AGENDA
NATURAL RESOURCES COMMITTEE
REGULAR MEETING
THURSDAY, MARCH 7, 2024 – 9:00 AM
ADMINISTRATION CENTER - ROOM A-200
121 W. MAIN STREET, PORT WASHINGTON, WI 53074

The public can access the meeting by viewing the live stream at the link which will be opened five minutes before the call to order:

Natural Resources Committee Live Stream

The public can submit comments here: Public Comment Form
Public Comment Policy & Instructions For Submitting Public Comments Online

1. **CALL TO ORDER**
2. **PROPER NOTICE**
3. **PUBLIC COMMENTS, CORRESPONDENCE, COMMUNICATIONS**
4. **APPROVAL OF MINUTES**
   a. February 8, 2024
5. **PUBLIC HEARING**
   1) Request by Mark Hertzfeldt, Design 2 Construct, as Agent for Project Sports LLC, as owner, to petition the Natural Resources Committee for a Zoning Classification change Shoreland-Wetland to Shoreland in the Shoreland District, per Section 7.1300 of the Ozaukee County Shoreland & Floodplain Zoning Ordinance, to rezone those delineated wetland areas to allow filing, grading, and excavating per the DNR approval letter dated September 29, 2023.

      Affecting the following described real estates: **Town of Cedarburg**, T10N-R21E in the NW ¼ and the NE ¼ of the NW ¼, Section 21 T10N-R21E, Lot 1 CSM #3997 Doc.1050182. Tax Key #03-021-05-006.00, Property address: 8611 State Road 60, Cedarburg WI 53012

   2) Request by Robert Bach, as Agent for G3 Development and QTIP Trust A as owners, to petition the Natural Resources Committee for a Zoning Classification change Shoreland-Wetland to Shoreland in the Shoreland District, per Section 7.1300 of the Ozaukee County Shoreland & Floodplain Zoning Ordinance, to reflect the results of a wetland delineation report and survey; and to allow the rezoning of the proposed road crossings through the wetland areas.

      Affecting the following described real estates: **Town of Grafton** –

      a) Proposed P2 Business Condos – Part of the NE ¼ of the NE ¼, Section 31 T10N-R22E, Lot 1 CSM #4120 Doc. 1105888; Tax Key #06-031-01-021.00; 391 Port Washington Road, Grafton WI 53024

      b) Proposed Winding Brook Subdivision – Part of the SE ¼ of the NE ¼, Section 31 T10N-22E, Lot 2 CSM #4120 Doc. 1105888, Tax Key #06-031-04-010.00; and Part of the NW ¼ and NE ¼ and SW ¼ and SE ¼ of the SE ¼ Section 31 T10N-R22E, Tax Key #06-031-13-002.00; 351 Port Washington Road, Grafton WI 53024.

6. **LAND AND WATER MANAGEMENT DEPARTMENT**
   a. Action Items:
      1. Ordinance: Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21
      2. Ordinance: Shoreland & Floodplain Zoning Map Amendment - Town of Grafton, Section 31

   b. Management/Financial/Informational Reports
      a. Land & Water Management Reports
7. **UNIVERSITY EXTENSION OFFICE**
   a. Action Items:
      1. Extension Marketing Specialist

   b. Management/Financial/Informational Reports
      a. UW-Madison Division of Extension Reports
8. **REGISTER OF DEEDS/LAND INFORMATION**
   a. Management/Financial/Informational Reports
      1. Register of Deeds/Land Info Department Report
9. **PLANNING AND PARKS DEPARTMENT**
   a. Action Items:
      1. Stone Wall Farms, Inc., owner, PO Box 893, Cedarburg, Wisconsin 53012, and James Schneider, North Shore Engineering, Inc., applicant, 11433 N. Port Washington Road, Mequon, Wisconsin 53092, are requesting land division approval for a minor land division by Certified Survey Map (CSM) in accord with Section 7.1400 (Land Division Requirements) of the County Ordinance. The Property is located just east of 10607 Bridge Street, Town of Cedarburg, Ozaukee County, Wisconsin, being a division of part of the Northeast ¼ and the Northwest ¼ of the Southwest ¼ of Section 29, Township 10 North, Range 21 East, in the Town of Cedarburg, Ozaukee County, Wisconsin. Parcel Number(s): 030290901600. Total Acreage to be Divided: approximately +/- 4.112 acres

2. Mardel D Habersetzer Family Trust, owner, 4612 Pleasant Valley Rd., Cedarburg, Wisconsin 53012, and Thomas L. Sykora, applicant, 2321 Ridgewood Rd., Grafton, Wisconsin 53024, are requesting land division approval for a minor land division by Certified Survey Map (CSM) in accord with Section 7.1400 (Land Division Requirements) of the County Ordinance. The Property is located at 4408 Pleasant Valley Road, Town of Cedarburg, Ozaukee County, Wisconsin, being a redivision of part of Lot 2 of Certified Survey Map No. 3103, being a part of the Southeast ¼ of the Southeast ¼ of Section 2, Township 10 North, Range 21 East, in the Town of Cedarburg, Ozaukee County, Wisconsin. Parcel Number(s): 030021600800. Total Acreage to be Divided: approximately +/- 6.738 acres.
3. Increase of Revenue Budget Amendment for a Wisconsin Department of Natural Resources Surface Water Planning Grant to Support Water Quality Monitoring Activities on the Little Menomonee River and Creek, Mole Creek and Ulao Creek in Ozaukee County
4. Increase of Revenue Budget Amendment for a Wisconsin Department of Natural Resources Surface Water Management – Surface Water Restoration Grant to Support Stream Restoration Activities in Tendick Nature Park
5. Increase of Revenue Budget Amendment for a Wisconsin Department of Natural Resources Surface Water Management – Management Plan Implementation Grant to Support Wetland Enhancement Activities in Tendick Nature Park
6. Submittal and Acceptance of a National Fish and Wildlife Foundation Sustain Our Great Lakes Grant for Invasive Vegetation Management in the Upper Milwaukee River Project Area
7. Submittal and Acceptance of National Fish and Wildlife Foundation – Sustain Our Great Lakes Grant for Habitat Restoration and Public Access Improvements at Clay Bluffs Cedar Gorge Nature Preserve - Phase II
8. Resolution: Submittal and Acceptance of a Wisconsin Department of Natural Resources Knowles-Nelson Stewardship Local Assistance Grant for Habitat Restoration and Public Access Improvements at Clay Bluffs Cedar Gorge Nature Preserve
9. Resolution: Submittal and Acceptance of a Wisconsin Department of Natural Resources Knowles-Nelson Stewardship Local Assistance Grant for Campground Development and a Bathroom Facility at Hawthorne Hills County Park
10. Submittal and Acceptance of US Fish and Wildlife Service – Joint Venture Grant for Acquiring (or portions of) Parcel ID's: (110500504001, 110500510001, 110250200100, 110251400700) Along County Highway Trunk W and the Milwaukee River in the Village of Saukville for Floodplain and Wetland Restoration and Addition to the Ozaukee County Park System per §§ 59.52(6)(a) AND 27.065(1)(a) Wisconsin Statutes as Part of the County Highway Trunk W Road Reconstruction and Restoration Project
11. Resolution: Submittal and Acceptance of Outdoor Recreation Trail Aids - County Snowmobile Trail Aids Funding Through the Wisconsin Department of Natural Resources
12. Resolution: WE Energies Underground Easement for Electrical Service at Hawthorne Hills County Park

b. Discussion Items:

1. Adaptive Golf Equipment at the Ozaukee County Golf Courses
2. Proposals and Contract for Emergency Fire Suppression Fire Pump Controller Replacement at MeeKwon Golf Course
3. Update on Hawthorne Hills County Park Multipurpose Maintenance Building Construction and Change Orders
4. Update on Planning and Parks Department Capital Projects and Planning and Parks Department Ecological Division Grant Projects

c. Management/Financial/Informational Reports

1. Planning & Parks Department Management and Financial Reports

10. NEXT MEETING DATE

April 4, 2024

11. ADJOURNMENT

A quorum of members of committees or the full County Board of Ozaukee County may be in attendance at this meeting for purposes related to committee or board duties, however, no formal action will be taken by these committees or the board at this meeting.

Persons with disabilities requiring accommodations for attendance at this meeting should contact the County Clerk's Office at 262-284-8110, twenty-four (24) hours in advance of the meeting.

Natural Resources Committee

AGENDA INFORMATION SHEET

AGENDA DATE: **March 7, 2024**
DEPARTMENT: **County Clerk**
DIRECTOR: **Karen Niemuth**
PREPARER: **Lisa Henning**

Agenda Summary February 8, 2024

<https://www.co.ozaukee.wi.us/AgendaCenter/ViewFile/Minutes/_02082024-3366>

NATURAL RESOURCES COMMITTEE

Natural Resources Committee

AGENDA INFORMATION SHEET

AGENDA DATE: **March 7, 2024**
DEPARTMENT: **Land and Water Management**
DIRECTOR: **Katie Vogeler**
PREPARER: **Geoff Schramm**

Agenda Summary Shoreland-Wetland Rezoning Sports Project LLC as a public hearing

ATTACHMENTS:

- Legal Notice (PDF)

NATURAL RESOURCES COMMITTEE

(February 22, 2024 and February 29, 2024)

OZAUKEE COUNTY NATURAL RESOURCES COMMITTEE

PUBLIC HEARING NOTICE

NOTICE IS HEREBY GIVEN that a public hearing will be held at a meeting of the Ozaukee County Natural Resources Committee on March 7, 2024, at 9:00 A.M. in Board Room A-200 of the Ozaukee County Administration Center, 121 W. Main St., Port Washington, to consider the following item(s):

1) Request by Mark Hertzfeldt, Design 2 Construct, as Agent for Project Sports LLC, as owner, to petition the Natural Resources Committee for a Zoning Classification change Shoreland-Wetland to Shoreland in the Shoreland District, per Section 7.1300 of the Ozaukee County Shoreland & Floodplain Zoning Ordinance, to rezone those delineated wetland areas to allow filing, grading, and excavating per the DNR approval letter dated September 29, 2023.

   Affecting the following described real estates: **Town of Cedarburg**, T10N-R21E in the NW ¼ and the NE ¼ of the NW ¼, Section 21 T10N-R21E, Lot 1 CSM #3997 Doc. 1050182.

   Tax Key #03-021-05-006.00, Property address: 8611 State Road 60, Cedarburg WI 53012

2) Request by Robert Bach, as Agent for G3 Development and QTIP Trust A as owners, to petition the Natural Resources Committee for a Zoning Classification change Shoreland-Wetland to Shoreland in the Shoreland District, per Section 7.1300 of the Ozaukee County Shoreland & Floodplain Zoning Ordinance, to reflect the results of a wetland delineation report and survey; and to allow the rezoning of the proposed road crossings through the wetland areas.

   Affecting the following described real estates: **Town of Grafton** –

   a) Proposed P2 Business Condos – Part of the NE ¼ of the NE ¼, Section 31 T10N-R22E, Lot 1 CSM #4120 Doc. 1105888; Tax Key #06-031-01-021.00; 391 Port Washington Road, Grafton WI 53024

   b) Proposed Winding Brook Subdivision – Part of the SE ¼ of the NE ¼, Section 31 T10N-22E, Lot 2 CSM #4120 Doc. 1105888, Tax Key #06-031-04-010.00; and Part of the NW ¼ and NE ¼ and SW ¼ and SE ¼ of the SE ¼ Section 31 T10N-R22E, Tax Key #06-031-13-002.00; 351 Port Washington Road, Grafton WI 53024.

Information regarding this item on file with the Ozaukee County Department of Land and Water Management, Room 223, Ozaukee County Administration Center, 121 W. Main St., Port Washington.

The public and all interested persons are invited to attend this meeting and comment as appropriate. Discussion and action by the Natural Resources Committee will follow the hearing.

Rob Holyoke, Chairman
Natural Resources Committee

Attachment: Legal Notice (Shoreland-Wetland Rezoning Sports Project LLC as a public hearing)

ORDINANCE NO. (ID # 9880)

SHORELAND & FLOODPLAIN ZONING MAP AMENDMENT - TOWN OF CEDARBURG, SECTION 21

The Ozaukee County Board of Supervisors does ordain that the County Shoreland and Floodplain Zoning Map be amended in accordance with Section 7.1300 of the Ozaukee County Code of Ordinances to indicate a Zoning Classification Change from Shoreland-Wetland to Shoreland.

Affecting the following described real estate: **Town of Cedarburg**, T10N, R21E in part of the NW ¼ and the NE ¼ of the NW ¼ of Section 21, Lot 1 CSM #3997 Doc. 1050182.

Tax Key #03-021-05-006.00, Property address: 8611 State Road 60, Cedarburg WI 53012

This Ordinance shall take effect upon enactment and publication.

Dated at Port Washington, Wisconsin, this 3rd day of April 2024.

SUMMARY: Shoreland and Floodplain Zoning Map Amendment, Town of Cedarburg - Section 21.

VOTE REQUIRED: Majority

NATURAL RESOURCES COMMITTEE

NATURAL RESOURCES COMMITTEE

Natural Resources Committee

AGENDA INFORMATION SHEET

AGENDA DATE: **March 7, 2024**
DEPARTMENT: **Land and Water Management**
DIRECTOR: **Katie Vogeler**
PREPARER: **Geoff Schramm**

Agenda Summary Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21

BACKGROUND INFORMATION: 1)Request by Sports Project LLC, to petition the Natural Resources Committee for a Zoning Classification change Shoreland-Wetland to Shoreland in the Shoreland District, per Section 7.1300 of the Ozaukee County Shoreland & Floodplain Zoning Ordinance, to reflect the results of a wetland delineation report and survey; and to allow the rezoning of the proposed road crossings thru the wetland areas.

The affected wetland is located in the **Town of Cedarburg**, T10N, R21E in part of the NW 1/4 and the NE 1/4 of the NW 1/4 of Section 21, Lot 1 CSM #3997 Doc. 1050182, Parcel Key # 03-021-05-006.00, 8611 State Road 60.

Background: The Sports Project LLC is planning on developing the property into an athletic performance facility with parking area. The area was farmed until the Town of Cedarburg had purchase the property in June of 2022.

A wetland delineation was completed by Wetland & Waterway Consulting, LLC. on June 25, 2023. The Town of Cedarburg had applied for the Change In Zoning Classification with Ozaukee County to recognize the wetland delineation on June 14, 2023. The Natural Resources Committee approved the recognition of the wetland delineation report on August 3, 2023.

The Town of Cedarburg had sold the property to Sports Project LLC in November of 2023.

The Sports Project LLC is petitioning to change the six (6) wetland areas that were delineated from Shoreland-Wetland to Shoreland to allow the filling, grading, and excavating to occur as part of the development of the property. The DNR has issued a permit dated September 29, 2023, to allow these wetland areas to be disturbed.

Per Section 7.0704 of the County Shoreland & Floodplain Zoning Ordinance, any use not listed in Section 7.0703 is prohibited, unless the wetland or portion of the wetland has been rezoned in accordance with Section 7.1300 of this ordinance and Section 59.69(5)(e), Wis. Stats.

Per email from *Dale Rezabek, DNR Water Management Specialist - Shoreland Specialist,* dated January 31, 2024 - Mr. Rezabek requested that “the committee that when they review the rezone case, that they should only rezone the project area from the shoreland-wetland district to uplands if the applicant can demonstrate to the satisfaction of the committee that there will be no

significant adverse effects on wetlands, according to the ordinance elements in Section 7.1305 B. 1. Thru 7." (of the Ozaukee County Shoreland and Floodplain Zoning Ordinance).

1. Section 7.1305 B. A wetland, or a portion thereof, in the shoreland-wetland district shall not be rezoned if the proposed rezoning may result in a significant adverse impact upon any of the following:

    a. Storm and flood water storage capacity

    b. Preservation of dry season stream flow, the discharge of groundwater to a wetland, the recharge of groundwater from a wetland to another area, or the flow of groundwater through a wetland.

    c. Filtering or storage of the sediments, nutrients, heavy metals, or organic compounds that would otherwise drain into navigable streams.

    d. Shoreline protection against soil erosion.

    e. Fish spawning, breeding, nursery or feeding grounds.

    f. Wildlife habitat.

    g. Areas of special recreational, scenic, or scientific interest, including scarce wetland types.

Per Section 7.1302 F. of the County Shoreland and Floodplain Zoning Ordinance, any change to a shoreland-wetland boundary shown on a Shoreland and Floodplain Zoning District Map requires County Board approval.

FISCAL IMPACT: N/A FUNDING SOURCE: N/A

RECOMMENDED MOTION: Approval to amend the Shoreland & Floodplain Zoning Map to reflect the change in the wetland boundary as a result of the survey completed by CJ engineering, dated August 29, 2023.

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ATTACHMENTS:

- Staff Report - Project Sports LLC (PDF)
- Support Documents (PDF)

OZAUKEE COUNTY
LAND & WATER MANAGEMENT DEPARTMENT

Katie Vogeler, Director
Edward J. Pfister, Sanitation & Zoning Coordinator
Geoff Schramm, Land & Water Coordinator
www.co.ozaukee.wi.us

Staff Report – Natural Resources Committee Hearing – March 7, 2024

Request by **Sports Project LLC** to petition the committee for a Zoning Classification change from Shoreland-Wetland Dsitrict to Shoreland District to allow the filling of six (6) wetland areas (a total of 1.47 acres) in order to construct a proposed athletic training facility and parking area.

Affecting the following described real estate:

The affected wetland is located in the **Town of Cedarburg**, T10N, R21E in part of the NW 1/4 and the NE 1/4 of the NW 1/4 of Section 21, Lot 1 CSM #3997 Doc. 1050182, Parcel Key # 03-021-05-006.00, 8611 State Road 60.

Background: The Sports Project LLC is planning on developing the property into an athletic performance facility with parking area. The area was farmed until the Town of Cedarburg had purchase the property in June of 2022.

1. A wetland delineation was completed by Wetland & Waterway Consulting, LLC. on June 25, 2023. The Town of Cedarburg had applied for the Change In Zoning Classification with Ozaukee County to recognize the wetland delineation on June 14, 2023. The Natural Resources Committee approved the recognition of the wetland delineation report on August 3, 2023.

2. The Town of Cedarburg had sold the property to Sports Project LLC in November of 2023.

3. The Sports Project LLC is petitioning to change the classification district of six (6) wetland areas that were delineated from Shoreland-Wetland to Shoreland to allow the filling, grading, and excavating to occur as part of the development of the property. The DNR has issued a permit dated September 29, 2023, to allow these wetland areas to be disturbed.

4. Per Section 7.0704 of the County Shoreland & Floodplain Zoning Ordinance, any use not listed in Section 7.0703 is prohibited, unless the wetland or portion of the wetland has been rezoned in accordance with Section 7.1300 of this ordinance and Section 59.69(5)(e), Wis. Stats.

5. Per the email from Dale Rezabek, DNR Water Management Specialist – Shoreland Specialist, dated January 31, 2024 – Mr. Rezabek informed the department to remind "the committee that when they review the rezone case, that they should only rezone the project area from the shoreland-wetland district to uplands (shoreland) if the applicant can demonstrate to the satisfaction of the committee that there will be no significant adverse effects on wetlands, according to the ordinance elements in Section 7.1305 B. 1. Thru 7." (of the Ozaukee County Shoreland and Floodplain Zoning Ordinance) as stated below.

    a. Section 7.1305 B. A wetland, or a portion thereof, in the shoreland-wetland district shall not be rezoned if the proposed rezoning may result in a significant adverse impact upon any of the following:
        i. Storm and flood water storage capacity

Attachment: Staff Report - Project Sports LLC (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

ii. Preservation of dry season stream flow, the discharge of groundwater to a wetland, recharge of groundwater from a wetland to another area, or the flow of groundwater through a wetland.
iii. Filtering or storage of the sediments, nutrients, heavy metals, or organic compounds that would otherwise drain into navigable streams.
iv. Shoreline protection against soil erosion.
v. Fish spawning, breeding, nursery or feeding grounds.
vi. Wildlife habitat.
vii. Areas of special recreational, scenic, or scientific interest, including scarce wetland types.

6. Per Section 7.1302 F. of the County Shoreland and Floodplain Zoning Ordinance, any change to a shoreland-wetland boundary shown on a Shoreland and Floodplain Zoning District Map requires County Board approval.

END/BAS
(2/14/24)

Attachment: Staff Report - Project Sports LLC (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
1027 W St. Paul Ave.
Milwaukee, WI 53233

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



September 29th, 2023

GP-SE-2023-46-02958

Steve Becker
9636 North Crestwood Court
Mequon, WI 53092
[sent electronically]

RE: Coverage under the wetland statewide general permit to impact wetlands from residential, commercial, and industrial activities, located in the Town of Cedarburg, Ozaukee County

Dear Mr. Becker:

Thank you for submitting an application for a General Permit to impact wetlands from residential, commercial and industrial activities located in the NW 1/4 of NW 1/4, Section 21, Township 10 N, Range 21 E, Town of Cedarburg, Ozaukee 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. **The discharge(s) from the proposed activity will comply with water quality requirements.**

Please re-read the permit eligibility standards and conditions. The eligibility standards can be found on the GP1 application checklist or in the GP1 statewide general permit. 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 me, your local Water Management Specialist, at (414) 430-7129 or at michelle.soderling@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,

Michelle Soderling

Michelle Soderling
Water Management Specialist

Email CC: Morgan Wirth-Murray, USACE Project Manager
Jack Johnston, Cedarburg Town Clerk
Tony Young, Conservation Warden
Christopher Jackson, CJ Engineering

RECEIVED
DEC 12 2023
OZAUKEE COUNTY
LAND & WATER
MANAGEMENT DEPT

Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

You agree to comply with the following conditions:

1. **Application**. You shall submit a complete application package to the Department as outlined in the application requirements (section 2) section 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 coverage under general permit WDNR-GP1-2023 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.

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-GP1-2023.

5. **Expiration**. The time limit for completing an activity authorized by the provisions of WDNR-GP1-2023 ends 5 years after the date on which the activity is considered to be authorized under WDNR-GP1-2023 or until the activity is completed, whichever occurs first. The Department's use of general permit WDNR-GP1-2022 established under s. 281.36(3g) Wis. Stats. expires on June 30, 2028.

6. **Written authorization for modification of scope.** Any modification to the wetland impacts authorized under this general permit must be approved by the Department in writing to ensure that the project continues to meet the general permit eligibility in section 1. Separate permitting is necessary if the modified project scope no longer meets general permit eligibility.

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

8. **Project Start**. You shall notify the Department using the information provided on the confirmation of coverage letter you receive before starting any activity and again not more than 5 days after each activity is completed.

9. **Project Completion.** Within one week after completing the regulated activity, you shall submit to the Department a statement certifying the project complies 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.

10. **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.

11. **Permit Compliance**. The department may revoke coverage of this permit if it is not constructed in compliance with the terms and conditions of this permit. Any act of noncompliance with this permit constitutes a permit violation and is grounds for enforcement action.

12. **Construction Timing**. Once wetland work begins, all construction activities in those wetlands 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.

13. **Construction**. No other portion of the wetland may be disturbed beyond the area designated in the submitted plans.

Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

14. **Proper Maintenance**. You must maintain the activity authorized by WDNR-GP1-2023 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 and waterways.

15. **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-GP1-2023 and applicable laws.

16. **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: https://dnr.wisconsin.gov/, keyword "stormwater technical standards". 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 the waterway.

17. **Equipment use**. The equipment used in the wetlands must be low ground weight equipment as specified by the manufacturer specifications.

18. **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.

19. **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 NR 40, Wis. Adm. Code. These protocols and practices can be found on the Department website at http://dnr.wi.gov/topic/Invasives/bmp.html Keyword: "equipment operator" and at http://dnr.wi.gov/topic/Invasives/documents/EquipOper.pdf.

20. **Federal and State Threatened and Endangered Species**. WDNR-GP1-2023 does not affect the Department'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 Department 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.

21. **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.

22. **Historic Properties and Cultural Resources**. WDNR-GP1-2023 does not affect the Department's responsibility to ensure that all authorizations comply with Section 106 of the National Historic Preservation Act and s. 44.40, Wis. Stats. No Department 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

23. **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.**

24. **Suitable fill material**. All fill authorized under this permit must consist of clean suitable soil, as defined by s. NR 500.03(214), Wis. Adm. 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.

Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

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

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

27. **Reevaluation of Decision**. The Department may suspend 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-GP1-2023.
    b. The information provided by the applicant in support of the permit application proves to have been false, incomplete, or inaccurate.

Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

Barry Sullivan

From: Rezabek, Dale H - DNR <Dale.Rezabek@wisconsin.gov>
Sent: Wednesday, January 31, 2024 4:38 PM
To: Barry Sullivan
Subject: RE: Public Notice

CAUTION: This email originated from outside of the organization. Do not click links, open attachments, or reply unless you recognize the sender and know the content is safe.

Hi Barry,

I would like you to tell the committee that when they review the rezone case, that they should only rezone the project area from the shoreland-wetland district to uplands if the applicant can demonstrate to the satisfaction of the committee that there will be no significant adverse effects on wetlands, according to the ordinance elements in Section 7.1305 B. 1. Thru 7.

Thanks, Dale

We are committed to service excellence.
Visit our survey at http://dnr.wi.gov/customersurvey to evaluate how I did.

Dale Rezabek, PG (He/Him/His)
Water Management Specialist - Shoreland Specialist
WDNR Waterways Program
Phone: (920) 267-1739
Dale.Rezabek@wisconsin.gov

From: Barry Sullivan <bsullivan@ozaukeecounty.gov>
Sent: Friday, January 26, 2024 2:01 PM
To: Rezabek, Dale H - DNR <Dale.Rezabek@wisconsin.gov>; Stern, Andrea K - DNR <Andrea.Stern@wisconsin.gov>
Subject: Public Notice

Dale and Andrea –

Attached is a public notice. I had sent you this previous but when we started to set up the document share to go to the Natural Resources Committee, we noticed that I had the wrong meeting date. So, we had to pull it off and re-notice it for the March hearing date.

Regards,

Barry

Barry A. Sullivan
Sanitation and Zoning Specialist
Ozaukee County Land and Water Management Department
121 W. Main Street
Port Washington WI 53074
(262)284-8318

Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

CJ engineering
civil design and consulting

9205 W. Center St., Suite 214
Milwaukee, WI 53222
Ph: (414) 443-1312

To: Wisconsin Department of Natural Resources

Date: August 29th, 2023

Purpose: General Permit Application – Wetland Disturbance

Project Name: Cedarburg Sports: – 8611 State Road 60, Cedarburg, WI

Ozaukee County Parcel Number: 030210500500

Owner:

Project Narrative & Wetland alternative Analysis:

The proposed Cedarburg Sports project, located in the Town of Cedarburg, Ozaukee County, will include the development of a proposed building, paved access drives, as well as paved parking areas. The project is located on the south side state trunk highway 60 at 8611 State Road 60 in the Town of Cedarburg. The existing wetlands were identified on site by Kristi Sherfinski of Helianthus LLC and Wetland & Waterway Consulting LLC, on May 17th, 2023 and located on May 24th, 2023. Based on the location of said wetlands and the configuration of the proposed project, a portion of the wetlands will need to be filled to allow for the construction of the proposed building, construction of paved access and circulation drives to the building. The building placement on site has been determined by the necessity to provide a septic area and restricted by the zoning code setbacks for this property. The wetland filling required for this project will improve the overall safety by providing a fire access route to the building and allow for the necessary space for safe vehicular circulation while also allowing the facility to efficiently operate and effectively utilize the majority of the eastern portion of their property, all while meeting the Stormwater requirements of the town.

The preferred design alternative, Alternative 1, will disturb 16,040 S.F. of wetlands. The existing wetlands can be designated into three areas. The north wetland area contains a drainage swale along the Highway 60 right-of-way which routes water to the 18" culvert running under said Highway 60. The disturbance of the north area of wetlands is necessary in order to build a 24' wide fire lane and access drive, and circulation drives.

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Fill material will be placed over the wetlands to reach the design elevations which are critical to construction of the paved areas. The second wetland fill area is located on the southeast position of the site and can be designated at the southeast pocketed wetlands. Similar to wetland area one, these wetlands will require filling to provide safe and efficient circulation drives and desired patron parking. The third area which will require wetlands to be filled is located on the south portion of the site. These wetlands can be designated as the southern pocketed wetlands. Said wetlands will need to be filled to construct the proposed building and accessible pedestrian walkways to all of the building access points. This preferred method will allow for the construction of the proposed building, fire lane, and circulation drives. This configuration will also allow for the construction of one singular stormwater basin. Silt fence shall surround the areas of disturbance adjacent to the wetlands to provide habitat protection. Once the drive, parking and proposed building is constructed, the disturbed areas will be restored with seeding and erosion matting. Equipment including workers will be prohibited from entering or crossing the wetland areas not approved by the WDNR at all times during the above-described activities without abiding to WDNR wetland impact guidelines. The preferred design will permanently disturb 16,040 S.F. of wetlands.

The second alternative method, Alternative 2, would reconfigure the site to minimize the wetland fill area by reducing the circulation drive areas, shifting the building and creating two separate, smaller stormwater basins. This alternative would still, pedestrian accessible paths to all building access points and the necessary fire access and circulation drives. With this alternative the wetland filling area one, along Highway 60, would be minimized but still require a portion of the wetlands to be filled in order to construct the building. However, the northeast portion of wetlands 1 along Highway 60 will remain undisturbed as a result of the redesign of the stormwater basin and reconfiguration of the patron parking. The second wetland area designated as the pocketed wetlands on the southeast portion of the site would be left undisturbed by this alternative as a portion of the circulation drive has been eliminated to accommodate the wetlands. The third wetland area designated as the south pocketed wetlands would still require to be completely filled in order to construct the building, fire access drive, circulation drive, and accessible pedestrian walks. in order to achieve this alternative configuration, a portion of the wetlands will need to be filled based on the need to grade back to the existing elevation and the development of the site for pedestrian and vehicular use. By decreasing the circulation drive areas, shifting the building location, reconfiguring the access/fire lanes, and creating two separate smaller stormwater basins, the wetland fill area will be reduced by 7,957 square feet. This option maintains the safe circulation drives, the fire lane, and the proposed building size. Once the proposed site improvements are constructed the disturbed areas will be restored with seeding and erosion matting in a similar fashion as listed above in the preferred method. These activities will result in a disturbance of 8,083 s.f. of wetlands.

The third and final alternative to the preferred method is a no build scenario, in this alternative the construction of a sports recreation building, fire access lanes, circulation drives and parking area which meets the needs of the patrons and community, while also meeting the safety and stormwater requirements is not feasible without disturbing a

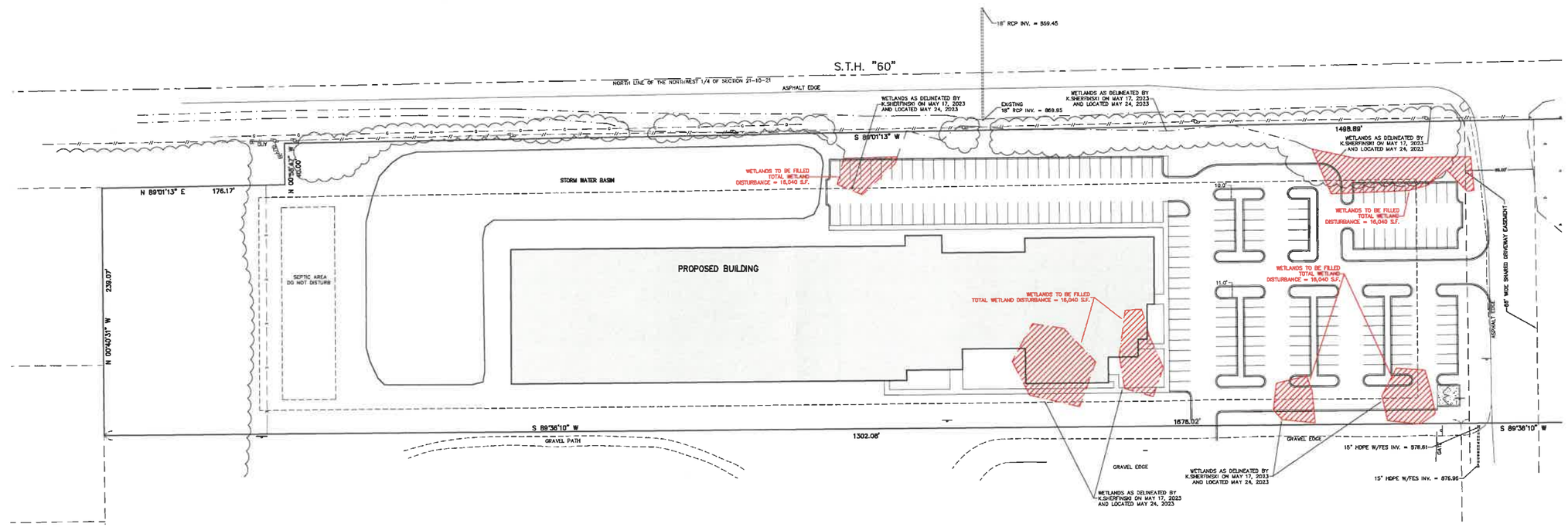
Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

portion of the wetlands. Therefore, the third alternative of not developing this site is not the preferred option.

Based on the provided alternative analysis, the second alternative option, Alternative 2, has been chosen as the proposed method of wetland disturbance by filling activities. The second alternative limits the wetland disturbance as much as possible, while still providing necessary circulation which promotes efficiency from both a safety and feasibility perspective. This option also provides the necessary pedestrian accessible walkways, fire access lane and the ability to build the proposed building, which is imperative to the functionality of this development.

Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

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CEDARBURG SPORTS

8611 HWY 60 CEDARBURG, WISCONSIN

CJE NO.: 2263R0
AUGUST 29, 2023

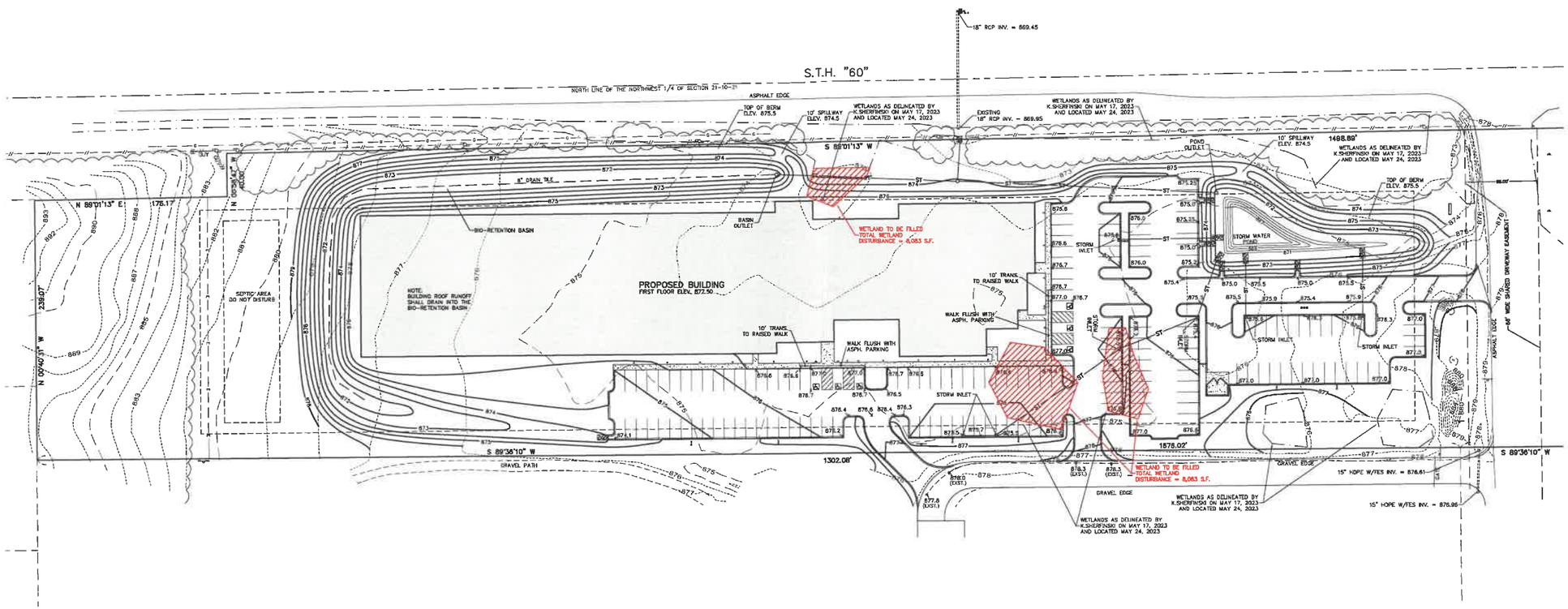
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GRAPHIC SCALE
50 0 25 50 100
1 inch = 50 ft

WETLAND FILL EXHIBIT
ALTERNATIVE I

Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

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LEGEND

------ 96 ------	EXISTING CONTOUR
——96——	PROPOSED CONTOUR
x 96.5	PROPOSED ELEVATION
——ST——	PROPOSED STORM SEWER

GRAPHIC SCALE
50 0 25 50 100
1 inch = 50 ft

CJE NO.: 2263R0
AUGUST 29, 2023

WETLAND FILL EXHIBIT
ALTERNATIVE 2

Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

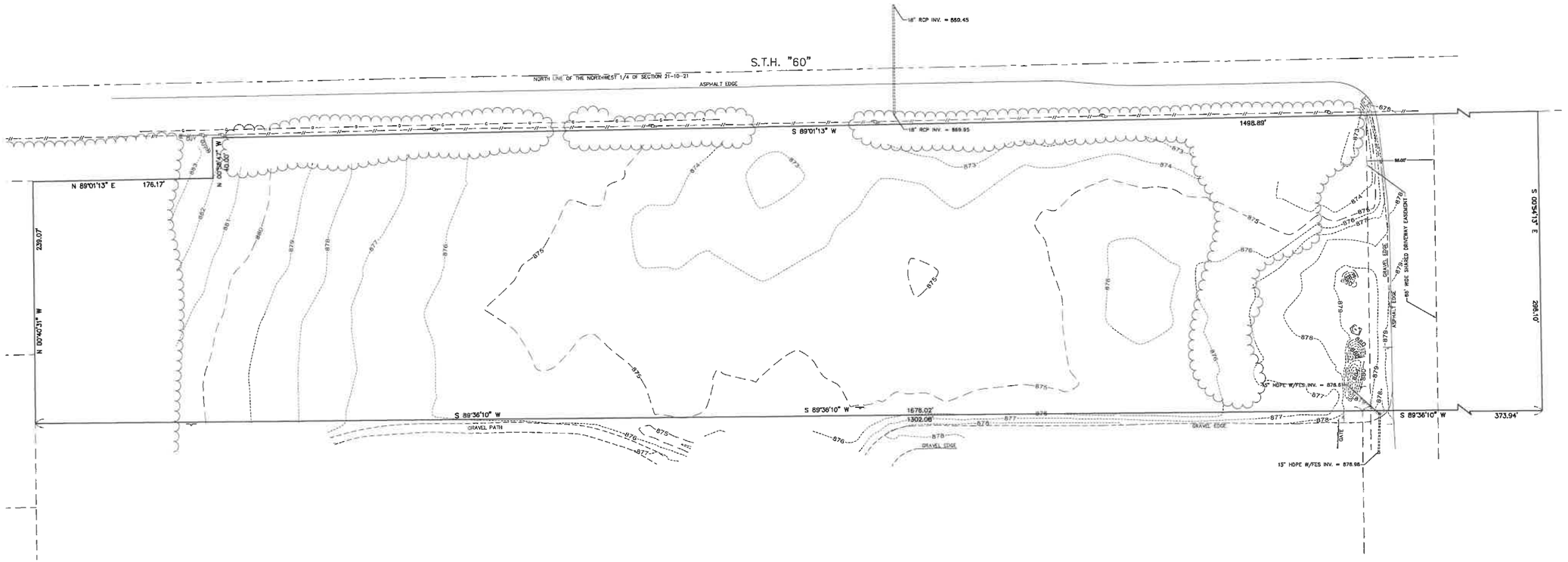
LEGAL DESCRIPTION:

LOT 1, CERTIFIED SURVEY MAP NO. 3697, BEING A PART OF THE NORTHWEST 1/4 OF SECTION 21, TOWNSHIP 10 NORTH, RANGE 21 EAST, IN THE TOWN OF CEDARBURG, OZAUKEE COUNTY, WISCONSIN.

CONTAINING 10.900 ACRES/ 474,784 SQUARE FEET

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civil design and consulting
9205 W. Center Street
Suite 214
Milwaukee, WI 53222
PH. (414)-443-1212
www.cj-engineering.com

CSE
CAPITOL SURVEY ENTERPRISES
220 REGENCY CT. STE. 310
BROOKFIELD, WI 53045
PH: (262) 786-6600
FAX: (414) 786-6606
WWW.CAPITOLSURVEY.COM



NOTES

1. SUBJECT PROPERTY ZONED: M-2, PLANNED INDUSTRIAL DISTRICT.

2. SETBACKS BASED ON THE TOWN OF CEDARBURG OF OZAUKEE COUNTY ZONING CODE AND ARE AS FOLLOWS:

(3) BUILDING HEIGHT:

(A) PRINCIPAL STRUCTURE: MAXIMUM TWO STORIES OR 35 FEET FOR RESIDENTIAL, ALL OTHER TYPES OF DEVELOPMENT MAXIMUM THREE STORIES OR 45 FEET.

(B) ACCESSORY STRUCTURE: MAXIMUM ONE STORY OR 25 FEET.

(4) YARD SETBACKS.

(A) STREET: MINIMUM 25 FEET.

(B) REAR: MINIMUM 30 FEET.

(C) SIDE: MINIMUM 15 FEET.

3. LEGAL DESCRIPTION BASED ON CERTIFIED SURVEY MAP NO. 3697.

4. THE UNDERGROUND UTILITY INFORMATION AS SHOWN HEREON IS BASED, IN PART, ON INFORMATION FURNISHED BY THE UTILITY COMPANIES, DIGGERS HOTLINE AND THE LOCAL MUNICIPALITY. WHILE THIS INFORMATION IS BELIEVED TO BE RELIABLE, ITS ACCURACY AND COMPLETENESS CANNOT BE GUARANTEED NOR CERTIFIED TO.

5. SUBJECT PROPERTY IS [ARE] LOCATED WITHIN AN AREA HAVING A ZONE DESIGNATION X; AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD PLAIN, PER INFORMATION FROM THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA), ON FLOOD INSURANCE RATE MAP NO. 55089C0159F, WITH A DATE OF IDENTIFICATION OF 12/4/2007, IN COMMUNITY NO. 550310, OZAUKEE COUNTY, WHICH IS THE COMMUNITY IN WHICH THE SUBJECT PROPERTY IS SITUATED.

6. PROJECT BENCHMARK/SITE BENCHMARK – THE NORTHWEST CORNER OF THE NORTHWEST 1/4 OF SECTION 21-10-21 FOUND CONCRETE MONUMENT WITH CAP WITH AN ELEVATION OF 875.75.

7. ELEVATIONS BASED ON INFORMATION FROM S.W.R.P.C. N.A.V.D. OF 1988(12)

8. DUE TO SNOW AND ICE CONDITIONS AT TIME OF SURVEY, NOT ALL IMPROVEMENTS AND/OR PHYSICAL FEATURES MAY BE SHOWN.

9. SURVEY DATUM:
COORDINATES ARE BASED ON THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), OZAUKEE COUNTY, NORTH AMERICAN DATUM OF 1983, 2011 ADJUSTMENT (NAD83(2011)). .

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LEGEND

SAN	SANITARY SEWER	ELECTRIC TRANSFORMER	HYDRANT
ST	STORM SEWER	ELECTRIC METER	WATER VALVE
W	WATER MAIN	ELECTRIC PEDESTAL	GAS VALVE
G	BURIED GAS LINE	ELECTRIC BOX AT GRADE	MANHOLE
TEL	BURIED TELEPHONE LINE	TELEPHONE PEDESTAL	STORM MANHOLE
E	BURIED ELECTRIC LINE	TV PEDESTAL	CATCH BASIN
FO	BURIED FIBER OPTIC LINE	GAS METER	CURB INLET
OHU	OVERHEAD UTILITY LINES	AIR CONDITIONER	METAL LIGHT POLE
CATV	BURIED CABLE TELEVISION LINES	UTILITY POLE	CONCRETE LIGHT POLE
CONST	CONSTRUCTION FENCE	WOOD SIGN	WOOD LIGHT POLE
	WOOD FENCE	METAL SIGN	MAIL BOX
	METAL FENCE	FLAG POLE	FIBER OPTIC MARKER
	EDGE OF WOODS AND BRUSH	BOLLARD	GUY WIRE
WM=XX.X	DOOR SILL ELEVATION	BOLLARD LIGHT	
FDC	FIRE DEPARTMENT CONNECTION	YARD LIGHT	

GRAPHIC SCALE
40 0 20 40 80
(IN FEET)
1 INCH = 40 FT.

EXISTING CONDITIONS SURVEY
FOR
CEDARBURG SPORTS FACILITY
8611 HWY 60
CEDARBURG, WI

DRAWN BY:	RAP	DATE:	12/23/2022
CHECKED BY:	MJB	DRAWING NO.	EC-0
CSE JOB NO.:	22-111	SHEET	1 OF 1

Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

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9205 W. Center Street
Suite 214
Milwaukee, WI 53222
PH. (414) 443-1312
www.cj-engineering.com

SHEET INDEX		
	1 OF 5	COVER SHEET
C1.0	2 OF 5	SITE PLAN
C2.0	3 OF 5	GRADING PLAN
C3.0	4 OF 5	SITE UTILITY PLAN
C4.0	5 OF 5	EROSION CONTROL PLAN

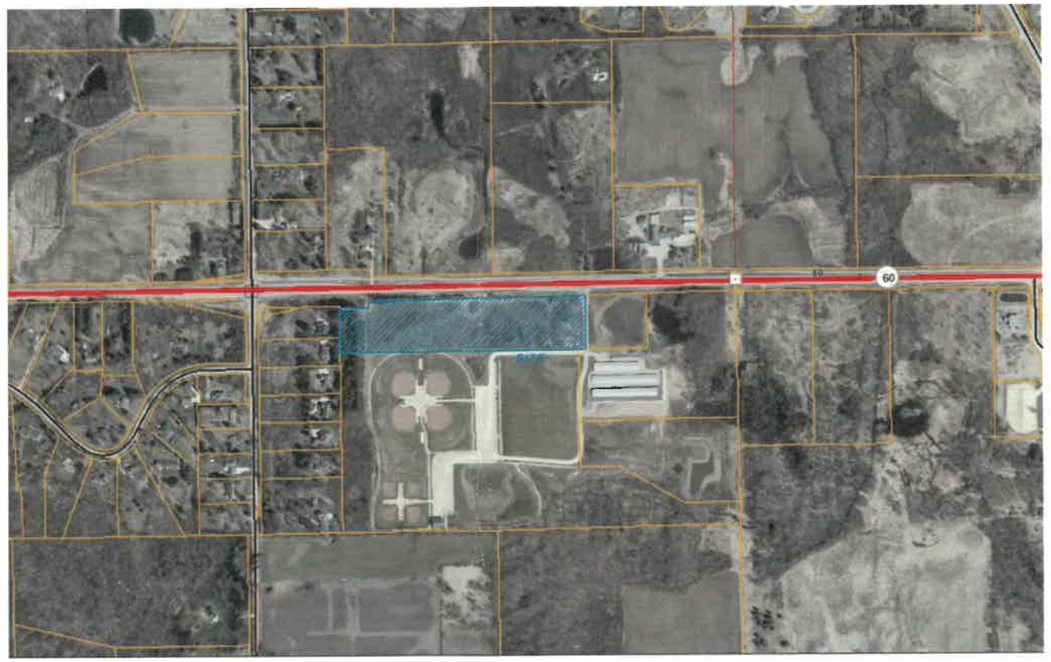
OWNER:
PROJECT SPORTS LLC
10725 EXECUTIVE COURT
MEQUON, WI 53092
REPRESENTATIVE/OWNER: STEVE BECKER
EMAIL: STEVE@TRAINAP.COM
PHONE: (262) 388-6262

SURVEYOR/ENGINEER:
CJ ENGINEERING, LLC
CHRIS JACKSON, PE, PLS
9205 W. CENTER STREET
SUITE 214
MILWAUKEE, WI 53222
EMAIL: CHRIS@CJ-ENGINEERING.COM
PHONE: (414) 443-1312

ARCHITECT:
DESIGNE 2 CONSTRUCT DEVELOPMENT CORPORATION
MARK HERTZFELDT, ARCHITECT
N173W21010 NORTHWEST PASSAGE
JACKSON, WI 53037
EMAIL: MHERTZFELDT@DESIGN2CONSTRUCT.COM
PHONE: (262) 677-9933

ATHLETE PERFORMANCE DEVELOPMENT

8611 HWY 60 CEDARBURG, WISCONSIN





N

LEGAL DESCRIPTION:

LOT 1, CERTIFIED SURVEY MAP NO. 4243, BEING A PART OF THE NORTHWEST 1/4 OF SECTION 21, TOWNSHIP 10 NORTH, RANGE 21 EAST, IN THE TOWN OF CEDARBURG, OZAUKEE COUNTY, WISCONSIN.

CONTAINING: 10.900 ACRES/ 474,784 SQUARE FEET.

NOTES

1. LEGAL DESCRIPTION BASED ON CERTIFIED SURVEY MAP NO. 4243.

2. PROJECT BENCHMARK/SITE BENCHMARK – THE NORTHWEST CORNER OF THE NORTHWEST 1/4 OF SECTION 21-10-21 FOUND CONCRETE MONUMENT WITH CAP WITH AN ELEVATION OF 875.75.

3. ELEVATIONS BASED ON INFORMATION FROM S.W.R.P.C. N.A.V.D. OF 1988(12)

4. SURVEY DATUM:
COORDINATES ARE BASED ON THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), OZAUKEE COUNTY, NORTH AMERICAN DATUM OF 1983, 2011 ADJUSTMENT (NAD83(2011)).

