DITCH CHECKS, AND OTHER EROSION CONTROL MEASURES MAY BE PHASED, ACCORDING TO CONSTRUCTION SCHEDULE. SOME ITEMS MAY NEED TO BE INSTALLED OR REMOVED AS WORK PROGRESSES.
12. ALL SEED RESTORATION ON SLOPES >4:1 SHALL BE PROVIDED WITH EROSION MAT, CLASS 1, TYPE A - ORGANIC.
HIGH POINT CHURCH
PROTECT EXISTING TREES (TYP.)
POND B
PROPERTY LINE (TYP.)
DELINEATED WETLAND (TYP.)
SILT FENCE (TYP.)
OLD SAUK ROAD
9 EA. - INLET PROTECTION AT INTERSECTION OF OLD SAUK ROAD AND NORTH HIGH POINT ROAD
REMOVE AND REPLACE SIDEWALK AND CONCRETE DRIVEWAY APRON AFTER COMPLETION OF CONSTRUCTION
CONTRACTOR SHALL REMOVE AND REPLACE PAVEMENT AND BASE COURSE IN KIND AFTER COMPLETION OF THE PROJECT.
REMOVE AND REPLACE 30-INCH CURB AND GUTTER
REMOVE AND REPLACE 6-FOOT WIDE SIDEWALK
STONE TRACKING PAD (TYP.)
SILT SOCK (TYP.)
TEMPORARY CONSTRUCTION FENCING LOCATED NORTH OF SILT SOCK
PROPOSED TEMPORARY ACCESS ROAD (TYP.). CONTRACTOR SHALL PROVIDE TEMPORARY GRADING AS NECESSARY AND RESTORE TO ORIGINAL GRADES AT PROJECT COMPLETION.
CONTRACTOR SHALL REMOVE, SALVAGE, AND REPLACE EXISTING RETAINING WALL IN KIND
6 EA. INLET PROTECTION (TYP.)
30-FOOT WIDE CONSTRUCTION EASEMENT
5 EA. - INLET PROTECTION 1100 LF EAST ON OLD SAUK ROAD
0 10 20 40 80
40
EROSION CONTROL AND GRADING PLAN-HIGH POINT CHURCH
1020.126
WEXFORD POND DREDGING AND FOREBAY CONSTRUCTION
CITY OF MADISON
CONTRACT NO: ########
S:\MAD\1000--1099\1020\126\Drawings\CAD\Civil 3d\Sheets\Plan\Grading Plan.dwg
MARK REVISION DATE BY
Designed By: TAW Date: 11/15/2022 4:49 PM Scale: 1"=40'
1020.126
5

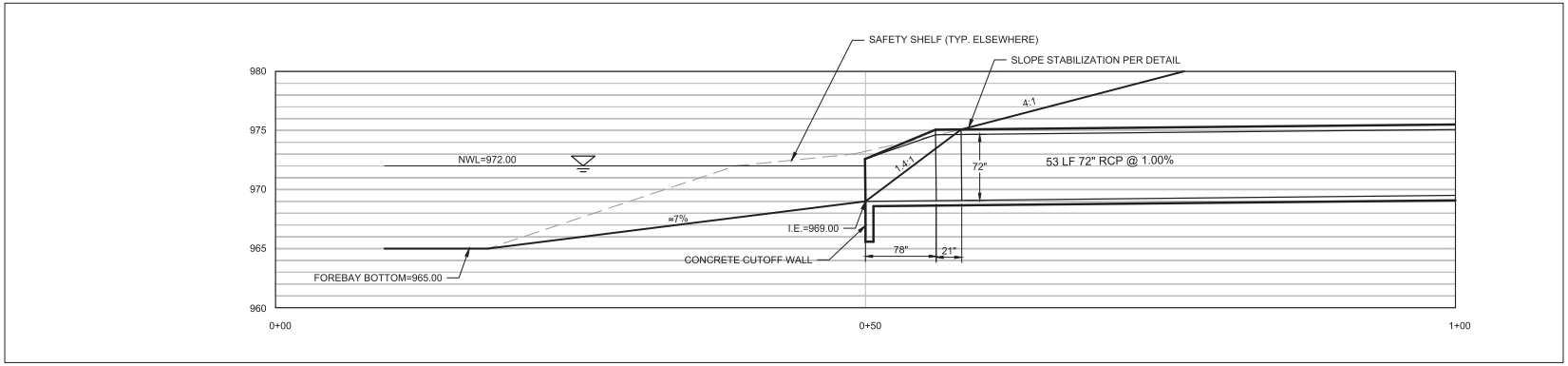

EROSION CONTROL NOTES:
1. EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO ANY OTHER CONSTRUCTION ACTIVITIES.
2. THE CONTRACTOR IS RESPONSIBLE FOR THE CONSTRUCTION AND MAINTENANCE OF ALL EROSION CONTROL MEASURES UNTIL FINAL ACCEPTANCE BY THE CITY OF MADISON.
3. THE CONTRACTOR SHALL INSTALL AND MAINTAIN EROSION CONTROL MEASURES IN ACCORDANCE WITH THE WDNRSOC STANDARDS AND CITY OF MADISON STANDARD SPECIFICATIONS.
4. THE CONTRACTOR SHALL PROVIDE STREET SWEEPING AS NEEDED ON A DAILY BASIS TO KEEP TRACKING TO A MINIMUM.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL STORM WATER CONTROL MEASURES NECESSARY WITHIN THE CHANNEL AND ASSOCIATED DRAINAGES.
6. NO CONSTRUCTION MATERIALS OR STOCKPILES SHALL BE STORED IN THE CHANNEL. ALL TEMPORARY STOCKPILES SHALL BE SURROUNDED BY SILT SOCK.
7. DITCH CHECKS SHALL BE CONSTRUCTED IN THE CHANNEL AS SHOWN IN THE PLAN SET, OR AS DIRECTED BY THE CONSTRUCTION ENGINEER.
8. THE CONTRACTOR SHALL INSTALL SILT FENCE OR SILT SOCK AS SHOWN IN THE PLAN SET, OR AT THE DIRECTION OF THE CONSTRUCTION ENGINEER.
9. ALL EROSION CONTROL MATTING SHALL BE OVERLAPPED SUCH THAT THE OVERLAP CORRESPONDS TO THE FLOW DIRECTION.
10. ADDITIONAL INLET PROTECTION MAY BE REQUIRED OUTSIDE THE LIMITS OF THIS SHEET.
11. THE CONTRACTOR SHALL BE AWARE THAT SILT FENCE, DITCH CHECKS, AND OTHER EROSION CONTROL MEASURES MAY BE PHASED, ACCORDING TO CONSTRUCTION SCHEDULE. SOME ITEMS MAY NEED TO BE INSTALLED OR REMOVED AS WORK PROGRESSES.
12. ALL SEED RESTORATION ON SLOPES >4:1 SHALL BE PROVIDED WITH EROSION MAT, CLASS 1, TYPE A - ORGANIC.
VEGETATED ACCESS
PROTECT EXISTING OUTLET STRUCTURE
TEMPORARY ACCESS TO POND FROM VEGETATED ACCESS
PROTECT TREES (TYP.)
PROTECT EX. 84" RCP ENDWALL
POND A
SOUTH FOREBAY
SECTION C-C
SECTION A-A
PROTECT EX. 30" RCP ENDWALL
POND B
PROTECT EX. 24" RCP ENDWALL
EW #2
48" RCP ENDWALL
IE=970.00
MH #2
7' STORM MH
IE=970.26 (48" S)
IE=973.70 (18" N)
RIM=979.05
26 LF 48" RCP @ -1.00%
REMOVE 36' OF EXISTING 18" RCP STORM SEWER
SECTION D-D
NORTH FOREBAY
REMOVE 60' OF EXISTING 30" CMP STORM SEWER
EW #1
72" RCP ENDWALL
IE=969.00
53 LF 72" RCP @ -1.00%
MH #1
10' STORM MH
IE=969.53 (72" SW)
IE=973.55 (36" NE)
RIM=981.74
SOUTH WOODMONT CIRCLE
SAWMILL ROAD
EROSION CONTROL AND GRADING PLAN - PONDS
WEXFORD POND DREDGING AND FOREBAY CONSTRUCTION
CITY OF MADISON
CONTRACT NO: ########
1020.126
S:\MAD\1000--1099\1020\126\Drawings\CAD\Civil 3d\Sheets\Plan\Pond Sheets 7.22.22.dwg
Designed By: TAW
Date: 11/15/2022 4:49 PM
Scale: 1"=40'
REVISION
DATE
BY
MARK
1020.126
6


EROSION CONTROL NOTES:
1. EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO ANY OTHER CONSTRUCTION ACTIVITIES.
2. THE CONTRACTOR IS RESPONSIBLE FOR THE CONSTRUCTION AND MAINTENANCE OF ALL EROSION CONTROL MEASURES UNTIL FINAL ACCEPTANCE BY THE CITY OF MADISON.
3. THE CONTRACTOR SHALL INSTALL AND MAINTAIN EROSION CONTROL MEASURES IN ACCORDANCE WITH THE WDNRSOC STANDARDS AND CITY OF MADISON STANDARD SPECIFICATIONS.
4. THE CONTRACTOR SHALL PROVIDE STREET SWEEPING AS NEEDED ON A DAILY BASIS TO KEEP TRACKING TO A MINIMUM.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL STORM WATER CONTROL MEASURES NECESSARY WITHIN THE CHANNEL AND ASSOCIATED DRAINAGES.
6. NO CONSTRUCTION MATERIALS OR STOCKPILES SHALL BE STORED IN THE CHANNEL. ALL TEMPORARY STOCKPILES SHALL BE SURROUNDED BY SILT SOCK.
7. DITCH CHECKS SHALL BE CONSTRUCTED IN THE CHANNEL AS SHOWN IN THE PLAN SET, OR AS DIRECTED BY THE CONSTRUCTION ENGINEER.
8. THE CONTRACTOR SHALL INSTALL SILT FENCE OR SILT SOCK AS SHOWN IN THE PLAN SET, OR AT THE DIRECTION OF THE CONSTRUCTION ENGINEER.
9. ALL EROSION CONTROL MATTING SHALL BE OVERLAPPED SUCH THAT THE OVERLAP CORRESPONDS TO THE FLOW DIRECTION.
10. ADDITIONAL INLET PROTECTION MAY BE REQUIRED OUTSIDE THE LIMITS OF THIS SHEET.
11. THE CONTRACTOR SHALL BE AWARE THAT SILT FENCE, DITCH CHECKS, AND OTHER EROSION CONTROL MEASURES MAY BE PHASED, ACCORDING TO CONSTRUCTION SCHEDULE. SOME ITEMS MAY NEED TO BE INSTALLED OR REMOVED AS WORK PROGRESSES.
12. ALL SEED RESTORATION ON SLOPES >4:1 SHALL BE PROVIDED WITH EROSION MAT, CLASS 1, TYPE A - ORGANIC.
INLET PROTECTION (TYP.)
INLET PROTECTION (TYP.)
TRACKING PAD (TYP.)
REMOVE AND REPLACE SIDEWALK AFTER COMPLETION OF CONSTRUCTION
NORTH HIGH POINT ROAD
PROTECT EXISTING TREES (TYP.)
DITCH CHECK
462 LF OF GRAVITY BLOCK WALL
TRAMORE TRAIL
12-FT WIDE VEGETATED ACCESS
DELINEATED WETLAND (TYP.)
HIGH POINT SWIM CLUB
PROTECT EXISTING TREES (TYP.)
DITCH CHECK
SAWMILL DRIVE
SILT FENCE (TYP.)
PROPERTY LINE (TYP.)
POND A
N
0 10 20 40
40
MARK REVISION DATE BY
Designed By: TAW Date: 11/15/2022 4:50 PM Scale: 1"=40'
1020.126
EROSION CONTROL AND GRADING PLAN-VEGETATED ACCESS
WEXFORD POND DREDGING AND FOREBAY CONSTRUCTION
CITY OF MADISON
CONTRACT NO: ########
S:\MAD\1000--1099\1020\126\Drawings\CAD\Civil 3d\Sheets\Plan\Grading Plan.dwg
1020.126
7

48" OUTFALL PIPE PROFILE



72" OUTFALL PIPE PROFILE



MARK	REVISION	DATE	BY
###	###	###	###
###	###	###	###
###	###	###	###
###	###	###	###

Designed By: TAW | Date: 11/15/2022 1:47 PM | Scale: 1"=40' | 8

1020.126

OUTFALL PIPE PROFILES

WEXFORD POND DREDGING AND FOREBAY CONSTRUCTION

CITY OF MADISON

CONTRACT NO: ########

S:\MAD\1000--1099\1020\126\Drawings\CAD\Civil 3d\Sheets\Plan\Pond Plan Sheets.dwg

1020.126

8

MARK	REVISION	DATE	BY
###	###	###	###

Designed By: TAW | Date: 11/15/2022 4:50 PM | Scale: 1"=40' | 9

1020.126

CONSTRUCTION ACCESS PLAN

WEXFORD POND DREDGING AND FOREBAY CONSTRUCTION

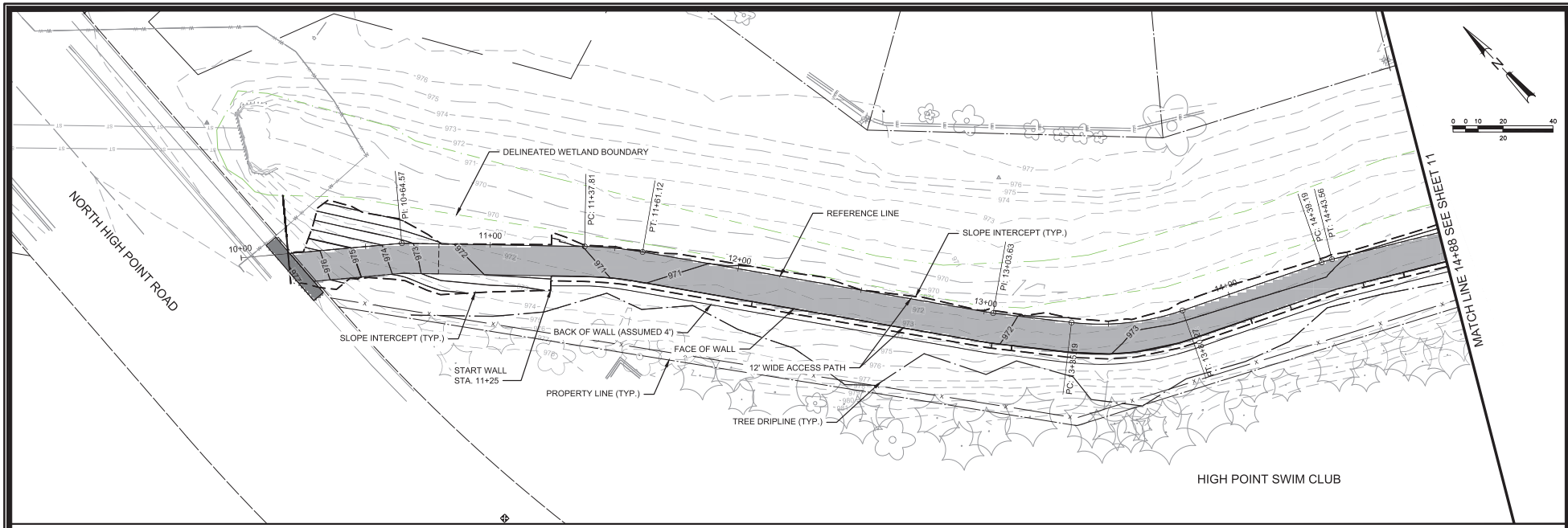
CITY OF MADISON

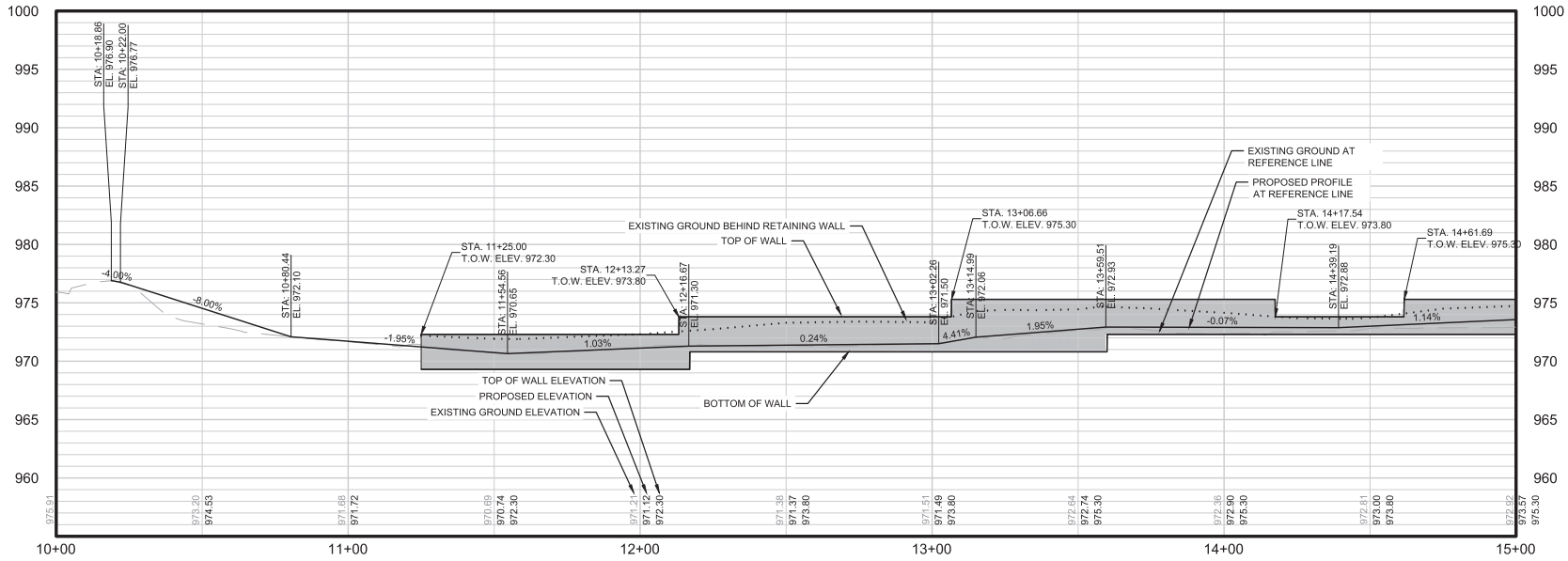
CONTRACT NO: ########

S:\MAD\1000--1099\1020\126\Drawings\CAD\Civil 3d\Sheets\Plan\Construction Access Exhibit.dwg

1020.126

9





MARK	REVISION	DATE	BY

Designed By: TAW | Date: 11/15/2022 1:47 PM | Scale: 1"=40' | 12750 | 10

VEGETATED ACCESS PLAN AND PROFILE

WEXFORD POND DREDGING AND FOREBAY CONSTRUCTION

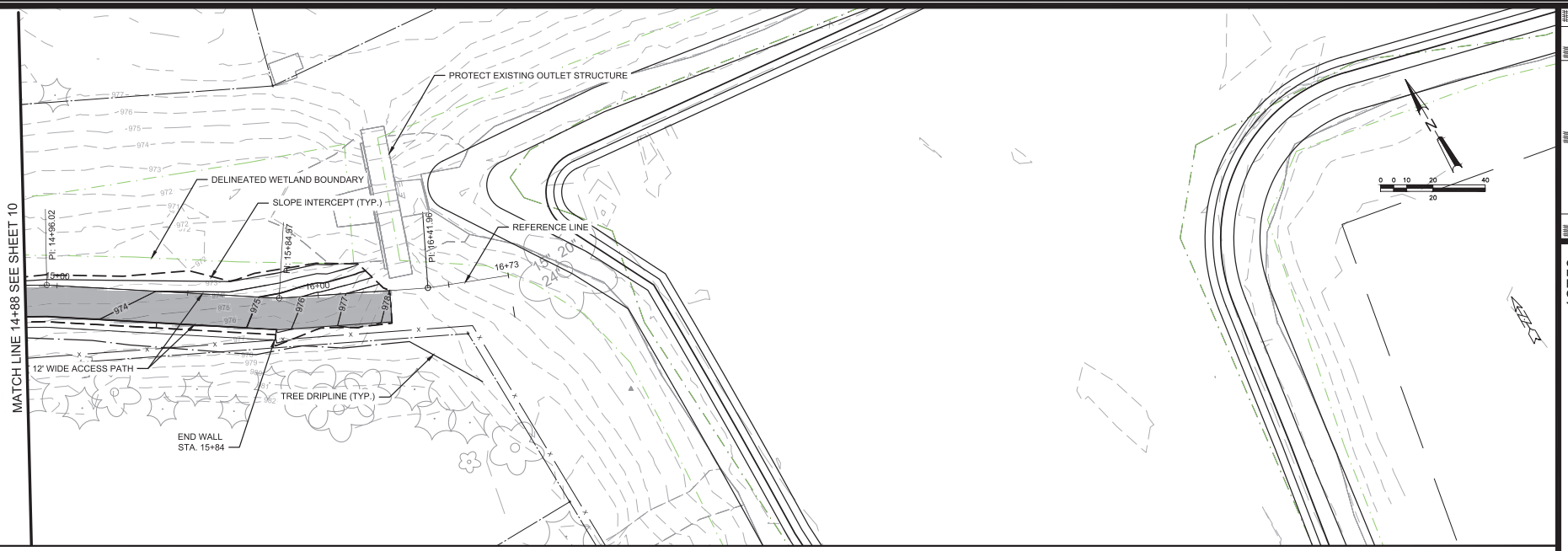
CITY OF MADISON

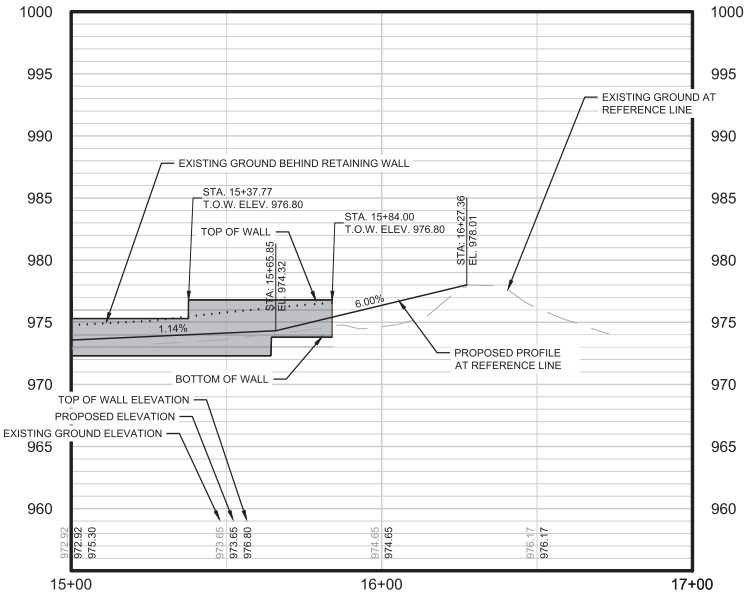
CONTRACT NO: ######

S:\MAD\1000--1099\1020\126\Drawings\CAD\Civil 3d\Sheets\Plan\NHP Access.dwg

12750

10





VEGETATED ACCESS PLAN AND PROFILE

WEXFORD POND DREDGING AND FOREBAY CONSTRUCTION

CITY OF MADISON

12750

CONTRACT NO: ######

S:\MAD\1000--1099\10201\26\Drawings\CAD\Civil 3d\Sheets\Plan\NHP Access.dwg

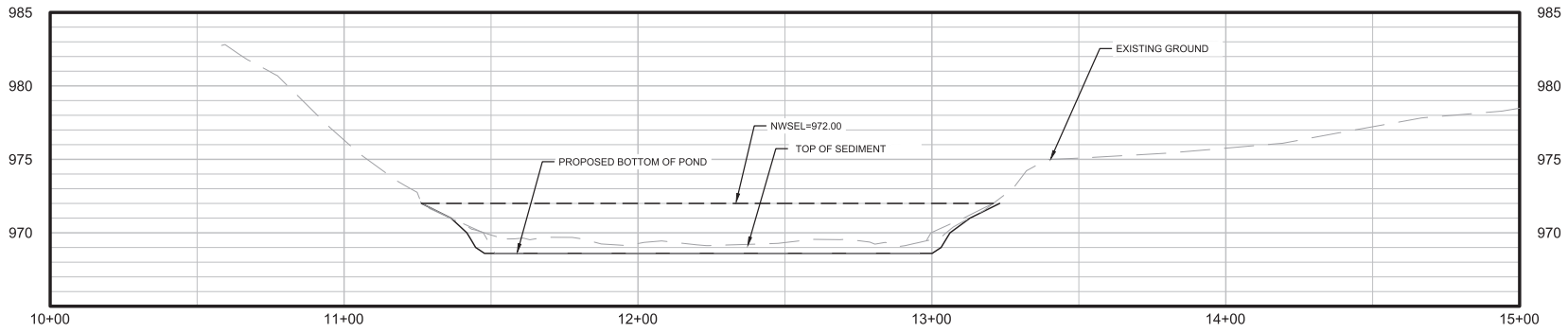
MARK	REVISION	DATE	BY
###	###	###	###

Designed By: TAW | Date: 11/15/2022 1:48 PM | Scale: 1"=40'

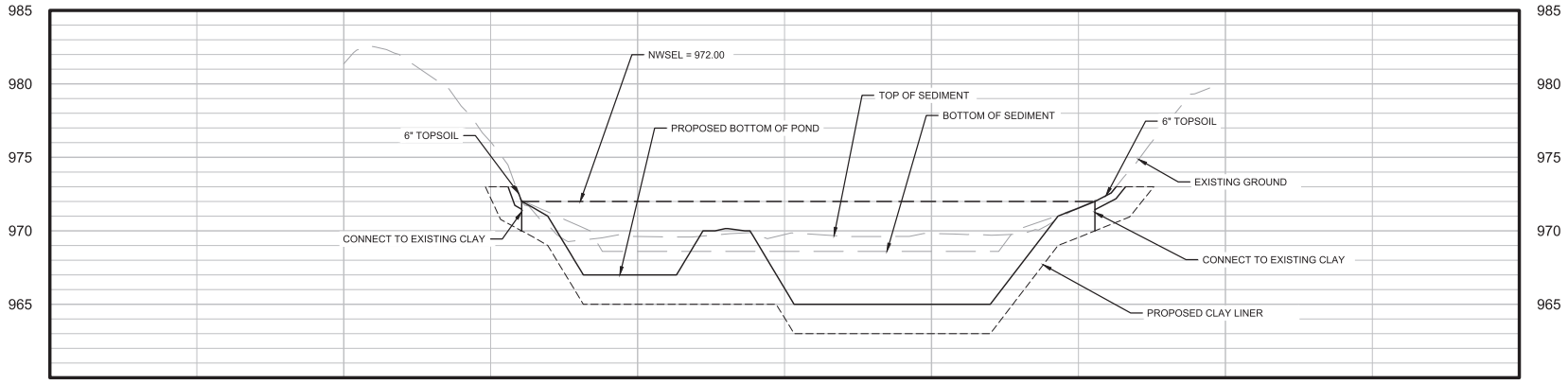
12750

11

SECTION A-A



SECTION B-B



POND CROSS SECTIONS

WEXFORD POND DREDGING AND FOREBAY CONSTRUCTION

CITY OF MADISON

1020.126

CONTRACT NO: ########

S:\MAD\1000--1099\1020\126\Drawings\CAD\Civil 3d\Sheets\Plan\Pond Sheets 7.22.22.dwg

Designed By: TAW | Date: 11/15/2022 1:48 PM | Scale: 1"=40'

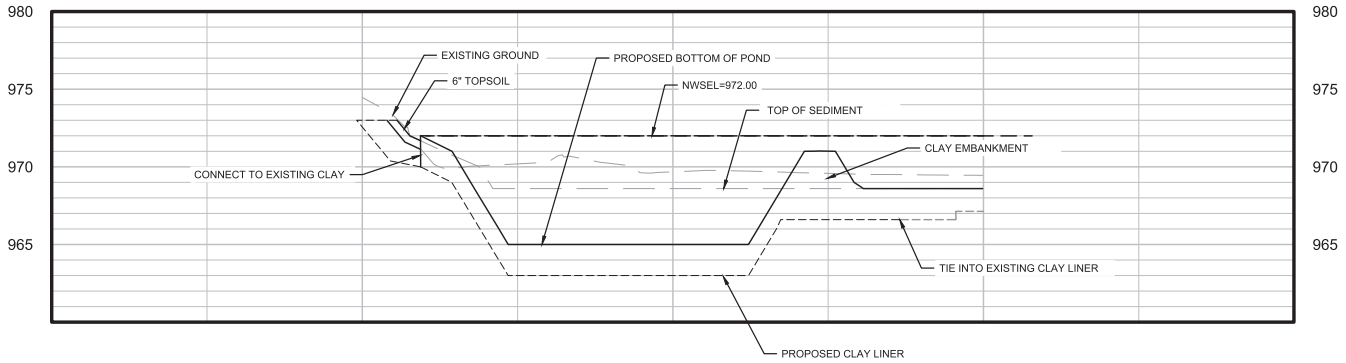
MARK	REVISION	DATE	BY
###	###	###	###

1020.126

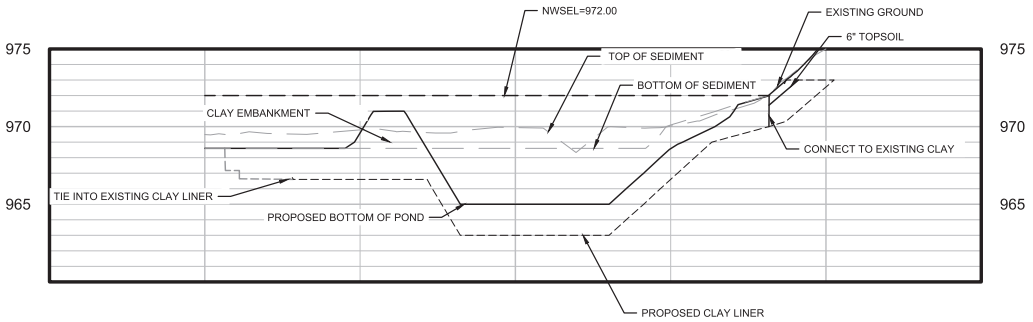
12

0 5 10 20 40
20

SECTION C-C



SECTION D-D



MARK	REVISION	DATE	BY
###	###	###	###

Designed By: TAW | Date: 11/15/2022 1:48 PM | Scale: 1"=40' | 13

1020.126

POND CROSS SECTIONS

1020.126

WEXFORD POND DREDGING AND FOREBAY CONSTRUCTION

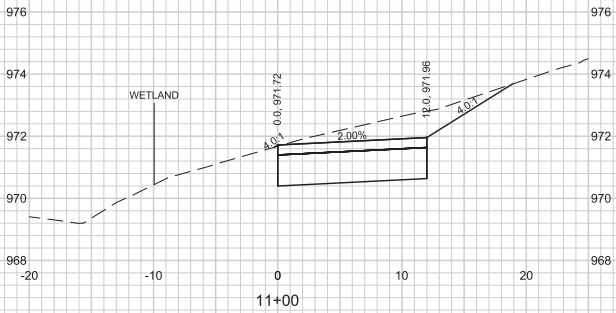
CITY OF MADISON

S:\MAD\1000--1099\1020\126\Drawings\CAD\Civil 3d\SheetsPlan\Pond Sheets 7.22.22.dwg

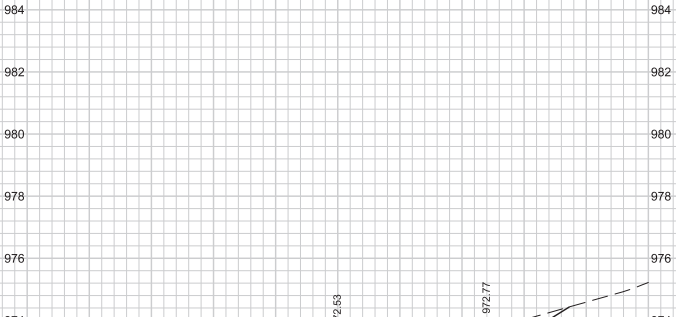
CONTRACT NO: ########

1020.126

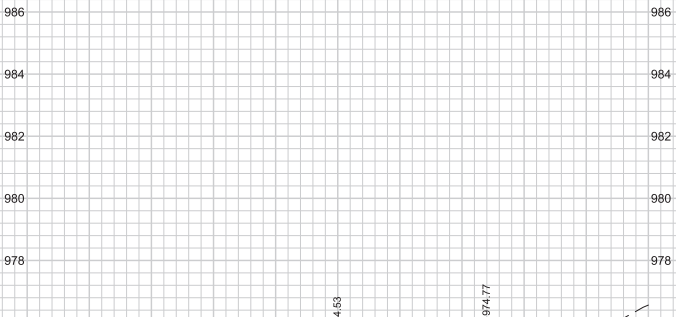
13



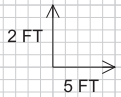
11+00



10+75



10+50



14 | 1020.126

VEGETATED ACCESS CROSS SECTIONS | 1020.126

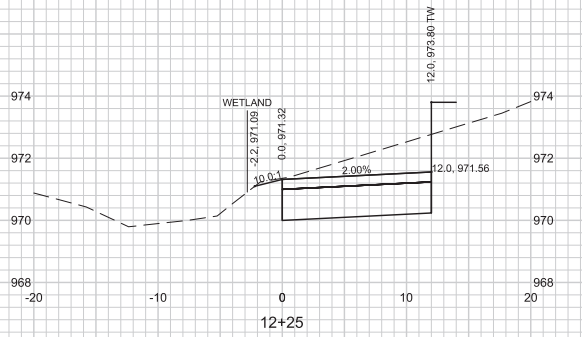
WEXFORD POND DREDGING AND FOREBAY CONSTRUCTION | CITY OF MADISON

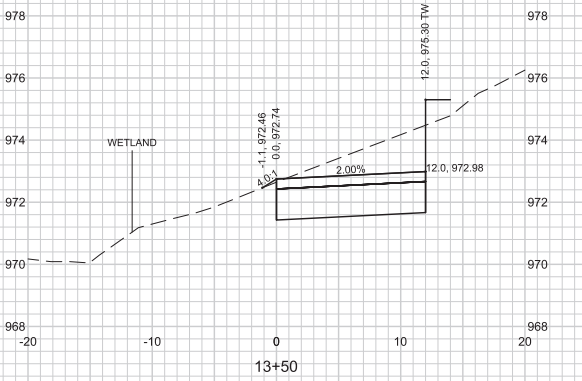
S:\MAD\1000--1099\1020\126\Drawings\CAD\Civil 3d\SheetsOther\North High Point Path XS.dwg | CONTRACT NO: ########

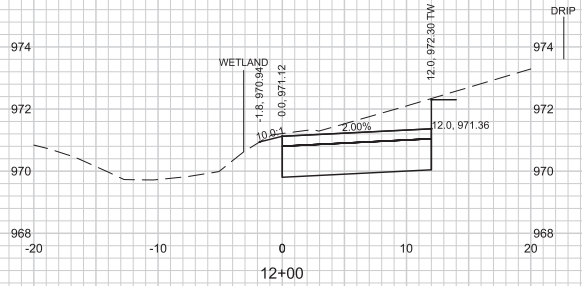
MARK	REVISION	DATE	BY
###	###	###	###
###	###	###	###
###	###	###	###
###	###	###	###

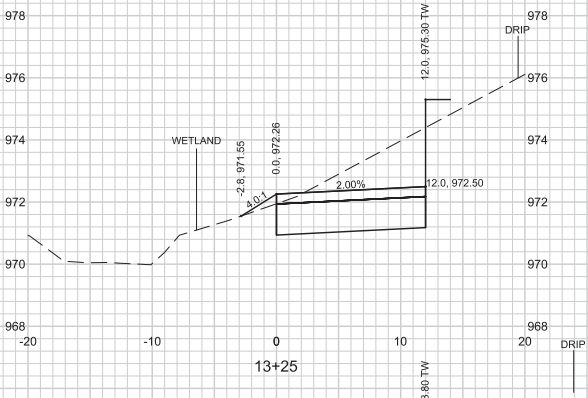
Designed By: TAW | Date: 11/15/2022 1:57 PM | Scale: 1"=40'

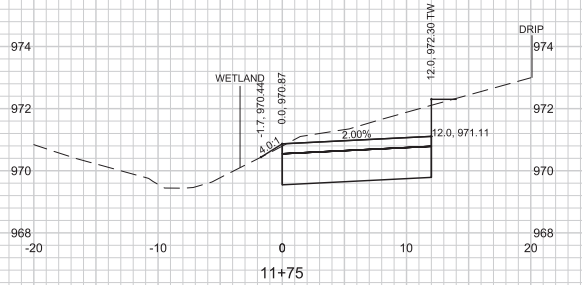
1020.126 | 14

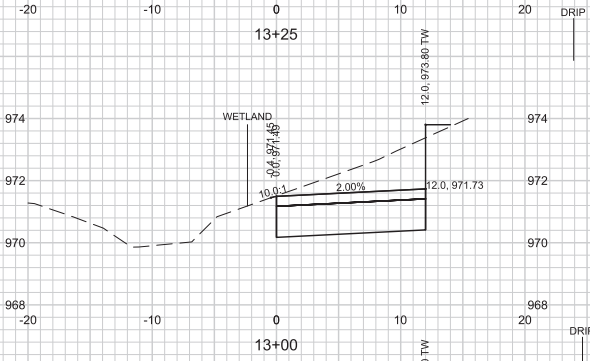


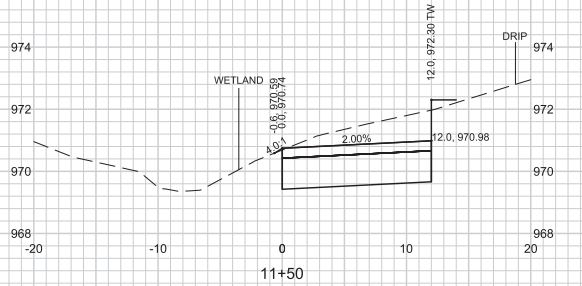


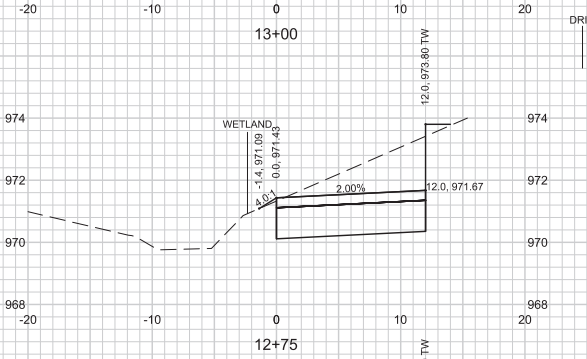


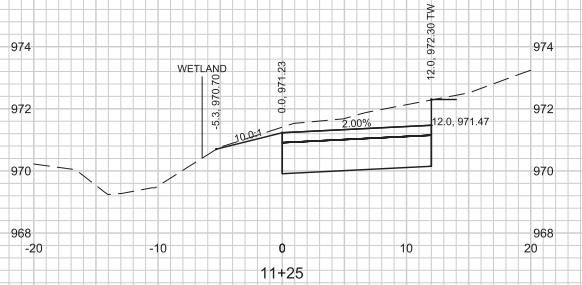


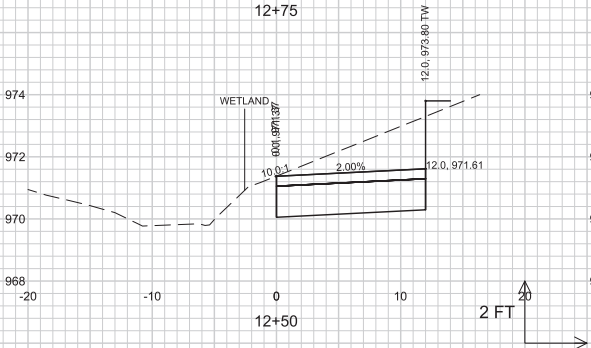










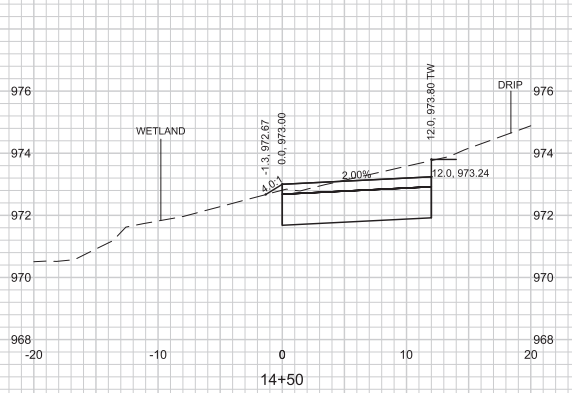


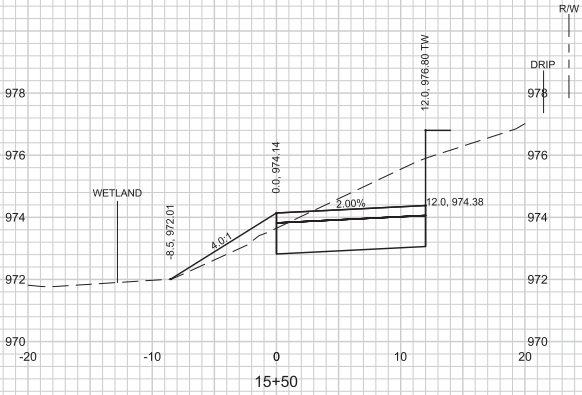
15	1020.126	VEGETATED ACCESS CROSS SECTIONS	1020.126
		WEXFORD POND DREDGING AND FOREBAY CONSTRUCTION	CITY OF MADISON
		S:\MAD\1000--1099\1020\126\Drawings\CAD\Civil 3d\SheetsOther\North High Point Path XS.dwg	CONTRACT NO: ########

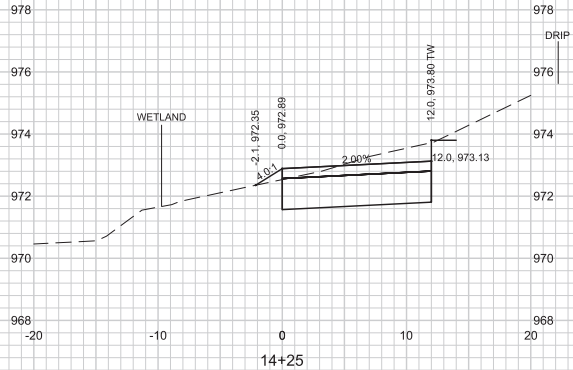
MARK	REVISION	DATE	BY
###	###	###	###
###	###	###	###
###	###	###	###
###	###	###	###

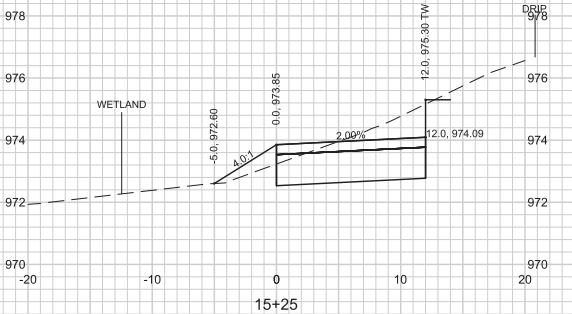
Designed By: TAW | Date: 11/15/2022 1:57 PM | Scale: 1"=40'

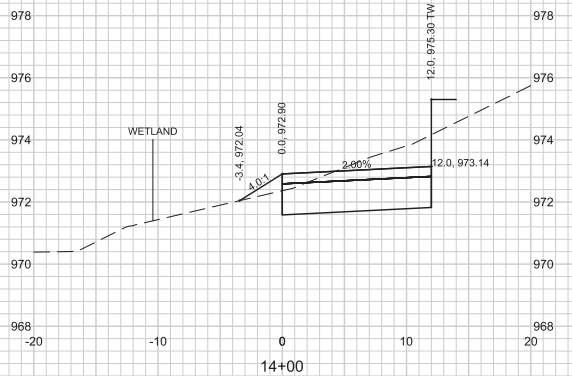
1020.126 | 15

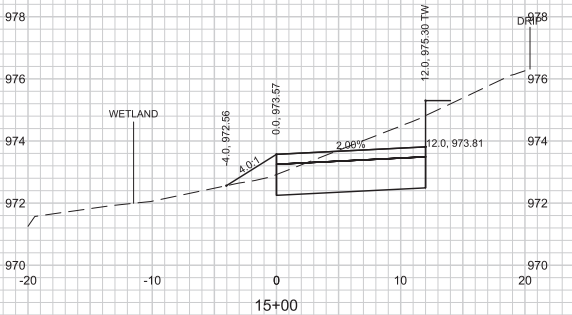


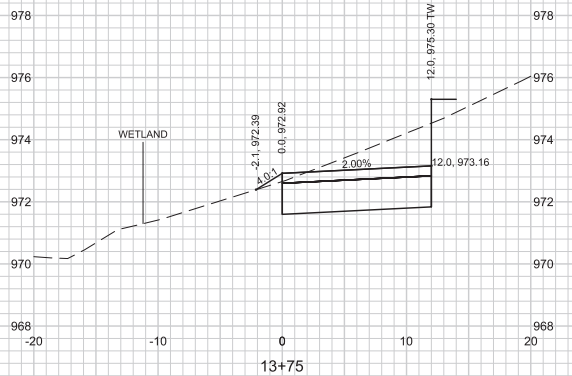


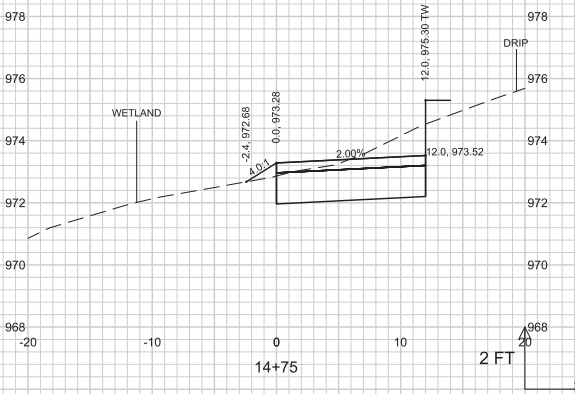












16 | 1020.126

VEGETATED ACCESS CROSS SECTIONS 1020.126

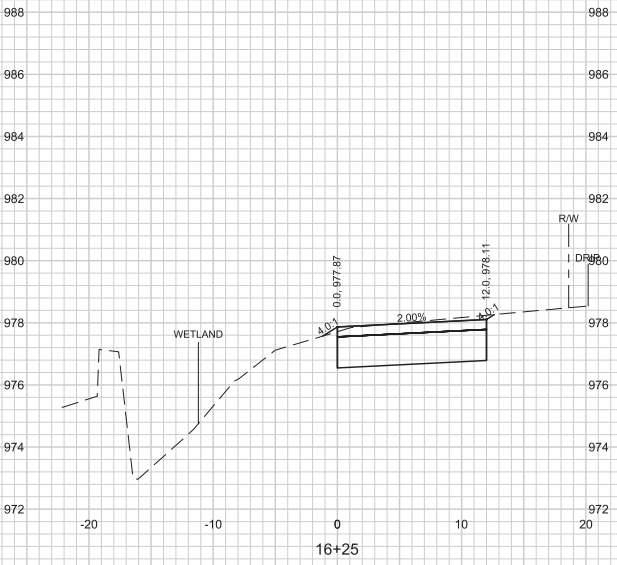
WEXFORD POND DREDGING AND FOREBAY CONSTRUCTION CITY OF MADISON

S:\MAD\1000--1099\1020\126\Drawings\CAD\Civil 3d\SheetsOther\North High Point Path XS.dwg CONTRACT NO: ########

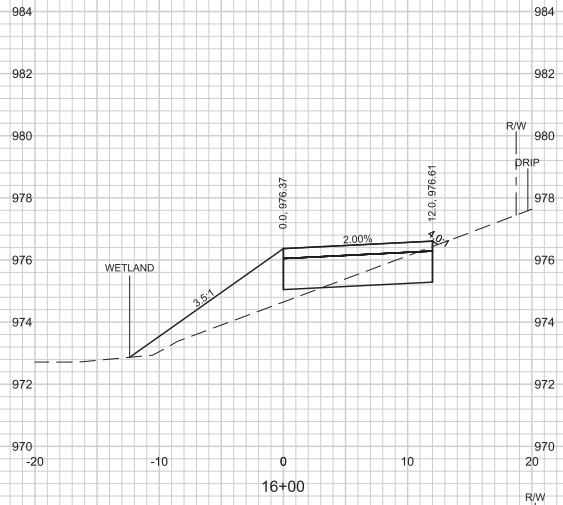
MARK	REVISION	DATE	BY
###	###	###	###
###	###	###	###
###	###	###	###
###	###	###	###

Designed By: TAW | Date: 11/15/2022 1:57 PM | Scale: 1"=40'

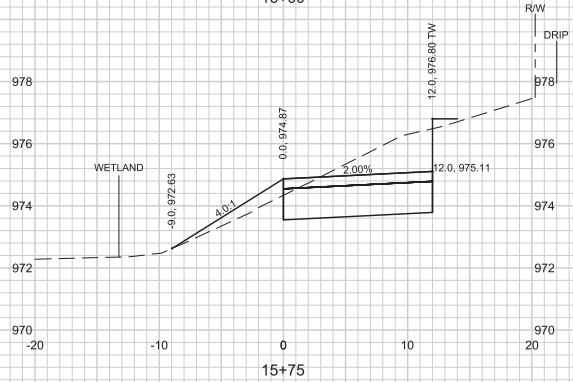
1020.126 16



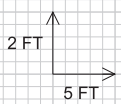
16+25



16+00



15+75



17	1020.126	VEGETATED ACCESS CROSS SECTIONS	1020.126
		WEXFORD POND DREDGING AND FOREBAY CONSTRUCTION	CITY OF MADISON
		S:\MAD\1000--1099\1020\126\Drawings\CAD\Civil 3d\SheetsOther\North High Point Path XS.dwg	CONTRACT NO: ########

MARK	REVISION	DATE	BY
###	###	###	###
###	###	###	###
###	###	###	###
###	###	###	###

Designed By: TAW | Date: 11/15/2022 1:57 PM | Scale: 1"=40'

1020.126 | 17

43. Stormwater Management Facilities. Discharges of dredged or fill material into non-tidal waters of the United States for the construction of stormwater management facilities, including stormwater detention basins and retention basins and other stormwater management facilities; the construction of water control structures, outfall structures and emergency spillways; the construction of low impact development integrated management features such as bioretention facilities (e.g., rain gardens), vegetated filter strips, grassed swales, and infiltration trenches; and the construction of pollutant reduction green infrastructure features designed to reduce inputs of sediments, nutrients, and other pollutants into waters, such as features needed to meet reduction targets established under Total Maximum Daily Loads set under the Clean Water Act.

This NWP authorizes, to the extent that a section 404 permit is required, discharges of dredged or fill material into non-tidal waters of the United States for the maintenance of stormwater management facilities, low impact development integrated management features, and pollutant reduction green infrastructure features. The maintenance of stormwater management facilities, low impact development integrated management features, and pollutant reduction green infrastructure features that are not waters of the United States does not require a section 404 permit.

The discharge must not cause the loss of greater than 1/2-acre of non-tidal waters of the United States. This NWP does not authorize discharges of dredged or fill material into non-tidal wetlands adjacent to tidal waters. This NWP does not authorize discharges of dredged or fill material for the construction of new stormwater management facilities in perennial streams.

Notification: For discharges of dredged or fill material into non-tidal waters of the United States for the construction of new stormwater management facilities or pollutant reduction green infrastructure features, or the expansion of existing stormwater management facilities or pollutant reduction green infrastructure features, the permittee must submit a pre-construction notification to the district engineer prior to commencing the activity. (See general condition 32.) Maintenance activities do not require pre-construction notification if they are limited to restoring the original design capacities of the stormwater management facility or pollutant reduction green infrastructure feature. (Authority: Section 404)

2021 Nationwide Permits (NWP)

St. Paul District Regional Conditions for Minnesota and Wisconsin

To qualify for NWP authorization, the prospective permittee must comply with the following regional conditions, as applicable, in addition to any case specific conditions imposed by the division engineer. The St. Paul District Regulatory website will provide current information regarding NWPs and the necessary 401 Water Quality Certifications at https://www.mvp.usace.army.mil/missions/regulatory/nwp/. Every person who wishes to obtain permit authorization under one or more NWPs, or who is currently relying on an existing or prior permit authorization under one or more NWPs, has been and is on notice that all of the provisions of 33 CFR 330.1 through 330.6 apply to every NWP authorization. Note especially 33 CFR 330.5 relating to the modification, suspension, or revocation of any NWP authorization.

The following NWPs have been revoked and are not available for use in St. Paul District: NWPs 8, 12, 14, 15, 21, 23, 24, 34, 48, 49, 50, 55, 56, 57, and 58.

Information on other permits available for use in St. Paul District can be found at: https://www.mvp.usace.army.mil/Missions/Regulatory/Permitting-Process-Procedures/.

Any regulated activity eligible for authorization under a St. Paul District Special Area Management Plan (SAMP) general permit is not eligible for authorization by NWPs.

The following regional conditions are applicable to all NWPs:

A. **Linear Projects:** No linear utility or linear transportation projects are eligible for authorization by NWPs. These projects will be reviewed for authorization under the St. Paul District's regional general permits or an individual permit.

B. **Temporary Impacts:** All regulated temporary impacts to waters of the U.S. must comply with the following criteria:

(1) If the temporary impacts in waters of the U.S., including wetlands, that occur as a result of the regulated activity would remain in place for longer than 90 days between May 15 and November 15, a PCN is required.

(2) Any PCN with temporary impacts must specify how long the temporary impact will remain and include a restoration and re-vegetation plan showing how all temporary fills and structures will be removed and the area restored to preconstruction contours and elevations. Native, non-invasive vegetation must be used unless otherwise authorized by a Corps NWP verification.

C. **PCNs for Apostle Islands National Lakeshore and Madeline Island**: A project proponent must notify the District by submitting a PCN if the regulated activity would result in excavation, fill, or the placement of a new structure within the boundaries of Apostle Islands National Lakeshore and Madeline Island in Wisconsin. Regulated activities authorized under NWP 3 (Maintenance) are not subject to this condition unless they include bank shaping or excavation.

D. **Calcareous fens:**

WISCONSIN: No work in a calcareous fen is authorized by a NWP unless the Wisconsin Department of Natural Resources (WI DNR) has approved a permit for the proposed regulated activity. Project proponents must provide evidence of an approved permit to the District.

MINNESOTA: No work in a calcareous fen is authorized by a NWP unless the Minnesota Department of Natural Resources (MN DNR) has approved a calcareous fen management plan specific to a project that otherwise qualifies for authorization by a NWP. Project proponents must provide evidence of an approved fen management plan to the District. A list of known Minnesota calcareous fens can be found at: http://files.dnr.state.mn.us/eco/wetlands/calcareous_fen_list.pdf.

E. **Special Aquatic Resources:** A project proponent must notify the District by submitting a PCN if a regulated activity would occur in any of the following aquatic resources:

(1) State-designated wild rice waters[1,2];

(2) Bog wetland plant communities[1,3];

(3) Fens[1,3];

(4) Coastal plain marshes[1,4];

(5) Interdunal wetlands[1,4];

(6) Great Lakes ridge and swale complexes[1,4];

(7) Aquatic resources within Lake Superior National Estuarine Research Reserve;

(8) Ramsar wetland sites, including: the Horicon Marsh, Upper Mississippi River Floodplain Wetland, Kakagon and Bad River Slough, Door Peninsula Coastal Wetlands, Chiwaukee Illinois Beach Lake Plain, and Lower Wisconsin Riverway. The complete up to date Ramsar list is available at https://rsis.ramsar.org.

The following regional conditions are applicable to a specific NWP:

F. **NWP 52. Water-Based Renewable Energy Generation Pilot Projects:** NWP 52 does not authorize structures or work in Lake Michigan and Lake Superior within the geographic regulatory boundaries of the St. Paul District.

G. **NWP 3, 33, and 41. Aquatic Resource Impacts:** A project proponent must notify the District by submitting a PCN if a regulated activity, including but not limited to, filling, flooding, excavating, or drainage of waters of the U.S., involves:

(1) A permanent loss of greater than 1/10 acre of waters of the U.S. for NWP 3 and 41; or
(2) over 1/2 acre of temporary impacts to waters of the U.S. for NWP 3, 33, and 41.

H. **NWP 27. Aquatic Habitat Restoration, Establishment and Enhancement Activities:** NWP 27 does not authorize the permanent conversion of forested, bog, fen, sedge meadow, or shrub-carr wetlands to other plant communities. A project proponent may request, in writing, a waiver from this condition from the District. The waiver will only be issued if it can be demonstrated that the conversion would restore wetland plant communities to the pre-settlement condition or a watershed approach and that the current landscape and hydrologic conditions would sustain the targeted community.

---

[1] Information about Wisconsin plant community types for 1-6 above may be obtained from: http://dnr.wi.gov/topic/EndangeredResources/Communities.asp?mode=group&Type=Wetland

[2] Information regarding wild rice waters and their extent may be obtained from: https://www.dnr.state.mn.us/wildlife/shallowlakes/wildrice.html and https://gisdata.mn.gov/dataset/biota-wild-rice-lakes-dnr-wld in Minnesota, https://dnr.wisconsin.gov/topic/wildlifehabitat/rice.html in Wisconsin, and an interactive map is provided at: http://maps.glifwc.org/ (under Treaty Resources – Gathering).

[3] Additional information on bog and fen communities can be found at: http://www.mvp.usace.army.mil/missions/regulatory.aspx and in Minnesota at http://www.dnr.state.mn.us/npc/classification.html.

[4] Coastal plain marshes, interdunal wetlands, and Great Lakes ridge and swale complexes are specific to Wisconsin

2021 Nationwide Permit General Conditions

1. Navigation.

(a) No activity may cause more than a minimal adverse effect on navigation.

(b) Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States.

(c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his or her authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

2. Aquatic Life Movements. No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. All permanent and temporary crossings of waterbodies shall be suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species. If a bottomless culvert cannot be used, then the crossing should be designed and constructed to minimize adverse effects to aquatic life movements.

3. Spawning Areas. Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.

4. Migratory Bird Breeding Areas. Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.

5. Shellfish Beds. No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWPs 4 and 48, or is a shellfish seeding or habitat restoration activity authorized by NWP 27.

6. Suitable Material. No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see section 307 of the Clean Water Act).

7. Water Supply Intakes. No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.

8. Adverse Effects From Impoundments. If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.

9. Management of Water Flows. To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization, storm water management activities, and temporary and permanent road crossings, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

10. Fills Within 100-Year Floodplains. The activity must comply with applicable FEMA-approved state or local floodplain management requirements.

11. Equipment. Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.

12. Soil Erosion and Sediment Controls. Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow, or during low tides.

13. Removal of Temporary Structures and Fills. Temporary structures must be removed, to the maximum extent practicable, after their use has been discontinued. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.

14. Proper Maintenance. Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety and compliance with applicable NWP general conditions, as well as any activity-specific conditions added by the district engineer to an NWP authorization.

15. Single and Complete Project. The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.

16. Wild and Scenic Rivers.

(a) No NWP activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status.

(b) If a proposed NWP activity will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, the permittee must submit a pre-construction notification (see general condition 32). The district engineer will coordinate the PCN with the Federal agency with direct management responsibility for that river. Permittees shall not begin the NWP activity until notified by the district engineer that the Federal agency with direct management responsibility for that river has determined in writing that the proposed NWP activity will not adversely affect the Wild and Scenic River designation or study status.

(c) Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency responsible for the designated Wild and Scenic River or study river (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service). Information on these rivers is also available at: http://www.rivers.gov/.

17. Tribal Rights. No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.

18. Endangered Species.

(a) No activity is authorized under any NWP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify designated critical habitat or critical habitat proposed for such designation. No activity is authorized under any NWP which "may affect" a listed species or critical habitat, unless ESA section 7 consultation addressing the consequences of the proposed activity on listed species or critical habitat has been completed. See 50 CFR 402.02 for the definition of "effects of the action" for the purposes of ESA section 7 consultation, as well as 50 CFR 402.17, which provides further explanation under ESA section 7 regarding "activities that are reasonably certain to occur" and "consequences caused by the proposed action."

(b) Federal agencies should follow their own procedures for complying with the requirements of the ESA (see 33 CFR 330.4(f)(1)). If pre-construction notification is required for the proposed activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation has not been submitted, additional ESA section 7 consultation may be necessary for the activity and the respective federal agency would be responsible for fulfilling its obligation under section 7 of the ESA.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if any listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed such designation) might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat or critical habitat proposed for such designation, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation), the pre-construction notification must include the name(s) of the endangered or threatened species (or species proposed for listing) that might be affected by the proposed activity or that utilize the designated critical habitat (or critical habitat proposed for such designation) that might be affected by the proposed activity. The district engineer will determine whether the proposed activity "may affect" or will have "no effect" to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps' determination within 45 days of receipt of a complete pre-construction notification. For activities where the non-Federal applicant has identified listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation) that might be affected or is in the vicinity of the activity, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification that the proposed activity will have "no effect" on listed species (or species proposed for listing or designated critical habitat (or critical habitat proposed for such designation), or until ESA section 7 consultation or conference has been completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(d) As a result of formal or informal consultation or conference with the FWS or NMFS the district engineer may add species-specific permit conditions to the NWPs.

(e) Authorization of an activity by an NWP does not authorize the “take” of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with “incidental take” provisions, etc.) from the FWS or the NMFS, the Endangered Species Act prohibits any person subject to the jurisdiction of the United States to take a listed species, where "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word “harm” in the definition of “take" means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.

(f) If the non-federal permittee has a valid ESA section 10(a)(1)(B) incidental take permit with an approved Habitat Conservation Plan for a project or a group of projects that includes the proposed NWP activity, the non-federal applicant should provide a copy of that ESA section 10(a)(1)(B) permit with the PCN required by paragraph (c) of this general condition. The district engineer will coordinate with the agency that issued the ESA section 10(a)(1)(B) permit to determine whether the proposed NWP activity and the associated incidental take were considered in the internal ESA section 7 consultation conducted for the ESA section 10(a)(1)(B) permit. If that coordination results in concurrence from the agency that the proposed NWP activity and the associated incidental take were considered in the internal ESA section 7 consultation for the ESA section 10(a)(1)(B) permit, the district engineer does not need to conduct a separate ESA section 7 consultation for the proposed NWP activity. The district engineer will notify the non-federal applicant within 45 days of receipt of a complete pre-construction notification whether the ESA section 10(a)(1)(B) permit covers the proposed NWP activity or whether additional ESA section 7 consultation is required.

(g) Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the FWS and NMFS or their world wide web pages at http://www.fws.gov/ or http://www.fws.gov/ipac and http://www.nmfs.noaa.gov/pr/species/esa/ respectively.

19. Migratory Birds and Bald and Golden Eagles. The permittee is responsible for ensuring that an action authorized by an NWP complies with the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. The permittee is responsible for contacting the appropriate local office of the U.S. Fish and Wildlife Service to determine what measures, if any, are necessary or appropriate to reduce adverse effects to migratory birds or eagles, including whether "incidental take" permits are necessary and available under the Migratory Bird Treaty Act or Bald and Golden Eagle Protection Act for a particular activity.

20. Historic Properties.

(a) No activity is authorized under any NWP which may have the potential to cause effects to properties listed, or eligible for listing, in the National Register of Historic Places until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.

(b) Federal permittees should follow their own procedures for complying with the requirements of section 106 of the National Historic Preservation Act (see 33 CFR 330.4(g)(1)). If pre-construction notification is required for the proposed NWP activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation is not submitted, then additional consultation under section 106 may be necessary. The respective federal agency is responsible for fulfilling its obligation to comply with section 106.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if the NWP activity might have the potential to cause effects to any historic properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the pre-construction notification must state which historic properties might have the potential to be affected by the proposed NWP activity or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of, or potential for, the presence of historic properties can be sought from the State Historic Preservation Officer, Tribal Historic Preservation Officer, or designated tribal representative, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). When reviewing pre-construction notifications, district engineers will comply with the current procedures for addressing the requirements of section 106 of the National Historic Preservation Act. The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts commensurate with potential impacts, which may include background research, consultation, oral history interviews, sample field investigation, and/or field survey. Based on the information submitted in the PCN and these identification efforts, the district engineer shall determine whether the proposed NWP activity has the potential to cause effects on the historic properties. Section 106 consultation is not required when the district engineer determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR 800.3(a)). Section 106 consultation is required when the district engineer determines that the activity has the potential to cause effects on historic properties. The district engineer will conduct consultation with consulting parties identified under 36 CFR 800.2(c) when he or she

makes any of the following effect determinations for the purposes of section 106 of the NHPA: no historic properties affected, no adverse effect, or adverse effect.

(d) Where the non-Federal applicant has identified historic properties on which the proposed NWP activity might have the potential to cause effects and has so notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects to historic properties or that NHPA section 106 consultation has been completed. For non-federal permittees, the district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA section 106 consultation is required. If NHPA section 106 consultation is required, the district engineer will notify the non-Federal applicant that he or she cannot begin the activity until section 106 consultation is completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(e) Prospective permittees should be aware that section 110k of the NHPA (54 U.S.C. 306113) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.

21. Discovery of Previously Unknown Remains and Artifacts. Permittees that discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by an NWP, they must immediately notify the district engineer of what they have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the Federal, Tribal, and state coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

22. Designated Critical Resource Waters. Critical resource waters include, NOAA-managed marine sanctuaries and marine monuments, and National Estuarine Research Reserves. The district engineer may designate, after notice and opportunity for public comment, additional waters officially designated by a state as having particular environmental or ecological significance, such as outstanding national resource waters or state natural heritage sites. The district engineer may also designate additional critical resource waters after notice and opportunity for public comment.

(a) Discharges of dredged or fill material into waters of the United States are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, 50, 51, 52, 57 and 58 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.

(b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, 38, and 54, notification is required in accordance with general condition 32, for any activity proposed by permittees in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after she or he determines that the impacts to the critical resource waters will be no more than minimal.

23. Mitigation. The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal:

(a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site).

(b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating for resource losses) will be required to the extent necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal.

(c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse environmental effects of the proposed activity are no more than minimal, and provides an activity-specific waiver of this requirement. For wetland losses of 1/10-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in only minimal adverse environmental effects.

(d) Compensatory mitigation at a minimum one-for-one ratio will be required for all losses of stream bed that exceed 3/100-acre and require pre-construction notification, unless the district engineer determines in writing that either

some other form of mitigation would be more environmentally appropriate or the adverse environmental effects of the proposed activity are no more than minimal, and provides an activity-specific waiver of this requirement. This compensatory mitigation requirement may be satisfied through the restoration or enhancement of riparian areas next to streams in accordance with paragraph (e) of this general condition. For losses of stream bed of 3/100-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in only minimal adverse environmental effects. Compensatory mitigation for losses of streams should be provided, if practicable, through stream rehabilitation, enhancement, or preservation, since streams are difficult-to-replace resources (see 33 CFR 332.3(e)(3)).

(e) Compensatory mitigation plans for NWP activities in or near streams or other open waters will normally include a requirement for the restoration or enhancement, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, the restoration or maintenance/protection of riparian areas may be the only compensatory mitigation required. If restoring riparian areas involves planting vegetation, only native species should be planted. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. If it is not possible to restore or maintain/protect a riparian area on both sides of a stream, or if the waterbody is a lake or coastal waters, then restoring or maintaining/protecting a riparian area along a single bank or shoreline may be sufficient. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of minimization or compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.

(f) Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR part 332.

(1) The prospective permittee is responsible for proposing an appropriate compensatory mitigation option if compensatory mitigation is necessary to ensure that the activity results in no more than minimal adverse environmental effects. For the NWPs, the preferred mechanism for providing compensatory mitigation is mitigation bank credits or in-lieu fee program credits (see 33 CFR 332.3(b)(2) and (3)). However, if an appropriate number and type of mitigation bank or in-lieu credits are not available at the time the PCN is submitted to the district engineer, the district engineer may approve the use of permittee-responsible mitigation.

(2) The amount of compensatory mitigation required by the district engineer must be sufficient to ensure that the authorized activity results in no more than minimal individual and cumulative adverse environmental effects (see 33 CFR 330.1(e)(3)). (See also 33 CFR 332.3(f).)

(3) Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, aquatic resource restoration should be the first compensatory mitigation option considered for permittee-responsible mitigation.

(4) If permittee-responsible mitigation is the proposed option, the prospective permittee is responsible for submitting a mitigation plan. A conceptual or detailed mitigation plan may be used by the district engineer to make the decision on the NWP verification request, but a final mitigation plan that addresses the applicable requirements of 33 CFR 332.4(c)(2) through (14) must be approved by the district engineer before the permittee begins work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation (see 33 CFR 332.3(k)(3)). If permittee-responsible mitigation is the proposed option, and the proposed compensatory mitigation site is located on land in which another federal agency holds an easement, the district engineer will coordinate with that federal agency to determine if proposed compensatory mitigation project is compatible with the terms of the easement.

(5) If mitigation bank or in-lieu fee program credits are the proposed option, the mitigation plan needs to address only the baseline conditions at the impact site and the number of credits to be provided (see 33 CFR 332.4(c)(1)(ii)).

(6) Compensatory mitigation requirements (e.g., resource type and amount to be provided as compensatory mitigation, site protection, ecological performance standards, monitoring requirements) may be addressed through conditions added to the NWP authorization, instead of components of a compensatory mitigation plan (see 33 CFR 332.4(c)(1)(ii)).

(g) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2-acre, it cannot be used to authorize any NWP activity resulting in the loss of greater than 1/2-acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary,

to ensure that an NWP activity already meeting the established acreage limits also satisfies the no more than minimal impact requirement for the NWPs.

(h) Permittees may propose the use of mitigation banks, in-lieu fee programs, or permittee-responsible mitigation. When developing a compensatory mitigation proposal, the permittee must consider appropriate and practicable options consistent with the framework at 33 CFR 332.3(b). For activities resulting in the loss of marine or estuarine resources, permittee-responsible mitigation may be environmentally preferable if there are no mitigation banks or in-lieu fee programs in the area that have marine or estuarine credits available for sale or transfer to the permittee. For permittee-responsible mitigation, the special conditions of the NWP verification must clearly indicate the party or parties responsible for the implementation and performance of the compensatory mitigation project, and, if required, its long-term management.

(i) Where certain functions and services of waters of the United States are permanently adversely affected by a regulated activity, such as discharges of dredged or fill material into waters of the United States that will convert a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse environmental effects of the activity to the no more than minimal level.

24. Safety of Impoundment Structures. To ensure that all impoundment structures are safely designed, the district engineer may require non-Federal applicants to demonstrate that the structures comply with established state or federal, dam safety criteria or have been designed by qualified persons. The district engineer may also require documentation that the design has been independently reviewed by similarly qualified persons, and appropriate modifications made to ensure safety.

25. Water Quality.

(a) Where the certifying authority (state, authorized tribe, or EPA, as appropriate) has not previously certified compliance of an NWP with CWA section 401, a CWA section 401 water quality certification for the proposed discharge must be obtained or waived (see 33 CFR 330.4(c)). If the permittee cannot comply with all of the conditions of a water quality certification previously issued by certifying authority for the issuance of the NWP, then the permittee must obtain a water quality certification or waiver for the proposed discharge in order for the activity to be authorized by an NWP.

(b) If the NWP activity requires pre-construction notification and the certifying authority has not previously certified compliance of an NWP with CWA section 401, the proposed discharge is not authorized by an NWP until water quality certification is obtained or waived. If the certifying authority issues a water quality certification for the proposed discharge, the permittee must submit a copy of the certification to the district engineer. The discharge is not authorized by an NWP until the district engineer has notified the permittee that the water quality certification requirement has been satisfied by the issuance of a water quality certification or a waiver.

(c) The district engineer or certifying authority may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.

26. Coastal Zone Management. In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). If the permittee cannot comply with all of the conditions of a coastal zone management consistency concurrence previously issued by the state, then the permittee must obtain an individual coastal zone management consistency concurrence or presumption of concurrence in order for the activity to be authorized by an NWP. The district engineer or a state may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.

27. Regional and Case-By-Case Conditions. The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or U.S. EPA in its CWA section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.

28. Use of Multiple Nationwide Permits. The use of more than one NWP for a single and complete project is authorized, subject to the following restrictions:

(a) If only one of the NWPs used to authorize the single and complete project has a specified acreage limit, the acreage loss of waters of the United States cannot exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3-acre.

(b) If one or more of the NWPs used to authorize the single and complete project has specified acreage limits, the acreage loss of waters of the United States authorized by those NWPs cannot exceed their respective specified acreage limits. For example, if a commercial development is constructed under NWP 39, and the single and complete project includes the filling of an upland ditch authorized by NWP 46, the maximum acreage loss of waters of the United States

for the commercial development under NWP 39 cannot exceed 1/2-acre, and the total acreage loss of waters of United States due to the NWP 39 and 46 activities cannot exceed 1 acre.

29. Transfer of Nationwide Permit Verifications. If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature:

"When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below."

_____

(Transferee)

_____

(Date)

30. Compliance Certification. Each permittee who receives an NWP verification letter from the Corps must provide a signed certification documenting completion of the authorized activity and implementation of any required compensatory mitigation. The success of any required permittee-responsible mitigation, including the achievement of ecological performance standards, will be addressed separately by the district engineer. The Corps will provide the permittee the certification document with the NWP verification letter. The certification document will include:

(a) A statement that the authorized activity was done in accordance with the NWP authorization, including any general, regional, or activity-specific conditions;

(b) A statement that the implementation of any required compensatory mitigation was completed in accordance with the permit conditions. If credits from a mitigation bank or in-lieu fee program are used to satisfy the compensatory mitigation requirements, the certification must include the documentation required by 33 CFR 332.3(l)(3) to confirm that the permittee secured the appropriate number and resource type of credits; and

(c) The signature of the permittee certifying the completion of the activity and mitigation.

The completed certification document must be submitted to the district engineer within 30 days of completion of the authorized activity or the implementation of any required compensatory mitigation, whichever occurs later.

31. Activities Affecting Structures or Works Built by the United States. If an NWP activity also requires review by, or permission from, the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers (USACE) federally authorized Civil Works project (a "USACE project"), the prospective permittee must submit a pre-construction notification. See paragraph (b)(10) of general condition 32. An activity that requires section 408 permission and/or review is not authorized by an NWP until the appropriate Corps office issues the section 408 permission or completes its review to alter, occupy, or use the USACE project, and the district engineer issues a written NWP verification.

32. Pre-Construction Notification.

(a) *Timing*. Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification (PCN) as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, if the PCN is determined to be incomplete, notify the prospective permittee within that 30 day period to request the additional information necessary to make the PCN complete. The request must specify the information needed to make the PCN complete. As a general rule, district engineers will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity until either:

(1) He or she is notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or

(2) 45 calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 18 that listed species or critical habitat might be affected or are in the vicinity of the activity, or to notify the Corps pursuant to general condition 20 that the activity might have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that there is "no effect" on listed species or "no potential to

cause effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or section 106 of the National Historic Preservation Act (see 33 CFR 330.4(g)) has been completed. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee may not begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).

(b) *Contents of Pre-Construction Notification*: The PCN must be in writing and include the following information:

(1) Name, address and telephone numbers of the prospective permittee;

(2) Location of the proposed activity;

(3) Identify the specific NWP or NWP(s) the prospective permittee wants to use to authorize the proposed activity;

(4)

(i) A description of the proposed activity; the activity's purpose; direct and indirect adverse environmental effects the activity would cause, including the anticipated amount of loss of wetlands, other special aquatic sites, and other waters expected to result from the NWP activity, in acres, linear feet, or other appropriate unit of measure; a description of any proposed mitigation measures intended to reduce the adverse environmental effects caused by the proposed activity; and any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity, including other separate and distant crossings for linear projects that require Department of the Army authorization but do not require pre-construction notification. The description of the proposed activity and any proposed mitigation measures should be sufficiently detailed to allow the district engineer to determine that the adverse environmental effects of the activity will be no more than minimal and to determine the need for compensatory mitigation or other mitigation measures.

(ii) For linear projects where one or more single and complete crossings require pre-construction notification, the PCN must include the quantity of anticipated losses of wetlands, other special aquatic sites, and other waters for each single and complete crossing of those wetlands, other special aquatic sites, and other waters (including those single and complete crossings authorized by an NWP but do not require PCNs). This information will be used by the district engineer to evaluate the cumulative adverse environmental effects of the proposed linear project, and does not change those non-PCN NWP activities into NWP PCNs.

(iii) Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the activity and when provided results in a quicker decision. Sketches should contain sufficient detail to provide an illustrative description of the proposed activity (e.g., a conceptual plan), but do not need to be detailed engineering plans);

(5) The PCN must include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial and intermittent streams, on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters on the project site, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many wetlands, other special aquatic sites, and other waters. Furthermore, the 45-day period will not start until the delineation has been submitted to or completed by the Corps, as appropriate;

(6) If the proposed activity will result in the loss of greater than 1/10-acre of wetlands or 3/100-acre of stream bed and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied, or explaining why the adverse environmental effects are no more than minimal and why compensatory mitigation should not be required. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan.

(7) For non-federal permittees, if any listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation) might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat (or critical habitat proposed for such designation), the PCN must include the name(s) of those endangered or threatened species (or species proposed for listing) that might be affected by the proposed activity or utilize the designated critical habitat (or critical habitat proposed for such designation) that might be affected by the proposed activity. For NWP activities that require pre-construction notification, Federal permittees must provide documentation demonstrating compliance with the Endangered Species Act;

(8) For non-federal permittees, if the NWP activity might have the potential to cause effects to a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, the PCN must state which historic property might have the potential to be affected by the

BEFORE THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES

Application of the United States Department of the Army,)
Corps of Engineers, for Water Quality Certification for the)
Final Regulations Pertaining to the Issuance, Reissuance,)
and Modification of Nationwide Permits

On September 15, 2020, the United States Department of the Army, Corps of Engineers (COE), published its notice regarding the Issuance of Nationwide Permits (NWPs) in the Federal Register (agency docket number COE–2020–0002). The publication includes new, existing, and modified NWPs. Publication of these NWPs serves as the Corps' application to the State for water quality certification (WQC) under Section 401 of the Federal Clean Water Act (CWA).