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DEC 18 2023
OZAUKEE COUNTY
LAND & WATER
MANAGEMENT DEPT

CJE NO.: 2263R2
AUGUST 09, 2023
REV. 10/23/23
REV. 11/15/23

ORIGINAL PLANS PREPARED BY
CJ engineering
9205 W. Center Street
Suite 214
Milwaukee, WI 53222
PH. (414) 443-1312
www.cj-engineering.com

WISCONSIN
CHRISTOPHER A. JACKSON
E-34614
WAUWATOSA, WI
PROFESSIONAL ENGINEER

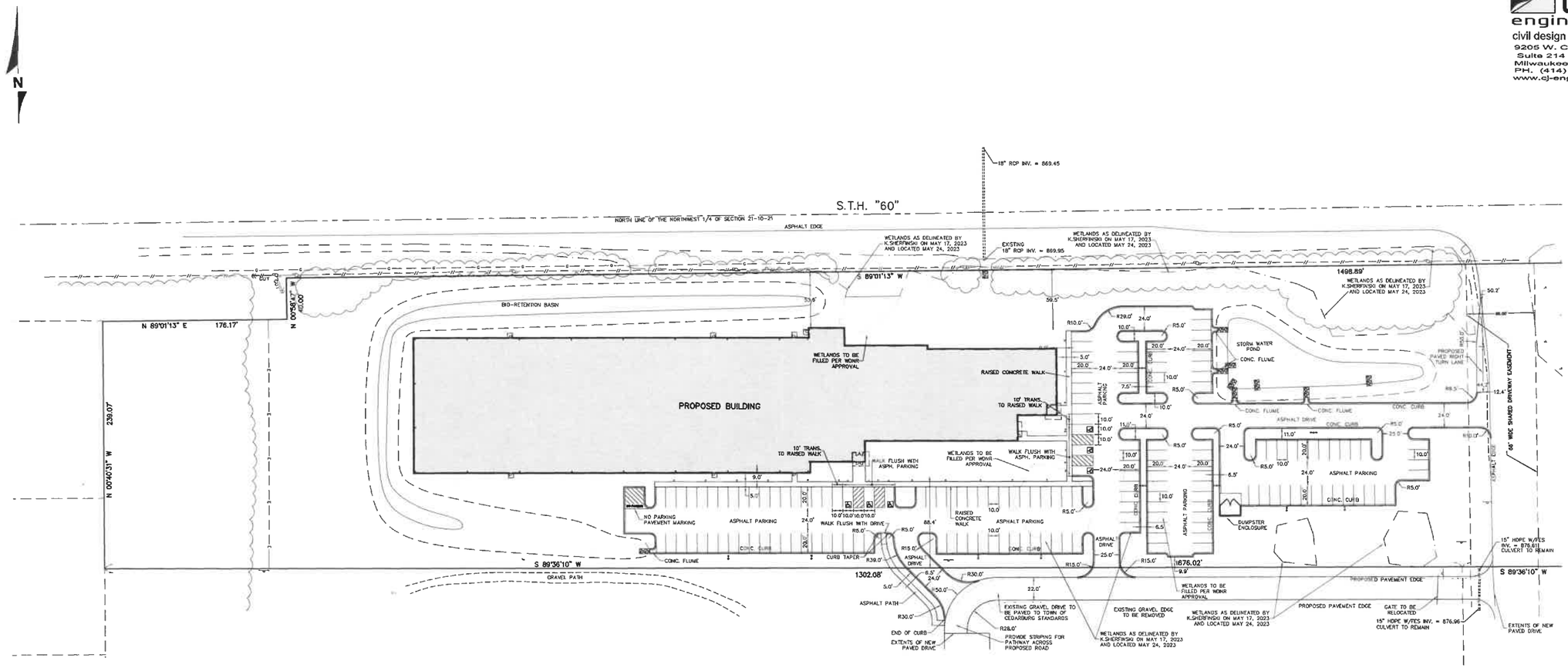
DATE: 11/15/2023

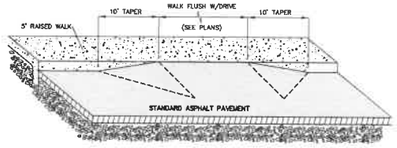
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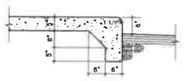
ATHLETE PERFORMANCE DEVELOPMENT

8611 HWY 60 CEDARBURG, WISCONSIN

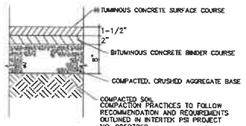




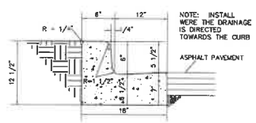
FLUSH WALK AT ENTRANCES
NOT TO SCALE



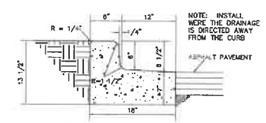
CONCRETE WALK WITH INTEGRAL CURB
NOT TO SCALE



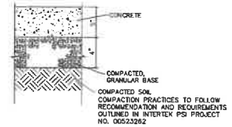
ASPHALT PAVEMENT
NOT TO SCALE



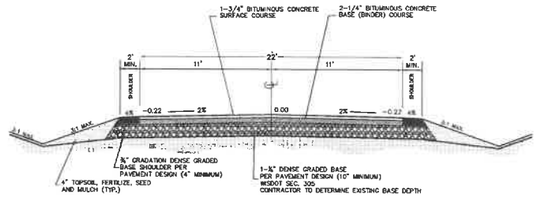
LOW SIDE CONCRETE CURB (L.S. C&G) DETAIL
NOT TO SCALE



HIGH SIDE CONCRETE CURB (H.S. C&G) DETAIL
NOT TO SCALE



CONCRETE SIDEWALK
NOT TO SCALE



TOWN OF CEDARBURG
STANDARD ROAD CROSS SECTION
NOT TO SCALE

NOTES:

1. ALL PROPOSED SPOT GRADES SHOWN ARE AT BOTTOM OF CURB, UNLESS OTHERWISE NOTED.
2. ANY EXISTING TOWN OR SHARED INFRASTRUCTURE THAT IS DAMAGED DURING CONSTRUCTION SHALL BE REPLACED IN KIND.
3. SITE AREAS:

   PAVEMENT: 80,577 S.F. (1.850 ACRES)
   BUILDING: 72,293 S.F. (1.660 ACRES)

   IMPERVIOUS: 152,870 S.F. (3.509 ACRES) 32%
   OPEN: 321,914 S.F. (7.390 ACRES) 68%

   TOTAL 474,784 S.F. (10.900 ACRES)

4. DISTURBED AREA: 278,700 S.F. (6.40 ACRES)
5. PARKING:
   156 REGULAR SPACES
   6 HANDICAPPED SPACES

CJE NO.: 2263R2
AUGUST 09, 2023
REV. 10/23/23
REV. 11/15/23

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GRAPHIC SCALE
50 0 25 50 100
1 inch = 50 ft

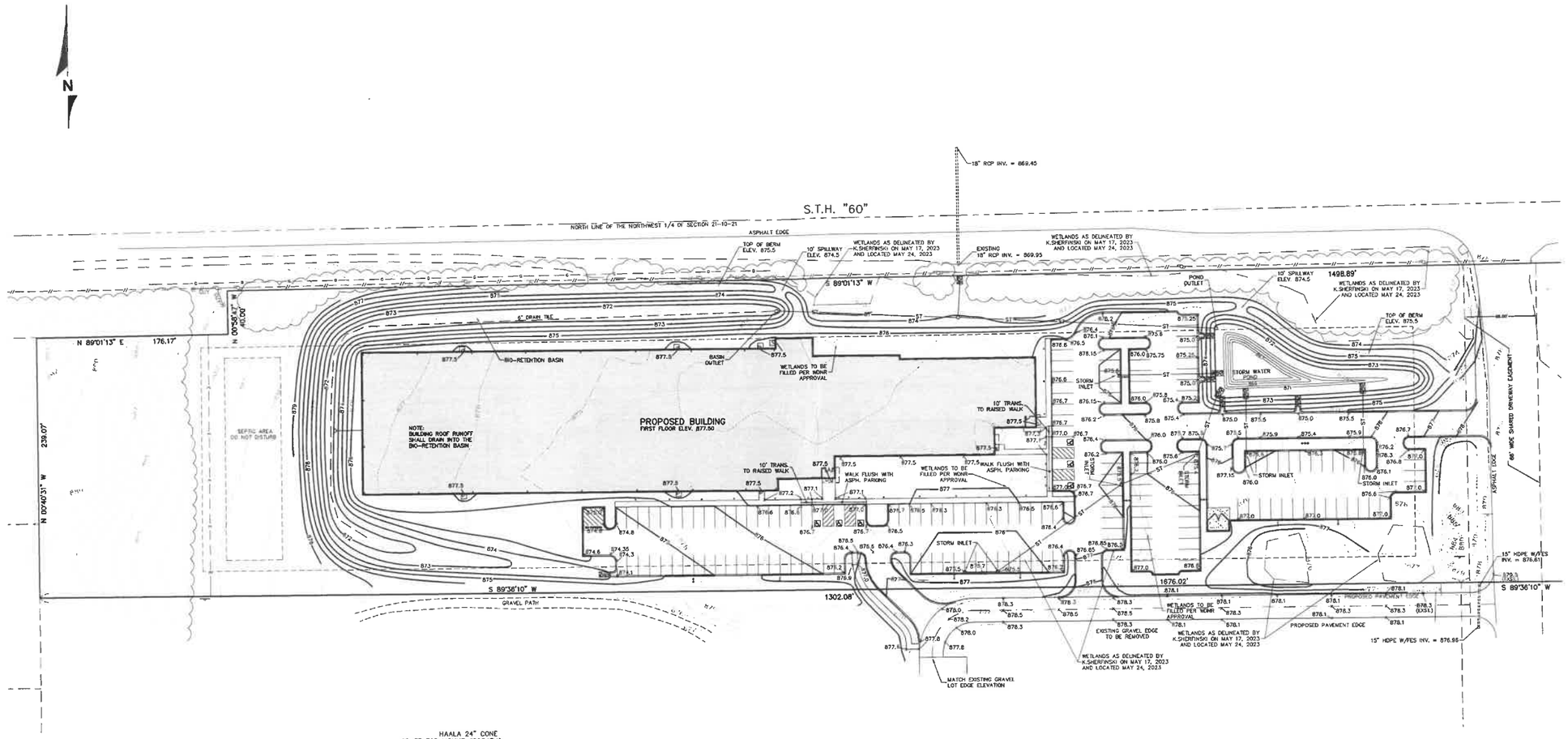
SITE PLAN C1.0

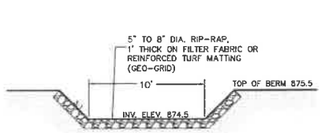
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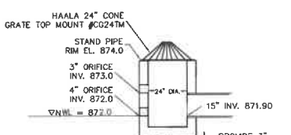
ATHLETE PERFORMANCE DEVELOPMENT

8611 HWY 60 CEDARBURG, WISCONSIN

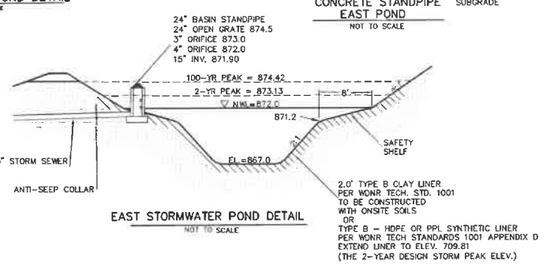




SPILLWAY EAST POND DETAIL
NOT TO SCALE

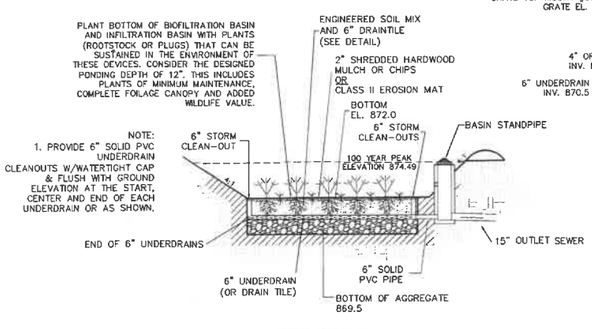


24" PRECAST CONCRETE STANDPIPE EAST POND
NOT TO SCALE



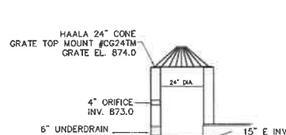
EAST STORMWATER POND DETAIL
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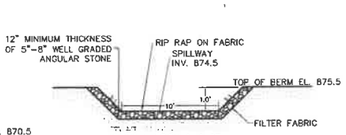


CROSS SECTION OF BIORETENTION BASIN

WEST BIORETENTION BASIN DETAIL
NOT TO SCALE

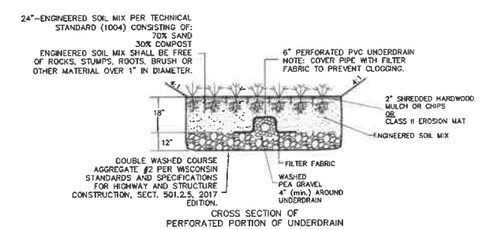


24" PRECAST CONCRETE STANDPIPE
NOT TO SCALE



CROSS SECTION C-C OF EMERGENCY SPILLWAY

SPILLWAY DETAIL
NOT TO SCALE



CROSS SECTION OF PERFORATED PORTION OF UNDERDRAIN

LEGEND

	EXISTING CONTOUR
96	PROPOSED CONTOUR
x 96.5	PROPOSED ELEVATION
ST	PROPOSED STORM SEWER

NOTES:

1. SPOT GRADES ALONG THE CURB ARE AT THE FLANGE LINE OF THE CURB OR BOTTOM OF WALK UNLESS OTHERWISE SPECIFIED.
2. DISTURBED AREA: 278,700 S.F. (6.40 ACRES)
3. WETLAND FILL AREAS PER WI DNR APPROVAL AND PERMITTING: GP-SE-2023-46-02958

GRAPHIC SCALE
50 0 25 50 100
1 inch = 50 ft

CJE NO.: 2263R2
AUGUST 09, 2023
REV. 10/23/23
REV. 11/15/23

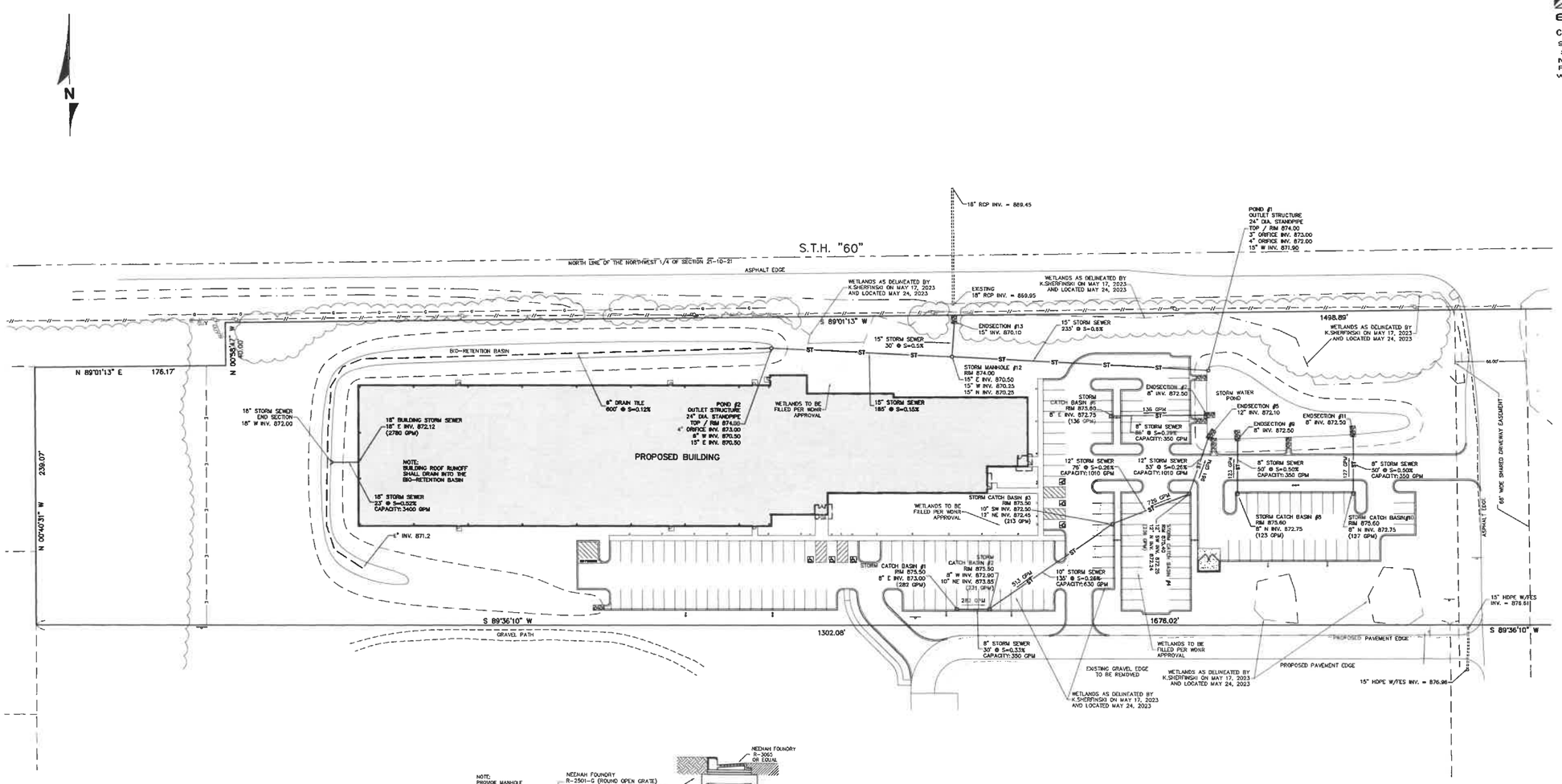
SITE GRADING PLAN C2.0

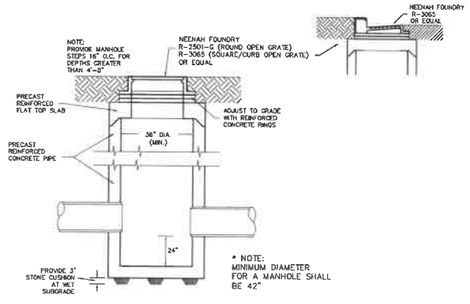
Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

CJ engineering
civil design and consulting
9205 W. Center Street
Suite 214
Milwaukee, WI 53222
PH. (414) 443-1312
www.cj-engineering.com

ATHLETE PERFORMANCE DEVELOPMENT

8611 HWY 60 CEDARBURG, WISCONSIN





PRECAST STORM CATCH BASIN

NOT TO SCALE

NOTES:

1. ALL STORM SEWER, SANITARY SEWER, AND WATER MAIN MATERIALS AND INSTALLATION PER APPLICABLE SECTIONS OF THE LATEST EDITIONS OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN (STANDARD SPECIFICATIONS), WISCONSIN ADMINISTRATIVE PLUMBING CODE AND THE TOWN OF CEDARBURG REQUIREMENTS.
2. ALL TRENCHES IN PAVEMENT AREAS SHALL HAVE GRAVEL BACKFILL IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS SECTION 8.43.4 AND PER FILE NO.4 COMPACTED SECTION (CLASS "B" BEDDING).
3. WATER AND SANITARY SEWER TO BE PROVIDED BY WELL AND SEPTIC SYSTEM. LOCATION AND DESIGN BY OTHERS.
4. UTILITY SPECIFICATIONS:
   STORM SEWER: ADS HDPE N-12 OR PVC ASTM D3034

LEGEND

- EXISTING STORM SEWER
- PROPOSED STORM SEWER
- EXISTING SANITARY SEWER
- PROPOSED SANITARY SEWER
- EXISTING WATER MAIN
- PROPOSED WATER MAIN
- BURIED GAS MAIN
- OVER HEAD WIRE
- BURIED ELECTRIC

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DIAL 811 OR (800) 242-8511

GRAPHIC SCALE
50 0 25 50 100
1 inch = 50 ft

CJE NO.: 2263R2
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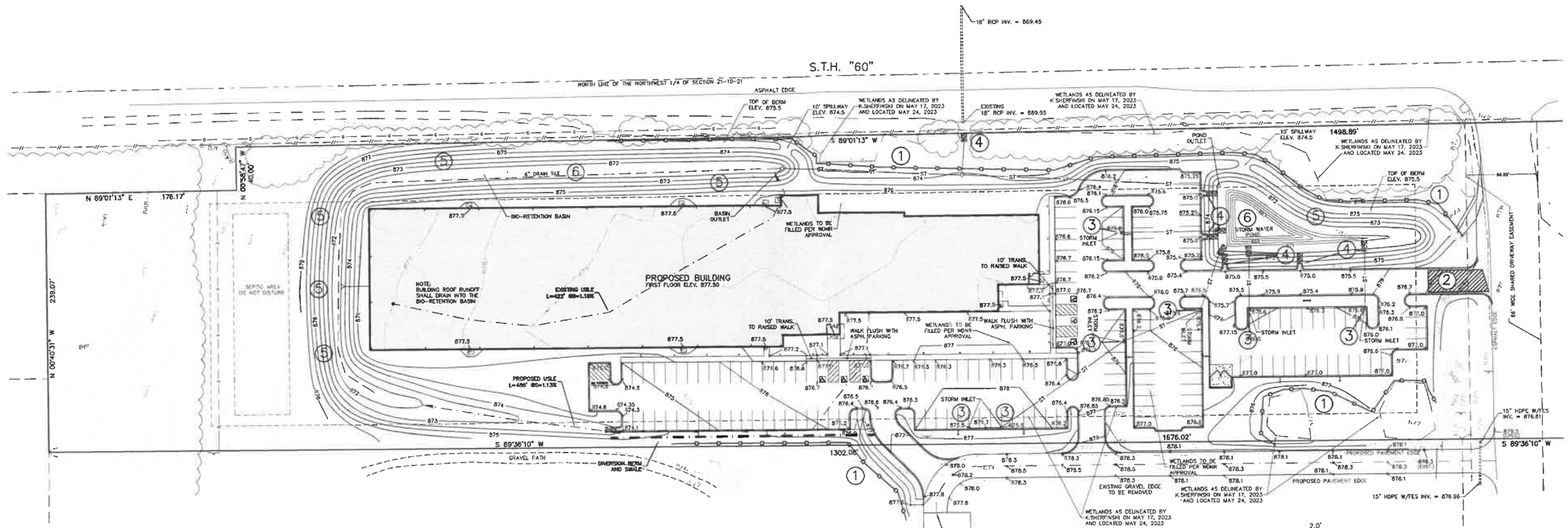
SITE UTILITY PLAN C3.0

Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

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ATHLETE PERFORMANCE DEVELOPMENT

8611 HWY 60 CEDARBURG, WISCONSIN



NOTES:

1. ALL EROSION CONTROL METHODS SHALL BE IN ACCORDANCE WITH THE TOWN OF CEDARBURG STANDARDS AND WDNR CPS TECHNICAL STANDARDS.
2. ALL EXPOSED SOIL AREAS NOT DISTURBED WITHIN SEVEN (7) DAYS SHALL BE IMMEDIATELY RESTORED WITH SEED AND MULCH OR POLYMER.

SEE WDNR TECHNICAL STANDARD 1059 FOR SEEDING

DURING GROWING SEASON (SOIL TEMPERATURES REMAIN CONSISTENTLY ABOVE 53°);

3. DISTURBED AREA: 278,700 S.F. (6.40 ACRES)
4. WETLAND SIGNAGE ON SILT FENCE TO BE PLACED AS BUFFER ADJACENT TO WETLAND AREAS.

EROSION CONTROL PRACTICES

1. SILT FENCE
2. CONSTRUCTION EXIT
3. INLET PROTECTION
4. OUTLET PROTECTION
5. EROSION MATTING
6. SEDIMENT BASIN

FOR FINAL STABILIZATION, PROVIDE CLASS I, TYPE B EROSION MAT PER 'WISDOT EROSION CONTROL PAL' (OR EQUAL) IN ALL ROADSIDE DITCHES, DEFINED SWALES, SIDE SLOPES, OUTLOT BERMS AND ALL OTHER SLOPES 4:1 OR GREATER. INSTALL PER MANUFACTURERS SPECIFICATIONS.

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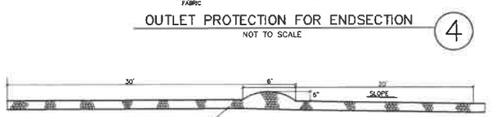
LEGEND

190	EXISTING CONTOUR
190	PROPOSED CONTOUR
x=189.5	PROPOSED GRADE
ST	EXISTING STORM SEWER
ST	PROPOSED STORM SEWER
SAN	EXISTING SANITARY SEWER
SAN	PROPOSED SANITARY SEWER
W	EXISTING WATER MAIN
W	PROPOSED WATER MAIN
G	BURIED GAS MAIN
OHW	OVER HEAD WIRE
E	BURIED ELECTRIC
	SILT FENCE

CONSTRUCTION SPECIFICATIONS

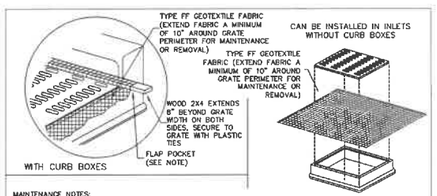
1. EXCAVATE BELOW CHANNEL OUTLET AND WIDEN CHANNEL TO THE REQUIRED RIP RAP THICKNESS FOR EACH APRON. FOUNDATION TO BE CUT TO ZERO GRADE AND SMOOTHED.
2. PLACE FILTER CLOTH ON BOTTOM AND SIDES OF PREPARED FOUNDATION. ALL JOINTS TO OVERLAP A MINIMUM OF 1.0'.
3. EXERCISE CARE IN RIP RAP PLACEMENT TO AVOID DAMAGE TO FILTER FABRIC.
4. PLACE RIP RAP ON ZERO GRADE – TOP OF RIP RAP TO BE LEVEL WITH EXISTING OUTLET – NO OVERFALL AT ENDS.
5. RIP RAP TO BE HARD, ANGULAR, WELL GRADE STONE OF 5" TO 6" DIA.
6. IMMEDIATELY AFTER CONSTRUCTION, STABILIZE ALL DISTURBED AREAS WITH VEGETATION.

OUTLET PROTECTION FOR ENDSECTION 4
NOT TO SCALE



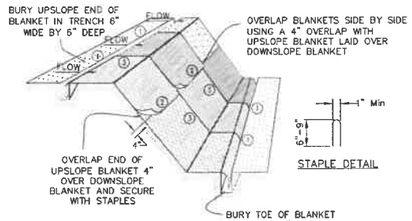
NOTE: EXIT SHALL BE MINIMUM 18' WIDE

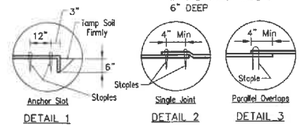
CONSTRUCTION EXIT PER WDNR TECHNICAL STANDARD 1057 2
NOT TO SCALE



MAINTENANCE NOTES:
1. WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED IN THE FABRIC DOES NOT FALL INTO THE STRUCTURE. MATERIAL THAT HAS FALLEN INTO THE INLET SHALL BE IMMEDIATELY REMOVED.
2. FILTER FABRIC SHALL HAVE THE FOLLOWING PROPERTIES:
A. GRAB STRENGTH: 100LBS. (ASTM D-3786)
B. MULLEN BURST: 200 PSI (ASTM D-3786)
C. EQUIVALENT OPENING SIZE: BETWEEN 50 AND 140 FOR SOILS WITH MORE THAN 15 PERCENT BY WEIGHT PASSING A NO. 200 SIEVE. BETWEEN 20 AND 50 FOR SOILS WITH LESS THAN 15 PERCENT BY WEIGHT PASSING A NO. 200 SIEVE.
D. WATER FLOW RATE OF 10 GAL/MIN./SQ.FT. AT 50 MM CONSTANT HEAD (ASTM D-4491)
E. ULTRA VIOLET RADIATION STABILITY OF 90% F. IF SUPPORT NETTING IS REQUIRED, NETTING SHALL BE AN INDUSTRIAL POLYPROPYLENE WITH A 3/4 INCH SPACING OR EQUIVALENT.
3. FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2"X4". THE REBAR, STEEL PIPE, OR WOOD SHALL BE INSTALLED IN THE REAR FLAP AND SHALL NOT BLOCK THE TOP HALF OF THE CURB FACE OPENING.

INLET PROTECTION PER WDNR TECHNICAL STANDARD 1060 3
NOT TO SCALE



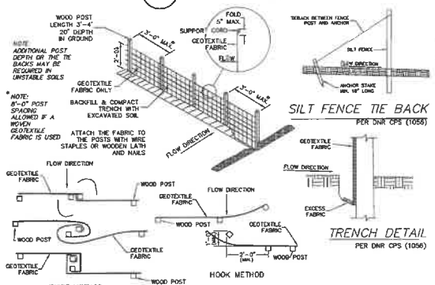


EROSION MATTING TYPICAL INSTALLATION PER WDNR TECHNICAL STANDARD 1053 FOR CLASS 1, TYPE B EROSION MAT INSTALL PER MANUFACTURERS SPECIFICATIONS 5
NOT TO SCALE



TYPICAL CROSS SECTION DIVERSION

CONSTRUCTION SITE DIVERSION PER WDNR TECHNICAL STANDARD 1066 7
NOT TO SCALE



SILT FENCE PER WDNR TECHNICAL STANDARD 1056 1
NOT TO SCALE

CONSTRUCTION SPECIFICATIONS

1. CONSTRUCTION SILT FENCE AROUND THE DISTURBED AREAS AS SHOWN ON EROSION CONTROL PLAN, TO PREVENT SEDIMENT FROM BEING WASHED INTO THE DRAINAGE SYSTEM
2. LOCATE POSTS PER DNR CPS (1056)
3. WHEN JOINTS ARE NECESSARY REFER, TO DNR CPS (1056)
4. FILTER FABRIC TO BE OF NYLON, POLYESTER, PROPYLENE OR ETHYLENE YARN WITH EXTRA STRENGTH – 50 LB/LIN. IN. (MIN.) – AND WITH A FLOW RATE OF AT LEAST 0.3 GAL./SQ. FT./MIN. FABRIC SHOULD CONTAIN ULTRAVIOLET RAY INHIBITORS AND STABILIZERS.
5. THE FILTER FABRIC SHALL BE ANCHORED BY SPREADING AT LEAST 8 INCHES OF FABRIC IN A 4" X 6" TRENCH
6. THE FILTER FABRIC SHALL BE STAPLED AND/OR NAILED TO THE UPSLOPE SIDE OF THE POSTS.
7. POST TO BE 1 1/8" X 1 1/8" HICKORY OR OAK, 3 FEET LONG, SPACED A MAXIMUM OF 3 FEET APART.
8. USE WIRE REINFORCEMENT IN UNSTABILIZED MINOR SWALES, DITCHES AND DIVERSIONS.
9. USE WSDOT APPROVED SILT FENCE

WINTER CONDITIONS

DURING WINTER CONSTRUCTION (NOVEMBER 1 TO MAY 1), CONTRACTOR TO PROVIDE TYPE B SOIL STABILIZER, POLYACRYLAMIDE (PAM) PER LATEST WDOT PAL (UPDATED 11/2/2017) ON ALL DISTURBED AREAS THAT ARE NOT TO BE DISTURBED BEYOND 7 DAYS. CONTRACTOR TO INSTALL PAM PER WDNR TECHNICAL STANDARD 1050 AND THE MANUFACTURERS SPECIFICATIONS.

PRESCRIPTIVE COMPLIANCE AREAS:

PER WDNR NR151.11 WIS. ADM. CODE
MAXIMUM PERIOD OF BARE SOIL EXPOSURE FOR SLOPES EXCEEDING 20%

SLOPE AREA DRAINS TO SEDIMENT BASIN OR SEDIMENT TRAP	MAXIMUM PERIOD OF BARE SOIL EXPOSURE (CALENDER DAYS)	
	LAND DISTURBANCE BETWEEN SEPT. 16TH AND MAY 1ST	LAND DISTURBANCE BETWEEN MAY 2ND AND SEPT. 15TH

GRAPHIC SCALE

50 0 25 50 100

1 inch = 50 ft

TEMPORARY STABILIZATION METHODS

TEMPORARY SEEDING:
DURING GROWING SEASON (MAY 2 – OCTOBER 31) TEMPORARY SEEDING (COVER CROP) TO BE USED FOR TEMPORARY STABILIZATION DURING SITE CONSTRUCTION

Species	Lbs/Acre	Percent Purity
Oats	131	98
Cereal Rye	131*	97
Winter Wheat	131*	95
Annual Ryegrass	80*	97

* For Seeding

LAND APPLICATION OF ADDITIVES:
DURING NONGROWING SEASON (NOVEMBER 1 – MAY 1) CONTRACTOR TO PROVIDE TYPE B SOIL STABILIZER DURING SITE CONSTRUCTION. STABILIZER TO BE POLYACRYLAMIDE (PAM) PER LATEST WDOT PAL (UPDATED 11/2/2017) – SEE WDNR TECHNICALSTANDARD 1050.

STABILIZATION SHOULD BE COMPLETED WITHIN 7 DAYS OF ESTABLISHING FINAL GRADE OR THAT WILL OTHERWISE EXIST FOR MORE THAN 14 DAYS.

CONSTRUCTION SCHEDULE

1. OBTAIN PLAN APPROVAL AND OTHER APPLICABLE PERMITS.
2. INSTALL CONSTRUCTION EXIT.
3. INSTALL SILT FENCE AND CONSTRUCTION FENCE
4. STRIP AND STOCK PILE TOP SOIL SURROUND TOP SOIL STOCK PILE WITH SILT FENCE AND TEMP. STABILIZE. LOCATION OF STOCK PILE TO BE DETERMINED BY CONTRACTOR.
5. INSTALL SEDIMENT BASINS (FUTURE BIORETENTION BASIN & WET POND) AND DIVERSION SWALE/BERM TO DIRECT FLOW TO BASIN AREAS:
A. THE AREA OF THE BIO-RETENTION BASIN WILL BE USED AS A SEDIMENTATION BASIN DURING CONSTRUCTION. DO NOT INSTALL DRAINTILE, AGGREGATE OR ENGINEERED SOIL AT THIS STAGE.
B. ROUGH GRADE BASIN AND INSTALL BASIN STANDPIPE AND 24" OUTLET PIPE AND RIP RAP
6. ROUGH GRADE SITE
7. UTILIZE DEWATERING BAG AS NECESSARY DURING EXCAVATION FOR BUILDING CONSTRUCTION. DIRECT RUNOFF FROM BAG TO EXISTING STORM WATER FACILITIES.
8. INSTALL PROPOSED UTILITIES.
9. INSTALL OUTLET PROTECTION
10. INSTALL BASE COURSE OF PAVEMENT.
11. INSTALL BIORETENTION BASIN: INSTALL AGGREGATE, 6" DRAIN TILE, ENGINEERED SOIL AND PLANTINGS. PROVIDE FINAL STABILIZATION OF BASIN SIDE SLOPES THAT INCLUDE SEEDING AND MATTING.
12. FINAL GRADE SLOPES AND TOPSOIL CRITICAL SLOPES; VEGETATE AND MAT ALL DISTURBED AREAS.
13. ALL EROSION CONTROL PRACTICES WILL BE INSPECTED WEEKLY AND AFTER RAINFALL. NEEDED REPAIRS WILL BE PERFORMED IMMEDIATELY.
14. AFTER SITE IS STABILIZED, REMOVE ALL TEMPORARY MEASURES AND VEGETATE THE DISTURBED AREAS.

MAINTENANCE PLAN

1. ALL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CHECKED FOR STABILITY AND OPERATION FOLLOWING EVERY ½" RUNOFF-PRODUCTION RAINFALL BUT IN NO CASE LESS THAN ONCE EVERY WEEK. ANY NEEDED REPAIRS WILL BE MADE IMMEDIATELY TO MAINTAIN ALL PRACTICES AS DESIGNED.
2. SEDIMENT WILL BE REMOVED FROM BEHIND THE SILT FENCE WHEN IT BECOMES ABOUT 0.5 FT. DEEP AT THE FENCE. THE SILT FENCE WILL BE REPAIRED AS NECESSARY TO MAINTAIN A BARRIER.
3. ALL SEEDED AREAS WILL BE WATERED, FERTILIZED, RESEEDED AS NECESSARY, AND MULCHED TO MAINTAIN A VIGOROUS, DENSE VEGETATIVE COVER.
4. ANY SEDIMENT REACHING A PUBLIC OR PRIVATE ROAD SHALL BE REMOVED BY STREET CLEANING BEFORE THE END OF EACH DAY.

CJE NO.: 2263R2
AUGUST 09, 2023
REV. 10/23/23
REV. 11/15/23

SITE EROSION CONTROL PLAN C4.0

Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

(February 22, 2024 and February 29, 2024)

OZAUKEE COUNTY NATURAL RESOURCES COMMITTEE

PUBLIC HEARING NOTICE

NOTICE IS HEREBY GIVEN that a public hearing will be held at a meeting of the Ozaukee County Natural Resources Committee on March 7, 2024, at 9:00 A.M. in Board Room A-200 of the Ozaukee County Administration Center, 121 W. Main St., Port Washington, to consider the following item(s):

1) Request by Mark Hertzfeldt, Design 2 Construct, as Agent for Project Sports LLC, as owner, to petition the Natural Resources Committee for a Zoning Classification change Shoreland-Wetland to Shoreland in the Shoreland District, per Section 7.1300 of the Ozaukee County Shoreland & Floodplain Zoning Ordinance, to rezone those delineated wetland areas to allow filing, grading, and excavating per the DNR approval letter dated September 29, 2023.

   Affecting the following described real estates: **Town of Cedarburg**, T10N-R21E in the NW ¼ and the NE ¼ of the NW ¼, Section 21 T10N-R21E, Lot 1 CSM #3997 Doc. 1050182.

   Tax Key #03-021-05-006.00, Property address: 8611 State Road 60, Cedarburg WI 53012

2) Request by Robert Bach, as Agent for G3 Development and QTIP Trust A as owners, to petition the Natural Resources Committee for a Zoning Classification change Shoreland-Wetland to Shoreland in the Shoreland District, per Section 7.1300 of the Ozaukee County Shoreland & Floodplain Zoning Ordinance, to reflect the results of a wetland delineation report and survey; and to allow the rezoning of the proposed road crossings through the wetland areas.

   Affecting the following described real estates: **Town of Grafton** –

   a) Proposed P2 Business Condos – Part of the NE ¼ of the NE ¼, Section 31 T10N-R22E, Lot 1 CSM #4120 Doc. 1105888; Tax Key #06-031-01-021.00; 391 Port Washington Road, Grafton WI 53024

   b) Proposed Winding Brook Subdivision – Part of the SE ¼ of the NE ¼, Section 31 T10N-22E, Lot 2 CSM #4120 Doc. 1105888, Tax Key #06-031-04-010.00; and Part of the NW ¼ and NE ¼ and SW ¼ and SE ¼ of the SE ¼ Section 31 T10N-R22E, Tax Key #06-031-13-002.00; 351 Port Washington Road, Grafton WI 53024.

Information regarding this item on file with the Ozaukee County Department of Land and Water Management, Room 223, Ozaukee County Administration Center, 121 W. Main St., Port Washington.

The public and all interested persons are invited to attend this meeting and comment as appropriate. Discussion and action by the Natural Resources Committee will follow the hearing.

Rob Holyoke, Chairman
Natural Resources Committee

Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

Katie Vogeler, Director
Edward J. Pfister, Sanitation & Zoning Coordinator
Geoff Schramm, Land & Water Coordinator
www.co.ozaukee.wi.us

LAND AND WATER MANAGEMENT

January 26, 2024

Due to an error in the Public Notice regarding the public hearing date in the previous Public Notice dated January 8, 2024, which stated February 1, 2024, and should have been February 8, 2024. Therefore, the Public Hearing for this notice has been rescheduled to March 7,2024 Public Hearing as noted below.

(February 22, 2024 and February 29, 2024)

OZAUKEE COUNTY NATURAL RESOURCES COMMITTEE

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   b) Proposed Winding Brook Subdivision – Part of the SE ¼ of the NE ¼, Section 31 T10N-22E, Lot 2 CSM #4120 Doc. 1105888, Tax Key #06-031-04-010.00; and Part of the NW ¼ and NE ¼ and SW ¼ and SE ¼ of the SE ¼ Section 31 T10N-R22E, Tax Key #06-031-13-002.00; 351 Port Washington Road, Grafton WI 53024.

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Rob Holyoke, Chairman
Natural Resources Committee

121 W. Main Street, P.O. Box 994, Port Washington, WI 53074
Phone: (262) 284-8313 Fax: (262) 284-8367

Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

Katie Vogeler,
Edward J. Pfister, Sanitation & Zoning Coordinator
Geoff Schramm, Land & Water Coordinator
www.co.ozaukee.wi.us

OZAUKEE COUNTY
LAND AND WATER MANAGEMENT DEPARTMENT

PETITION TO CHANGE ZONING CLASSIFICATION

TO THE OZAUKEE COUNTY NATURAL RESOURCES COMMITTEE:

Ladies & Gentleman:

The undersigned hereby petitions the Ozaukee County Natural Resource Committee to change the zoning classification of the folllowing land in Ozaukee County, Wisconsin from:

Shoreland Wetland	to	Shoreland
(Existing Zoning District)		(Proposed Zoning District)

Owner: Project sports LLC	**Agent:** Design 2 Construct - Mark Hertzfeldt
Telephone Number: 262-573-9196	**Telephone Number:** 262-677-9933
E-Mail Address: steve@trainap.net	**E-Mail Address:** mhertzfeldt@design2construct.com
Mailing Address: 9636 N. Crestwood Ct.	**Mailing Address:** N173W21010 Northwest Passage.
City, State, Zip: Mequon, WI 53092	**City, State, Zip:** Jackson, WI 53037
Project Address (If different than mailing address): 8611 STH 60, Town of Cedarburg	

Tax Key Number: 030210500600

Legal Description (¼/¼, Section, Township-Range, Municipality): See provided existing conditions survey NW, NE of NW, S21, T10, R21 Town of Cedarburg

Lot Number: 1	**Block Number:**	**Subdivision Name or CSM #** 3997 Doc. 1050182

Additional Information: Required due to small wetland infill

NOTICE TO PETITIONERS:

The procedure to rezone / amend the Ozaukee County Shoreland and Floodplain Zoning Ordinance must comply with the statue and administrative rule provisions described in Sections 7.1300-7.1305. The criteria that the board must consider to reach a decision on the petition are stated in the ordinance [Sections 7.1300 (comprehensive), 7.1302 (floodplain), and 7.1305 (shoreland-wetland)].

This petition (original only) and any support documents must be filed with the Ozaukee County Land & Water Management Department one month in advance of the applicable Natural Resources Committee meeing date. Required support documents include:

(1) A survey clearly showing the boundaries (wetland / floodplain) of any area to be rezoned, and
(2) A written statement that addresses the criteria in ordinance Sections 7.1300-7.1305 as they relate to the proposed rezoning, if applicacble (see descriptions on back page). **Application materials shall be limited to 8.50 x 11.50, 8.50 x 14.00, or 11.00 x 17.00 sheets.**
Petitions will be considered at the next available committee meeting.

(continue on page 2)

121 W. Main Street, P. O. Box 994, Port Washington, WI 53074
Phone: (262) 284-8313 Fax: (262) 284-8367

Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

NOTICE TO PETITIONERS (continued)

Notice of a public hearing on the petition will be published as a Class II notice under CH. 985, Wisconsin Statutes. The applicant will be notified of the date, time, and location of the hearing. It is advisable for the applicant or an agent for the applicant to attend the hearing.

A rezoning application fee of $330.00, **payable to Ozaukee County**, is due at the time the petition is filed.

Comprehensive Rezoning

Section 7.1300 - Applies to all areas within the shoreland zoning jurisdictional area except floodplain and wetland areas. Rezoning of floodplain or wetland areas are regulated under Sections 7.1302 & 7.1305 (see below).

Floodplain Rezoning

Section 7.1302 - Floodplain management regulations may only be removed by rezoning the area to remove it from the floodplain provided the property:

(a) is filled to an elevation 2 feet above the regional flood elevation and is contiguous to lands outside the floodplain, or
(b) was above the regional flood elevation at the time of the effective date of the floodplain zoning map (mapped floodplain error).

Shoreland-Wetland Rezoning

Section 7.1305 - A wetland, or portion thereof, in the shoreland-wetland district shall not be rezoned if the proposed rezoning may result in a significant adverse impact upon any of the following:

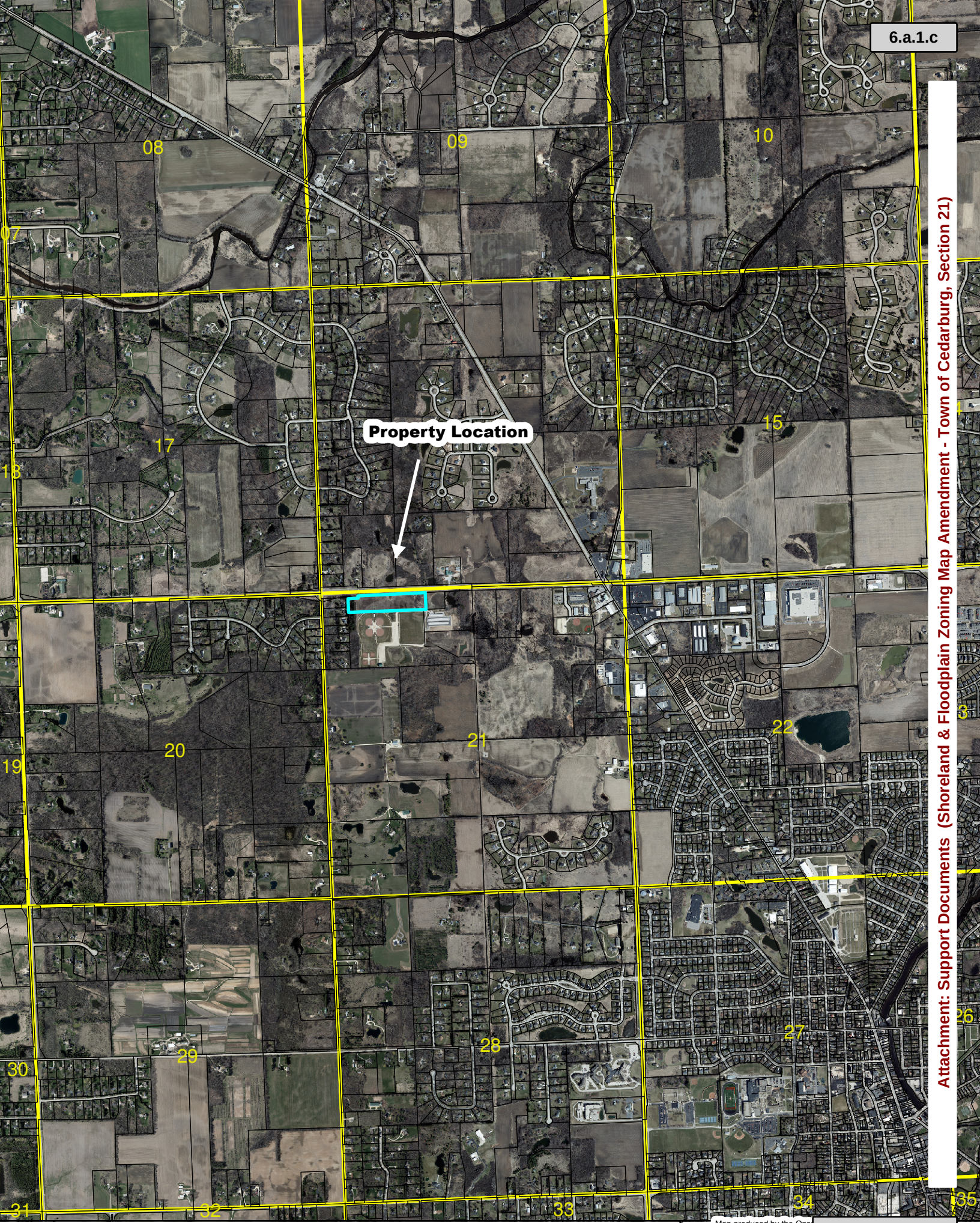
1. Storm and flood water storage capacity;
2. Preservation of dry season stream flow, the discharge of groundwater to a wetland, the recharge of groundwater from a wetland to another area, or the flow of groundwater through a wetland;
3. Filtering or storage of sediments, nutrients, heavy metals, or organic compounds that would otherwise drain into navigable waters;
4. Shoreline protection against soil erosion;
5. Fish spawning, breeding, nursery or feeding grounds;
6. Wildlife habitat;
7. Areas of special recreational, scenic, or scientific interest, including scarce wetland types.

Section 7.1305(C) - If the Wisconsin Department of Natural Resources notifies the natural resources committee or county board that a proposed text or map amendment to the shoreland-wetland provisions of this ordinance may have a significant adverse impact upon any of the criteria listed above, that amendment, if approved by the county board, shall contain the following provision:

"This amendment shall not take effect until more than 30 days have elapsed after written notice of the county board approval of this amendment is mailed to the DNR. During that 30-day period the department may notify the county board that it will adopt a superseding shoreland ordinance for the county under Section 59.692 (6), Wis. Stats. If the department does so notify the county board, the effect of this amendment shall be stayed until the Section 59.692 (6) adoption procedure is completed or otherwise terminated."

Signature (Owner/Agent): (AGENT)	Date: 12/07/2023	Petition Fee: $330
		Petition Date:
(For Department use only)		Check / Receipt Number: 117462 / 17484
Date of NR Committee Approval:	Date of County Board Approval:	
Comments:		

Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)



Legend

0 500 1,000 2,000 Feet

2022 AERIAL

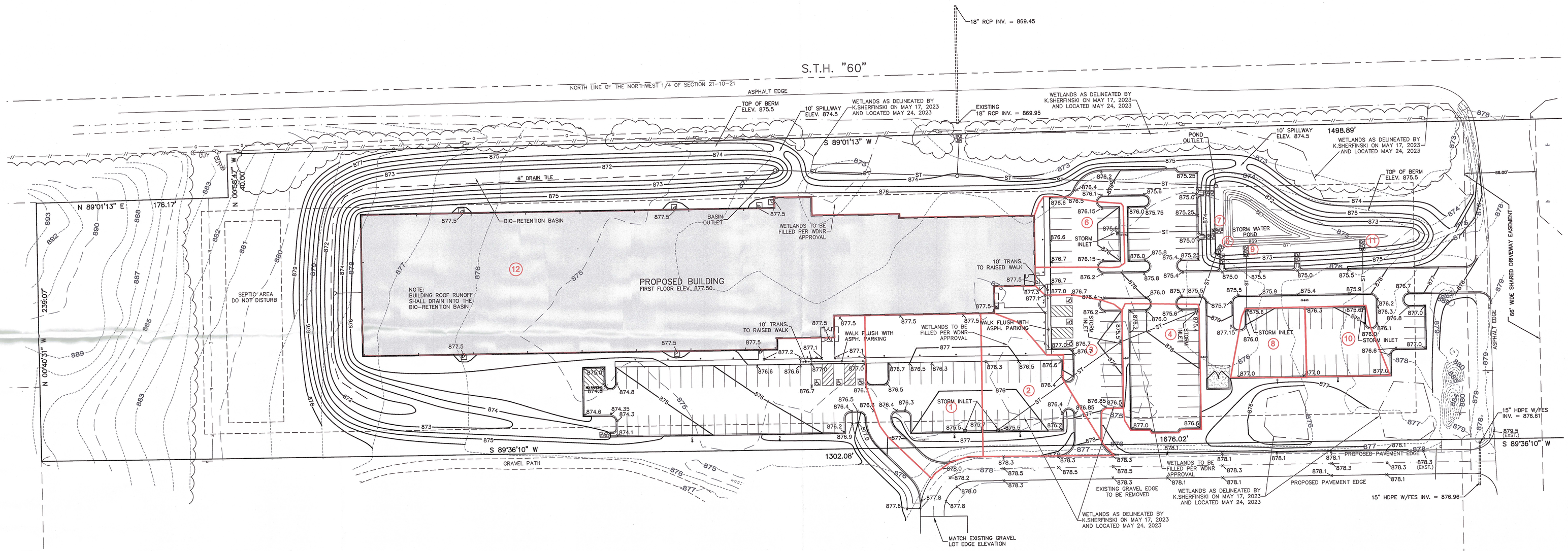
Map produced by the Ozaukee County Land Water Management Dept.
The information on the aer
It is based on the best available information at the time of its printing.

CJ engineering
civil design and consulting
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Milwaukee, WI 53222
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LAND & WATER
MANAGEMENT DEPT

ATHLETE PERFORMANCE DEVELOPMENT

8611 HWY 60 CEDARBURG, WISCONSIN



STORM AREA	1			2			3			4		
NAME	INLET			INLET			INLET			INLET		
TYPE	SF	ACRE	GPM	SF	ACRE	GPM	SF	ACRE	GPM	SF	ACRE	GPM
PAVED	7189	0.165	221	6394	0.147	197	6324	0.145	195	7400	0.170	228
BUILDING		0.000	0		0.000	0		0.000	0		0.000	0
OPEN	6297	0.145	61	3591	0.082	35	1884	0.043	18	819	0.019	8
TOTAL	13486	0.310	**282**	9985	0.229	**231**	8208	0.188	**213**	8219	0.189	**236**
CUMULATIVE						513			726			961

STORM AREA	6		
NAME	INLET		
TYPE	SF	ACRE	GPM
PAVED	4164	0.096	128
BUILDING		0.000	0
OPEN	865	0.020	8
TOTAL	5029	0.115	**136**

STORM AREA	8		
NAME	INLET		
TYPE	SF	ACRE	GPM
PAVED	3988	0.092	123
BUILDING		0.000	0
OPEN	77	0.002	1
TOTAL	4065	0.093	**123**

STORM AREA	10		
NAME	INLET		
TYPE	SF	ACRE	GPM
PAVED	4104	0.094	126
BUILDING		0.000	0
OPEN	60	0.001	1
TOTAL	4164	0.096	**127**

STORM AREA	12		
NAME	BUILDING		
TYPE	SF	ACRE	GPM
PAVED	0	0.000	0
BUILDING	72293	1.660	2780
OPEN	0	0.000	0
TOTAL	72293	1.660	**2780**

www.DiggersHotline.com
DIGGERS HOTLINE
DIAL 811 OR (800) 242-8511

LEGEND

96	EXISTING CONTOUR
96	PROPOSED CONTOUR
x 96.5	PROPOSED ELEVATION
ST	PROPOSED STORM SEWER

CJE NO.: 2263R2
AUGUST 09, 2023
REV. 10/23/23
REV. 11/15/23

GRAPHIC SCALE
0 20 40 80
1 inch = 40 ft

STORM SEWER AREAS

CJ engineering
civil design and consulting

STORM WATER MANAGEMENT PLAN

FOR

Athlete Performance Development

8611 HWY 60
Cedarburg, Wisconsin

August 9, 2023
Revised: November 15, 2023



PREPARED BY:

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Milwaukee, WI 53222
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CJE Job No.: 2263R1

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Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

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2.) Town & WiDNR Requirements

3.) Developed Site Area & Cover

4.) 24-Hour Rainfall Values

5.) Method of Analysis

6.) Drainage Summary

7.) Water Quality

8.) Conclusion

9.) Appendix

A. Existing Conditions

i. USDA NRCS Ozaukee County Soil Resource Report & Soil Analysis report by Professional Service Industries, Inc.

ii. HydoCAD / TR-55 calculations

iii. SWMP – Existing Conditions plan

B. Proposed Conditions

i. SWMP – Proposed Conditions plan

ii. HydoCAD / TR-55 calculations

iii. WinSLAMM Water Quality Calculations

Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

Introduction:

The proposed development will consist of a 72,293 s.f. proposed building with proposed surface parking and loading areas at the Cedarburg Sports site located on Highway 60 in the Town of Cedarburg. In order to meet the Town of Cedarburg and DNR storm water requirements, runoff from the proposed development will drain into 2 storm water basins that are to be located on the west end and in northeast of the property. The basin on the west end of the property will function as a bio retention basin and receive drainage from the roof, the west portion of the parking area and the adjacent open areas. The northeast basin will be a wet detention basin with a permanent water surface. This basin will receive runoff from the proposed parking area via a storm sewer conveyance system as well as sheet drainage via paved flumes. The two new basins will be installed with multi stage outlet structure which will then route the water to the existing drainage ditch along highway 60. Said discharge location will be located in the vicinity of an existing 18" drainage culvert and will allow for the drainage pattern to be maintained from existing conditions. The proposed basins have been designed to meet WDNR and the Town of Cedarburg storm water requirements so that post development storm water runoff is limited to the existing conditions runoff values during the 2-year and 10-year design storm events. The proposed storm water basins are designed to provide water quality, removing over 80% of total suspended sediment prior to discharge. The existing onsite solid are silt loam and demonstrate poor infiltrative soil properties such that this project is exempt for the infiltration requirements of NR 151.

Allowable runoff per the Town of Cedarburg & WDNR NR 151 requirements:

Per The Town of Cedarburg Ordinance Sec. 2.02(B)(1)
By design, BMPs shall be employed to maintain or reduce the peak runoff discharge rates, to the maximum extent practicable, as compared to pre-development conditions for the 2- through and 10 year – 24 hour design storm applicable to the development site

Per NR 151.12(5)b(1):
By design, BMPs shall be employed to maintain or reduce the peak runoff discharge rates, to the maximum extent practicable, as compared to pre-development conditions for the 2-year, 24-hour design storm applicable to the post-construction site.

Developed Site: (See the Proposed Conditions Plan: Appendix "B").

Soil Types:	Silt Loam (See Soil Resource report)
Curve Numbers:	Impervious Surface, CN = 98 Grass in Good Condition: H.S.G. "D", CN = 80 Woods in Good Condition: H.S.G. "D", CN =77

Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

24-Hour Rainfall Values:

1-Year Design Storm: 2.30"
2-Year Design Storm: 2.61"
10-Year Design Storm: 3.77"
100-Year Design Storm: 6.38"

All rainfall data is for 24-hour duration per the NOAA Atlas 14 rainfall values and the MSE3 distribution for Ozaukee County as recommended by WI DNR and SEWRPC

Method of Analysis:

The storm water runoff quantity was calculated using the methods outlines in TR-55 ("Urban Hydrology for Small Watersheds" by the U.S. Department of Agriculture's Soil Conservation Services). Calculations were performed with the "HydroCAD 7.10" computer software. Water quality calculations were done using SLAMM for Windows "Source Loading and Management Model" version 9.2.3.

Drainage Summary: (See Calculations in Appendix)

Area	1 Year Storm	2 Year Storm	10 Year Storm	100 Year Storm
Existing Conditions				
Existing Subcatchment 1:	5.57 cfs	7.36 cfs	14.83 cfs	33.67 cfs
Total Runoff	**5.57 cfs**	**7.36 cfs**	**14.83 cfs**	**33.67 cfs**
Proposed Conditions				
Subcatchment 1 (Into Pond 1)	4.81cfs	5.72 cfs	9.14 cfs	16.76 cfs
Pond 1 (out)	0.37 cfs	0.44 cfs	0.71 cfs	6.45 cfs
Subcatchment 2: To Bio-Retention Basin	6.23 cfs	7.65 cfs	13.14 cfs	25.78 cfs
Pond 2: Bio-Retention Basin (out)	0.38 cfs	0.41 cfs	0.79 cfs	8.01 cfs
Subcatchment 3: Undetained	1.70 cfs	2.20 cfs	4.24 cfs	9.20 cfs
Total Runoff (Proposed Reach)	**1.93 cfs**	**2.45 cfs**	**4.92 cfs**	**13.21 cfs**
Allowable Runoff		**7.36 cfs**	**14.83 cfs**	

Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

Water Quality Calculations

Per NR 151.12(5)(a)1. For new development, by design, reduce to the maximum extent practicable, the total suspended solids load by 80%, based on an average annual rainfall, as compared to no runoff management controls. No person shall be required to exceed an 80% total suspended solids reduction to meet the requirements. The storm water basins will remove 80% of the total suspended solids (TSS) prior to discharge off site, as quantified using the WinSLAMM program (See appendix for calculation results and input data). The TSS out is as follows:

Before Outfall Controls	After Outfall Controls	Percent Removed
1782 lbs	353.7 lbs	80.15%

Infiltration Requirements

Per NR 151.12(5)(c)6.a. This project is exempt from infiltration requirement as the onsite soils have less than 0.6 inches/hour infiltration rates.

Conclusion:

The proposed peak runoff rates under post-development conditions do not exceed the Town of Cedarburg or NR151 peak runoff rate limits for the 2 and 10 -year rainfall events. The proposed storm water basins will also provide water quality prior to discharge to the existing discharge location, removing more than 80% TSS from the runoff. The proposed development meets and exceeds the storm water management requirements for the Town of Cedarburg and NR 151. Electronic copies of the HyrdoCad or WinSLAMM files will be provided to the Town for review if requested.

Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

APPENDIX

Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

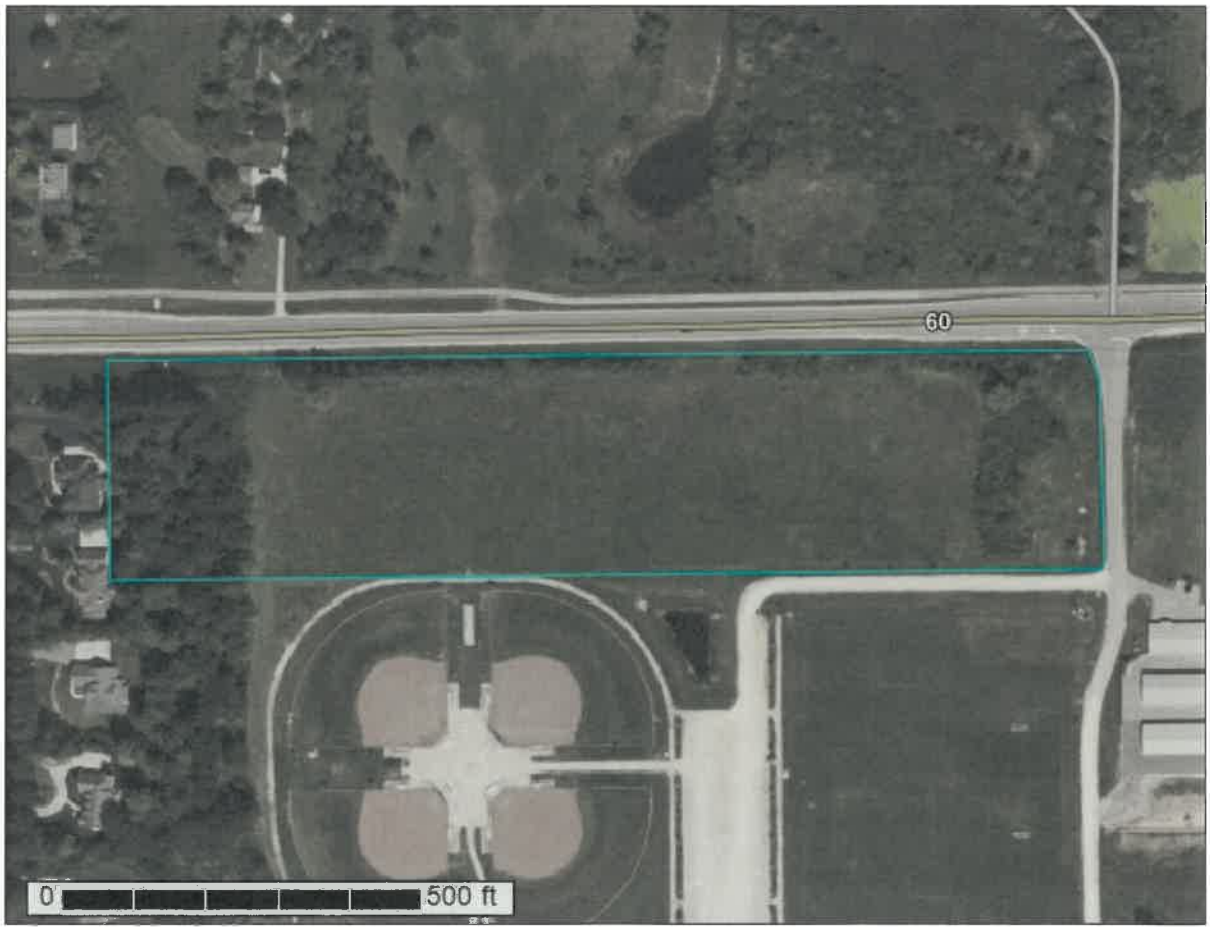
United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Ozaukee County, Wisconsin



August 8, 2023

Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

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Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

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Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)



6

Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Ozaukee County, Wisconsin
Survey Area Data: Version 19, Sep 7, 2022

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Aug 4, 2022—Sep 13, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
HmD2	Hochheim loam, 12 to 20 percent slopes, eroded	1.0	10.0%
MgA	Martinton silt loam, 1 to 3 percent slopes	7.2	73.5%
OuB2	Ozaukee silt loam, high carbonate substratum, 2 to 6 percent slopes, eroded	0.4	4.3%
ZuB2	Zurich silt loam, 2 to 6 percent slopes, eroded	1.2	12.1%
Totals for Area of Interest		**9.8**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

Ozaukee County, Wisconsin

HmD2—Hochheim loam, 12 to 20 percent slopes, eroded

Map Unit Setting

National map unit symbol: 2t72w
Elevation: 820 to 1,330 feet
Mean annual precipitation: 28 to 36 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 130 to 175 days
Farmland classification: Not prime farmland

Map Unit Composition

Hochheim, eroded, and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Hochheim, Eroded

Setting

Landform: Drumlins
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Loamy till and/or calcareous, dense loamy till

Typical profile

Ap - 0 to 6 inches: loam
Bt - 6 to 16 inches: clay loam
C - 16 to 30 inches: gravelly loam
Cd - 30 to 79 inches: gravelly loam

Properties and qualities

Slope: 12 to 20 percent
Depth to restrictive feature: 20 to 36 inches to densic material
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 60 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 4.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: D
Ecological site: F095XB007WI - Loamy Upland with Carbonates
Forage suitability group: Mod AWC, adequately drained with limitations (G095BY006WI)
Other vegetative classification: Mod AWC, adequately drained with limitations (G095BY006WI)

Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

Hydric soil rating: No

Minor Components

Theresa

Percent of map unit: 10 percent
Landform: Drumlins
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Crest
Down-slope shape: Convex
Across-slope shape: Convex
Ecological site: F095XB007WI - Loamy Upland with Carbonates
Hydric soil rating: No

Hochheim

Percent of map unit: 5 percent
Landform: Drumlins
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: F095XB006WI - Shallow Upland
Hydric soil rating: No

MgA—Martinton silt loam, 1 to 3 percent slopes

Map Unit Setting

National map unit symbol: g98p
Elevation: 700 to 1,000 feet
Mean annual precipitation: 32 to 35 inches
Mean annual air temperature: 39 to 54 degrees F
Frost-free period: 150 to 175 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Martinton and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Martinton

Setting

Landform: Glacial lakes (relict), drainageways
Landform position (two-dimensional): Footslope, toeslope
Landform position (three-dimensional): Base slope, dip
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Fine-silty loess over silty and clayey lacustrine deposits

Typical profile

Ap - 0 to 8 inches: silt loam

Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

Btg - 8 to 24 inches: silty clay loam
Cg - 24 to 60 inches: stratified sandy loam to silty clay

Properties and qualities

Slope: 1 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.14 to 0.57 in/hr)
Depth to water table: About 0 to 24 inches
Frequency of flooding: None
Frequency of ponding: Occasional
Calcium carbonate, maximum content: 30 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 10.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: C/D
Ecological site: F095XB005WI - Moist Loamy or Clayey Lowland
Forage suitability group: High AWC, high water table (G095BY007WI)
Other vegetative classification: High AWC, high water table (G095BY007WI)
Hydric soil rating: No

Minor Components

Poygan

Percent of map unit: 10 percent
Landform: Depressions
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Dip
Down-slope shape: Concave
Across-slope shape: Concave
Ecological site: F095XB002WI - Wet Floodplain
Hydric soil rating: Yes

OuB2—Ozaukee silt loam, high carbonate substratum, 2 to 6 percent slopes, eroded

Map Unit Setting

National map unit symbol: 2sn0c
Elevation: 650 to 1,010 feet
Mean annual precipitation: 31 to 39 inches
Mean annual air temperature: 44 to 49 degrees F
Frost-free period: 125 to 185 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Ozaukee, high carbonate substratum, eroded, and similar soils: 96 percent

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Minor components: 4 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Ozaukee, High Carbonate Substratum, Eroded

Setting

Landform: Ground moraines, end moraines
Landform position (two-dimensional): Summit, shoulder
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Thin mantle of loess over silty and clayey till

Typical profile

Ap - 0 to 7 inches: silt loam
Bt1 - 7 to 11 inches: silty clay loam
2Bt2 - 11 to 22 inches: silty clay
2Bt3 - 22 to 27 inches: silty clay loam
2Cd - 27 to 60 inches: silty clay loam

Properties and qualities

Slope: 2 to 6 percent
Depth to restrictive feature: 22 to 40 inches to densic material
Drainage class: Moderately well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 24 to 42 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 60 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 4.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: C
Ecological site: F110XY012IL - Moist Glacial Drift Upland Forest
Forage suitability group: Mod AWC, adequately drained with limitations (G095BY006WI)
Other vegetative classification: Mod AWC, adequately drained with limitations (G095BY006WI)
Hydric soil rating: No

Minor Components

Ashkum, drained

Percent of map unit: 2 percent
Landform: End moraines, ground moraines
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Base slope
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: R110XY024IL - Ponded Depressional Sedge Meadow
Hydric soil rating: Yes

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Urban land

Percent of map unit: 1 percent
Landform: Ground moraines
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Orthents, clayey

Percent of map unit: 1 percent
Landform: Ground moraines
Landform position (two-dimensional): Summit, backslope
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Convex
Ecological site: F095XB010WI - Loamy and Clayey Upland
Hydric soil rating: No

ZuB2—Zurich silt loam, 2 to 6 percent slopes, eroded

Map Unit Setting

National map unit symbol: 2wsrt
Elevation: 660 to 1,050 feet
Mean annual precipitation: 31 to 33 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 124 to 190 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Zurich, eroded, and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Zurich, Eroded

Setting

Landform: Lakebeds (relict)
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Loess over sandy and silty lacustrine deposits

Typical profile

Ap - 0 to 5 inches: silt loam
BE - 5 to 11 inches: silt loam
Bt - 11 to 23 inches: silty clay loam
2C - 23 to 79 inches: stratified very fine sand to silt loam

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Properties and qualities

Slope: 2 to 6 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: About 20 to 40 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 30 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 11.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: B/D
Ecological site: F095XB007WI - Loamy Upland with Carbonates
Forage suitability group: High AWC, adequately drained (G095BY008WI)
Other vegetative classification: High AWC, adequately drained (G095BY008WI)
Hydric soil rating: No

Minor Components

Fox

Percent of map unit: 5 percent
Landform: Lakebeds (relict)
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: F095XB010WI - Loamy and Clayey Upland
Other vegetative classification: Mod AWC, adequately drained (G095BY005WI)
Hydric soil rating: No

Darroch

Percent of map unit: 5 percent
Landform: Lakebeds (relict)
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Base slope
Down-slope shape: Concave
Across-slope shape: Linear
Ecological site: F095XB005WI - Moist Loamy or Clayey Lowland
Hydric soil rating: No

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Professional Service Industries, Inc.
821 Corporate Court, Waukesha, WI 53189
Phone: (262) 521-2125
Fax: (262) 521-2471

September 12, 2023

Design 2 Construct Development Corporation
N173 W21010 Northwest Passage
Jackson, WI 53037

Attn: Mr. Mark Hertzfeldt, AIA
Architect

Re: Subsurface Exploration and Foundation Evaluation
Proposed Cedarburg Athletic Performance Facility
8611 STH 60
Cedarburg, WI
PSI Project No. 00523262

Dear Mr. Hertzfeldt:

The subsurface exploration and foundation evaluation for the above referenced project has been completed. An electronic copy of the report is being provided via email. Hard copies can be issued upon request. After you have had the opportunity of reading the report, please call at any time with any questions or comments you may have. Professional Service Industries, Inc. (PSI) appreciates the opportunity to be of service on this project and looks forward to continuing as your geotechnical consultant during the design and construction phases, as well as your upcoming projects.

Sincerely,

PROFESSIONAL SERVICE INDUSTRIES, INC.

Emily M. Broback
Project Manager

James M. Becco, P.E.
Regional Vice President

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PROFESSIONAL ENGINEER

The above Professional Engineering Seal and signature is an electronic reproduction of the original seal and signature. Original hard copies can be provided upon request. This electronic reproduction shall not be construed as an original or certified document.

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SUBSURFACE EXPLORATION AND FOUNDATION EVALUATION

For the:

Proposed Cedarburg Athletic Performance Facility
8611 STH 60
Cedarburg, WI

Prepared for

Design 2 Construct Development Corporation
N173 W21010 Northwest Passage
Jackson, WI 53037

Prepared by

Professional Service Industries, Inc.
821 Corporate Court
Waukesha, Wisconsin 53189

September 12, 2023

PSI Project No. 00523262

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Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

INTRODUCTION

General

This report presents the results of the subsurface exploration and foundation evaluation for the proposed Cedarburg Athletic Performance Facility in Cedarburg, Wisconsin. The work was performed for Design 2 Construct Development Corporation, at the request of Mr. Mark Hertzfeldt.

Purpose

The purpose of this study was to evaluate the subsurface conditions at specific boring locations on the site, and to establish parameters for use by the design engineers and architects in preparing the foundation, floor slab, pavement, and stormwater basin designs for the proposed project.

Scope

The scope of services included site reconnaissance, the subsurface exploration, a determination of soil characteristics by field and laboratory testing, and an evaluation of the data obtained. The scope of the field exploration program, including the number, depth, and location of the borings, was determined by PSI in consultation with the client.

Authorization

The description of services and authorization to perform this subsurface exploration and foundation evaluation were in the form of a signed acceptance copy of PSI Proposal No. 403675, dated August 9, 2023. The general conditions for the performance of the work were referenced in the proposal. This report has been prepared on behalf of, and exclusively for the use of the Design 2 Construct Development Corporation. The information contained in this report may not be relied upon by any other parties without the express written consent of PSI, and acceptance by such parties of PSI's General Conditions.

SITE AND PROJECT DESCRIPTION

Site Features

The project site is located on the south side of STH 60, at the address of 8611 STH 60, approximately 1,800 feet east of Horns Corners Road, in Cedarburg, Wisconsin. At the time of the exploration, the site was a vacant field with trees along the north and east edges of the project site. The surrounding properties consist of the Korb Sports Complex to the south and east, residential properties to the west, and STH 60 and agricultural fields to the north. Aerial photos reviewed on Google Earth indicate that the site has

remained relatively similar in appearance to that described herein since at least March of 2018 when construction of the Korb Sports Complex to the south and east began. Prior to March of 2018, the entire site had been utilized as an agricultural field since at least March of 2000.

The topography of the general area slopes down to the northeast, with an elevation difference between the borings of about 5.5 feet (EL. 879.5 to EL. 874).

Project Description

Based on the information provided by the client, it is understood that the project will consist of the construction of a single story, slab-on-grade building that is planned to be approximately 80,000 square feet in size. No below grade levels are planned. The western portion of the building is understood to be a high bay sports court. Structural loads were not provided. For the purpose of this report, it is estimated that maximum column and wall loads will not exceed 100 kips and 10 kips per lineal foot respectively. When structural loads are determined, PSI must be informed so that any necessary re-evaluation or revisions to this report can be made.

According to information provided by the client, the planned finished first floor elevation is EL. 877.5. On the basis of the existing elevations at the borings, fills of about 2.5 to 3.5 feet are estimated to be required within the majority of the site, and cuts of about 2.5 feet are estimated to be required towards the northwest section of the site.

A stormwater management basin is planned at the northeast corner and west/northwest portions of the site. The planned bottom elevations are EL. 872 and EL. 867 for the west/northwest and northeast basins, respectively. The type and other design details have not been provided.

The planned pavements are understood to consist of flexible asphalt (HMAC) pavement or concrete. Traffic loading was not provided but is estimated to consist of light passenger vehicles, occasional delivery trucks, busses, garbage trucks, and snow removal equipment.

When information becomes available, or if any of the information discussed herein differs from current plans or changes as design progresses, PSI must be informed so that any necessary revisions to this report can be made.

EXPLORATION AND LABORATORY PROCEDURES

Scope Summary

The field and laboratory data utilized in the evaluation of the subsurface materials was obtained by drilling exploratory test borings, securing soil samples by the split-spoon sampling method, and subjecting the samples to laboratory testing.

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Field Exploration

Twelve (12) soil test borings were performed for this project. B-1 through B-8 were performed within the proposed building area and drilled to a planned depth of about 20 feet below existing grade. B-9 and B-10 were performed within the planned pavement areas and drilled to a planned depth of about 5 feet below existing grade. B-11 and B-12 were performed within the planned northeast stormwater management basin and were drilled to a planned depth of about 15 feet below existing grade. B-1 and B-2 were drilled for the purpose of both the proposed building and the west/northwest stormwater management basin. B-12 was offset 80 feet southwest from its planned location due to dense trees and brush. The number, depth, and approximate location of the soil borings was determined by PSI in consultation with the client. The borings were located in the field by PSI utilizing a handheld consumer grade GPS device. The locations are estimated to be accurate to within several feet. The surface elevations shown on the logs were estimated by interpolation of a 1-foot contour map of the property, provided by the client. The elevations are estimated to be accurate to within about 1 foot.

The soil test borings were performed with an ATV mounted rotary drilling rig utilizing continuous flight hollow stem augers to advance the holes. Representative samples were obtained by the Standard Penetration Test (SPT) method using split-spoon sampling procedures in general accordance with ASTM D-1586 procedures. Samples were generally collected at 2.5-foot intervals to 10 feet, and then at 5-foot intervals thereafter to the end of the borings. The standard penetration value (N) is defined as the number of blows of a 140-pound hammer, falling thirty (30) inches, required to advance the split-spoon sampler one (1) foot into the soil. The sampler is lowered to the bottom of the drill hole and the number of blows recorded for each of the three (3) successive increments of six (6) inches penetration. The "N" value is obtained by adding the second and third incremental numbers. The SPT provides a means of estimating the relative density of granular soils and comparative consistency of cohesive soils, thereby providing a method of evaluating the relative strength and compressibility characteristics of the subsoils.

The SPT soil samples were transferred into clean glass jars immediately after retrieval and returned to the laboratory upon completion of the field operations. Samples will be discarded unless other instructions are received. The samples from B-1 through B-15 were visually classified in general accordance with the Unified Soil Classification System (ASTM D- 2488-75). The samples collected within the stormwater management area were visually classified by a certified soil tester in general accordance with USDA National Resources Conservation Service textural soil classification procedures. A description of the subsurface conditions encountered at each boring location is shown on the enclosed Soil Boring Logs. After completion of the borings, the auger holes were backfilled to the ground surface with bentonite chips.

A copy of the Soil Boring Logs, Boring Location Plan (Figure 1), and Soil Evaluation - Storms Forms are enclosed in the Appendix. The soil stratification shown on the logs represents the approximate soil conditions in the actual boring locations at the time of the

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exploration. The terms and symbols used on the logs are described in the General Notes found in the Appendix.

Laboratory Physical Testing

Soil samples obtained from the exploration were visually classified in the laboratory, and subjected to testing, which included moisture content determinations. The laboratory testing was performed in general accordance with the respective ASTM methods, as applicable, and the results are shown on the boring logs in the Appendix.

DESCRIPTION OF SUBSURFACE CONDITIONS

General

A description of the subsurface conditions encountered at the test boring locations is shown on the Soil Boring Logs. The lines of demarcation shown on the logs represent approximate boundaries between the various soil classifications. It must be recognized that the soil descriptions are considered representative for the specific test hole locations, but that variations may occur between and beyond the sampling intervals and boring locations. Soil depths, topsoil and layer thicknesses, and demarcation lines utilized for preconstruction planning should not be expected to yield exact and final quantities. A summary of the major soil profile components is described in the following paragraphs.

Soil Conditions

USCS Classification – Soil Borings B-1 through B-8

The surface materials at the borings consisted of about 9 to 13 inches of topsoil comprised of dark brown to black lean clay, silty clay, sandy clay, silt, silty sand, and sand and gravel. Below the topsoil, natural granular and cohesive soils were encountered which generally consisted of gray to brown lean clay, silty clay, sandy clay, silt, silty sand, and sand and gravel to the termination depths of about 5 to 20 feet (EL. 879.5 to EL. 870) below existing grade. The natural cohesive soils were in a stiff to hard condition with unconfined compressive strengths ranging from 1.20 to 6.0 tons per square foot (tsf). The natural granular soils were in a loose to very dense condition with N-values ranging from about 5 to 51 blows per foot (bpf).

USDA Classification - Stormwater Management Area Borings B-1, B-2, B-11, and B-12

The soils encountered within the borings performed at the planned stormwater management areas generally consisted of 10 to 12 inches of topsoil comprised of dark brown to black silt loam. The topsoil was underlain by light brown to dark gray silt loam, very fine sandy loam, silty clay loam, loam, loamy sand, and sandy loam to the boring termination depths of 15 to 20 feet (EL. 832 to EL. 877.5) below existing grade.

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The foregoing discussion of soil conditions on this site represents a generalized soil profile as determined at the test boring locations. A more detailed description and supporting data for each test location can be found on the individual soil boring logs.

Groundwater Observations

Groundwater observations were made during the drilling operations, and in the open boreholes upon completion of drilling and removal of the augers. Groundwater was encountered within B-2, B-3, B-5, B-6, and B-12 during auger advancement at depths of about 8 to 17 feet (EL. 858.5 to EL. 867.5) below existing grade. No water was observed upon completion of drilling and removal of the augers. No groundwater was encountered within the remaining borings during auger advancement or upon completion of drilling and removal of the augers.

It must be recognized that groundwater levels fluctuate with time due to variations in seasonal precipitation, lateral drainage conditions, and soil permeability characteristics. Longer term monitoring would be required to further evaluate groundwater levels on this site.

EVALUATION AND RECOMMENDATIONS

General Development Considerations

In view of the subsurface conditions encountered in the test borings, together with the structural loading criteria and development grades anticipated, conventional spread footings can be used for support of the proposed structure.

Some difficulty with groundwater control, and with subgrade and excavation instability may be experienced during construction.

The floor slab and pavements can be supported by the existing soils following proper preparation, which will include the removal of soft, unstable or unsuitable zones. A discussion of the foundation design parameters, as well as the support conditions for the floor slab and pavement areas, is included in the following sections.

Site Preparation

The presence of topsoil and vegetation in the subgrade can adversely affect the serviceability of structural fills, foundations, floor slabs, pavements, and other structures placed upon them. Approximately 9 to 13 inches of topsoil were present on the surface of the site at the boring locations. However, some variation should be expected, especially within former/existing agricultural fields, where tilling and other related operations can result in thicker pockets of topsoil, or topsoil having become intermixed within underlying soils. All topsoil, vegetation, trees, roots and other organic matter must be stripped from the areas of footings, floor slabs, pavements, sidewalks, and other structures.

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The property had previously been utilized as a farm field. If any remnant drain tiles are encountered during construction, it is generally recommended that they be tied into new drainage structures or otherwise be properly drained to a suitable area (in accordance with any applicable regulatory requirements or restrictions), since they may still actively drain areas of the subject site or adjacent properties.

After stripping the topsoil and cutting high areas of the site to the planned finished grade, and prior to the placement of new fill which may be placed to raise grades, the exposed subgrade must be thoroughly proofrolled to detect unstable, yielding soils. This should consist of overlapping passes in a perpendicular grid pattern, with a fully-loaded tandem-axle dump truck, or other equipment of similar size and weight suitable for the surface conditions. Proofrolling should be performed in consultation with the geotechnical engineer at the time of construction. Substantial difficulty with subgrade preparation may be experienced, especially in wet or cold weather, or during thawing conditions. Additionally, instability can become more severe within silty and clayey soils such as were encountered within the borings. The clay soils are considered to be highly moisture sensitive. It is generally recommended that earthwork be carried out during relatively warm, dry weather. Any soft, wet, or otherwise unstable zones which cannot be improved by scarification and aeration, must be removed and replaced with compacted structural fill, such as clean crushed stone, possibly in conjunction with the use of a geotextile fabric. Lime, lime kiln dust, fly ash, or Portland cement modification are additional remedial measures which can be considered for clayey and some silty soils. However, this must only be performed at the direction and under the supervision of the geotechnical engineer. A proper mix design must be performed prior to the performance of any modification. Substantial construction delays and difficulty with subgrade stabilization may be experienced during periods of wet and/or cool weather. Consideration should be given to installing construction roads to reduce disturbance to the sensitive subgrade soils.

Every effort must be made to keep excavations dry. If construction proceeds during wet weather, some additional overexcavation may be necessary. If weather permits, the soil could be dried and recompacted. A crushed stone working mat, possibly in conjunction with a geotextile fabric may also be feasible to help stabilize subgrades. Site grading runoff should be directed to catch basins, so that the potential for the softening of the foundation and pavement subgrade soils is reduced.

Where the removal of unsuitable bearing material is performed beneath proposed footings, the excavation must extend laterally beyond the perimeter of the foundation for a distance at least equal to the thickness of the fill below the footing bottom. This general guideline also applies to instances where a raised structural fill pad is constructed to achieve a bearing elevation greater than existing grades. The influence zone of footing stresses can be represented as an imaginary 45° line extending downward and outward from the footing bottom. All fill placed within this zone after cutting to firm soil must be properly engineered, from the bottom of the cut, up to the floor slab subgrade elevation.

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If site grades are raised in excess of 2 feet, the first lift of new fill must be placed so as to extend a minimum lateral distance of 5 feet beyond the planned top building pad dimension (for fills less than 5 feet in thickness), or for a distance equal to at least 1 foot laterally beyond the top pad dimension for every foot of fill thickness (for fills greater than 5 feet in depth). Subsequent lifts can then be placed on an approximate 1H:1V slope back up to the planned top perimeter dimension of the pad. Proper moisture control is essential to reduce the amount of compactive effort necessary to achieve the desired densities.

When a firm and stable subgrade is established, low areas may be raised to planned grades with properly compacted structural fill. Any new fill should be a clean granular soil, such as those materials meeting the gradations outlined in Section 209 or 305 of the State of Wisconsin Standard Specification for Highway and Structure Construction. If fine-grained soils, such as those with high silt or clay content are used, they should generally be placed over large open areas, where conditions are more favorable for the proper placement and compaction of such materials. It must be recognized that high silt or clay content materials are difficult to compact when placed at moisture contents beyond a few percent of the optimum moisture content. In addition, the near surface soils across the site are considered to be highly moisture sensitive; therefore, extreme difficulty with subgrade preparation should be expected, especially if they become wet during construction. Fill must be placed in layers of not more than nine (9) inches in thickness, at moisture contents at or near optimum, and be compacted to a minimum density of 95 percent of the maximum dry density as determined by ASTM designation D-698. Silt, clay, and wet granular soils are not suitable for reuse as compacted fill in trenches, or adjacent to foundation stem walls or retaining walls.

Proper moisture control is essential to reduce the amount of compactive effort necessary to achieve the desired densities. This is especially true of clayey soils, where scarification and aeration may be required to achieve near - optimum moisture levels prior to compaction. A sheepsfoot roller is generally required for compaction of clayey soils, whereas a vibratory smooth drum roller is preferred for granular material. Small hand-operated compactors should be used in confined areas; granular fills are generally more readily compacted to the required densities in such applications.

It is recommended that well-graded granular soils be utilized as backfill in new utility trenches and alongside below grade walls to reduce the potential for consolidation and settlement of the fill. All fill soils must be placed and compacted under engineering controlled conditions, to provide suitable support for overlaying structures and roadways. Additional guidance can be provided at the time of construction in the selection process for grade-raising fill and trench backfill.

The selection of fill materials for various applications should be done in consultation with the soils engineer. Similarly, the evaluation of the subgrade and placement and compaction of fill for structural applications should be monitored and tested by a qualified representative of the soils engineer.

Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

Foundation Evaluation

The proposed structure may be supported by a conventional spread foundation system, bearing on suitable naturally occurring soils or within structural fill, prepared as discussed in a previous section. Based upon the planned finished floor elevation of EL. 877.5, interior and exterior footings will bear at about EL. 876 and EL. 873.5, respectively. Stiff to very stiff clay soils were generally encountered within the borings at these approximate elevations. Spread and continuous wall footings bearing upon suitable natural soils, or upon compacted structural fill, may be designed for a net allowable soil pressure of 3,000 psf. However, some undercutting of soft, unstable or otherwise unsuitable soils may be required, and may become extensive where wet materials are present.

The suitability of the existing soils for support of the proposed foundation must be determined by testing by a qualified geotechnical engineer during construction, utilizing static cone penetrometer tests or dynamic cone penetrometer tests for cohesive and granular soils, respectively. Soft, loose, or otherwise unsuitable materials not disclosed by the borings, may be encountered in the foundation excavations at the bearing elevation. If unsuitable existing soil is present, it must be removed throughout a zone extending one foot laterally for each two feet removed below the foundation, on either side of the planned footing. The over-excavated area must be backfilled with structural compacted fill.

In lieu of the use of compacted structural fill, lean concrete mix can be used to replace the unsuitable soils. The foundation excavations should be about 4 inches wider than the proposed footing width and must extend to suitable natural bearing soils. The concrete must be placed immediately after excavation to avoid intrusion of soil into the excavation. The concrete should contain sufficient aggregate and cement to attain a 28-day compressive strength of at least 1000 psi. Some sloughing or caving of the overlying soils may be experienced. Should this occur during concrete placement, the area must be removed and recast. Additionally, should caving become extensive, it may be necessary to substantially widen excavations to avoid soil intrusion into the concrete. This may result in the use of additional concrete quantities significantly in excess of preconstruction budget estimates.

All perimeter footings must be placed at a depth of at least 4 feet (or deeper if required by local code or in accordance with customary practice) below the finished grade for frost protection. Due to periodic severity of winters in this area, it is recommended that footings in poorly heated or unheated areas of the building also be placed at least 4 feet below the adjacent exterior grade. Interior footings not subject to frost action may be placed at a shallow depth of at least 18 inches below the floor slab, provided they bear on suitable natural soils or engineered fills. All footings must be protected from the effects of frost if construction is carried out during winter months.

It is recommended that the footings supporting individual columns have a minimum dimension of 24 inches, and continuous footings have a minimum width of 18 inches, even if the maximum recommended allowable bearing pressure is not fully utilized. In

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order to minimize the effects of any slight differential movement that may occur due to variations in the character of the supporting soils and any variations in seasonal moisture contents, it is recommended that all foundations be suitably reinforced to make them as rigid as needed.

In general, the performance of the foundation system on this site is dependent on the various factors discussed herein. The excavation, preparation, and concreting of foundations should be monitored and tested by a representative of the soils engineer.

Floor Slab Subgrade

Prior to constructing the floor slabs or pavements, and prior to the placement of any fill used to raise grades, the exposed subgrade must be prepared utilizing the proofrolling procedures described previously. In areas that exhibit soft, yielding or unstable soil conditions, the following remedial measures are recommended to provide a stable subgrade. It is recommended that the proofrolling operations be monitored by a representative of the geotechnical engineer to ensure that a firm, suitable subgrade is present prior to placement of new fills, or to construction of floor slabs and pavements. Extensive removal and replacement of fill may be necessary.

Localized wet, soft or unstable areas can be undercut to such depths determined necessary in the field to reach stable material, and the area backfilled with imported crushed stone, such as the 1¼-inch gradation specified in Section 305 of the WisDOT Standard Specifications, placed and compacted as recommended in the Site Preparation section of this report. If relatively thick zones or areas of extensive yielding are observed, and they cannot be stabilized by normal discing, aeration and recompaction procedures, undercutting and replacement with crushed stone and geotextile fabric (if needed) may also be required in these areas.

The floor slab may be designed utilizing an estimated modulus of subgrade reaction of 125 pci based on the presence of a suitable and stable subgrade, prepared as discussed in this report. However, this is based on common range values obtained from 1 ft. x 1 ft. plate load tests on specific soil types. Depending on how the slab load is applied, the value may need to be modified for larger areas using the following:

Modulus of Subgrade Reaction $k_s = (\frac{k}{B})$ for cohesive soil

$$k_s = k\,(\frac{B+1}{2B})^2 \text{ for cohesionless soil}$$

where: k_s = coefficient of vertical subgrade reaction for loaded area
k = coefficient of vertical subgrade reaction for a 1x1 foot square area
B = width of area loaded, in feet

The final design and detailing should be performed by a qualified structural engineer based on the intended slab use, loading conditions and anticipated subgrade conditions.

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A granular mat, which can be designed as a drainage layer, should be provided below the floor slab. This must be a minimum of six (6) inches in thickness and properly compacted. In moisture sensitive areas, a vapor retarder may be placed beneath the floor slab or base course, however, it is recommended that the architect be consulted in this regard. The proper use of a vapor retarder may not completely prevent moisture beneath or on top of slabs. If the base course contains sharp particles, a cushion layer of sand approximately 2 inches in thickness may be required to provide protection from puncture.

The floor slabs should be suitably reinforced to make them as rigid as necessary and proper joints provided at the junction of slabs and the foundation system so that a small amount of independent movement can occur without causing damage. Large floor areas must be provided with joints at frequent intervals (maximum spacing of 30 times the slab thickness, per ACI) to compensate for concrete volume changes (shrinkage). It is recommended that appropriate construction methods and curing procedures be used to minimize shrinkage and curling of the floor slabs.

Exterior/Unheated Area Slabs

Based on the borings, entry slabs, sidewalks, aprons, and other slabs in exterior or unheated areas will bear upon clay soils. Such materials are highly frost susceptible and poorly drained. Slabs placed directly upon clay soils are subject to heaving and subsequent settlement due to freeze/thaw cycles. This can result in cracking, misalignment, and other related effects (especially at joints). It is recommended that consideration be given to limited undercutting of the frost susceptible materials to a depth of 1 to 2 feet below the slab, and replacement with well graded, properly placed and compacted granular soils. A properly designed underdrain system connected to the municipal sewer (if permissible) or directed to on-site stormwater management areas should also be incorporated to reduce the potential effects of freeze/thaw cycles.

Utility Construction

In general, the on-site soils can be used for support of utility lines. Some difficulty with the stability of utility trenches should be expected due to the presence of granular soils across the site, especially in the presence of water. The use of shoring, bracing, or trench boxes will be required. Utility construction should be performed in accordance with "The Standard Specifications for Sewer and Water Line Construction" for the State of Wisconsin.

It is recommended that well graded granular soils such as those specified in Tables 37 and 39 of the Standard Specification for Sewer and Water Construction be utilized as backfill in utility trenches to reduce the potential for consolidation and settlement of the backfill. All fill soils must be properly placed and compacted under engineering controlled conditions to provide suitable support for overlaying structures and roadways. Silty and clayey soils, organic soils, and wet granular materials are not recommended for use as backfill within utility trenches due to the substantial difficulty of obtaining proper compaction in confined areas.

Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

As with all excavation work, all open cut trenches must be properly shored and braced as required by applicable federal and state OSHA codes, and as necessary to protect life and property.

CONSTRUCTION CONSIDERATIONS

Groundwater Control

Groundwater observations were made during the drilling operations, and in the open boreholes upon completion of drilling and removal of the augers. Groundwater was encountered within B-2, B-3, B-5, B-6, and B-12 during auger advancement at depths of about 8 to 17 feet (EL. 858.5 to EL. 867.5) below existing grade. No water was observed upon completion of drilling and removal of the augers. No groundwater was encountered within the remaining borings during auger advancement or upon completion of drilling and removal of the augers.

On the basis of the observations, some difficulty with groundwater may be experienced during excavation work on this site. If excavations extend only a few inches or so below the groundwater or low volume perched zones, a filtered sump pump or other conventional means may suffice to control the groundwater. However, for deeper excavations, or for large volume perched zones, prolonged dewatering with a series of sumps, or other more comprehensive means may be necessary to facilitate construction.

It must be recognized that groundwater levels fluctuate with time due to variations in seasonal precipitation, lateral drainage conditions, and soil permeability characteristics. Longer term monitoring would be required to further evaluate groundwater levels on this site.

Since the foundation materials are subject to softening when exposed to free moisture, every effort should be made to keep excavations dry. Discharge water from roof drains should be directed away from the building, and the site grading direct runoff to catch basins, so that the potential for the softening of the foundation and pavement subgrade soils is reduced.

Excavations and Site Drainage

Sloping, shoring or bracing of the excavation sidewalls will be necessary to facilitate construction and to protect life and property. Substantial sloughing and caving should be expected within unprotected excavations. The degree of excavation instability problems is dependent upon the depth and length of time that excavations remain open, excavation bank slopes, water levels and the effectiveness of any dewatering systems. However, severe instability may occur within granular or soft clay soils, especially encroaching upon and extending below the groundwater or perched zones. All excavation work must be performed in accordance with OSHA and local building code requirements.

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Where excavations encroach upon or extend below the groundwater or perched zones and into fine sand, silt, or soft clay, a substantially unstable subgrade may develop when the confining effect of the overburden is removed. Significant sloughing or caving of sidewalls may also occur; especially within undercut excavations. Some overexcavation of softened or loosened soils, in conjunction with the use of a crushed stone working mat, may be necessary to establish a stable bearing subgrade. Additionally, significantly widened excavations may result, or be required to maintain or achieve sidewall stability.

All excavations must be performed with caution and utilize methods which will prevent undermining or destabilization of existing buildings, utilities, pavements, sidewalks or other structures. The use of a properly designed shoring and bracing, sheet piling, or underpinning system must be utilized as necessary to adequately protect buildings, utilities, pavements, and other structures. This must be performed by an experienced specialty contractor. Additionally, extreme care must be used during the installation of any bracing system, especially those using driven or vibratory methods, in order to avoid damaging existing buildings, utilities, and other structures. Consideration should be given to the performance of video and/or photographic documentation of the condition of nearby buildings, utilities, and other structures prior to installation.

It is mandated that excavations, whether they be for utility trenches, basement excavations or footing excavations, be constructed in accordance with current Occupational Safety and Health Administration (OSHA) guidelines to protect workers and others during construction. PSI recommends that these regulations be strictly enforced; otherwise, workers could be in danger and the owner(s) and the contractor(s) could be liable for substantial penalties. The contractor is solely responsible for designing and constructing stable, temporary excavations and should shore, slope, or bench the sides of the excavations as required to maintain stability of both the excavation sides and bottom. The contractor's "responsible person", as defined in 29 CFR Part 1926, should evaluate the soil exposed in the excavations as part of the contractor's safety procedures. In no case should slope height, slope inclination, or excavation depth, including utility trench excavation depth, exceed those specified in local, state, and federal safety regulations. PSI is providing this information solely as a service to our client. PSI does not assume responsibility for construction site safety or the contractor's or other parties' compliance with local, state, and federal safety or other regulations.

Since the subgrade soils are generally sensitive to moisture, every effort should be made to provide adequate drainage across the site during construction, and to prevent ponding of runoff on the subgrade. These soils are also subject to erosion caused by runoff, and erosion control measures should be implemented where needed or required by local ordinances.

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Seismic Design Considerations

The soils encountered in the borings are considered to meet the criteria for Site Class D in accordance with 1613.2.5.2 of the International Building Code-2018 (which directs to the simplified design procedure outlined in ASCE 7 – Minimum Design Loads and Associated Criteria for Buildings and Other Structures).

PAVEMENT DESIGN RECOMMENDATIONS

Pavements for this project are understood to consist of asphalt or concrete parking lots and driveways and are estimated to be subjected to passenger type vehicles and delivery truck traffic.

The near surface pavement subgrade soils encountered at the borings predominately consisted of clay with an estimated visual classification of A-6 by the AASHTO soil classification method. These soils are generally rated as poor for pavement subgrade support due to their high frost susceptibility, poor drainage characteristics, and higher susceptibility to strength loss when exposed to free water. Provided that the subgrade soils are prepared as outlined in the *Site Preparation* section of this report, the in-place subgrade soils and any new structural fill can be used for standard flexible or rigid pavement construction.

Analysis of the visual soil classification has been made in estimating pertinent subgrade design coefficients as described in the Wisconsin Soils Manual for Pavement Design. Based on the soils encountered, and with proper subgrade preparation and drainage, the following pavement subgrade design parameters are recommended for the pavement section design. However, if soils with support characteristics different from the estimated materials are encountered or are used to raise grades in new pavement areas, revised coefficients will need to be provided.

PAVEMENT SUBGRADE DESIGN COEFFICIENTS

AASHTO Soil Classification	**A-6**
Design Frost Index	**F-3**
Design Group Index	**14**
Soil Support Value	**3.0**
Estimated Subgrade Modulus (k)	**100 pci**

During construction, the surficial subgrade soils can become wet, softened and disturbed from rainfall and construction equipment. Therefore, prior to placing the pavement base materials, the subgrade must be proofrolled as outlined previously. Particular attention should be given to high traffic areas that have become rutted and areas of backfilled trenches. Localized wet, soft, or unstable areas can be undercut to such depths determined necessary in the field to reach stable materials. The granular base course should consist of well-graded crushed stone meeting the requirements from the State of

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Wisconsin DOT Standard Specifications for construction for dense graded base. If relatively large or thick zones of extensive yielding are observed, and normal discing and recompaction procedures cannot stabilize them, undercutting and replacement with crushed stone and geotextile fabric (if needed) may be required in these areas. Preparation and evaluation of the pavement subgrade must be performed as outlined in the Site Preparation section of this report.

Periodic pavement maintenance is required to keep a pavement, under normal traffic and environmental conditions, as near as possible to its constructed condition. Maintenance is necessary to reduce the effects of pavement stress caused by changes in temperature and moisture, repetitive traffic loadings, and movement of the subgrade soils. As pavement distress is observed, it should be repaired as quickly as possible. Unrepaired areas will generally lead to more severe and widespread distress, and eventually, pavement disintegration. Therefore, periodic maintenance consisting of crack sealing, seal coating every 3 to 5 years, and other necessary repairs at least annually, will be required to obtain the design service life.

The subject site is located in an area that experiences annual freezing cycles and the subgrade soils encountered have been classified as highly susceptible to frost action when free water is present. In order to reduce the potential for frost action, it will be necessary to control surface runoff and water seepage, because complete removal and replacement of the frost susceptible subgrade soils is not considered economically feasible. It is recommended that underdrains be placed within the subgrade, just below the granular base, to help reduce the potential for trapping water within the aggregate base layer. Sufficient drain tiles extending radially outward an adequate distance from each interior catch basin must be installed. In addition, drain tiles should extend along curb lines, up the slope from curb inlets. The drain tile should be directly connected to the storm sewer manholes or catch basins (if permissible by local municipal or other applicable code). The drain tile should consist of perforated PVC pipe of adequate diameter placed beneath the base layer, extending a sufficient distance into the subgrade. The pipe should be surrounded by appropriately sized clean stone, with the pipe and stone being wrapped with a geotextile filter fabric to reduce the potential for soils to migrate into and obstruct the pipe.

STORMWATER MANAGEMENT AREA CONSIDERATIONS

As requested by the client, B-1, B-2, B-11, and B-12 were performed in the area of the proposed stormwater management. The subgrade soils encountered at these locations have been visually classified in general accordance with the USDA textural soil classification system. They consisted of 10 to 12 inches of topsoil comprised of dark brown to black silt loam. The topsoil was underlain by light brown to dark gray silt loam, very fine sandy loam, silty clay loam, loam, loamy sand, and sandy loam. Groundwater was not encountered.

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With regard to the above soil and groundwater conditions encountered at the borings, NR 151.124(4)(c)1 and 2 – *Infiltration rate exemptions* indicates that infiltration practices located in an area where the infiltration rate of the soil measured at the proposed bottom of the infiltration system is less than 0.6 inches per hour using a scientifically credible field test method; or an area where the least permeable soil horizon to 5 feet below the proposed bottom of the infiltration system using the USDA method of soils analysis consists of sandy clay loam, clay loam, silty clay loam, sandy clay, silty clay or clay may be credited toward meeting the requirements, but the decision to infiltrate under these conditions is optional. In addition, NR 151.124(4)(b)1 – *Separation distances* indicates that infiltration practices shall be located so that the characteristics of the soil and the separation distance between the bottom of the infiltration system and the elevation of seasonal high groundwater or the top of bedrock are in accordance with the following Table (reproduced from NR 151.124):

Table 3. Separation Distances and Soil Characteristics

Source Area	Separation Distance	Soil Characteristics
Industrial, Commercial, Institutional Parking Lots and Roads	5 feet or more	Filtering Layer*
Residential Arterial Roads	5 feet or more	Filtering Layer*
Roofs Draining to Surface Infiltration Practices	1 foot or more	Native or Engineered Soil with Particles Finer than Coarse Sand
Roofs Draining to Surface Infiltration Practices	Not Applicable	
All Other Impervious Source Areas	3 feet or more	Filtering Layer*

*Defined in NR 151.002(14r) as a "soil that has at least a 3-foot deep layer with at least 20 percent fines; or at least a 5-foot deep layer with at least 10 percent fines; or an engineered soil with an equivalent level of protection as determined by the regulatory authority for the site."

The information shown above is a selected excerpt from NR151 that is intended only as general guidance for considering stormwater management in conjunction with the encountered subsurface conditions at the borings. Basin design must be performed by a qualified and experienced firm. In addition, the entirety of Chapter NR151 of the Wisconsin Administrative Code, the Site Evaluation for Stormwater Infiltration (1002) document, and other applicable references; along with appropriate state, local or other municipal requirements must be consulted as part of site specific stormwater design.

It is recommended that stormwater management basins not be placed in close proximity to basements or other below grade structures. Proper and careful consideration of soils and subsurface conditions must be given during site and design planning, and extreme care must be exercised during construction. Lateral migration of water may result in substantially increased sump pump activity and can quickly overcome the ability of such pumps to maintain a desirable water level, resulting in significant flooding. The potential

Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

for such conditions to occur can greatly increase when below grade floor elevations encroach upon or are below the elevation of basin bottoms and/or when basins are placed in close proximity to structures (strongly not recommended). In addition, the presence of granular or other generally permeable soils, which is typically necessary in the areas of structures for utility backfill, alongside basement walls, or within other development excavations/trenches can act as extensive migration channels to rapidly carry large volumes of water from basins and into nearby below grade structures. Building codes or municipal regulations may require that floor elevations of below grade structures be a specified distance above the water level of nearby basins or other stormwater features. It is therefore recommended that the design engineer (or other appropriate representative) review applicable municipal or other regulatory requirements and verify the design normal and design high water elevations of stormwater basins/features with respect to planned or existing below grade slab elevations.

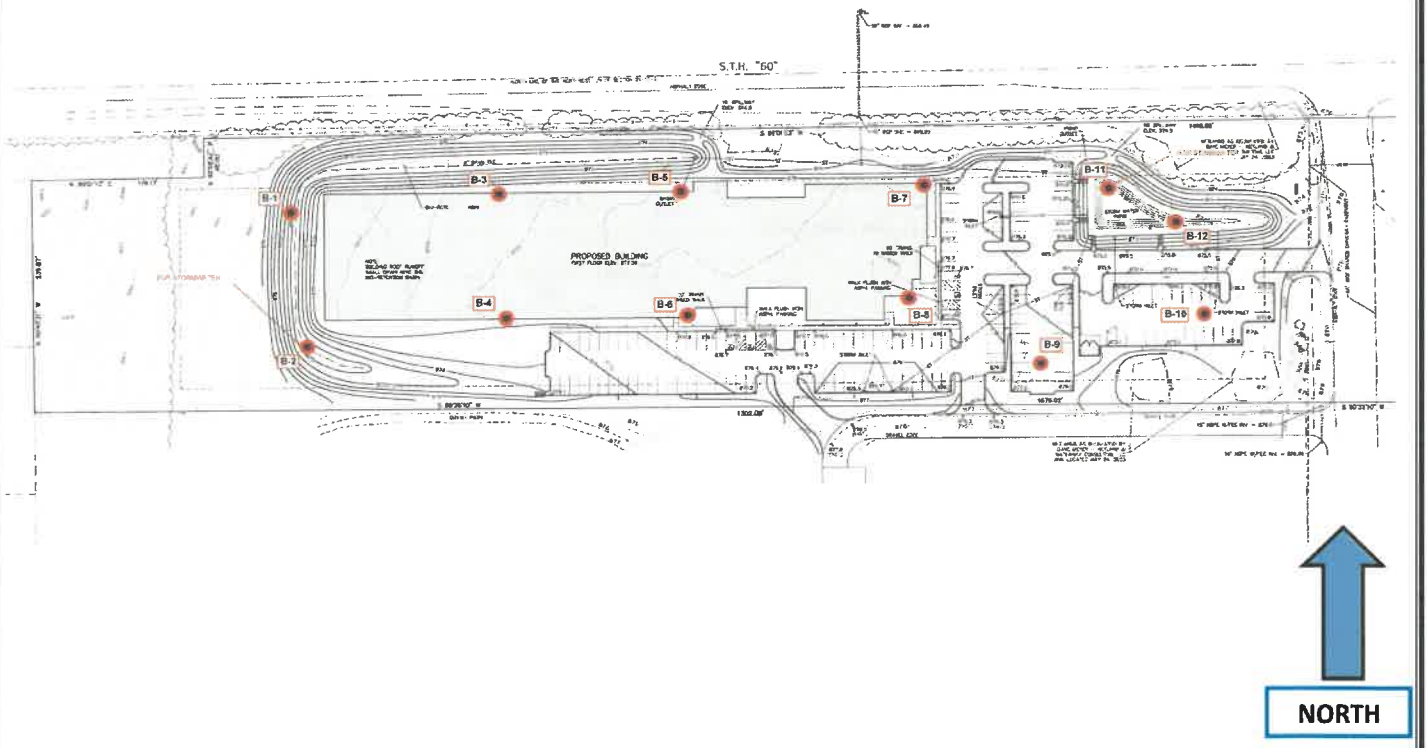
GENERAL COMMENTS

This geotechnical exploration and evaluation have been prepared to aid in the evaluation of the soil conditions on this site. The recommendations presented herein are based on the available soil information and the design information provided. Any changes in the design information or building locations should be brought to the attention of PSI to determine if modifications in the recommendations are required. The final design plans and specifications should also be reviewed by PSI to determine that the recommendations presented herein have been interpreted and implemented as intended.

This geotechnical study has been conducted in a manner consistent with that level of care ordinarily exercised by members of the profession currently practicing in the same locality under similar conditions. The findings, recommendations and opinions contained herein have been promulgated in accordance with generally accepted practice in the fields of foundation engineering, soils mechanics, and engineering geology. No other representations expressed or implied, and no warranty or guarantee is included or intended in this report.

It is recommended that the earthwork and foundation operations be monitored by a representative of PSI, to test and evaluate the bearing capacities, and the selection, placement and compaction of controlled fills.

Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)



intertek psi	Cedarburg Athletic Performance Facility 8611 STH 60 Cedarburg, WI	SCALE: 1 inch = 120 feet (approx.)
		DATE: 08/25/2023
	FIGURE 1: BORING LOCATION PLAN	PROJECT NUMBER: 00523262

Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

BORING B-1

DATE STARTED:	8/22/23	**DRILL COMPANY:**	PSI, Inc.
DATE COMPLETED:	8/22/23	**DRILLER:** DT	**LOGGED BY:** AW
COMPLETION DEPTH	20.0 ft	**DRILL RIG:**	Marooka D-50 ATV - Rig #395
BENCHMARK:	N/A	**DRILLING METHOD:**	Hollow Stem Auger
ELEVATION:	879.5 ft	**SAMPLING METHOD:**	2-in SS
LATITUDE:		**HAMMER TYPE:**	Automatic
LONGITUDE:		**EFFICIENCY**	N/A
STATION: N/A	**OFFSET:** N/A	**REVIEWED BY:**	
REMARKS:			

Water

While Drilling	Not Obsvd
Upon Completion	Not Obsvd
Delay	N/A

BORING LOCATION:

Elevation (feet)	Depth, (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch (SS)	Moisture, %	Additional Remarks
	0			1	8	Topsoil, Brown Silt, Trace Gravel, Moist (11"± Thick)	TPSL	2-2-4-4 N=6	22	
						(Topsoil, Brown Silt Loam)	CL		23	Q_r = 3.1 tsf
				2	14	Brown Lean Clay, Trace Gravel, Moist (Reddish Brown Silty Clay Loam)		3-4-5-8 N=9	16	>> Q_r = 4.1 tsf
875						Brown Silty Lean Clay, Trace Sand and Gravel, Very Moist				
	5			3	16	(2' to 7' - Brown Silty Clay Loam) (7' to 12' - Light Brown Silty Clay Loam)		5-8-11-11 N=19	17	Q_r = 3.3 tsf
				4	20		CL-ML	4-3-5-7 N=8	24	Q_r = 1.8 tsf
870				5	16			2-5-7-9 N=12	25	Q_r = 5.0 tsf
	10			6	24			5-9-9-10 N=18	24	Q_r = 2.0 tsf
				7	20	Brown Silty Sand and Gravel, Very Moist (Light Brown Gravelly Loamy Sand)		21-21-22-24 N=43	8	
865						(12' to 20' - Light Brown Gravelly Very Fine Sandy Loam)	SM			
	15			8	18			14-24-27-25 N=51	9	>>
				9	8	Brown Sandy Lean Clay Trace to With Gravel, Very Moist		12-15-9-7 N=24	12	
							CL			
860				10	12			4-5-11-14 N=16		
	20					End of Boring at 20'				
						Cave-In at 9'				
						(Classifications in parentheses are USDA classifications)				

STANDARD PENETRATION TEST DATA
N in blows/ft ◎
× Moisture ◪ PL ✚ LL
0 25 50

STRENGTH, tsf
▲ Qu ✳ Qp
0 2.0 4.0

intertek psi
Professional Service Industries, Inc.
821 Corporate Court, Suite 100
Waukesha, WI 53189
Telephone: (262) 521-2125

PROJECT NO.: 00523262
PROJECT: Proposed Cedarburg Athletic Performance Facility
LOCATION: STH 60 Cedarburg, WI

The stratification lines represent approximate boundaries. The transition may be gradual.

Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

BORING B-2

DATE STARTED:	8/22/23	**DRILL COMPANY:**	PSI, Inc.
DATE COMPLETED:	8/22/23	**DRILLER:** DT	**LOGGED BY:** AW
COMPLETION DEPTH	20.0 ft	**DRILL RIG:**	Marooka D-50 ATV - Rig #395
BENCHMARK:	N/A	**DRILLING METHOD:**	Hollow Stem Auger
ELEVATION:	877.5 ft	**SAMPLING METHOD:**	2-in SS
LATITUDE:		**HAMMER TYPE:**	Automatic
LONGITUDE:		**EFFICIENCY**	N/A
STATION: N/A	**OFFSET:** N/A	**REVIEWED BY:**	
REMARKS:			

Water

While Drilling	10 feet
Upon Completion	Not Obsvd
Delay	N/A

BORING LOCATION:

Elevation (feet)	Depth, (feet)	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch (SS)	Moisture, %
	0	1	8	Topsoil, Dark Brown Silty Lean Clay, Moist (10"± Thick)	TPSL		20
				(Topsoil, Black Silty Loam)	CL	2-3-3-5 N=6	22
875		2	14	Brown Lean Clay, Trace Sand, Moist (Reddish Brown Silty Clay Loam)		2-3-5-8 N=8	18
	5	3	16	Brown Silty Lean Clay, Very Moist (2' to 7' - Brown Silty Clay Loam) (7' to 10' - Light Brown Silt Loam)	CL-ML	3-7-11-12 N=18	20
870		4	22			2-3-4-5 N=7	22
		5	20			2-3-5-8 N=8	25
	10	6	20	Brown Sandy Lean Clay With Sand and Gravel, Wet (Brown Loam)	CL	4-5-9-18 N=14	24
865		7	22	Brown Sand and Gravel, Wet (12' to 16' - Brown Gravelly Sandy Loam)	SP	3-8-17-12 N=25	10
	15	8	12	Brown Silty Sand and Gravel, Wet	SM	5-8-11-19 N=19	9
		9	18	Gray Sandy Lean Clay Trace to With Gravel, Very Moist (Gray Silty Clay Loam)	CL	59/10"	11
860		10	12			8-11-11-11 N=22	10
	20			End of Boring at 20' Cave-In at 8' (Classifications in parentheses are USDA classifications)			

STANDARD PENETRATION TEST DATA
N in blows/ft ◎
× Moisture ◪ PL ✚ LL
0 25 50
STRENGTH, tsf
▲ Qu ✳ Qp
0 2.0 4.0

Additional Remarks

intertek psi
Professional Service Industries, Inc.
821 Corporate Court, Suite 100
Waukesha, WI 53189
Telephone: (262) 521-2125

PROJECT NO.: 00523262
PROJECT: Proposed Cedarburg Athletic Performance Facility
LOCATION: STH 60 Cedarburg, WI

The stratification lines represent approximate boundaries. The transition may be gradual.

Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

BORING B-3

DATE STARTED:	8/22/23	**DRILL COMPANY:**	PSI, Inc.
DATE COMPLETED:	8/22/23	**DRILLER:** DT	**LOGGED BY:** AW
COMPLETION DEPTH	20.0 ft	**DRILL RIG:**	Marooka D-50 ATV - Rig #395
BENCHMARK:	N/A	**DRILLING METHOD:**	Hollow Stem Auger
ELEVATION:	875.5 ft	**SAMPLING METHOD:**	2-in SS
LATITUDE:		**HAMMER TYPE:**	Automatic
LONGITUDE:		**EFFICIENCY**	N/A
STATION: N/A	**OFFSET:** N/A	**REVIEWED BY:**	
REMARKS:			

Water

While Drilling	17 feet
Upon Completion	Not Obsvd
Delay	N/A

BORING LOCATION:

Elevation (feet)	Depth, (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch (SS)	Moisture, %	STANDARD PENETRATION TEST DATA N in blows/ft ◎ × Moisture ◪ PL ✚ LL (0, 25, 50) STRENGTH, tsf ▲ Qu ✳ Qp (0, 2.0, 4.0)	Additional Remarks
875	0					Topsoil, Dark Brown Lean Clay, Trace Sand, Moist (12"± Thick)	TPSL		18	×	
				1	12	Brown Lean Clay With Silt Pockets and Seams, Moist to Very Moist		8-11-12 N=23	12	× ◎ >>✳	
				2	12			9-11-13 N=24	13	× ◎	
870	5			3	16		CL	4-5-7 N=12	14	◎ × >>✳	Q_r = 6.0 tsf
				4	18			4-5-8 N=13	29	◎ × ✳	Q_r = 1.8 tsf
865	10					Gray Lean Clay, Very Moist					
				5	18		CL	4-5-6 N=11	27	◎ × ✳	Q_r = 2.7 tsf
860	15					Brown Silty Sand and Gravel, Wet	SM				
				6	18			12-22-27 N=49	23	× ◎	
	20					End of Boring at 20'					
						Cave-In at 10'					

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PROJECT NO.: 00523262
PROJECT: Proposed Cedarburg Athletic Performance Facility
LOCATION: STH 60 Cedarburg, WI

The stratification lines represent approximate boundaries. The transition may be gradual.

Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

DATE STARTED:	8/22/23	**DRILL COMPANY:**	PSI, Inc.		
DATE COMPLETED:	8/22/23	**DRILLER:** DT	**LOGGED BY:** AW		
COMPLETION DEPTH	20.0 ft	**DRILL RIG:**	Marooka D-50 ATV - Rig #395		
BENCHMARK:	N/A	**DRILLING METHOD:**	Hollow Stem Auger		
ELEVATION:	875.0 ft	**SAMPLING METHOD:**	2-in SS		
LATITUDE:		**HAMMER TYPE:**	Automatic		
LONGITUDE:		**EFFICIENCY**	N/A		
STATION: N/A	**OFFSET:** N/A	**REVIEWED BY:**			
REMARKS:					

BORING B-4

Water		
	While Drilling	Not Obsvd
	Upon Completion	Not Obsvd
	Delay	N/A

BORING LOCATION:

Elevation (feet)	Depth, (feet)	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch (SS)	Moisture, %	Additional Remarks
	0			Topsoil, Black Sandy Lean Clay, Moist (10"± Thick)	TPSL		14	
		1	12	Brown to Gray Lean Clay With Silt Seams, Very Moist		5-5-6 N=11	20	Q_p = 1.2 tsf
		2	10			2-2-4 N=6	21	
870	5	3	14		CL	5-6-6 N=12	23	Q_p = 2.9 tsf
		4	18			4-6-6 N=12	23	Q_p = 3.1 tsf
865	10			Tan Silty Sand and Gravel, Moist				
		5	12		SM	9-13-19 N=32	9	
860	15			Gray Lean Clay With Sand and Gravel, Moist				
		6	18		CL	12-17-16 N=33	12	
855	20			End of Boring at 20'				
				Cave-In at 8'				

STANDARD PENETRATION TEST DATA
N in blows/ft ◎
× Moisture ◪ PL ✚ LL
0 25 50

STRENGTH, tsf
▲ Qu ✳ Qp
0 2.0 4.0

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PROJECT NO.: 00523262
PROJECT: Proposed Cedarburg Athletic
LOCATION: Performance Facility
STH 60
Cedarburg, WI

The stratification lines represent approximate boundaries. The transition may be gradual.

Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

BORING B-5

DATE STARTED:	8/22/23	DRILL COMPANY:	PSI, Inc.
DATE COMPLETED:	8/22/23	DRILLER: DT	LOGGED BY: AW
COMPLETION DEPTH	20.0 ft	DRILL RIG:	Marooka D-50 ATV - Rig #395
BENCHMARK:	N/A	DRILLING METHOD:	Hollow Stem Auger
ELEVATION:	874.5 ft	SAMPLING METHOD:	2-in SS
LATITUDE:		HAMMER TYPE:	Automatic
LONGITUDE:		EFFICIENCY	N/A
STATION: N/A	OFFSET: N/A	REVIEWED BY:	
REMARKS:			

Water		
While Drilling	8 feet	
Upon Completion	Not Obsvd	
Delay	N/A	

BORING LOCATION:

Elevation (feet)	Depth, (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch (SS)	Moisture, %	STANDARD PENETRATION TEST DATA N in blows/ft ◎ × Moisture ◪ PL ✚ LL (0, 25, 50) STRENGTH, tsf ▲ Qu ✳ Qp (0, 2.0, 4.0)	Additional Remarks
	0					Topsoil, Black Lean Clay, Trace Gravel, Very Moist (12"± Thick)	TPSL		23		
				1	8	Brown to Gray Lean Clay, With Silt Seams, Very Moist		3-4-5 N=9	28		
870	5			2	12		CL	3-3-3 N=6	30		
				3	16			3-4-5 N=9	33		
						Gray Medium to Coarse Sand and Gravel, Wet					
865	10			4	16		SP	4-5-5 N=10	24		
						Gray Silt With Sand and Gravel, Wet					
860	15			5	10		ML	4-2-3 N=5	25		
855	20			6	14			22-19-18 N=37	10		
						End of Boring at 20'					
						Cave-In at 7'					

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PROJECT NO.:	00523262
PROJECT:	Proposed Cedarburg Athletic Performance Facility
LOCATION:	STH 60 Cedarburg, WI

The stratification lines represent approximate boundaries. The transition may be gradual.

Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

BORING B-6

DATE STARTED:	8/22/23	**DRILL COMPANY:**	PSI, Inc.
DATE COMPLETED:	8/22/23	**DRILLER:** DT	**LOGGED BY:** AW
COMPLETION DEPTH	20.0 ft	**DRILL RIG:**	Marooka D-50 ATV - Rig #395
BENCHMARK:	N/A	**DRILLING METHOD:**	Hollow Stem Auger
ELEVATION:	874.5 ft	**SAMPLING METHOD:**	2-in SS
LATITUDE:		**HAMMER TYPE:**	Automatic
LONGITUDE:		**EFFICIENCY**	N/A
STATION: N/A	**OFFSET:** N/A	**REVIEWED BY:**	
REMARKS:			

Water

While Drilling	8 feet
Upon Completion	Not Obsvd
Delay	N/A

BORING LOCATION:

Elevation (feet)	Depth, (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch (SS)	Moisture, %
	0					Topsoil, Black Silty Sand, Moist (13"± Thick)	TPSL		22
				1	6	Brown Silty Lean Clay, Trace Gravel, Moist to Wet		3-3-4 N=7	18
870	5			2	8			3-2-3 N=5	23
				3	18		CL-ML	3-2-3 N=5	37
865	10			4	18			3-7-12 N=19	39
				5	10	Gray Silty Sand and Gravel, Wet	SM	3-3-4 N=7	25
860	15					Gray Lean Clay With Sand and Gravel, Very Moist	CL		
855	20			6	8			3-5-7 N=12	14
						End of Boring at 20'			
						Cave-In at 6'			

STANDARD PENETRATION TEST DATA
N in blows/ft ◎
× Moisture ◪ PL ✤ LL
0 25 50

STRENGTH, tsf
▲ Qu ✳ Qp
0 2.0 4.0

Additional Remarks

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PROJECT NO.: 00523262
PROJECT: Proposed Cedarburg Athletic Performance Facility
LOCATION: STH 60 Cedarburg, WI

The stratification lines represent approximate boundaries. The transition may be gradual.

Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

BORING B-7

DATE STARTED:	8/22/23	**DRILL COMPANY:**	PSI, Inc.
DATE COMPLETED:	8/22/23	**DRILLER:** DT	**LOGGED BY:** AW
COMPLETION DEPTH	15.0 ft	**DRILL RIG:**	Marooka D-50 ATV - Rig #395
BENCHMARK:	N/A	**DRILLING METHOD:**	Hollow Stem Auger
ELEVATION:	874 ft	**SAMPLING METHOD:**	2-in SS
LATITUDE:		**HAMMER TYPE:**	Automatic
LONGITUDE:		**EFFICIENCY**	N/A
STATION: N/A	**OFFSET:** N/A	**REVIEWED BY:**	

REMARKS:

Water		
While Drilling	Not Obsvd
Upon Completion	Not Obsvd
Delay	N/A

BORING LOCATION:

Elevation (feet)	Depth, (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch (SS)	Moisture, %	STANDARD PENETRATION TEST DATA N in blows/ft ◎ × Moisture ◪ PL ✚ LL (0, 25, 50) STRENGTH, tsf ▲ Qu ✳ Qp (0, 2.0, 4.0)	Additional Remarks
	0					Topsoil, Black Sand and Gravel, Damp (10"± Thick)	TPSL		21		
				1	10	Brown Silty Lean Clay, Trace Gravel, Moist to Very Moist		3-5-6 N=11	24		
870				2	14		CL-ML	4-4-6 N=10	21		
	5			3	16			3-6-13 N=19	29		
						Gray Medium to Coarse Sand and Gravel, Moist					
865				4	10			8-7-3 N=10	9		
	10						SP				
860				5	12			8-7-12 N=19	7		
	15					End of Boring at 15'					
						Cave-In at 11'					

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PROJECT NO.: 00523262
PROJECT: Proposed Cedarburg Athletic Performance Facility
LOCATION: STH 60 Cedarburg, WI

The stratification lines represent approximate boundaries. The transition may be gradual.

Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

BORING B-8

DATE STARTED:	8/22/23	**DRILL COMPANY:**	PSI, Inc.
DATE COMPLETED:	8/22/23	**DRILLER:** DT	**LOGGED BY:** AW
COMPLETION DEPTH	15.0 ft	**DRILL RIG:**	Marooka D-50 ATV - Rig #395
BENCHMARK:	N/A	**DRILLING METHOD:**	Hollow Stem Auger
ELEVATION:	875 ft	**SAMPLING METHOD:**	2-in SS
LATITUDE:		**HAMMER TYPE:**	Automatic
LONGITUDE:		**EFFICIENCY**	N/A
STATION: N/A	**OFFSET:** N/A	**REVIEWED BY:**	
REMARKS:			

Water

While Drilling	Not Obsvd
Upon Completion	Not Obsvd
Delay	N/A

BORING LOCATION:

Elevation (feet)	Depth, (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch (SS)	Moisture, %
	0					Topsoil, Black Sand and Gravel, Damp (11"± Thick)	TPSL		20
				1	14	Brown to Gray Lean Clay With Silt Seams, Very Moist		4-5-7 N=12	23
				2	16			6-5-7 N=12	24
870	5			3	18		CL	4-4-6 N=10	23
				4	16			4-5-6 N=11	24
865	10								
				5	18			6-6-7 N=13	22
860	15					End of Boring at 15' Cave-In at 9'			

STANDARD PENETRATION TEST DATA
N in blows/ft ◎
× Moisture ◪ PL ✚ LL
0 25 50
STRENGTH, tsf
▲ Qu ✳ Qp
0 2.0 4.0

Additional Remarks

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Telephone: (262) 521-2125

PROJECT NO.: 00523262
PROJECT: Proposed Cedarburg Athletic Performance Facility
LOCATION: STH 60 Cedarburg, WI

The stratification lines represent approximate boundaries. The transition may be gradual.

Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

DATE STARTED:	8/22/23	**DRILL COMPANY:**	PSI, Inc.		
DATE COMPLETED:	8/22/23	**DRILLER:** DT	**LOGGED BY:** AW		
COMPLETION DEPTH	5.0 ft	**DRILL RIG:**	Marooka D-50 ATV - Rig #395		
BENCHMARK:	N/A	**DRILLING METHOD:**	Hollow Stem Auger		
ELEVATION:	875 ft	**SAMPLING METHOD:**	2-in SS		
LATITUDE:		**HAMMER TYPE:**	Automatic		
LONGITUDE:		**EFFICIENCY**	N/A		
STATION: N/A	**OFFSET:** N/A	**REVIEWED BY:**			
REMARKS:					

BORING B-9

Water		
While Drilling		Not Obsvd
Upon Completion		Not Obsvd
Delay		N/A

BORING LOCATION:

Elevation (feet)	Depth, (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch (SS)	Moisture, %	STANDARD PENETRATION TEST DATA N in blows/ft ◎ × Moisture ◪ PL ✚ LL (0 25 50) STRENGTH, tsf ▲ Qu ✳ Qp (0 2.0 4.0)	Additional Remarks
	0					Topsoil, Black Sand and Gravel, Damp (12"± Thick)	TPSL		22	×	
				1	10	Brown Lean Clay With Silt Seams, Very Moist	CL	3-4-5 N=9	29	◎ ×	
				2	14			4-4-4 N=8	22	◎ ×	
870	5					End of Boring at 5'					
						Cave-In at 3'					

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PROJECT NO.:	00523262
PROJECT:	Proposed Cedarburg Athletic
LOCATION:	Performance Facility
	STH 60
	Cedarburg, WI

The stratification lines represent approximate boundaries. The transition may be gradual.

Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

BORING B-10

DATE STARTED:	8/22/23	**DRILL COMPANY:**	PSI, Inc.
DATE COMPLETED:	8/22/23	**DRILLER:** DT	**LOGGED BY:** AW
COMPLETION DEPTH	5.0 ft	**DRILL RIG:**	Marooka D-50 ATV - Rig #395
BENCHMARK:	N/A	**DRILLING METHOD:**	Hollow Stem Auger
ELEVATION:	877 ft	**SAMPLING METHOD:**	2-in SS
LATITUDE:		**HAMMER TYPE:**	Automatic
LONGITUDE:		**EFFICIENCY**	N/A
STATION: N/A	**OFFSET:** N/A	**REVIEWED BY:**	

REMARKS:

Water		
While Drilling	Not Obsvd
Upon Completion	Not Obsvd
Delay	N/A

BORING LOCATION:

Elevation (feet)	Depth, (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch (SS)	Moisture, %	STANDARD PENETRATION TEST DATA N in blows/ft ◎ × Moisture ◪ PL ✚ LL (0, 25, 50) STRENGTH, tsf ▲ Qu ✳ Qp (0, 2.0, 4.0)	Additional Remarks
	0					Topsoil, Black Sand and Gravel, Damp (9"± Thick)	TPSL		16	×	
875				1	12	Brown Lean Clay, With Silt Seams, Very Moist to Moist	CL	3-3-6 N=9	23	×	
				2	14			4-5-8 N=13	16	◎× ✳	
	5					End of Boring at 5'					
						Cave-In at 3'					

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PROJECT NO.: 00523262
PROJECT: Proposed Cedarburg Athletic Performance Facility
LOCATION: STH 60 Cedarburg, WI

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Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

BORING B-11

DATE STARTED:	8/22/23	**DRILL COMPANY:**	PSI, Inc.
DATE COMPLETED:	8/22/23	**DRILLER:** DT	**LOGGED BY:** AW
COMPLETION DEPTH	15.0 ft	**DRILL RIG:**	Marooka D-50 ATV - Rig #395
BENCHMARK:	N/A	**DRILLING METHOD:**	Hollow Stem Auger
ELEVATION:	874 ft	**SAMPLING METHOD:**	2-in SS
LATITUDE:		**HAMMER TYPE:**	Automatic
LONGITUDE:		**EFFICIENCY**	N/A
STATION: N/A	**OFFSET:** N/A	**REVIEWED BY:**	
REMARKS:			

Water		
While Drilling	Not Obsvd	
Upon Completion	Not Obsvd	
Delay	N/A	

BORING LOCATION:

Elevation (feet)	Depth, (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch (SS)	Moisture, %	STANDARD PENETRATION TEST DATA N in blows/ft ◎ × Moisture ◪ PL ✚ LL (0, 25, 50) STRENGTH, tsf ▲ Qu ✳ Qp (0, 2.0, 4.0)	Additional Remarks
	0					Topsoil, Black Silt Loam, Very Moist			20		
						Dark Reddish Brown Silty Clay Loam, Very Moist					
				1	14			6-8-9-12 N=17	21		
870				2	20			4-9-12-16 N=21	22		
	5			3	19			15-20-22-21 N=42	25		
				4	24			6-8-11-13 N=19	19		
865						Brown Silty Clay Loam, Very Moist					
	10			5	24			4-7-8-11 N=15	30		
						Dark Gray Silty Clay Loam, Very Moist					
				6	22			3-4-6-6 N=10	25		
860				7	10			53/8"	27		>>◎
	15					End of Boring at 15'					
						Cave-In at 11'					

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PROJECT NO.:	00523262
PROJECT:	Proposed Cedarburg Athletic Performance Facility
LOCATION:	STH 60 Cedarburg, WI

The stratification lines represent approximate boundaries. The transition may be gradual.

Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

BORING B-12

DATE STARTED:	8/22/23	**DRILL COMPANY:**	PSI, Inc.
DATE COMPLETED:	8/22/23	**DRILLER:** DT	**LOGGED BY:** AW
COMPLETION DEPTH	15.0 ft	**DRILL RIG:**	Marooka D-50 ATV - Rig #395
BENCHMARK:	N/A	**DRILLING METHOD:**	Hollow Stem Auger
ELEVATION:	874.5 ft	**SAMPLING METHOD:**	2-in SS
LATITUDE:		**HAMMER TYPE:**	Automatic
LONGITUDE:		**EFFICIENCY**	N/A
STATION: N/A	**OFFSET:** N/A	**REVIEWED BY:**	
REMARKS:			

Water

While Drilling	11 feet
Upon Completion	Not Obsvd
Delay	N/A

BORING LOCATION:

Elevation (feet)	Depth, (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch (SS)	Moisture, %	STANDARD PENETRATION TEST DATA N in blows/ft ◎ × Moisture ◪ PL ✚ LL (0 25 50) STRENGTH, tsf ▲ Qu ✳ Qp (0 2.0 4.0)	Additional Remarks
	0					Topsoil, Black Silt Loam, Very Moist (11"± Thick)			21		
						Dark Reddish Brown Silty Clay Loam, Very Moist					
				1	15			4-4-7-11 N=11	22		
						Brown Silty Clay Loam, Very Moist					
870				2	16			7-6-9-11 N=15	21		
	5			3	18			5-8-10-11 N=18	19		
				4	22			5-8-12-10 N=20	19		
865	10			5	24			4-6-7-9 N=13	28		
				6	20	Light Brown Gravelly Sandy Loam, Wet		2-3-17-8 N=20	31		
				7	10			2-6-6-9 N=12	18		
860	15					End of Boring at 15'					
						Cave-In at 13'					
						Boring Offset 80' Southeast Due to Dense Overgrowth and Trees					

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GENERAL NOTES

SAMPLE IDENTIFICATION

The Unified Soil Classification System (USCS), AASHTO 1988 and ASTM designations D2487 and D-2488 are used to identify the encountered materials unless otherwise noted. Coarse-grained soils are defined as having more than 50% of their dry weight retained on a #200 sieve (0.075mm); they are described as: boulders, cobbles, gravel or sand. Fine-grained soils have less than 50% of their dry weight retained on a #200 sieve; they are defined as silts or clay depending on their Atterberg Limit attributes. Major constituents may be added as modifiers and minor constituents may be added according to the relative proportions based on grain size.

DRILLING AND SAMPLING SYMBOLS

SFA: Solid Flight Auger - typically 4" diameter flights, except where noted.
HSA: Hollow Stem Auger - typically 3¼" or 4¼ I.D. openings, except where noted.
M.R.: Mud Rotary - Uses a rotary head with Bentonite or Polymer Slurry
R.C.: Diamond Bit Core Sampler
H.A.: Hand Auger
P.A.: Power Auger - Handheld motorized auger

SS: Split-Spoon - 1 3/8" I.D., 2" O.D., except where noted.
ST: Shelby Tube - 3" O.D., except where noted.
RC: Rock Core
TC: Texas Cone
BS: Bulk Sample
PM: Pressuremeter
CPT-U: Cone Penetrometer Testing with Pore-Pressure Readings

SOIL PROPERTY SYMBOLS

N: Standard "N" penetration: Blows per foot of a 140 pound hammer falling 30 inches on a 2-inch O.D. Split-Spoon.
N_{60}: A "N" penetration value corrected to an equivalent 60% hammer energy transfer efficiency (ETR)
Q_u: Unconfined compressive strength, TSF
Q_p: Pocket penetrometer value, unconfined compressive strength, TSF
w%: Moisture/water content, %
LL: Liquid Limit, %
PL: Plastic Limit, %
PI: Plasticity Index = (LL-PL),%
DD: Dry unit weight, pcf
▼,▽,▼ Apparent groundwater level at time noted

RELATIVE DENSITY OF COARSE-GRAINED SOILS

Relative Density	N - Blows/foot
Very Loose	0 - 4
Loose	4 - 10
Medium Dense	10 - 30
Dense	30 - 50
Very Dense	50 - 80
Extremely Dense	80+

ANGULARITY OF COARSE-GRAINED PARTICLES

Description	Criteria
Angular:	Particles have sharp edges and relatively plane sides with unpolished surfaces
Subangular:	Particles are similar to angular description, but have rounded edges
Subrounded:	Particles have nearly plane sides, but have well-rounded corners and edges
Rounded:	Particles have smoothly curved sides and no edges

GRAIN-SIZE TERMINOLOGY

Component	Size Range
Boulders:	Over 300 mm (>12 in.)
Cobbles:	75 mm to 300 mm (3 in. to 12 in.)
Coarse-Grained Gravel:	19 mm to 75 mm (¾ in. to 3 in.)
Fine-Grained Gravel:	4.75 mm to 19 mm (No.4 to ¾ in.)
Coarse-Grained Sand:	2 mm to 4.75 mm (No.10 to No.4)
Medium-Grained Sand:	0.42 mm to 2 mm (No.40 to No.10)
Fine-Grained Sand:	0.075 mm to 0.42 mm (No. 200 to No.40)
Silt:	0.005 mm to 0.075 mm
Clay:	<0.005 mm

PARTICLE SHAPE

Description	Criteria
Flat:	Particles with width/thickness ratio > 3
Elongated:	Particles with length/width ratio > 3
Flat & Elongated:	Particles meet criteria for both flat and elongated

RELATIVE PROPORTIONS OF FINES

Descriptive Term	% Dry Weight
Trace:	< 5%
With:	5% to 12%
Modifier:	>12%

Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

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GENERAL NOTES

(Continued)

CONSISTENCY OF FINE-GRAINED SOILS

Q_u - TSF	N - Blows/foot	Consistency
0 - 0.25	0 - 2	Very Soft
0.25 - 0.50	2 - 4	Soft
0.50 - 1.00	4 - 8	Firm (Medium Stiff)
1.00 - 2.00	8 - 15	Stiff
2.00 - 4.00	15 - 30	Very Stiff
4.00 - 8.00	30 - 50	Hard
8.00+	50+	Very Hard

MOISTURE CONDITION DESCRIPTION

Description	Criteria
Dry:	Absence of moisture, dusty, dry to the touch
Moist:	Damp but no visible water
Wet:	Visible free water, usually soil is below water table

RELATIVE PROPORTIONS OF SAND AND GRAVEL

Descriptive Term	% Dry Weight
Trace:	< 15%
With:	15% to 30%
Modifier:	>30%

STRUCTURE DESCRIPTION

Description	Criteria
Stratified:	Alternating layers of varying material or color with layers at least ¼-inch (6 mm) thick
Laminated:	Alternating layers of varying material or color with layers less than ¼-inch (6 mm) thick
Fissured:	Breaks along definite planes of fracture with little resistance to fracturing
Slickensided:	Fracture planes appear polished or glossy, sometimes striated
Blocky:	Cohesive soil that can be broken down into small angular lumps which resist further breakdown
Lensed:	Inclusion of small pockets of different soils
Layer:	Inclusion greater than 3 inches thick (75 mm)
Seam:	Inclusion 1/8-inch to 3 inches (3 to 75 mm) thick extending through the sample
Parting:	Inclusion less than 1/8-inch (3 mm) thick

SCALE OF RELATIVE ROCK HARDNESS

Q_u - TSF	Consistency
2.5 - 10	Extremely Soft
10 - 50	Very Soft
50 - 250	Soft
250 - 525	Medium Hard
525 - 1,050	Moderately Hard
1,050 - 2,600	Hard
>2,600	Very Hard

ROCK BEDDING THICKNESSES

Description	Criteria
Very Thick Bedded	Greater than 3-foot (>1.0 m)
Thick Bedded	1-foot to 3-foot (0.3 m to 1.0 m)
Medium Bedded	4-inch to 1-foot (0.1 m to 0.3 m)
Thin Bedded	1¼-inch to 4-inch (30 mm to 100 mm)
Very Thin Bedded	½-inch to 1¼-inch (10 mm to 30 mm)
Thickly Laminated	1/8-inch to ½-inch (3 mm to 10 mm)
Thinly Laminated	1/8-inch or less "paper thin" (<3 mm)

ROCK VOIDS

Voids	Void Diameter
Pit	<6 mm (<0.25 in)
Vug	6 mm to 50 mm (0.25 in to 2 in)
Cavity	50 mm to 600 mm (2 in to 24 in)
Cave	>600 mm (>24 in)

GRAIN-SIZED TERMINOLOGY

(Typically Sedimentary Rock)

Component	Size Range
Very Coarse Grained	>4.76 mm
Coarse Grained	2.0 mm - 4.76 mm
Medium Grained	0.42 mm - 2.0 mm
Fine Grained	0.075 mm - 0.42 mm
Very Fine Grained	<0.075 mm

ROCK QUALITY DESCRIPTION

Rock Mass Description	RQD Value
Excellent	90 -100
Good	75 - 90
Fair	50 - 75
Poor	25 -50
Very Poor	Less than 25

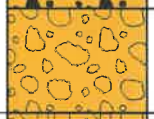
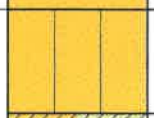
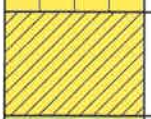
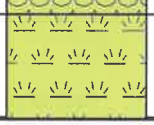
DEGREE OF WEATHERING

Slightly Weathered:	Rock generally fresh, joints stained and discoloration extends into rock up to 25 mm (1 in), open joints may contain clay, core rings under hammer impact.
Weathered:	Rock mass is decomposed 50% or less, significant portions of the rock show discoloration and weathering effects, cores cannot be broken by hand or scraped by knife.
Highly Weathered:	Rock mass is more than 50% decomposed, complete discoloration of rock fabric, core may be extremely broken and gives clunk sound when struck by hammer, may be shaved with a knife.

Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

SOIL CLASSIFICATION CHART

NOTE: DUAL SYMBOLS ARE USED TO INDICATE BORDERLINE SOIL CLASSIFICATIONS

MAJOR DIVISIONS			SYMBOLS GRAPH	SYMBOLS LETTER	TYPICAL DESCRIPTIONS
COARSE GRAINED SOILS — MORE THAN 50% OF MATERIAL IS LARGER THAN NO. 200 SIEVE SIZE	GRAVEL AND GRAVELLY SOILS — MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE	CLEAN GRAVELS (LITTLE OR NO 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 (APPRECIABLE AMOUNT OF FINES)		GM	SILTY GRAVELS, GRAVEL - SAND - SILT MIXTURES
				GC	CLAYEY GRAVELS, GRAVEL - SAND - CLAY MIXTURES
	SAND AND SANDY SOILS — MORE THAN 50% OF COARSE FRACTION PASSING ON NO. 4 SIEVE	CLEAN SANDS (LITTLE OR NO FINES)		SW	WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
				SP	POORLY-GRADED SANDS, GRAVELLY SAND, LITTLE OR NO FINES
		SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES)		SM	SILTY SANDS, SAND - SILT MIXTURES
				SC	CLAYEY SANDS, SAND - CLAY MIXTURES
FINE GRAINED SOILS — MORE THAN 50% 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 GREATER THAN 50		MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILTY SOILS
				CH	INORGANIC CLAYS OF HIGH PLASTICITY
				OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
HIGHLY ORGANIC SOILS				PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS

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Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

Wis. Dept. of Safety and Professional Services
Division of Industry Services

SOIL EVALUATION - STORM

In accordance with SPS 382.365 & 385, Wis. Adm. Code and WDNR Standard 1002

Attach complete site plan on paper not less that 8 1/2 x 11 inches in size. Plan must include, but not limited to: vertical and horizontal reference point (BM), direction and percent slope, scale or dimensions, north arrow, and BM referenced to nearest road.

Please print all information.

Personal information you provide may be used for secondary purposes [Privacy Law, s. 15.04 (1) (m)].

County: Ozaukee
Parcel I.D.:
Reviewed by:
Date:

Property Owner	Property Location: 8611 STH 60, Cedarburg, WI Govt. Lot
Property Owner's Mailing Address	Lot # / Block # / Subd. Name or CSM#
City / State / Zip Code / Phone Number	☒ City ☐ Village ☐ Town — Nearest Road: Cedarburg / STH 60

Drainage area _____ ☐ sq. ft. ☐ acres
Optional:
Test Site Suitable for (check all that apply)
☐ Irrigation ☐ Bioretention trench ☐ Trench(es)
☐ Rain Garden ☐ Grassed swale ☐ Reuse
☐ Infiltration trench ☐ SDS (> 15' wide) ☐ Other _____

Hydraulic Application Test Method:
☒ Morphological Evaluation
☐ Double Ring Infiltrometer
☐ Other (specify)

Soil Moisture
Date of Test Pits: August 22, 2023
USDA-NRCS WETS Value: 12
☐ Dry =1;
☒ Normal = 2;
☐ Wet = 3.

1 Obs. # ☒ Boring ☐ Pit — B-1
Ground surface elevation ± — Elevation of limiting factor: 12'±

Horizon	Depth in.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	% Rock Frag.	% Fines	Hydraulic App. Rate Inches/Hr.
1	0-11	10YR 2/1		sil	1 f sbk	mfr		<15		0.13
2	11-24	5YR 3/3		sicl	1 f sbk	mfr		<15		0.04
3	24-72	7.5YR 4/3		sicl	2 vy thin pl	mfi		<15		0.04
4	72-144	7.5YR 6/3		sil	2 thin pl	mfr		<15		0.13
5	144-168	7.5YR 6/3		grls	0 m	mfr		>15		1.63
6	168-240	7.5YR 6/3		grvfsl	0 m	mfr		>15		0.5

Comment: wet soils at 12 feet

2 Obs. # ☒ Boring ☐ Pit — B-2
Ground surface elevation ± — Elevation of limiting factor: 10'±

Horizon	Depth in.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	% Rock Frag.	% Fines	Hydraulic App. Rate Inches/Hr.
1	0-10	10YR 2/1		sil	1 f sbk	mfr		<15		0.13
2	10-48	5YR 3/3		sicl	1 f sbk	mfr		<15		0.04
3	48-72	7.5YR 4/3		sicl	2 vy thin pl	mfi		<15		0.04
4	72-120	7.5YR 6/3		sil	2 thin pl	mfr		<15		0.13
5	120-144	7.5YR 5/3		l	0 m	mfi		<15		0.24
6	144-192	7.5YR 5/3		grsl	0 m	mfi		>15		0.5
7	192-240	7.5YR 6/1		sicl	1 f sbk	mfi		<15		0.04

Comment: wet soils at 10 feet; gray soils at 16 feet

CST/PSS Name (Please Print)	Signature	CST/PSS/Geologist Number
Patrick J. Patterson		G-229
Address	Date Evaluation Conducted	Telephone Number
821 Corporate Court, Waukesha, WI 53189	8/22/2023	262 521 2125

SBD-10793 (R.01/17)

Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

3 Obs. # ☒ Boring B-11 ☐ Pit Ground surface elevation ± Elevation of limiting factor: 11'±

Horizon	Depth in.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	% Rock Frag.	% Fines	Hydraulic App. Rate Inches/Hr.
1	0-12	10YR 2/1		sil	1 f sbk	mfr		<15		0.13
2	12-108	5YR 3/3		sicl	1 f sbk	mfr		<15		0.04
3	108-132	7.5YR 4/3		sicl	2 vy thin pl	mfi		<15		0.04
4	132-180	7.5YR 4/1		sicl	1 f sbk	mfi		<15		0.04

Comment: gray soils at 11 feet

4 Obs. # ☒ Boring B-12 ☐ Pit Ground surface elevation ± Elevation of limiting factor: 11'±

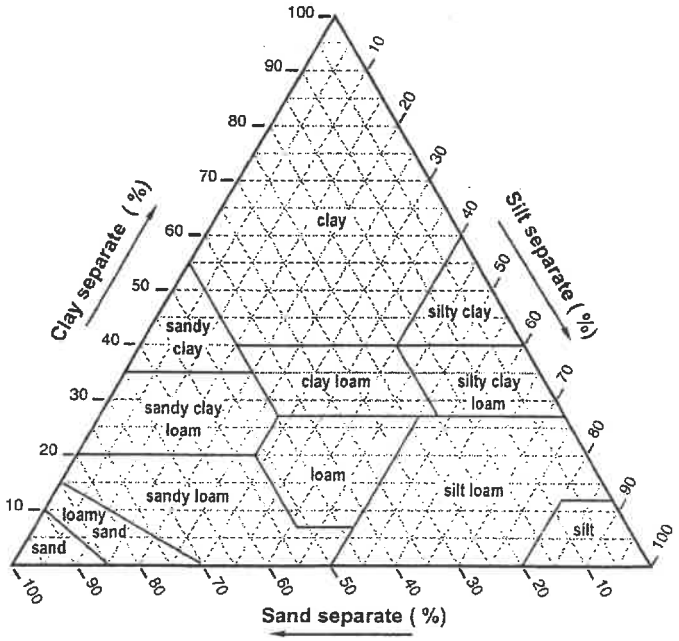
Horizon	Depth in.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	% Rock Frag.	% Fines	Hydraulic App. Rate Inches/Hr.
1	0-11	10YR 2/1		sil	1 f sbk	mfr		<15		0.13
2	11-36	5YR 3/3		sicl	1 f sbk	mfr		<15		0.04
3	36-144	7.5YR 5/3		sicl	2 thin pl	mfi		<15		0.04
4	144-180	7.5YR 6/3		grsl	0 m	mfr		>15		0.5

Comment: wet soils at 11 feet

Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

Texture Triangle:

Fine Earth Texture Classes (——)



TEXTURE MODIFIERS - Conventions for using "Rock Fragment Texture Modifiers" and for using textural adjectives that convey the "% volume" ranges for **Rock Fragments - Size and Quantity**.

Fragment Content % By Volume	Rock Fragment Modifier Usage
< 15	No texture adjective is used (noun only; e.g., *loam*).
15 to < 35	Use adjective for appropriate size; e.g., *gravelly*.
35 to < 60	Use "very" with the appropriate size adjective; e.g., *very gravelly*.
60 to < 90	Use "extremely" with the appropriate size adjective; e.g., *extremely gravelly*.
≥ 90	No adjective or modifier. If ≤ 10% fine earth, use the appropriate noun for the dominant size class; e.g., *gravel*. Use **Terms in Lieu of Texture**.

Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

(SOIL) TEXTURE

This is the numerical proportion (percent by weight) of sand, silt, and clay in a soil. Sand, silt, and clay content is estimated in the field by hand (or quantitatively measured in the office/lab by hydrometer or pipette) and then placed within the texture triangle to determine **Texture Class**. Estimate the **Texture Class**; e.g., *sandy loam*; or **Subclass**; e.g., *fine sandy loam* of the fine earth (≤ 2 mm) fraction, or choose a **Term in Lieu of Texture**; e.g., *gravel*. If appropriate, use a **Textural Class Modifier**; e.g., *gravelly silt loam*.

NOTE: **Soil Texture** encompasses only the fine earth fraction (≤ 2 mm). **Particle Size Distribution** (PSD) encompasses the whole soil, including both the fine earth fraction (≤ 2 mm; weight %) and rock fragments (> 2 mm; volume %).

TEXTURE CLASS

Texture Class or Subclass	Code	
	Conv.	NASIS
Coarse Sand	cos	COS
Sand	s	S
Fine Sand	fs	FS
Very Fine Sand	vfs	VFS
Loamy Coarse Sand	lcos	LCOS
Loamy Sand	ls	LS
Loamy Fine Sand	lfs	LFS
Loamy Very Fine Sand	lvfs	LVFS
Coarse Sandy Loam	cosl	COSL
Sandy Loam	sl	SL
Fine Sandy Loam	fsl	FSL
Very Fine Sandy Loam	vfsl	VFSL
Loam	l	L
Silt Loam	sil	SIL
Silt	si	SI
Sandy Clay Loam	scl	SCL
Clay Loam	cl	CL
Silty Clay Loam	sicl	SICL
Sandy Clay	sc	SC
Silty Clay	sic	SIC
Clay	c	C

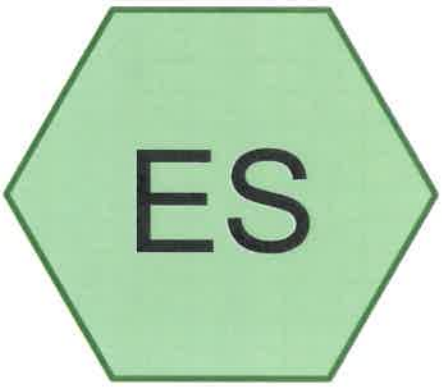
Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

TEXTURE MODIFIERS - *(adjectives)*

ROCK FRAGMENTS: Size & Quantity [1]	Code		Criteria: Percent (By Volume) of Total Rock Fragments and Dominated By (*name size*): [1]
	Conv.	PDP/ NASIS	
ROCK FRAGMENTS (> 2 mm; ≥ Strongly Cemented)			
Gravelly	GR	GR	≥ 15% but < 35% gravel
Fine Gravelly	FGR	GRF	≥15% but < 35% fine gravel
Medium Gravelly	MGR	GRM	≥15% but < 35% med. gravel
Coarse Gravelly	CGR	GRC	≥ 15% but < 35% coarse gravel
Very Gravelly	VGR	GRV	≥ 35% but < 60% gravel
Extremely Gravelly	XGR	GRX	≥ 60% but < 90% gravel
Cobbly	CB	CB	≥ 15% but < 35% cobbles
Very Cobbly	VCB	CBV	≥ 35% but < 60% cobbles
Extremely Cobbly	XCB	CBX	≥ 60% but < 90% cobbles
Stony	ST	ST	≥ 15% but < 35% stones
Very Stony	VST	STV	≥ 35% but < 60% stones
Extremely Stony	XST	STX	≥ 60% but < 90% stones
Bouldery	BY	BY	≥ 15% but < 35% boulders
Very Bouldery	VBY	BYV	≥ 35% but < 60% boulders
Extremely Bouldery	XBY	BYX	≥ 60% but < 90% boulders
Channery	CN	CN	≥ 15% but < 35% channers
Very Channery	VCN	CNV	≥ 35% but < 60% channers
Extremely Channery	XCN	CNX	≥ 60% but < 90% channers
Flaggy	FL	FL	≥ 15% but < 35% flagstones
Very Flaggy	VFL	FLV	≥ 35% but < 60% flagstones
Extremely Flaggy	XFL	FLX	≥ 60% but < 90% flagstones
PARAROCK FRAGMENTS (> 2 mm; < Strongly Cemented) [2, 3]			
Parabouldery	PBY	PBY	(same criteria as bouldery)
Very Parabouldery	VPBY	PBYV	(same criteria as very bouldery)
Extr. Parabouldery	XPBY	PBYX	(same criteria as ext. bouldery)
etc.	etc.	etc.	(same criteria as non-para)

[1] The "Quantity" modifier (e.g., *very*) is based on the total rock fragment content. The "Size" modifier (e.g., *cobbly*) is independently based on the largest, dominant fragment size. For a mixture of sizes (e.g., *gravel and stones*), a smaller size–class is named only if its quantity (%) sufficiently exceeds that of a larger size–class. For field texture determination, a smaller size-class must exceed 2 times the quantity (vol. %) of a larger size class before it is named (e.g., 30% gravel and 14% stones = *very gravelly*, but 20% gravel and 14% stones = *stony*). For more explicit naming criteria see NSSH-Part 618, Exhibit 618.11(Soil Survey Staff, 2001b).

Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)



Existing Site

Subcat Reach Pond Link

Routing Diagram for CJE2263R2
Prepared by {enter your company name here}, Printed 11/2/2023
HydroCAD® 10.00-16 s/n 03450 © 2015 HydroCAD Software Solutions LLC

Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

Area Listing (selected nodes)

Area (acres)	CN	Description (subcatchment-numbers)
8.557	79	Woods/grass comb., Good, HSG D (ES)
8.557	**79**	**TOTAL AREA**

Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

Summary for Subcatchment ES: Existing Site

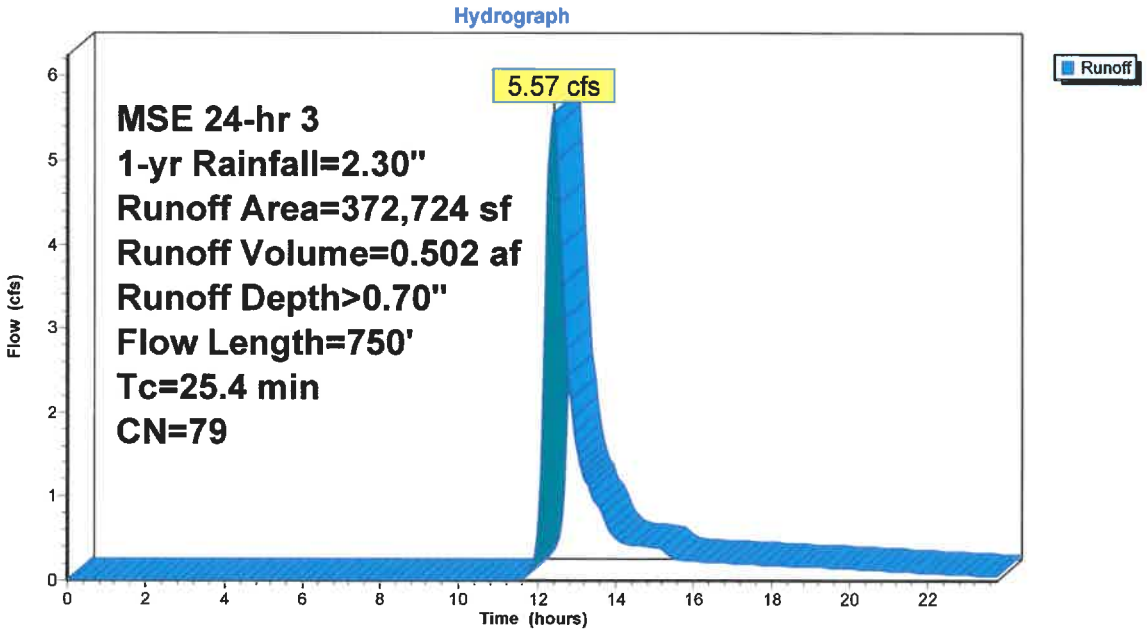
Runoff = 5.57 cfs @ 12.40 hrs, Volume= 0.502 af, Depth> 0.70"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-23.75 hrs, dt= 0.05 hrs
MSE 24-hr 3 1-yr Rainfall=2.30"

Area (sf)	CN	Description
372,724	79	Woods/grass comb., Good, HSG D
372,724		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
20.3	150	0.0667	0.12		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 2.61"
5.1	600	0.0150	1.97		**Shallow Concentrated Flow, B-C** Unpaved Kv= 16.1 fps
25.4	750	Total			

Subcatchment ES: Existing Site



Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

Summary for Subcatchment ES: Existing Site

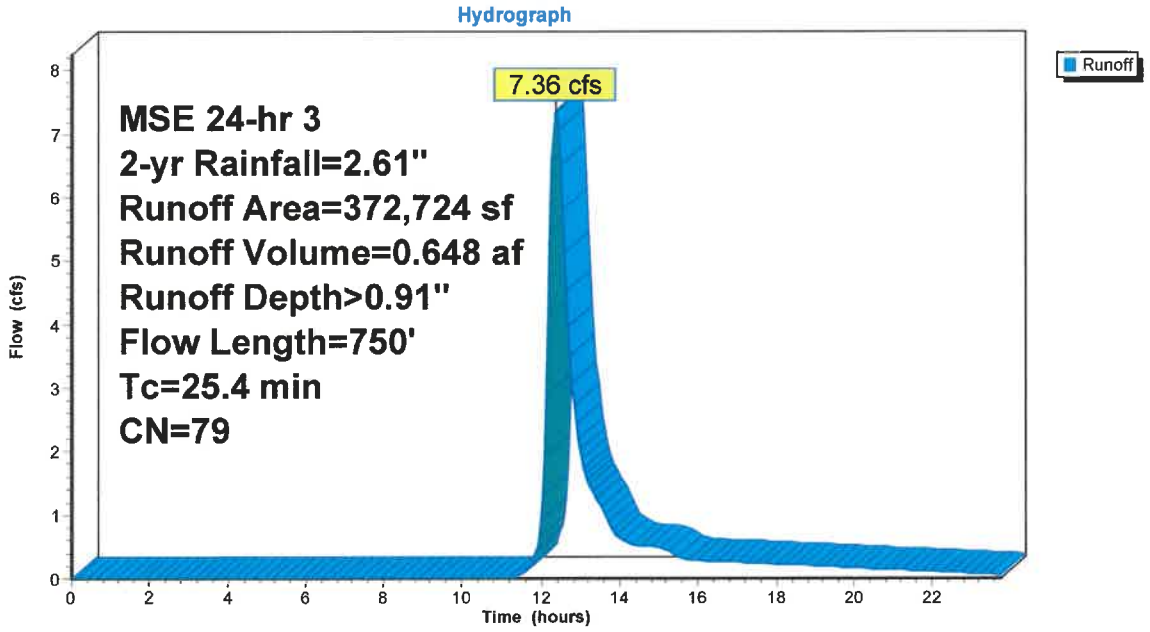
Runoff = 7.36 cfs @ 12.39 hrs, Volume= 0.648 af, Depth> 0.91"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-23.75 hrs, dt= 0.05 hrs
MSE 24-hr 3 2-yr Rainfall=2.61"

Area (sf)	CN	Description
372,724	79	Woods/grass comb., Good, HSG D
372,724		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
20.3	150	0.0667	0.12		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 2.61"
5.1	600	0.0150	1.97		**Shallow Concentrated Flow, B-C** Unpaved Kv= 16.1 fps
25.4	750	Total			

Subcatchment ES: Existing Site



Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

Summary for Subcatchment ES: Existing Site

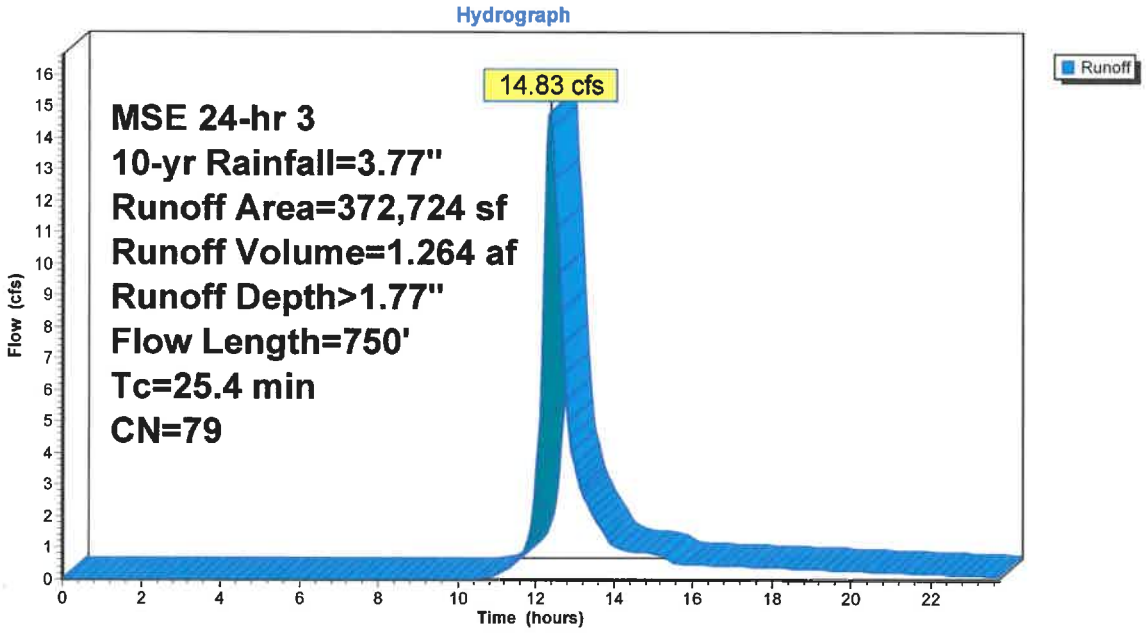
Runoff = 14.83 cfs @ 12.38 hrs, Volume= 1.264 af, Depth> 1.77"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-23.75 hrs, dt= 0.05 hrs
MSE 24-hr 3 10-yr Rainfall=3.77"