The Wisconsin Department of Natural Resources (WDNR) has examined the regulations promulgated by the COE and United States Environmental Protection Agency pursuant to Section 401, CWA, and Chapters NR 102, 103, and 299, Wisconsin Administrative Code (Wis. Adm. Code).

The WDNR has determined the following conditions for the NWPs are required to ensure compliance with state water quality standards enumerated in s. 299.04, Wis. Adm. Code. Water quality in Wisconsin will be adequately protected so long as these conditions are met and the requirements of the final NWPs are consist with the public noticed drafts. This certification shall expire when the nationwide permits expire.

Section 401 Certification does not release the permittee from obtaining all other necessary federal, state, and local permits, licenses, certificates, approvals, registrations, charters, or similar forms of permission required by law. It does not limit any other state permit, license, certificate, approval, registration, charter, or similar form of permission required by law that imposes more restrictive requirements. It does not eliminate, waive, or vary the permittee's obligation to comply with all other laws and state statutes and rules throughout the construction, installation, and operation of the project. This Certification does not release the permittee from any liability, penalty, or duty imposed by Wisconsin or federal statutes, regulations, rules, or local ordinances, and it does not convey a property right or an exclusive privilege.

The conditions of this Certification cannot be used for other permit decisions, permit types or licenses that are not expressly listed in the agency docket number COE–2020–0002. Pursuant to 40 CFR 121.5, a certification request must be submitted to the state of Wisconsin for all individual license or permit requests. This includes projects undertaken by federal agencies including U.S. Army Corp of Engineer projects.

This Certification does not replace or satisfy any environmental review requirements, including those under the Wisconsin Environmental Policy Act (WEPA) or the National Environmental Policy Act (NEPA).

STATE CONDITIONS AND LIMITATIONS OF CERTIFICATION

GENERAL CONDITIONS:

1. The permittee shall allow the WDNR reasonable entry and access to the discharge site to inspect the discharge for compliance with the certification and applicable laws.

   Justification: On-site inspection is a critical element to gather necessary information for water quality certification decisions and quality control and assurance of data provided by the applicant. This authorization is required pursuant to s. NR 299.05(3)(d)2.c, Wis. Adm. Code.

2. Water quality certification is denied without prejudice for activities involving the temporary stockpiling of dredged or fill material in waters of the state, including wetlands.

   Justification: Physical alterations can degrade surface waters through the filling, dredging or stockpiling of materials. Pursuant to ss. NR 102.05 and NR 103.03, Wis. Adm. Codes, no waters of the state including wetlands shall be lowered in quality unless it has been affirmatively demonstrated to the department that such a change is justifiable. To satisfy these antidegradation and water quality protection requirements, individual certification is warranted to properly demonstrate that temporary stockpiling of dredged or fill material is warranted.

3. Water quality certification is denied without prejudice for activities that have the potential to adversely impact Area of Special Natural Resource Interest (ASNRI) waters designated under to s. NR 1.05, Wis. Adm. Code.

   Justification: Pursuant to ch. NR 207, Wis. Adm. Code, Wisconsin's antidegradation standards prohibit degradation of outstanding resource waters and limits degradations to exceptional resource waters. Additionally, formal consultation with the Voigt Task Force is needed on projects which could have impacts on wild rice or wild rice habitat. For these reasons, all projects that have the potential to degrade ASNRI waters designated under s. 30.01(1am), Wis. Stat. are denied without prejudice. ASNRI waters are available on the DNR's surface water data viewer at https://dnr.wisconsin.gov/topic/SurfaceWater/swdv.

4. Water quality certification is denied without prejudice for activities that have the potential to adversely impact Public Rights Features (PRFs) designated under to s. NR 1.06, Wis. Adm. Code.

   Justification: Pursuant to s. NR 102.04(1)(a) and (b), Wis. Adm. Code, objectionable deposits or debris shall not be present in such amounts as to interfere with public rights in waters of the state. Public Rights Features are most sensitive to these types of deposits and warrant individual water quality

water quality certification

certification to ensure that wildlife, recreation, and fish and aquatic life standards under ch. NR 102, Wis. Adm. Code are satisfied.

PRFs are available on the DNR's surface water data viewer at https://dnr.wisconsin.gov/topic/SurfaceWater/swdv.

5. No discharges of dredged or fill material below the ordinary high water mark of a navigable stream as defined by s. 310.03(5), Wis. Adm. Code, may take place during fish spawning periods or times when nursery areas would be adversely impacted. These periods are:
   - September 15th through May 15th for all trout streams and upstream to the first dam or barrier on the Root River (Racine County), the Kewaunee River (Kewaunee County), and Strawberry Creek (Door County). To determine if a waterway is a trout stream, you may use the WDNR website trout maps at http://dnr.wi.gov/topic/fishing/trout/streammaps.html.
   - September 15th through June 15th on all Great Lakes tributaries upstream to the first dam or barrier.
   - November 1st through June 15th for Lake Michigan waters surrounding Door County including Green Bay and all harbors and bays.
   - September 15th through July 1st for Lake Superior waters surrounding Douglas County including St. Louis River and all harbors and bays.
   - March 1st through June 15th for ALL OTHER waters.

   Justification: Pursuant to s. NR 102.04(3), Wis. Adm. Code, aquatic life designations include spawning areas for cold water and warm water fish and aquatic life habitat. Water quality criteria are derived to ensure spawning activities in Wisconsin are protected.

6. The permittee must install in-water best management practices (BMPs) to minimize total suspended solids (TSS), sedimentation and nutrient loadings for any work conducted below the ordinary high water mark (OHWM). Any visual increase in turbidity outside of the approved impact area shall result in the project operations ceasing until BMPs have been modified to address the issue.

   Justification: Pursuant to ss. NR 102.04(1) and NR 102.06, Wis. Adm. Code, objectionable deposits and nutrients may not be present in amounts that interfere with public rights and interests or exceed state standards for surface water. In-water BMPs also help ensure excessive sedimentation, TSS, and nutrient loadings will not result in a violation of state wetland water quality standards under s. NR 103.03, Wis. Adm. Code.

7. The permittee may not use any materials that contains toxic substances in toxic amounts. This may include materials used for structure placement, beneficially reused materials, or fill.

   Justification: Pursuant to chs. NR 102, NR 103, NR 105 and s. NR 299.04(1)(b), Wis. Adm. Codes, water quality criteria and limitations must be satisfied to grant water quality certification.

water quality certification

8. The permittee must ensure that any material used to construct a project is properly contained and stabilized in a manner that will prevent the material from being eroded.

   Justification: Pursuant to ss. NR 102.04(1)(a) and (b) and NR 103.03, Wis. Adm. Code, objectionable deposits or debris shall not be present in amounts that interfere with public rights and interests in waterways or the functions and values of wetlands in Wisconsin.

9. Projects permitted under any NWP must implement planning and pretreatment of equipment to minimize spread of invasive or noxious species, designated under to ch. 40, Wis. Adm. Code.

   Justification: Pursuant to s. NR 103.03(2)(f)3., Wis. Adm Code, water quality certification must prevent conditions conducive to the establishment or proliferation of nuisance organisms in order to protect existing wetland habitat and ecosystems. Invasive species threaten the "protection and propagation of a balanced fish and other aquatic life community" under the "Fish and other aquatic life" designated use in ch. NR 102.04(3), Wis. Adm. Code.

10. Whenever an applicant is completing sediment sampling and analysis, monitoring or disposal of materials from any dredging project, proper sampling and quality assurance methods shall be implemented in alignment with ch. NR 347, Wis. Adm. Code.

    Justification: In order to protect the public rights and interests in the waters of the state and to ensure that data quality is representative of site conditions to make informed water quality certification decisions, all data gathering, sampling, monitoring, data analysis and disposal shall be completed using proper sampling and quality assurance methods in alignment with ch. NR 347, Wis. Adm. Code.

Conditions Applicable to Specific Nationwide Permits Granted Water Quality Certification:

NWP 16 — Return Water From Upland Contained Disposal Areas:

The permittee must ensure that return water from dredging that is directly returned to the original source water meets the same water quality standards that apply to the original source water. If the return water is discharged into a receiving water that is not the original source water, then the permittee must ensure that the discharge water will meet the more stringent water quality standard of the receiving water and the original source water.

Justification: The return water shall not violate state water quality standards established under chs. NR 102, 103 and 105, Wis. Adm. Code.

NWP 18 — Minor Discharges:

water quality certification

The permittee must ensure that direct and secondary impacts to wetlands do not exceed 400 sq. ft.

Justification: Pursuant to s. NR 103.03(2)(d), Wis. Adm. Code, wetlands shall be protected from cumulative impacts of discharges which may result in concentrations or combinations of substances which are toxic or harmful to human, animal, or plant life. Ensuring that the eligibility standard for wetland impacts encompasses primary and secondary impacts will ensure adequate protection from cumulative impacts.

The project scope shall not include installation of nonperforated drain tile which would have a hydrologic impact to a waterway or wetland.

Justification: Sections NR 103.03(1)(a) and (b), Wis. Adm. Code, require that wetland hydrology and storm and flood water storage be adequately protected.

NWP 42 — Recreational Facilities:

The permittee must remove temporary fill within 60 days of placing the material in a waterway or wetland unless mitigation is provided for the temporary loss of function.

Justification: This material can be a source of TSS and nutrients, particularly phosphorus to the receiving water (chs. NR 102 and 103, Wis. Adm. Code).

The permittee shall ensure that the project will not result in a conversion of navigable waters, pursuant to s. NR 310.03(5), Wis. Adm. Code, to uplands or an enclosure of navigable waters that would result in an interference with the public rights in those waters.

Justification: Pursuant to s. NR 102.04(1)(a) and (b), Wis. Adm. Code, objectionable deposits or debris shall not be present in such amounts as to interfere with public rights in waters of the state.

NWP 43 — Stormwater Management Facilities:

The permittee may not convert navigable waterways pursuant to s. 310.03(5), Wis. Adm. Code, or wetlands to treat stormwater.

Justification: Pursuant to s. NR 103.03(1)(a), Wis. Adm. Code, state wetland water quality standards require that wetlands are maintained within natural variation from storm and flood water storage and retention and the moderation of water level fluctuation extremes. Pursuant to s. NR 102.04(1)(a) and (b), Wis. Adm. Code, objectionable

water quality certification

deposits or debris shall not be present in such amounts as to interfere with public rights in waters of the state.

NWP 46 — Discharges in Ditches:

The permittee must remove temporary fill within 60 days of placing the material in a waterway or wetland unless mitigation is provided for the temporary loss of function.

Justification: This material can be a source of TSS and nutrients, particularly phosphorus to the receiving water (chs. NR 102 and 103, Wis. Adm. Code).

NWP 51 – Land-Based Renewable Energy Generation Facilities

The permittee must remove temporary fill within 60 days of placing the material in a waterway or wetland unless mitigation is provided for the temporary loss of function.

Justification: This material can be a source of TSS and nutrients, particularly phosphorus, to the receiving water (chs. NR 102 and 103, Wis. Adm. Code).

The permittee may not convert wetlands to stormwater treatment facilities.

Justification: Pursuant to s. NR 103.03(1)(a), Wis. Adm. Code, state wetland water quality standards require that wetlands are maintained within natural variation from storm and flood water storage and retention and the moderation of water level fluctuation extremes.

The project shall not impact more than 300 linear feet.

Justification: Pursuant to s. NR 207.12, antibacksliding requirements must be satisfied before a relaxation of a standard could be applied. This analysis requires individual water quality certification.

NWP 53 - Removal of Low-Head Dams

The permittee shall ensure that accumulated sediment is adequately controlled to ensure that downstream water quality is protected once the dam is removed.

Justification: This material can be a source of TSS and nutrients, particularly phosphorus to the receiving water (chs. NR 102 and 103, Wis. Adm. Code).

water quality certification

NWP E- Water Reclamation and Reuse Facilities

The permittee shall only use native plantings or, for the purposes of short-term stabilization, early successional non-invasive plantings for the purposes of short-term stabilization followed by native plantings.

Justification: Pursuant to s. NR 103.03(2)(f)3., Wis. Adm Code, water quality certification must prevent conditions conducive to the establishment or proliferation of nuisance organisms in order to protect existing wetland habitat and ecosystems. The invasive species rule, ch. NR 40, Wis. Adm. Code, makes it illegal to possess, transport, transfer or introduce certain invasive species in Wisconsin.

Nationwide Permits Granted Water Quality Certification:

- NWP 3 — Maintenance
- NWP 4 — Fish and Wildlife Harvesting, Enhancement, and Attraction Devices and Activities
- NWP 5 — Scientific Measurement Devices
- NWP 6 — Survey Activities
- NWP 7 — Outfall Structures and Associated Intake Structures
- NWP 13 — Bank Stabilization
- NWP 19 — Minor Dredging
- NWP 20 — Response Operations for Oil or Hazardous Substances
- NWP 22 — Removal of Vessels
- NWP 25 — Structural Discharges
- NWP 27 — Aquatic Habitat Restoration, Enhancement, and Establishment Activities
- NWP 30 — Moist Soil Management for Wildlife
- NWP 31 — Maintenance of Existing Flood Control Facilities
- NWP 32 — Completed Enforcement Actions
- NWP 36 — Boat Ramps
- NWP 37 — Emergency Watershed Protection and Rehabilitation
- NWP 38 — Cleanup of Hazardous and Toxic Waste
- NWP 41 — Reshaping Existing Drainage Ditches
- NWP 45 — Repair of Uplands Damaged by Discrete Events
- NWP 54 — Living Shorelines

Nationwide Permits Denied Water Quality Certification Without Prejudice At This Time:

- NWP 17 – Hydropower Projects

water quality certification

Justification: The NWP is overly broad and can include a wide range of activities. The broad category of activities covered could significantly impact phosphorus and thermal impacts to waterways. Because Wisconsin has numeric standards for phosphorus and temperature pursuant to ch. NR 102, Wis Adm. Code, individual water quality certification is required to determine thermal and nutrient loadings from these areas. Individual water quality certification will also help ensure that state wetlands standards under ch. NR 103, Wis. Adm. Code are satisfied.

- NWP 29 — Residential Developments

Justification: The NWP is overly broad and can include a range of residential development density and can also include a wide array of other integral development pieces. The density of the development can significantly impact phosphorus and thermal impacts to waterways. Because Wisconsin has numeric standards for phosphorus and temperature pursuant to ch. NR 102, Wis. Adm. Code, individual water quality certification is required to determine thermal and nutrient loadings from these areas. Individual water quality certification will also help ensure that state wetlands standards under ch. NR 103, Wis. Adm. Code are satisfied.

- NWP 33 – Temporary Construction, Access, and Dewatering

Justification: Site-specific WQC is appropriate to ensure that site-specific dewatering plans are developed and address sediment-laden materials, which may contain potentially contaminated materials, discharged from dewatering disposal. Oily sheens, odors or colors can be observed in some dewatering activities which may violate water quality standards under ch. NR 102, Wis. Adm. Code.

- NWP 39 — Commercial and Institutional Developments

Justification: The NWP is overly broad and can include a range of commercial and institutional development types and density. These can significantly impact phosphorus and thermal impacts to waterways. Because Wisconsin has numeric standards for phosphorus and temperature pursuant to ch. NR 102, Wis. Adm. Code, individual water quality certification is required to determine thermal and nutrient loadings from these areas. Individual water quality certification will also help ensure that state wetlands standards under ch. NR 103, Wis. Adm. Code are satisfied.

- NWP 40 — Agricultural Activities

water quality certification

Justification: The NWP is overly broad and can include a wide range of agricultural activities. These can significantly impact phosphorus and thermal impacts to waterways. Because Wisconsin has numeric standards for phosphorus and temperature pursuant to ch. NR 102, Wis. Adm. Code, individual water quality certification is required to determine thermal and nutrient loadings from these areas. Individual water quality certification will also help ensure that state wetlands standards under ch. NR 103, Wis. Adm. Code are satisfied.

- NWP 44 — Mining Activities

Justification: The NWP is overly broad and can include a range of activities. Given the proximity of these activities to mining activities there is an increase risk that heavy metals or other toxic substances regulated in ch. NR 105 and 106, Wis. Adm. Code, may be discharged in surface waters at levels that may not comply with state standards.

- NWP 48 — Commercial Shellfish Mariculture Activities

Justification: Nutrient discharges from commercial shellfish activities can be significant depending on the size, placement, and treatment of waters from these areas. Given the range of concentration and placement, individual water quality certification is appropriate for these activities to ensure that state nutrient standards pursuant to s. NR 102.06, Wis. Adm. Code are satisfied. Individual water quality certification will also help ensure that state wetlands standards under ch. NR 103, Wis. Adm. Code are satisfied.

- NWP 52 — Water-Based Renewable Energy Generation Pilot Projects

Justification: Impacts to fish and aquatic life uses and criteria such as temperature from water-based energy generation projects can be significant depending on the size and placement of these projects. Given the broad range of waterways this NWP could apply to, an individual WQC is appropriate to ensure that state water quality standards for fish and aquatic life uses and criteria under NR 102.04, Wis. Adm. Code are satisfied.

<u>Nationwide Permits For Which Water Quality Certification Is Not Required:</u>

This water quality certification decision reflects the NWPs for which certification was requested on November 12, 2020. As stated in the notice, NWPs 1, 2, 9, 10, 11, 28, and 35 do not require section 401 water quality certification because they would authorize activities which, in the opinion of the Corps, could not reasonably be expected to result in a discharge into waters of the United States. Additionally, the notice stipulated that the St. Paul District is proposing to revoke the following NWPs in both Minnesota and Wisconsin: 8, 12, 14, 15, 21, 23, 24, 34, 49, 50, A, B, C,

water quality certification

and D. WDNR is not taking action on these NWPs for these reasons and concludes that a new notification and pre-filing meeting would be required for these NWPs should the position of the St. Paul District change.

NOTICE OF APPEAL RIGHTS

If you believe that you have a right to challenge this decision, you should know that Wisconsin Statutes and administrative rules establish time periods within which requests to review Department decisions must be filed.

To request a contested case hearing pursuant to section 227.42, Wisconsin Statutes, you have 30 days after the decision is mailed, or otherwise served by the Department, to serve a petition for hearing on the Secretary of the Department of Natural Resources.

This determination becomes final in accordance with the provisions of s. NR 299.05(7), Wisconsin Administrative Code, and is judicially reviewable when final. For judicial review of a decision pursuant to Sections 227.52 and 227.53, Wisconsin Statutes, you have 30 days after the decision becomes final to file your petition with the appropriate circuit court and to serve the petition on the Secretary of the Department of Natural Resources. The petition must name the Department of Natural Resources as the respondent.

Reasonable accommodation, including the provision of informational material in an alternative format, will be provided for qualified individuals with disabilities upon request.

This notice is provided pursuant to section 227.48(2), Wisconsin Statutes.

Dated at Madison, Wisconsin 10/11/2021 | 11:26 AM CDT

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES

By _____
David R. Siebert

proposed activity or include a vicinity map indicating the location of the historic property. For NWP activities that require pre-construction notification, Federal permittees must provide documentation demonstrating compliance with section 106 of the National Historic Preservation Act;

(9) For an activity that will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, the PCN must identify the Wild and Scenic River or the "study river" (see general condition 16); and

(10) For an NWP activity that requires permission from, or review by, the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers federally authorized civil works project, the pre-construction notification must include a statement confirming that the project proponent has submitted a written request for section 408 permission from, or review by, the Corps office having jurisdiction over that USACE project.

(c) *Form of Pre-Construction Notification*: The nationwide permit pre-construction notification form (Form ENG 6082) should be used for NWP PCNs. A letter containing the required information may also be used. Applicants may provide electronic files of PCNs and supporting materials if the district engineer has established tools and procedures for electronic submittals.

(d) *Agency Coordination*:

(1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the activity's adverse environmental effects so that they are no more than minimal.

(2) Agency coordination is required for: (i) all NWP activities that require pre-construction notification and result in the loss of greater than 1/2-acre of waters of the United States; (ii) NWP 13 activities in excess of 500 linear feet, fills greater than one cubic yard per running foot, or involve discharges of dredged or fill material into special aquatic sites; and (iii) NWP 54 activities in excess of 500 linear feet, or that extend into the waterbody more than 30 feet from the mean low water line in tidal waters or the ordinary high water mark in the Great Lakes.

(3) When agency coordination is required, the district engineer will immediately provide (e.g., via e-mail, facsimile transmission, overnight mail, or other expeditious manner) a copy of the complete PCN to the appropriate Federal or state offices (FWS, state natural resource or water quality agency, EPA, and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will have 10 calendar days from the date the material is transmitted to notify the district engineer via telephone, facsimile transmission, or e-mail that they intend to provide substantive, site-specific comments. The comments must explain why the agency believes the adverse environmental effects will be more than minimal. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the pre-construction notification. The district engineer will fully consider agency comments received within the specified time frame concerning the proposed activity's compliance with the terms and conditions of the NWPs, including the need for mitigation to ensure that the net adverse environmental effects of the proposed activity are no more than minimal. The district engineer will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each pre-construction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5.

(4) In cases of where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act.

(5) Applicants are encouraged to provide the Corps with either electronic files or multiple copies of pre-construction notifications to expedite agency coordination.

US Army Corps of Engineers
St. Paul District

COMPLIANCE CERTIFICATION

Regulatory File Number: MVP-2022-01944-DDP

Name of Permittee: City of Madison Engineering Division - James Wolfe

County/State: Madison, Wisconsin

Date of Issuance: December 1, 2022

Upon completion of the activity authorized by this permit and any mitigation required by the permit, sign this certification and return it to the Corps contact identified in your verification letter within 30 days.

Please note that your permitted activity is subject to a compliance inspection by a U.S. Army Corps of Engineers representative. If you fail to comply with this permit, you are subject to permit suspension, modification, or revocation.

By signing below, the permittee is certifying that the work authorized by the above referenced permit has been completed in accordance with the terms and conditions of the permit, and any required mitigation was completed in accordance with the permit conditions.

_____ _____

Signature of Permittee Date

State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
South Central Region Headquarters
3911 Fish Hatchery Rd
Fitchburg, WI 53711-5397

Tony Evers, Governor
Adam N. Payne, Secretary
Telephone (608) 275-3266
Toll Free 1-888-936-7463
TTY Access via relay - 711

March 2, 2023

Jim Wolfe
City of Madison Engineering Division
210 Martin Luther King Jr Blvd
Room 115
Madison WI 53703-3342
Via email: jwolfe@cityofmadison.com

SUBJECT: Coverage Under WPDES General Permit No. WI-S067831-06: Construction Site Storm Water Runoff

Permittee Name: City of Madison Engineering Division
Site Name: Wexford Pond Dredging and Forebay Construction
FIN: 86635

Dear Permittee:

The Wisconsin Department of Natural Resources received your Notice of Intent on February 15, 2023, for the Wexford Pond Dredging and Forebay Construction site and has evaluated the information provided regarding storm water discharges from your construction site. We have determined that your construction site activities will be regulated under ch. 283, Wis. Stats., ch. NR 216, Wis. Adm. Code, and in accordance with Wisconsin Pollutant Discharge Elimination System (WPDES) General Permit No. WI-S067831-06, Construction Site Storm Water Runoff. All erosion control and storm water management activities undertaken at the site must be done in accordance with the terms and conditions of the general permit.

The **Start Date** of permit coverage for this site is March 02, 2023. The maximum period of permit coverage for this site is limited to 3 years from the **Start Date**. Therefore, permit coverage automatically expires and terminates 3 years from the Start Date and storm water discharges are no longer authorized unless another Notice of Intent and application fee to retain coverage under this permit or a reissued version of this permit is submitted to the Department 14 working days prior to expiration.

A copy of the general permit along with extensive storm water information including technical standards, forms, guidance and other documents is accessible on the Department's storm water program Internet site. To obtain a copy of the general permit, please download it and the associated documents listed below from the following Department Internet site: **http://dnr.wi.gov/topic/stormwater/construction/forms.html**

- Construction Site Storm Water Runoff WPDES general permit No. WI-S067831-06
- Construction site inspection report form
- Notice of Termination form

If, for any reason, you are unable to access these documents over the Internet, please contact me and I will send them to you.

To ensure compliance with the general permit, please read it carefully and be sure you understand its contents. Please take special note of the following requirements (This is not a complete list of the terms and conditions of the general permit.):

1. The Construction Site Erosion Control Plan and Storm Water Management Plan that you completed prior to submitting your permit application must be implemented and maintained throughout construction. Failure to do so may result in enforcement action by the Department.

2. The general permit requires that erosion and sediment controls be routinely inspected at least every 7 days, and within 24 hours after a rainfall event of 0.5 inches or greater. Weekly written reports of all inspections must be maintained. The reports must contain the following information:

a. Date, time, and exact place of inspection;
b. Name(s) of individual(s) performing inspection;
c. An assessment of the condition of erosion and sediment controls;
d. A description of any erosion and sediment control implementation and maintenance performed;
e. A description of the site's present phase of construction.

3. A **Certificate of Permit Coverage** must be posted in a conspicuous place on the construction site. The Certificate of Permit Coverage (WDNR Publication # WT-813) is enclosed for your use.

4. When construction activities have ceased and the site has undergone final stabilization, a Notice of Termination (NOT) of coverage under the general permit must be submitted to the Department.

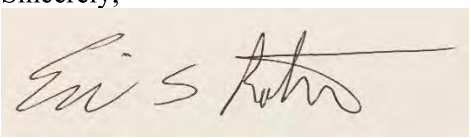
It is important that you read and understand the terms and conditions of the general permit because they have the force of law and apply to you. Your project may lose its permit coverage if you do not comply with its terms and conditions. The Department may also withdraw your project from coverage under the general permit and require that you obtain an individual WPDES permit instead, based on the Department's own motion, upon the filing of a written petition by any person, or upon your request.

If you believe that you have a right to challenge this decision to grant permit coverage, you should know that the Wisconsin statutes and administrative rules establish time periods within which requests to review Department decisions must be filed. For judicial review of a decision pursuant to ss. 227.52 and 227.53, Wis. Stats., you have 30 days after the decision is mailed, or otherwise served by the Department, to file your petition with the appropriate circuit court and serve the petition on the Department. Such a petition for judicial review must name the Department of Natural Resources as the respondent.

To request a contested case hearing pursuant to s. 227.42, Wis. Stats., you have 30 days after the decision is mailed, or otherwise served by the Department, to serve a petition for hearing on the Secretary of the Department of Natural Resources. All requests for contested case hearings must be made in accordance with s. NR 2.05(5), Wis. Adm. Code, and served on the Secretary in accordance with s. NR 2.03, Wis. Adm. Code. The filing of a request for a contested case hearing is not a prerequisite for judicial review and does not extend the 30-day period for filing a petition for judicial review.

Thank you for your cooperation with the Construction Site Storm Water Discharge Permit Program. If you have any questions concerning the contents of this letter or the general permit, please contact Eric Rortvedt at (608) 235-7655.

Sincerely,



Eric S. Rortvedt, P.E.
South Central Region
Water Resources Engineer

ENCLOSURE: Certificate of Permit Coverage

Cc: Sarah Lerner, City of Madison Engineering (via email)

CERTIFICATE OF PERMIT COVERAGE

UNDER THE
WPDES CONSTRUCTION SITE STORM WATER RUNOFF PERMIT
Permit No. WI-S067831-06

Under s. NR 216.455(2), Wis. Adm. Code, landowners of construction sites with storm water discharges regulated by the Wisconsin Department of Natural Resources (WDNR) Storm Water Permit Program are required to post this certificate in a conspicuous place at the construction site. This certifies that the site has been granted WDNR storm water permit coverage. The landowner must implement and maintain erosion control practices to limit sediment-contaminated runoff to waters of the state in accordance with the permit.

EROSION CONTROL COMPLAINTS

should be reported to the WDNR Tip Line at

1-800-TIP-WDNR (1-800-847-9367)

Please provide the following information to the Tip Line:

WDNR Site No. (FIN): 86635

Site Name: Wexford Pond Dredging and Forebay Construction

Address/Location: 1005 N. High Point Road, City of MADISON

Additional Information:

Landowner: City of Madison Engineering Division

Landowner's Contact Person: Jim Wolfe

Contact Telephone Number: (608) 266-4751

Permit Start Date: March 02, 2023 **By:**

WDNR Publication # WT-813 (10/11)

Attachment B: Soil Borings and Geotechnical Analysis

CGC, Inc.

Construction • Geotechnical
Consulting Engineering/Testing

June 6, 2022
C22051-3

Ms. Sarah Lerner, PLA
City of Madison Engineering Dept.
City-County Building, Room 115
210 Martin Luther King, Jr. Blvd.
Madison, WI 53703-3345

Re: Geotechnical Exploration Report
Wexford Pond Reconstructions
Madison, Wisconsin

Dear Ms. Lerner:

Construction • Geotechnical Consultants, Inc. (CGC) has completed the subsurface exploration for the above-referenced project. We understand the proposed project includes the enlarging and deepening of existing ponds situated within a City-owned parcel to the north of Old Sauk Road just west of High Point Road. The ponds serve as a retention basin for stormwater runoff which enters the parcel primarily from the southeast, exits to the northwest and eventually joins Pheasant Branch Creek. The main purpose of this exploration was to identify near-surface soils as well as materials used in the ponds' construction. The area was explored using techniques including standard soil borings around the perimeter of the existing ponds and three shallow-water sediment cores taken from within the ponds (recovered previously to be analyzed for potential contamination). Results from said analyses are separate from this report. An electronic copy of this report is being transmitted as requested.

SUBSURFACE EXPLORATION

The subsurface conditions in the area of proposed construction were explored by drilling six borings to depths of 15 ft below ground surface within the proposed project area. In addition, three sediment cores were recovered from within the existing ponds. Boring/Core locations were determined by the City of Madison (in coordination with Strand Associates, Inc.) and staked in the field by CGC personnel. The borings were performed by Badger State Drilling (under subcontract to CGC) on April 13, 2022, using an all-terrain Diedrich D-50 drill rig. The sediment cores were recovered by CGC on September 15, 2021. The cores were extended through the sediments and into pond construction materials, yielding additional (limited) soils information. The specific procedures used for drilling and sampling are described in Appendix A.

SITE CONDITIONS

The subsurface profile revealed by the borings varies significantly at the boring locations. A generalized soil profile in the project area can be summarized (in descending order) as:

2921 Perry Street, Madison WI 53713
Telephone: 608/288-4100
FAX: 608/288-7887

- 6 to 14 in. of **topsoil fill** (with composition varying from silty to clayey), atop
- 2 to 4.5 ft of **fill materials** consisting of clay with scattered sand and gravel at B3 and B4; or 2-4 ft of *possible* fill composed of granular materials at B1, B2 and B5 (with fill materials beneath the topsoil not detected at B6), over
- 10 to 12 ft of native **granular soils** with variable silt/gravel contents at B1, B2 and B6; or 6.5 to 12 ft of native **clay soils** at B3, B4 and B5 (with the clays being interrupted by a 2.5 ft layer of *silt* at B4 and underlain by about 1.5 ft of sand at B5).

Additional information pertaining to pond soil profiles was interpreted from the sediment cores, each of which suggests a clay bottom/liner greater than 1 ft thickness at the core locations.

Pond Reconstruction

We understand the northern pond is proposed to be enlarged significantly, while the southern pond is to remain approximately within the footprint of its current configuration. Both of the reconstructed ponds are proposed to be deepened by about 1.5 ft and include forebays designed to accumulate sediment from runoff prior to entering the main ponds. Deepening of the pond forebays by about 3 ft below existing pond bottoms is planned.

In our opinion, the ponds should be designed with a minimum 2-ft thick clay liner to maintain a somewhat constant water surface elevation independent of natural groundwater level fluctuations. Based on information gathered at some of the soil boring locations coupled with potential new pond bottom elevations, corresponding depths may at times coincide with granular soils. While groundwater was not present at the boring locations, saturation of the materials *beneath* the existing ponds may require dewatering prior to and during construction. Saturated/unstable soils will greatly influence pond constructability.

Construction of a clay liner should involve the placement of 6-in. to 8-in. thick clay lifts, each densified to a minimum 95% compaction based on standard Proctor methods (ASTM D698). The final thickness of the liner should be a minimum of 2 feet after final grading and compaction. Additional details are presented in Appendix D. In areas where the excavation depth coincides with existing native clay soils, the final liner thickness could include "credit" of existing clay for the lower 1 ft to achieve the goal of a 2-ft thick liner. The existing clay must be *disked/aerated and subsequently compacted* until a firm surface is achieved (based on little deflection beneath the compactor – dependent on field confirmation at the time of construction). The granular soils encountered are not suitable pond liner material. CGC can potentially elaborate on construction methodology upon request.

Note that clays were not encountered at B1, B2 or B6. Lab work, including natural moisture contents, Atterberg Limits and Particle Size Distribution tests were performed on some of the samples recovered in the borings. Results are included on the individual logs and/or in Appendix B. The samples are being retained in our laboratory in the event further testing is desired. Regarding new clay liner development, general guidelines for construction, testing and material properties are presented in Appendix D that include:

- WI Dept. of Natural Resources Conservation Practice Standard – Wet Detention Pond (1001) Appendix D; and
- USDA Construction Specification – Section 300 Clay Liner

We assume the clay liner will be extended up the sideslopes to at least EL 977 (which is about 5 ft above an assumed normal pool elevation of EL 972). We recommend the clay liner be Type A per the WDNR Wet Detention Pond (Appendix D) guidelines because of hydraulic conductivity criteria of $1x10^{-7}$ cm/sec or less that will limit infiltration compared to the other liner types. Lifts of clay should be placed horizontally with each lift kneaded into the one below and "benched" into the existing sideslope.

Structures

While details were not provided, we also assume structures may be necessary in the pond reconfigurations. Assuming that excavations are backfilled with granular soils, including those excavated on-site, the following parameters should be used for the design of the structures:

Table 2 – Structure Design Parameters (Granular Backfill)

Allowable Design Soil Bearing Pressure:	2000 psf
Angle of Internal Friction (deg):	30
Moist Unit Weight of Soil Backfill (pcf):	115
Saturated Unit Weight of Soil Backfill (pcf):	125
Buoyant Unit Weight of Soil Backfill (pcf):	63
At-Rest Lateral Earth Pressure Coefficient, K_0:	0.5
Active Lateral Earth Pressure Coefficient, K_a:	0.3
Passive Lateral Earth Pressure Coefficient, K_p:	3.0

The design bearing pressure assumes firm soils exist at the slab base, with loose/soft materials to be removed and replaced with compacted granular materials. Further, the lateral earth pressure coefficients assume that granular material is used as backfill and compacted to a minimum of 95% of modified Proctor (ASTM D 1557). Hydrostatic pressures should be included for walls located below the water table.

Regarding any culvert pipe that would extend through the sideslopes, we recommend either concrete or compacted clay cutoff collars (i.e., bedding check dams) be built to retard potential lateral water flow through bedding.

CLOSING REMARKS

We understand the planned pond reconstructions have been proposed to occur without the installation of new clay liners, relying on the new bottoms to "self-seal" after several years of new sediments are

allowed to accumulate. *We strongly recommend against implementing this method.* The majority of sands encountered in the borings are considered to be free-draining and would likely result in intermittent water retention at best. Additionally, deepening the ponds in areas underlain by granular soils could compromise the existing clay liners again leading to little or no water retention. In order to maintain a somewhat constant water level in the ponds, the existing clay liners should not be disturbed. In areas proposed to be deepened to create forebays, new clay liners should be constructed as described previously. Furthermore, the new forebay liners would need to be integrated with existing pond liners to create a "seamless" clay bottom. Lastly, we wish to reiterate that some dewatering of soils beneath the existing ponds may be necessary to facilitate new clay liner construction. Means and methods are the contractor's responsibility. If additional questions arise as pond reconstruction details develop, please contact CGC.

Additional information regarding the opinions and recommendations presented in the report is discussed in Appendix D. As always, we appreciate the opportunity to serve you in this evaluation and look forward to working with you as the project proceeds.

Sincerely,

CGC, INC.

Eric S. Fair
Senior Staff Engineer/Geologist

Michael N. Schultz, P.E.
Principal/Senior Consulting Professional

Encl: Appendix A - Field Exploration
Appendix B - Soil Boring Location Map
Logs of Test Borings (6)
Logs of Sediment Cores (3)
Log of Test Boring-General Notes
Unified Soil Classification System
Particle Size Distribution Test Reports (2)
Appendix C - Document Qualifications
Appendix D - Clay Liner Construction Guidelines

APPENDIX A

FIELD EXPLORATION

APPENDIX A

FIELD EXPLORATION

The subsurface conditions in the areas of the project were explored by drilling 6 SPT soil borings to a depth of 15 ft and conducting 3 sediment cores extending into stiff clay at locations determined by the City of Madison in coordination with Strand Associates and CGC which are shown in plan on the Soil Boring and Sediment Core Location Map presented in Appendix B.

The soil borings were performed by Badger State Drilling using an all-terrain, rotary Dietrich D-50 drill rig. The SPT method consists of driving a 2-inch outside diameter split-barrel sampler using a 140-pound weight falling freely through a distance of 30 inches. The sampler is first seated 6 inches into the material to be sampled and then driven 12 inches. The number of blows required to drive the sampler the final 12 inches is recorded on the log of borings and is known as the Standard Penetration Resistance (commonly referred to as the N-value). Sediment cores were recovered from beneath the pond using a piston sampler.

During the field exploration, the driller visually classified the soil and prepared a field log. Water level observations were made in each boring during as well as after drilling and are shown at the bottom of each boring log. Upon completion of drilling, the borings were backfilled with bentonite in accordance with WDNR regulations, and the soil samples delivered to our laboratory for visual classification and laboratory testing. The soils were visually classified by CGC using the Unified Soil Classification System and reviewed by a geotechnical engineer. The final logs prepared by the engineer and a description of the Unified Soil Classification System are presented in Appendix B.

APPENDIX B

SOIL BORING LOCATION MAP
LOGS OF TEST BORINGS (6)
LOGS OF SEDIMENT CORES (3)
LOG OF TEST BORING-GENERAL NOTES
UNIFIED SOIL CLASSIFICATION SYSTEM
PARTICLE SIZE DISTRIBUTION TEST REPORTS (2)

Legend

Denotes boring/core location

N

Scale: Reduced

Notes

1. Soil Borings performed by Badger State Drilling in April 2022
2. Sediment Cores recovered by CGC in September 2021
3. Boring/core locations are approximate

Date: 5/2022	CGC, Inc.	**Soil Boring and Sediment Core Location Map Wexford Pond – Madison, WI**
Job No. C22051-3		

CGC Inc.

LOG OF TEST BORING

Project: Wexford Ponds
N484578.9 E785660.1
Location: Madison, WI

Boring No. 1
Surface Elevation (ft) 974.3
Job No. C22051-3
Sheet 1 of 1

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

SAMPLE No.	TYPE	Rec (in.)	Moist	N	Depth (ft)	VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES qu (qa) (tsf)	W	LL	PL	LOI
						14 in. Clayey Topsoil					
1		18	M	34		Dense to Medium Dense, Brown Fine to Coarse SAND, Some Gravel, Trace to Little Silt (SP/SP-SM - Possible Fill to 5 ft)					
2		12	M	27							
					5						
3		18	M	16							
4		18	M	16		Medium Dense, Light Brown Fine to Coarse SAND, Some Gravel, Trace Silt (SP) P200= 3.8%					
					10						
5		18	M	11							
6		18	M	10							
					15	Medium Dense, Brown Silty SAND to Sandy SILT (SM/ML)					
						End of Boring at 15 ft					
						Backfilled with Bentonite Chips					
					20						

WATER LEVEL OBSERVATIONS

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

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

GENERAL NOTES

Start 4/13/22 End 4/13/22
Driller BSD Chief KD Rig D-50
Logger GB Editor ESF
Drill Method 2.25" HSA; Autohammer

CGC Inc.

LOG OF TEST BORING

Project Wexford Ponds
N484423.1 E786166.1
Location Madison, WI

Boring No. 2
Surface Elevation (ft) 973.4
Job No. C22051-3
Sheet 1 of 1

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

SAMPLE No.	TYPE	Rec (in.)	Moist	N	Depth (ft)	VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES qu (qa) (tsf)	W	LL	PL	LOI
						11 in. TOPSOIL					
1		18	M	12		Medium Dense, Light Brown Fine to Medium SAND, Trace Silt and Gravel (SP - Possible Fill)					
2		18	M	25	5	Medium Dense, Brown Fine to Coarse SAND, Trace Silt and Gravel (SP) P200= 1.8%					
3		4	M	29		More Gravel Noted with Depth					
4		18	M	18	10						
5		18	M	25							
6		18	M	27		Medium Dense, Light Brown Fine to Medium SAND, Trace Silt and Gravel (SP)					
					15	End of Boring at 15 ft Backfilled with Bentonite Chips					
					20						

WATER LEVEL OBSERVATIONS

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

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

GENERAL NOTES

Start 4/13/22 End 4/13/22
Driller BSD Chief KD Rig D-50
Logger GB Editor ESF
Drill Method 2.25" HSA; Autohammer

CGC Inc.

LOG OF TEST BORING

Project: Wexford Ponds
N484350.3 E785925.9
Location: Madison, WI

Boring No. 3
Surface Elevation (ft) 975.9
Job No. C22051-3
Sheet 1 of 1

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

SAMPLE No.	TYPE	Rec (in.)	Moist	N	Depth (ft)	VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES qu (qa) (tsf)	W	LL	PL	LOI
						6 in. TOPSOIL					
1		18	M	10		FILL: Very Stiff Dark Brown Clay with Traces of Sand and Gravel	(3.5)				
2		18	M	7		Very Stiff, Brown Lean CLAY, Trace Sand (CL)	(2.75)				
					5						
3		18	M	11		Medium Stiff to Stiff, Dark Gray to Brown Lean CLAY (CL)	(1.0)	22.9	29	17	
4		18	M/W	4			(0.75)				
					10						
5		18	M	6			(1.25)				
						Very Soft, Gray and Brown (Mottled) Lean CLAY, Trace Sand, Some Gravel (CL)					
6		18	M/W	5			(0.2)				
					15	End of Boring at 15 ft Backfilled with Bentonite Chips					
					20						

WATER LEVEL OBSERVATIONS

While Drilling ▽ NW — Upon Completion of Drilling NW
Time After Drilling
Depth to Water ▼
Depth to Cave in

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

GENERAL NOTES

Start 4/13/22 End 4/13/22
Driller BSD Chief KD Rig D-50
Logger GB Editor ESF
Drill Method 2.25" HSA; Autohammer

CGC Inc.

LOG OF TEST BORING

Project: Wexford Ponds
N484104.3 E785863.3
Location: Madison, WI

Boring No. 4
Surface Elevation (ft) 976.1
Job No. C22051-3
Sheet 1 of 1

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

SAMPLE No.	TYPE	Rec (in.)	Moist	N	Depth (ft)	VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES qu (qa) (tsf)	W	LL	PL	LOI
						12 in. TOPSOIL					
1		16	M	10		FILL: Very Stiff Dark Brown Clay with Scattered Sand and Gravel	(3.5)				
2		4	M	10			(2.25)				
					5						
						Stiff, Gray and Brown (Mottled) Lean CLAY, Trace Sand (CL)					
3		14	M	10			(1.25)				
						Loose to Medium Dense, Dark Gray SILT, Trace Sand and Clay (ML)					
4		18	M	10							
					10						
						Stiff, Brown Sandy Lean CLAY, Scattered Sand Partings (CL)					
5		18	M	10			(1.75)				
6		18	M	9			(0.5)				
					15	Loose to Medium Dense, Light Brown Fine to Medium SAND, Trace Silt and Gravel (SP)					
						End of Boring at 15 ft					
						Backfilled with Bentonite Chips					
					20						

WATER LEVEL OBSERVATIONS

While Drilling ▽ NW — Upon Completion of Drilling NW
Time After Drilling
Depth to Water ▼
Depth to Cave in

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

GENERAL NOTES

Start 4/13/22 End 4/13/22
Driller BSD Chief KD Rig D-50
Logger GB Editor ESF
Drill Method 2.25" HSA; Autohammer

CGC Inc.

LOG OF TEST BORING

Project: Wexford Ponds
N483966.1 E785808.3
Location: Madison, WI

Boring No. 5
Surface Elevation (ft) 974.1
Job No. C22051-3
Sheet 1 of 1

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

SAMPLE No.	TYPE	Rec (in.)	Moist	N	Depth (ft)	VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES qu (qa) (tsf)	W	LL	PL	LOI
						8 in. TOPSOIL					
1		18	M	11		Medium Dense, Gray SILT, Trace Sand (ML - Possible Fill)					
2		18	M/W	9		Medium Stiff to Very Soft, Gray and Brown (Mottled) Lean CLAY, Trace Sand (CL)	(0.75)	24.1	29	17	
3		18	M	7	5		(0.25)				
4		18	M/W	3			(0.2)				
5		18	M/W	13	10		(0.75)				
6		18	M	46		Dense, Reddish-Brown Fine to Coarse SAND, Some Silt and Gravel (SM)					
					15	End of Boring at 15 ft Backfilled with Bentonite Chips					
					20						

WATER LEVEL OBSERVATIONS

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

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

GENERAL NOTES

Start 4/14/22 End 4/14/22
Driller BSD Chief KD Rig D-50
Logger GB Editor ESF
Drill Method 2.25" HSA; Autohammer

CGC Inc.

LOG OF TEST BORING

Project: Wexford Ponds
N483938.6 E786111.0
Location: Madison, WI

Boring No. 6
Surface Elevation (ft) 974.9
Job No. C22051-3
Sheet 1 of 1

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

SAMPLE No.	TYPE	Rec (in.)	Moist	N	Depth (ft)	VISUAL CLASSIFICATION and Remarks	qu (qa) (tsf)	W	LL	PL	LOI
						12 in. TOPSOIL					
1		18	M	23		Medium Dense, Brown Fine to Coarse SAND, Some Gravel, Trace to Little Silt (SP/SP-SM)					
2		18	M	24							
					5						
						Medium Dense, Light Brown Fine to Medium SAND, Trace Silt and Gravel (SP)					
3		14	M	25							
						Medium Dense, Brown Fine to Coarse SAND, Some Gravel, Trace to Little Silt (SP/SP-SM)					
4		12	M	26							
					10						
5		18	M	12							
						Medium Dense, Light Brown Fine to Medium SAND, Trace Silt and Gravel (SP)					
6		18	M	13							
					15	End of Boring at 15 ft					
						Backfilled with Bentonite Chips					
					20						

WATER LEVEL OBSERVATIONS

While Drilling ▽ NW — Upon Completion of Drilling NW
Time After Drilling
Depth to Water ▼
Depth to Cave in

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

GENERAL NOTES

Start 4/14/22 End 4/14/22
Driller BSD Chief KD Rig D-50
Logger GB Editor ESF
Drill Method 2.25" HSA; Autohammer

CGC Inc.

LOG OF SEDIMENT CORE

Project: Wexford Ponds

Location: Madison, WI

Core No.: SC-1
Surface Elevation:
Job No.: C21051-15
Sheet: 1 of 1

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

SAMPLE					VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES				
No.	TYPE	Rec (in.)	Moist	N	Depth (ft)		Electrical Conductivity	W	LL	LI	pH (in.)
						44 in. Water					
						Dark Gray-Brown Organic SILT, Trace Sand					
						Very Soft, Gray Lean CLAY	(<0.2)				
					5	Soft to Stiff, Bluish-Gray Lean CLAY	(0.3) (1.5)				
						End of Core at 6.25 ft Backfilled with Bentonite Chips					
					10						

WATER LEVEL OBSERVATIONS

While Excavating ▽ NW Upon Completion of Drilling

Time After Excavating

Depth to Water ▼

Depth to Cave in

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

GENERAL NOTES

Start 9/15/21 End 9/15/21
Driller CGC Chief
Logger ESF Editor ESF
Equip. Used: Piston Sampler
Pre-Washed With TSP Sol'n

CGC Inc.

LOG OF SEDIMENT CORE

Project: Wexford Ponds

Location: Madison, WI

Core No.: SC-2
Surface Elevation:
Job No.: C21051-15
Sheet: 1 of 1

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

SAMPLE					VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES				
No.	TYPE	Rec (in.)	Moist	N	Depth (ft)		Electrical Conductivity	W	LL	LI	pH (in.)
						34 in. Water					
						Dark Gray Organic SILT, Trace Sand, Scattered Plant Fibers and Wood Pieces					
						Very Soft, Gray Lean CLAY	(<0.2)				
					5	Soft to Stiff, Bluish Gray Lean CLAY	(0.3)				
							(1.5)				
						End of Core at 5.8 ft					
						Backfilled with Bentonite Chips					
					10						

WATER LEVEL OBSERVATIONS

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

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

GENERAL NOTES

Start 9/15/21 End 9/15/21
Driller CGC Chief
Logger ESF Editor ESF
Equip. Used: Piston Sampler
Pre-Washed With TSP Sol'n

CGC Inc.

LOG OF SEDIMENT CORE

Project: Wexford Ponds

Location: Madison, WI

Core No.: SC-3
Surface Elevation:
Job No.: C21051-15
Sheet: 1 of 1

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

SAMPLE						VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES				
No.	TYPE	Rec (in.)	Moist	N	Depth (ft)		Electrical Conductivity	W	LL	LI	pH (in.)
						31 in. Water					
						Dark Gray Organic SILT, Trace Sand, Scattered Plant Fibers					
						Stiff, Bluish-Gray Lean CLAY	(1.5)				
					5	End of Core at 5.1 ft					
						Backfilled with Bentonite Chips					
					10						

WATER LEVEL OBSERVATIONS

While Excavating ▽ NW Upon Completion of Drilling
Time After Excavating
Depth to Water ▼
Depth to Cave in

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

GENERAL NOTES

Start 9/15/21 End 9/15/21
Driller CGC Chief
Logger ESF Editor ESF
Equip. Used: Piston Sampler
Pre-Washed With TSP Sol'n

CGC, Inc.

LOG OF TEST BORING
General Notes

DESCRIPTIVE SOIL CLASSIFICATION

Grain Size Terminology

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

Plasticity characteristics differentiate between silt and clay.

General Terminology

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

Relative Density

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

Relative Proportions Of Cohesionless Soils

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

Consistency

Term	q_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

Organic Content by Combustion Method

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

Plasticity

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

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

SYMBOLS

Drilling and Sampling

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

Laboratory Tests

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

Water Level Measurement

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

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

CGC, Inc.

Madison - Milwaukee

Unified Soil Classification System

UNIFIED SOIL CLASSIFICATION AND SYMBOL CHART

COARSE-GRAINED SOILS (more than 50% of material is larger than No. 2 sieve size)			
GRAVELS More than 50% of coarse fraction larger than No. 4 sieve size	Clean Gravels (Less than 5% fines)	GW	Well-graded gravels, gravel-sand mixtures, little or no fines
		GP	Poorly-graded gravels, gravel-sand mixtures, little or no fines
	Gravels with fines (More than 12% fines)	GM	Silty gravels, gravel-sand-silt mixtures
		GC	Clayey gravels, gravel-sand-clay mixtures
SANDS 50% or more of coarse fraction smaller than No. 4 sieve size	Clean Sands (Less than 5% fines)	SW	Well-graded sands, gravelly sands, little or no fines
		SP	Poorly graded sands, gravelly sands, little or no fines
	Sands with fines (More than 12% fines)	SM	Silty sands, sand-silt mixtures
		SC	Clayey sands, sand-clay mixtures
FINE-GRAINED SOILS (50% or more of material is smaller than No. 200 sieve size.)			
SILTS AND CLAYS Liquid limit less than 50%		ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity
		CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
		OL	Organic silts and organic silty clays of low plasticity
SILTS AND CLAYS Liquid limit 50% or greater		MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts
		CH	Inorganic clays of high plasticity, fat clays
		OH	Organic clays of medium to high plasticity, organic silts
HIGHLY ORGANIC SOILS		PT	Peat and other highly organic soils

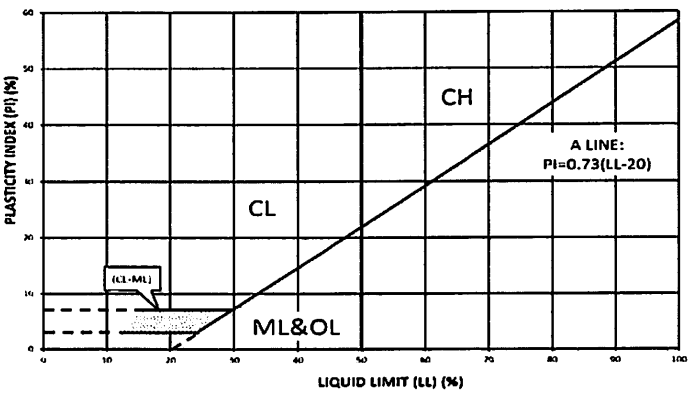
LABORATORY CLASSIFICATION CRITERIA

GW	$C_u = \frac{D_{60}}{D_{10}}$ greater than 4; $C_C = \frac{D_{30}}{D_{10} \times D_{60}}$ between 1 and 3	
GP	Not meeting all gradation requirements for GW	
GM	Atterberg limts below "A" line or P.I. less than 4	Above "A" line with P.I. between 4 and 7 are borderline cases requiring use of dual symbols
GC	Atterberg limts above "A" line or P.I. greater than 7	
SW	$C_u = \frac{D_{60}}{D_{10}}$ greater than 4; $C_C = \frac{D_{30}}{D_{10} \times D_{60}}$ between 1 and 3	
SP	Not meeting all gradation requirements for GW	
SM	Atterberg limits below "A" line or P.I. less than 4	Limits plotting in shaded zone with P.I. between 4 and 7 are borderline cases requiring use of dual symbols
SC	Atterberg limits above "A" line with P.I. greater than 7	

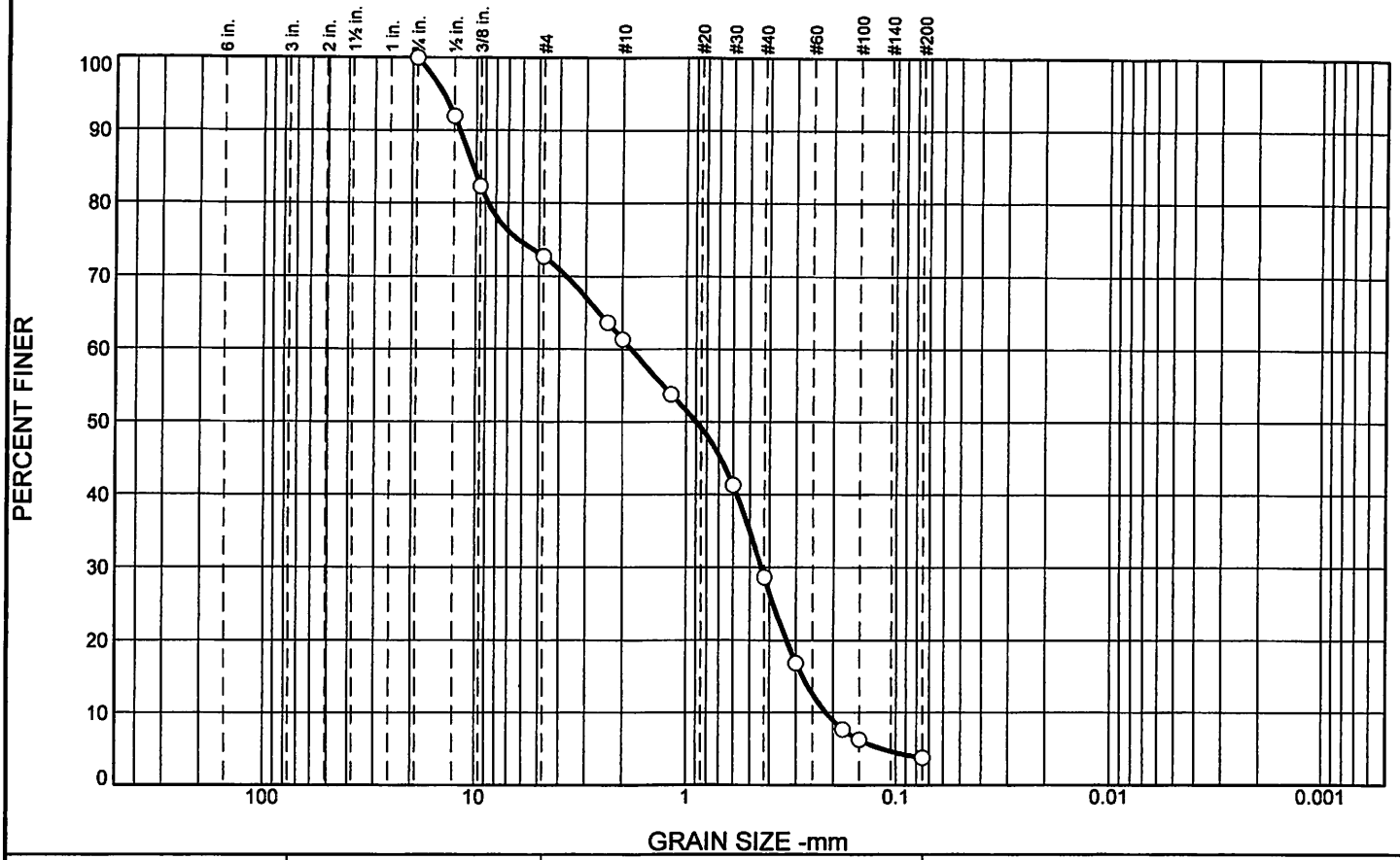
Determine percentages of sand and gravel from grain-size curve. Depending on percentage of fines (fraction smaller than No. 200 sieve size), coarse-grained soils are classified as follows:

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

PLASTICITY CHART



Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	27.3	11.3	32.7	24.9	3.8	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/4	100.0		
1/2	92.0		
3/8	82.3		
#4	72.7		
#8	63.7		
#10	61.4		
#16	53.8		
#30	41.3		
#40	28.7		
#50	16.8		
#80	7.7		
#100	6.3		
#200	3.8		

* (no specification provided)

Material Description

Brown Fine to Coarse Sand, Some Gravel, Trace Silt

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 11.9466 D_{85}= 10.3578 D_{60}= 1.8187
D_{50}= 0.8986 D_{30}= 0.4398 D_{15}= 0.2796
D_{10}= 0.2169 C_u= 8.38 C_c= 0.49

Classification

USCS= SP AASHTO=

Remarks

Test No. 4648

Sample Number: B1/S4

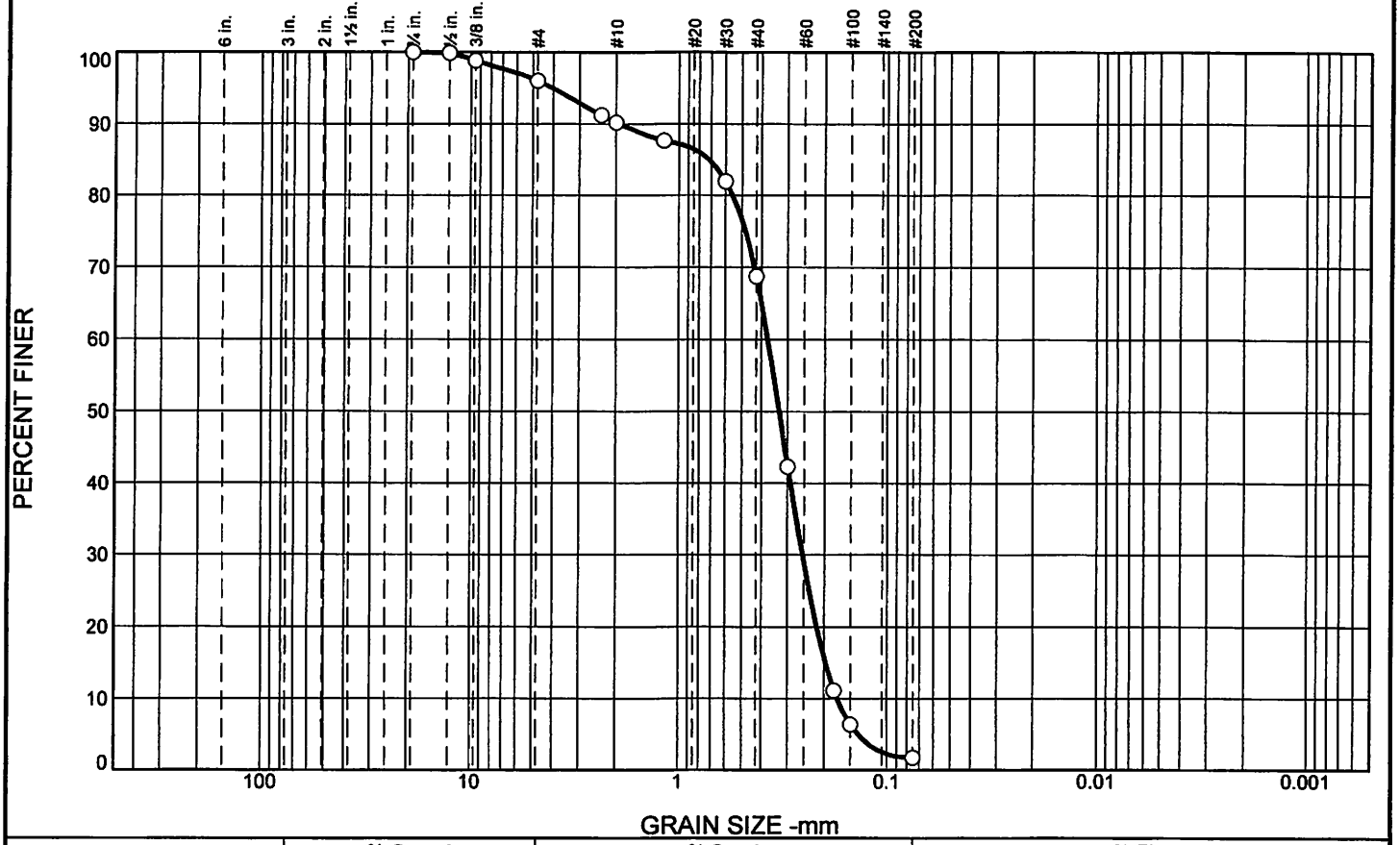
Date: 5/4/22

CGC, Inc.

Client: City of Madison Engineering
Project: Wexford Ponds Geotech
Project No: C22051-3 **Figure**

Tested By: JFS **Checked By:** KJS

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	4.0	5.8	21.4	67.0	1.8	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/4	100.0		
1/2	99.9		
3/8	98.9		
#4	96.0		
#8	91.2		
#10	90.2		
#16	87.7		
#30	82.0		
#40	68.8		
#50	42.3		
#80	11.1		
#100	6.4		
#200	1.8		

* (no specification provided)

Material Description

Brown Fine to Coarse Sand, Trace Silt and Gravel

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 1.9260 D_{85}= 0.7206 D_{60}= 0.3742
D_{50}= 0.3299 D_{30}= 0.2548 D_{15}= 0.1978
D_{10}= 0.1740 C_u= 2.15 C_c= 1.00

Classification

USCS= SP AASHTO=

Remarks

Test No. 4648

Sample Number: B2/S2

Date: 5/4/22

CGC, Inc.

Client: City of Madison Engineering
Project: Wexford Ponds Geotech
Project No: C22051-3 **Figure**

Tested By: JFS **Checked By:** KJS

APPENDIX C

DOCUMENT QUALIFICATIONS

APPENDIX C
DOCUMENT QUALIFICATIONS

I. GENERAL RECOMMENDATIONS/LIMITATIONS

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

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

II. IMPORTANT INFORMATION ABOUT YOUR GEOTECHNICAL ENGINEERING REPORT

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

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

READ THE FULL REPORT

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

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

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

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

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

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

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

SUBSURFACE CONDITIONS CAN CHANGE

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

MOST GEOTECHNICAL FINDINGS ARE PROFESSIONAL OPINION

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

effective method of managing the risks associated with unanticipated conditions.

A REPORT'S RECOMMENDATIONS ARE NOT FINAL

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

A GEOTECHNICAL ENGINEERING REPORT IS SUBJECT TO MISINTERPRETATION

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

DO NOT REDRAW THE ENGINEER'S LOGS

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

GIVE CONSTRUCTORS A COMPLETE REPORT AND GUIDANCE

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

READ RESPONSIBILITY PROVISIONS CLOSELY

Some clients, design professionals, and constructors do not recognize that geotechnical engineering is far less exact than other engineering disciplines. This lack of understanding has created unrealistic expectations that have led to disappointments, claims, and disputes. To help reduce the risk of such outcomes, geotechnical engineers commonly include a variety of explanatory provisions in their reports. Sometimes labeled "limitations," many of these provisions indicate where geotechnical engineer's responsibilities begin and end, to help others recognize their own responsibilities and risks. *Read these provisions closely.* Ask questions. Your geotechnical engineer should respond fully and frankly.

ENVIRONMENTAL CONCERNS ARE NOT COVERED

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

OBTAIN PROFESSIONAL ASSISTANCE TO DEAL WITH MOLD

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

RELY ON YOUR GEOTECHNICAL ENGINEER FOR ADDITIONAL ASSISTANCE

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

Modified and reprinted with permission from:

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

APPENDIX D

CLAY LINER CONSTRUCTION GUIDELINES

Appendix D—Pond Liner Design, Decision Flowchart

Pond Liner Design Specifications for Three Levels of Liners

A. Type A Liners—for sites with the highest potential for groundwater pollution. They include:
- Clay (natural soil, not bentonite)
- High Density Polyethylene (HDPE)
- Geosynthetic Clay Liners (GCL)

1. Clay liner criteria (essentially the same as the clay below landfills but not as thick):
   a. 50% fines (200 sieve) or more.
   b. An in-place hydraulic conductivity of 1×10^{-7} cm./sec. or less.
   c. Average liquid limit of 25 or greater, with no value less than 20.
   d. Average PI of 12 or more, with no values less than 10.
   e, Clay installed wet of optimum if using standard Proctor, and 2% wet of optimum if using modified Proctor.
   f. Clay compaction and documentation as specified in NRCS Wisconsin Construction Specification 300, Clay Liners.
   g. Minimum thickness of two feet.
   h. Specify method for keeping the pool full or use of composite soils below liner.
2. HDPE liner criteria:
   a. Minimum thickness shall be 60 mils.
   b. Design according to the criteria in Table 3 of the NRCS 313, Waste Storage Facility technical standard.
   c. Install according to NRCS Wisconsin Construction Specification 202, Polyethylene Geomembrane Lining.
3. GCL liner criteria:
   a. Design according to the criteria in Table 4 of NRCS 313, Waste Storage Facility technical standard.
   b. Install according to NRCS Wisconsin Construction Specification 203, Geosynthetic Clay Liner.

B. Type B Liners—for sites with medium potential for groundwater pollution or where need for a full pool level is high. They include:
- All liners meeting Type A criteria
- Clay
- HDPE
- Polyethylene Pond Liner (PPL)

1. Clay liner criteria:
   a. 50% fines (200 sieve) or more.
   b. An in-place hydraulic conductivity of 1×10^{-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.
2. HDPE liner criteria:
   a. Minimum thickness shall be 40 mils.
   b. All other criteria same as for Type A HDPE liner.
3. PPL liner criteria:
   a. Minimum thickness shall be 30 mils.
   b. All other criteria same as for Type A HDPE liner.

C. Type C Liners—for sites with little potential for groundwater pollution or where the need for a full pool is less important. They include:
- All liners meeting Type A or B criteria
- Silts and clays
- HDPE (<40 mil)
- PPL (20-24 mil)
- PVC (30-40 mil)
- EPDM (45 mil)

1. Silt/Clay liner criteria:
   a. 50% fines (200 sieve), or 20% fines and a PI of 7.
   b. Soil compaction and documentation as specified in NRCS Wisconsin Construction Specification 204, Earthfill for Waste Storage Facilities.
   c. Minimum thickness of two feet.
   d. Specify method for keeping the pool full or use of composite soils below liner.

D. Liner Elevation—All liners must extend above the permanent pool up to the elevation reached by the 2-yr., 24-hour storm event.

E. For synthetic liners, follow the manufacturers' recommendations for installation.

Construction Specification
300 Clay Liner

SCOPE

The work shall consist of:

1. Construction of a clay liner as shown on the construction plans.
   or
2. Re-compaction of the upper one foot of clay material specific to WIzNRCS Conservation Practice Standard (WI CPS) 313 Table 1.

CLAY LINER MATERIAL

Clay liner material shall have a minimum plasticity index of 12 (PI ≥12) and a minimum percentage passing the No. 200 sieve (P200) as specified in the construction plans. The clay liner material shall be capable of providing a liner with a maximum hydraulic conductivity (permeability) of 1 x 10-7 centimeters per second.

Proposed liner material properties shall be determined in the lab prior to placement for each different borrow area and material, at the specified minimum frequency shown in Table 1. These tests are typically done in the design phase with additional tests required when unpredicted changes in borrow material are observed.

A standard or modified proctor test density curve, and optimum moisture, shall be developed from the borrow materials. A hydraulic conductivity (permeability) shall be determined on a re-compacted sample. The sample shall be re-compacted to the minimum density and moisture content specified in Section 6, Compaction.

Table 1 Borrow Material Testing	
Test Reference	**Minimum Frequency**
Standard Proctor (ASTM D 698) or Modified Proctor (ASTM D 1557)	1 per 5,000 cubic yards of estimated in-place liner quantity
Atterberg Limit (ASTM D 4318) and Percent Fines (ASTM D 1140)	1 per 5,000 cubic yards of estimated in-place liner quantity
Permeability (ASTM D 5084)	1 per 5,000 cubic yards of estimated in-place liner quantity

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. 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.

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 Technician or Engineer. The clay liner shall

not be placed upon a frozen surface, nor shall snow, ice, or frozen material be incorporated in the clay liner.

Clay materials shall contain no 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 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 hard 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 the optimum moisture as determined by the standard proctor test or modified proctor test.

The application of water to the clay shall be accomplished at the borrow areas in-so-far as practicable. Water may be applied by sprinkling the clay after placement and before compaction of the liner, if necessary. Uniform moisture distribution shall be obtained by disking.

COMPACTION

The clay liner shall be compacted to a minimum of 95% of standard proctor dry density or to a minimum of 90% of modified proctor dry density.

The clay liner shall be compacted with a footed compactor weighing at least 25,000 pounds, operated continuously over the clay material.

REWORKING OR REMOVAL AND REPLACEMENT OF DEFECTIVE LINER

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

TESTING METHOD SPECIFICATIONS

- ASTM D 698 Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft3 (600 kN-m/m3))
- ASTM D 1557 Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft3 (2,700 kN-m/m3))
- ASTM D 4318 Standard Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils
- ASTM D 1140 Standard Test Methods for Amount of Material in Soils Finer than No. 200 (75 µm) Sieve
- ASTM D6938 Standard Test Methods for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth)
- ASTM D7698 Standard Test Method for In-Place Estimation of Density and Water Content of Soil and Aggregate by Correlation with Complex Impedance Method
- ASTM D 2937 Standard Test Method for Density of Soil in Place by the Drive-Cylinder Method
- ASTM D 2167 Standard Test Method for Density and Unit Weight of Soil in Place by the Rubber Balloon Method
- ASTM D 1556 Standard Test Method for Density and Unit Weight of Soil in Place by Sand-Cone Method
- ASTM D 5084 Standard Test Methods for Measurement of Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter

TESTING FREQUENCY

Clay liner construction shall be tested and documented by a third party engineering or testing firm at the specified minimum frequency shown in Table 2.

Field density tests shall be completed on the compacted in-place clay liner, as the liner is beingplaced. Atterberg limit and percent fines shall be completed on samples obtained next to the field density test. After the completion of the liner, undisturbed samples shall be taken from the constructed clay liner for permeability verification.

Copies of the test locations and test results (documentation report) shall be provided to the owner to document compliance with this specification.

Table 2 Liner Testing

Test Reference	**Minimum Frequency** (Standard mathematical rounding rules apply)
Field Density (ASTM D 2922, or D 6938, or D 2167, or D 1556 or ASTM D 7698)	1 test per 500 cubic yards of in-place liner, distributed throughout the structure (Horizontally and Vertically)
Atterberg Limit (ASTM D 4318) and Percent Fines (ASTM D 1140)	1 test per 2000 cubic yards of in-place liner
Permeability (ASTM D 5084)	1 per 5,000 cubic yards of in-place liner (2 minimum per facility)1

Addendum A

This addendum clarifies the specification's scope #2. (The re-compacted layer (Upper 1' of soil) required by WI NRCS Conservation Practice Standard (WI CPS) 313, Table 1. All other parts of the Wisconsin Construction Specification 300 Clay Liner apply.

1. RE-COMPACTED CLAY MATERIAL
   Re-compacted clay material shall have the same properties and tested for Standard or Modified Proctor, Atterberg Limits, and Percent Fines as specified above in 2. CLAY LINER MATERIAL.

   The clay material may be obtained from any location within the footprint to the proposed waste storage facility.

2. FOUNDATIONPREPARATION
   The facility shall be excavated 12 inches below the designed bottom elevation. The surface 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 above in 5. CONTROL OF MOISTURE CONTENT. The foundation materials shall be compacted and bonded with the first clay material lift.

3. PLACEMENT
   The first clay material lift shall not be placed until the required foundation preparation has been completed and the foundation has been inspected and approved by the Technician or Engineer.

   The re-compacted layer 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 placement and compaction process continues until the specified elevation has been achieved.

   The re-compacted layer shall then be tested and documented by a third party engineering or testing firm at the specified minimum frequency shown in Table 2 for Field Density, Atterberg Limits, and Percent Fines.

Specific Site Requirements

Attachment C: Sediment Sampling, Pace Analytics, and Email from WDNR

Hellermann, Luke

From: Amrhein, James F - DNR <James.Amrhein@wisconsin.gov>
Sent: Monday, November 22, 2021 8:46 AM
To: Bemis, Bynn
Cc: Fries, Greg; Lerner, Sarah; Schmidt, Janet; Williams, Mike; Vieth, Eric; Hellermann, Luke; Cooper, Carolyn E - DNR
Subject: RE: Wexford Pond sediment results
Attachments: RE: Wexford Pond sediment results

[EXTERNAL EMAIL]: Verify sender before opening links or attachments.

Hi Brynn,

I have reviewed the sediment sample results from the 3 sites at Wexford Ponds. As you note, there are several exceedances of our Threshold Effect Concentrations (TEC) for several compounds (the majority being PAHs), especially in SC2. However these values, in context with low concentrations of the other compounds found in SC2 and in the other 2 sites, show the sediments do NOT represent a high risk to aquatic organisms. Therefore the water resources program has no issues with the dredging.

My colleague, Carolyn Cooper, has also reviewed the data and agrees that the material may be handled as clean material (see attached e-mail).

Thank you for summarizing the results so concisely as it makes it convenient for us to expedite the review.

Jim

We are committed to service excellence.
Visit our survey at http://dnr.wi.gov/customersurvey to evaluate how I did.

Jim Amrhein
Phone: 608-275-3280
James.amrhein@wisconsin.gov

> **From:** Bemis, Brynn <BBemis@cityofmadison.com>
> **Sent:** Thursday, November 18, 2021 10:22 AM
> **To:** Cooper, Carolyn E - DNR <carolyn.cooper@wisconsin.gov>; Amrhein, James F - DNR <James.Amrhein@wisconsin.gov>
> **Cc:** Fries, Greg <gfries@cityofmadison.com>; Lerner, Sarah <SLerner@cityofmadison.com>; Schmidt, Janet <jschmidt@cityofmadison.com>; Williams, Mike <mike.williams@strand.com>; 'Eric.Vieth@strand.com' <Eric.Vieth@strand.com>; Hellermann, Luke <Luke.Hellermann@strand.com>
> **Subject:** Wexford Pond sediment results
>
> CAUTION: This email originated from outside the organization.
> Do not click links or open attachments unless you recognize the sender and know the content is safe.
>
> Hello Carolyn and Jim,

Hellermann, Luke

From: Cooper, Carolyn E - DNR <carolyn.cooper@wisconsin.gov>
Sent: Friday, November 19, 2021 11:13 AM
To: Amrhein, James F - DNR
Subject: RE: Wexford Pond sediment results

Hi Jim,

This is acceptable to the Waste Program.

We are committed to service excellence.
Visit our survey at http://dnr.wi.gov/customersurvey to evaluate how I did.

Carolyn Cooper, P.G.
Phone: (608) 931-9387
carolyn.cooper@wisconsin.gov

From: Bemis, Brynn <BBemis@cityofmadison.com>
Sent: Thursday, November 18, 2021 10:22 AM
To: Cooper, Carolyn E - DNR <carolyn.cooper@wisconsin.gov>; Amrhein, James F - DNR <James.Amrhein@wisconsin.gov>
Cc: Fries, Greg <gfries@cityofmadison.com>; Lerner, Sarah <SLerner@cityofmadison.com>; Schmidt, Janet <jschmidt@cityofmadison.com>; Williams, Mike <mike.williams@strand.com>; 'Eric.Vieth@strand.com' <Eric.Vieth@strand.com>; Hellermann, Luke <Luke.Hellermann@strand.com>
Subject: Wexford Pond sediment results

Hello Carolyn and Jim,

Attached are the sampling results for 3 sediment cores collected from Wexford Pond, located northeast of the intersection of Old Sauk Road and the Beltline in Madison, WI. I compared the results to the NR720 non-industrial direct contact RCLs, the Wisconsin Background Threshold Values, and the NR720 Groundwater Pathway RCL. At the bottom of the table, I used the risk assessment approach outlined in RR-079 to cumulatively calculate the direct contact RCL for the seven carcinogenic PAHs. The PDF also includes a sampling map, borings logs, and the Pace lab report.

The City intends to dredge Wexford Pond in fall/winter 2022. Based on the lab results, the City proposes to allow its Public Works contractor to handle and dispose of the material as "clean" sediment. The only direct contact RCL exceedance—apart from native arsenic—is benzo(a)pyrene in SC2. However, when considered cumulatively with the other compounds detected, sediment from all three cores is "below direct-contact concern". (Technically, the "cumulative cancer risk" for these borings is less than the calculated cancer risk value of $5x10^{-6}$). I included the calculation summary page for each core after the map.

Attached are the sampling results for 3 sediment cores collected from Wexford Pond, located northeast of the intersection of Old Sauk Road and the Beltline in Madison, WI. I compared the results to the NR720 non-industrial direct contact RCLs, the Wisconsin Background Threshold Values, and the NR720 Groundwater Pathway RCL. At the bottom of the table, I used the risk assessment approach outlined in RR-079 to cumulatively calculate the direct contact RCL for the seven carcinogenic PAHs. The PDF also includes a sampling map, borings logs, and the Pace lab report.