Area (sf)	CN	Description
372,724	79	Woods/grass comb., Good, HSG D
372,724		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
20.3	150	0.0667	0.12		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 2.61"
5.1	600	0.0150	1.97		**Shallow Concentrated Flow, B-C** Unpaved Kv= 16.1 fps
25.4	750	Total			

Subcatchment ES: Existing Site



Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

Summary for Subcatchment ES: Existing Site

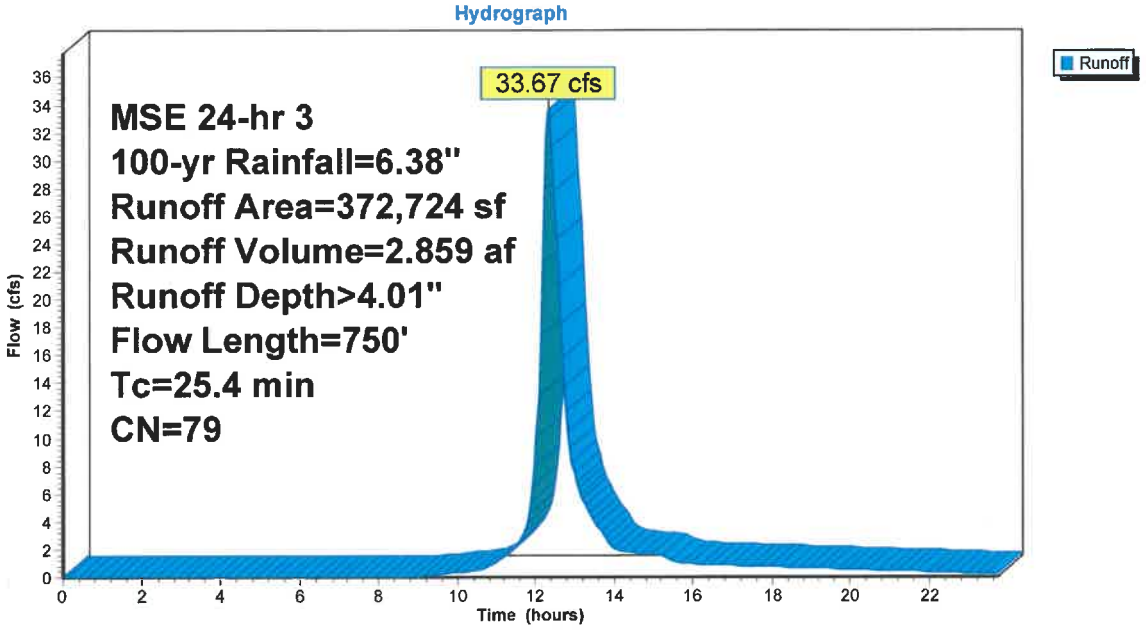
Runoff = 33.67 cfs @ 12.36 hrs, Volume= 2.859 af, Depth> 4.01"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-23.75 hrs, dt= 0.05 hrs
MSE 24-hr 3 100-yr Rainfall=6.38"

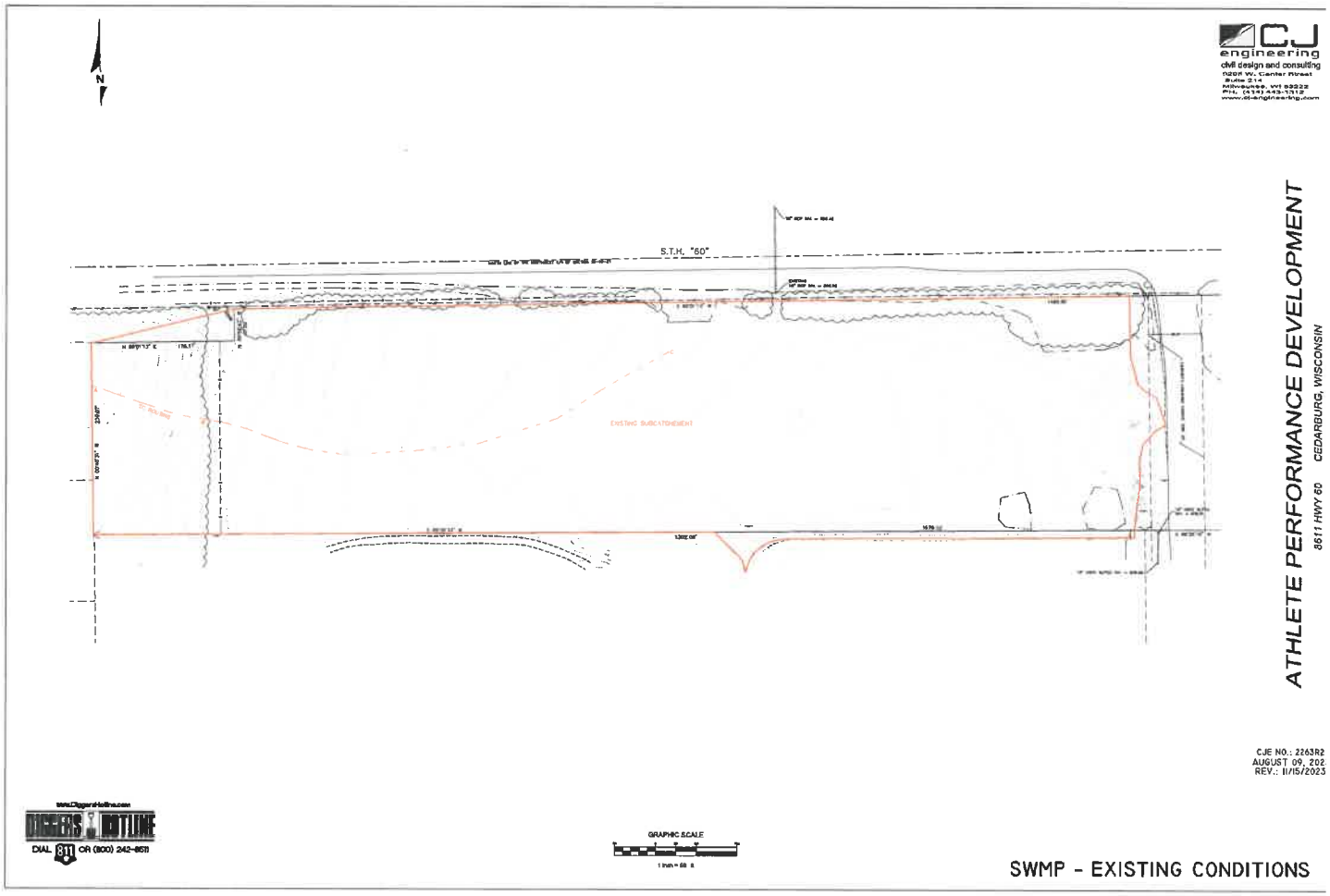
Area (sf)	CN	Description
372,724	79	Woods/grass comb., Good, HSG D
372,724		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
20.3	150	0.0667	0.12		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 2.61"
5.1	600	0.0150	1.97		**Shallow Concentrated Flow, B-C** Unpaved Kv= 16.1 fps
25.4	750	Total			

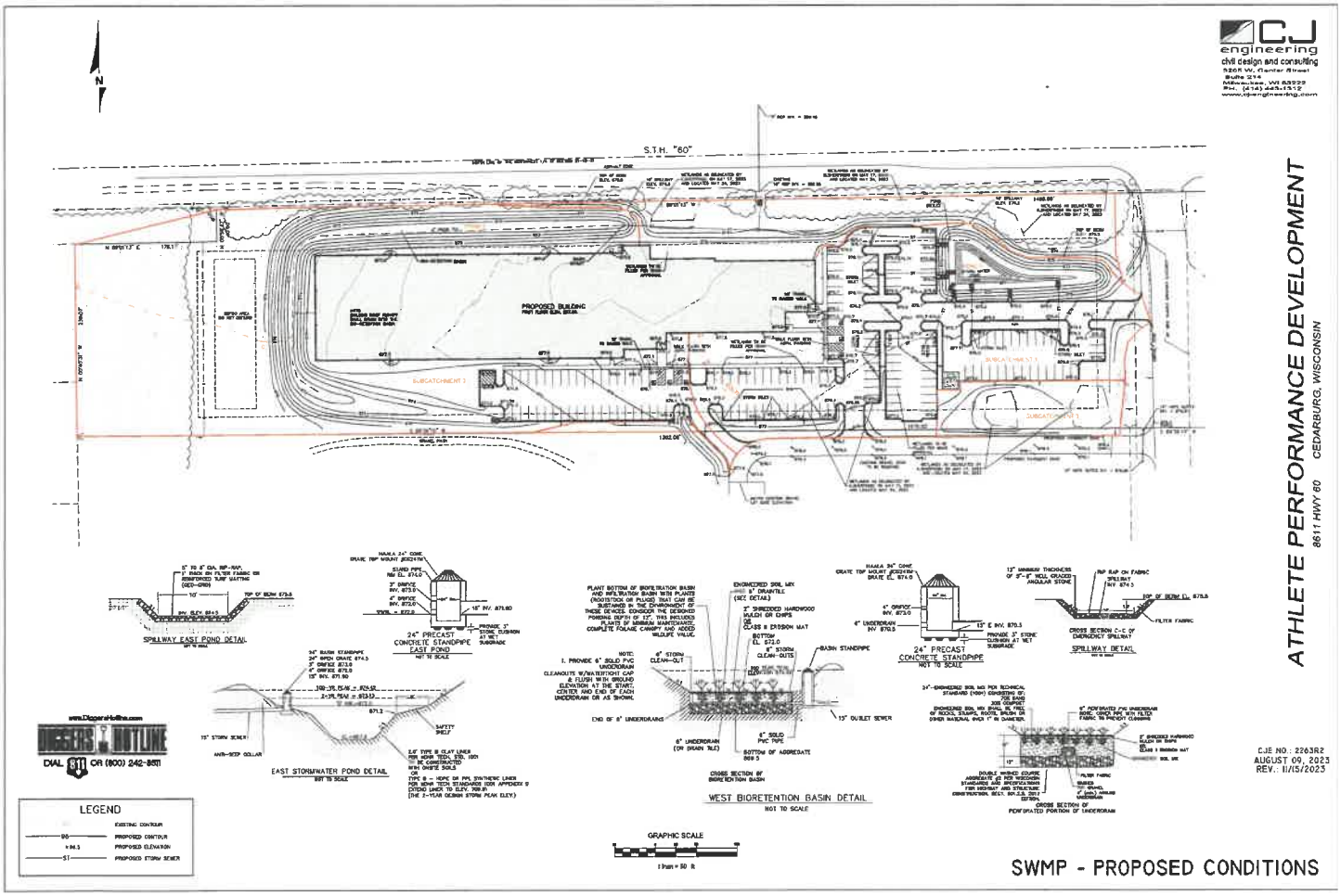
Subcatchment ES: Existing Site



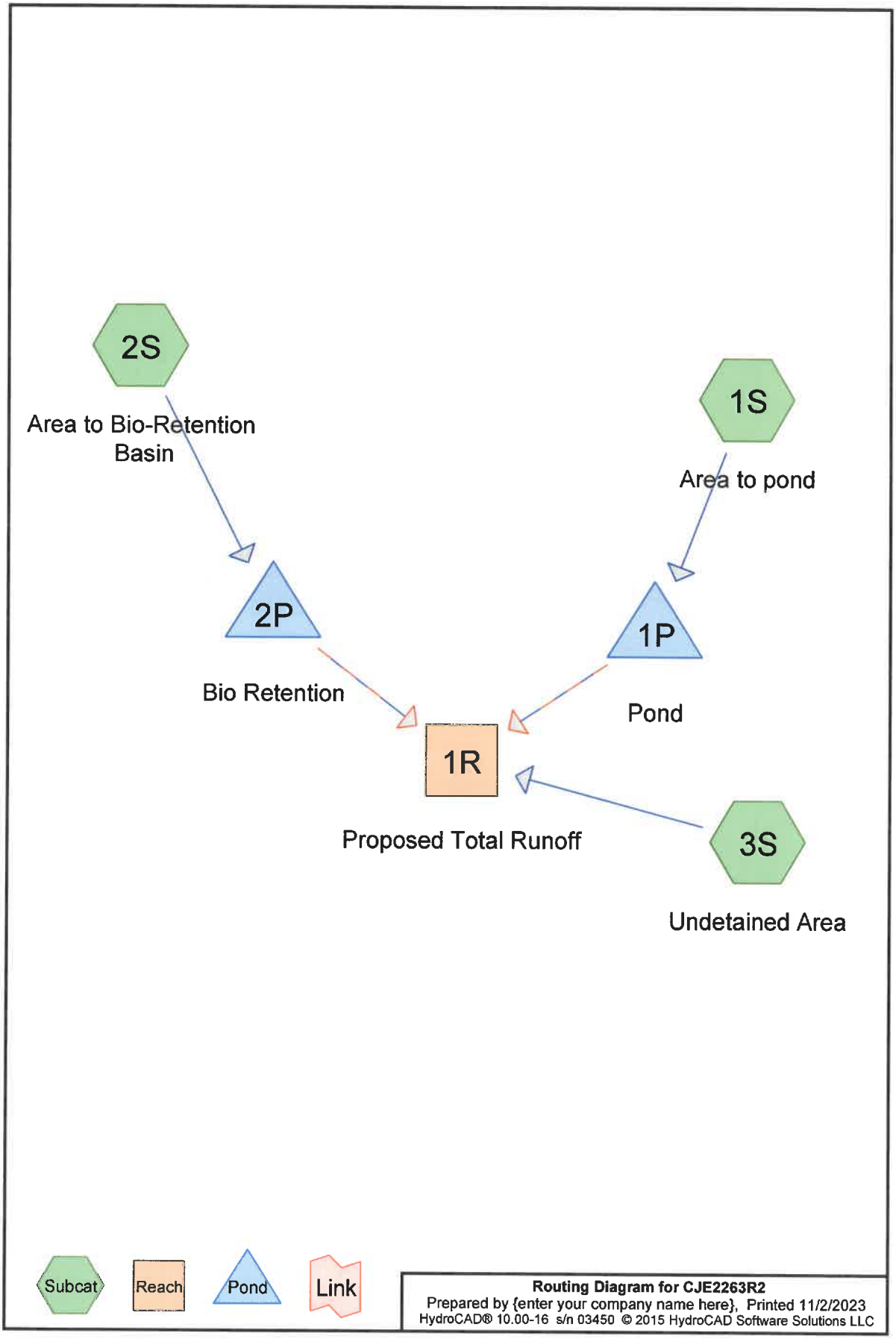
Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)



Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)



Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)



Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

Area Listing (selected nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.711	74	>75% Grass cover, Good, HSG C (1S)
3.333	80	>75% Grass cover, Good, HSG D (2S, 3S)
1.850	98	Pavement (1S, 2S)
0.149	98	Pond - NWL (1S)
1.660	98	Proposed Building (2S)
0.854	77	Woods, Good, HSG D (2S)
8.557	**87**	**TOTAL AREA**

Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

Pipe Listing (selected nodes)

Line#	Node Number	In-Invert (feet)	Out-Invert (feet)	Length (feet)	Slope (ft/ft)	n	Diam/Width (inches)	Height (inches)	Inside-Fill (inches)
1	1S	0.00	0.00	300.0	0.0026	0.013	12.0	0.0	0.0
2	1P	871.90	870.50	235.0	0.0060	0.011	15.0	0.0	0.0
3	2P	870.50	870.25	165.0	0.0015	0.011	15.0	0.0	0.0
4	2P	871.20	870.50	600.0	0.0012	0.010	6.0	0.0	0.0

Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

Summary for Subcatchment 1S: Area to pond

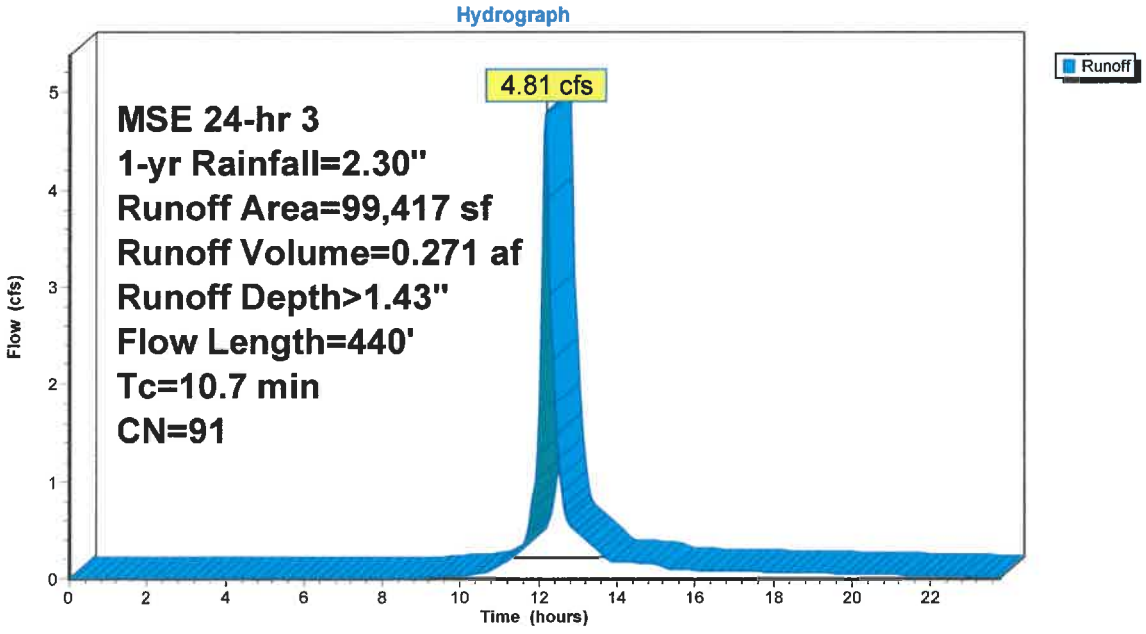
Runoff = 4.81 cfs @ 12.19 hrs, Volume= 0.271 af, Depth> 1.43"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-23.75 hrs, dt= 0.05 hrs
MSE 24-hr 3 1-yr Rainfall=2.30"

	Area (sf)	CN	Description
	30,965	74	>75% Grass cover, Good, HSG C
*	61,948	98	Pavement
*	6,504	98	Pond - NWL
	99,417	91	Weighted Average
	30,965		31.15% Pervious Area
	68,452		68.85% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.9	40	0.0100	0.10		**Sheet Flow, A-B** Grass: Short n= 0.150 P2= 2.61"
1.6	100	0.0120	1.01		**Sheet Flow, B-C** Smooth surfaces n= 0.011 P2= 2.61"
2.2	300	0.0026	2.31	1.82	**Pipe Channel, C-D** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.013
10.7	440	Total			

Subcatchment 1S: Area to pond



Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

Summary for Subcatchment 2S: Area to Bio-Retention Basin

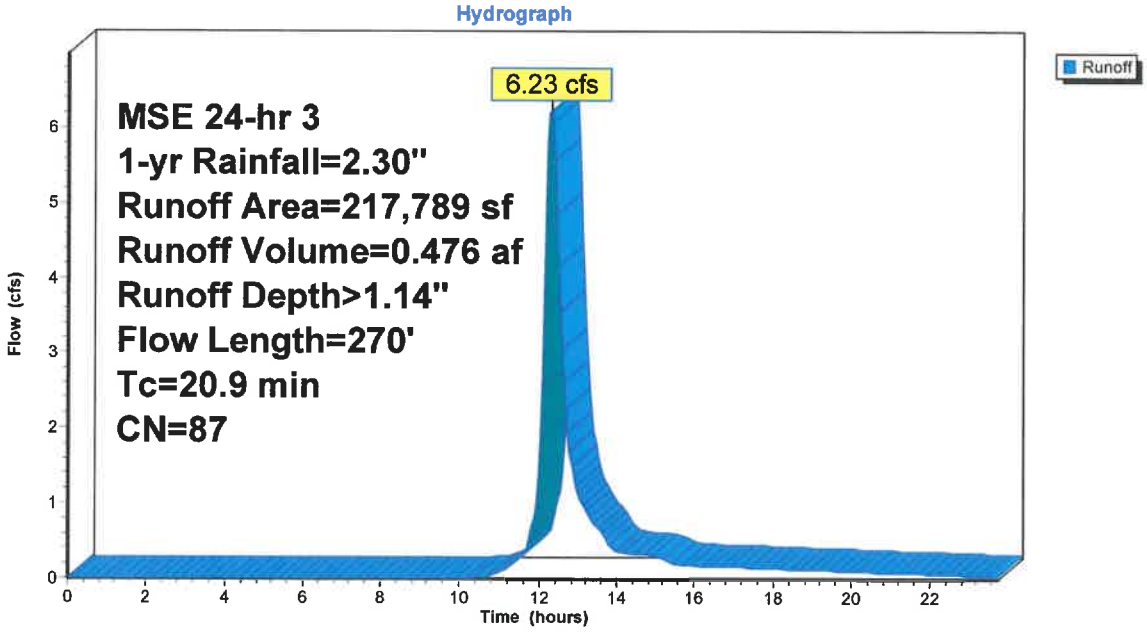
Runoff = 6.23 cfs @ 12.31 hrs, Volume= 0.476 af, Depth> 1.14"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-23.75 hrs, dt= 0.05 hrs
MSE 24-hr 3 1-yr Rainfall=2.30"

	Area (sf)	CN	Description
*	72,293	98	Proposed Building
	89,677	80	>75% Grass cover, Good, HSG D
*	18,629	98	Pavement
	37,190	77	Woods, Good, HSG D
	217,789	87	Weighted Average
	126,867		58.25% Pervious Area
	90,922		41.75% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
20.3	150	0.0667	0.12		**Sheet Flow, E-F** Woods: Light underbrush n= 0.400 P2= 2.61"
0.5	90	0.0330	2.92		**Shallow Concentrated Flow, F-G** Unpaved Kv= 16.1 fps
0.1	30	0.2333	7.78		**Shallow Concentrated Flow, G-H** Unpaved Kv= 16.1 fps
20.9	270	Total			

Subcatchment 2S: Area to Bio-Retention Basin



Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

Summary for Subcatchment 3S: Undetained Area

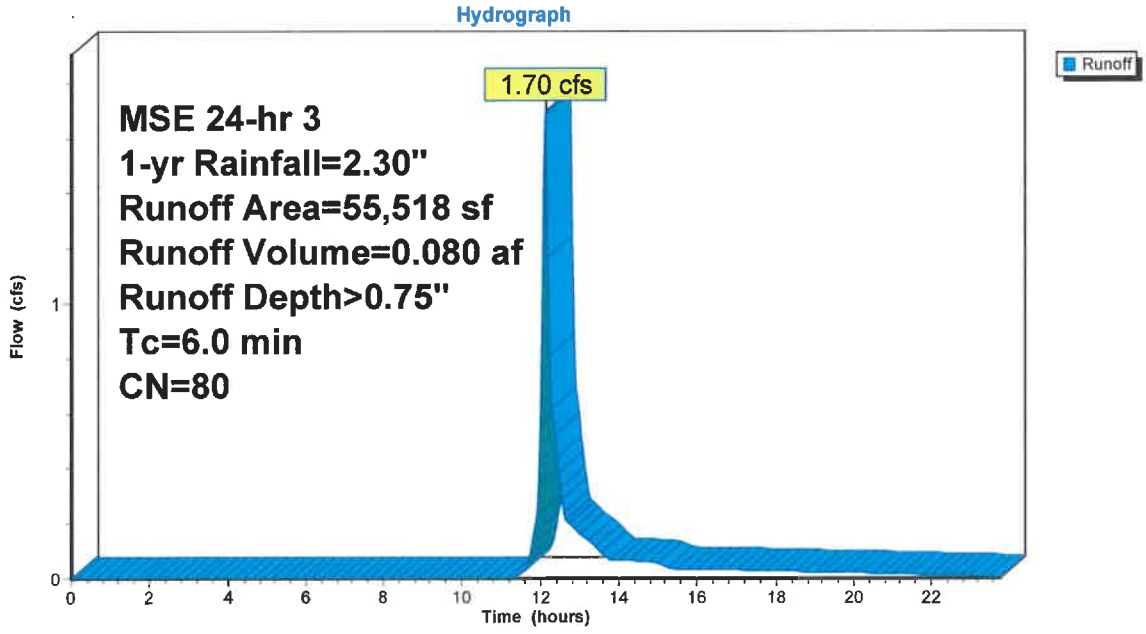
Runoff = 1.70 cfs @ 12.14 hrs, Volume= 0.080 af, Depth> 0.75"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-23.75 hrs, dt= 0.05 hrs
MSE 24-hr 3 1-yr Rainfall=2.30"

Area (sf)	CN	Description
55,518	80	>75% Grass cover, Good, HSG D
55,518		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Tc**

Subcatchment 3S: Undetained Area



Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

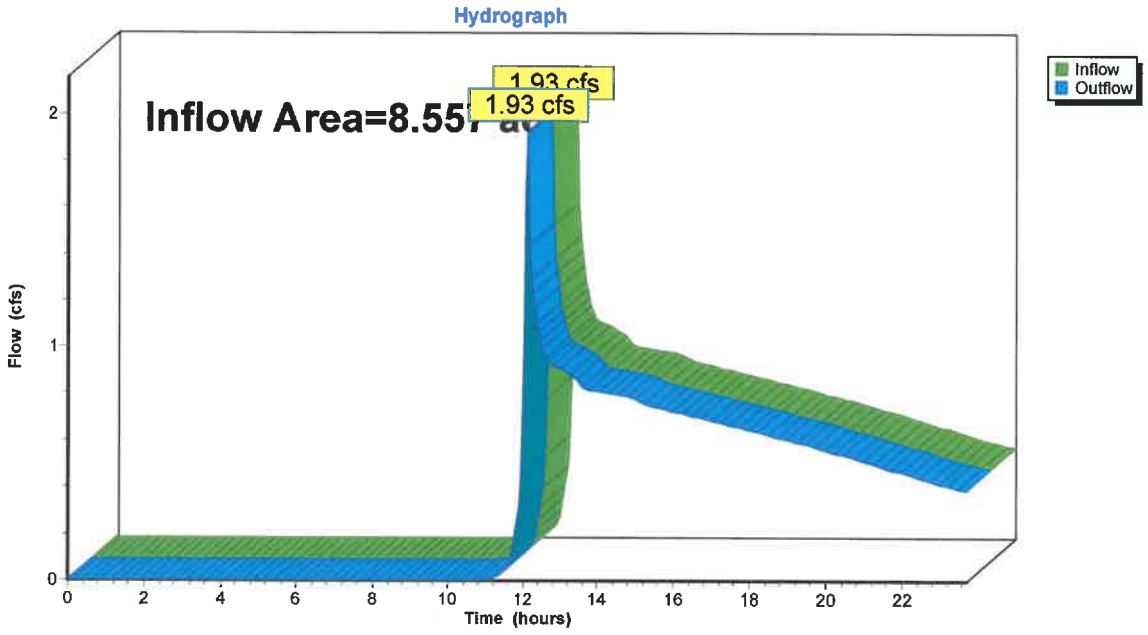
Summary for Reach 1R: Proposed Total Runoff

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 8.557 ac, 42.76% Impervious, Inflow Depth > 0.93" for 1-yr event
Inflow = 1.93 cfs @ 12.14 hrs, Volume= 0.661 af
Outflow = 1.93 cfs @ 12.14 hrs, Volume= 0.661 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-23.75 hrs, dt= 0.05 hrs

Reach 1R: Proposed Total Runoff



Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

Summary for Pond 1P: Pond

Inflow Area = 2.282 ac, 68.85% Impervious, Inflow Depth > 1.43" for 1-yr event
Inflow = 4.81 cfs @ 12.19 hrs, Volume= 0.271 af
Outflow = 0.37 cfs @ 13.30 hrs, Volume= 0.242 af, Atten= 92%, Lag= 66.9 min
Primary = 0.37 cfs @ 13.30 hrs, Volume= 0.242 af
Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-23.75 hrs, dt= 0.05 hrs
Peak Elev= 872.95' @ 13.30 hrs Surf.Area= 8,451 sf Storage= 7,114 cf

Plug-Flow detention time= 242.2 min calculated for 0.242 af (89% of inflow)
Center-of-Mass det. time= 198.3 min (996.6 - 798.3)

Volume	Invert	Avail.Storage	Storage Description
#1	872.00'	35,790 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
872.00	6,504	0	0
873.00	8,550	7,527	7,527
874.00	10,550	9,550	17,077
875.00	12,750	11,650	28,727
875.50	15,500	7,063	35,790

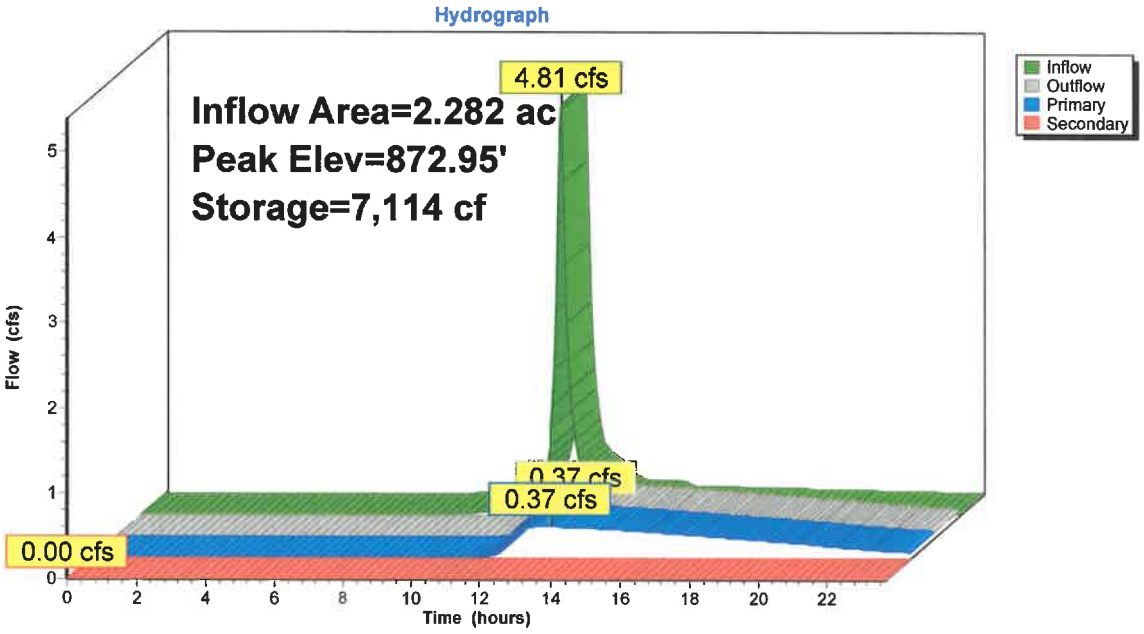
Device	Routing	Invert	Outlet Devices
#1	Primary	871.90'	**15.0" Round Culvert** L= 235.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 871.90' / 870.50' S= 0.0060 '/' Cc= 0.900 n= 0.011, Flow Area= 1.23 sf
#2	Device 1	872.00'	**4.0" Vert. Orifice/Grate** C= 0.600
#3	Device 1	873.00'	**3.0" Vert. Orifice/Grate** C= 0.600
#4	Device 1	874.00'	**24.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#5	Secondary	874.50'	**10.0' long x 10.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

Primary OutFlow Max=0.37 cfs @ 13.30 hrs HW=872.95' (Free Discharge)
└1=**Culvert** (Passes 0.37 cfs of 3.85 cfs potential flow)
  ├2=**Orifice/Grate** (Orifice Controls 0.37 cfs @ 4.27 fps)
  ├3=**Orifice/Grate** (Controls 0.00 cfs)
  └4=**Orifice/Grate** (Controls 0.00 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=872.00' (Free Discharge)
└5=**Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

Pond 1P: Pond



Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

Summary for Pond 2P: Bio Retention

Inflow Area = 5.000 ac, 41.75% Impervious, Inflow Depth > 1.14" for 1-yr event
Inflow = 6.23 cfs @ 12.31 hrs, Volume= 0.476 af
Outflow = 0.38 cfs @ 13.95 hrs, Volume= 0.339 af, Atten= 94%, Lag= 98.1 min
Primary = 0.38 cfs @ 13.95 hrs, Volume= 0.339 af
Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-23.75 hrs, dt= 0.05 hrs
Peak Elev= 872.78' @ 13.95 hrs Surf.Area= 13,543 sf Storage= 13,482 cf

Plug-Flow detention time= 323.2 min calculated for 0.338 af (71% of inflow)
Center-of-Mass det. time= 249.6 min (1,069.5 - 819.9)

Volume	Invert	Avail.Storage	Storage Description
#1	869.50'	64,291 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
869.50	7,000	0.0	0	0
869.51	7,000	33.0	23	23
870.00	7,000	33.0	1,132	1,155
870.01	7,000	27.0	19	1,174
872.00	7,800	27.0	3,976	5,150
872.01	7,800	100.0	78	5,228
873.00	15,150	100.0	11,360	16,588
874.00	23,000	100.0	19,075	35,663
875.00	34,255	100.0	28,628	64,291

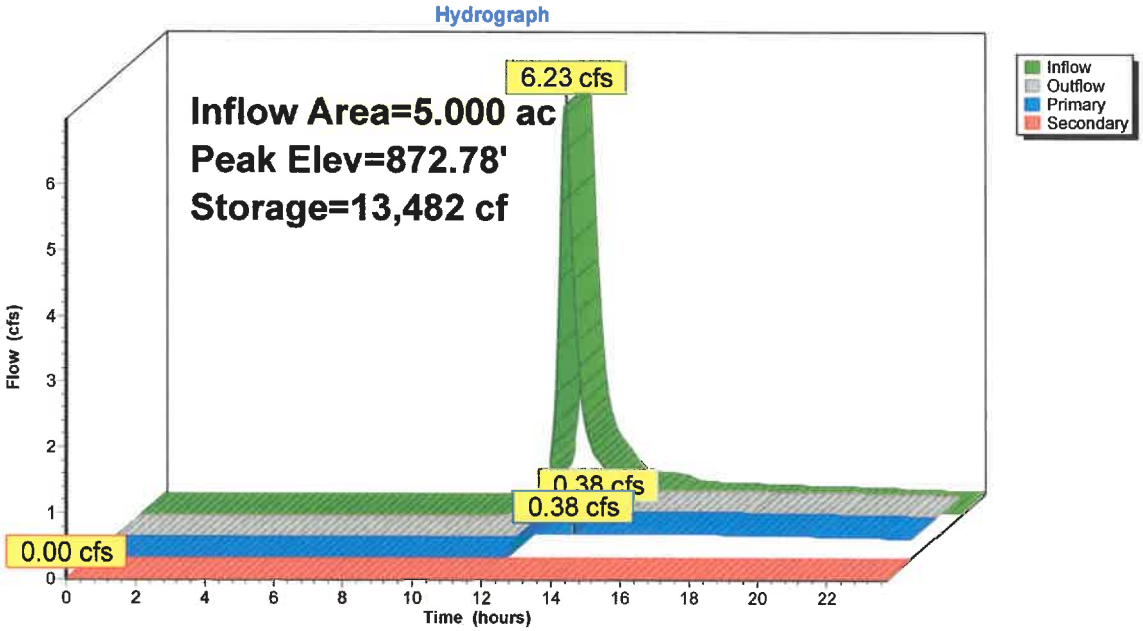
Device	Routing	Invert	Outlet Devices
#1	Primary	870.50'	**15.0" Round Culvert** L= 165.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 870.50' / 870.25' S= 0.0015 '/' Cc= 0.900 n= 0.011 Concrete pipe, straight & clean, Flow Area= 1.23 sf
#2	Device 1	871.20'	**6.0" Round Culvert** L= 600.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 871.20' / 870.50' S= 0.0012 '/' Cc= 0.900 n= 0.010, Flow Area= 0.20 sf
#3	Device 1	873.00'	**4.0" Vert. Orifice/Grate** C= 0.600
#4	Device 1	874.00'	**24.0" Horiz. Orifice/Grate** C= 0.600 in 36.0" Grate (44% open area) Limited to weir flow at low heads
#5	Secondary	874.50'	**10.0' long x 10.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

Primary OutFlow Max=0.38 cfs @ 13.95 hrs HW=872.78' (Free Discharge)
↑—**1=Culvert** (Passes 0.38 cfs of 5.41 cfs potential flow)
↑—**2=Culvert** (Barrel Controls 0.38 cfs @ 1.96 fps)
—**3=Orifice/Grate** (Controls 0.00 cfs)
—**4=Orifice/Grate** (Controls 0.00 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=869.50' (Free Discharge)
↑—**5=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

Pond 2P: Bio Retention



Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

Summary for Subcatchment 1S: Area to pond

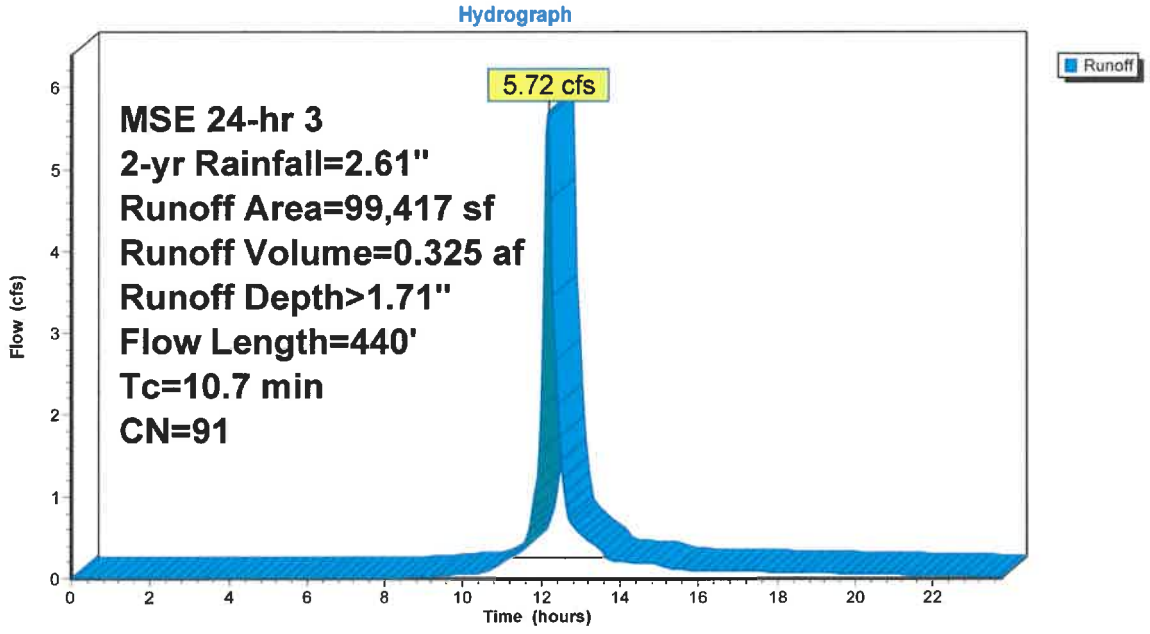
Runoff = 5.72 cfs @ 12.18 hrs, Volume= 0.325 af, Depth> 1.71"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-23.75 hrs, dt= 0.05 hrs
MSE 24-hr 3 2-yr Rainfall=2.61"

	Area (sf)	CN	Description
	30,965	74	>75% Grass cover, Good, HSG C
*	61,948	98	Pavement
*	6,504	98	Pond - NWL
	99,417	91	Weighted Average
	30,965		31.15% Pervious Area
	68,452		68.85% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.9	40	0.0100	0.10		**Sheet Flow, A-B** Grass: Short n= 0.150 P2= 2.61"
1.6	100	0.0120	1.01		**Sheet Flow, B-C** Smooth surfaces n= 0.011 P2= 2.61"
2.2	300	0.0026	2.31	1.82	**Pipe Channel, C-D** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.013
10.7	440	Total			

Subcatchment 1S: Area to pond



Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

Summary for Subcatchment 2S: Area to Bio-Retention Basin

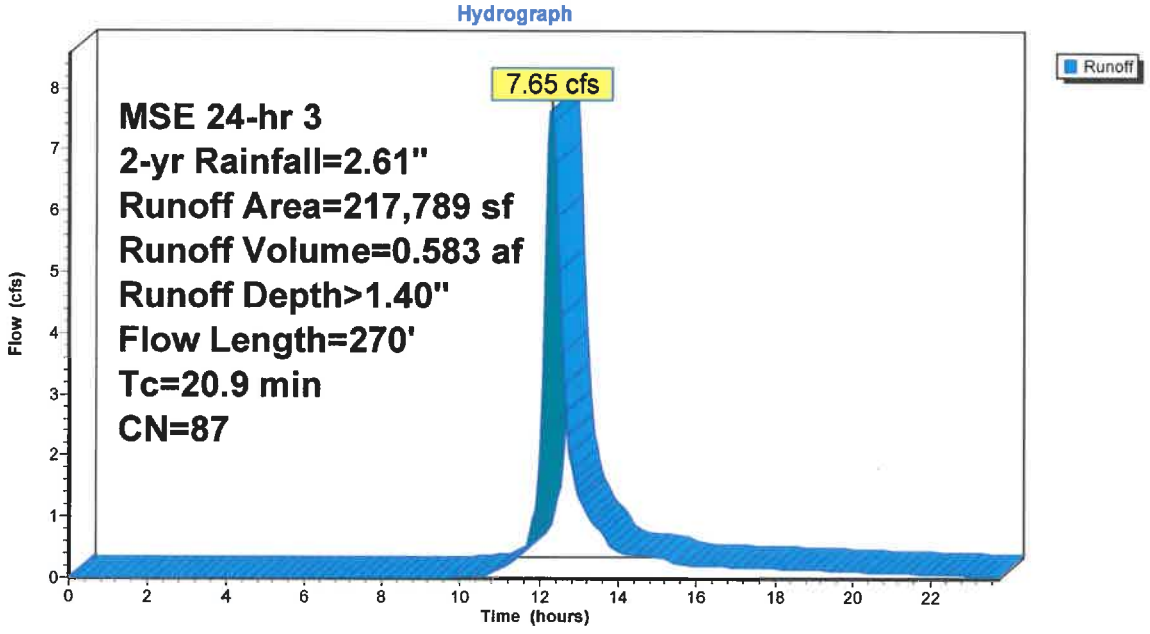
Runoff = 7.65 cfs @ 12.31 hrs, Volume= 0.583 af, Depth> 1.40"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-23.75 hrs, dt= 0.05 hrs
MSE 24-hr 3 2-yr Rainfall=2.61"

	Area (sf)	CN	Description
*	72,293	98	Proposed Building
	89,677	80	>75% Grass cover, Good, HSG D
*	18,629	98	Pavement
	37,190	77	Woods, Good, HSG D
	217,789	87	Weighted Average
	126,867		58.25% Pervious Area
	90,922		41.75% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
20.3	150	0.0667	0.12		**Sheet Flow, E-F** Woods: Light underbrush n= 0.400 P2= 2.61"
0.5	90	0.0330	2.92		**Shallow Concentrated Flow, F-G** Unpaved Kv= 16.1 fps
0.1	30	0.2333	7.78		**Shallow Concentrated Flow, G-H** Unpaved Kv= 16.1 fps
20.9	270	Total			

Subcatchment 2S: Area to Bio-Retention Basin



Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

Summary for Subcatchment 3S: Undetained Area

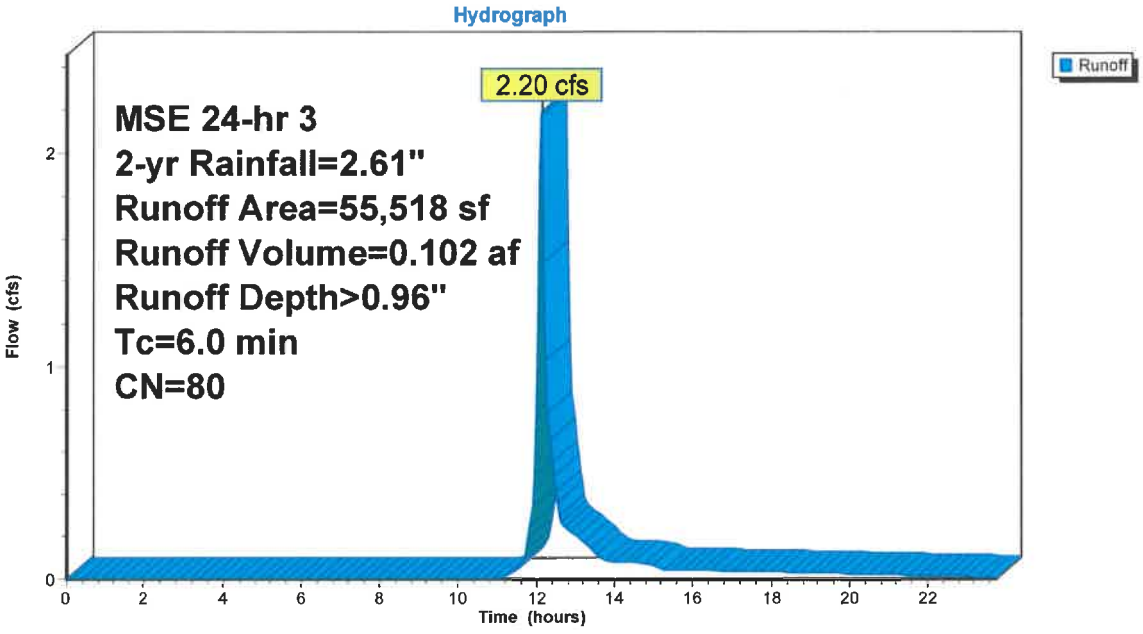
Runoff = 2.20 cfs @ 12.14 hrs, Volume= 0.102 af, Depth> 0.96"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-23.75 hrs, dt= 0.05 hrs
MSE 24-hr 3 2-yr Rainfall=2.61"

Area (sf)	CN	Description
55,518	80	>75% Grass cover, Good, HSG D
55,518		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Tc**

Subcatchment 3S: Undetained Area



Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

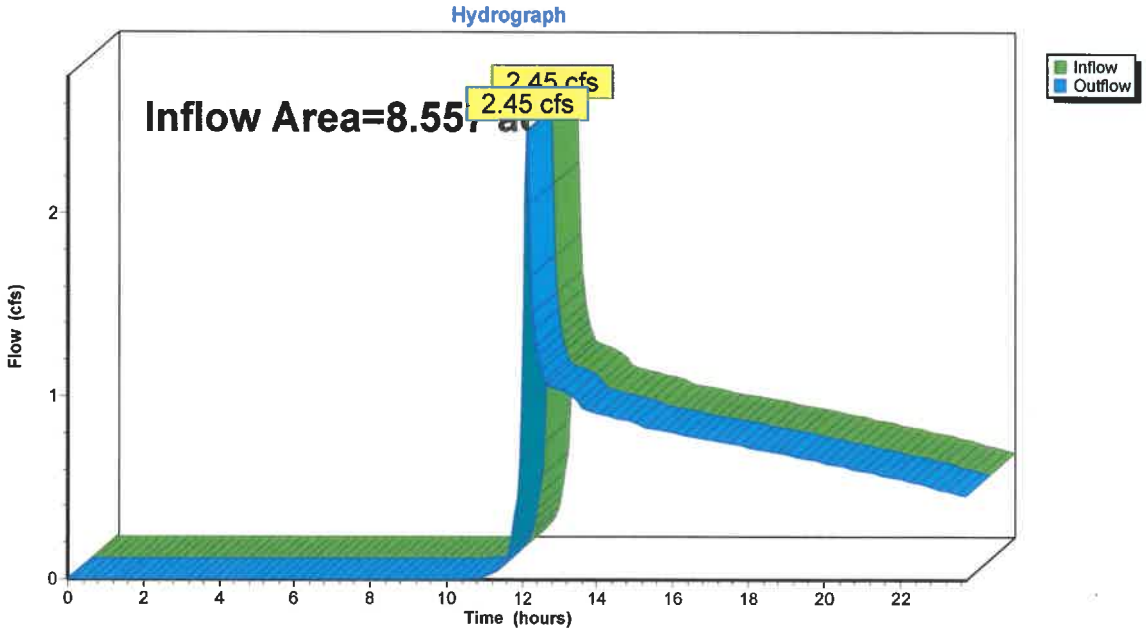
Summary for Reach 1R: Proposed Total Runoff

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 8.557 ac, 42.76% Impervious, Inflow Depth > 1.07" for 2-yr event
Inflow = 2.45 cfs @ 12.15 hrs, Volume= 0.761 af
Outflow = 2.45 cfs @ 12.15 hrs, Volume= 0.761 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-23.75 hrs, dt= 0.05 hrs

Reach 1R: Proposed Total Runoff



Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

Summary for Pond 1P: Pond

Inflow Area = 2.282 ac, 68.85% Impervious, Inflow Depth > 1.71" for 2-yr event
Inflow = 5.72 cfs @ 12.18 hrs, Volume= 0.325 af
Outflow = 0.44 cfs @ 13.28 hrs, Volume= 0.289 af, Atten= 92%, Lag= 65.7 min
Primary = 0.44 cfs @ 13.28 hrs, Volume= 0.289 af
Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-23.75 hrs, dt= 0.05 hrs
Peak Elev= 873.13' @ 13.28 hrs Surf.Area= 8,802 sf Storage= 8,620 cf

Plug-Flow detention time= 253.6 min calculated for 0.288 af (89% of inflow)
Center-of-Mass det. time= 209.4 min (1,004.2 - 794.8)

Volume	Invert	Avail.Storage	Storage Description
#1	872.00'	35,790 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
872.00	6,504	0	0
873.00	8,550	7,527	7,527
874.00	10,550	9,550	17,077
875.00	12,750	11,650	28,727
875.50	15,500	7,063	35,790

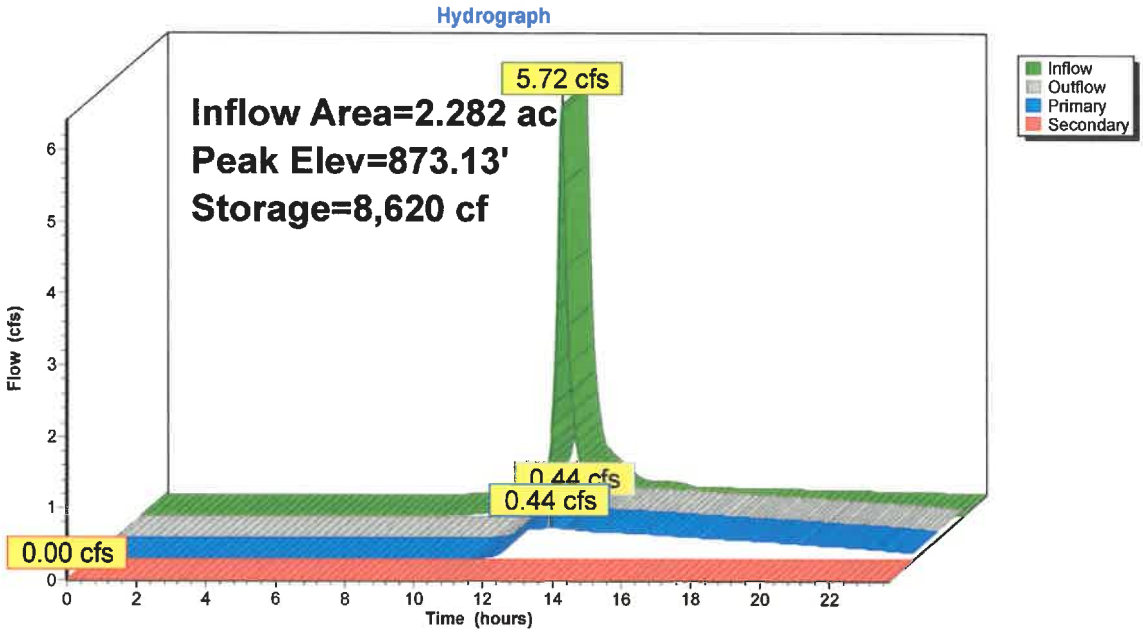
Device	Routing	Invert	Outlet Devices
#1	Primary	871.90'	**15.0" Round Culvert** L= 235.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 871.90' / 870.50' S= 0.0060 '/' Cc= 0.900 n= 0.011, Flow Area= 1.23 sf
#2	Device 1	872.00'	**4.0" Vert. Orifice/Grate** C= 0.600
#3	Device 1	873.00'	**3.0" Vert. Orifice/Grate** C= 0.600
#4	Device 1	874.00'	**24.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#5	Secondary	874.50'	**10.0' long x 10.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

Primary OutFlow Max=0.44 cfs @ 13.28 hrs HW=873.13' (Free Discharge)
└**1=Culvert** (Passes 0.44 cfs of 4.61 cfs potential flow)
  ├**2=Orifice/Grate** (Orifice Controls 0.41 cfs @ 4.72 fps)
  ├**3=Orifice/Grate** (Orifice Controls 0.03 cfs @ 1.21 fps)
  └**4=Orifice/Grate** (Controls 0.00 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=872.00' (Free Discharge)
└**5=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

Pond 1P: Pond



Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

Summary for Pond 2P: Bio Retention

Inflow Area = 5.000 ac, 41.75% Impervious, Inflow Depth > 1.40" for 2-yr event
Inflow = 7.65 cfs @ 12.31 hrs, Volume= 0.583 af
Outflow = 0.41 cfs @ 14.13 hrs, Volume= 0.370 af, Atten= 95%, Lag= 108.8 min
Primary = 0.41 cfs @ 14.13 hrs, Volume= 0.370 af
Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-23.75 hrs, dt= 0.05 hrs
Peak Elev= 873.03' @ 14.13 hrs Surf.Area= 15,387 sf Storage= 17,050 cf

Plug-Flow detention time= 333.7 min calculated for 0.370 af (64% of inflow)
Center-of-Mass det. time= 255.7 min (1,071.5 - 815.8)

Volume	Invert	Avail.Storage	Storage Description
#1	869.50'	64,291 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
869.50	7,000	0.0	0	0
869.51	7,000	33.0	23	23
870.00	7,000	33.0	1,132	1,155
870.01	7,000	27.0	19	1,174
872.00	7,800	27.0	3,976	5,150
872.01	7,800	100.0	78	5,228
873.00	15,150	100.0	11,360	16,588
874.00	23,000	100.0	19,075	35,663
875.00	34,255	100.0	28,628	64,291