The City intends to dredge Wexford Pond in fall/winter 2022. Based on the lab results, the City proposes to allow its Public Works contractor to handle and dispose of the material as "clean" sediment. The only direct contact RCL exceedance—apart from native arsenic—is benzo(a)pyrene in SC2. However, when considered cumulatively with the other compounds detected, sediment from all three cores is "below direct-contact concern". (Technically, the "cumulative cancer risk" for these borings is less than the calculated cancer risk value of $5x10^{-6}$). I included the calculation summary page for each core after the map.

Please let us know if you agree with our assessment that the sediment may be handled as "clean" material. We will include language in the Public Works contract that the final disposal site meets the performance requirements in NR 504.04(4).

Regards,

Brynn Bemis

Brynn Bemis, Hydrogeologist
City of Madison Engineering Division
Room 115 City/County Building
210 Martin Luther King Jr. Blvd.
Madison, WI 53703
(office) 608.267.1986
(cell) 608.695.1385
bbemis@cityofmadison.com

Wexford Pond Sediment Results

Prepared on: November 17, 2021 by Brynn Bemis, City of Madison Engineering (608.695.1385, bbemis@cityofmadison.cor

Sampled: September 15, 2021

Boring ID		SC1	SC2	SC3	NR 720 Non-Industrial Not-To-Exceed Direct Contract RCLs	Wisconsin Background Threshold Values	NR 720 Ground-water Pathway RCL
Depth of Sediment (ft)		0 - 1.5	0 - 2	0 - 2			
Date Collected		9/15/2021	9/15/2021	9/15/2021			
Soil Type		organic silt and lean clay	organic silt and lean clay	organic silt and lean clay			
Arsenic	mg/kg	**5.2**	**3.6** J	**6.0**	0.677	8.0	0.584
Barium	mg/kg	***186***	129	***171***	15,300	364	164.8
Cadmium	mg/kg	0.22 J	0.41 J	0.44 J	71.1	1.0	0.752
Chromium	mg/kg	24.0	25.3	29.3	100,000	44	360,000
Copper	mg/kg	18.0	27.2	21.1	3,130	35	91.6
Lead	mg/kg	14.7	21.8	19.1	400	52	27.0
Manganese	mg/kg	***898***	***302***	***604***	1,830	2,937	39.1
Nickel	mg/kg	***20.6***	***17.9***	***20.8***	1,550	31	13.1
Selenium	mg/kg	<2.0	<2.0	<2.3	391	NE	0.52
Zinc	mg/kg	65.0	123	101	23,500	150	NE
Mercury	mg/kg	<0.014	0.026 J	0.018 J	3.13	NE	0.208
PCB, Total	ug/kg	<22.8	<25.0	<27.6	0.234	0.025	0.0094
Total Organic Carbon	mg/kg	17300	14600	18600	NE	NE	NE
Total Organic Carbon	mg/kg	19100	15500	20200	NE	NE	NE
Mean TOC	mg/kg	18200	15000	19400	NE	NE	NE
Percent Moisture	%	33.4	39.1	44.9	NE	NE	NE
Total Volatile Solids	% (w/w)	4.3	9.4	4.2	NE	NE	NE
1-Methylnaphthalene	ug/kg	<3.7	<4.0	<4.4	17,600	NE	NE
2-Methylnaphthalene	ug/kg	<3.7	<4.0	<4.4	239,000	NE	NE
Acenaphthene	ug/kg	<3.2	7.1 J	<3.9	3,590,000	NE	NE
Acenaphthylene	ug/kg	<3.2	<3.5	<3.8	NE	NE	NE
Anthracene	ug/kg	<3.1	26.1 J	8.9 J	17,900,000	NE	196,949
Benzo(a)anthracene	ug/kg	11.7 J	154	39.1	1140 (cPAH)	NE	NE
Benzo(a)pyrene	ug/kg	15.9 J	**216**	68.3	115 (cPAH)	NE	470
Benzo(b)fluoranthene	ug/kg	33.4 J	427	137	1150 (cPAH)	NE	478
Benzo(g,h,i)perylene	ug/kg	20.6 J	243	87.0	NE	NE	NE
Benzo(k)fluoranthene	ug/kg	12.8 J	123	55.0	11500 (cPAH)	NE	NE
Chrysene	ug/kg	23.4 J	***288***	98.9	115000 (cPAH)	NE	144
Dibenz(a,h)anthracene	ug/kg	3.6 J	40.0	17.4 J	115 (cPAH)	NE	NE
Fluoranthene	ug/kg	38.2	629	179	2,390,000	NE	88,878
Fluorene	ug/kg	<3.0	14.9 J	4.4 J	2,390,000	NE	14,830
Indeno(1,2,3-cd)pyrene	ug/kg	15.7 J	185	68.7	1150 (cPAH)	NE	NE
Naphthalene	ug/kg	<2.4	3.9 J	3.00 J	5,520	NE	658
Phenanthrene	ug/kg	11.8 J	238	56.5	NE	NE	NE
Pyrene	ug/kg	25.6	413	123	1,790,000	NE	54,546
Cumulative cPAHs Cancer Risk (D		2.0E-07	2.9E-06	9.6E-07	**NR722 cPAH Evaluation:** This section evaluates the cumulative cancer risk posed by seven carcinogenic PAHs. It uses a calculated cancer risk value of 5x10-6 to assess non-industrial direct conact risk, following the process outlined in RR-087 and RR-079.		
No. of Individual Exceedances (DC		0	0	0			
Cumulative Hazard Index		0.0329	0.0478	0.0424			
Cumulative Cancer Risk		9.1E-07	3.7E-06	1.8E-06			

BOLD + Underlined - Values met or exceed a Direct Contact RCL, as of April 2021

BOLD + Italics = Values met or exceed a Groundwater Pathway RCL, as of April 2021

NR 720 RCLs were calculated using the EPA Regional Screening Level Web Calculator.

J - Result is less than the Limit of Quantitation (LOQ) but greater than the Reporting Limit.

mg/kg = milligrams per kilogram or parts per million (ppm)

ug/kg = micrograms per kilogram or parts per billion (ppb)

NE = Not Established

PAHs =Polycyclic aromatic hydrocarbons

PCBs = Polychlorinated biphenyls

cPAH = carcinogenic PAH

DC = Direct contact

Legend

Denotes Core Location

N

Scale: Reduced

Notes

1. Sediment Cores recovered by CGC in September 2021
2. Core locations are approximate

Date: 9/2021	CGC, Inc.	**Sediment Core Location Map**
Job No. C21051-15		**Wexford Pond**
		Madison, WI

NR 722 Direct-Contact ***Exceedance*** - ***Hazard*** - ***Risk*** Calculation Summary from Soil Data (Exclusive Cumulative-only Assessment of cPAHs)

Note: This Summary is OLD. Update with 'Get Summary' in Row 924 of the applicable *_DC_RCLs tab.

BRRTS # :
Type BRRTS No. Here (If Known)

Wexford Pond - SC1 cPAH Results

# of Soil-Concentration Entries: 39

Please do not enter anything in this summary!

Bottom-Line:

(Cumulative) cPAH Cancer Risk	Number of Individual Exceedance	(Cumulative) Hazard Index	(Cumulative) Cancer Risk
2.0E-07	0	0.0329	9.1E-07

Yes, levels are below direct-contact concern.

Date of Entry: 11/17/2021.
Date of Worksheet Used: 03/14/2017.

List below only has contaminants with data.

Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	BTV (mg/kg)	INPUTTED Site Data (mg/kg)	cPAH Cancer Risk from Data	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Naphthalene	91-20-3	178.	5.52	5.52	ca		0.0024			0.	4.3E-10
Benzo[a]pyrene	50-32-8	17.8	0.115	0.115	ca		0.0159	1.38E-07	cPAH	0.0009	1.4E-07
Acenaphthene	83-32-9	3,590.	-	3,590.	nc		0.0032			0.	
Acenaphthylene	208-96-8	-	-				0.0032				
Anthracene	120-12-7	17,900.	-	17,900.	nc		0.0031			0.	
Benz[a]anthracene	56-55-3	-	1.14	1.14	ca		0.0117	1.03E-08	cPAH		1.0E-08
Benzo[b]fluoranthene	205-99-2	-	1.15	1.15	ca		0.0034	2.96E-09	cPAH		3.0E-09
Benzo[g,h,i]perylene	191-24-2	-	-				0.0206				
Benzo[k]fluoranthene	207-08-9	-	11.5	11.5	ca		0.0128	1.11E-09	cPAH		1.1E-09
Chrysene	218-01-9	-	115.	115.	ca		0.0234	2.03E-10	cPAH		2.0E-10
Dibenz[a,h]anthracene	53-70-3	-	0.115	0.115	ca		0.0036	3.13E-08	cPAH		3.1E-08
Fluoranthene	206-44-0	2,390.	-	2,390.	nc		0.0382			0.	
Fluorene	86-73-7	2,390.	-	2,390.	nc		0.003			0.	
Indeno[1,2,3-cd]pyrene	193-39-5	-	1.15	1.15	ca		0.0157	1.37E-08	cPAH		1.4E-08
Methylnaphthalene, 1-	90-12-0	4,180.	17.6	17.6	ca		0.0037			0.	2.1E-10
Methylnaphthalene, 2-	91-57-6	239.	-	239.	nc		0.0037			0.	
Phenanthrene	85-01-8	-	-				0.0118				
Pyrene	129-00-0	1,790.	-	1,790.	nc		0.0256			0.	
Arsenic, Inorganic	7440-38-2	34.9	0.677	0.677	ca	8.	5.2				
Barium	7440-39-3	15,300.	-	15,300.	nc	364.	186.				
Cadmium (Diet)	7440-43-9	71.1	2,430.	71.1	nc	1.	0.22				
Chromium(III), Insoluble Salts	16065-83-1	117,000.	-	100,000.	ceiling		24.			0.0002	
Chromium, Total	7440-47-3	-	-			44.	24.				
Copper	7440-50-8	3,130.	-	3,130.	nc	35.	18.				
Mercury (elemental)	7439-97-6	15.7	-	3.13	Csat		0.014			0.0009	
Lead and Compounds	7439-92-1	400.	-	400.		52.	14.7				
Manganese (Non-diet)	7439-96-5	1,830.	-	1,830.	nc	2,937.	898.				
Nickel Soluble Salts	7440-02-0	1,550.	16,900.	1,550.	nc	31.	20.6				
Selenium	7782-49-2	391.	-	391.	nc		2.			0.0051	
Zinc and Compounds	7440-66-6	23,500.	-	23,500.	nc	150.	65.				
Aroclor 1016	12674-11-2	4.11	6.79	4.11	nc		0.0228			0.0055	3.4E-09
Aroclor 1221	11104-28-2	-	0.213	0.213	ca		0.0228				1.1E-07
Aroclor 1232	11141-16-5	-	0.19	0.19	ca		0.0228				1.2E-07
Aroclor 1242	53469-21-9	-	0.235	0.235	ca		0.0228				9.7E-08
Aroclor 1248	12672-29-6	-	0.236	0.236	ca		0.0228				9.7E-08
Aroclor 1254	11097-69-1	1.17	0.239	0.239	ca		0.0228			0.0195	9.5E-08
Aroclor 1260	11096-82-5	-	0.243	0.243	ca		0.0228				9.4E-08
Aroclor 5460	11126-42-4	35.2	-	35.2	nc		0.0228			0.0006	
Polychlorinated Biphenyls (high risk)	1336-36-3	-	0.234	0.234	ca		0.0228				9.7E-08

NR 722 Direct-Contact ***Exceedance*** - ***Hazard*** - ***Risk*** Calculation Summary from Soil Data (Exclusive Cumulative-only Assessment of cPAHs)

Note: This Summary is OLD. Update with 'Get Summary' in Row 924 of the applicable *_DC_RCLs tab.

BRRTS # :
Type BRRTS No. Here (If Known)

Wexford Pond - SC2 Sediment cPAH Results

# of Soil-Concentration Entries: 38

Please do not enter anything in this summary!

Bottom-Line:

(Cumulative) cPAH Cancer Risk	Number of Individual Exceedance	(Cumulative) Hazard Index	(Cumulative) Cancer Risk
2.9E-06	0	0.0478	3.7E-06

Yes, levels are below direct-contact concern.

Date of Entry: 11/17/2021.
Date of Worksheet Used: 03/14/2017.

List below only has contaminants with data.

Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	BTV (mg/kg)	INPUTTED Site Data (mg/kg)	cPAH Cancer Risk from Data	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Naphthalene	91-20-3	178.	5.52	5.52	ca		0.0039			0.	7.1E-10
Benzo[a]pyrene	50-32-8	17.8	0.115	0.115	ca		0.216	1.88E-06	cPAH	0.0121	1.9E-06
Acenaphthene	83-32-9	3,590.	-	3,590.	nc		0.0071			0.	
Acenaphthylene	208-96-8	-	-				0.0035				
Anthracene	120-12-7	17,900.	-	17,900.	nc		0.0261			0.	
Benz[a]anthracene	56-55-3	-	1.14	1.14	ca		0.154	1.35E-07	cPAH		1.4E-07
Benzo[b]fluoranthene	205-99-2	-	1.15	1.15	ca		0.427	3.71E-07	cPAH		3.7E-07
Benzo[g,h,i]perylene	191-24-2	-	-				0.243				
Benzo[k]fluoranthene	207-08-9	-	11.5	11.5	ca		0.123	1.07E-08	cPAH		1.1E-08
Chrysene	218-01-9	-	115.	115.	ca		0.288	2.50E-09	cPAH		2.5E-09
Dibenz[a,h]anthracene	53-70-3	-	0.115	0.115	ca		0.04	3.48E-07	cPAH		3.5E-07
Fluoranthene	206-44-0	2,390.	-	2,390.	nc		0.629			0.0003	
Fluorene	86-73-7	2,390.	-	2,390.	nc		0.0149			0.	
Indeno[1,2,3-cd]pyrene	193-39-5	-	1.15	1.15	ca		0.185	1.61E-07	cPAH		1.6E-07
Methylnaphthalene, 1-	90-12-0	4,180.	17.6	17.6	ca		0.004			0.	2.3E-10
Methylnaphthalene, 2-	91-57-6	239.	-	239.	nc		0.004			0.	
Phenanthrene	85-01-8	-	-				0.238				
Pyrene	129-00-0	1,790.	-	1,790.	nc		0.413			0.0002	
Arsenic, Inorganic	7440-38-2	34.9	0.677	0.677	ca	8.	3.6				
Barium	7440-39-3	15,300.	-	15,300.	nc	364.	129.				
Cadmium (Diet)	7440-43-9	71.1	2,430.	71.1	nc	1.	0.41				
Chromium(III), Insoluble Salts	16065-83-1	117,000.	-	100,000.	ceiling		25.3			0.0002	
Chromium, Total	7440-47-3	-	-			44.	25.3				
Copper	7440-50-8	3,130.	-	3,130.	nc	35.	27.2				
Mercury (elemental)	7439-97-6	15.7	-	3.13	Csat		0.026			0.0017	
Lead and Compounds	7439-92-1	400.	-	400.		52.	21.8				
Manganese (Non-diet)	7439-96-5	1,830.	-	1,830.	nc	2,937.	302.				
Selenium	7782-49-2	391.	-	391.	nc		2.			0.0051	
Zinc and Compounds	7440-66-6	23,500.	-	23,500.	nc	150.	123.				
Aroclor 1016	12674-11-2	4.11	6.79	4.11	nc		0.025			0.0061	3.7E-09
Aroclor 1221	11104-28-2	-	0.213	0.213	ca		0.025				1.2E-07
Aroclor 1232	11141-16-5	-	0.19	0.19	ca		0.025				1.3E-07
Aroclor 1242	53469-21-9	-	0.235	0.235	ca		0.025				1.1E-07
Aroclor 1248	12672-29-6	-	0.236	0.236	ca		0.025				1.1E-07
Aroclor 1254	11097-69-1	1.17	0.239	0.239	ca		0.025			0.0214	1.0E-07
Aroclor 1260	11096-82-5	-	0.243	0.243	ca		0.025				1.0E-07
Aroclor 5460	11126-42-4	35.2	-	35.2	nc		0.025			0.0007	
Polychlorinated Biphenyls (high risk)	1336-36-3	-	0.234	0.234	ca		0.025				1.1E-07

NR 722 Direct-Contact ***Exceedance*** - ***Hazard*** - ***Risk*** Calculation Summary from Soil Data (Exclusive Cumulative-only Assessment of cPAHs)

Note: This Summary is OLD. Update with 'Get Summary' in Row 924 of the applicable *_DC_RCLs tab.

BRRTS # :
Type BRRTS No. Here (If Known)

Wexford Pond - SC3 Sediment cPAH Results

# of Soil-Concentration Entries: 39

Please do not enter anything in this summary!

Bottom-Line:

(Cumulative) cPAH Cancer Risk	Number of Individual Exceedance	(Cumulative) Hazard Index	(Cumulative) Cancer Risk
9.6E-07	0	0.0424	1.8E-06

Yes, levels are below direct-contact concern.

Date of Entry: 11/17/2021.
Date of Worksheet Used: 03/14/2017.

List below only has contaminants with data.

Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	BTV (mg/kg)	INPUTTED Site Data (mg/kg)	cPAH Cancer Risk from Data	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Naphthalene	91-20-3	178.	5.52	5.52	ca		0.003			0.	5.4E-10
Benzo[a]pyrene	50-32-8	17.8	0.115	0.115	ca		0.0683	5.94E-07	cPAH	0.0038	5.9E-07
Acenaphthene	83-32-9	3,590.	-	3,590.	nc		0.0039			0.	
Acenaphthylene	208-96-8	-	-				0.0038				
Anthracene	120-12-7	17,900.	-	17,900.	nc		0.0089			0.	
Benz[a]anthracene	56-55-3	-	1.14	1.14	ca		0.0391	3.43E-08	cPAH		3.4E-08
Benzo[b]fluoranthene	205-99-2	-	1.15	1.15	ca		0.137	1.19E-07	cPAH		1.2E-07
Benzo[g,h,i]perylene	191-24-2	-	-				0.087				
Benzo[k]fluoranthene	207-08-9	-	11.5	11.5	ca		0.055	4.78E-09	cPAH		4.8E-09
Chrysene	218-01-9	-	115.	115.	ca		0.0989	8.60E-10	cPAH		8.6E-10
Dibenz[a,h]anthracene	53-70-3	-	0.115	0.115	ca		0.0174	1.51E-07	cPAH		1.5E-07
Fluoranthene	206-44-0	2,390.	-	2,390.	nc		0.179			0.0001	
Fluorene	86-73-7	2,390.	-	2,390.	nc		0.0044			0.	
Indeno[1,2,3-cd]pyrene	193-39-5	-	1.15	1.15	ca		0.0687	5.97E-08	cPAH		6.0E-08
Methylnaphthalene, 1-	90-12-0	4,180.	17.6	17.6	ca		0.0044			0.	2.5E-10
Methylnaphthalene, 2-	91-57-6	239.	-	239.	nc		0.0044			0.	
Phenanthrene	85-01-8	-	-				0.0565				
Pyrene	129-00-0	1,790.	-	1,790.	nc		0.123			0.0001	
Arsenic, Inorganic	7440-38-2	34.9	0.677	0.677	ca	8.	6.				
Barium	7440-39-3	15,300.	-	15,300.	nc	364.	171.				
Cadmium (Diet)	7440-43-9	71.1	2,430.	71.1	nc	1.	0.44				
Chromium(III), Insoluble Salts	16065-83-1	117,000.	-	100,000.	ceiling		29.3			0.0003	
Chromium, Total	7440-47-3	-	-			44.	29.3				
Copper	7440-50-8	3,130.	-	3,130.	nc	35.	21.1				
Mercury (elemental)	7439-97-6	15.7	-	3.13	Csat		0.018			0.0011	
Lead and Compounds	7439-92-1	400.	-	400.		52.	19.1				
Manganese (Non-diet)	7439-96-5	1,830.	-	1,830.	nc	2,937.	604.				
Nickel Soluble Salts	7440-02-0	1,550.	16,900.	1,550.	nc	31.	20.8				
Selenium	7782-49-2	391.	-	391.	nc		2.3			0.0059	
Zinc and Compounds	7440-66-6	23,500.	-	23,500.	nc	150.	101.				
Aroclor 1016	12674-11-2	4.11	6.79	4.11	nc		0.0276			0.0067	4.1E-09
Aroclor 1221	11104-28-2	-	0.213	0.213	ca		0.0276				1.3E-07
Aroclor 1232	11141-16-5	-	0.19	0.19	ca		0.0276				1.5E-07
Aroclor 1242	53469-21-9	-	0.235	0.235	ca		0.0276				1.2E-07
Aroclor 1248	12672-29-6	-	0.236	0.236	ca		0.0276				1.2E-07
Aroclor 1254	11097-69-1	1.17	0.239	0.239	ca		0.0276			0.0236	1.2E-07
Aroclor 1260	11096-82-5	-	0.243	0.243	ca		0.0276				1.1E-07
Aroclor 5460	11126-42-4	35.2	-	35.2	nc		0.0276			0.0008	
Polychlorinated Biphenyls (high risk)	1336-36-3	-	0.234	0.234	ca		0.0276				1.2E-07

CGC Inc.

LOG OF SEDIMENT CORE

Project: Wexford Ponds

Location: Madison, WI

Core No. SC-1
Surface Elevation
Job No. C21051-15
Sheet 1 of 1

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

SAMPLE						VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES				
No.	TYPE	Rec (in.)	Moist	N	Depth (ft)		Electrical Conductivity	W	LL	LI	pH (in.)
						44 in. Water					
						Dark Gray-Brown Organic SILT, Trace Sand					
						Very Soft, Gray Lean CLAY	(<0.2)				
					5	Soft to Stiff, Bluish-Gray Lean CLAY	(0.3)				
							(1.5)				
						End of Core at 6.25 ft					
						Backfilled with Bentonite Chips					
					10						

WATER LEVEL OBSERVATIONS

While Excavating ▽ NW Upon Completion of Drilling
Time After Excavating
Depth to Water ▼
Depth to Cave in

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

GENERAL NOTES

Start 9/15/21 End 9/15/21
Driller CGC Chief
Logger ESF Editor ESF
Equip. Used: Piston Sampler
Pre-Washed With TSP SOL'N

CGC Inc.

LOG OF SEDIMENT CORE

Project: Wexford Ponds

Location: Madison, WI

Core No.: SC-2
Surface Elevation:
Job No.: C21051-15
Sheet: 1 of 1

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

SAMPLE					VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES				
No.	TYPE	Rec (in.)	Moist	N	Depth (ft)		Electrical Conductivity	W	LL	LI	pH (in.)
						34 in. Water					
						Dark Gray Organic SILT, Trace Sand, Scattered Plant Fibers and Wood Pieces					
						Very Soft, Gray Lean CLAY	(<0.2)				
					5	Soft to Stiff, Bluish Gray Lean CLAY	(0.3)				
							(1.5)				
						End of Core at 5.8 ft					
						Backfilled with Bentonite Chips					
					10						

WATER LEVEL OBSERVATIONS

While Excavating ▽ NW Upon Completion of Drilling
Time After Excavating
Depth to Water ▼
Depth to Cave in

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

GENERAL NOTES

Start 9/15/21 End 9/15/21
Driller CGC Chief
Logger ESF Editor ESF
Equip. Used: Piston Sampler
Pre-Washed With TSP SOL'N

CGC Inc.

LOG OF SEDIMENT CORE

Project: Wexford Ponds

Location: Madison, WI

Core No. SC-3
Surface Elevation
Job No. C21051-15
Sheet 1 of 1

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

SAMPLE						VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES				
No.	TYPE	Rec (in.)	Moist	N	Depth (ft)		Electrical Conductivity	W	LL	LI	pH (in.)
						31 in. Water					
						Dark Gray Organic SILT, Trace Sand, Scattered Plant Fibers					
					5	Stiff, Bluish-Gray Lean CLAY	(1.5)				
						End of Core at 5.1 ft					
						Backfilled with Bentonite Chips					
					10						

WATER LEVEL OBSERVATIONS

While Excavating ▽ NW Upon Completion of Drilling
Time After Excavating
Depth to Water ▼
Depth to Cave in

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

GENERAL NOTES

Start 9/15/21 End 9/15/21
Driller CGC Chief
Logger ESF Editor ESF
Equip. Used: Piston Sampler
Pre-Washed With TSP SOL'N

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

October 08, 2021

Brynn Bemis
City of Madison - Department of Engineering
210 Martin Luther King Jr Blvd
Room 115
Madison, WI 53703

RE: Project: WEXFORD POND
Pace Project No.: 40233468

Dear Brynn Bemis:

Enclosed are the analytical results for sample(s) received by the laboratory on September 17, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Gulf Coast
- Pace National - Mt. Juliet
- Pace Analytical Services - Asheville
- Pace Analytical Services - Green Bay

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Dan Milewsky
dan.milewsky@pacelabs.com
(920)469-2436
Project Manager

Enclosures

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

CERTIFICATIONS

Project: WEXFORD POND
Pace Project No.: 40233468

Pace Analytical Services Green Bay
1241 Bellevue Street, Green Bay, WI 54302
Florida/NELAP Certification #: E87948
Illinois Certification #: 200050
Kentucky UST Certification #: 82
Louisiana Certification #: 04168
Minnesota Certification #: 055-999-334
New York Certification #: 12064
North Dakota Certification #: R-150
Virginia VELAP ID: 460263
South Carolina Certification #: 83006001
Texas Certification #: T104704529-14-1
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
USDA Soil Permit #: P330-16-00157
Federal Fish & Wildlife Permit #: LE51774A-0

Pace Analytical Services National
12065 Lebanon Road, Mt. Juliet, TN 37122
Alabama Certification #: 40660
Alaska Certification 17-026
Arizona Certification #: AZ0612
Arkansas Certification #: 88-0469
California Certification #: 2932
Canada Certification #: 1461.01
Colorado Certification #: TN00003
Connecticut Certification #: PH-0197
DOD Certification: #1461.01
EPA# TN00003
Florida Certification #: E87487
Georgia DW Certification #: 923
Georgia Certification: NELAP
Idaho Certification #: TN00003
Illinois Certification #: 200008
Indiana Certification #: C-TN-01
Iowa Certification #: 364
Kansas Certification #: E-10277
Kentucky UST Certification #: 16
Kentucky Certification #: 90010
Louisiana Certification #: AI30792
Louisiana DW Certification #: LA180010
Maine Certification #: TN0002
Maryland Certification #: 324
Massachusetts Certification #: M-TN003
Michigan Certification #: 9958
Minnesota Certification #: 047-999-395
Mississippi Certification #: TN00003
Missouri Certification #: 340
Montana Certification #: CERT0086
Nebraska Certification #: NE-OS-15-05
Nevada Certification #: TN-03-2002-34
New Hampshire Certification #: 2975
New Jersey Certification #: TN002
New Mexico DW Certification
New York Certification #: 11742
North Carolina Aquatic Toxicity Certification #: 41
North Carolina Drinking Water Certification #: 21704
North Carolina Environmental Certificate #: 375
North Dakota Certification #: R-140
Ohio VAP Certification #: CL0069
Oklahoma Certification #: 9915
Oregon Certification #: TN200002
Pennsylvania Certification #: 68-02979
Rhode Island Certification #: LAO00356
South Carolina Certification #: 84004
South Dakota Certification
Tennessee DW/Chem/Micro Certification #: 2006
Texas Mold Certification #: LAB0152
Texas Certification #: T 104704245-17-14
USDA Soil Permit #: P330-15-00234
Utah Certification #: TN00003
Virginia Certification #: VT2006
Vermont Dept. of Health: ID# VT-2006
Virginia Certification #: 460132
Washington Certification #: C847
West Virginia Certification #: 233
Wisconsin Certification #: 998093910
Wyoming UST Certification #: via A2LA 2926.01
A2LA-ISO 17025 Certification #: 1461.01
A2LA-ISO 17025 Certification #: 1461.02
AIHA-LAP/LLC EMLAP Certification #:100789

Pace Analytical Gulf Coast
7979 Innovation Park Drive, Baton Rouge, LA 70820
Arkansas Certification #: 88-0655
DoD ELAP Certification #: L18-597
Florida Certification #: E87854
Illinois Certification #: 004585
Kansas Certification #: E-10354
Louisiana/LELAP Certification #: 01955
North Carolina Certification #: 618
North Dakota Certification #: R-195
Oklahoma Certification #: 2019-101
South Carolina Certification #: 73006001
Texas Certification #: T104704178-19-11
USDA Soil Permit # P330-19-00209
Virginia Certification #: 460215

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

CERTIFICATIONS

Project: WEXFORD POND
Pace Project No.: 40233468

Pace Analytical Gulf Coast
Washington Certification #: C929

Pace Analytical Services Asheville
2225 Riverside Drive, Asheville, NC 28804
Florida/NELAP Certification #: E87648
North Carolina Drinking Water Certification #: 37712
North Carolina Wastewater Certification #: 40
South Carolina Certification #: 99030001
Virginia/VELAP Certification #: 460222

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

SAMPLE SUMMARY

Project: WEXFORD POND
Pace Project No.: 40233468

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40233468001	**SC-1**	Solid	09/15/21 10:00	09/17/21 07:50
40233468002	**SC-2**	Solid	09/15/21 10:30	09/17/21 07:50
40233468003	**SC-3**	Solid	09/15/21 11:00	09/17/21 07:50
40233468004	**LF-COMPOSITE**	Solid	09/15/21 11:00	09/17/21 07:50

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

SAMPLE ANALYTE COUNT

Project: WEXFORD POND
Pace Project No.: 40233468

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40233468001	**SC-1**	EPA 8082	BLM	10	PASI-G
		EPA 6010D	TXW	10	PASI-G
		EPA 7471	AJT	1	PASI-G
		EPA 8270E by SIM	RJN	20	PASI-G
		ASTM D2974-87	AH	1	PASI-G
		EPA 160.4	HNT	1	PASI-G
		EPA 9060 Modified	TJJ	4	PASI-G
40233468002	**SC-2**	EPA 8082	BLM	10	PASI-G
		EPA 6010D	TXW	10	PASI-G
		EPA 7471	AJT	1	PASI-G
		EPA 8270E by SIM	RJN	20	PASI-G
		ASTM D2974-87	AH	1	PASI-G
		EPA 160.4	HNT	1	PASI-G
		EPA 9060 Modified	TJJ	4	PASI-G
40233468003	**SC-3**	EPA 8082	BLM	10	PASI-G
		EPA 6010D	TXW	10	PASI-G
		EPA 7471	AJT	1	PASI-G
		EPA 8270E by SIM	RJN	20	PASI-G
		ASTM D2974-87	AH	1	PASI-G
		EPA 160.4	HNT	1	PASI-G
		EPA 9060 Modified	TJJ	4	PASI-G
40233468004	**LF-COMPOSITE**	EPA 6010D	TXW	10	PASI-G
		EPA 7470	AJT	1	PASI-G
		EPA 8270E	TPO	17	PASI-G
		EPA 8260	LAP	13	PASI-G
		ASTM D2974-87	AH	1	PASI-G
		EPA 1010	HNT	1	PASI-G
		EPA 9066	JER	1	PAN
		EPA 9071B	WAW	1	PAN
		EPA 9040	ALY	1	PASI-G
		EPA 9076	KQB	1	PASI-A
		EPA 9095	HNT	1	PASI-G
		EPA 9012B	MOS	1	GCLA
		EPA 9034	RYC	1	GCLA

GCLA = Pace Analytical Gulf Coast
PAN = Pace National - Mt. Juliet
PASI-A = Pace Analytical Services - Asheville

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

SAMPLE ANALYTE COUNT

Project: WEXFORD POND
Pace Project No.: 40233468

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory

PASI-G = Pace Analytical Services - Green Bay

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: WEXFORD POND
Pace Project No.: 40233468

Sample: SC-1 **Lab ID: 40233468001** Collected: 09/15/21 10:00 Received: 09/17/21 07:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB	Analytical Method: EPA 8082 Preparation Method: EPA 3541 Pace Analytical Services - Green Bay								
PCB-1016 (Aroclor 1016)	**<22.8**	ug/kg	75.0	22.8	1	09/20/21 05:57	09/20/21 21:21	12674-11-2	
PCB-1221 (Aroclor 1221)	**<22.8**	ug/kg	75.0	22.8	1	09/20/21 05:57	09/20/21 21:21	11104-28-2	
PCB-1232 (Aroclor 1232)	**<22.8**	ug/kg	75.0	22.8	1	09/20/21 05:57	09/20/21 21:21	11141-16-5	
PCB-1242 (Aroclor 1242)	**<22.8**	ug/kg	75.0	22.8	1	09/20/21 05:57	09/20/21 21:21	53469-21-9	
PCB-1248 (Aroclor 1248)	**<22.8**	ug/kg	75.0	22.8	1	09/20/21 05:57	09/20/21 21:21	12672-29-6	
PCB-1254 (Aroclor 1254)	**<22.8**	ug/kg	75.0	22.8	1	09/20/21 05:57	09/20/21 21:21	11097-69-1	
PCB-1260 (Aroclor 1260)	**<22.8**	ug/kg	75.0	22.8	1	09/20/21 05:57	09/20/21 21:21	11096-82-5	
PCB, Total	**<22.8**	ug/kg	75.0	22.8	1	09/20/21 05:57	09/20/21 21:21	1336-36-3	
Surrogates									
Tetrachloro-m-xylene (S)	65	%	67-102		1	09/20/21 05:57	09/20/21 21:21	877-09-8	S0
Decachlorobiphenyl (S)	64	%	47-114		1	09/20/21 05:57	09/20/21 21:21	2051-24-3	
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3050B Pace Analytical Services - Green Bay								
Arsenic	**5.2**	mg/kg	3.8	2.2	1	09/21/21 06:56	09/21/21 15:54	7440-38-2	
Barium	**186**	mg/kg	0.75	0.23	1	09/21/21 06:56	09/21/21 15:54	7440-39-3	P6
Cadmium	**0.22J**	mg/kg	0.75	0.20	1	09/21/21 06:56	09/21/21 15:54	7440-43-9	
Chromium	**24.0**	mg/kg	1.5	0.42	1	09/21/21 06:56	09/21/21 15:54	7440-47-3	
Copper	**18.0**	mg/kg	1.5	0.42	1	09/21/21 06:56	09/21/21 15:54	7440-50-8	
Lead	**14.7**	mg/kg	3.0	0.90	1	09/21/21 06:56	09/21/21 15:54	7439-92-1	
Manganese	**898**	mg/kg	15.0	5.6	20	09/21/21 06:56	09/22/21 11:58	7439-96-5	P6,R1
Nickel	**20.6**	mg/kg	1.5	0.40	1	09/21/21 06:56	09/21/21 15:54	7440-02-0	
Selenium	**<2.0**	mg/kg	6.0	2.0	1	09/21/21 06:56	09/21/21 15:54	7782-49-2	
Zinc	**65.0**	mg/kg	6.0	1.8	1	09/21/21 06:56	09/21/21 15:54	7440-66-6	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Green Bay								
Mercury	**<0.014**	mg/kg	0.047	0.014	1	09/20/21 09:30	09/20/21 14:27	7439-97-6	1q
8270E MSSV PAH by SIM	Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546 Pace Analytical Services - Green Bay								
Acenaphthene	**<3.2**	ug/kg	25.0	3.2	1	09/23/21 07:58	09/23/21 15:29	83-32-9	
Acenaphthylene	**<3.2**	ug/kg	25.0	3.2	1	09/23/21 07:58	09/23/21 15:29	208-96-8	
Anthracene	**<3.1**	ug/kg	25.0	3.1	1	09/23/21 07:58	09/23/21 15:29	120-12-7	
Benzo(a)anthracene	**11.7J**	ug/kg	25.0	3.2	1	09/23/21 07:58	09/23/21 15:29	56-55-3	
Benzo(a)pyrene	**15.9J**	ug/kg	25.0	2.8	1	09/23/21 07:58	09/23/21 15:29	50-32-8	
Benzo(b)fluoranthene	**33.4**	ug/kg	25.0	3.5	1	09/23/21 07:58	09/23/21 15:29	205-99-2	
Benzo(g,h,i)perylene	**20.6J**	ug/kg	25.0	4.4	1	09/23/21 07:58	09/23/21 15:29	191-24-2	
Benzo(k)fluoranthene	**12.8J**	ug/kg	25.0	3.2	1	09/23/21 07:58	09/23/21 15:29	207-08-9	
Chrysene	**23.4J**	ug/kg	25.0	4.7	1	09/23/21 07:58	09/23/21 15:29	218-01-9	
Dibenz(a,h)anthracene	**3.6J**	ug/kg	25.0	3.5	1	09/23/21 07:58	09/23/21 15:29	53-70-3	
Fluoranthene	**38.2**	ug/kg	25.0	3.0	1	09/23/21 07:58	09/23/21 15:29	206-44-0	
Fluorene	**<3.0**	ug/kg	25.0	3.0	1	09/23/21 07:58	09/23/21 15:29	86-73-7	
Indeno(1,2,3-cd)pyrene	**15.7J**	ug/kg	25.0	5.2	1	09/23/21 07:58	09/23/21 15:29	193-39-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: WEXFORD POND
Pace Project No.: 40233468

Sample: SC-1 **Lab ID: 40233468001** Collected: 09/15/21 10:00 Received: 09/17/21 07:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV PAH by SIM	Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546 Pace Analytical Services - Green Bay								
1-Methylnaphthalene	**<3.7**	ug/kg	25.0	3.7	1	09/23/21 07:58	09/23/21 15:29	90-12-0	
2-Methylnaphthalene	**<3.7**	ug/kg	25.0	3.7	1	09/23/21 07:58	09/23/21 15:29	91-57-6	
Naphthalene	**<2.4**	ug/kg	25.0	2.4	1	09/23/21 07:58	09/23/21 15:29	91-20-3	
Phenanthrene	**11.8J**	ug/kg	25.0	2.9	1	09/23/21 07:58	09/23/21 15:29	85-01-8	
Pyrene	**25.6**	ug/kg	25.0	3.7	1	09/23/21 07:58	09/23/21 15:29	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	57	%	36-86		1	09/23/21 07:58	09/23/21 15:29	321-60-8	
Terphenyl-d14 (S)	64	%	41-97		1	09/23/21 07:58	09/23/21 15:29	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974-87 Pace Analytical Services - Green Bay								
Percent Moisture	**33.4**	%	0.10	0.10	1		09/21/21 11:08		
160.4 Total Volatile Solids	Analytical Method: EPA 160.4 Pace Analytical Services - Green Bay								
Total Volatile Solids	**4.3**	% (w/w)	0.10	0.10	1		09/21/21 10:30		
Total Organic Carbon	Analytical Method: EPA 9060 Modified Pace Analytical Services - Green Bay								
Surrogates									
RPD%	**10.1**	%	0.10	0.10	1		09/24/21 07:39		
Total Organic Carbon	**19100**	mg/kg	3900	1160	1		09/24/21 07:39	7440-44-0	
Total Organic Carbon	**17300**	mg/kg	3830	1140	1		09/24/21 07:46	7440-44-0	
Mean Total Organic Carbon	**18200**	mg/kg	3860	1150	1		09/24/21 07:39	7440-44-0	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: WEXFORD POND
Pace Project No.: 40233468

Sample: SC-2 **Lab ID: 40233468002** Collected: 09/15/21 10:30 Received: 09/17/21 07:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB	Analytical Method: EPA 8082 Preparation Method: EPA 3541 Pace Analytical Services - Green Bay								
PCB-1016 (Aroclor 1016)	**<25.0**	ug/kg	82.2	25.0	1	09/20/21 06:53	09/20/21 15:27	12674-11-2	
PCB-1221 (Aroclor 1221)	**<25.0**	ug/kg	82.2	25.0	1	09/20/21 06:53	09/20/21 15:27	11104-28-2	
PCB-1232 (Aroclor 1232)	**<25.0**	ug/kg	82.2	25.0	1	09/20/21 06:53	09/20/21 15:27	11141-16-5	
PCB-1242 (Aroclor 1242)	**<25.0**	ug/kg	82.2	25.0	1	09/20/21 06:53	09/20/21 15:27	53469-21-9	
PCB-1248 (Aroclor 1248)	**<25.0**	ug/kg	82.2	25.0	1	09/20/21 06:53	09/20/21 15:27	12672-29-6	
PCB-1254 (Aroclor 1254)	**<25.0**	ug/kg	82.2	25.0	1	09/20/21 06:53	09/20/21 15:27	11097-69-1	
PCB-1260 (Aroclor 1260)	**<25.0**	ug/kg	82.2	25.0	1	09/20/21 06:53	09/20/21 15:27	11096-82-5	
PCB, Total	**<25.0**	ug/kg	82.2	25.0	1	09/20/21 06:53	09/20/21 15:27	1336-36-3	
Surrogates									
Tetrachloro-m-xylene (S)	54	%	67-102		1	09/20/21 06:53	09/20/21 15:27	877-09-8	S0
Decachlorobiphenyl (S)	58	%	47-114		1	09/20/21 06:53	09/20/21 15:27	2051-24-3	
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3050B Pace Analytical Services - Green Bay								
Arsenic	**3.6J**	mg/kg	3.8	2.2	1	09/21/21 06:56	09/21/21 16:08	7440-38-2	
Barium	**129**	mg/kg	0.76	0.23	1	09/21/21 06:56	09/21/21 16:08	7440-39-3	
Cadmium	**0.41J**	mg/kg	0.76	0.20	1	09/21/21 06:56	09/21/21 16:08	7440-43-9	
Chromium	**25.3**	mg/kg	1.5	0.42	1	09/21/21 06:56	09/21/21 16:08	7440-47-3	
Copper	**27.2**	mg/kg	1.5	0.42	1	09/21/21 06:56	09/21/21 16:08	7440-50-8	
Lead	**21.8**	mg/kg	3.0	0.91	1	09/21/21 06:56	09/21/21 16:08	7439-92-1	
Manganese	**302**	mg/kg	0.76	0.28	1	09/21/21 06:56	09/21/21 16:08	7439-96-5	
Nickel	**17.9**	mg/kg	1.5	0.40	1	09/21/21 06:56	09/21/21 16:08	7440-02-0	
Selenium	**<2.0**	mg/kg	6.0	2.0	1	09/21/21 06:56	09/21/21 16:08	7782-49-2	
Zinc	**123**	mg/kg	6.0	1.8	1	09/21/21 06:56	09/21/21 16:08	7440-66-6	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Green Bay								
Mercury	**0.026J**	mg/kg	0.051	0.015	1	09/20/21 09:30	09/20/21 14:29	7439-97-6	1q
8270E MSSV PAH by SIM	Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546 Pace Analytical Services - Green Bay								
Acenaphthene	**7.1J**	ug/kg	27.4	3.6	1	09/23/21 07:58	09/23/21 16:03	83-32-9	
Acenaphthylene	**<3.5**	ug/kg	27.4	3.5	1	09/23/21 07:58	09/23/21 16:03	208-96-8	
Anthracene	**26.1J**	ug/kg	27.4	3.4	1	09/23/21 07:58	09/23/21 16:03	120-12-7	
Benzo(a)anthracene	**154**	ug/kg	27.4	3.5	1	09/23/21 07:58	09/23/21 16:03	56-55-3	
Benzo(a)pyrene	**216**	ug/kg	27.4	3.1	1	09/23/21 07:58	09/23/21 16:03	50-32-8	
Benzo(b)fluoranthene	**427**	ug/kg	27.4	3.8	1	09/23/21 07:58	09/23/21 16:03	205-99-2	
Benzo(g,h,i)perylene	**243**	ug/kg	27.4	4.8	1	09/23/21 07:58	09/23/21 16:03	191-24-2	
Benzo(k)fluoranthene	**123**	ug/kg	27.4	3.5	1	09/23/21 07:58	09/23/21 16:03	207-08-9	
Chrysene	**288**	ug/kg	27.4	5.2	1	09/23/21 07:58	09/23/21 16:03	218-01-9	
Dibenz(a,h)anthracene	**40.0**	ug/kg	27.4	3.8	1	09/23/21 07:58	09/23/21 16:03	53-70-3	
Fluoranthene	**629**	ug/kg	27.4	3.2	1	09/23/21 07:58	09/23/21 16:03	206-44-0	
Fluorene	**14.9J**	ug/kg	27.4	3.3	1	09/23/21 07:58	09/23/21 16:03	86-73-7	
Indeno(1,2,3-cd)pyrene	**185**	ug/kg	27.4	5.7	1	09/23/21 07:58	09/23/21 16:03	193-39-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: WEXFORD POND
Pace Project No.: 40233468

Sample: SC-2 **Lab ID: 40233468002** Collected: 09/15/21 10:30 Received: 09/17/21 07:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV PAH by SIM	Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546 Pace Analytical Services - Green Bay								
1-Methylnaphthalene	**<4.0**	ug/kg	27.4	4.0	1	09/23/21 07:58	09/23/21 16:03	90-12-0	
2-Methylnaphthalene	**<4.0**	ug/kg	27.4	4.0	1	09/23/21 07:58	09/23/21 16:03	91-57-6	
Naphthalene	**3.9J**	ug/kg	27.4	2.7	1	09/23/21 07:58	09/23/21 16:03	91-20-3	
Phenanthrene	**238**	ug/kg	27.4	3.1	1	09/23/21 07:58	09/23/21 16:03	85-01-8	
Pyrene	**413**	ug/kg	27.4	4.0	1	09/23/21 07:58	09/23/21 16:03	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	71	%	36-86		1	09/23/21 07:58	09/23/21 16:03	321-60-8	
Terphenyl-d14 (S)	75	%	41-97		1	09/23/21 07:58	09/23/21 16:03	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974-87 Pace Analytical Services - Green Bay								
Percent Moisture	**39.1**	%	0.10	0.10	1		09/21/21 11:08		
160.4 Total Volatile Solids	Analytical Method: EPA 160.4 Pace Analytical Services - Green Bay								
Total Volatile Solids	**9.4**	% (w/w)	0.10	0.10	1		09/21/21 10:31		
Total Organic Carbon	Analytical Method: EPA 9060 Modified Pace Analytical Services - Green Bay								
Surrogates									
RPD%	**6.0**	%	0.10	0.10	1		09/24/21 07:51		
Total Organic Carbon	**15500**	mg/kg	2850	851	1		09/24/21 07:51	7440-44-0	
Total Organic Carbon	**14600**	mg/kg	2820	842	1		09/24/21 07:57	7440-44-0	
Mean Total Organic Carbon	**15000**	mg/kg	2840	846	1		09/24/21 07:51	7440-44-0	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: WEXFORD POND
Pace Project No.: 40233468

Sample: SC-3 **Lab ID: 40233468003** Collected: 09/15/21 11:00 Received: 09/17/21 07:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB	Analytical Method: EPA 8082 Preparation Method: EPA 3541 Pace Analytical Services - Green Bay								
PCB-1016 (Aroclor 1016)	**<27.6**	ug/kg	90.7	27.6	1	09/20/21 06:53	09/20/21 15:49	12674-11-2	
PCB-1221 (Aroclor 1221)	**<27.6**	ug/kg	90.7	27.6	1	09/20/21 06:53	09/20/21 15:49	11104-28-2	
PCB-1232 (Aroclor 1232)	**<27.6**	ug/kg	90.7	27.6	1	09/20/21 06:53	09/20/21 15:49	11141-16-5	
PCB-1242 (Aroclor 1242)	**<27.6**	ug/kg	90.7	27.6	1	09/20/21 06:53	09/20/21 15:49	53469-21-9	
PCB-1248 (Aroclor 1248)	**<27.6**	ug/kg	90.7	27.6	1	09/20/21 06:53	09/20/21 15:49	12672-29-6	
PCB-1254 (Aroclor 1254)	**<27.6**	ug/kg	90.7	27.6	1	09/20/21 06:53	09/20/21 15:49	11097-69-1	
PCB-1260 (Aroclor 1260)	**<27.6**	ug/kg	90.7	27.6	1	09/20/21 06:53	09/20/21 15:49	11096-82-5	
PCB, Total	**<27.6**	ug/kg	90.7	27.6	1	09/20/21 06:53	09/20/21 15:49	1336-36-3	
Surrogates									
Tetrachloro-m-xylene (S)	60	%	67-102		1	09/20/21 06:53	09/20/21 15:49	877-09-8	S0
Decachlorobiphenyl (S)	62	%	47-114		1	09/20/21 06:53	09/20/21 15:49	2051-24-3	
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3050B Pace Analytical Services - Green Bay								
Arsenic	**6.0**	mg/kg	4.5	2.6	1	09/21/21 06:56	09/21/21 16:40	7440-38-2	
Barium	**171**	mg/kg	0.89	0.27	1	09/21/21 06:56	09/21/21 16:40	7440-39-3	
Cadmium	**0.44J**	mg/kg	0.89	0.24	1	09/21/21 06:56	09/21/21 16:40	7440-43-9	
Chromium	**29.3**	mg/kg	1.8	0.50	1	09/21/21 06:56	09/21/21 16:40	7440-47-3	
Copper	**21.1**	mg/kg	1.8	0.49	1	09/21/21 06:56	09/21/21 16:40	7440-50-8	
Lead	**19.1**	mg/kg	3.6	1.1	1	09/21/21 06:56	09/21/21 16:40	7439-92-1	
Manganese	**604**	mg/kg	0.89	0.33	1	09/21/21 06:56	09/21/21 16:40	7439-96-5	
Nickel	**20.8**	mg/kg	1.8	0.47	1	09/21/21 06:56	09/21/21 16:40	7440-02-0	
Selenium	**<2.3**	mg/kg	7.1	2.3	1	09/21/21 06:56	09/21/21 16:40	7782-49-2	
Zinc	**101**	mg/kg	7.1	2.1	1	09/21/21 06:56	09/21/21 16:40	7440-66-6	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Green Bay								
Mercury	**0.018J**	mg/kg	0.056	0.016	1	09/20/21 09:30	09/20/21 14:31	7439-97-6	1q
8270E MSSV PAH by SIM	Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546 Pace Analytical Services - Green Bay								
Acenaphthene	**<3.9**	ug/kg	30.3	3.9	1	09/29/21 08:29	09/29/21 12:06	83-32-9	
Acenaphthylene	**<3.8**	ug/kg	30.3	3.8	1	09/29/21 08:29	09/29/21 12:06	208-96-8	
Anthracene	**8.9J**	ug/kg	30.3	3.8	1	09/29/21 08:29	09/29/21 12:06	120-12-7	
Benzo(a)anthracene	**39.1**	ug/kg	30.3	3.9	1	09/29/21 08:29	09/29/21 12:06	56-55-3	
Benzo(a)pyrene	**68.3**	ug/kg	30.3	3.4	1	09/29/21 08:29	09/29/21 12:06	50-32-8	
Benzo(b)fluoranthene	**137**	ug/kg	30.3	4.2	1	09/29/21 08:29	09/29/21 12:06	205-99-2	
Benzo(g,h,i)perylene	**87.0**	ug/kg	30.3	5.3	1	09/29/21 08:29	09/29/21 12:06	191-24-2	
Benzo(k)fluoranthene	**55.0**	ug/kg	30.3	3.9	1	09/29/21 08:29	09/29/21 12:06	207-08-9	
Chrysene	**98.9**	ug/kg	30.3	5.7	1	09/29/21 08:29	09/29/21 12:06	218-01-9	
Dibenz(a,h)anthracene	**17.4J**	ug/kg	30.3	4.2	1	09/29/21 08:29	09/29/21 12:06	53-70-3	
Fluoranthene	**179**	ug/kg	30.3	3.6	1	09/29/21 08:29	09/29/21 12:06	206-44-0	
Fluorene	**4.4J**	ug/kg	30.3	3.6	1	09/29/21 08:29	09/29/21 12:06	86-73-7	
Indeno(1,2,3-cd)pyrene	**68.7**	ug/kg	30.3	6.3	1	09/29/21 08:29	09/29/21 12:06	193-39-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: WEXFORD POND
Pace Project No.: 40233468

Sample: SC-3 **Lab ID: 40233468003** Collected: 09/15/21 11:00 Received: 09/17/21 07:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV PAH by SIM	Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546 Pace Analytical Services - Green Bay								
1-Methylnaphthalene	**<4.4**	ug/kg	30.3	4.4	1	09/29/21 08:29	09/29/21 12:06	90-12-0	
2-Methylnaphthalene	**<4.4**	ug/kg	30.3	4.4	1	09/29/21 08:29	09/29/21 12:06	91-57-6	
Naphthalene	**3.0J**	ug/kg	30.3	3.0	1	09/29/21 08:29	09/29/21 12:06	91-20-3	
Phenanthrene	**56.5**	ug/kg	30.3	3.5	1	09/29/21 08:29	09/29/21 12:06	85-01-8	
Pyrene	**123**	ug/kg	30.3	4.5	1	09/29/21 08:29	09/29/21 12:06	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	46	%	36-86		1	09/29/21 08:29	09/29/21 12:06	321-60-8	
Terphenyl-d14 (S)	45	%	41-97		1	09/29/21 08:29	09/29/21 12:06	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974-87 Pace Analytical Services - Green Bay								
Percent Moisture	**44.9**	%	0.10	0.10	1		09/21/21 11:08		
160.4 Total Volatile Solids	Analytical Method: EPA 160.4 Pace Analytical Services - Green Bay								
Total Volatile Solids	**4.2**	% (w/w)	0.10	0.10	1		09/21/21 10:31		
Total Organic Carbon	Analytical Method: EPA 9060 Modified Pace Analytical Services - Green Bay								
Surrogates									
RPD%	**8.1**	%	0.10	0.10	1		09/24/21 08:04		
Total Organic Carbon	**20200**	mg/kg	3700	1100	1		09/24/21 08:04	7440-44-0	
Total Organic Carbon	**18600**	mg/kg	3690	1100	1		09/24/21 08:11	7440-44-0	
Mean Total Organic Carbon	**19400**	mg/kg	3690	1100	1		09/24/21 08:04	7440-44-0	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: WEXFORD POND
Pace Project No.: 40233468

Sample: LF-COMPOSITE **Lab ID: 40233468004** Collected: 09/15/21 11:00 Received: 09/17/21 07:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.
Comments: • Sample container used for ZHE had headspace.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP, TCLP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Leachate Method/Date: EPA 1311; 09/28/21 14:21 Pace Analytical Services - Green Bay								
Arsenic	**<0.0084**	mg/L	0.025	0.0084	1	09/29/21 10:59	09/29/21 19:38	7440-38-2	
Barium	**1.1**	mg/L	0.050	0.015	10	09/29/21 10:59	09/30/21 11:14	7440-39-3	
Cadmium	**0.0027J**	mg/L	0.0050	0.0013	1	09/29/21 10:59	09/29/21 19:38	7440-43-9	
Chromium	**<0.0025**	mg/L	0.010	0.0025	1	09/29/21 10:59	09/29/21 19:38	7440-47-3	
Copper	**0.026**	mg/L	0.010	0.0034	1	09/29/21 10:59	09/29/21 19:38	7440-50-8	
Lead	**0.011J**	mg/L	0.020	0.0059	1	09/29/21 10:59	09/29/21 19:38	7439-92-1	
Nickel	**0.082**	mg/L	0.010	0.0026	1	09/29/21 10:59	09/29/21 19:38	7440-02-0	
Selenium	**<0.012**	mg/L	0.040	0.012	1	09/29/21 10:59	09/29/21 19:38	7782-49-2	
Silver	**<0.0032**	mg/L	0.010	0.0032	1	09/29/21 10:59	09/29/21 19:38	7440-22-4	
Zinc	**0.40**	mg/L	0.040	0.012	1	09/29/21 10:59	09/29/21 19:38	7440-66-6	
7470 Mercury, TCLP	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Leachate Method/Date: EPA 1311; 09/28/21 14:21 Pace Analytical Services - Green Bay								
Mercury	**<0.000066**	mg/L	0.00020	0.000066	1	09/29/21 10:25	09/30/21 09:34	7439-97-6	
8270E MSSV TCLP Sep Funnel	Analytical Method: EPA 8270E Preparation Method: EPA 3510 Leachate Method/Date: EPA 1311; 09/28/21 14:21 Pace Analytical Services - Green Bay								
1,4-Dichlorobenzene	**<0.014**	mg/L	0.050	0.014	1	10/04/21 11:08	10/05/21 12:35	106-46-7	
2,4-Dinitrotoluene	**<0.011**	mg/L	0.050	0.011	1	10/04/21 11:08	10/05/21 12:35	121-14-2	
Hexachloro-1,3-butadiene	**<0.017**	mg/L	0.050	0.017	1	10/04/21 11:08	10/05/21 12:35	87-68-3	
Hexachlorobenzene	**<0.011**	mg/L	0.055	0.011	1	10/04/21 11:08	10/05/21 12:35	118-74-1	
Hexachloroethane	**<0.014**	mg/L	0.050	0.014	1	10/04/21 11:08	10/05/21 12:35	67-72-1	
2-Methylphenol(o-Cresol)	**<0.0093**	mg/L	0.050	0.0093	1	10/04/21 11:08	10/05/21 12:35	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<0.0061**	mg/L	0.050	0.0061	1	10/04/21 11:08	10/05/21 12:35		
Nitrobenzene	**<0.011**	mg/L	0.050	0.011	1	10/04/21 11:08	10/05/21 12:35	98-95-3	
Pentachlorophenol	**<0.046**	mg/L	0.15	0.046	1	10/04/21 11:08	10/05/21 12:35	87-86-5	
Phenol	**<0.0032**	mg/L	0.050	0.0032	1	10/04/21 11:08	10/05/21 12:35	108-95-2	
Pyridine	**<0.015**	mg/L	0.050	0.015	1	10/04/21 11:08	10/05/21 12:35	110-86-1	
2,4,5-Trichlorophenol	**<0.0064**	mg/L	0.050	0.0064	1	10/04/21 11:08	10/05/21 12:35	95-95-4	
2,4,6-Trichlorophenol	**<0.0080**	mg/L	0.050	0.0080	1	10/04/21 11:08	10/05/21 12:35	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	86	%	41-118		1	10/04/21 11:08	10/05/21 12:35	4165-60-0	
2-Fluorobiphenyl (S)	73	%	54-107		1	10/04/21 11:08	10/05/21 12:35	321-60-8	
2,4,6-Tribromophenol (S)	85	%	62-172		1	10/04/21 11:08	10/05/21 12:35	118-79-6	
Phenol-d6 (S)	34	%	12-120		1	10/04/21 11:08	10/05/21 12:35	13127-88-3	
8260 MSV TCLP	Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 09/29/21 14:16 Pace Analytical Services - Green Bay								
Benzene	**<0.0030**	mg/L	0.010	0.0030	10		10/01/21 18:06	71-43-2	H1
2-Butanone (MEK)	**<0.065**	mg/L	0.25	0.065	10		10/01/21 18:06	78-93-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: WEXFORD POND
Pace Project No.: 40233468

Sample: LF-COMPOSITE **Lab ID: 40233468004** Collected: 09/15/21 11:00 Received: 09/17/21 07:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.
Comments: • Sample container used for ZHE had headspace.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV TCLP	Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 09/29/21 14:16								
	Pace Analytical Services - Green Bay								
Carbon tetrachloride	**<0.0037**	mg/L	0.010	0.0037	10		10/01/21 18:06	56-23-5	H1
Chlorobenzene	**<0.0086**	mg/L	0.010	0.0086	10		10/01/21 18:06	108-90-7	H1
Chloroform	**<0.012**	mg/L	0.050	0.012	10		10/01/21 18:06	67-66-3	H1
1,2-Dichloroethane	**<0.0029**	mg/L	0.010	0.0029	10		10/01/21 18:06	107-06-2	H1
1,1-Dichloroethene	**<0.0058**	mg/L	0.010	0.0058	10		10/01/21 18:06	75-35-4	H1
Tetrachloroethene	**<0.0041**	mg/L	0.010	0.0041	10		10/01/21 18:06	127-18-4	H1
Trichloroethene	**<0.0032**	mg/L	0.010	0.0032	10		10/01/21 18:06	79-01-6	H1
Vinyl chloride	**<0.0017**	mg/L	0.010	0.0017	10		10/01/21 18:06	75-01-4	H1
Surrogates									
Toluene-d8 (S)	91	%	70-130		10		10/01/21 18:06	2037-26-5	
4-Bromofluorobenzene (S)	84	%	70-130		10		10/01/21 18:06	460-00-4	
1,2-Dichlorobenzene-d4 (S)	105	%	70-130		10		10/01/21 18:06	2199-69-1	
Percent Moisture	Analytical Method: ASTM D2974-87								
	Pace Analytical Services - Green Bay								
Percent Moisture	**40.1**	%	0.10	0.10	1		09/21/21 11:08		
1010 Flashpoint,Closed Cup	Analytical Method: EPA 1010								
	Pace Analytical Services - Green Bay								
Flashpoint	**>200**	deg F			1		09/28/21 10:52		3q
Wet Chemistry 9066	Analytical Method: EPA 9066 Preparation Method: 4AAP								
	Pace National - Mt. Juliet								
Phenolics, Total Recoverable	**<0.220**	mg/kg	0.733	0.220	1	10/06/21 03:27	10/06/21 12:33	64743-03-9	
Wet Chemistry 9071B	Analytical Method: EPA 9071B Preparation Method: 9071B								
	Pace National - Mt. Juliet								
Oil and Grease	**248**	mg/kg	110	33.0	1	10/04/21 17:54	10/05/21 02:42		
9040 pH	Analytical Method: EPA 9040								
	Pace Analytical Services - Green Bay								
pH at 25 Degrees C	**7.3**	Std. Units	0.10	0.010	1		09/28/21 10:37		2q,H6
9076 Total Chlorine	Analytical Method: EPA 9076								
	Pace Analytical Services - Asheville								
Chlorine, Total	**<0.010**	%	0.010	0.010	1		10/02/21 03:41	7782-50-5	N2
9095 Paint Filter Liquid Test	Analytical Method: EPA 9095								
	Pace Analytical Services - Green Bay								
Free Liquids	**Pass**	no units			1		10/01/21 14:31		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: WEXFORD POND
Pace Project No.: 40233468

Sample: LF-COMPOSITE **Lab ID: 40233468004** Collected: 09/15/21 11:00 Received: 09/17/21 07:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.
Comments: • Sample container used for ZHE had headspace.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
EPA 7.3.3.2, Rev 3/9012B	Analytical Method: EPA 9012B Preparation Method: SW-846 7.3.3.2 Pace Analytical Gulf Coast								
Cyanide, Reactive	**<250**	mg/kg	250	250	1	10/05/21 11:00	10/06/21 09:20		
EPA 7.3.4.2, Rev. 3/9034	Analytical Method: EPA 9034 Preparation Method: SW-846 7.3.4.2 Pace Analytical Gulf Coast								
Sulfide, Reactive	**<250**	mg/kg	250	250	1	10/05/21 11:00	10/07/21 17:13		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: WEXFORD POND
Pace Project No.: 40233468

QC Batch: 397013
QC Batch Method: EPA 7470
Analysis Method: EPA 7470
Analysis Description: 7470 Mercury TCLP
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40233468004

METHOD BLANK: 2290565 Matrix: Water
Associated Lab Samples: 40233468004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	mg/L	<0.000066	0.00020	09/30/21 08:59	

METHOD BLANK: 2290265 Matrix: Water
Associated Lab Samples: 40233468004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	mg/L	<0.000066	0.00020	09/30/21 09:20	

METHOD BLANK: 2290266 Matrix: Water
Associated Lab Samples: 40233468004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	mg/L	<0.000066	0.00020	09/30/21 09:39	

METHOD BLANK: 2290267 Matrix: Water
Associated Lab Samples: 40233468004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	mg/L	<0.000066	0.00020	09/30/21 10:01	

LABORATORY CONTROL SAMPLE: 2290566

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.005	0.0051	102	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2290567 2290568

Parameter	Units	40233498001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	0.41 ug/L	0.005	0.005	0.0063	0.0060	118	112	85-115	5	20	M0

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: WEXFORD POND
Pace Project No.: 40233468

MATRIX SPIKE SAMPLE: 2290569

Parameter	Units	40233827002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.00032	0.005	0.0058	110	85-115	

MATRIX SPIKE SAMPLE: 2290570

Parameter	Units	40233965001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	<0.066 ug/L	0.005	0.0058	115	85-115	

MATRIX SPIKE SAMPLE: 2290571

Parameter	Units	40233966001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	<0.066 ug/L	0.005	0.0057	114	85-115	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: WEXFORD POND
Pace Project No.: 40233468

QC Batch: 396068
QC Batch Method: EPA 7471
Analysis Method: EPA 7471
Analysis Description: 7471 Mercury
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40233468001, 40233468002, 40233468003

METHOD BLANK: 2285506 Matrix: Solid
Associated Lab Samples: 40233468001, 40233468002, 40233468003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	mg/kg	<0.010	0.035	09/20/21 13:29	

LABORATORY CONTROL SAMPLE: 2285507

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/kg	0.83	0.90	108	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2285508 2285509

Parameter	Units	40233495001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/kg	0.028J	0.98	0.98	1.1	1.0	104	102	85-115	2	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: WEXFORD POND
Pace Project No.: 40233468

QC Batch: 396199
QC Batch Method: EPA 3050B
Analysis Method: EPA 6010D
Analysis Description: 6010D MET
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40233468001, 40233468002, 40233468003

METHOD BLANK: 2286023 Matrix: Solid
Associated Lab Samples: 40233468001, 40233468002, 40233468003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/kg	<1.5	2.5	09/21/21 15:50	
Barium	mg/kg	<0.15	0.50	09/21/21 15:50	
Cadmium	mg/kg	<0.13	0.50	09/21/21 15:50	
Chromium	mg/kg	<0.28	1.0	09/21/21 15:50	
Copper	mg/kg	<0.28	1.0	09/21/21 15:50	
Lead	mg/kg	<0.60	2.0	09/21/21 15:50	
Manganese	mg/kg	<0.19	0.50	09/21/21 15:50	
Nickel	mg/kg	<0.26	1.0	09/21/21 15:50	
Selenium	mg/kg	<1.3	4.0	09/21/21 15:50	
Zinc	mg/kg	<1.2	4.0	09/21/21 15:50	

LABORATORY CONTROL SAMPLE: 2286024

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/kg	25	24.4	98	80-120	
Barium	mg/kg	25	25.1	100	80-120	
Cadmium	mg/kg	25	25.3	101	80-120	
Chromium	mg/kg	25	25.7	103	80-120	
Copper	mg/kg	25	26.0	104	80-120	
Lead	mg/kg	25	25.5	102	80-120	
Manganese	mg/kg	25	25.1	101	80-120	
Nickel	mg/kg	25	25.7	103	80-120	
Selenium	mg/kg	25	25.6	103	80-120	
Zinc	mg/kg	25	24.9	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2286025 2286026

Parameter	Units	40233468001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	mg/kg	5.2	37.2	37.4	36.5	39.6	84	92	75-125	8	20	
Barium	mg/kg	186	37.2	37.4	254	279	183	248	75-125	9	20	P6
Cadmium	mg/kg	0.22J	37.2	37.4	35.2	35.4	94	94	75-125	1	20	
Chromium	mg/kg	24.0	37.2	37.4	62.1	68.5	102	119	75-125	10	20	
Copper	mg/kg	18.0	37.2	37.4	53.5	54.8	95	99	75-125	2	20	
Lead	mg/kg	14.7	37.2	37.4	49.3	49.5	93	93	75-125	0	20	
Manganese	mg/kg	898	37.2	37.4	764	1240	-359	915	75-125	48	20	P6,R1
Nickel	mg/kg	20.6	37.2	37.4	54.6	59.0	91	103	75-125	8	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: WEXFORD POND
Pace Project No.: 40233468

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2286025 2286026

Parameter	Units	40233468001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Selenium	mg/kg	<2.0	37.2	37.4	34.7	35.8	91	94	75-125	3	20	
Zinc	mg/kg	65.0	37.2	37.4	102	104	101	104	75-125	1	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: WEXFORD POND
Pace Project No.: 40233468

QC Batch: 397020
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D MET TCLP
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40233468004

METHOD BLANK: 2290598 Matrix: Water
Associated Lab Samples: 40233468004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/L	<0.0084	0.025	09/29/21 19:33	
Barium	mg/L	<0.0015	0.0050	09/29/21 19:33	
Cadmium	mg/L	<0.0013	0.0050	09/29/21 19:33	
Chromium	mg/L	<0.0025	0.010	09/29/21 19:33	
Copper	mg/L	<0.0034	0.010	09/29/21 19:33	
Lead	mg/L	<0.0059	0.020	09/29/21 19:33	
Nickel	mg/L	<0.0026	0.010	09/29/21 19:33	
Selenium	mg/L	<0.012	0.040	09/29/21 19:33	
Silver	mg/L	<0.0032	0.010	09/29/21 19:33	
Zinc	mg/L	<0.012	0.040	09/29/21 19:33	

METHOD BLANK: 2290262 Matrix: Solid
Associated Lab Samples: 40233468004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/L	<0.0084	0.025	09/29/21 20:31	
Barium	mg/L	0.0036J	0.0050	09/29/21 20:31	
Cadmium	mg/L	<0.0013	0.0050	09/29/21 20:31	
Chromium	mg/L	<0.0025	0.010	09/29/21 20:31	
Copper	mg/L	<0.0034	0.010	09/29/21 20:31	
Lead	mg/L	<0.0059	0.020	09/29/21 20:31	
Nickel	mg/L	0.0054J	0.010	09/29/21 20:31	
Selenium	mg/L	<0.012	0.040	09/29/21 20:31	
Silver	mg/L	<0.0032	0.010	09/29/21 20:31	
Zinc	mg/L	<0.012	0.040	09/29/21 20:31	

METHOD BLANK: 2290263 Matrix: Solid
Associated Lab Samples: 40233468004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/L	<0.0084	0.025	09/29/21 20:21	
Barium	mg/L	0.0019J	0.0050	09/29/21 20:21	
Cadmium	mg/L	<0.0013	0.0050	09/29/21 20:21	
Chromium	mg/L	<0.0025	0.010	09/29/21 20:21	
Copper	mg/L	<0.0034	0.010	09/29/21 20:21	
Lead	mg/L	<0.0059	0.020	09/29/21 20:21	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: WEXFORD POND
Pace Project No.: 40233468

METHOD BLANK: 2290263 Matrix: Solid
Associated Lab Samples: 40233468004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nickel	mg/L	<0.0026	0.010	09/29/21 20:21	
Selenium	mg/L	<0.012	0.040	09/29/21 20:21	
Silver	mg/L	<0.0032	0.010	09/29/21 20:21	
Zinc	mg/L	<0.012	0.040	09/29/21 20:21	

METHOD BLANK: 2290264 Matrix: Solid
Associated Lab Samples: 40233468004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/L	<0.0084	0.025	09/29/21 20:39	
Barium	mg/L	<0.0015	0.0050	09/29/21 20:39	
Cadmium	mg/L	<0.0013	0.0050	09/29/21 20:39	
Chromium	mg/L	<0.0025	0.010	09/29/21 20:39	
Copper	mg/L	<0.0034	0.010	09/29/21 20:39	
Lead	mg/L	<0.0059	0.020	09/29/21 20:39	
Nickel	mg/L	<0.0026	0.010	09/29/21 20:39	
Selenium	mg/L	<0.012	0.040	09/29/21 20:39	
Silver	mg/L	<0.0032	0.010	09/29/21 20:39	
Zinc	mg/L	<0.012	0.040	09/29/21 20:39	

LABORATORY CONTROL SAMPLE: 2290599

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	0.25	0.25	99	80-120	
Barium	mg/L	0.25	0.26	103	80-120	
Cadmium	mg/L	0.25	0.26	103	80-120	
Chromium	mg/L	0.25	0.26	104	80-120	
Copper	mg/L	0.25	0.26	104	80-120	
Lead	mg/L	0.25	0.26	105	80-120	
Nickel	mg/L	0.25	0.26	105	80-120	
Selenium	mg/L	0.25	0.25	101	80-120	
Silver	mg/L	0.12	0.12	99	80-120	
Zinc	mg/L	0.25	0.26	106	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2290600 2290601

Parameter	Units	40233468004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	mg/L	<0.0084	0.25	0.25	0.26	0.26	103	101	75-125	1	20	
Barium	mg/L	1.1	0.25	0.25	1.3	1.4	88	96	75-125	2	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: WEXFORD POND
Pace Project No.: 40233468

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2290600 2290601

Parameter	Units	40233468004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cadmium	mg/L	0.0027J	0.25	0.25	0.27	0.27	108	107	75-125	1	20	
Chromium	mg/L	<0.0025	0.25	0.25	0.26	0.25	102	101	75-125	1	20	
Copper	mg/L	0.026	0.25	0.25	0.29	0.29	105	106	75-125	1	20	
Lead	mg/L	0.011J	0.25	0.25	0.27	0.26	103	102	75-125	1	20	
Nickel	mg/L	0.082	0.25	0.25	0.34	0.33	102	101	75-125	0	20	
Selenium	mg/L	<0.012	0.25	0.25	0.27	0.27	105	104	75-125	0	20	
Silver	mg/L	<0.0032	0.12	0.12	0.13	0.13	107	106	75-125	1	20	
Zinc	mg/L	0.40	0.25	0.25	0.64	0.65	99	100	75-125	0	20	

MATRIX SPIKE SAMPLE: 2290602

Parameter	Units	40233827002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	<0.0084	0.25	0.26	104	75-125	
Barium	mg/L	0.13	0.25	0.39	103	75-125	
Cadmium	mg/L	0.0081	0.25	0.27	106	75-125	
Chromium	mg/L	<0.0025	0.25	0.25	100	75-125	
Copper	mg/L	0.0080J	0.25	0.27	106	75-125	
Lead	mg/L	<0.0059	0.25	0.26	101	75-125	
Nickel	mg/L	0.0092J	0.25	0.26	101	75-125	
Selenium	mg/L	<0.012	0.25	0.26	105	75-125	
Silver	mg/L	<0.0032	0.12	0.13	103	75-125	
Zinc	mg/L	0.034J	0.25	0.29	101	75-125	

MATRIX SPIKE SAMPLE: 2290603

Parameter	Units	40233880001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	<4.2	0.25	<4.2	0	75-125	M0
Barium	mg/L	<0.75	0.25	<0.75	21	75-125	M0
Cadmium	mg/L	<0.66	0.25	<0.66	61	75-125	M0
Chromium	mg/L	<1.3	0.25	<1.3	0	75-125	M0
Copper	mg/L	126	0.25	119	-2860	75-125	P6
Lead	mg/L	<3.0	0.25	<3.0	49	75-125	P6
Nickel	mg/L	1.3J	0.25	<1.3	-27	75-125	P6
Selenium	mg/L	<3.1	0.25	<3.1	78	75-125	
Silver	mg/L	<1.6	0.12	<1.6	-182	75-125	M0
Zinc	mg/L	1150	0.25	1070	-29200	75-125	P6

MATRIX SPIKE SAMPLE: 2290604

Parameter	Units	40233965001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	0.043	0.25	0.30	102	75-125	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: WEXFORD POND
Pace Project No.: 40233468

MATRIX SPIKE SAMPLE: 2290604

Parameter	Units	40233965001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Barium	mg/L	0.42	0.25	0.67	102	75-125	
Cadmium	mg/L	<0.0013	0.25	0.26	105	75-125	
Chromium	mg/L	0.0041J	0.25	0.26	103	75-125	
Copper	mg/L	0.86	0.25	1.1	104	75-125	
Lead	mg/L	<0.0059	0.25	0.26	104	75-125	
Nickel	mg/L	0.089	0.25	0.35	104	75-125	
Selenium	mg/L	<0.012	0.25	0.27	108	75-125	
Silver	mg/L	<0.0032	0.12	0.13	102	75-125	
Zinc	mg/L	0.021J	0.25	0.28	105	75-125	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: WEXFORD POND
Pace Project No.: 40233468

QC Batch: 397138
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV TCLP
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40233468004

METHOD BLANK: 2291371 Matrix: Water
Associated Lab Samples: 40233468004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1-Dichloroethene	mg/L	<0.00058	0.0010	10/01/21 06:12	
1,2-Dichloroethane	mg/L	<0.00029	0.0010	10/01/21 06:12	
2-Butanone (MEK)	mg/L	<0.0065	0.025	10/01/21 06:12	
Benzene	mg/L	<0.00030	0.0010	10/01/21 06:12	
Carbon tetrachloride	mg/L	<0.00037	0.0010	10/01/21 06:12	
Chlorobenzene	mg/L	<0.00086	0.0010	10/01/21 06:12	
Chloroform	mg/L	<0.0012	0.0050	10/01/21 06:12	
Tetrachloroethene	mg/L	<0.00041	0.0010	10/01/21 06:12	
Trichloroethene	mg/L	<0.00032	0.0010	10/01/21 06:12	
Vinyl chloride	mg/L	<0.00017	0.0010	10/01/21 06:12	
1,2-Dichlorobenzene-d4 (S)	%	99	70-130	10/01/21 06:12	
4-Bromofluorobenzene (S)	%	92	70-130	10/01/21 06:12	
Toluene-d8 (S)	%	99	70-130	10/01/21 06:12	

METHOD BLANK: 2290736 Matrix: Solid
Associated Lab Samples: 40233468004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1-Dichloroethene	mg/L	<0.0058	0.010	10/01/21 16:13	
1,2-Dichloroethane	mg/L	<0.0029	0.010	10/01/21 16:13	
2-Butanone (MEK)	mg/L	<0.065	0.25	10/01/21 16:13	
Benzene	mg/L	<0.0030	0.010	10/01/21 16:13	
Carbon tetrachloride	mg/L	<0.0037	0.010	10/01/21 16:13	
Chlorobenzene	mg/L	<0.0086	0.010	10/01/21 16:13	
Chloroform	mg/L	<0.012	0.050	10/01/21 16:13	
Tetrachloroethene	mg/L	<0.0041	0.010	10/01/21 16:13	
Trichloroethene	mg/L	<0.0032	0.010	10/01/21 16:13	
Vinyl chloride	mg/L	<0.0017	0.010	10/01/21 16:13	
1,2-Dichlorobenzene-d4 (S)	%	102	70-130	10/01/21 16:13	
4-Bromofluorobenzene (S)	%	86	70-130	10/01/21 16:13	
Toluene-d8 (S)	%	94	70-130	10/01/21 16:13	

LABORATORY CONTROL SAMPLE: 2291372

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethene	mg/L	0.05	0.056	113	85-126	
1,2-Dichloroethane	mg/L	0.05	0.042	84	70-130	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: WEXFORD POND
Pace Project No.: 40233468