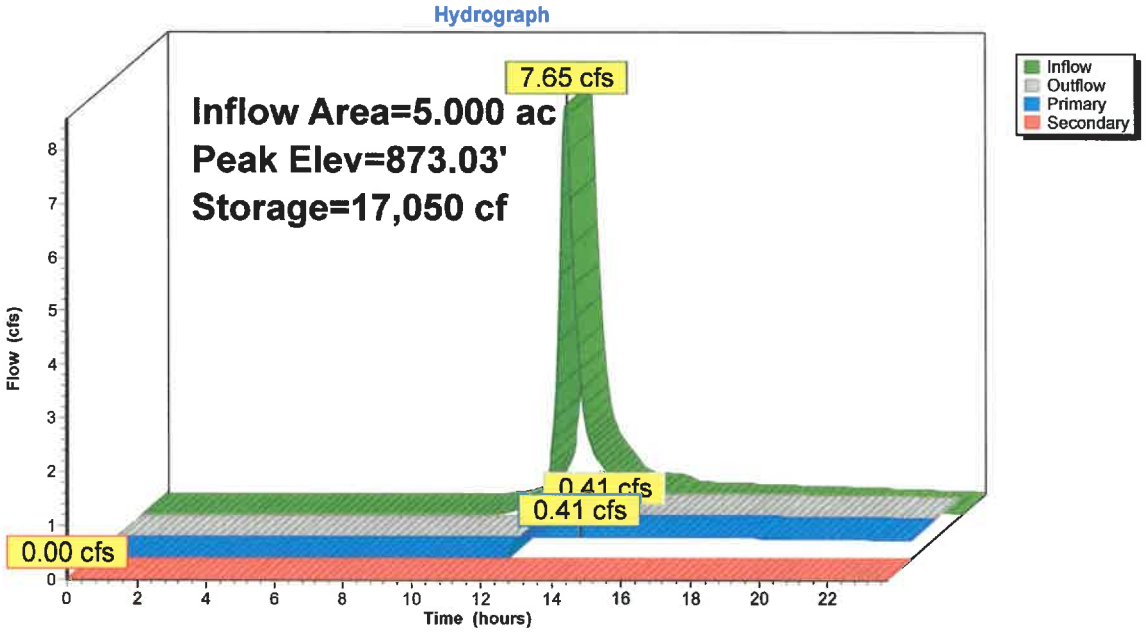
Device	Routing	Invert	Outlet Devices
#1	Primary	870.50'	**15.0" Round Culvert** L= 165.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 870.50' / 870.25' S= 0.0015 '/' Cc= 0.900 n= 0.011 Concrete pipe, straight & clean, Flow Area= 1.23 sf
#2	Device 1	871.20'	**6.0" Round Culvert** L= 600.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 871.20' / 870.50' S= 0.0012 '/' Cc= 0.900 n= 0.010, Flow Area= 0.20 sf
#3	Device 1	873.00'	**4.0" Vert. Orifice/Grate** C= 0.600
#4	Device 1	874.00'	**24.0" Horiz. Orifice/Grate** C= 0.600 in 36.0" Grate (44% open area) Limited to weir flow at low heads
#5	Secondary	874.50'	**10.0' long x 10.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

Primary OutFlow Max=0.41 cfs @ 14.13 hrs HW=873.03' (Free Discharge)
└─**1=Culvert** (Passes 0.41 cfs of 5.91 cfs potential flow)
  └─**2=Culvert** (Barrel Controls 0.41 cfs @ 2.09 fps)
  └─**3=Orifice/Grate** (Orifice Controls 0.00 cfs @ 0.59 fps)
  └─**4=Orifice/Grate** (Controls 0.00 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=869.50' (Free Discharge)
└─**5=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

Pond 2P: Bio Retention



Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

Summary for Subcatchment 1S: Area to pond

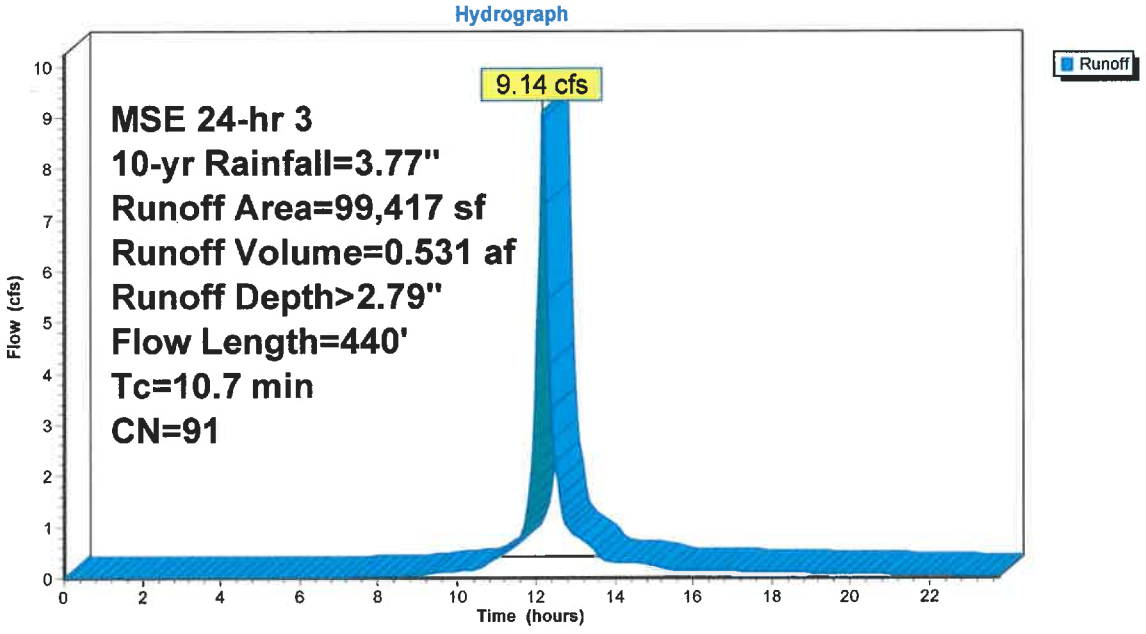
Runoff = 9.14 cfs @ 12.18 hrs, Volume= 0.531 af, Depth> 2.79"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-23.75 hrs, dt= 0.05 hrs
MSE 24-hr 3 10-yr Rainfall=3.77"

	Area (sf)	CN	Description
	30,965	74	>75% Grass cover, Good, HSG C
*	61,948	98	Pavement
*	6,504	98	Pond - NWL
	99,417	91	Weighted Average
	30,965		31.15% Pervious Area
	68,452		68.85% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.9	40	0.0100	0.10		**Sheet Flow, A-B** Grass: Short n= 0.150 P2= 2.61"
1.6	100	0.0120	1.01		**Sheet Flow, B-C** Smooth surfaces n= 0.011 P2= 2.61"
2.2	300	0.0026	2.31	1.82	**Pipe Channel, C-D** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.013
10.7	440	Total			

Subcatchment 1S: Area to pond



Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

Summary for Subcatchment 2S: Area to Bio-Retention Basin

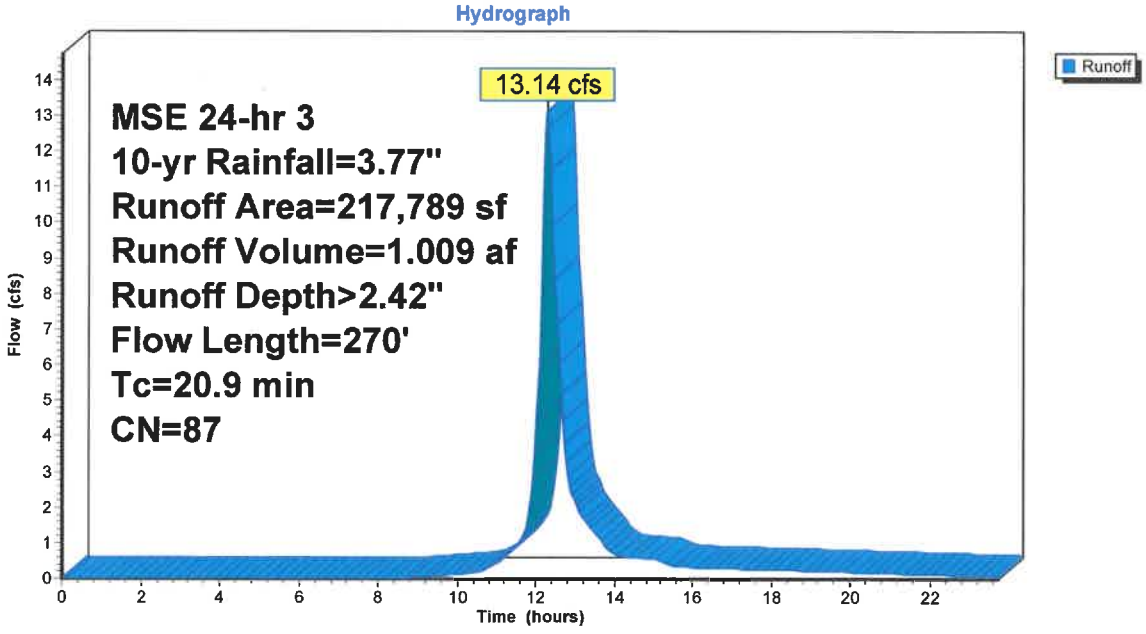
Runoff = 13.14 cfs @ 12.31 hrs, Volume= 1.009 af, Depth> 2.42"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-23.75 hrs, dt= 0.05 hrs
MSE 24-hr 3 10-yr Rainfall=3.77"

	Area (sf)	CN	Description
*	72,293	98	Proposed Building
	89,677	80	>75% Grass cover, Good, HSG D
*	18,629	98	Pavement
	37,190	77	Woods, Good, HSG D
	217,789	87	Weighted Average
	126,867		58.25% Pervious Area
	90,922		41.75% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
20.3	150	0.0667	0.12		**Sheet Flow, E-F** Woods: Light underbrush n= 0.400 P2= 2.61"
0.5	90	0.0330	2.92		**Shallow Concentrated Flow, F-G** Unpaved Kv= 16.1 fps
0.1	30	0.2333	7.78		**Shallow Concentrated Flow, G-H** Unpaved Kv= 16.1 fps
20.9	270	Total			

Subcatchment 2S: Area to Bio-Retention Basin



Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

Summary for Subcatchment 3S: Undetained Area

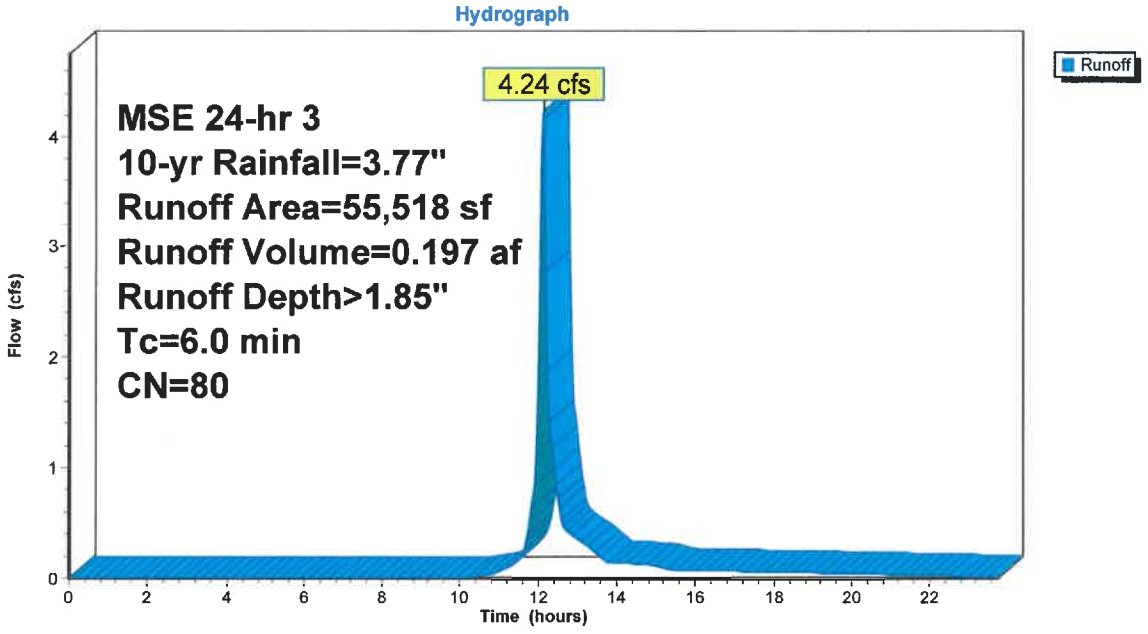
Runoff = 4.24 cfs @ 12.13 hrs, Volume= 0.197 af, Depth> 1.85"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-23.75 hrs, dt= 0.05 hrs
MSE 24-hr 3 10-yr Rainfall=3.77"

Area (sf)	CN	Description
55,518	80	>75% Grass cover, Good, HSG D
55,518		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Tc**

Subcatchment 3S: Undetained Area



Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

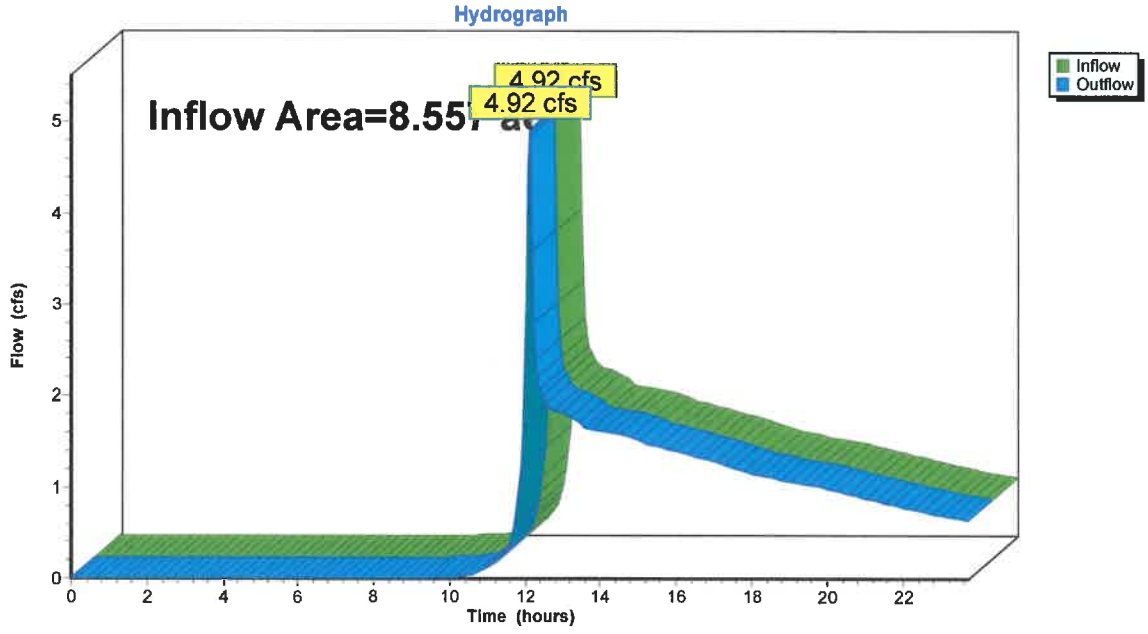
Summary for Reach 1R: Proposed Total Runoff

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 8.557 ac, 42.76% Impervious, Inflow Depth > 1.79" for 10-yr event
Inflow = 4.92 cfs @ 12.14 hrs, Volume= 1.278 af
Outflow = 4.92 cfs @ 12.14 hrs, Volume= 1.278 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-23.75 hrs, dt= 0.05 hrs

Reach 1R: Proposed Total Runoff



Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

Summary for Pond 1P: Pond

Inflow Area = 2.282 ac, 68.85% Impervious, Inflow Depth > 2.79" for 10-yr event
Inflow = 9.14 cfs @ 12.18 hrs, Volume= 0.531 af
Outflow = 0.71 cfs @ 13.22 hrs, Volume= 0.460 af, Atten= 92%, Lag= 62.5 min
Primary = 0.71 cfs @ 13.22 hrs, Volume= 0.460 af
Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-23.75 hrs, dt= 0.05 hrs
Peak Elev= 873.72' @ 13.22 hrs Surf.Area= 9,997 sf Storage= 14,237 cf

Plug-Flow detention time= 259.6 min calculated for 0.459 af (86% of inflow)
Center-of-Mass det. time= 211.3 min (996.3 - 785.1)

Volume	Invert	Avail.Storage	Storage Description
#1	872.00'	35,790 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
872.00	6,504	0	0
873.00	8,550	7,527	7,527
874.00	10,550	9,550	17,077
875.00	12,750	11,650	28,727
875.50	15,500	7,063	35,790

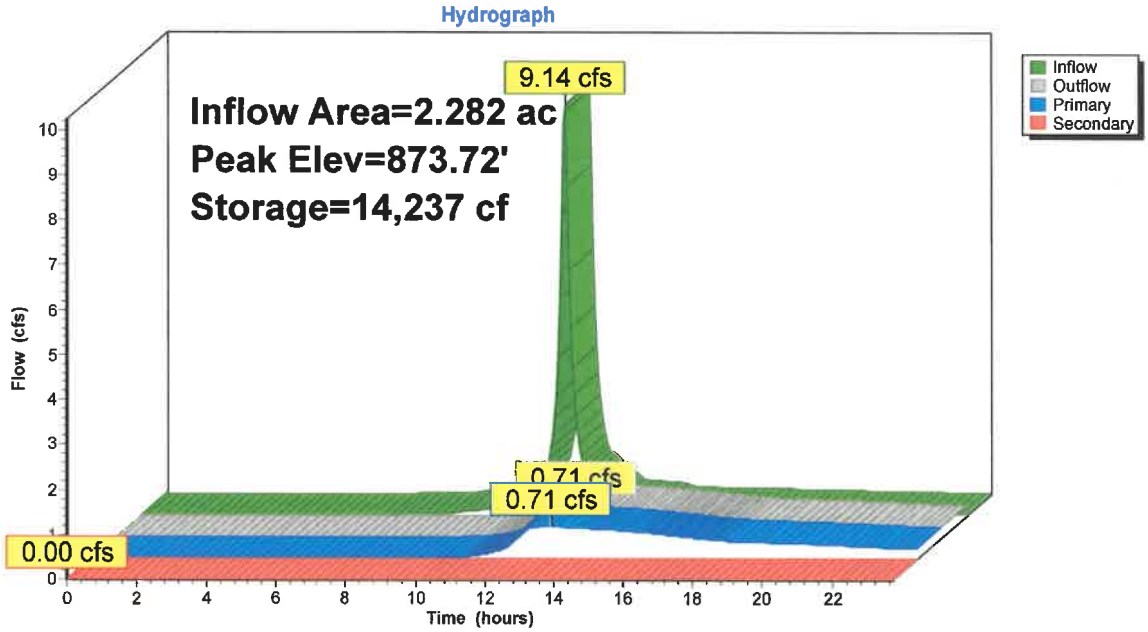
Device	Routing	Invert	Outlet Devices
#1	Primary	871.90'	**15.0" Round Culvert** L= 235.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 871.90' / 870.50' S= 0.0060 '/' Cc= 0.900 n= 0.011, Flow Area= 1.23 sf
#2	Device 1	872.00'	**4.0" Vert. Orifice/Grate** C= 0.600
#3	Device 1	873.00'	**3.0" Vert. Orifice/Grate** C= 0.600
#4	Device 1	874.00'	**24.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#5	Secondary	874.50'	**10.0' long x 10.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

Primary OutFlow Max=0.71 cfs @ 13.22 hrs HW=873.72' (Free Discharge)
└**1=Culvert** (Passes 0.71 cfs of 5.94 cfs potential flow)
  ├**2=Orifice/Grate** (Orifice Controls 0.52 cfs @ 6.01 fps)
  ├**3=Orifice/Grate** (Orifice Controls 0.18 cfs @ 3.72 fps)
  └**4=Orifice/Grate** (Controls 0.00 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=872.00' (Free Discharge)
└**5=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

Pond 1P: Pond



Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

Summary for Pond 2P: Bio Retention

Inflow Area = 5.000 ac, 41.75% Impervious, Inflow Depth > 2.42" for 10-yr event
Inflow = 13.14 cfs @ 12.31 hrs, Volume= 1.009 af
Outflow = 0.79 cfs @ 13.86 hrs, Volume= 0.622 af, Atten= 94%, Lag= 93.0 min
Primary = 0.79 cfs @ 13.86 hrs, Volume= 0.622 af
Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-23.75 hrs, dt= 0.05 hrs
Peak Elev= 873.74' @ 13.86 hrs Surf.Area= 20,965 sf Storage= 29,965 cf

Plug-Flow detention time= 313.7 min calculated for 0.622 af (62% of inflow)
Center-of-Mass det. time= 238.5 min (1,043.5 - 805.0)

Volume	Invert	Avail.Storage	Storage Description
#1	869.50'	64,291 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
869.50	7,000	0.0	0	0
869.51	7,000	33.0	23	23
870.00	7,000	33.0	1,132	1,155
870.01	7,000	27.0	19	1,174
872.00	7,800	27.0	3,976	5,150
872.01	7,800	100.0	78	5,228
873.00	15,150	100.0	11,360	16,588
874.00	23,000	100.0	19,075	35,663
875.00	34,255	100.0	28,628	64,291

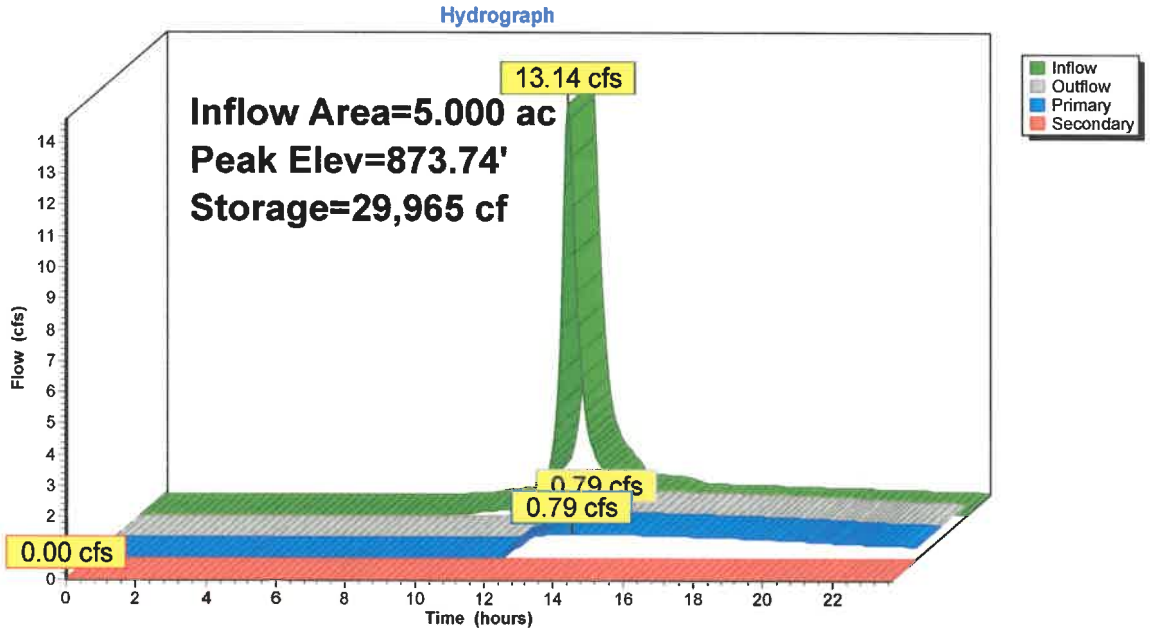
Device	Routing	Invert	Outlet Devices
#1	Primary	870.50'	**15.0" Round Culvert** L= 165.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 870.50' / 870.25' S= 0.0015 '/' Cc= 0.900 n= 0.011 Concrete pipe, straight & clean, Flow Area= 1.23 sf
#2	Device 1	871.20'	**6.0" Round Culvert** L= 600.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 871.20' / 870.50' S= 0.0012 '/' Cc= 0.900 n= 0.010, Flow Area= 0.20 sf
#3	Device 1	873.00'	**4.0" Vert. Orifice/Grate** C= 0.600
#4	Device 1	874.00'	**24.0" Horiz. Orifice/Grate** C= 0.600 in 36.0" Grate (44% open area) Limited to weir flow at low heads
#5	Secondary	874.50'	**10.0' long x 10.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

Primary OutFlow Max=0.79 cfs @ 13.86 hrs HW=873.74' (Free Discharge)
└**1=Culvert** (Passes 0.79 cfs of 7.15 cfs potential flow)
  ├**2=Culvert** (Barrel Controls 0.48 cfs @ 2.43 fps)
  ├**3=Orifice/Grate** (Orifice Controls 0.32 cfs @ 3.65 fps)
  └**4=Orifice/Grate** (Controls 0.00 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=869.50' (Free Discharge)
└**5=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

Pond 2P: Bio Retention



Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

Summary for Subcatchment 1S: Area to pond

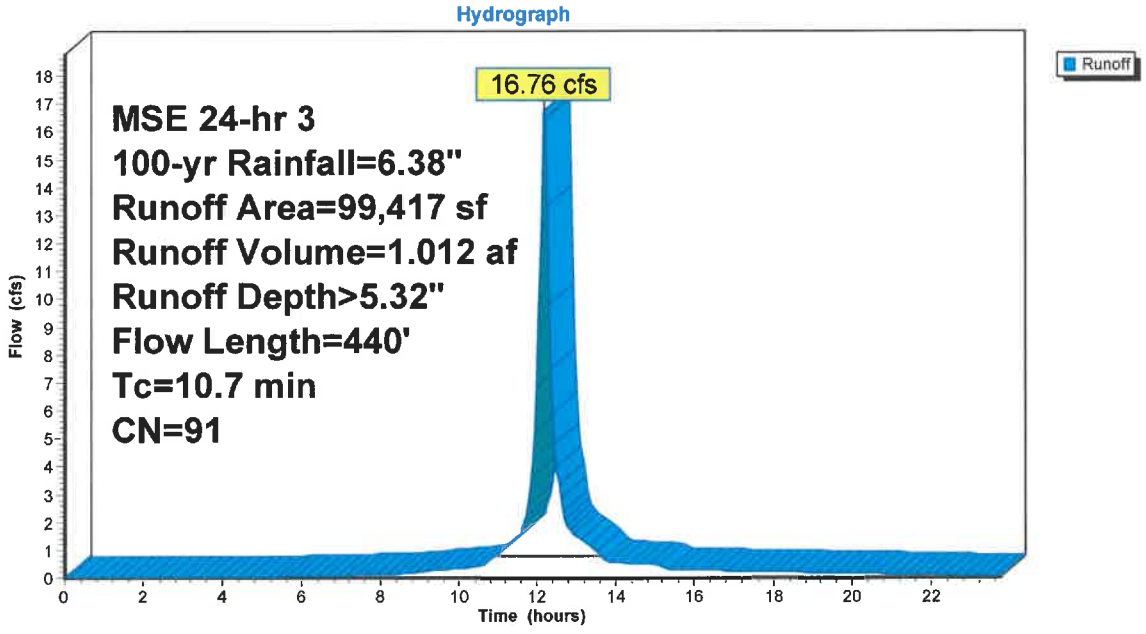
Runoff = 16.76 cfs @ 12.18 hrs, Volume= 1.012 af, Depth> 5.32"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-23.75 hrs, dt= 0.05 hrs
MSE 24-hr 3 100-yr Rainfall=6.38"

	Area (sf)	CN	Description
	30,965	74	>75% Grass cover, Good, HSG C
*	61,948	98	Pavement
*	6,504	98	Pond - NWL
	99,417	91	Weighted Average
	30,965		31.15% Pervious Area
	68,452		68.85% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.9	40	0.0100	0.10		**Sheet Flow, A-B** Grass: Short n= 0.150 P2= 2.61"
1.6	100	0.0120	1.01		**Sheet Flow, B-C** Smooth surfaces n= 0.011 P2= 2.61"
2.2	300	0.0026	2.31	1.82	**Pipe Channel, C-D** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.013
10.7	440	Total			

Subcatchment 1S: Area to pond



Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

Summary for Subcatchment 2S: Area to Bio-Retention Basin

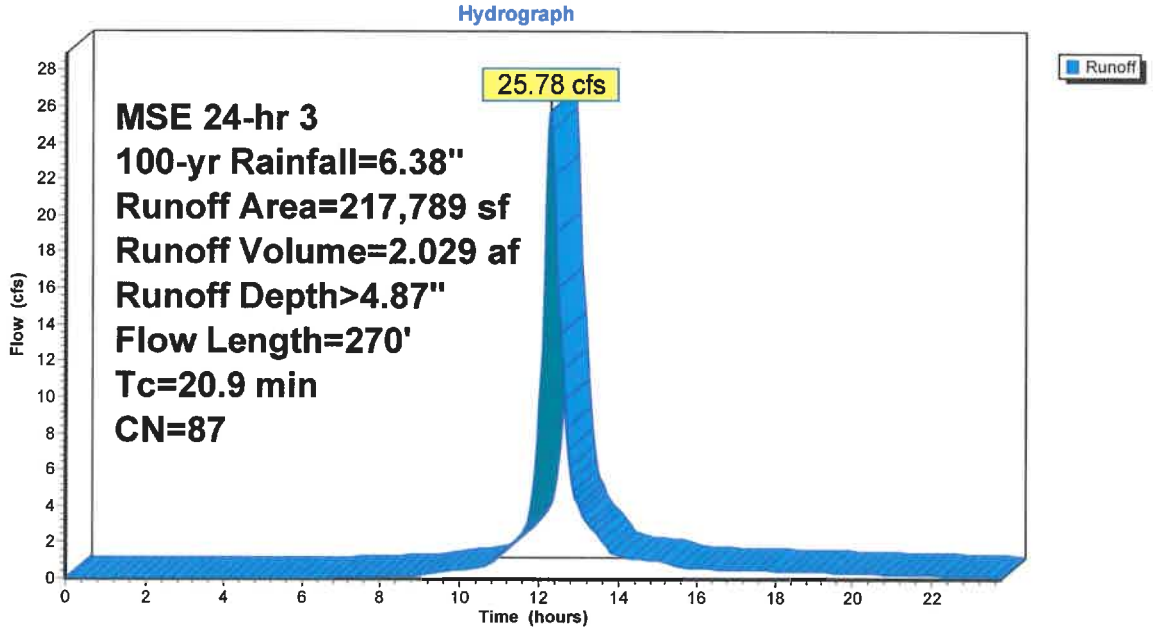
Runoff = 25.78 cfs @ 12.30 hrs, Volume= 2.029 af, Depth> 4.87"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-23.75 hrs, dt= 0.05 hrs
MSE 24-hr 3 100-yr Rainfall=6.38"

	Area (sf)	CN	Description
*	72,293	98	Proposed Building
	89,677	80	>75% Grass cover, Good, HSG D
*	18,629	98	Pavement
	37,190	77	Woods, Good, HSG D
	217,789	87	Weighted Average
	126,867		58.25% Pervious Area
	90,922		41.75% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
20.3	150	0.0667	0.12		**Sheet Flow, E-F** Woods: Light underbrush n= 0.400 P2= 2.61"
0.5	90	0.0330	2.92		**Shallow Concentrated Flow, F-G** Unpaved Kv= 16.1 fps
0.1	30	0.2333	7.78		**Shallow Concentrated Flow, G-H** Unpaved Kv= 16.1 fps
20.9	270	Total			

Subcatchment 2S: Area to Bio-Retention Basin



Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

Summary for Subcatchment 3S: Undetained Area

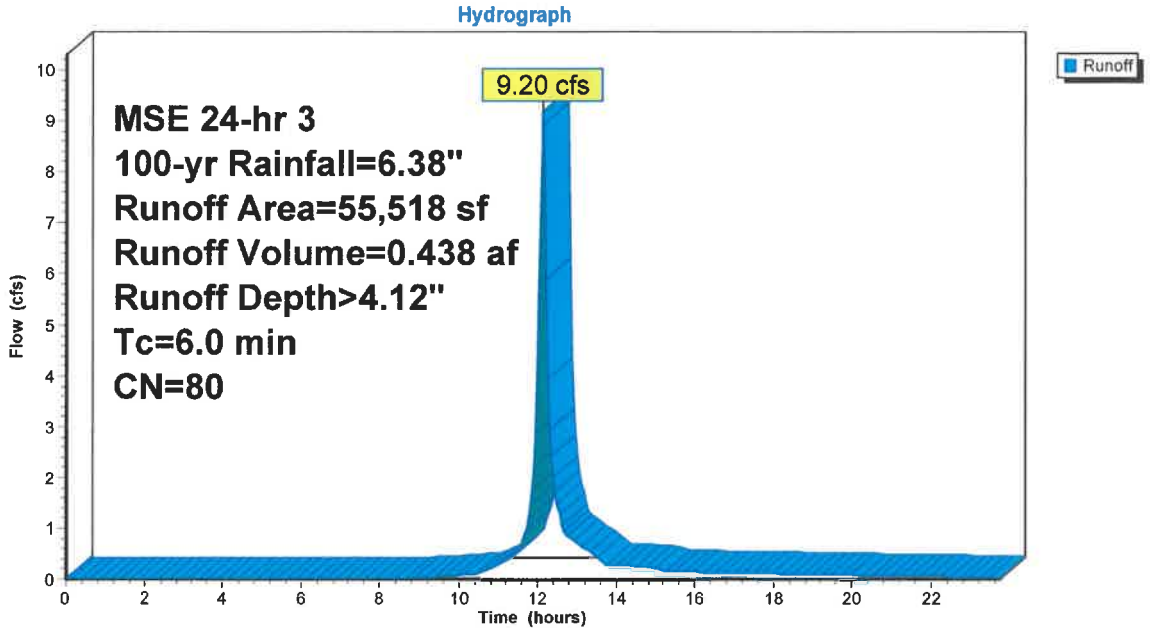
Runoff = 9.20 cfs @ 12.13 hrs, Volume= 0.438 af, Depth> 4.12"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-23.75 hrs, dt= 0.05 hrs
MSE 24-hr 3 100-yr Rainfall=6.38"

Area (sf)	CN	Description
55,518	80	>75% Grass cover, Good, HSG D
55,518		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Min. Tc**

Subcatchment 3S: Undetained Area



Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

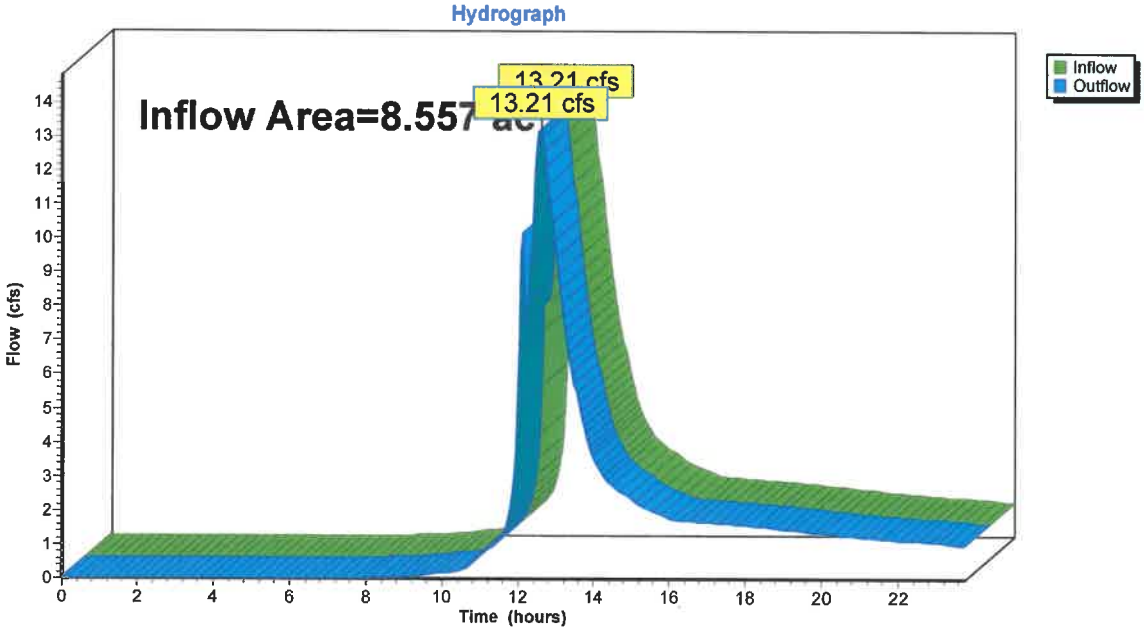
Summary for Reach 1R: Proposed Total Runoff

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 8.557 ac, 42.76% Impervious, Inflow Depth > 3.95" for 100-yr event
Inflow = 13.21 cfs @ 12.57 hrs, Volume= 2.819 af
Outflow = 13.21 cfs @ 12.57 hrs, Volume= 2.819 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-23.75 hrs, dt= 0.05 hrs

Reach 1R: Proposed Total Runoff



Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

Summary for Pond 1P: Pond

Inflow Area = 2.282 ac, 68.85% Impervious, Inflow Depth > 5.32" for 100-yr event
Inflow = 16.76 cfs @ 12.18 hrs, Volume= 1.012 af
Outflow = 6.45 cfs @ 12.39 hrs, Volume= 0.892 af, Atten= 62%, Lag= 12.4 min
Primary = 6.45 cfs @ 12.39 hrs, Volume= 0.892 af
Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-23.75 hrs, dt= 0.05 hrs
Peak Elev= 874.42' @ 12.39 hrs Surf.Area= 11,470 sf Storage= 21,683 cf

Plug-Flow detention time= 190.8 min calculated for 0.890 af (88% of inflow)
Center-of-Mass det. time= 146.3 min (918.9 - 772.6)

Volume	Invert	Avail.Storage	Storage Description
#1	872.00'	35,790 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
872.00	6,504	0	0
873.00	8,550	7,527	7,527
874.00	10,550	9,550	17,077
875.00	12,750	11,650	28,727
875.50	15,500	7,063	35,790

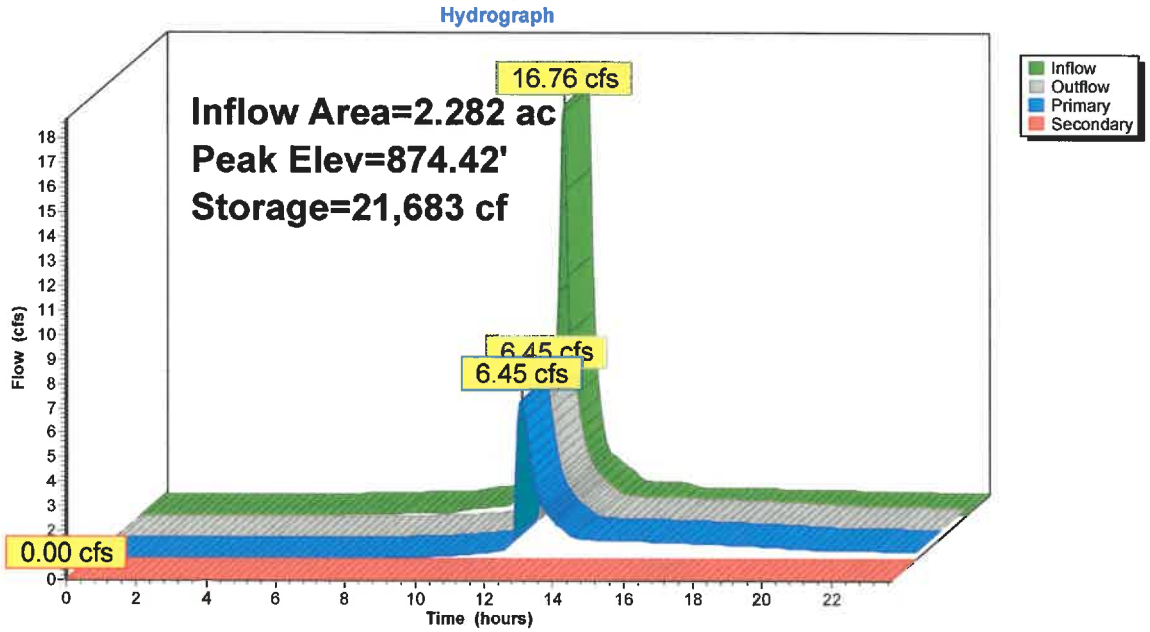
Device	Routing	Invert	Outlet Devices
#1	Primary	871.90'	**15.0" Round Culvert** L= 235.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 871.90' / 870.50' S= 0.0060 '/' Cc= 0.900 n= 0.011, Flow Area= 1.23 sf
#2	Device 1	872.00'	**4.0" Vert. Orifice/Grate** C= 0.600
#3	Device 1	873.00'	**3.0" Vert. Orifice/Grate** C= 0.600
#4	Device 1	874.00'	**24.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#5	Secondary	874.50'	**10.0' long x 10.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

Primary OutFlow Max=6.42 cfs @ 12.39 hrs HW=874.42' (Free Discharge)
└**1=Culvert** (Passes 6.42 cfs of 6.91 cfs potential flow)
  ├**2=Orifice/Grate** (Orifice Controls 0.63 cfs @ 7.22 fps)
  ├**3=Orifice/Grate** (Orifice Controls 0.27 cfs @ 5.47 fps)
  └**4=Orifice/Grate** (Weir Controls 5.52 cfs @ 2.11 fps)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=872.00' (Free Discharge)
└**5=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

Pond 1P: Pond



Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

Summary for Pond 2P: Bio Retention

Inflow Area = 5.000 ac, 41.75% Impervious, Inflow Depth > 4.87" for 100-yr event
Inflow = 25.78 cfs @ 12.30 hrs, Volume= 2.029 af
Outflow = 8.01 cfs @ 12.72 hrs, Volume= 1.489 af, Atten= 69%, Lag= 24.8 min
Primary = 8.01 cfs @ 12.72 hrs, Volume= 1.489 af
Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-23.75 hrs, dt= 0.05 hrs
Peak Elev= 874.49' @ 12.72 hrs Surf.Area= 28,490 sf Storage= 48,222 cf

Plug-Flow detention time= 208.9 min calculated for 1.489 af (73% of inflow)
Center-of-Mass det. time= 144.3 min (935.5 - 791.2)

Volume	Invert	Avail.Storage	Storage Description
#1	869.50'	64,291 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
869.50	7,000	0.0	0	0
869.51	7,000	33.0	23	23
870.00	7,000	33.0	1,132	1,155
870.01	7,000	27.0	19	1,174
872.00	7,800	27.0	3,976	5,150
872.01	7,800	100.0	78	5,228
873.00	15,150	100.0	11,360	16,588
874.00	23,000	100.0	19,075	35,663
875.00	34,255	100.0	28,628	64,291

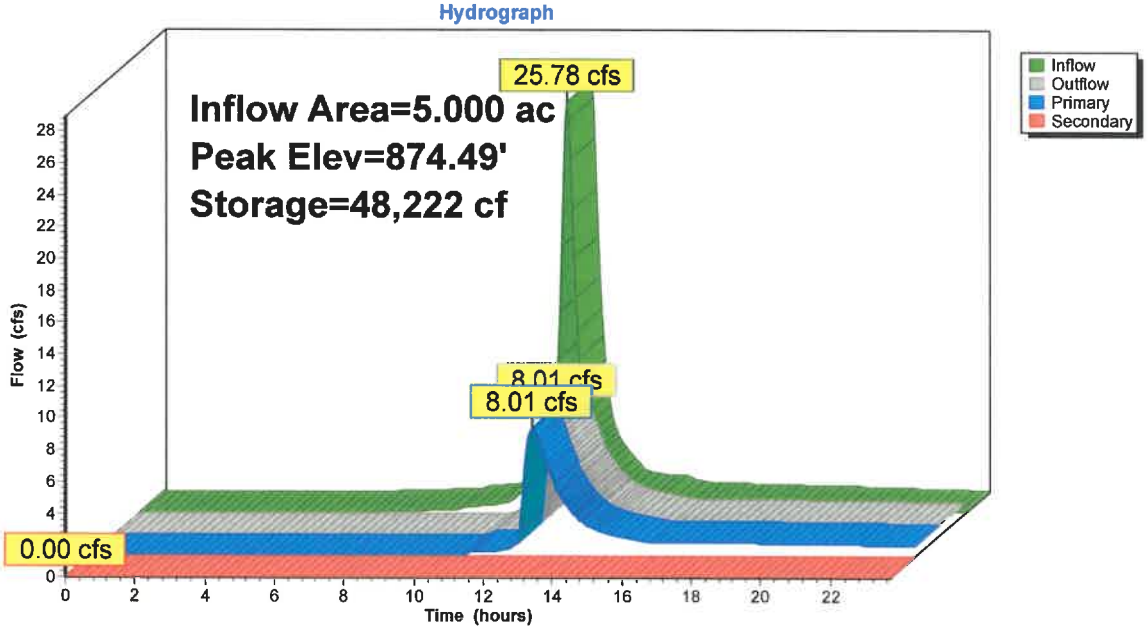
Device	Routing	Invert	Outlet Devices
#1	Primary	870.50'	**15.0" Round Culvert** L= 165.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 870.50' / 870.25' S= 0.0015 '/' Cc= 0.900 n= 0.011 Concrete pipe, straight & clean, Flow Area= 1.23 sf
#2	Device 1	871.20'	**6.0" Round Culvert** L= 600.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 871.20' / 870.50' S= 0.0012 '/' Cc= 0.900 n= 0.010, Flow Area= 0.20 sf
#3	Device 1	873.00'	**4.0" Vert. Orifice/Grate** C= 0.600
#4	Device 1	874.00'	**24.0" Horiz. Orifice/Grate** C= 0.600 in 36.0" Grate (44% open area) Limited to weir flow at low heads
#5	Secondary	874.50'	**10.0' long x 10.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

Primary OutFlow Max=8.00 cfs @ 12.72 hrs HW=874.49' (Free Discharge)
└─**1=Culvert** (Passes 8.00 cfs of 8.25 cfs potential flow)
  ├─**2=Culvert** (Barrel Controls 0.54 cfs @ 2.74 fps)
  ├─**3=Orifice/Grate** (Orifice Controls 0.48 cfs @ 5.53 fps)
  └─**4=Orifice/Grate** (Weir Controls 6.98 cfs @ 2.28 fps)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=869.50' (Free Discharge)
└─**5=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

Pond 2P: Bio Retention



Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

Data file name: \\192.168.25.46\Home\WinSLAMM\CJE2263R1.mdb
WinSLAMM Version 10.5.0
Rain file name: C:\WinSLAMM Files\Rain Files\WisReg - Milwaukee WI 1969.RAN
Particulate Solids Concentration file name: C:\WinSLAMM Files\v10.1 WI_AVG01.pscx
Runoff Coefficient file name: C:\WinSLAMM Files\WI_SL06 Dec06.rsvx
Residential Street Delivery file name: C:\WinSLAMM Files\WI_Res and Other Urban Dec06.std
Institutional Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std
Commercial Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std
Industrial Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std
Other Urban Street Delivery file name: C:\WinSLAMM Files\WI_Res and Other Urban Dec06.std
Freeway Street Delivery file name: C:\WinSLAMM Files\Freeway Dec06.std
Apply Street Delivery Files to Adjust the After Event Load Street Dirt Mass Balance: False
Pollutant Relative Concentration file name: C:\WinSLAMM Files\WI_GEO03.ppdx
Source Area PSD and Peak to Average Flow Ratio File: C:\WinSLAMM Files\NURP Source Area PSD Files.csv
Cost Data file name:
If Other Device Pollutant Load Reduction Values = 1, Off-site Pollutant Loads are Removed from Pollutant Load % Reduction calculations
Seed for random number generator: -42
Study period starting date: 01/05/69 Study period ending date: 12/31/69
Start of Winter Season: 12/02 End of Winter Season: 03/12
Date: 11-02-2023 Time: 10:32:19
Site information:

LU# 1 - Commercial: Subcatchment 1 Total area (ac): 2.282
13 - Paved Parking 1: 1.422 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
45 - Large Landscaped Areas 1: 0.711 ac. Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
70 - Water Body Areas: 0.149 ac. PSD File: Source Area PSD File:

LU# 2 - Commercial: Subcatchment 2 Total area (ac): 5.000
1 - Roofs 1: 1.660 ac. Flat Connected PSD File: C:\WinSLAMM Files\NURP.cpz Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
13 - Paved Parking 1: 0.428 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
45 - Large Landscaped Areas 1: 2.059 ac. Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
57 - Undeveloped Areas 1: 0.853 ac. Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz Source Area PSD File: C:\WinSLAMM Files\NURP.cpz

LU# 3 - Commercial: Subcatchment 3 Total area (ac): 1.275
45 - Large Landscaped Areas 1: 1.275 ac. Normal Silty PSD File: C:\WinSLAMM Files\NURP.cpz Source Area PSD File: C:\WinSLAMM Files\NURP.cpz

Control Practice 1: Wet Detention Pond CP# 1 (DS) - DS Wet Pond # 1
Particle Size Distribution file name: Not needed - calculated by program
Initial stage elevation (ft): 6
Peak to Average Flow Ratio: 3.8
Maximum flow allowed into pond (cfs): No maximum value entered
Outlet Characteristics:
Outlet type: Orifice 1
1. Orifice diameter (ft): 0.33
2. Number of orifices: 1
3. Invert elevation above datum (ft): 6
Outlet type: Orifice 2
1. Orifice diameter (ft): 0.25
2. Number of orifices: 1
3. Invert elevation above datum (ft): 7
Outlet type: Broad Crested Weir
1. Weir crest length (ft): 10
2. Weir crest width (ft): 10
3. Height from datum to bottom of weir opening: 8.5
Outlet type: Vertical Stand Pipe
1. Stand pipe diameter (ft): 24
2. Stand pipe height above datum (ft): 8
Pond stage and surface area

Entry Number	Stage (ft)	Pond Area (acres)	Natural Seepage (in/hr)	Other Outflow (cfs)
0	0.00	0.0000	0.00	0.00
1	1.00	0.0240	0.00	0.00
2	2.00	0.0310	0.00	0.00
3	3.00	0.0400	0.00	0.00
4	4.00	0.0530	0.00	0.00
5	5.00	0.0700	0.00	0.00
6	6.00	0.1490	0.00	0.00
7	7.00	0.1960	0.00	0.00
8	8.00	0.2420	0.00	0.00
9	9.00	0.2930	0.00	0.00
10	9.50	0.3560	0.00	0.00

Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

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Control Practice 2: Biofilter CP# 1 (DS) - DS Biofilters # 1

1. Top area (square feet) = 34255
2. Bottom aea (square feet) = 7000
3. Depth (ft): 5.5
4. Biofilter width (ft) - for Cost Purposes Only: 30
5. Infiltration rate (in/hr) = 0.04
6. Random infiltration rate generation? No
7. Infiltration rate fraction (side): 0.01
8. Infiltration rate fraction (bottom): 1
9. Depth of biofilter that is rock filled (ft) 1
10. Porosity of rock filled volume = 0.33
11. Engineered soil infiltration rate: 3.6
12. Engineered soil depth (ft) = 1.5
13. Engineered soil porosity = 0.27
14. Percent solids reduction due to flow through engineered soil = 80
15. Biofilter peak to average flow ratio = 3.8
16. Number of biofiltration control devices = 1
17. Particle size distribution file: Not needed - calculated by program
18. Initial water surface elevation (ft): 0

Soil Data	Soil Type Fraction in Eng. Soil
User-Defined Media Type	1.000

Biofilter Outlet/Discharge Characteristics:

Outlet type: Broad Crested Weir
1. Weir crest length (ft): 10
2. Weir crest width (ft): 10
3. Height of datum to bottom of weir opening: 5

Outlet type: Vertical Stand Pipe
1. Stand pipe diameter (ft): 2
2. Stand pipe height above datum (ft): 4.5

Outlet type: Surface Discharge Pipe
1. Surface discharge pipe outlet diameter (ft): 0.33
2. Pipe invert elevation above datum (ft): 3.5
3. Number of surface pipe outlets: 1

Outlet type: Drain Tile/Underdrain
1. Underdrain outlet diameter (ft): 0.5
2. Invert elevation above datum (ft): 1
3. Number of underdrain outlets: 1

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SLAMM for Windows Version 10.5.0
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Data file name: \\192.168.25.46\Home\WinSLAMM\CJE2263R1.mdb
WinSLAMM Version 10.5.0
Rain file name: C:\WinSLAMM Files\Rain Files\WisReg - Milwaukee WI 1969.RAN
Particulate Solids Concentration file name: C:\WinSLAMM Files\v10.1 WI_AVG01.pscx
Runoff Coefficient file name: C:\WinSLAMM Files\WI_SL06 Dec06.rsvx
Pollutant Relative Concentration file name: C:\WinSLAMM Files\WI_GEO03.ppdx
Residential Street Delivery file name: C:\WinSLAMM Files\WI_Res and Other Urban Dec06.std
Institutional Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std
Commercial Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std
Industrial Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std
Other Urban Street Delivery file name: C:\WinSLAMM Files\WI_Res and Other Urban Dec06.std
Freeway Street Delivery file name: C:\WinSLAMM Files\Freeway Dec06.std
Apply Street Delivery Files to Adjust the After Event Load Street Dirt Mass Balance: False
Source Area PSD and Peak to Average Flow Ratio File: C:\WinSLAMM Files\NURP Source Area PSD Files.csv
Cost Data file name:
If Other Device Pollutant Load Reduction Values = 1, Off-site Pollutant Loads are Removed from Pollutant Load % Reduction calculations
Seed for random number generator: -42
Study period starting date: 01/05/69 Study period ending date: 12/31/69
Start of Winter Season: 12/02 End of Winter Season: 03/12
Model Run Start Date: 01/05/69 Model Run End Date: 12/31/69
Date of run: 11-02-2023 Time of run: 10:28:52
Total Area Modeled (acres): 8.557
Years in Model Run: 0.99

	Runoff Volume (cu ft)	Percent Runoff Volume Reduction	Particulate Solids Conc. (mg/L)	Particulate Solids Yield (lbs)	Percent Particulate Solids Reduction
Total of all Land Uses without Controls:	327408	-	87.18	1782	-
Outfall Total with Controls:	253366	22.61%	22.36	353.7	80.15%
Annualized Total After Outfall Controls:	256884			358.6	

Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

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Attachment: Support Documents (Shoreland & Floodplain Zoning Map Amendment - Town of Cedarburg, Section 21)

ORDINANCE NO. (ID # 9852)

SHORELAND & FLOODPLAIN ZONING MAP AMENDMENT - TOWN OF GRAFTON, SECTION 31

The Ozaukee County Board of Supervisors does ordain that the County Shoreland and Floodplain Zoning Map be amended in accordance with Section 7.1300 of the Ozaukee County Code of Ordinances to indicate a Zoning Classification Change from Shoreland-Wetland to Shoreland.