LABORATORY CONTROL SAMPLE: 2291372

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	mg/L	0.05	0.051	102	70-132	
Carbon tetrachloride	mg/L	0.05	0.049	97	70-130	
Chlorobenzene	mg/L	0.05	0.052	104	70-130	
Chloroform	mg/L	0.05	0.047	94	80-122	
Tetrachloroethene	mg/L	0.05	0.052	105	70-130	
Trichloroethene	mg/L	0.05	0.050	99	70-130	
Vinyl chloride	mg/L	0.05	0.056	111	63-142	
1,2-Dichlorobenzene-d4 (S)	%			98	70-130	
4-Bromofluorobenzene (S)	%			94	70-130	
Toluene-d8 (S)	%			97	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2291405 2291406

Parameter	Units	40233468004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1-Dichloroethene	mg/L	<0.0058	0.5	0.5	0.56	0.56	112	112	76-132	0	20	H1
1,2-Dichloroethane	mg/L	<0.0029	0.5	0.5	0.42	0.42	85	84	70-130	0	20	H1
Benzene	mg/L	<0.0030	0.5	0.5	0.50	0.50	101	100	70-132	0	20	H1
Carbon tetrachloride	mg/L	<0.0037	0.5	0.5	0.50	0.50	100	100	70-132	0	20	H1
Chlorobenzene	mg/L	<0.0086	0.5	0.5	0.52	0.53	105	106	70-130	1	20	H1
Chloroform	mg/L	<0.012	0.5	0.5	0.47	0.47	94	93	80-122	1	20	H1
Tetrachloroethene	mg/L	<0.0041	0.5	0.5	0.53	0.53	107	105	70-130	1	20	H1
Trichloroethene	mg/L	<0.0032	0.5	0.5	0.48	0.48	96	96	70-130	0	20	H1
Vinyl chloride	mg/L	<0.0017	0.5	0.5	0.56	0.55	112	110	61-143	1	20	H1
1,2-Dichlorobenzene-d4 (S)	%						98	99	70-130			
4-Bromofluorobenzene (S)	%						89	89	70-130			
Toluene-d8 (S)	%						96	96	70-130			

MATRIX SPIKE SAMPLE: 2291407

Parameter	Units	40233965001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethene	mg/L	<5.8 ug/L	0.5	0.58	115	76-132	
1,2-Dichloroethane	mg/L	<2.9 ug/L	0.5	0.43	86	70-130	
Benzene	mg/L	<3.0 ug/L	0.5	0.51	102	70-132	
Carbon tetrachloride	mg/L	<3.7 ug/L	0.5	0.51	101	70-132	
Chlorobenzene	mg/L	<8.6 ug/L	0.5	0.52	105	70-130	
Chloroform	mg/L	<11.8 ug/L	0.5	0.47	95	80-122	
Tetrachloroethene	mg/L	<4.1 ug/L	0.5	0.54	108	70-130	
Trichloroethene	mg/L	<3.2 ug/L	0.5	0.51	101	70-130	
Vinyl chloride	mg/L	<1.7 ug/L	0.5	0.56	113	61-143	
1,2-Dichlorobenzene-d4 (S)	%				100	70-130	
4-Bromofluorobenzene (S)	%				90	70-130	
Toluene-d8 (S)	%				96	70-130	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: WEXFORD POND
Pace Project No.: 40233468

MATRIX SPIKE SAMPLE: 2291408

Parameter	Units	40234050001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethene	mg/L	<0.0058	0.5	0.48	96	76-132	
1,2-Dichloroethane	mg/L	<0.0029	0.5	0.37	75	70-130	
Benzene	mg/L	<0.0030	0.5	0.44	88	70-132	
Carbon tetrachloride	mg/L	<0.0037	0.5	0.43	86	70-132	
Chlorobenzene	mg/L	<0.0086	0.5	0.46	93	70-130	
Chloroform	mg/L	<0.012	0.5	0.41	83	80-122	
Tetrachloroethene	mg/L	<0.0041	0.5	0.47	94	70-130	
Trichloroethene	mg/L	<0.0032	0.5	0.42	84	70-130	
Vinyl chloride	mg/L	<0.0017	0.5	0.48	96	61-143	
1,2-Dichlorobenzene-d4 (S)	%				101	70-130	
4-Bromofluorobenzene (S)	%				90	70-130	
Toluene-d8 (S)	%				96	70-130	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: WEXFORD POND
Pace Project No.: 40233468

QC Batch: 396048
QC Batch Method: EPA 3541
Analysis Method: EPA 8082
Analysis Description: 8082 GCS PCB
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40233468001

METHOD BLANK: 2285436 Matrix: Solid
Associated Lab Samples: 40233468001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	<15.2	50.0	09/20/21 14:27	
PCB-1221 (Aroclor 1221)	ug/kg	<15.2	50.0	09/20/21 14:27	
PCB-1232 (Aroclor 1232)	ug/kg	<15.2	50.0	09/20/21 14:27	
PCB-1242 (Aroclor 1242)	ug/kg	<15.2	50.0	09/20/21 14:27	
PCB-1248 (Aroclor 1248)	ug/kg	<15.2	50.0	09/20/21 14:27	
PCB-1254 (Aroclor 1254)	ug/kg	<15.2	50.0	09/20/21 14:27	
PCB-1260 (Aroclor 1260)	ug/kg	<15.2	50.0	09/20/21 14:27	
Decachlorobiphenyl (S)	%	93	47-114	09/20/21 14:27	
Tetrachloro-m-xylene (S)	%	91	67-102	09/20/21 14:27	

LABORATORY CONTROL SAMPLE: 2285437

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg		<15.2			
PCB-1221 (Aroclor 1221)	ug/kg		<15.2			
PCB-1232 (Aroclor 1232)	ug/kg		<15.2			
PCB-1242 (Aroclor 1242)	ug/kg		<15.2			
PCB-1248 (Aroclor 1248)	ug/kg		<15.2			
PCB-1254 (Aroclor 1254)	ug/kg		<15.2			
PCB-1260 (Aroclor 1260)	ug/kg	500	442	88	69-115	
Decachlorobiphenyl (S)	%			94	47-114	
Tetrachloro-m-xylene (S)	%			91	67-102	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2285438 2285439

Parameter	Units	40233480001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
PCB-1016 (Aroclor 1016)	ug/kg	<0.019 mg/kg			<18.8	<18.9					20	
PCB-1221 (Aroclor 1221)	ug/kg	<0.019 mg/kg			<18.8	<18.9					20	
PCB-1232 (Aroclor 1232)	ug/kg	<0.019 mg/kg			<18.8	<18.9					20	
PCB-1242 (Aroclor 1242)	ug/kg	<0.019 mg/kg			<18.8	<18.9					20	
PCB-1248 (Aroclor 1248)	ug/kg	<0.019 mg/kg			<18.8	<18.9					20	
PCB-1254 (Aroclor 1254)	ug/kg	<0.019 mg/kg			<18.8	<18.9					20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: WEXFORD POND
Pace Project No.: 40233468

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2285438 2285439

Parameter	Units	40233480001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
PCB-1260 (Aroclor 1260)	ug/kg	<0.019 mg/kg	618	620	521	520	84	84	45-120	0	20	
Decachlorobiphenyl (S)	%						92	90	47-114			
Tetrachloro-m-xylene (S)	%						84	86	67-102			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: WEXFORD POND
Pace Project No.: 40233468

QC Batch: 396050
QC Batch Method: EPA 3541
Analysis Method: EPA 8082
Analysis Description: 8082 GCS PCB
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40233468002, 40233468003

METHOD BLANK: 2285441 Matrix: Solid
Associated Lab Samples: 40233468002, 40233468003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	<15.2	50.0	09/20/21 13:37	
PCB-1221 (Aroclor 1221)	ug/kg	<15.2	50.0	09/20/21 13:37	
PCB-1232 (Aroclor 1232)	ug/kg	<15.2	50.0	09/20/21 13:37	
PCB-1242 (Aroclor 1242)	ug/kg	<15.2	50.0	09/20/21 13:37	
PCB-1248 (Aroclor 1248)	ug/kg	<15.2	50.0	09/20/21 13:37	
PCB-1254 (Aroclor 1254)	ug/kg	<15.2	50.0	09/20/21 13:37	
PCB-1260 (Aroclor 1260)	ug/kg	<15.2	50.0	09/20/21 13:37	
Decachlorobiphenyl (S)	%	99	47-114	09/20/21 13:37	
Tetrachloro-m-xylene (S)	%	74	67-102	09/20/21 13:37	

LABORATORY CONTROL SAMPLE: 2285442

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg		<15.2			
PCB-1221 (Aroclor 1221)	ug/kg		<15.2			
PCB-1232 (Aroclor 1232)	ug/kg		<15.2			
PCB-1242 (Aroclor 1242)	ug/kg		<15.2			
PCB-1248 (Aroclor 1248)	ug/kg		<15.2			
PCB-1254 (Aroclor 1254)	ug/kg		<15.2			
PCB-1260 (Aroclor 1260)	ug/kg	500	424	85	69-115	
Decachlorobiphenyl (S)	%			100	47-114	
Tetrachloro-m-xylene (S)	%			76	67-102	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2285443 2285444

Parameter	Units	40233437001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
PCB-1016 (Aroclor 1016)	ug/kg	<16.7			<16.7	<16.7					20	
PCB-1221 (Aroclor 1221)	ug/kg	<16.7			<16.7	<16.7					20	
PCB-1232 (Aroclor 1232)	ug/kg	<16.7			<16.7	<16.7					20	
PCB-1242 (Aroclor 1242)	ug/kg	<16.7			<16.7	<16.7					20	
PCB-1248 (Aroclor 1248)	ug/kg	<16.7			<16.7	<16.7					20	
PCB-1254 (Aroclor 1254)	ug/kg	44.2J			<16.7	<16.7					20	
PCB-1260 (Aroclor 1260)	ug/kg	154	548	551	747	605	108	82	45-120	21	20	R1
Decachlorobiphenyl (S)	%						76	80	47-114			
Tetrachloro-m-xylene (S)	%						64	76	67-102			S0

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: WEXFORD POND
Pace Project No.: 40233468

QC Batch: 396459
QC Batch Method: EPA 3546
Analysis Method: EPA 8270E by SIM
Analysis Description: 8270E/3546 MSSV PAH by SIM
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40233468001, 40233468002

METHOD BLANK: 2287625 Matrix: Solid
Associated Lab Samples: 40233468001, 40233468002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1-Methylnaphthalene	ug/kg	<2.4	16.7	09/23/21 10:30	
2-Methylnaphthalene	ug/kg	<2.4	16.7	09/23/21 10:30	
Acenaphthene	ug/kg	<2.2	16.7	09/23/21 10:30	
Acenaphthylene	ug/kg	<2.1	16.7	09/23/21 10:30	
Anthracene	ug/kg	<2.1	16.7	09/23/21 10:30	
Benzo(a)anthracene	ug/kg	<2.2	16.7	09/23/21 10:30	
Benzo(a)pyrene	ug/kg	<1.9	16.7	09/23/21 10:30	
Benzo(b)fluoranthene	ug/kg	<2.3	16.7	09/23/21 10:30	
Benzo(g,h,i)perylene	ug/kg	<2.9	16.7	09/23/21 10:30	
Benzo(k)fluoranthene	ug/kg	<2.1	16.7	09/23/21 10:30	
Chrysene	ug/kg	<3.1	16.7	09/23/21 10:30	
Dibenz(a,h)anthracene	ug/kg	<2.3	16.7	09/23/21 10:30	
Fluoranthene	ug/kg	<2.0	16.7	09/23/21 10:30	
Fluorene	ug/kg	<2.0	16.7	09/23/21 10:30	
Indeno(1,2,3-cd)pyrene	ug/kg	<3.5	16.7	09/23/21 10:30	
Naphthalene	ug/kg	<1.6	16.7	09/23/21 10:30	
Phenanthrene	ug/kg	<1.9	16.7	09/23/21 10:30	
Pyrene	ug/kg	<2.5	16.7	09/23/21 10:30	
2-Fluorobiphenyl (S)	%	93	36-86	09/23/21 10:30	S3
Terphenyl-d14 (S)	%	129	41-97	09/23/21 10:30	S3

LABORATORY CONTROL SAMPLE: 2287626

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1-Methylnaphthalene	ug/kg	333	256	77	53-100	
2-Methylnaphthalene	ug/kg	333	255	77	51-97	
Acenaphthene	ug/kg	333	241	72	62-120	
Acenaphthylene	ug/kg	333	243	73	61-120	
Anthracene	ug/kg	333	298	90	62-111	
Benzo(a)anthracene	ug/kg	333	261	78	61-120	
Benzo(a)pyrene	ug/kg	333	305	92	65-120	
Benzo(b)fluoranthene	ug/kg	333	319	96	64-108	
Benzo(g,h,i)perylene	ug/kg	333	320	96	71-120	
Benzo(k)fluoranthene	ug/kg	333	298	89	76-120	
Chrysene	ug/kg	333	273	82	74-120	
Dibenz(a,h)anthracene	ug/kg	333	296	89	71-120	
Fluoranthene	ug/kg	333	306	92	67-112	
Fluorene	ug/kg	333	263	79	65-120	
Indeno(1,2,3-cd)pyrene	ug/kg	333	314	94	74-120	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: WEXFORD POND
Pace Project No.: 40233468

LABORATORY CONTROL SAMPLE: 2287626

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Naphthalene	ug/kg	333	233	70	53-120	
Phenanthrene	ug/kg	333	266	80	67-120	
Pyrene	ug/kg	333	277	83	60-103	
2-Fluorobiphenyl (S)	%			98	36-86	S0
Terphenyl-d14 (S)	%			112	41-97	S0

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2287627 2287628

Parameter	Units	40233527005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1-Methylnaphthalene	ug/kg	<3.0	417	416	257	264	61	63	41-100	3	29	
2-Methylnaphthalene	ug/kg	<3.1	417	416	267	277	64	66	42-97	4	21	
Acenaphthene	ug/kg	<2.7	417	416	272	272	65	65	43-120	0	27	
Acenaphthylene	ug/kg	<2.6	417	416	274	271	66	65	51-120	1	26	
Anthracene	ug/kg	<2.6	417	416	298	288	71	69	46-111	3	29	
Benzo(a)anthracene	ug/kg	3.8J	417	416	313	310	74	74	48-120	1	23	
Benzo(a)pyrene	ug/kg	2.6J	417	416	332	311	79	74	46-108	6	30	
Benzo(b)fluoranthene	ug/kg	5.7J	417	416	355	352	84	83	45-108	1	30	
Benzo(g,h,i)perylene	ug/kg	3.8J	417	416	324	320	77	76	39-120	1	37	
Benzo(k)fluoranthene	ug/kg	<2.7	417	416	301	306	72	73	47-120	2	31	
Chrysene	ug/kg	5.6J	417	416	266	269	62	63	54-120	1	21	
Dibenz(a,h)anthracene	ug/kg	<2.9	417	416	324	327	77	78	46-120	1	34	
Fluoranthene	ug/kg	7.8J	417	416	349	348	82	82	53-112	0	27	
Fluorene	ug/kg	<2.5	417	416	296	295	71	71	48-120	0	29	
Indeno(1,2,3-cd)pyrene	ug/kg	<4.3	417	416	347	351	83	84	40-120	1	34	
Naphthalene	ug/kg	<2.0	417	416	259	274	62	65	47-120	6	25	
Phenanthrene	ug/kg	4.4J	417	416	303	296	72	70	49-120	3	28	
Pyrene	ug/kg	6.3J	417	416	286	292	67	69	43-103	2	31	
2-Fluorobiphenyl (S)	%						76	82	36-86			
Terphenyl-d14 (S)	%						80	83	41-97			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: WEXFORD POND
Pace Project No.: 40233468

QC Batch: 396987
QC Batch Method: EPA 3546
Analysis Method: EPA 8270E by SIM
Analysis Description: 8270E/3546 MSSV PAH by SIM
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40233468003

METHOD BLANK: 2290502 Matrix: Solid
Associated Lab Samples: 40233468003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1-Methylnaphthalene	ug/kg	<2.4	16.7	09/29/21 11:14	
2-Methylnaphthalene	ug/kg	<2.4	16.7	09/29/21 11:14	
Acenaphthene	ug/kg	<2.2	16.7	09/29/21 11:14	
Acenaphthylene	ug/kg	<2.1	16.7	09/29/21 11:14	
Anthracene	ug/kg	<2.1	16.7	09/29/21 11:14	
Benzo(a)anthracene	ug/kg	<2.2	16.7	09/29/21 11:14	
Benzo(a)pyrene	ug/kg	<1.9	16.7	09/29/21 11:14	
Benzo(b)fluoranthene	ug/kg	<2.3	16.7	09/29/21 11:14	
Benzo(g,h,i)perylene	ug/kg	<2.9	16.7	09/29/21 11:14	
Benzo(k)fluoranthene	ug/kg	<2.1	16.7	09/29/21 11:14	
Chrysene	ug/kg	<3.2	16.7	09/29/21 11:14	
Dibenz(a,h)anthracene	ug/kg	<2.3	16.7	09/29/21 11:14	
Fluoranthene	ug/kg	<2.0	16.7	09/29/21 11:14	
Fluorene	ug/kg	<2.0	16.7	09/29/21 11:14	
Indeno(1,2,3-cd)pyrene	ug/kg	<3.5	16.7	09/29/21 11:14	
Naphthalene	ug/kg	<1.6	16.7	09/29/21 11:14	
Phenanthrene	ug/kg	<1.9	16.7	09/29/21 11:14	
Pyrene	ug/kg	<2.5	16.7	09/29/21 11:14	
2-Fluorobiphenyl (S)	%	71	36-86	09/29/21 11:14	
Terphenyl-d14 (S)	%	85	41-97	09/29/21 11:14	

LABORATORY CONTROL SAMPLE: 2290503

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1-Methylnaphthalene	ug/kg	333	261	78	53-100	
2-Methylnaphthalene	ug/kg	333	257	77	51-97	
Acenaphthene	ug/kg	333	257	77	62-120	
Acenaphthylene	ug/kg	333	259	78	61-120	
Anthracene	ug/kg	333	330	99	62-111	
Benzo(a)anthracene	ug/kg	333	274	82	61-120	
Benzo(a)pyrene	ug/kg	333	321	96	65-120	
Benzo(b)fluoranthene	ug/kg	333	317	95	64-108	
Benzo(g,h,i)perylene	ug/kg	333	348	104	71-120	
Benzo(k)fluoranthene	ug/kg	333	299	90	76-120	
Chrysene	ug/kg	333	286	86	74-120	
Dibenz(a,h)anthracene	ug/kg	333	319	96	71-120	
Fluoranthene	ug/kg	333	332	100	67-112	
Fluorene	ug/kg	333	279	84	65-120	
Indeno(1,2,3-cd)pyrene	ug/kg	333	345	104	74-120	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: WEXFORD POND
Pace Project No.: 40233468

LABORATORY CONTROL SAMPLE: 2290503

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Naphthalene	ug/kg	333	249	75	53-120	
Phenanthrene	ug/kg	333	285	85	67-120	
Pyrene	ug/kg	333	291	87	60-103	
2-Fluorobiphenyl (S)	%			80	36-86	
Terphenyl-d14 (S)	%			90	41-97	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2290504 2290505

Parameter	Units	40233659018 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1-Methylnaphthalene	ug/kg	<2.6	351	351	201	214	57	61	41-100	6	29	
2-Methylnaphthalene	ug/kg	<2.6	351	351	206	222	58	63	42-97	8	21	
Acenaphthene	ug/kg	3.1J	351	351	203	213	57	60	43-120	5	27	
Acenaphthylene	ug/kg	3.1J	351	351	213	213	60	60	51-120	0	26	
Anthracene	ug/kg	12.1J	351	351	243	240	66	65	46-111	1	29	
Benzo(a)anthracene	ug/kg	44.1	351	351	291	270	71	64	48-120	8	23	
Benzo(a)pyrene	ug/kg	49.9	351	351	318	295	76	70	46-108	7	30	
Benzo(b)fluoranthene	ug/kg	75.7	351	351	371	338	84	75	45-108	10	30	
Benzo(g,h,i)perylene	ug/kg	41.7	351	351	302	284	74	69	39-120	6	37	
Benzo(k)fluoranthene	ug/kg	28.6	351	351	279	268	72	68	47-120	4	31	
Chrysene	ug/kg	53.5	351	351	266	252	61	57	54-120	5	21	
Dibenz(a,h)anthracene	ug/kg	8.7J	351	351	248	241	68	66	46-120	3	34	
Fluoranthene	ug/kg	109	351	351	422	364	89	73	53-112	15	27	
Fluorene	ug/kg	3.7J	351	351	219	227	61	64	48-120	3	29	
Indeno(1,2,3-cd)pyrene	ug/kg	32.5	351	351	299	274	76	69	40-120	9	34	
Naphthalene	ug/kg	3.5J	351	351	206	216	58	61	47-120	5	25	
Phenanthrene	ug/kg	46.8	351	351	262	263	61	62	49-120	0	28	
Pyrene	ug/kg	75.4	351	351	300	288	64	61	43-103	4	31	
2-Fluorobiphenyl (S)	%						62	65	36-86			
Terphenyl-d14 (S)	%						60	65	41-97			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: WEXFORD POND
Pace Project No.: 40233468

QC Batch: 397352
QC Batch Method: EPA 3510
Analysis Method: EPA 8270E
Analysis Description: 8270E TCLP MSSV
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40233468004

METHOD BLANK: 2293264 Matrix: Water
Associated Lab Samples: 40233468004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dichlorobenzene	mg/L	<0.0029	0.010	10/04/21 17:59	
2,4,5-Trichlorophenol	mg/L	<0.0013	0.010	10/04/21 17:59	
2,4,6-Trichlorophenol	mg/L	<0.0016	0.010	10/04/21 17:59	
2,4-Dinitrotoluene	mg/L	<0.0021	0.010	10/04/21 17:59	
2-Methylphenol(o-Cresol)	mg/L	<0.0019	0.010	10/04/21 17:59	
3&4-Methylphenol(m&p Cresol)	mg/L	<0.0012	0.010	10/04/21 17:59	
Hexachloro-1,3-butadiene	mg/L	<0.0033	0.010	10/04/21 17:59	
Hexachlorobenzene	mg/L	<0.0023	0.011	10/04/21 17:59	
Hexachloroethane	mg/L	<0.0028	0.010	10/04/21 17:59	
Nitrobenzene	mg/L	<0.0021	0.010	10/04/21 17:59	
Pentachlorophenol	mg/L	<0.0091	0.030	10/04/21 17:59	
Phenol	mg/L	<0.00064	0.010	10/04/21 17:59	
Pyridine	mg/L	<0.0030	0.010	10/04/21 17:59	
2,4,6-Tribromophenol (S)	%	92	62-172	10/04/21 17:59	
2-Fluorobiphenyl (S)	%	74	54-107	10/04/21 17:59	
Nitrobenzene-d5 (S)	%	85	41-118	10/04/21 17:59	
Phenol-d6 (S)	%	34	12-120	10/04/21 17:59	

METHOD BLANK: 2290268 Matrix: Water
Associated Lab Samples: 40233468004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dichlorobenzene	mg/L	<0.014	0.050	10/05/21 11:31	
2,4,5-Trichlorophenol	mg/L	<0.0064	0.050	10/05/21 11:31	
2,4,6-Trichlorophenol	mg/L	<0.0080	0.050	10/05/21 11:31	
2,4-Dinitrotoluene	mg/L	<0.011	0.050	10/05/21 11:31	
2-Methylphenol(o-Cresol)	mg/L	<0.0093	0.050	10/05/21 11:31	
3&4-Methylphenol(m&p Cresol)	mg/L	<0.0061	0.050	10/05/21 11:31	
Hexachloro-1,3-butadiene	mg/L	<0.017	0.050	10/05/21 11:31	
Hexachlorobenzene	mg/L	<0.011	0.055	10/05/21 11:31	
Hexachloroethane	mg/L	<0.014	0.050	10/05/21 11:31	
Nitrobenzene	mg/L	<0.011	0.050	10/05/21 11:31	
Pentachlorophenol	mg/L	<0.046	0.15	10/05/21 11:31	
Phenol	mg/L	<0.0032	0.050	10/05/21 11:31	
Pyridine	mg/L	<0.015	0.050	10/05/21 11:31	
2,4,6-Tribromophenol (S)	%	96	62-172	10/05/21 11:31	
2-Fluorobiphenyl (S)	%	78	54-107	10/05/21 11:31	
Nitrobenzene-d5 (S)	%	95	41-118	10/05/21 11:31	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: WEXFORD POND
Pace Project No.: 40233468

METHOD BLANK: 2290268 Matrix: Water
Associated Lab Samples: 40233468004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Phenol-d6 (S)	%	35	12-120	10/05/21 11:31	

METHOD BLANK: 2290733 Matrix: Water
Associated Lab Samples: 40233468004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dichlorobenzene	mg/L	<0.014	0.050	10/05/21 11:52	
2,4,5-Trichlorophenol	mg/L	<0.0064	0.050	10/05/21 11:52	
2,4,6-Trichlorophenol	mg/L	<0.0080	0.050	10/05/21 11:52	
2,4-Dinitrotoluene	mg/L	<0.011	0.050	10/05/21 11:52	
2-Methylphenol(o-Cresol)	mg/L	<0.0093	0.050	10/05/21 11:52	
3&4-Methylphenol(m&p Cresol)	mg/L	<0.0061	0.050	10/05/21 11:52	
Hexachloro-1,3-butadiene	mg/L	<0.017	0.050	10/05/21 11:52	
Hexachlorobenzene	mg/L	<0.011	0.055	10/05/21 11:52	
Hexachloroethane	mg/L	<0.014	0.050	10/05/21 11:52	
Nitrobenzene	mg/L	<0.011	0.050	10/05/21 11:52	
Pentachlorophenol	mg/L	<0.046	0.15	10/05/21 11:52	
Phenol	mg/L	<0.0032	0.050	10/05/21 11:52	
Pyridine	mg/L	<0.015	0.050	10/05/21 11:52	
2,4,6-Tribromophenol (S)	%	89	62-172	10/05/21 11:52	
2-Fluorobiphenyl (S)	%	79	54-107	10/05/21 11:52	
Nitrobenzene-d5 (S)	%	90	41-118	10/05/21 11:52	
Phenol-d6 (S)	%	36	12-120	10/05/21 11:52	

METHOD BLANK: 2291465 Matrix: Water
Associated Lab Samples: 40233468004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dichlorobenzene	mg/L	<0.014	0.050	10/05/21 12:14	
2,4,5-Trichlorophenol	mg/L	<0.0064	0.050	10/05/21 12:14	
2,4,6-Trichlorophenol	mg/L	<0.0080	0.050	10/05/21 12:14	
2,4-Dinitrotoluene	mg/L	<0.011	0.050	10/05/21 12:14	
2-Methylphenol(o-Cresol)	mg/L	<0.0093	0.050	10/05/21 12:14	
3&4-Methylphenol(m&p Cresol)	mg/L	<0.0061	0.050	10/05/21 12:14	
Hexachloro-1,3-butadiene	mg/L	<0.017	0.050	10/05/21 12:14	
Hexachlorobenzene	mg/L	<0.011	0.055	10/05/21 12:14	
Hexachloroethane	mg/L	<0.014	0.050	10/05/21 12:14	
Nitrobenzene	mg/L	<0.011	0.050	10/05/21 12:14	
Pentachlorophenol	mg/L	<0.046	0.15	10/05/21 12:14	
Phenol	mg/L	<0.0032	0.050	10/05/21 12:14	
Pyridine	mg/L	<0.015	0.050	10/05/21 12:14	
2,4,6-Tribromophenol (S)	%	82	62-172	10/05/21 12:14	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: WEXFORD POND
Pace Project No.: 40233468

METHOD BLANK: 2291465 Matrix: Water
Associated Lab Samples: 40233468004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
2-Fluorobiphenyl (S)	%	74	54-107	10/05/21 12:14	
Nitrobenzene-d5 (S)	%	84	41-118	10/05/21 12:14	
Phenol-d6 (S)	%	35	12-120	10/05/21 12:14	

LABORATORY CONTROL SAMPLE: 2293265

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	mg/L	0.05	0.030	61	46-89	
2,4,5-Trichlorophenol	mg/L	0.05	0.047	95	60-122	
2,4,6-Trichlorophenol	mg/L	0.05	0.045	89	59-119	
2,4-Dinitrotoluene	mg/L	0.05	0.050	100	70-130	
2-Methylphenol(o-Cresol)	mg/L	0.05	0.038	75	47-130	
3&4-Methylphenol(m&p Cresol)	mg/L	0.05	0.033	65	43-130	
Hexachloro-1,3-butadiene	mg/L	0.05	0.028	57	51-103	
Hexachlorobenzene	mg/L	0.05	0.046	92	70-130	
Hexachloroethane	mg/L	0.05	0.026	52	35-102	
Nitrobenzene	mg/L	0.05	0.046	91	70-130	
Pentachlorophenol	mg/L	0.05	0.044	88	53-101	
Phenol	mg/L	0.05	0.020	41	28-120	
Pyridine	mg/L	0.05	0.040	80	10-130	
2,4,6-Tribromophenol (S)	%			91	62-172	
2-Fluorobiphenyl (S)	%			81	54-107	
Nitrobenzene-d5 (S)	%			87	41-118	
Phenol-d6 (S)	%			37	12-120	

MATRIX SPIKE SAMPLE: 2293266

Parameter	Units	40234119001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	mg/L	<14.4 ug/L	0.25	0.14	57	46-99	
2,4,5-Trichlorophenol	mg/L	<6.4 ug/L	0.25	0.24	96	24-139	
2,4,6-Trichlorophenol	mg/L	<8.0 ug/L	0.25	0.25	101	18-131	
2,4-Dinitrotoluene	mg/L	<10.6 ug/L	0.25	0.26	102	22-158	
2-Methylphenol(o-Cresol)	mg/L	<9.3 ug/L	0.25	0.21	85	29-130	
3&4-Methylphenol(m&p Cresol)	mg/L	<6.1 ug/L	0.25	0.19	77	19-130	
Hexachloro-1,3-butadiene	mg/L	<16.5 ug/L	0.25	0.13	51	51-113	
Hexachlorobenzene	mg/L	<11.5 ug/L	0.25	0.24	96	70-130	
Hexachloroethane	mg/L	<14.2 ug/L	0.25	0.11	45	35-102	
Nitrobenzene	mg/L	<10.7 ug/L	0.25	0.25	100	51-130	
Pentachlorophenol	mg/L	<45.5 ug/L	0.25	0.23	92	10-200	
Phenol	mg/L	<3.2 ug/L	0.25	0.11	46	14-120	
Pyridine	mg/L	<15.1 ug/L	0.25	0.19	78	10-130	
2,4,6-Tribromophenol (S)	%				93	62-172	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: WEXFORD POND
Pace Project No.: 40233468

MATRIX SPIKE SAMPLE: 2293266

Parameter	Units	40234119001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
2-Fluorobiphenyl (S)	%				84	54-107	
Nitrobenzene-d5 (S)	%				99	41-118	
Phenol-d6 (S)	%				39	12-120	

MATRIX SPIKE SAMPLE: 2293267

Parameter	Units	40234048001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	mg/L	<0.014	0.25	0.12	49	46-99	
2,4,5-Trichlorophenol	mg/L	<0.0064	0.25	0.24	97	24-139	
2,4,6-Trichlorophenol	mg/L	<0.0080	0.25	0.24	98	18-131	
2,4-Dinitrotoluene	mg/L	<0.011	0.25	0.26	104	22-158	
2-Methylphenol(o-Cresol)	mg/L	<0.0093	0.25	0.19	76	29-130	
3&4-Methylphenol(m&p Cresol)	mg/L	<0.0061	0.25	0.18	70	19-130	
Hexachloro-1,3-butadiene	mg/L	<0.017	0.25	0.12	50	51-113	M1
Hexachlorobenzene	mg/L	<0.011	0.25	0.23	94	70-130	
Hexachloroethane	mg/L	<0.014	0.25	0.092	37	35-102	
Nitrobenzene	mg/L	<0.011	0.25	0.24	95	51-130	
Pentachlorophenol	mg/L	<0.046	0.25	0.23	93	10-200	
Phenol	mg/L	<0.0032	0.25	0.11	43	14-120	
Pyridine	mg/L	<0.015	0.25	0.19	77	10-130	
2,4,6-Tribromophenol (S)	%				98	62-172	
2-Fluorobiphenyl (S)	%				86	54-107	
Nitrobenzene-d5 (S)	%				92	41-118	
Phenol-d6 (S)	%				37	12-120	

MATRIX SPIKE SAMPLE: 2293268

Parameter	Units	40234090001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	mg/L	<0.014	0.25	0.13	52	46-99	
2,4,5-Trichlorophenol	mg/L	<0.0064	0.25	0.20	79	24-139	
2,4,6-Trichlorophenol	mg/L	<0.0080	0.25	0.19	77	18-131	
2,4-Dinitrotoluene	mg/L	<0.011	0.25	0.19	75	22-158	
2-Methylphenol(o-Cresol)	mg/L	<0.0093	0.25	0.17	67	29-130	
3&4-Methylphenol(m&p Cresol)	mg/L	<0.0061	0.25	0.16	62	19-130	
Hexachloro-1,3-butadiene	mg/L	<0.017	0.25	0.096	38	51-113	M1
Hexachlorobenzene	mg/L	<0.011	0.25	0.17	68	70-130	M1
Hexachloroethane	mg/L	<0.014	0.25	0.10	41	35-102	
Nitrobenzene	mg/L	<0.011	0.25	0.21	83	51-130	
Pentachlorophenol	mg/L	<0.046	0.25	0.16	62	10-200	
Phenol	mg/L	<0.0032	0.25	0.091	36	14-120	
Pyridine	mg/L	<0.015	0.25	0.14	56	10-130	
2,4,6-Tribromophenol (S)	%				77	62-172	
2-Fluorobiphenyl (S)	%				61	54-107	
Nitrobenzene-d5 (S)	%				71	41-118	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: WEXFORD POND
Pace Project No.: 40233468

MATRIX SPIKE SAMPLE: 2293268

Parameter	Units	40234090001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Phenol-d6 (S)	%				30	12-120	

MATRIX SPIKE SAMPLE: 2293269

Parameter	Units	40233903012 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	mg/L	<14.4 ug/L	0.25	0.14	57	46-99	
2,4,5-Trichlorophenol	mg/L	<6.4 ug/L	0.25	0.22	88	24-139	
2,4,6-Trichlorophenol	mg/L	<8.0 ug/L	0.25	0.24	95	18-131	
2,4-Dinitrotoluene	mg/L	<10.6 ug/L	0.25	0.27	107	22-158	
2-Methylphenol(o-Cresol)	mg/L	<9.3 ug/L	0.25	0.19	75	29-130	
3&4-Methylphenol(m&p Cresol)	mg/L	<6.1 ug/L	0.25	0.18	71	19-130	
Hexachloro-1,3-butadiene	mg/L	<16.5 ug/L	0.25	0.13	53	51-113	
Hexachlorobenzene	mg/L	<11.5 ug/L	0.25	0.25	98	70-130	
Hexachloroethane	mg/L	<14.2 ug/L	0.25	0.10	41	35-102	
Nitrobenzene	mg/L	<10.7 ug/L	0.25	0.24	95	51-130	
Pentachlorophenol	mg/L	<45.5 ug/L	0.25	0.23	91	10-200	
Phenol	mg/L	<3.2 ug/L	0.25	0.11	42	14-120	
Pyridine	mg/L	<15.1 ug/L	0.25	0.19	77	10-130	
2,4,6-Tribromophenol (S)	%				95	62-172	
2-Fluorobiphenyl (S)	%				86	54-107	
Nitrobenzene-d5 (S)	%				93	41-118	
Phenol-d6 (S)	%				39	12-120	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: WEXFORD POND
Pace Project No.: 40233468

QC Batch: 396266
QC Batch Method: ASTM D2974-87
Analysis Method: ASTM D2974-87
Analysis Description: Dry Weight/Percent Moisture
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40233468001, 40233468002, 40233468003, 40233468004

SAMPLE DUPLICATE: 2286344

Parameter	Units	40233472002 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	4.4	4.1	5	10	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: WEXFORD POND
Pace Project No.: 40233468

QC Batch: 396856
QC Batch Method: EPA 1010
Analysis Method: EPA 1010
Analysis Description: 1010 Flash Point, Closed Cup
Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40233468004

LABORATORY CONTROL SAMPLE: 2290017

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Flashpoint	deg F		81.0			

SAMPLE DUPLICATE: 2290218

Parameter	Units	40233859004 Result	Dup Result	RPD	Max RPD	Qualifiers
Flashpoint	deg F	>200	>200			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: WEXFORD POND
Pace Project No.: 40233468

QC Batch: 396227
QC Batch Method: EPA 160.4
Analysis Method: EPA 160.4
Analysis Description: 160.4 Total Volatile Solids
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40233468001, 40233468002, 40233468003

METHOD BLANK: 2286136 Matrix: Solid
Associated Lab Samples: 40233468001, 40233468002, 40233468003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Volatile Solids	% (w/w)	6.1	0.10	09/21/21 10:29	

LABORATORY CONTROL SAMPLE: 2286137

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Volatile Solids	% (w/w)	395	387	98	80-120	

SAMPLE DUPLICATE: 2286138

Parameter	Units	40233292001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Volatile Solids	% (w/w)	59.8	59.5	0	10	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: WEXFORD POND
Pace Project No.: 40233468

QC Batch: 1751361
QC Batch Method: 4AAP
Analysis Method: EPA 9066
Analysis Description: Wet Chemistry 9066
Laboratory: Pace National - Mt. Juliet

Associated Lab Samples: 40233468004

METHOD BLANK: R3713088-1 Matrix: Solid
Associated Lab Samples: 40233468004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Phenolics, Total Recoverable	mg/kg	<0.220	0.733	10/06/21 12:32	

LABORATORY CONTROL SAMPLE: R3713088-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Phenolics, Total Recoverable	mg/kg	8.33	8.40	101	72.1-129	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R3713088-4 R3713088-5

Parameter	Units	L1411554-02 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Phenolics, Total Recoverable	mg/kg	ND	16.7	16.7	15.2	14.7	90.7	88.2	15.4-151	2.78	20	

SAMPLE DUPLICATE: R3713088-3

Parameter	Units	L1411554-02 Result	Dup Result	RPD	Max RPD	Qualifiers
Phenolics, Total Recoverable	mg/kg	ND	<0.220	0.00	20	

SAMPLE DUPLICATE: R3713088-6

Parameter	Units	L1411554-02 Result	Dup Result	RPD	Max RPD	Qualifiers
Phenolics, Total Recoverable	mg/kg	ND	<0.220	0.00	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: WEXFORD POND
Pace Project No.: 40233468

QC Batch: 1749799
QC Batch Method: 9071B
Analysis Method: EPA 9071B
Analysis Description: Wet Chemistry 9071B
Laboratory: Pace National - Mt. Juliet

Associated Lab Samples: 40233468004

METHOD BLANK: R3712311-1 Matrix: Solid
Associated Lab Samples: 40233468004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Oil and Grease	mg/kg	<33.0	110	10/05/21 02:42	

LABORATORY CONTROL SAMPLE & LCSD: R3712311-2 R3712311-3

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Oil and Grease	mg/kg	4000	3750	3780	93.8	94.5	80.0-120	0.797	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R3712311-5 R3712311-6

Parameter	Units	L1412037-11 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Oil and Grease	mg/kg	79.3	4000	4000	3510	3510	85.8	85.9	80.0-120	0.084	20	

SAMPLE DUPLICATE: R3712311-4

Parameter	Units	L1412037-11 Result	Dup Result	RPD	Max RPD	Qualifiers
Oil and Grease	mg/kg	79.3	109J	32.0	20	D8,J

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: WEXFORD POND
Pace Project No.: 40233468

QC Batch: 396837
QC Batch Method: EPA 9040
Analysis Method: EPA 9040
Analysis Description: 9040 pH
Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40233468004

SAMPLE DUPLICATE: 2289963

Parameter	Units	40233248001 Result	Dup Result	RPD	Max RPD	Qualifiers
pH at 25 Degrees C	Std. Units	6.5	6.5	0	20	H6

SAMPLE DUPLICATE: 2289964

Parameter	Units	40233887001 Result	Dup Result	RPD	Max RPD	Qualifiers
pH at 25 Degrees C	Std. Units	7.6	7.6	1	20	H6

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: WEXFORD POND
Pace Project No.: 40233468

QC Batch: 650515
QC Batch Method: EPA 9076
Analysis Method: EPA 9076
Analysis Description: 9076 Total Chlorine
Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 40233468004

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3411964 3411965

Parameter	Units	92564369001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chlorine, Total	%	ND	0.05	0.05	0.030	0.025	59	49	80-120	18	20	M0,N2

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: WEXFORD POND
Pace Project No.: 40233468

QC Batch: 397293
QC Batch Method: EPA 9095
Analysis Method: EPA 9095
Analysis Description: 9095 PAINT FILTER LIQUID TEST
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40233468004

METHOD BLANK: 2292660 Matrix: Solid
Associated Lab Samples: 40233468004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Free Liquids	no units	Fail		10/01/21 14:29	

LABORATORY CONTROL SAMPLE: 2292661

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Free Liquids	no units		Pass			

SAMPLE DUPLICATE: 2292662

Parameter	Units	40233859001 Result	Dup Result	RPD	Max RPD	Qualifiers
Free Liquids	no units	Pass	Pass			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: WEXFORD POND
Pace Project No.: 40233468

QC Batch: 722581
QC Batch Method: SW-846 7.3.3.2
Analysis Method: EPA 9012B
Analysis Description: EPA 9012A Reactivity Cyanide Solid
Laboratory: Pace Analytical Gulf Coast
Associated Lab Samples: 40233468004

METHOD BLANK: 2247975 Matrix: Solid
Associated Lab Samples: 40233468004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide, Reactive	mg/kg	<250	250	10/06/21 08:41	

LABORATORY CONTROL SAMPLE: 2247976

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide, Reactive	mg/kg	250	<250	11	1-25	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: WEXFORD POND
Pace Project No.: 40233468

QC Batch: 722584
QC Batch Method: SW-846 7.3.4.2
Analysis Method: EPA 9034
Analysis Description: EPA 9034 Reactivity Sulfide Solid
Laboratory: Pace Analytical Gulf Coast
Associated Lab Samples: 40233468004

METHOD BLANK: 2247980 Matrix: Solid
Associated Lab Samples: 40233468004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfide, Reactive	mg/kg	<250	250	10/07/21 17:13	

LABORATORY CONTROL SAMPLE: 2247981

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide, Reactive	mg/kg	1000	1090	109	47-135	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: WEXFORD POND
Pace Project No.: 40233468

QC Batch: 396331
QC Batch Method: EPA 9060 Modified
Analysis Method: EPA 9060 Modified
Analysis Description: 9060 TOC Average
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40233468001, 40233468002, 40233468003

METHOD BLANK: 2286865 Matrix: Solid
Associated Lab Samples: 40233468001, 40233468002, 40233468003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mean Total Organic Carbon	mg/kg	<179	600	09/23/21 03:34	

LABORATORY CONTROL SAMPLE: 2286866

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mean Total Organic Carbon	mg/kg	120000	120000	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2286867 2286868

Parameter	Units	10577606062 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mean Total Organic Carbon	mg/kg	27900	41500	41900	73300	65400	109	89	50-150	11	30	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2286869 2286870

Parameter	Units	10577606063 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mean Total Organic Carbon	mg/kg	34400	65900	64400	92600	85100	88	79	50-150	8	30	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALIFIERS

Project: WEXFORD POND
Pace Project No.: 40233468

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above LOD.