Affecting the following described real estate: **Town of Grafton**,

a) Part of the NE ¼ of the NE ¼, Section 31 T10N-R22E, Lot 1 CSM #4120 Doc. 1105888; Tax Key #06-031-01-021.00; 391 Port Washington Road, Grafton Wisconsin.

b) Part of the SE ¼ of the NE ¼, Section 31 T10N-22E, Lot 2 CSM #4120 Doc. 1105888, Tax Key #06-031-04-010.00; and Part of the NW ¼ and NE ¼ and SW ¼ and SE ¼ of the SE ¼ Section 31 T10N-R22E, Tax Key #06-031-13-002.00; 351 Port Washington Road, Grafton Wisconsin.

This Ordinance shall take effect upon enactment and publication.

Dated at Port Washington, Wisconsin, this 3rd day of April 2024.

SUMMARY: Shoreland and Floodplain Zoning Map Amendment, Town of Grafton-Section 31.

VOTE REQUIRED: Majority

NATURAL RESOURCES COMMITTEE

NATURAL RESOURCES COMMITTEE

Natural Resources Committee

AGENDA INFORMATION SHEET

AGENDA DATE: **March 7, 2024**
DEPARTMENT: **Land and Water Management**
DIRECTOR: **Katie Vogeler**
PREPARER: **Geoff Schramm**

Agenda Summary Shoreland & Floodplain Zoning Map Amendment - Town of Grafton, Section 31

BACKGROUND INFORMATION: Request by Robert Bach, as Agent for G3 Development and QTIP Trust A as owners, to petition the Natural Resources Committee for a Zoning Classification change Shoreland-Wetland to Shoreland in the Shoreland District, per Section 7.1300 of the Ozaukee County Shoreland & Floodplain Zoning Ordinance, to reflect the results of a wetland delineation report and survey; and to allow the rezoning of the proposed road crossings thru the wetland areas.

Affecting the following described real estates: **Town of Grafton**-

a) Proposed P2 Business Condos - Part of the NE ¼ of the NE ¼, Section 31 T10N-R22E, Lot 1 CSM #4120 Doc. 1105888; Tax Key #06-031-01-021.00; 391 Port Washington Road, Grafton Wisconsin.

b) Proposed Winding Brook Subdivision - Part of the SE ¼ of the NE ¼, Section 31 T10N-22E, Lot 2 CSM@4120 Doc. 1105888, Tax Key #06-031-04-010.00; and Part of the NW ¼ and NE ¼ and SW ¼ and SE ¼ of the SE ¼ Section 31 T10N-R22E, Tax Key #06-031-13-002.00; 351 Port Washington Road, Grafton Wisconsin.

FISCAL IMPACT: N/A FUNDING SOURCE: N/A

RECOMMENDED MOTION: Site a) Approval to amend the Shoreland & Floodplain Zoning Map to reflect the change in the wetland boundary as a result of the survey completed by Bates Soil & Water Testing Services LLC, dated June 23, 2020.

RECOMMENDED MOTION: Site b) Approval to amend the Shoreland & Floodplain Zoning Map to reflect the change in the wetland boundary as a result of the survey completed by Heartland Ecological Group Inc., December 15, 2023.

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ATTACHMENTS:

- Combined G2 Development and QTIP Trust A Property (PDF)

Katie Vogeler, Director
Edward J. Pfister, Sanitation & Zoning Coordinator
Geoff Schramm, Land & Water Coordinator
www.co.ozaukee.wi.us

LAND AND WATER MANAGEMENT DEPARTMENT

Staff Report – Natural Resources Committee Hearing – March 7, 2024

Rezoning Application by Robert Bach for G3 Development and QTIP Trust A – three (3) properties as follows –

A) Proposed P2 Business Condos - Town of Grafton T10N-R22E, Part of the NE ¼ of the NE ¼ of Section 31, Lot 1 CSM #4120 Doc. 1105888, Parcel Key #06-031-01-021.00, located at 391 Port Washington Road.

B) Proposed Winding Brook Subdivision –

   a. Town of Grafton T10N-R22E, Part of the SE ¼ of the NE ¼ Section 31, Lot 2 CSM #4120 doc. 1105888, Parcel Key #06-031-04-010.00, located at 351 Port Washington Road.

   b. Town of Grafton T10N-R22E, Part of the NW ¼ and the NE ¼ and the SW ¼ and the SE ¼ of SE ¼ Section 31, Parcel Key #06-031-13-002.00, located south of 351 Port Washington Road.

Requests and findings:

1) *To amend the wetland boundary on the Ozaukee County Zoning Map #44 based on the wetland delineation reports for the above referenced properties*.

   a) Bates Soil & Water Testing Services LLC conducted the wetland delineation for the proposed P2 Business Condos parcel.

   b) Heartland Ecological Group Inc. conducted the assured wetland delineation for the proposed Winding Brook Subdivision two parcels.

2) *To amend the Ozaukee County Zoning Map #44 to allow the filling of the wetlands areas to allow road crossings.*

3) *Erin Cox, DNR Water Management Specialist, issued the permit approval dated December 6, 2023, under the wetland statewide general permit to allow the wetland disturbance as described above to occur.*

4) *Michelle Soderling,* DNR Water management Specialist, issued the permit approval dated January 19, 2024 under the wetland statewide general permit to allow the wetland disturbance as described above to occur.

5) Per email from *Dale Rezabek, DNR Water Management Specialist – Shoreland Specialist,* dated January 31, 2024 – Mr. Rezabek requested that "the committee that when they review the rezone case, that they should only rezone the project area from the shoreland-wetland district to uplands if the applicant can demonstrate to the satisfaction of the committee that there will be no significant adverse effects on wetlands, according to the ordinance elements in Section 7.1305 B. 1. Thru 7." (of the Ozaukee County Shoreland and Floodplain Zoning Ordinance).

121 W. Main Street, P.O. Box 994, Port Washington, WI 53074
Phone: (262) 284-8270 Fax: (262) 284-8278

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

a. Section 7.1305 B. A wetland, or a portion thereof, in the shoreland-wetland district shall not be rezoned if the proposed rezoning may result in a significant adverse impact upon any of the following:
    i. Storm and flood water storage capacity
    ii. Preservation of dry season stream flow, the discharge of groundwater to a wetland, the recharge of groundwater from a wetland to another area, or the flow of groundwater through a wetland.
    iii. Filtering or storage of the sediments, nutrients, heavy metals, or organic compounds that would otherwise drain into navigable streams.
    iv. Shoreline protection against soil erosion.
    v. Fish spawning, breeding, nursery or feeding grounds.
    vi. Wildlife habitat.
    vii. Areas of special recreational, scenic, or scientific interest, including scarce wetland types.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

Katie Vogeler, Director
Edward J. Pfister, Sanitation & Zoning Coordinator
Geoff Schramm, Land & Water Coordinator
www.co.ozaukee.wi.us

LAND AND WATER MANAGEMENT

January 26, 2024

Due to an error in the Public Notice regarding the public hearing date in the previous Public Notice dated January 8, 2024, which stated February 1, 2024, and should have been February 8, 2024. Therefore, the Public Hearing for this notice has been rescheduled to March 7,2024 Public Hearing as noted below.

(February 22, 2024 and February 29, 2024)

OZAUKEE COUNTY NATURAL RESOURCES COMMITTEE

PUBLIC HEARING NOTICE

NOTICE IS HEREBY GIVEN that a public hearing will be held at a meeting of the Ozaukee County Natural Resources Committee on March 7, 2024, at 9:00 A.M. in Board Room A-200 of the Ozaukee County Administration Center, 121 W. Main St., Port Washington, to consider the following item(s):

1) Request by Mark Hertzfeldt, Design 2 Construct, as Agent for Project Sports LLC, as owner, to petition the Natural Resources Committee for a Zoning Classification change Shoreland-Wetland to Shoreland in the Shoreland District, per Section 7.1300 of the Ozaukee County Shoreland & Floodplain Zoning Ordinance, to rezone those delineated wetland areas to allow filing, grading, and excavating per the DNR approval letter dated September 29, 2023.

   Affecting the following described real estates: **Town of Cedarburg**, T10N-R21E in the NW ¼ and the NE ¼ of the NW ¼, Section 21 T10N-R21E, Lot 1 CSM #3997 Doc. 1050182.

   Tax Key #03-021-05-006.00, Property address: 8611 State Road 60, Cedarburg WI 53012

2) Request by Robert Bach, as Agent for G3 Development and QTIP Trust A as owners, to petition the Natural Resources Committee for a Zoning Classification change Shoreland-Wetland to Shoreland in the Shoreland District, per Section 7.1300 of the Ozaukee County Shoreland & Floodplain Zoning Ordinance, to reflect the results of a wetland delineation report and survey; and to allow the rezoning of the proposed road crossings through the wetland areas.

   Affecting the following described real estates: **Town of Grafton** –

   a) Proposed P2 Business Condos – Part of the NE ¼ of the NE ¼, Section 31 T10N-R22E, Lot 1 CSM #4120 Doc. 1105888; Tax Key #06-031-01-021.00; 391 Port Washington Road, Grafton WI 53024.

   b) Proposed Winding Brook Subdivision – Part of the SE ¼ of the NE ¼, Section 31 T10N-22E, Lot 2 CSM #4120 Doc. 1105888, Tax Key #06-031-04-010.00; and Part of the NW ¼ and NE ¼ and SW ¼ and SE ¼ of the SE ¼ Section 31 T10N-R22E, Tax Key #06-031-13-002.00; 351 Port Washington Road, Grafton WI 53024.

Information regarding this item on file with the Ozaukee County Department of Land and Water Management, Room 223, Ozaukee County Administration Center, 121 W. Main St., Port Washington.

The public and all interested persons are invited to attend this meeting and comment as appropriate. Discussion and action by the Natural Resources Committee will follow the hearing.

Rob Holyoke, Chairman
Natural Resources Committee

121 W. Main Street, P.O. Box 994, Port Washington, WI 53074
Phone: (262) 284-8313 Fax: (262) 284-8367

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

(February 22, 2024 and February 29, 2024)

OZAUKEE COUNTY NATURAL RESOURCES COMMITTEE

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NOTICE IS HEREBY GIVEN that a public hearing will be held at a meeting of the Ozaukee County Natural Resources Committee on March 7, 2024, at 9:00 A.M. in Board Room A-200 of the Ozaukee County Administration Center, 121 W. Main St., Port Washington, to consider the following item(s):

1) Request by Mark Hertzfeldt, Design 2 Construct, as Agent for Project Sports LLC, as owner, to petition the Natural Resources Committee for a Zoning Classification change Shoreland-Wetland to Shoreland in the Shoreland District, per Section 7.1300 of the Ozaukee County Shoreland & Floodplain Zoning Ordinance, to rezone those delineated wetland areas to allow filing, grading, and excavating per the DNR approval letter dated September 29, 2023.

   Affecting the following described real estates: **Town of Cedarburg**, T10N-R21E in the NW ¼ and the NE ¼ of the NW ¼, Section 21 T10N-R21E, Lot 1 CSM #3997 Doc. 1050182.

   Tax Key #03-021-05-006.00, Property address: 8611 State Road 60, Cedarburg WI 53012

2) Request by Robert Bach, as Agent for G3 Development and QTIP Trust A as owners, to petition the Natural Resources Committee for a Zoning Classification change Shoreland-Wetland to Shoreland in the Shoreland District, per Section 7.1300 of the Ozaukee County Shoreland & Floodplain Zoning Ordinance, to reflect the results of a wetland delineation report and survey; and to allow the rezoning of the proposed road crossings through the wetland areas.

   Affecting the following described real estates: **Town of Grafton** –

   a) Proposed P2 Business Condos – Part of the NE ¼ of the NE ¼, Section 31 T10N-R22E, Lot 1 CSM #4120 Doc. 1105888; Tax Key #06-031-01-021.00; 391 Port Washington Road, Grafton WI 53024

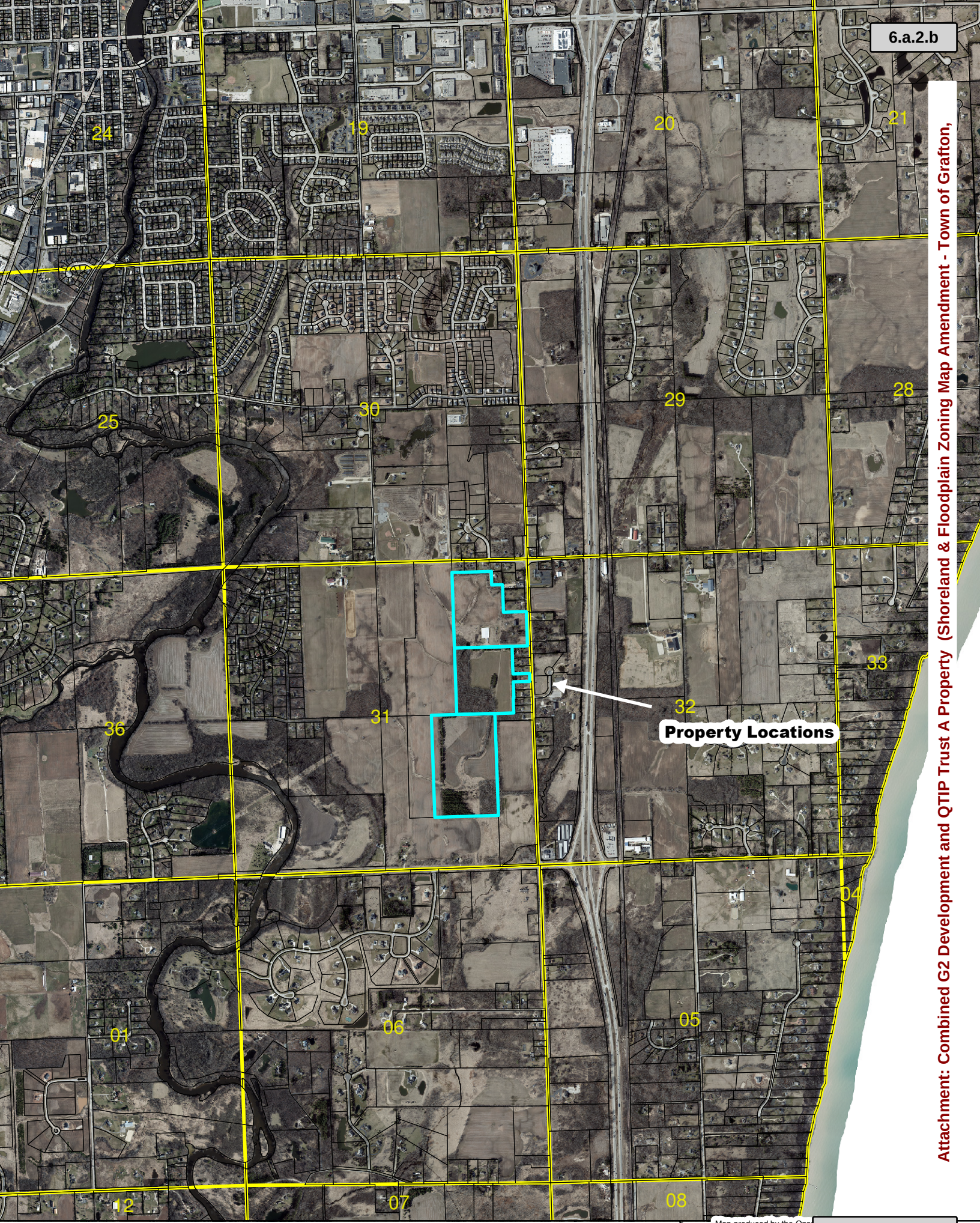
   b) Proposed Winding Brook Subdivision – Part of the SE ¼ of the NE ¼, Section 31 T10N-22E, Lot 2 CSM #4120 Doc. 1105888, Tax Key #06-031-04-010.00; and Part of the NW ¼ and NE ¼ and SW ¼ and SE ¼ of the SE ¼ Section 31 T10N-R22E, Tax Key #06-031-13-002.00; 351 Port Washington Road, Grafton WI 53024.

Information regarding this item on file with the Ozaukee County Department of Land and Water Management, Room 223, Ozaukee County Administration Center, 121 W. Main St., Port Washington.

The public and all interested persons are invited to attend this meeting and comment as appropriate. Discussion and action by the Natural Resources Committee will follow the hearing.

Rob Holyoke, Chairman
Natural Resources Committee

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,



Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

Legend

0 500 1,000 2,000 Feet

2022 AERIAL

Map produced by the Ozaukee County Water Management Dept.
The information on the aer
It is based on the best available information at the time of its printing.

Barry Sullivan

From: Cox, Erin E - DNR <Erin.Cox@wisconsin.gov>
Sent: Wednesday, December 6, 2023 3:57 PM
To: robert3bach@gmail.com
Cc: Young, Anthony NMN Jr - DNR (Tony); USACE_Requests_WI@usace.army.mil; Barry Sullivan; Josh Bohn
Subject: Approved: P2 Storage Wetland fill General Permit, Ozaukee County (03803)
Attachments: Approved GP_Wetland Fill P2Storage Ozaukee County_03803.pdf

CAUTION: This email originated from outside of the organization. Do not click links, open attachments, or reply unless you recognize the sender and know the content is safe.

Robert,

Please see attached approved permit authorizing impacts to wetlands in the Town of Grafton, Ozaukee County. Please read over the permit and conditions that are in place to ensure that you understand what is expected of you moving forward with the project. Your next step is to notify me prior to starting work. If you have any questions for me, please don't hesitate to reach out!

Best,

We are committed to service excellence.
Visit our survey at https://link.edgepilot.com/s/be65adc0/VtqzBZbhJ0yPAV6ao4M-mA?u=http://dnr.wi.gov/customersurvey to evaluate how I did.

Erin Cox (she/her)
Water Management Specialist
Wisconsin Department of Natural Resources
141 NW Barstow St, Room 180
Waukesha, WI 53188-3789
Cell Phone: 262-282-2029
Fax: 262-574-2117
Erin.Cox@wisconsin.gov

dnr.wi.gov

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
141 NW Barstow St.
Waukesha, WI, 53188

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

12/06/2023

GP-SE-2023-46-03803

Robert Bach
Russell I Bratt Trust
PO Box 460446
Fort Lauderdale, FL 33346
[sent electronically]

RE: Coverage under the wetland statewide general permit to impact wetlands from residential, commercial, and industrial activities, located in the Town of Grafton, Ozaukee County

Dear Mr. Bach:

Thank you for submitting an application for a General Permit to impact wetlands from residential, commercial and industrial activities located in the NE 1/4 of NE 1/4, Section 31, Township 10, Range 22E, Town of Grafton, Ozaukee 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. **The discharge(s) from the proposed activity will comply with water quality requirements.**

Please re-read the permit eligibility standards and conditions. The eligibility standards can be found on the GP1 application checklist or in the GP1 statewide general permit. 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 me, your local Water Management Specialist, at (262) 282-2029 or at Erin.Cox@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,

Erin E Cox

Erin Cox
Water Management Specialist

Email CC:

USACE General Inbox
Barry Sullivan, Ozaukee County
Tony Young, Conservation Warden
Josh Bohn, Parish Survey and Engineering
Waterway/Wetland File

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

15. **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-GP1-2023 and applicable laws.

16. **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: https://dnr.wisconsin.gov/, keyword "stormwater technical standards". 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 the waterway.

17. **Equipment use**. The equipment used in the wetlands must be low ground weight equipment as specified by the manufacturer specifications.

18. **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.

19. **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 NR 40, Wis. Adm. Code. These protocols and practices can be found on the Department website at http://dnr.wi.gov/topic/Invasives/bmp.html Keyword: "equipment operator" and at http://dnr.wi.gov/topic/Invasives/documents/EquipOper.pdf.

20. **Federal and State Threatened and Endangered Species**. WDNR-GP1-2023 does not affect the Department'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 Department 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.

21. **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.

22. **Historic Properties and Cultural Resources.** WDNR-GP1-2023 does not affect the Department's responsibility to ensure that all authorizations comply with Section 106 of the National Historic Preservation Act and s. 44.40, Wis. Stats. No Department 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.

23. **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.**

24. **Suitable fill material**. All fill authorized under this permit must consist of clean suitable soil, as defined by s. NR 500.03(214), Wis. Adm. 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.

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

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

Bates SOIL & WATER TESTING SERVICES, LLC.

WETLAND DELINEATION REPORT

BRATT PROPERTY

Town of Grafton
Ozaukee County

June 23, 2020

RECEIVED
DEC 19 2023
OZAUKEE COUNTY
LAND & WATER
MANAGEMENT DEPT

N1237 COUNTRY CREST CIRCLE • HORTONVILLE, WI 54944
920-779-0000

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

Bates SOIL & WATER TESTING SERVICES, LLC.

June 23, 2020

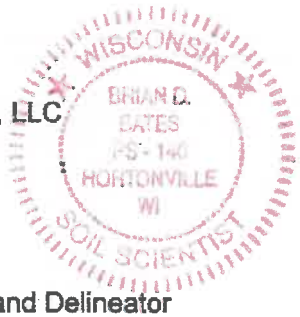
Wisconsin Department of Natural Resources
101 S. Webster Street
Madison, WI 53707

RE: Wetland Delineation Report for the Bratt Property
Town of Grafton, Ozaukee County

Enclosed is a Wetland Delineation Report for the Bratt Property. If the Department has any questions or comments regarding this report or work performed, please call me at 920-779-0000 or 920-470-5313.

Respectfully submitted,

Bates Soil & Water Testing Services, LLC



Brian D. Bates, PSS, PWS, CST
WDNR Professionally Assured Wetland Delineator

cc: WDNR Electronic Portal Submittal

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

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Figure 1 Wetland Delineation Map
Figure 2 WDNR Wetland Inventory Map
Figure 3 National Wetlands Inventory Map
Figure 4 Topography Map
Figure 5 NRCS County Soil Survey Map

Appendices

Appendix A Site Photographs
Appendix B USACE Wetland Determination Data Forms
Appendix C FSA Slide Review

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

QUALIFICATIONS

State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
1300 W Clairemont Avenue
Eau Claire, WI 54701

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

March 6, 2020

Brian Bates, PSS, PWS, CST
Bates Soil & Water Testing Services, LLC.
N1237 Country Crest Circle
Hortonville, WI 54944

Subject: 2020 Assured Wetland Delineator Confirmation

Dear Mr. Bates:

This letter provides Wisconsin Department of Natural Resources (WDNR) confirmation for the wetland delineations you conduct during the 2020 growing season. You and your clients will not need to wait for the WDNR to review your wetland delineations before moving forward with project planning. This will help expedite the review process for WDNR's wetland regulatory program. Your name and contact information will continue to be listed on our website at: http://dnr.wi.gov/topic/wetlands/assurance.html.

In the instance where a municipality may require a letter of confirmation for your work prior to moving forward in the local regulatory process, this letter shall serve as that confirmation. Although your wetland delineations do not require WDNR field review, inclusion of a Wetland Delineation Report is required for projects needing State authorized wetland, waterway and/or storm water permit approvals.

If you or any client has a question regarding your status in the Wetland Delineation Professional Assurance Program, contact me by email at kara.brooks@wisconsin.gov or phone at 414-308-5780. Thank you for all your hard work and best wishes for the upcoming field season.

Sincerely,

Kara Brooks
Wetland Identification Coordinator
Bureau of Watershed Management

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

ADDITIONAL QUALIFICATIONS DISCUSSION

Bates Soil & Water Testing Services, LLC was founded in 1996 by Brian Bates. Mr. Bates consults on multiple disciplines associated with the soils and waters of Wisconsin. Mr. Bates has over 22 years of wetland experience in the Northeast/Northcentral and Midwest Regions. Wetland related services include wetland determinations and delineations, wetland hydrology monitoring, wetland restoration, wetland restoration monitoring and invasive plant control.

Mr. Bates holds a Bachelor of Science Degree in Soil Science and a Master of Science Degree in Natural Resources - Hydrogeology emphasis, from the University of Wisconsin-Stevens Point. Mr. Bates is a Licensed Professional Soil Scientist, Professional Wetland Scientist, Hydrogeologist, Certified Soil Tester and a WDNR Professionally Assured Wetland Delineator. In 1991, Mr. Bates was recognized as one of the "Top Ten" Soil Profile Evaluators in the nation, recognized at a collegiate level, National Soil Judging Competition in California. Mr. Bates is also a member of the Wisconsin Society of Professional Soil Scientists. Additional continuing education training completed by Mr. Bates relating to wetland science includes:

- ✓ *Basic Wetland Delineation course offered by the Wisconsin Department of Administration, Coastal Management Program (1998)*
- ✓ *Training Workshop for Consultants: Understanding Wisconsin's Wetland Compensatory Mitigation Rules and Guidelines (2003)*
- ✓ *Advanced Wetland Delineation Training Workshop offered by the University of Wisconsin-La Crosse (2010, 2019)*
- ✓ *Critical Methods in Wetland Delineation seminar offered by the Wisconsin Department of Natural Resources (2010, 2013, 2014, 2015, 2018, 2020).*
- ✓ *Vegetation of Wisconsin Course offered by the University of Wisconsin-Milwaukee Field Station (2016)*

INTRODUCTION

On April 20, 2020 a Wetland Delineation was performed by Brian Bates and Tom Neitzel of Bates Soil & Water Testing Services, LLC. William Bratt ordered the Wetland Delineation to determine the wetland status of the Area of Interest (AOI) for proposed development. Mr. Bates was the lead investigator for the field investigation and is the principal author of this report. The weather was sunny and mild (+/- 55° Fahrenheit).

The AOI is 58.14 acres in size and consists of residential and agricultural areas. A complete legal description is provided on Figure 1. All detailed latitude, longitude and site datum coordinates for the investigation were obtained by J.E. Arthur and Associates, Inc., Fond du Lac, Wisconsin. Detailed numerical coordinates are not provided on the Wetland Determination Data Forms but can be obtained from J.E. Arthur and Associates, Inc., if desired.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

METHODOLOGY

Investigation Review

Prior to beginning the field evaluation of the AOI, the following on-site or off-site reference reviews were conducted:

- Preliminary Field Reconnaissance
- NRCS Hydric Soil List
- Wisconsin Department of Natural Resources Wetland Inventory Map
- U.S. Fish & Wildlife Service National Wetland Inventory Map
- County Soil Survey Manual
- NRCS Web Soil Survey
- FSA Slide Review

The reviewed resources provided information on whether wetlands have been previously identified within the AOI or have a higher probability of wetlands occurring. Wetland area or areas with wetland potential within the AOI were then field investigated to make on-site determinations and where necessary, complete delineations of the uppermost wetland boundary.

The approximate boundaries of the Northcentral and Northeast Region and Midwest Region were reviewed prior to completing off-site data reviews and the field investigation. Based on map examination and project location, the Wetland Determination was completed using the criteria and methods outlined in the documents below. These documents use a three-criterion investigation method which examine for indicators of hydrophytic vegetation, hydric soils and wetland hydrology.

- ✓ *Basic Guide to Wisconsin's Wetlands and Their Boundaries (1995)*
- ✓ *Corps of Engineers Wetland Delineation Manual (1987)*
- ✓ *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region Version 2.0 (2012)*

Vegetation

Indicator Status of vegetation identified was based on the State of Wisconsin 2016 Wetland Plant List: (http://rsgisias.crrel.usace.army.mil/nwpl_static/data/DOC/lists 2016/States/pdf/WI_2016v1.pdf). Vegetation was evaluated using the Quadrant Sampling Method, which consisted of a 5' radius for the Herbaceous Layer, a 15' radius for the Sapling/Shrub Layer and a 30' radius for the Tree and Vine Layer. Vegetation abundance was based on the measurement of Percent Areal (Absolute) Cover. Vegetation observed during the investigation was identified to the Species Level and documented on the Northcentral and Northeast Region Wetland Determination Data Forms. The Rapid Test, "50/20" rule and/or Prevalence Index was used for determining major vegetation dominance unless problematic vegetation was observed. At least 80% of the areal cover was identified and documented, if observed.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

Hydrology

Hydrology is the most variable of all three criteria and is the source for all wetlands. It is highly influenced by short and long-term precipitation, soil properties and the drainage catena of the small watersheds typically evaluated. Hydrology follows three pathways from the time it drops onto the soil surface to the time it becomes groundwater or stream flow. The first pathway is overland flow, where water flows on the soil surface. The second pathway is through flow, which is lateral flow through the soil-scape, generally parallel to the soil surface. The final flow path is groundwater flow, which is generally deep (except in most wetland areas), saturated, subsurface flow.

The Wisconsin Wetland Inventory Map (WWI), the U.S. Fish & Wildlife Service National Wetland Map (NWI), the United States Geological Survey (USGS) topographic map and FSA Slide reviews all provide information concerning wetland potential.

Unlike soils or vegetation, hydrology indicators are not always associated with a specific sample point or area. The time of year or year evaluated often determines if direct observations of inundation or saturation can be made. If a hydrology indicator is found near a sampling point, in an area that has similar landscape position, vegetation and soils, any evidence of hydrology will be noted on the Wetland Determination Data Forms.

Verification of Hydrology for this study was based on the 18 Primary or 11 Secondary hydrology indicators listed on the Northcentral and Northeast Region Wetland Determination Data Form, unless additional indicators from other regional supplements were determined to be applicable with appropriate documentation.

Soils

Soil morphology, the field observable attributes of the soil in various horizons or arrangements, based on vertical exposure at each sampling point to a minimum depth of 24" below grade (unless otherwise noted), were documented on the Northcentral and Northeast Region Wetland Determination Data Forms.

Soil profiles were evaluated through the construction of backhoe pits (unless otherwise noted on the data sheets). Backhoe pits are the preferred method of soil evaluation since they provide a clear picture of the soil profile over a large area, unlike small auger holes, push probes or hand dug holes. The use of a backhoe is the only option for deeply filled sites that contain large coarse fragments such as concrete, blacktop or bricks or sites that naturally contain large coarse fragments such as cobbles and boulders.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

Each soil profile was compared to the Field Indicators of Hydric Soils in the United States - A guide for Identifying and Delineating Hydric Soils, Version 8.1, 2017. The Hue, Value and Chroma color patterns of the soil horizons, sub-horizons or redoximorphic features were evaluated and documented with the use of Munsell Soil Color Charts.

Many soils in northeastern Wisconsin are composed of red parent material soils. Red parent material soils are found in Wisconsin near Lake Superior and in the valley of the Fox River and surrounding areas near Lake Michigan. These soils were deposited by the Green Bay Lobe of glacial ice. The Green Bay Lobe dredged out the bay of Green Bay, formed Lake Winnebago, the Horicon Marsh and hills around Madison.

If Non-Problematic Hydric Soil Indicators are absent and indicators of hydrophytic vegetation and wetland hydrology are present (or are absent due to disturbance or other problem situations), the Problematic F21 Hydric Soil Indicator will be considered, as well as all other Problematic Hydric Soil Indicators within the Northcentral and Northeast Region. The F21 Hydric Soil Indicator is primarily used in the Northcentral and Northeast Region for problematic Red Parent Material Soils.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

INVESTIGATION DISCUSSION

Wetland Determinations should be conducted during the growing season. It is important to conduct the work during the growing season in order to positively identify vegetation and so that some primary hydrology indicators can be properly applied. The Regional Supplements provide a field observation-based approach for determining the growing season. This approach uses the biological growth of non-evergreen plants as an indicator to the beginning or end of the growing season. The growing season can also be determined by measuring soil temperature, if required. The start of the growing season can also be approximated by evaluating the first and last 28° Fahrenheit day on County-Specific Wetness Evaluation (WETS) Tables (Appendix A). This determination was conducted during the growing season based on green up.

Since wetland hydrology is seasonal and affected by short and long-term changes in meteorological conditions, it may not always be possible to observe hydrology indicators such as surface water, saturation, high water table or a dry-season water table. For any wetland analysis, the lack of primary or secondary hydrology indicators of hydrology will not be considered evidence for a lack of hydrology, especially in disturbed agricultural lands. Wetland Hydrology will not be considered absent (under most conditions) if the AOI has hydric soils or hydrophytic vegetation or in some agricultural areas, only hydric soils. In some instances, hydric soils are the only feasible means of identifying wetlands.

United States Department of Agriculture (USDA) Farm Service Agency (FSA) slides should be reviewed for wetland signatures if the AOI has experienced agricultural activities within three years of the wetland evaluation. USDA-FSA slides are helpful for evaluating soil saturation signatures such as standing water, drowned out crops or evidence of stunted or stressed crops. USDA-FSA slides are also beneficial for evaluating the timing of historical disturbances that may have changed wetland hydrology.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

WETLAND DELINEATION SPECIFICS

Hydrology

Field observations of hydrology and conclusions regarding hydrology must also consider antecedent precipitation. Generally speaking, an evaluation of antecedent precipitation is an evaluation of the amount of soil water or groundwater in storage, over time. To assess antecedent precipitation, the Natural Resources Conservation Service (NRCS) method of comparing local precipitation data to the local Wetness Evaluation Station was evaluated. For this study, precipitation data from the National Climatic Service in Milwaukee, Wisconsin (nearest climatic center) was compared to the nearest Wetness Evaluation Station (WETS) in Milwaukee, Wisconsin. Archived Climatic Data can be found at: http://www.nws.noaa.gov/climate/index.php?wfo=mkx.

	WETS 3 years in 10 less than	Normal	WETS 3 years in 10 more than	*2019 Rainfall	Condition Dry, Wet, Normal	Condition Value	Month Weight Value	Product of Previous 2 Columns
JANUARY	1.14"	1.74"	2.09"	2.06"	Normal	2	3	6
FEBRUARY	1.04"	1.71"	2.07"	0.91"	Dry	1	2	2
MARCH	1.55"	2.48"	2.99"	3.67"	Wet	3	1	3
								Sum 11

Note: If sum is

6-9 Prior period had been drier than normal
10-14 Prior period has been normal
15-18 Prior period has been wetter than normal

Condition Value:

Dry = 1
Normal = 2
Wet = 3

The NRCS Wetness Evaluation (WETS) Table provides the record of the 1971-2020 period of observation. This table is useful for comparing recent precipitation to relative normal precipitation. The greatest precipitation events observed were on 1/10/20 (0.47"), 2/17/20 (0.91") and 3/27/20 (1.33"). Based on the NRCS Antecedent Hydrologic Condition Evaluation Method, climatic conditions were Normal and primary indicators of hydrology were expected to be observed.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

WETS Station: MILWAUKEE MITCHELL INTL AP, WI (WETS TABLE NOT AVAILABLE FOR OZAUKEE COUNTY) Requested years: 1971 - 2020

Month	Temperature (°F)			Precipitation (inches)				
	Avg daily max	Avg daily min	Avg daily mean	Avg	30% chance will have less than	30% chance will have more than	Avg number of days with 0.10 inch or more	Average total snowfall
Jan	28.6	14.9	21.8	1.74	1.14	2.09	5	14.3
Feb	32.1	18.3	25.2	1.71	1.04	2.07	4	12.2
Mar	42.4	27.6	35.0	2.48	1.55	2.99	6	7.2
Apr	53.6	36.8	45.2	3.82	2.89	4.46	7	2.3
May	65.3	46.5	55.9	3.36	2.20	4.03	7	0.1
Jun	75.6	56.9	66.2	3.88	2.58	4.66	7	0.0
Jul	80.7	63.5	72.1	3.38	2.26	4.05	6	0.0
Aug	78.8	62.8	70.8	3.74	2.43	4.49	7	0.0
Sep	71.9	55.0	63.5	3.22	1.70	3.93	5	0.0
Oct	59.7	43.3	51.5	2.70	1.76	3.24	6	0.4
Nov	45.9	31.8	38.9	2.47	1.56	2.99	6	3.0
Dec	33.6	20.7	27.1	2.19	1.37	2.64	5	10.9
Annual:					31.56	37.28		
Average	55.7	39.9	47.8	-	-	-	-	-
Total	-	-	-	34.68			70	50.4

GROWING SEASON DATES

Requested years of data:	1971 - 2020		
Years with missing data:	24 deg = 1	28 deg = 1	32 deg = 1
Years with no occurrence:	24 deg = 0	28 deg = 0	32 deg = 0
Data years used:	24 deg = 49	28 deg = 49	32 deg = 49

Probability	Temperature		
	24 F or higher	28 F or higher	32 F or higher
	Beginning and Ending Dates Growing Season Length		
50 percent *	3/31 to 11/12 226 days	4/9 to 11/3 208 days	4/23 to 10/20 180 days
70 percent *	3/27 to 11/16 234 days	4/5 to 11/8 217 days	4/18 to 10/25 190 days

** Percent chance of the growing season occurring between the Beginning and Ending dates.*

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

Soils

Soil types within the AOI were evaluated by researching the County Soil Survey, NRCS Web Soil Survey Hydric Soil List and the WDNR Wetland Inventory Map. The following soil types and associated classifications exist within the evaluated areas of the AOI:

Soil Name	Map Symbol	Family or Higher Taxonomic Class	Drainage Class	Hydric per County	Wetland Indicator Soil Per WDNR
Kewaunee Silt Loam	KnB	Fine, mixed, active, mesic Typic Hapludalfs	Well Drained	May have inclusions	No
Kewaunee Silty Clay Loam	KoB2	Fine, mixed, active, mesic Typic Hapludalfs	Well Drained	No	No
Kewaunee Silty Clay Loam	KoC2	Fine, mixed, active, mesic Typic Hapludalfs	Well Drained	No	No
Kewaunee Silty Clay	KrD3	Fine, mixed, active, mesic Typic Hapludalfs	Well Drained	No	No
Manawa Silt Loam	MaA	Fine, mixed, active, mesic Aquollic Hapludalfs	Somewhat Poorly Drained	May have inclusions	Yes

NRCS Web Soil Survey: (http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm)
Wisconsin Wetland Inventory (http://dnrmaps.wi.gov/imf/imf.jsp?site=SurfaceWaterViewer.wetlands)

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

Report — Hydric Soil List - All Components

Collapse WI089-Ozaukee County, Wisconsin
WI089-Ozaukee County, Wisconsin

Map symbol and map unit name	Component/Local Phase	Comp. pct.	Landform	Hydric status	Hydric criteria met (code)
KnB: Kewaunee silt loam, 2 to 6 percent slopes	Kewaunee	90-97	Ground moraines	No	—
	Manawa	2-5	Drainageways	No	—
	Poygan-Occassionally ponded	1-5	Depressions	Yes	2
KoB2: Kewaunee silty clay loam, 2 to 6 percent slopes, eroded	Kewaunee-Eroded	85-95	Moraines	No	—
	Kewaunee	2-7	Moraines	No	—
	Manawa	3-8	Drainageways	No	—
KoC2: Kewaunee silty clay loam, 6 to 12 percent slopes, eroded	Kewaunee-Eroded	85-95	Moraines	No	—
	Kewaunee	5-5	Moraines	No	—
	Sisson	0-5	Moraines	No	—
	Omro	0-5	Moraines	No	—
KrD3: Kewaunee silty clay, 12 to 20 percent slopes, severely eroded	Kewaunee-Severely eroded	93-98	Moraines	No	—
	Kewaunee-Eroded	2-7	Moraines	No	—
MaA: Manawa silt loam, 0 to 3 percent slopes	Manawa	80-91	Drainageways on ground moraines	No	—
	Kewaunee	6-11	Ground moraines	No	—
	Poygan-Occassionally ponded	3-9	Depressions	Yes	2

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

WETLAND DETERMINATION DISCUSSION

The AOI is 58.14 acres in size and consists of residential and agricultural areas. Wetlands were identified on the Wisconsin Wetland Inventory Map and the National Wetlands Inventory Map. Wetland Indicator soils were also identified within portions of the AOI on the Wisconsin Wetland Inventory Map.

The sampling point locations for the investigation were chosen based on the review of mapping resources or observed changes in topography and vegetation during the investigation. The wetlands were differentiated from the adjacent upland area based on the observation of all three wetland criteria. The wetland locations within the AOI are illustrated on Figure 1. Photographs of the AOI and sampling points are provided in Appendix A. The sampling points were marked with numbered, hard wood stakes. The United States Army Corps of Engineers (USACOE) Wetland Determination Data Form for the Northcentral and Northeast Region was completed for each sampling point (Appendix B).

Wetland A (9.164 acres), Wetland B (0.014 acres), Wetland C (0.046): Wetland A, B and C are the same wetland complex, separated by culverts. Primary Indicators of Hydrology observed included Saturation, Drift Deposits and Water-Stained Leaves. Secondary Indicators of Hydrology observed included Geomorphic Position and FAC-N Test. The wetland was dominated with *Phalaris arundinacea, Acer rubrum, Cornus alb, Cornus racemosa, Salix interior, Typha angustifolia, Rhamnus cathartica, Quercus bicolor* and *Fraxinus pennsylvanica.* The soils were determined to be hydric per the F6 and F21 Hydric Soil Indicators. The wetland area can best be described as a combination of Shallow Marsh Wetland, Forested Wetland and Wet Meadow Wetland.

Wetland D (0.005 acres): No Primary Indicators of Hydrology were observed. Secondary Indicators of Hydrology observed included Geomorphic Position and the FAC-N Test. The wetland was dominated with Carex vulpinoidea. The soils were determined to be hydric per the F6 Hydric Soil Indicator. The wetland area can best be described as Wet Meadow Wetland.

Wetland E (0.005 acres): Only one Primary Indicator of Hydrology, Water-Stained Leaves, was observed. Secondary Indicators of Hydrology observed included Geomorphic Position and the FAC-N Test. The wetland was dominated with *Carex vulpinoidea*. The soils were determined to be hydric per the F21 Hydric Soil Indicator. The wetland area can best be described as Wet Meadow Wetland.

Wetland G (0.047 acres), Wetland H (0.006 acres): Wetland G and H are the same wetland complex, separated by a culvert. Primary Indicators of Hydrology observed included High Water Table, Water-Stained Leaves and Saturation. Secondary Indicators of Hydrology observed included Geomorphic Position and the FAC-N Test. The wetland was dominated with *Typha angustifolia* and *Phalaris arundinacea*. The soils were determined to be hydric per the F6 Hydric Soil Indicator. The wetland area can best be described as Wet Meadow Wetland.

Wetland F (0.068 acres): Primary Indicators of Hydrology observed included High Water Table, Saturation and Water-Stained Leaves. Secondary Indicators of Hydrology observed included Geomorphic Position and the FAC-N Test. The wetland was dominated with *Fraxinus pennsylvanica, Tyhpa angustifolia* and *Phalaris arundinacea*. The soils were determined to be hydric per the F6 Hydric Soil Indicator. The wetland area can best be described as Shallow Marsh Wetland.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

CONCLUSIONS

On April 20, 2020 a Wetland Determination and Delineation was performed for the AOI. The objective of the wetland investigation was to determine the wetland status of the AOI for proposed development. The purpose of this work is to provide William Bratt, Town of Grafton, Ozaukee County, State and Federal Regulators crucial information for development planning and regulatory jurisdictional conclusions.

The sampling point locations and wetland boundary lines illustrated on Figure 1 are accurate and precisely represent the work performed by Bates Soil & Water Testing Services, LLC. The sampling point stakes are "in place" and are available for review by the Wisconsin Department of Natural Resources (WDNR) and the U.S. Army Corps of Engineers (USACE), if desired.

Brian Bates, the lead delineator and author of this report, is a WDNR Professionally Assured Wetland Delineator (http://dnr.wi.gov/topic/wetlands/assurance.html) and concurrence from the WDNR is not necessary for waterway and wetland permits or shoreland/wetland zoning permits. However,

"Assurance does not change the need for or decisions about wetland fill permits. Assurance can't guarantee accuracy or relieve landowner responsibility in the event an error occurs and wetlands are filled. While it is unlikely for professional whose work is assured, inadvertent wetland fill that may result from errors must be remedied"
(http://dnr.wi.gov/topic/wetlands/assurance.html)

Still, the wetland boundaries identified are an excellent assessment of current site conditions. Final wetland boundary line decisions always rest with the WDNR and USACE. Adjustments to wetland boundary lines are at times possible based on opinion differences, but highly unlikely. Bates Soil & Water Testing Services, LLC, will submit this report to the WDNR for review. If a jurisdictional determination is required from the USACE, a Request for Corps of Engineers Wetland Delineation Review form will need to be completed and submitted to the USACE by the owner or designated agent. If permits are required for this project, construction authorization shall be obtained from all required regulatory agencies (Federal, State and County) prior to any regulatory concurrence expiring.

Property Owner/Contact Information:

William Bratt
P.O. Box 460446
Fort Lauderdale, Florida 33346-0446
wbratt@gmail.com
414-659-9566

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

FIGURE 1 - WETLAND DELINEATION MAP

WETLANDS OVERVIEW MAP

PART OF THE E 1/2 OF THE NE 1/4, SECTION 31, T10N R22E
391 NORTH PORT WASHINGTON ROAD
TOWN OF GRAFTON, OZAUKEE COUNTY, WI

VICINITY MAP



LEGEND

LINE DELINEATED BY BATES SOIL AND WATER TESTING ON APRIL 20, 2020

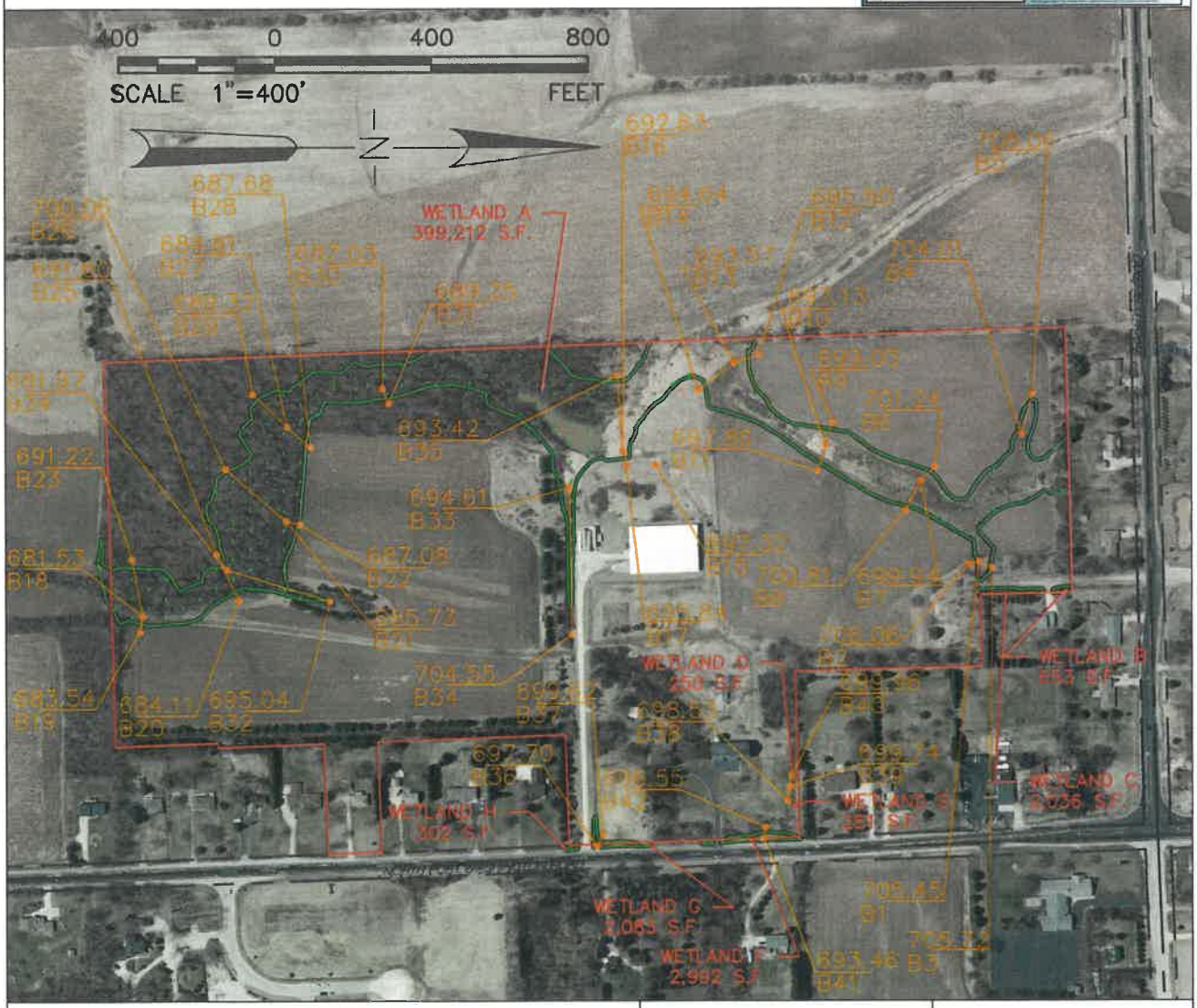
AREA OF INTEREST (AOI)

SAMPLE NO. SAMPLING POINT

PROPERTY LOCATION

WETLAND

AREA OF INTEREST
2,532,697 S.F.
58.14 ACRES



J.E. ARTHUR AND ASSOCIATES, INC.
ENGINEERS SURVEYORS PLANNERS
FOND DU LAC, WISCONSIN 54935
PHONE (920) 922-5703

DRAWN BY JJL
CHECKED BY ERO
APPROVED BY ERO

PROJECT NO. 823.5001
DATE 05/12/2020

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

FIGURE 2 - WDNR WETLAND INVENTORY MAP

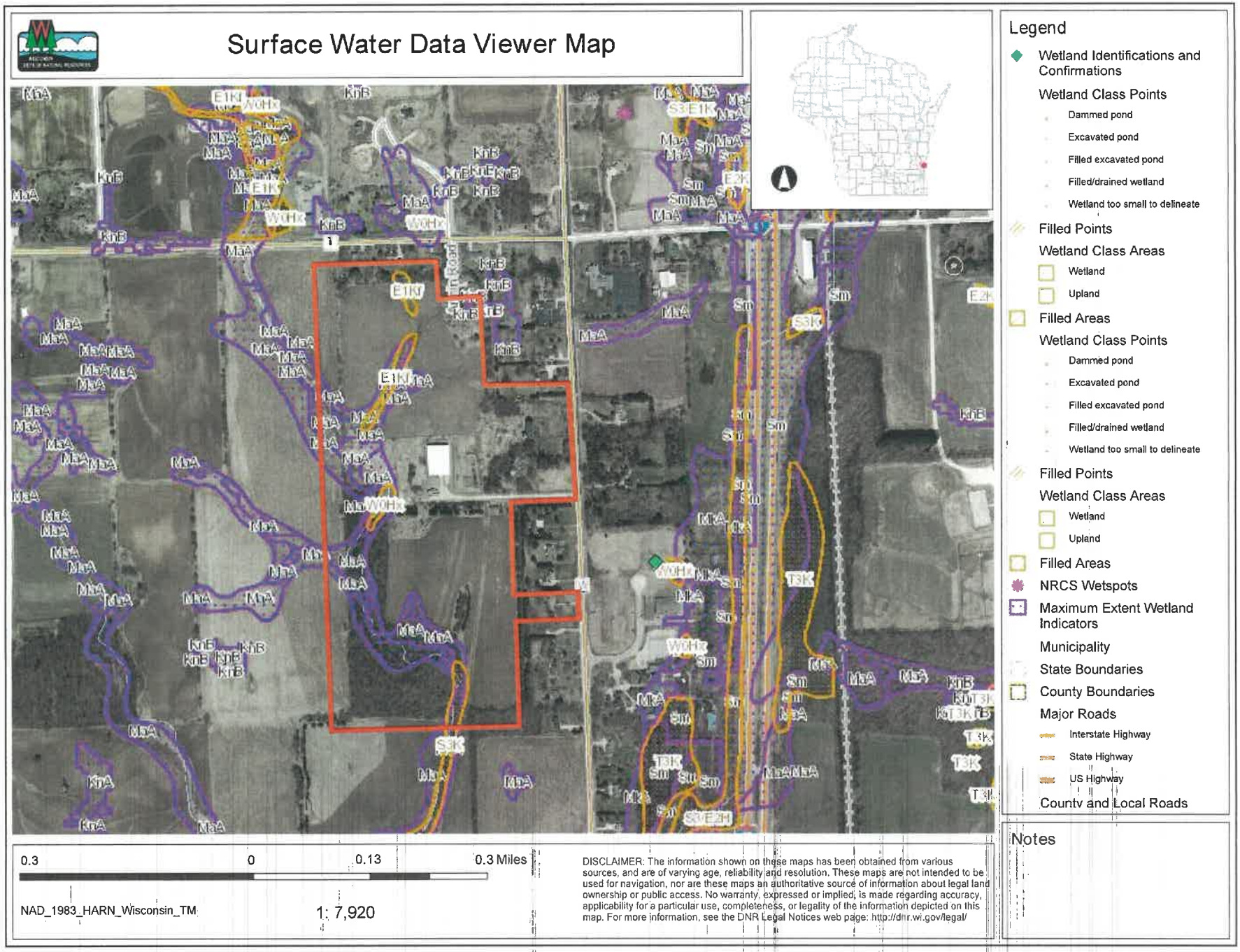


FIGURE 3 - NATIONAL WETLANDS INVENTORY MAP

U.S. Fish and Wildlife Service
National Wetlands Inventory

Wetlands



June 13, 2020

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

FIGURE 4 - TOPOGRAPHY MAP



Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

FIGURE 5 - SOIL SURVEY MAP

Soil Map—Ozaukee County, Wisconsin



USDA Natural Resources Conservation Service

Web Soil Survey
National Cooperative Soil Survey

6/13/2020
Page 1 of 3

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

APPENDIX A

Site Photographs

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

SITE PHOTOGRAPHS

PHOTO 1 VIEW OF WETLAND B FACING NORTH



PHOTO 2 VIEW OF WETLAND A FACING EAST, EAST OF B1



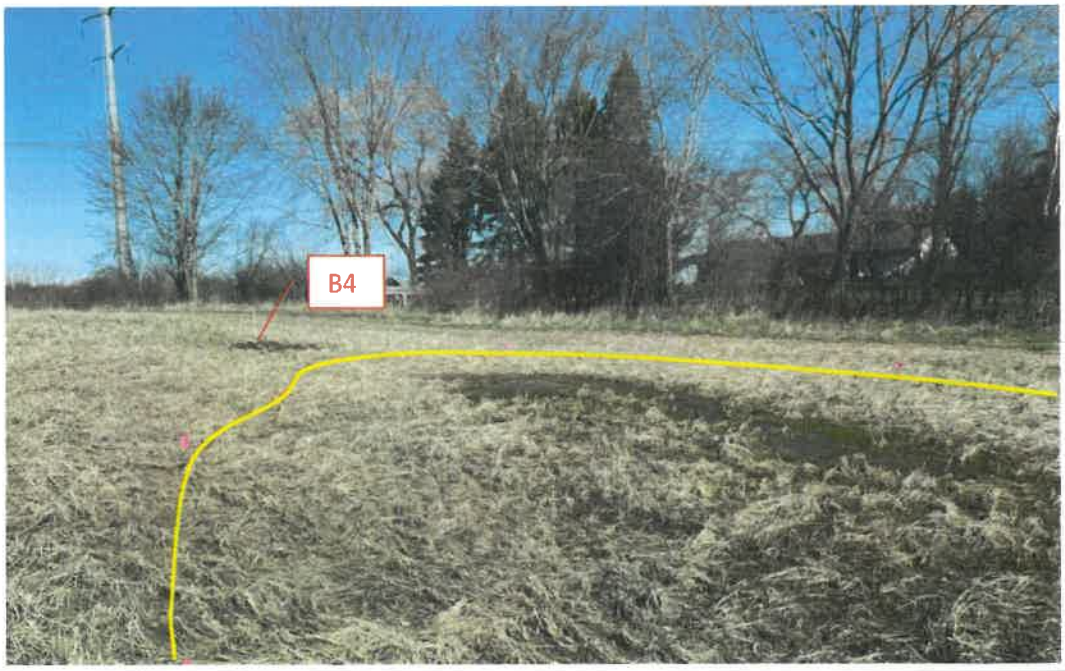
Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