J - Estimated concentration at or above the LOD and below the LOQ.

LOD - Limit of Detection adjusted for dilution factor, percent moisture, initial weight and final volume.

LOQ - Limit of Quantitation adjusted for dilution factor, percent moisture, initial weight and final volume.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected at or above the adjusted LOD.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

1q	Analyte was measured in the associated method blank at a concentration of -0.014 mg/kg.
2q	Due to the sample matrix, DI water was added to this sample on a one to one basis and the sample was stirred before analysis.
3q	Use of method EPA 1010A for flash point analysis on solid samples is for informational purposes only. It is the user's responsibility to verify the acceptance of this data for intended use.
D8	The sample and duplicate results for this parameter are less than 5 times the reporting limit, the RPD may not be statistically valid.
H1	Analysis conducted outside the recognized method holding time.
H6	Analysis initiated outside of the 15 minute EPA required holding time.
J	Analyte detected below the reporting limit, therefore result is an estimate. This qualifier is also used for all TICs.
M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
N2	The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.
P6	Matrix spike recovery was outside laboratory control limits due to a parent sample concentration notably higher than the spike level.
R1	RPD value was outside control limits.
S0	Surrogate recovery outside laboratory control limits.
S3	Surrogate recovery exceeded laboratory control limits. Analyte presence below reporting limits in associated sample.

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WEXFORD POND
Pace Project No.: 40233468

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40233468001	**SC-1**	EPA 3541	396048	EPA 8082	396083
40233468002	**SC-2**	EPA 3541	396050	EPA 8082	396085
40233468003	**SC-3**	EPA 3541	396050	EPA 8082	396085
40233468001	**SC-1**	EPA 3050B	396199	EPA 6010D	396297
40233468002	**SC-2**	EPA 3050B	396199	EPA 6010D	396297
40233468003	**SC-3**	EPA 3050B	396199	EPA 6010D	396297
40233468004	**LF-COMPOSITE**	EPA 3010A	397020	EPA 6010D	397083
40233468004	**LF-COMPOSITE**	EPA 7470	397013	EPA 7470	397044
40233468001	**SC-1**	EPA 7471	396068	EPA 7471	396113
40233468002	**SC-2**	EPA 7471	396068	EPA 7471	396113
40233468003	**SC-3**	EPA 7471	396068	EPA 7471	396113
40233468001	**SC-1**	EPA 3546	396459	EPA 8270E by SIM	396499
40233468002	**SC-2**	EPA 3546	396459	EPA 8270E by SIM	396499
40233468003	**SC-3**	EPA 3546	396987	EPA 8270E by SIM	397030
40233468004	**LF-COMPOSITE**	EPA 3510	397352	EPA 8270E	397474
40233468004	**LF-COMPOSITE**	EPA 8260	397138		
40233468001	**SC-1**	ASTM D2974-87	396266		
40233468002	**SC-2**	ASTM D2974-87	396266		
40233468003	**SC-3**	ASTM D2974-87	396266		
40233468004	**LF-COMPOSITE**	ASTM D2974-87	396266		
40233468004	**LF-COMPOSITE**	EPA 1010	396856		
40233468001	**SC-1**	EPA 160.4	396227		
40233468002	**SC-2**	EPA 160.4	396227		
40233468003	**SC-3**	EPA 160.4	396227		
40233468004	**LF-COMPOSITE**	4AAP	1751361	EPA 9066	1751361
40233468004	**LF-COMPOSITE**	9071B	1749799	EPA 9071B	1749799
40233468004	**LF-COMPOSITE**	EPA 9040	396837		
40233468004	**LF-COMPOSITE**	EPA 9076	650515		
40233468004	**LF-COMPOSITE**	EPA 9095	397293		
40233468001	**SC-1**	EPA 9060 Modified	396331		
40233468001	**SC-1**	EPA 9060 Modified	396332		
40233468002	**SC-2**	EPA 9060 Modified	396331		
40233468002	**SC-2**	EPA 9060 Modified	396332		
40233468003	**SC-3**	EPA 9060 Modified	396331		
40233468003	**SC-3**	EPA 9060 Modified	396332		
40233468004	**LF-COMPOSITE**	SW-846 7.3.3.2	722581	EPA 9012B	722672

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WEXFORD POND
Pace Project No.: 40233468

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40233468004	**LF-COMPOSITE**	SW-846 7.3.4.2	722584	EPA 9034	722909

UPPER MIDWEST REGION
MN: 612-607-1700 WI: 920-469-2436

Pace Analytical®
www.pacelabs.com

CHAIN OF CUSTODY

4023468

(Please Print Clearly)	
Company Name:	City of Madison
Branch/Location:	
Project Contact:	Brynn Bemis
Phone:	608.695.1385
Project Number:	
Project Name:	Wexford Pond
Project State:	WI
Sampled By (Print):	Brynn Bemis
Sampled By (Sign):	
PO #:	Regulatory Program:

*Preservation Codes
A=None B=HCL C=H2SO4 D=HNO3 E=DI Water F=Methanol G=NaOH
H=Sodium Bisulfate Solution I=Sodium Thiosulfate J=Other

Quote #:	
Mail To Contact:	
Mail To Company:	
Mail To Address:	bbemis@cityofmadison.com
Invoice To Contact:	
Invoice To Company:	
Invoice To Address:	
Invoice To Phone:	

Data Package Options (billable)
☐ EPA Level III
☐ EPA Level IV

MS/MSD
☐ On your sample (billable)
☐ NOT needed on your sample

Matrix Codes
A = Air, W = Water, B = Biota, DW = Drinking Water, C = Charcoal, GW = Ground Water, O = Oil, SW = Surface Water, S = Soil, WW = Waste Water, SI = Sludge, WP = Wipe

PACE LAB #	CLIENT FIELD ID	COLLECTION DATE	COLLECTION TIME	MATRIX	FILTERED? (YES/NO) Y/N	PRESERVATION (CODE)* Pick Letter	Analyses Requested: Metals-see email	PAHs	PCBs	TOC	Volatile Solids	Protocol 3
001	SC-1	9/15/21	10:00	S		A	x	x	x	x	x	
002	SC-2	"	10:30	S		A	1	1	1	1	1	
003	SC-3	"	11:00	S		A	1	1	1	1	1	
004	LF-composite	"	"	S		A						X

CLIENT COMMENTS: Hold until SC1-3 are analyzed! This sample requires lab composite mixing!

LAB COMMENTS (Lab Use Only):

Profile #:

Rush Turnaround Time Requested - Prelims
(Rush TAT subject to approval/surcharge)
Date Needed:

Transmit Prelim Rush Results by (complete what you want):

Email #1:	
Email #2:	
Telephone:	
Fax:	

Samples on HOLD are subject to special pricing and release of liability

Relinquished By:	Date/Time:	Received By:	Date/Time:
Brynn Bemis	9/16/21 15:14		9/16/21 15:15
CS Logistics	9/17/21 0750		9/17/21 0750

PACE Project No.: 4023468

Receipt Temp = 3 °C

Sample Receipt pH OK / Adjusted

Cooler Custody Seal: Present / Not Present; Intact / Not Intact

Version 6.0 06/14/06

C019a(27Jun2006)

ORIGINAL

Sample Preservation Receipt Form

Pace Analytical Services, LLC
1241 Bellevue Street, Suite 9
Green Bay, WI 54302

Client Name: City of Madison Project # 40233468

All containers needing preservation have been checked and noted below: ☐Yes ☐No ☒N/A

Initial when completed: Date/ Time:

Lab Lot# of pH paper: Lab Std #ID of preservation (if pH adjusted):

	Glass								Plastic					Vials						Jars				General							
Pace Lab #	AG1U	BG1U	AG1H	AG4S	AG4U	AG5U	AG2S	BG3U	BP1U	BP3U	BP3B	BP3N	BP3S	VG9A	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	JG9U	WGFU	WPFU	SP5T	ZPLC	GN	VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
001																				2			1										2.5 / 5 / 10
002																				2			1										2.5 / 5 / 10
003																				2			1										2.5 / 5 / 10
004																				3			3										2.5 / 5 / 10
005																																	2.5 / 5 / 10
006																																	2.5 / 5 / 10
007																																	2.5 / 5 / 10
008																																	2.5 / 5 / 10
009																																	2.5 / 5 / 10
010																																	2.5 / 5 / 10
011																																	2.5 / 5 / 10
012																																	2.5 / 5 / 10
013																																	2.5 / 5 / 10
014																																	2.5 / 5 / 10
015																																	2.5 / 5 / 10
016																																	2.5 / 5 / 10
017																																	2.5 / 5 / 10
018																																	2.5 / 5 / 10
019																																	2.5 / 5 / 10
020																																	2.5 / 5 / 10

11/17/21

Exceptions to preservation check: VOA, Coliform, TOC, TOX, TOH, O&G, WI DRO, Phenolics, Other:_____ Headspace in VOA Vials (>6mm) : ☐Yes ☐No ☒N/A ***If yes look in headspace column**

AG1U	1 liter amber glass
BG1U	1 liter clear glass
AG1H	1 liter amber glass HCL
AG4S	125 mL amber glass H2SO4
AG4U	120 mL amber glass unpres
AG5U	100 mL amber glass unpres
AG2S	500 mL amber glass H2SO4
BG3U	250 mL clear glass unpres

BP1U	1 liter plastic unpres
BP3U	250 mL plastic unpres
BP3B	250 mL plastic NaOH
BP3N	250 mL plastic HNO3
BP3S	250 mL plastic H2SO4

VG9A	40 mL clear ascorbic
DG9T	40 mL amber Na Thio
VG9U	40 mL clear vial unpres
VG9H	40 mL clear vial HCL
VG9M	40 mL clear vial MeOH
VG9D	40 mL clear vial DI

JGFU	4 oz amber jar unpres
JG9U	9 oz amber jar unpres
WGFU	4 oz clear jar unpres
WPFU	4 oz plastic jar unpres
SP5T	120 mL plastic Na Thiosulfate
ZPLC	ziploc bag
GN	

Pace Analytical® 1241 Bellevue Street, Green Bay, WI 54302	Document Name: Sample Condition Upon Receipt (SCUR)	Document Revised: 26Mar2020
	Document No.: ENV-FRM-GBAY-0014-Rev.00	Author: Pace Green Bay Quality Office

Sample Condition Upon Receipt Form (SCUR)

Project #:

WO# : 40233468

40233468

Client Name: City of Madison

Courier: ☐ CS Logistics ☐ Fed Ex ☐ Speedee ☐ UPS ☐ Waltco
☐ Client ☐ Pace Other: _____

Tracking #: _____

Custody Seal on Cooler/Box Present: ☐ yes ☐ no Seals intact: ☐ yes ☐ no

Custody Seal on Samples Present: ☐ yes ☐ no Seals intact: ☐ yes ☐ no

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other _____

Thermometer Used SR - 110 **Type of Ice:** (Wet) Blue Dry None ☐ Samples on ice, cooling process has begun

Cooler Temperature Uncorr: 3 /Corr: 3

Person examining contents:

Temp Blank Present: ☐ yes ☐ no **Biological Tissue is Frozen:** ☐ yes ☐ no

Date: 9/17/21 /Initials: [illegible]

Temp should be above freezing to 6°C.
Biota Samples may be received at ≤ 0°C if shipped on Dry Ice.

Labeled By Initials: MP

Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☐Yes ☑No ☐N/A	2. proj #, invoice, po# 9/17/21
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☑Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No	5.
- VOA Samples frozen upon receipt	☐Yes ☐No	Date/Time:
Short Hold Time Analysis (<72hr):	☐Yes ☑No	6.
Rush Turn Around Time Requested:	☐Yes ☑No	7.
Sufficient Volume: For Analysis: ☐Yes ☐No MS/MSD: ☐Yes ☑No ☐N/A		8.
Correct Containers Used:	☑Yes ☐No	9.
-Pace Containers Used:	☑Yes ☐No ☐N/A	
-Pace IR Containers Used:	☐Yes ☐No ☑N/A	
Containers Intact:	☑Yes ☐No	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☑N/A	11.
Sample Labels match COC:	☑Yes ☐No ☐N/A	12.
-Includes date/time/ID/Analysis Matrix: S		
Trip Blank Present:	☐Yes ☐No ☑N/A	13.
Trip Blank Custody Seals Present	☐Yes ☐No ☑N/A	
Pace Trip Blank Lot # (if purchased): _____		

Client Notification/ Resolution: If checked, see attached form for additional comments ☐

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

PM Review is documented electronically in LIMs. By releasing the project, the PM acknowledges they have reviewed the sample logir

Page 2 of 2

Attachment D: Bathymetric Data

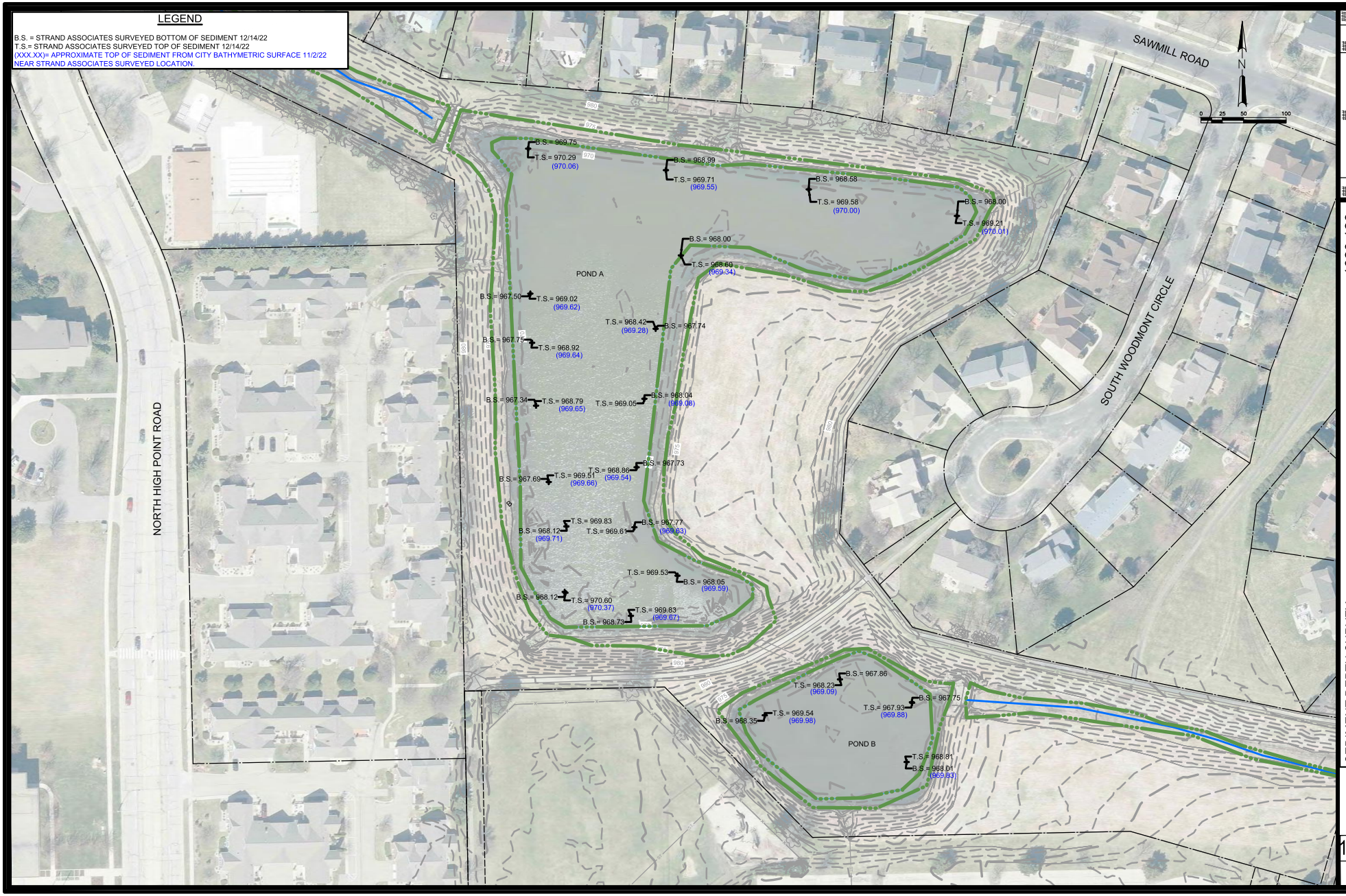
B-1	12750	BATHYMETRY		12750	
		WEXFORD POND DREDGING		MADISON, WI	
		M:\DESIGN\Projects\12750\CAD\Survey\12750_2022_11_2BathyExhibitforBids.dwg	CONTRACT NO:	8876	

MARK	REVISION	DATE	BY
###	###	###	###
###	###	###	###
###	###	###	###
###	###	###	###
Designed By: NA	Date: 6/8/2023 8:14 AM	Scale: 1:60	
#####		B-1	

12750 B-2	BATHYMETRY		12750
	WEXFORD POND DREDGING		MADISON, WI
	M:\DESIGN\Projects\12750\CAD\Survey\12750_2022_11_2BathyExhibitforBids.dwg	CONTRACT NO:	8876

MARK	REVISION	DATE	BY
###	###	###	###
###	###	###	###
###	###	###	###
###	###	###	###

Designed By: NA	Date: 6/8/2023 8:18 AM	Scale: 1:60	
####			B-1



MARK	REVISION	DATE	BY

Designed By: TAW | Date: 6/8/2023 9:32 AM | Scale: 1"=40' | 5

1020.126

1020.126

SEDIMENT DEPTH SURVEY

WEXFORD POND DREDGING AND FOREBAY CONSTRUCTION

CITY OF MADISON

CONTRACT NO: ----

S:\MAD\1000--1099\1020\126\Drawings\CAD\Civil 3d\Sheets\Plan\Pond Sheets 7.22.22.dwg

1020.126

D-2

Attachment E: Temporary Access Easement

TEMPORARY ACCESS EASEMENT

KRISTI CHLEBOWSKI
DANE COUNTY
REGISTER OF DEEDS

DOCUMENT #
5881111
01/06/2023 08:09 AM
Trans Fee:
Exempt #:
Rec. Fee: 30.00
Pages: 7
The above recording information verifies that this document has been electronically recorded and returned to the submitter.

High Point Church, Inc., a Wisconsin non-stock corporation (the "Grantor") being the owner of the property hereinafter described, in consideration of the sum of One and /00 Dollars ($1.00) and other valuable consideration, the receipt whereof is hereby acknowledged, does grant, set over and convey to the **City of Madison**, a Wisconsin municipal corporation (the "City") a temporary access easement (the "Access Easement"), including, but not limited to, the right of ingress and egress; the right to excavate, install, operate, maintain, repair, replace and modify a those improvements necessary for a temporary access drive (the "Access Facilities"); and the right to perform all work incidental thereto, over, across and through a portion of the Grantor's property as hereinafter described.

RETURN TO: City of Madison
Economic Development Division
Office of Real Estate Services
P.O. Box 2983
Madison, WI 53701-2983

Tax Parcel Nos.: 251/0708-143-0099-6
251/0708-143-0096-2

WITNESSETH:

WHEREAS, the Grantor is the owner in fee simple of certain real property located at 7702 Old Sauk Road in the City of Madison, Dane County, Wisconsin (the "Grantor's Property"), as legally described on attached Exhibit A; and

WHEREAS, the City is the owner in fee simple of certain real property located at 1005 N. High Point Road (the "City's Property"), adjacent to and northerly of the Grantor's Property in the City of Madison, Dane County, Wisconsin, as legally described on attached Exhibit A; and

WHEREAS, the City's Engineering Division conducted the Pheasant Branch Watershed Study, which identified that Wexford Pond has accumulated sediment that needs to be dredged to improve its efficiency for storage and nutrient removal; and

WHEREAS, to accomplish the necessary work, the City requires an access route southerly from the City's Property to Old Sauk Road, over the Grantor's Property, for construction purposes including the hauling of material dredged from the Wexford Pond areas, as depicted on attached Exhibit B; and

WHEREAS, the Grantor has agreed to grant this Access Easement upon, over, across and through a portion of the Grantor's Property to provide the City with a temporary access to the City's Property from Old Sauk Road for the dredging and restoration of the Wexford Pond and Greenway in conjunction with the Wexford Pond Dredging project, Engineering Project No. 12750.

NOW, THEREFORE, in consideration of the mutual promises and covenants contained herein and other good and valuable consideration, the adequacy and receipt whereof is hereby acknowledged, the Grantor and the City agree as follows:

1. Grant of Easement. The Grantor hereby grants to the City this Access Easement upon, over, across and through a portion of the Grantor's Property, as is designated on attached Exhibit B (the "Access Easement Area").

2. Use of Access Easement Area.

a. The work and construction of the Access Facilities shall be done and completed in accordance with Contract No. 8876, associated with City Engineering Wexford Pond Dredging Project No. 12750 ("Dredging Project").

a. This Access Easement shall provide limited, temporary ingress and egress from Old Sauk Road to the City's Property over the Grantor's Property including the Grantor's existing driveway and the temporary Access Facilities constructed by the City. This Access Easement is solely for those vehicles and pedestrians associated with the Dredging Project, its employees, contractors and agents, to enable the performance of work related to the Dredging Project within the City's Property.

b. The City agrees for itself and its employees, contractors and agents to use the Access Easement Area in a manner fully complying with all laws and other legal requirements.

c. The City reserves the right to use and occupy the Access Easement Area in a manner consistent with the rights conveyed herein, provided that such use and occupancy shall not unreasonably interfere with or disturb the Grantor's Property.

d. That portion of the Access Easement that is located over the Grantor's existing driveway improvements shall be used by the City as provided herein, in common with the Grantor and the Grantor's agents, employees, tenants, licensees, invitees, successors and assigns (collectively, the "Grantor's Parties" or individually a "Grantor's Party"). The Grantor's Parties shall have the right to use and enjoy the existing driveway improvements located within a portion of the Access Easement Area, provided such use does not unreasonably interfere with the use of the Access Easement Area by the City for the purposes set forth herein.

e. The Access Easement Area over the temporary Access Facilities constructed by the City shall be used exclusively by the City, and its employees, contractors and agents as provided herein for the duration of this Access Easement.

3. Limitations of Easement.

a. Neither the City, nor the Grantor's Parties may erect or permit to be erected any sign, fence, wall, pole, post, or any other facility or structure so as to obstruct or interfere with the use of the Access Easement Area.

b. The City shall not use the Access Easement Area for open storage or permanent parking of vehicles or equipment of any kind.

c. The City shall use the Access Easement Area only as a route of travel from Old Sauk Road to and from the City's Property. The City shall not permit the Access Easement Area to become, or to be construed to be, a route of access by the general public to use the City's Property.

4. Maintenance of Access Easement Area.

a. The City shall maintain the Access Facilities and the Grantor's existing driveway improvements within the Access Easement Area for the term of this Access Easement, as defined herein.

b. The City shall promptly restore and repair any damage to the Grantor's driveway improvements, including the driveway apron, asphalt, sidewalk, curb, and adjacent lawn areas within the Access Easement Area, if damaged as a result of the use of the Access Easement Area by or on behalf of the City after the completion of the Dredging Project, or as soon thereafter as weather reasonably permits, in a manner reasonably satisfactory to the Grantor.

c. The City will install temporary construction fencing along the western side of the Access Easement Area in accordance with City of Madison Standard Specifications.

d. The City will perform street sweeping within the existing driveway in the Access Easement Area in accordance with City of Madison Standard Specifications.

e. Staging construction equipment within this Access Easement shall not be allowed through the term of this Access Easement.

5. Term. This Access Easement shall terminate upon the completion of the construction described in the Dredging Project, or December 31, 2024, whichever occurs first.

6. Indemnification. The Grantor and the City shall be responsible for its own acts, errors or omissions and for the acts, errors or omissions of its employees, officers, officials, agents, boards, committees and commissions, and shall be responsible for any losses, claims, and liabilities that are attributable to such acts, errors, or omissions including providing its own defense, as it pertains to this Access Easement. In situations involving joint liability, each party shall only be responsible for such losses, claims, and liabilities that are attributable to its own acts, errors, or omissions and the acts, errors or omissions of its employees, officers, officials, agents, boards, committees and commissions. It is not the intent of either party to waive, limit or otherwise modify the protections and limitations of liability found in Wis. Stat. 893.80 or any other protections available to the parties by law. This paragraph shall survive the termination or expiration of this Access Easement.

7. Termination. If at some time in the future the Grantor and the City wish to terminate this Access Easement for reasons other than those set forth in Paragraph 5 included herein, they may agree to do so upon written notice in accordance with Paragraph 8 included herein. Upon such termination, the rights of the City under this Access Easement shall terminate.

8. Notices. All formal notices to be given under the terms of this Access Easement shall be signed by the person sending the same, and shall be sent by certified mail, return receipt requested and postage prepaid, to the address of the parties specified below. If electing to use electronic mail, said emails shall be sent to the email addresses provided below with an active read receipt and shall include a statement that the electronic mail constitutes notice under the terms of this Access Easement:

For the Grantor: High Point Church, Inc.
Attn: Brandon Ellis
7702 Old Sauk Road
Madison, WI 53717
bellis@highpointchurch.org

For the City: City of Madison Engineering Division
Attn: Sarah Lerner
City-County Building, Room 115
210 Martin Luther King, Jr. Blvd.
Madison, WI 53703
slerner@cityofmadison.com

Any party hereto may, by giving five (5) days written notice to the other party in the manner herein stated, designate any other address and person(s) in substitution of the address and person(s) shown above to which notices shall be given.

9. Amendment. This Access Easement may not be amended, modified, terminated, or released without the written consent of all the parties hereto, or their respective successors-in-interest.

10. Binding Effect. The rights and easement granted herein shall be deemed to be covenants running with the land and shall inure to the benefit of the City, its successors and assigns, and shall be binding upon the Grantor, its respective successors and assigns.

11. Applicable Law. This Access Easement shall be construed in accordance with the laws of the State of Wisconsin.

12. Severability. If any term or provision of this Access Easement is held to be invalid or unenforceable by a court of competent jurisdiction, then such holding shall not affect any of the remaining terms and provisions of this Access Easement and the same shall continue to be effective to the fullest extent permitted by law.

13. Public Record. This Access Easement will be recorded at the office of the Dane County Register of Deeds.

[signature page follows]

IN WITNESS WHEREOF, the undersigned hereby consent to the terms provided in this Temporary Access Easement, and conveys said easement rights as of this 5th day of January, 2023.

HIGH POINT CHURCH, INC.,
a Wisconsin Non-Stock Corporation

By: _____
(signature)

LUKE HIRSCHY, BOARD CHAIRMAN
(print name and title)

State of Wisconsin)
) ss.
County of Dane)

Personally came before me this 5th day of January, 2023, the above named Luke Hirschy (name), Board Chairman (title) of High Point Church, Inc., a Wisconsin Non-Stock Corporation, known by me to be the person who executed the foregoing instrument and acknowledge that they executed the foregoing instrument as such Board Chairman (title) as the deed of such limited partnership, by its authority.

ROBERT W HAINES
NOTARY
PUBLIC
STATE OF WISCONSIN

_____
Notary Public, State of Wisconsin

Robert W. Haines
(Print or Type Name)
Commission expires: 12/06/2025

Acceptance of this easement by the City is authorized by Resolution Enactment No. RES-22-00778, File ID No. 74308, adopted by the Common Council of the City of Madison on November 22, 2022.

Drafted by the City of Madison Office of Real Estate Services
Real Estate Project. No. 12659

EXHIBIT A
Legal Descriptions

Grantor's Property:

A parcel of land located in the SW 1/4 and SE 1/4 of the SW 1/4 of Section 14, T7N, R8E, City of Madison, Dane County, Wisconsin, to-wit:

Commencing at the South quarter corner of said Section; thence S88°29'30"W, along the southerly line of said SW 1/4 , 420.57 feet to the point of beginning; thence continuing S88°29'30"W, 904.43 feet; thence N01°30'30"W, 33.00 feet; thence N88°29'30" E, 245.00 feet to a point of curve; thence southwesterly on a cure to the right which as a radius of 995.00 feet and a chord which bears S89°49'12"W, 46.13 feet; thence N88°51'06"W, 199.09 feet; thence N01°30'30"W, 906.70 feet; thence N 88°29'30" E, 235.00 feet; thence S44°52'18"E, 247.59 feet; thence N88°29'30"E, 235.00 feet; thence S44°52'18"E, 247.59 feet; thence N88°29'30"E, 372.75 feet; thence S74°30'00"E, 246.92 feet; thence S15°30'00"W, 374.14 feet; thence S01°30'30"E, 340.00 feet to the point of beginning;

Except the southerly 33 feet thereof and also excepting therefrom lands conveyed to the City of Madison for street right-of-way per Document No. 2244482.

City's Property:

Part of all ¼'s of the SW 1/4 of Section 14, T7N, R8.E, City of Madison, Dane County, Wisconsin, to-wit: Commencing at the south quarter corner of said Section 14; thence S88°29'30"W, 420.57 feet; thence N01°30'30"W, 340.00 feet; thence Nl5°30'00"E, 575.86 feet to the most northwesterly corner of Lot 3, Certified Survey #3525, recorded in Volume 14 of Certified Surveys on page 109-112, Dane County Registry, and the point of beginning; thence Sl5°30'00"W, 201.72 feet; thence N74°30'00"W, 246.92 feet; thence S88°29'30"W, 372.75 feet.; thence N44°52'18"W, 247.59 feet, thence S88°29' 30"W, 235.00 feet; thence N01°30' 30"W, 600. 00 feet; thence N64°36'04"W, 328.93 feet; thence N38°11'00"W, 536.35 feet; thence N88°15'11"W, 398.04 feet; thence N01°44'49"E, 100.00 feet; thence S88°15'11"E, 144.75 feet; thence S38°11'0l"E, 164,41 feet; thence N87°36'50"E, 151.62 feet; thence S10°35'26"E, 257.51 feet; thence S45°49' 14 "E, 118. 46 feet; thence S64 °36 '04 "E, 194.31 feet; thence 885 °40' 52 "E, 438.31 feet; thence S79°43' 54 "E, 315.31 feet; thence S73°10'53"E, 15.00 feet; thence S27°24'42"W, 58.27 feet; thence S22°09'43"W, 81.39 feet; thence S60°47' 13"W, 185,00 feet; thence S34°39'46"W, 107.00 feet; thence S03°56'32"W, 132.37 feet; thence S38°04'29"E, 139,93 feet; thence S75°58'36"E. 126,81 feet; thence S78°56'56"E, 341.68 feet.; thence S82°00'00"E, 91.39 feet to the point of beginning.

AND ALSO: Lot 3, Dane County Certified Survey Map No. 3525, recorded in Volume 14 of Certified Surveys, pages 109 – 112, as Document No. 1674698, in the City of Madison, Dane County, Wisconsin.

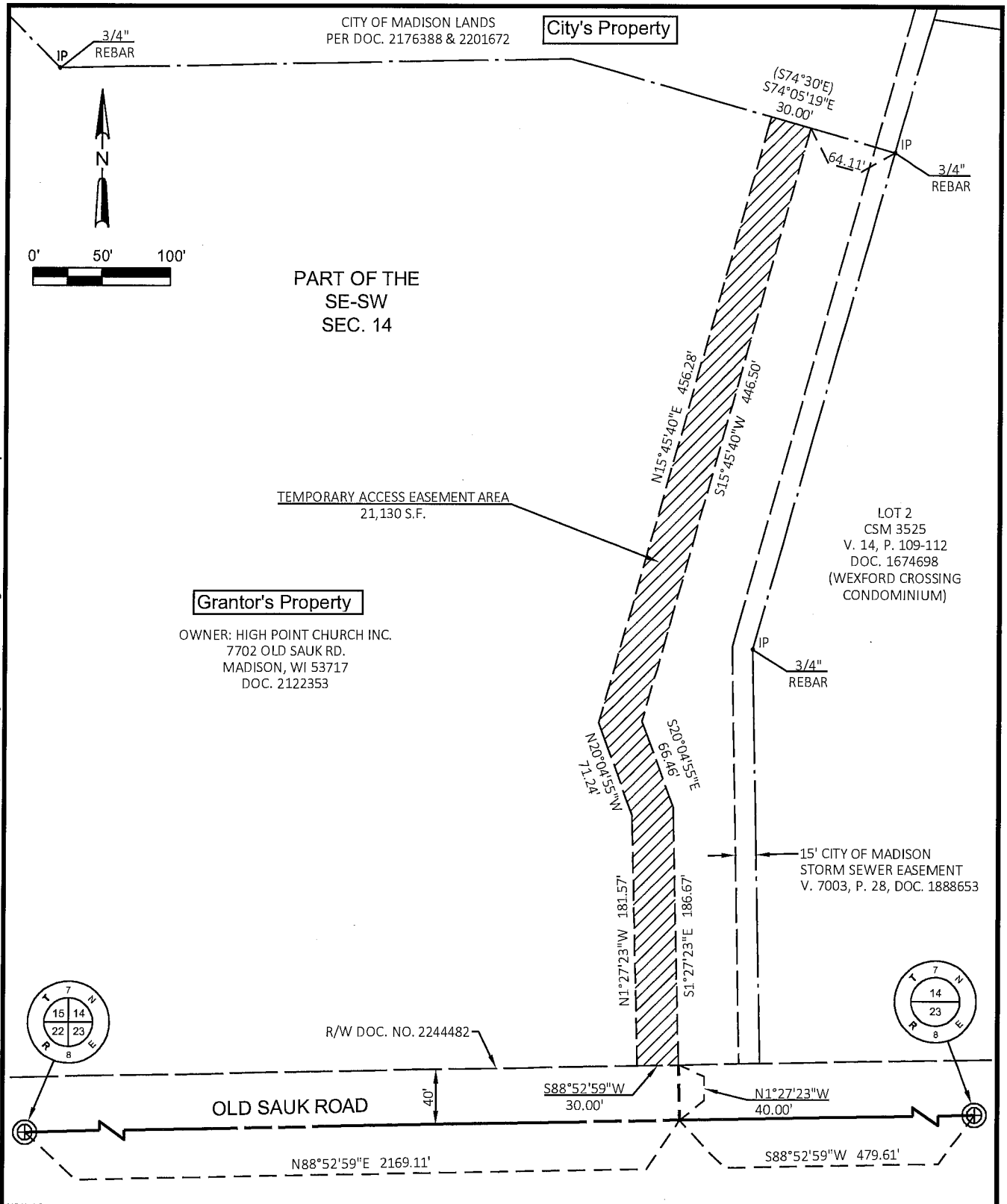


EXHIBIT B
TEMPORARY ACCESS EASEMENT
HIGH POINT CHURCH INC.
CITY OF MADISON
DANE COUNTY, WISCONSIN

REAL ESTATE PROJECT NO:
ENGINEERING PROJECT NO: 12750

STRAND ASSOCIATES®

1

1020.126

File: S:\MAD\1000--1099\1020\126\Drawings\CAD\Civil 3d\RW\Access Easement graphic.dwg Time: Aug 31, 2022 - 1:37pm