SITE PHOTOGRAPHS

PHOTO 3 VIEW OF WETLAND A FACING NORTH, WEST OF B1



PHOTO 4 VIEW OF WETLAND A FACING NORTHWEST NEAR B5



Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

SITE PHOTOGRAPHS

PHOTO 5 VIEW OF WETLAND A FACING NORTHWEST NEAR B4

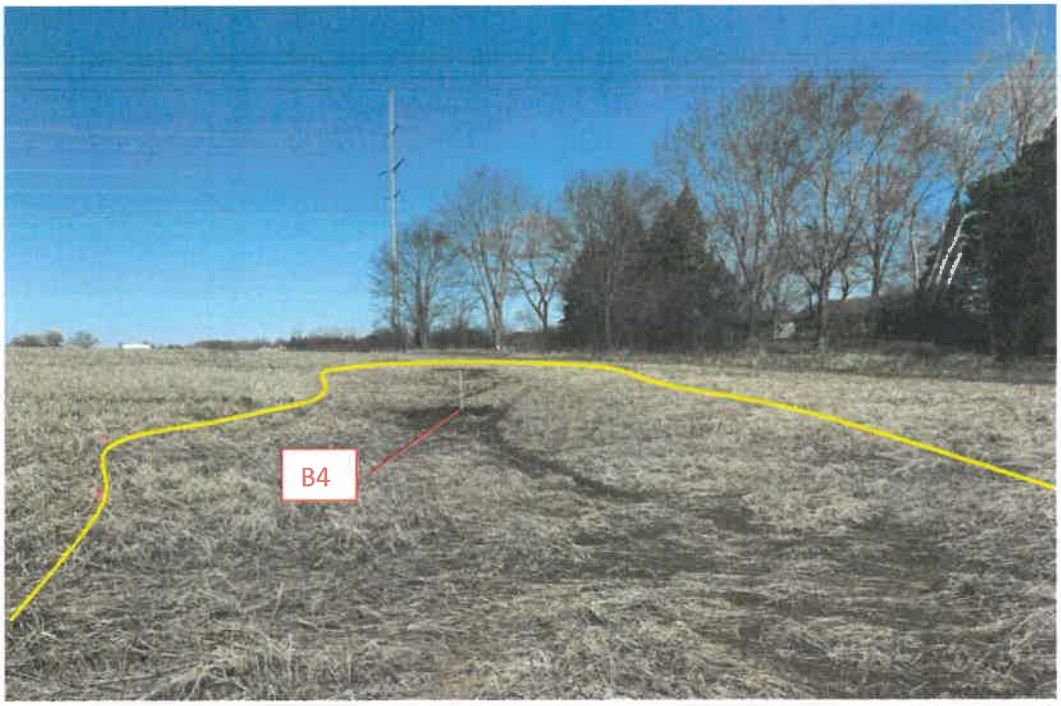


PHOTO 6 VIEW OF WETLAND A FACING NORTHWEST



Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

SITE PHOTOGRAPHS

PHOTO 7 VIEW OF WETLAND A FACING SOUTH NEAR B12

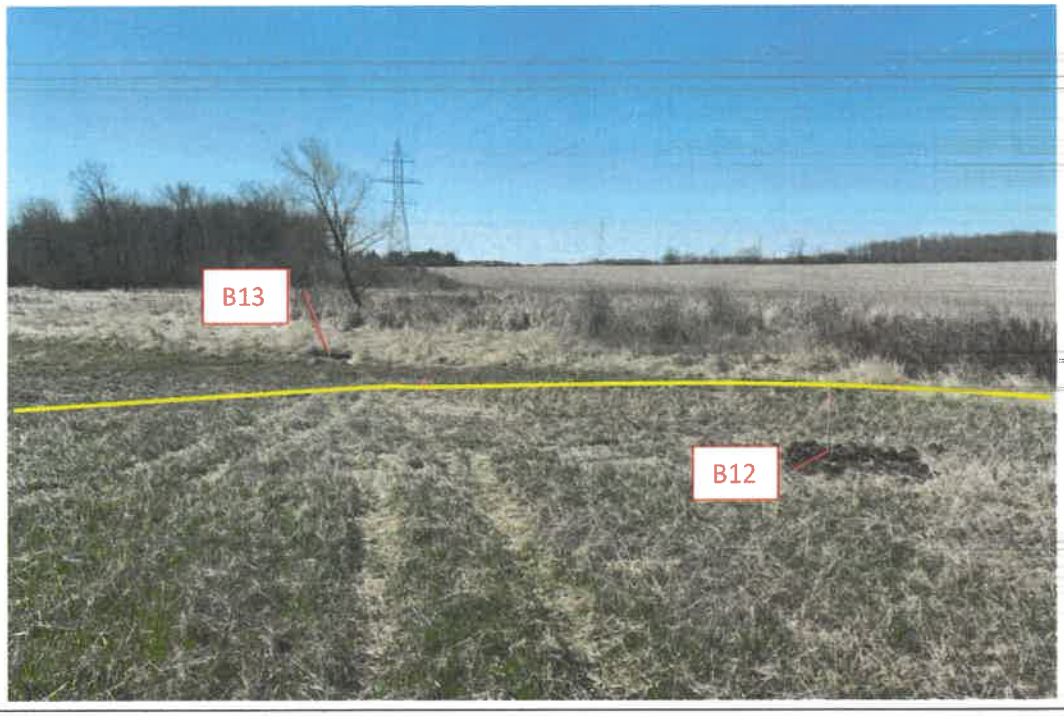


PHOTO 8 VIEW OF WETLAND A FACING SOUTHWEST NEAR B9



Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

SITE PHOTOGRAPHS

PHOTO 9 VIEW OF WETLAND A FACING SOUTHEAST NEAR B6

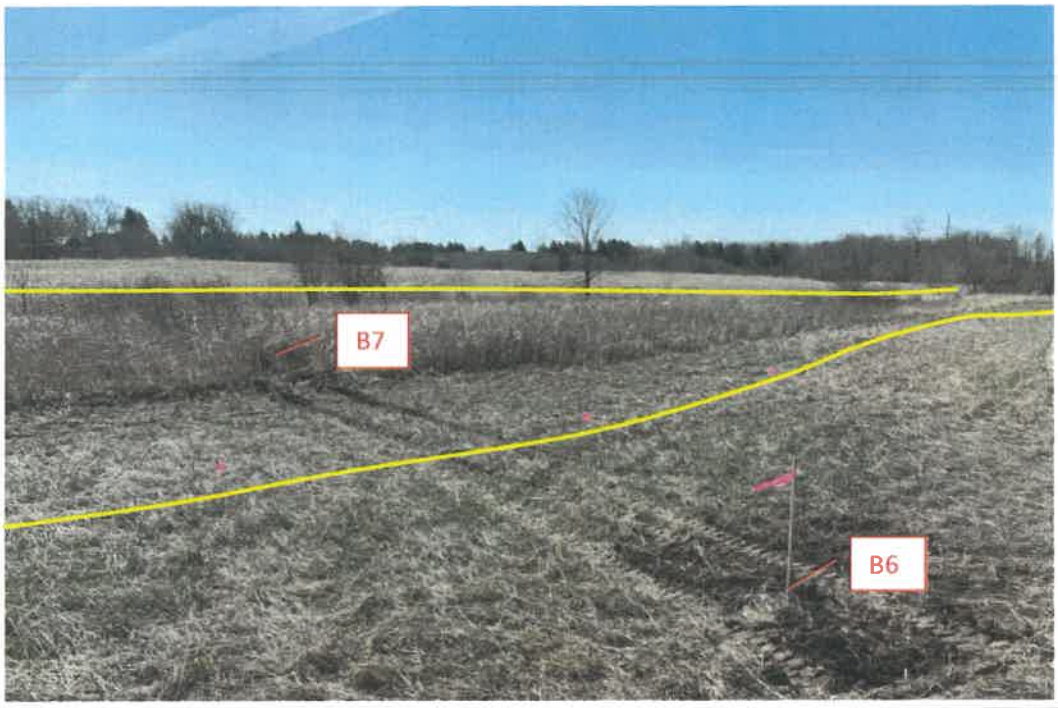


PHOTO 10 VIEW OF WETLAND A FACING NORTH, NORTH OF B8



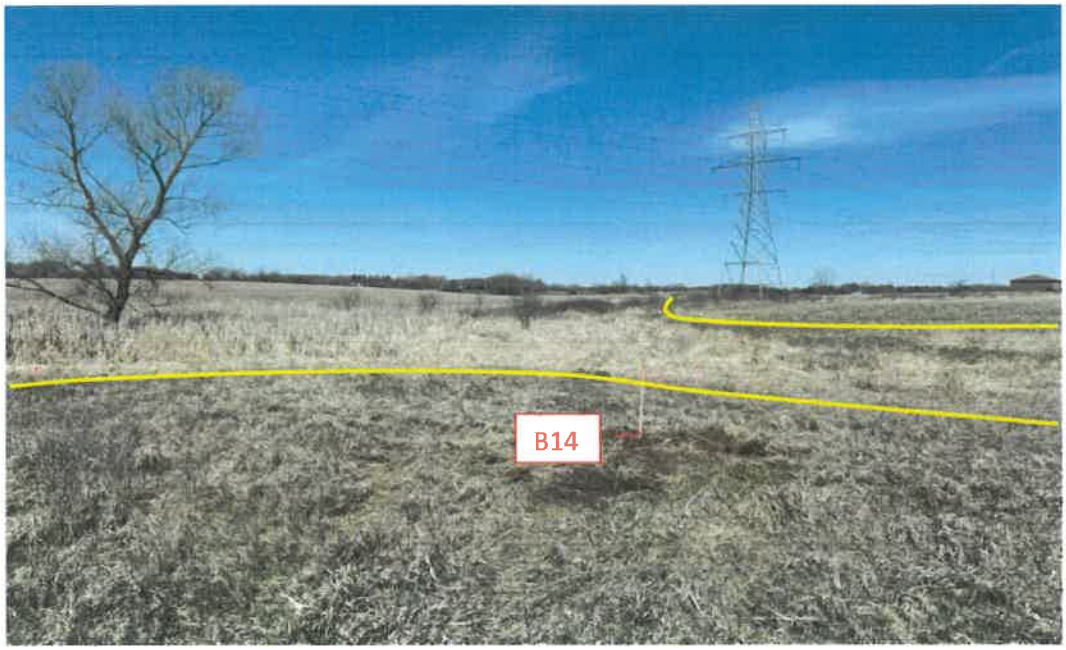
Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

SITE PHOTOGRAPHS

PHOTO 11 VIEW OF WETLAND A FACING SOUTH NEAR B19



PHOTO 12 VIEW OF WETLAND AT B14 FACING NORTHWEST



Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

SITE PHOTOGRAPHS

PHOTO 13 VIEW OF WETLAND A FACING SOUTH, SOUTH OF B18

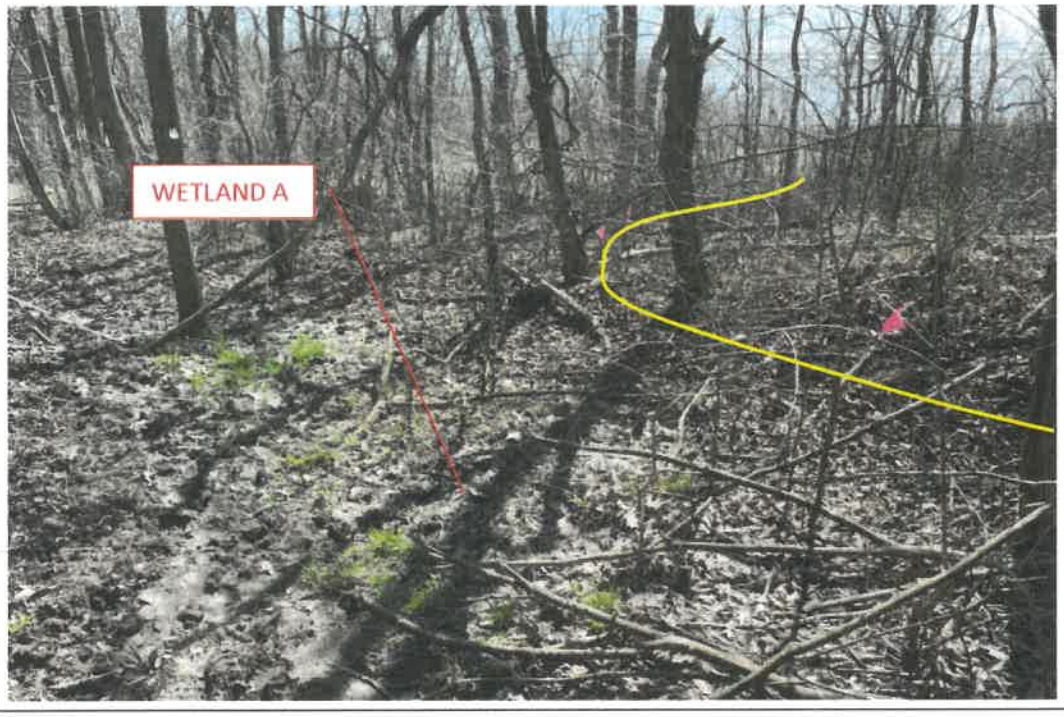


PHOTO 14 VIEW OF WETLAND FACING SOUTH, NORTH OF B18



Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

SITE PHOTOGRAPHS

PHOTO 15 VIEW OF WETLAND A FACING SOUTH

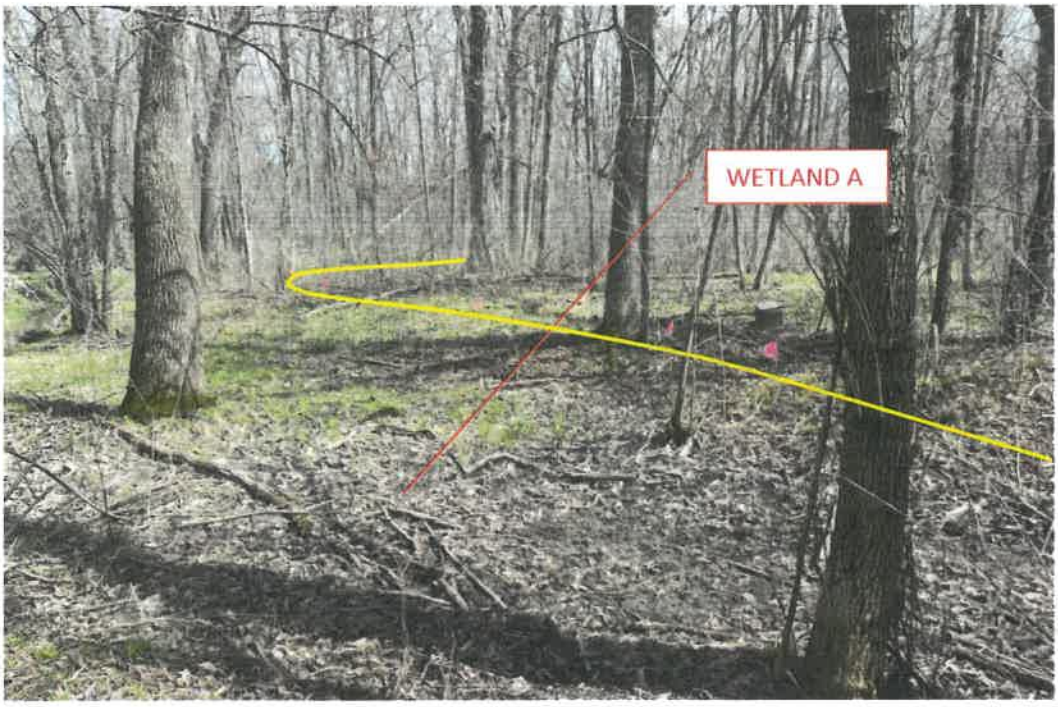


PHOTO 16 VIEW OF WETLAND A



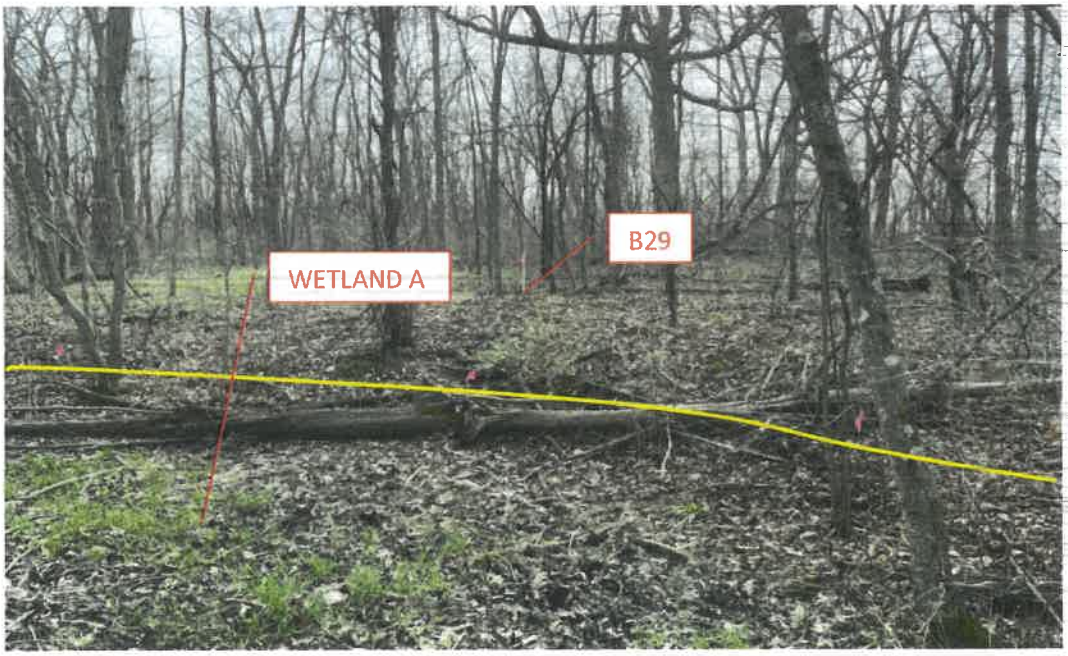
Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

SITE PHOTOGRAPHS

PHOTO 17 VIEW OF WETLAND A FACING EAST, EAST OF B28



PHOTO 18 VIEW OF WETLAND A AT B29 FACING SOUTH



Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

SITE PHOTOGRAPHS

PHOTO 19 VIEW OF WETLAND A FACING EAST, EAST OF B33

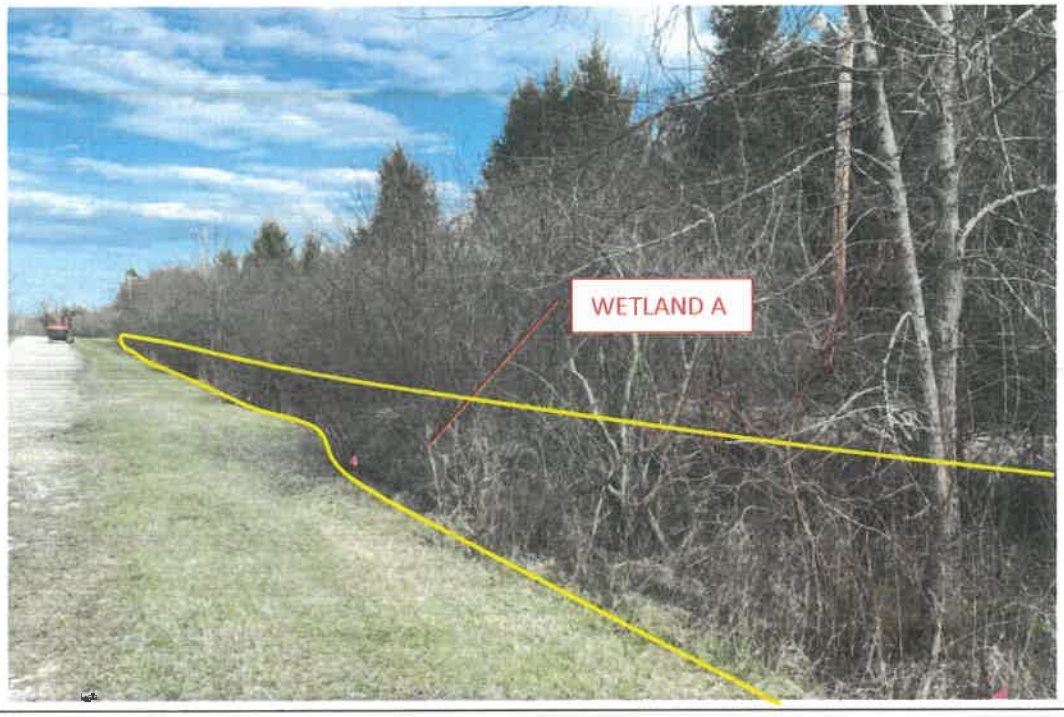


PHOTO 20 VIEW OF WETLAND A FACING WEST AT B33



Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

SITE PHOTOGRAPHS

PHOTO 21 VIEW OF WETLAND C FACING NORTH AT B36

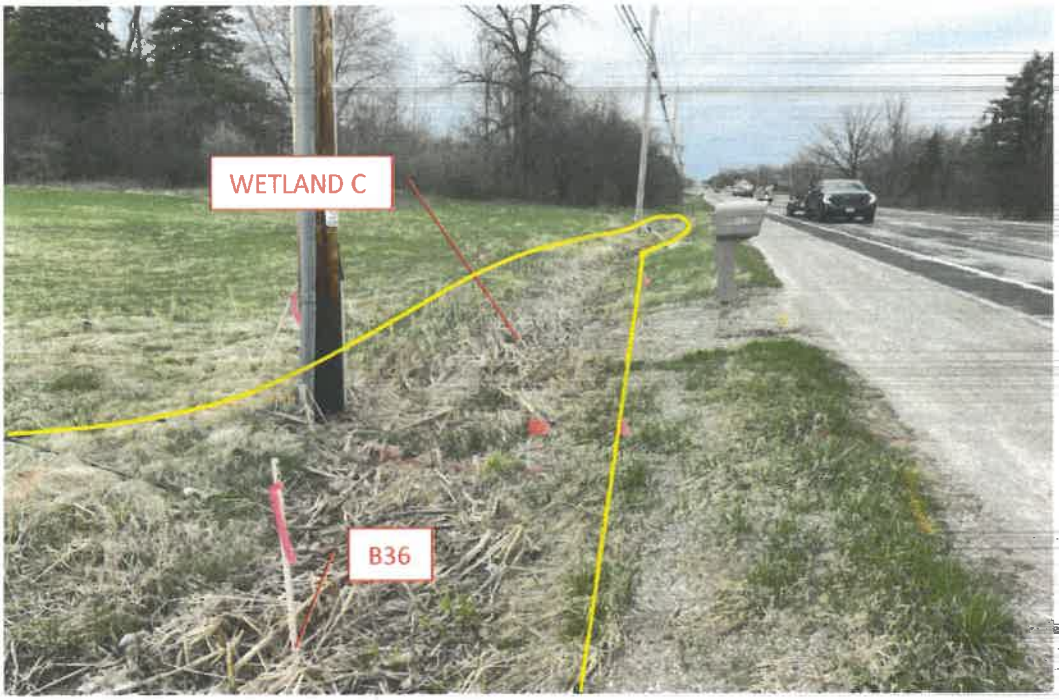
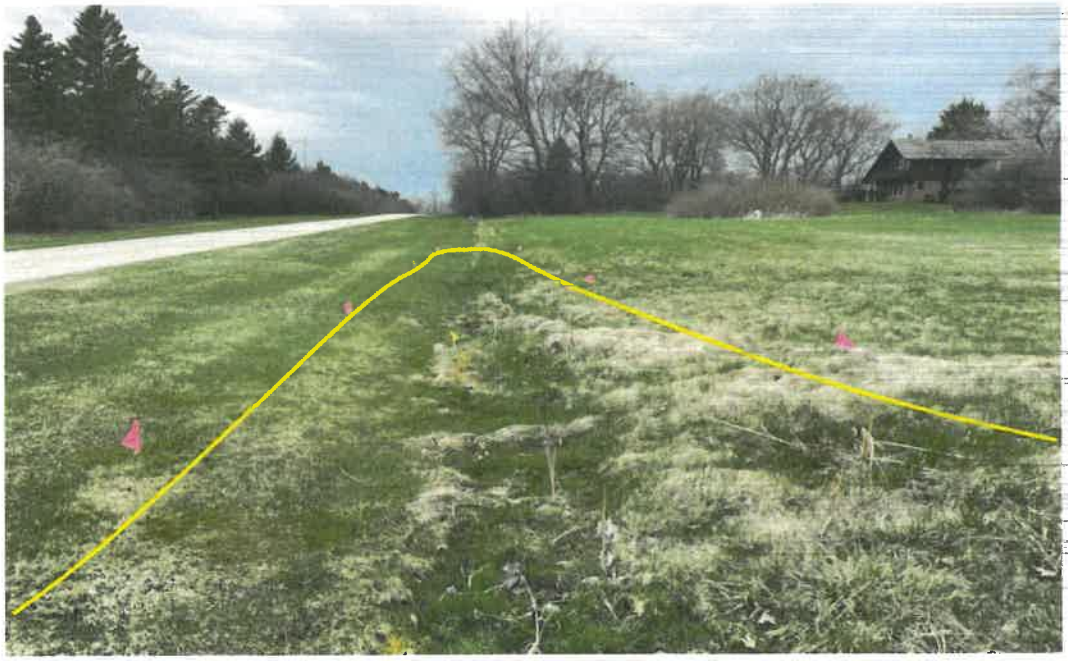


PHOTO 22 VIEW OF WETLAND C FACING WEST



Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

SITE PHOTOGRAPHS

PHOTO 23 VIEW OF WETLAND D FACING EAST

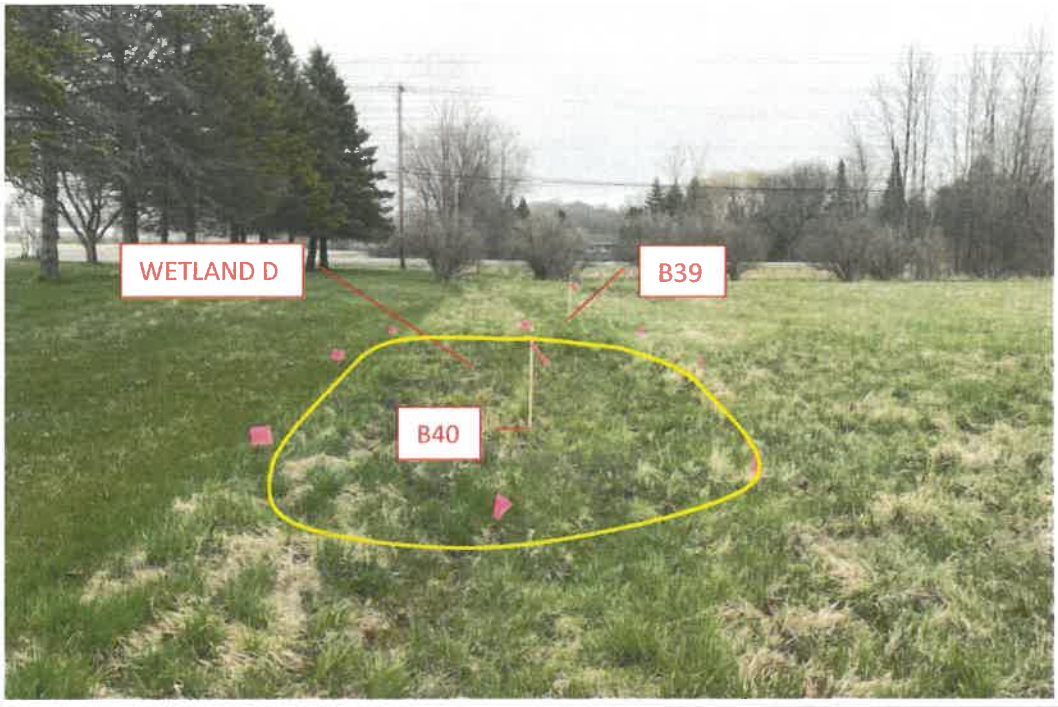


PHOTO 24 VIEW OF WETLAND E FACING EAST



Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

APPENDIX B

Wetland Delineation Data Forms

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: BRATT PROPERTY City/County: OZAUKEE Sampling Date: 4/20/20
Applicant/Owner: WILLIAM BRATT State: WISCONSIN Sampling Point: B1
Investigator(s): BRIAN BATES, PSS, PWS, CST Section, Township, Range: SECTION 31, T10N, R22E
Landform (hillslope, terrace, etc.): BACKSLOPE Local relief (concave, convex, none): CONCAVE
Slope (%): 0 TO 1 Lat.: *** Long.: *** Datum: CONTACT J.E. ARTHUR AND ASSOCIAT
Soil Map Unit Name KEWAUNEE SILT LOAM (KnB) NWI Classification: NONE
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
Are vegetation ____, soil ____, or hydrology ____ significantly disturbed? Are "normal
Are vegetation ____, soil ____, or hydrology ____ naturally problematic? circumstances" present? Yes
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present? Y
Hydric soil present? Y
Indicators of wetland hydrology present? Y

Is the sampled area within a wetland? Y

If yes, optional wetland site ID: ____

Remarks: (Explain alternative procedures here or in a separate report.)

CLIMATIC CONDITIONS ARE NORMAL PER THE NRCS ANTECEDENT HYDROLOGIC CONDITION EVALUATION METHOD.

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- X Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- X FAC-Neutral Test (D5)
- ___ Microtopographic Relief (D4)

Field Observations:
Surface water present? Yes ____ No X Depth (inches): ____
Water table present? Yes ____ No X Depth (inches): ____
Saturation present? Yes X No ____ Depth (inches): 0
(includes capillary fringe)

Indicators of wetland hydrology present? Y

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION - Use scientific names of plants

Sampling Point: B1

Tree Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1	*Fraxinus pennsylvanica*	15	Y	FACW
2	*Acer rubrum*	5	Y	FAC
3				
4				
5				
6				
7				
8				
9				
10				
		20	= Total Cover	

Sapling/Shrub Stratum	Plot Size (15')	Absolute % Cover	Dominant Species	Indicator Status
1	*Cornus alba*	15	Y	FACW
2	*Cornus racemosa*	15	Y	FAC
3				
4				
5				
6				
7				
8				
9				
10				
		30	= Total Cover	

Herb Stratum	Plot Size (5')	Absolute % Cover	Dominant Species	Indicator Status
1	*Poa pratensis*	85	Y	FACU
2	*Cornus alba*	5	N	FACW
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
		90	= Total Cover	

Woody Vine Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
		0	= Total Cover	

50/20 Thresholds

	20%	50%
Tree Stratum	4	10
Sapling/Shrub Stratum	6	15
Herb Stratum	18	45
Woody Vine Stratum	0	0

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across all Strata: 5 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 80.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species _____ x 1 = _____

FACW species _____ x 2 = _____

FAC species _____ x 3 = _____

FACU species _____ x 4 = _____

UPL species _____ x 5 = _____

Column totals _____ (A) _____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ Rapid test for hydrophytic vegetation

X Dominance test is >50%

___ Prevalence index is ≤3.0*

___ Morphogical adaptations* (provide supporting data in Remarks or on a separate sheet)

___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)

MEET FAC-N TEST.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

SOIL **Sampling Point:** B1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type*	Loc**	Texture	Remarks
0-10	7.5 YR 3/2	100					C	A
10-24	5 YR 4/4	80	5 YR 4/6	20	C	M	C	Bt

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains
**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

___ Histisol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
___ Depleted Below Dark Suface (A11)
___ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Dark Surface (S7) **(LRR R, MLRA 149B)**
___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
___ Thin Dark Surface (S9) **(LRR R, MLRA 149B**
___ Loamy Mucky Mineral (F1) **(LRR K, L)**
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B**
___ Coast Prairie Redox (A16) **(LRR K, L, R)**
___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
___ Dark Surface (S7) **(LRR K, L**
___ Polyvalue Below Surface (S8) **(LRR K, L)**
___ Thin Dark Surface (S9) **(LRR K, L)**
___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
X Red Parent Material (F21)
___ Very Shallow Dark Surface (TF12)
___ Other (Explain in Remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____

Hydric soil present? ___Y___

Remarks:

NO NON-PROBLEMATIC HYDRIC SOIL INDICATORS ABOVE OBSERVED SO PROCEDURES FOR PROBLEMATIC HYDRIC SOIL INDICATORS EVALUATED. STEP 1. I VERIFIED THAT HYDROPHYTIC VEGETATION IS PRESENT. STEP 2. I VERIFIED THAT AT LEAST 1 PRIMARY OR TWO SECONDARY INDICATORS OF HYDROLOGY WERE PRESENT. STEP 3. THE SOIL PROFILE WAS THOROUGHLY DESCRIBED. THE LANDSCAPE SETTING IS IN A POSITION TO COLLECT AND CONCENTRATE WATER SINCE THE SAMPLING POINT IS LOCATED IN A SWALE. NON-PROBLEMATIC HYDRIC SOIL INDICATORS ABOVE ARE POSSIBLY LACKING AS A RESULT OF THE RED PARENT MATERIAL SOILS. RED PARENT MATERIAL SOILS ARE PROBLEMATIC BECAUSE THEY ARE LESS LIKELY TO SHOW COLOR PATTERNS ASSOCIATED WITH REDUCING CONDITIONS. THE SOILS ARE HYDRIC PER THE F21 PROBLEMATIC HYDRIC SOIL INDICATOR.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: BRATT PROPERTY City/County: OZAUKEE Sampling Date: 4/20/20
Applicant/Owner: WILLIAM BRATT State: WISCONSIN Sampling Point: B2
Investigator(s): BRIAN BATES, PSS, PWS, CST Section, Township, Range: SECTION 31, T10N, R22E
Landform (hillslope, terrace, etc.): BACKSLOPE Local relief (concave, convex, none): NONE
Slope (%): 2 TO 3 Lat.: *** Long.: *** Datum: CONTACT J.E. ARTHUR AND ASSOCIAT
Soil Map Unit Name KEWAUNEE SILT LOAM (KnB) NWI Classification: NONE
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
Are vegetation ____, soil ____, or hydrology ____ significantly disturbed? Are "normal
Are vegetation ____, soil ____, or hydrology ____ naturally problematic? circumstances" present? Yes
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present? Y
Hydric soil present? N
Indicators of wetland hydrology present? N

Is the sampled area within a wetland? N

If yes, optional wetland site ID: ____

Remarks: (Explain alternative procedures here or in a separate report.)

CLIMATIC CONDITIONS ARE NORMAL PER THE NRCS ANTECEDENT HYDROLOGIC CONDITION EVALUATION METHOD.

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- X FAC-Neutral Test (D5)
- ___ Microtopographic Relief (D4)

Field Observations:

Surface water present?	Yes	____	No	X	Depth (inches): ____
Water table present?	Yes	____	No	X	Depth (inches): ____
Saturation present? (includes capillary fringe)	Yes	____	No	X	Depth (inches): ____

Indicators of wetland hydrology present? N

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
ONLY ONE SECONDARY INDICATOR OBSERVED.

VEGETATION - Use scientific names of plants

Sampling Point: B2

Tree Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1	*Acer rubrum*	15	Y	FAC
2	*Fraxinus pennsylvanica*	15	Y	FACW
3	*Rhamnus cathartica*	10	Y	FAC
4				
5				
6				
7				
8				
9				
10				
		40	= Total Cover	

Sapling/Shrub Stratum	Plot Size (15')	Absolute % Cover	Dominant Species	Indicator Status
1	*Lonicera tatarica*	15	Y	FACU
2	*Cornus alba*	5	Y	FACW
3	*Fraxinus pennsylvanica*	5	Y	FACW
4				
5				
6				
7				
8				
9				
10				
		25	= Total Cover	

Herb Stratum	Plot Size (5')	Absolute % Cover	Dominant Species	Indicator Status
1	*Poa pratensis*	85	Y	FACU
2	*Cornus alba*	5	N	FACW
3	*Lonicera tatarica*	5	N	FACU
4	*Fraxinus pennsylvanica*	5	N	FACW
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
		100	= Total Cover	

Woody Vine Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
		0	= Total Cover	

50/20 Thresholds

	20%	50%
Tree Stratum	8	20
Sapling/Shrub Stratum	5	13
Herb Stratum	20	50
Woody Vine Stratum	0	0

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across all Strata: 7 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 71.43% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species _____ x 1 = _____

FACW species _____ x 2 = _____

FAC species _____ x 3 = _____

FACU species _____ x 4 = _____

UPL species _____ x 5 = _____

Column totals _____ (A) _____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ Rapid test for hydrophytic vegetation

_X_ Dominance test is >50%

___ Prevalence index is ≤3.0*

___ Morphogical adaptations* (provide supporting data in Remarks or on a separate sheet)

___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)

MEETS FAC-N TEST.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

SOIL **Sampling Point:** B2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type*	Loc**	Texture	Remarks
0-10	7.5 YR 3/2	100					C	A
10-24	5 YR 4/4	80	5 YR 4/6	20	C	M	C	Bt

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains
**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

___ Histisol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
___ Depleted Below Dark Suface (A11)
___ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Dark Surface (S7) (**LRR R, MLRA 149B**)
___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**
___ Loamy Mucky Mineral (F1) (**LRR K, L**)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**
___ Coast Prairie Redox (A16) (**LRR K, L, R**)
___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
___ Dark Surface (S7) (**LRR K, L**
___ Polyvalue Below Surface (S8) (**LRR K, L**)
___ Thin Dark Surface (S9) (**LRR K, L**)
___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
___ Red Parent Material (F21)
___ Very Shallow Dark Surface (TF12)
___ Other (Explain in Remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____

Hydric soil present? ___N___

Remarks:
NO HYDRIC SOIL INDICATORS OBSERVED.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: BRATT PROPERTY City/County: OZAUKEE Sampling Date: 4/20/20
Applicant/Owner: WILLIAM BRATT State: WISCONSIN Sampling Point: B3
Investigator(s): BRIAN BATES, PSS, PWS, CST Section, Township, Range: SECTION 31, T10N, R22E
Landform (hillslope, terrace, etc.): BACKSLOPE Local relief (concave, convex, none): NONE
Slope (%): 2 TO 3 Lat.: *** Long.: *** Datum: CONTACT J.E. ARTHUR AND ASSOCIAT
Soil Map Unit Name KEWAUNE SILT LOAM (KnB) NWI Classification: NONE
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
Are vegetation ____, soil ____, or hydrology ____ significantly disturbed? Are "normal
Are vegetation ____, soil ____, or hydrology ____ naturally problematic? circumstances" present? Yes
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present? Y
Hydric soil present? N
Indicators of wetland hydrology present? N

Is the sampled area within a wetland? N

If yes, optional wetland site ID: ____

Remarks: (Explain alternative procedures here or in a separate report.)

CLIMATIC CONDITIONS ARE NORMAL PER THE NRCS ANTECEDENT HYDROLOGIC CONDITION EVALUATION METHOD.

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- X FAC-Neutral Test (D5)
- ___ Microtopographic Relief (D4)

Field Observations:

Surface water present?	Yes ____	No X	Depth (inches): ____	
Water table present?	Yes ____	No X	Depth (inches): ____	
Saturation present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____	

Indicators of wetland hydrology present? N

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
ONLY ONE SECONDARY INDICATOR OBSERVED.

VEGETATION - Use scientific names of plants

Sampling Point: B3

Tree Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1	*Fraxinus pennsylvanica*	15	Y	FACW
2	*Acer rubrum*	5	Y	FAC
3				
4				
5				
6				
7				
8				
9				
10				
		20	= Total Cover	

Sapling/Shrub Stratum	Plot Size (15')	Absolute % Cover	Dominant Species	Indicator Status
1	*Cornus alba*	10	Y	FACW
2	*Cornus racemosa*	10	Y	FAC
3	*Lonicera tatarica*	5	N	FACU
4	*Fraxinus pennsylvanica*	5	N	FACW
5				
6				
7				
8				
9				
10				
		30	= Total Cover	

Herb Stratum	Plot Size (5')	Absolute % Cover	Dominant Species	Indicator Status
1	*Poa pratensis*	90	Y	FACU
2	*Cornus racemosa*	5	N	FAC
3	*Cornus alba*	5	N	FACW
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
		100	= Total Cover	

Woody Vine Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
		0	= Total Cover	

50/20 Thresholds

	20%	50%
Tree Stratum	4	10
Sapling/Shrub Stratum	6	15
Herb Stratum	20	50
Woody Vine Stratum	0	0

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across all Strata: 5 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 80.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	x 1 =		
FACW species	x 2 =		
FAC species	x 3 =		
FACU species	x 4 =		
UPL species	x 5 =		
Column totals	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

___ Rapid test for hydrophytic vegetation

X Dominance test is >50%

___ Prevalence index is ≤3.0*

___ Morphogical adaptations* (provide supporting data in Remarks or on a separate sheet)

___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)

MEETS FAC-N TEST.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

SOIL **Sampling Point:** B3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type*	Loc**	Texture	Remarks
0-10	7.5 YR 3/2	100					SICL	A
10-24	5 YR 4/4	80	5 YR 4/6	20	C	M	C	Bt

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains
**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

___ Histisol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
___ Depleted Below Dark Suface (A11)
___ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Dark Surface (S7) (**LRR R, MLRA 149B**)
___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**
___ Loamy Mucky Mineral (F1) (**LRR K, L**)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**
___ Coast Prairie Redox (A16) (**LRR K, L, R**)
___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
___ Dark Surface (S7) (**LRR K, L**
___ Polyvalue Below Surface (S8) (**LRR K, L**)
___ Thin Dark Surface (S9) (**LRR K, L**)
___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
___ Red Parent Material (F21)
___ Very Shallow Dark Surface (TF12)
___ Other (Explain in Remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____

Hydric soil present? N

Remarks:
NO HYDRIC SOIL INDICATORS OBSERVED.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: BRATT PROPERTY City/County: OZAUKEE Sampling Date: 4/20/20
Applicant/Owner: WILLIAM BRATT State: WISCONSIN Sampling Point: B4
Investigator(s): BRIAN BATES, PSS, PWS, CST Section, Township, Range: SECTION 31, T10N, R22E
Landform (hillslope, terrace, etc.): BACKSLOPE Local relief (concave, convex, none): CONCAVE
Slope (%): 6 TO 7 Lat.: *** Long.: *** Datum: CONTACT J.E. ARTHUR AND ASSOCIAT
Soil Map Unit Name KEWAUNEE SILTY CLAY LOAM (KoB2) NWI Classification: NONE
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
Are vegetation X, soil ____, or hydrology ____ significantly disturbed? Are "normal
Are vegetation ____, soil ____, or hydrology ____ naturally problematic? circumstances" present? No
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	Y	**Is the sampled area within a wetland?**	Y
Hydric soil present?	Y		
Indicators of wetland hydrology present?	Y	If yes, optional wetland site ID:	

Remarks: (Explain alternative procedures here or in a separate report.)

CLIMATIC CONDITIONS ARE NORMAL PER THE NRCS ANTECEDENT HYDROLOGIC CONDITION EVALUATION METHOD. NON-NORMAL CIRCUMSTANCE, THE SAMPLING POINT HAS FARMING HISTORY.

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Microtopographic Relief (D4)

Field Observations:

Surface water present?	Yes	____	No	X	Depth (inches): ____
Water table present?	Yes	X	No	____	Depth (inches): -18
Saturation present? (includes capillary fringe)	Yes	X	No	____	Depth (inches): 0

Indicators of wetland hydrology present? Y

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION - Use scientific names of plants

Sampling Point: B4

Tree Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
		0	= Total Cover	

Sapling/Shrub Stratum	Plot Size (15')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
		0	= Total Cover	

Herb Stratum	Plot Size (5')	Absolute % Cover	Dominant Species	Indicator Status
1	*Setaria faberi*	30	Y	FACU
2	*Poa pratensis*	30	Y	FACU
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
		60	= Total Cover	

Woody Vine Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
		0	= Total Cover	

50/20 Thresholds

	20%	50%
Tree Stratum	0	0
Sapling/Shrub Stratum	0	0
Herb Stratum	12	30
Woody Vine Stratum	0	0

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across all Strata: 2 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 0.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species	60	x 4 =	240
UPL species		x 5 =	
Column totals	60 (A)		240 (B)

Prevalence Index = B/A = 4.00

Hydrophytic Vegetation Indicators:

___ Rapid test for hydrophytic vegetation
___ Dominance test is >50%
___ Prevalence index is ≤3.0*
___ Morphogical adaptations* (provide supporting data in Remarks or on a separate sheet)
___ Problematic hydrophytic vegetation*
X (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)

SEE SEPARATE SHEET. DOES NOT MEET FAC-N TEST.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

B4 VEGETATION DISCUSSION

Dominance Test not met. Prevalence Index evaluated since hydric soils and wetland hydrology were observed. Does not meet Prevalence Index. Problematic Hydrophytic Vegetation Procedures subsequently evaluated.

Step 1, I verified that at least one indicator of hydric soil and one primary or two secondary indicators of wetland hydrology were present. Step 2, I verified that area is in a landscape position that is likely to collect or water. Step 3, I verified that the appropriate landscape settings were present, Level or Nearly Level Area (0%-3% Slopes).

The sampling point is a Managed (disturbed) Plant Community since the sampling point area has been historically farmed.

4d(1) An un-managed area having similar soil and hydrologic conditions could be identified to the south and it was dominated with hydrophytes.

4d(4) The hydrophytic vegetation status at this sampling point has been made based on the presence of hydric soils, wetland hydrology and hydrophytes observed in non-managed areas. It is my B.P.J. that if this sampling point was not a managed plant community, hydrophytes would be dominant based on landscape position and the presence of hydric soils and wetland hydrology.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

SOIL **Sampling Point:** B4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type*	Loc**	Texture	Remarks
0-12	10 YR 3/1	85	10 YR 5/6	15	C	M	C	Ap
12-24	7.5 YR 4/4	50	7.5 YR 4/6	50	C	M	C	Bt

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains
**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

___ Histisol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
___ Depleted Below Dark Suface (A11)
___ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Dark Surface (S7) (**LRR R, MLRA 149B**)
___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**
___ Loamy Mucky Mineral (F1) (**LRR K, L**)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
_X_ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**
___ Coast Prairie Redox (A16) (**LRR K, L, R**)
___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
___ Dark Surface (S7) (**LRR K, L**
___ Polyvalue Below Surface (S8) (**LRR K, L**)
___ Thin Dark Surface (S9) (**LRR K, L**)
___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
___ Red Parent Material (F21)
___ Very Shallow Dark Surface (TF12)
___ Other (Explain in Remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____

Hydric soil present? ___Y___

Remarks:
THE SOILS ARE HYDRIC PER THE F6 INDICATOR.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: BRATT PROPERTY City/County: OZAUKEE Sampling Date: 4/20/20
Applicant/Owner: WILLIAM BRATT State: WISCONSIN Sampling Point: B5
Investigator(s): BRIAN BATES, PSS, PWS, CST Section, Township, Range: SECTION 31, T10N, R22E
Landform (hillslope, terrace, etc.): BACKSLOPE Local relief (concave, convex, none): NONE
Slope (%): 8 Lat.: *** Long.: *** Datum: CONTACT J.E. ARTHUR AND ASSOCIAT
Soil Map Unit Name KEWAUNEE SILTY CLAY LOAM (KoB2) NWI Classification: NONE
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
Are vegetation X, soil ____, or hydrology ____ significantly disturbed? Are "normal
Are vegetation ____, soil ____, or hydrology ____ naturally problematic? circumstances" present? No
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present? N
Hydric soil present? N
Indicators of wetland hydrology present? N

Is the sampled area within a wetland? N

If yes, optional wetland site ID: ____

Remarks: (Explain alternative procedures here or in a separate report.)

CLIMATIC CONDITIONS ARE NORMAL PER THE NRCS ANTECEDENT HYDROLOGIC CONDITION EVALUATION METHOD. NON-NORMAL CIRCUMSTANCE, THE SAMPLING POINT HAS FARMING HISTORY.

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Microtopographic Relief (D4)

Field Observations:

Surface water present?	Yes ____	No X	Depth (inches): ____		
Water table present?	Yes ____	No X	Depth (inches): ____	**Indicators of wetland hydrology present?**	N
Saturation present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____		

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

NO PRIMARY OR SECONDARY INDICATORS OBSERVED.

VEGETATION - Use scientific names of plants

Sampling Point: B5

Tree Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
		0	= Total Cover	

Sapling/Shrub Stratum	Plot Size (15')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
		0	= Total Cover	

Herb Stratum	Plot Size (5')	Absolute % Cover	Dominant Species	Indicator Status
1	*Taraxacum officinale*	10	Y	FACU
2	*Bromus inermis*	10	Y	UPL
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
		20	= Total Cover	

Woody Vine Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
		0	= Total Cover	

50/20 Thresholds

	20%	50%
Tree Stratum	0	0
Sapling/Shrub Stratum	0	0
Herb Stratum	4	10
Woody Vine Stratum	0	0

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across all Strata: 2 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 0.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	x 1 =		
FACW species	x 2 =		
FAC species	x 3 =		
FACU species	x 4 =		
UPL species	x 5 =		
Column totals	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

___ Rapid test for hydrophytic vegetation
___ Dominance test is >50%
___ Prevalence index is ≤3.0*
___ Morphogical adaptations* (provide supporting data in Remarks or on a separate sheet)
___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present? N

Remarks: (Include photo numbers here or on a separate sheet)

NON-NORMAL CIRCUMSTANCE, THE SAMPLING POINT HAS FARMING HISTORY AND VEGETATION HAS BEEN HISTORICALLY DISTURBED. DOES NOT MEET FAC-N TEST.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

SOIL **Sampling Point:** B5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type*	Loc**	Texture	Remarks
0-13	10 YR 3/2	100					C	Ap
13-24	5 YR 4/4	80	5 YR 4/6	20	C	M	C	Bt

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains
**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

___ Histisol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
___ Depleted Below Dark Suface (A11)
___ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Dark Surface (S7) (**LRR R, MLRA 149B**)
___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**
___ Loamy Mucky Mineral (F1) (**LRR K, L**)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**
___ Coast Prairie Redox (A16) (**LRR K, L, R**)
___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
___ Dark Surface (S7) (**LRR K, L**
___ Polyvalue Below Surface (S8) (**LRR K, L**)
___ Thin Dark Surface (S9) (**LRR K, L**)
___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
___ Red Parent Material (F21)
___ Very Shallow Dark Surface (TF12)
___ Other (Explain in Remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____

Hydric soil present? N

Remarks:
NO HYDRIC SOIL INDICATORS OBSERVED.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: BRATT PROPERTY City/County: OZAUKEE Sampling Date: 4/20/20
Applicant/Owner: WILLIAM BRATT State: WISCONSIN Sampling Point: B6
Investigator(s): BRIAN BATES, PSS, PWS, CST Section, Township, Range: SECTION 31, T10N, R22E
Landform (hillslope, terrace, etc.): BACKSLOPE Local relief (concave, convex, none): NONE
Slope (%): 7% Lat.: *** Long.: *** Datum: CONTACT J.E. ARTHUR AND ASSOCIAT
Soil Map Unit Name KEWAUNEE SILTY CLAY LOAM (KoB2) NWI Classification: NONE
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
Are vegetation X, soil ____, or hydrology ____ significantly disturbed? Are "normal
Are vegetation ____, soil ____, or hydrology ____ naturally problematic? circumstances" present? No
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present? N
Hydric soil present? N
Indicators of wetland hydrology present? N

Is the sampled area within a wetland? N

If yes, optional wetland site ID: ____

Remarks: (Explain alternative procedures here or in a separate report.)

CLIMATIC CONDITIONS ARE NORMAL PER THE NRCS ANTECEDENT HYDROLOGIC CONDITION EVALUATION METHOD. NON-NORMAL CIRCUMSTANCE, THE SAMPLING POINT HAS FARMING HISTORY.

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Microtopographic Relief (D4)

Field Observations:

Surface water present?	Yes ____	No X	Depth (inches):	____
Water table present?	Yes ____	No X	Depth (inches):	____
Saturation present? (includes capillary fringe)	Yes ____	No X	Depth (inches):	____

Indicators of wetland hydrology present? N

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

NO PRIMARY OR SECONDARY INDICATORS OBSERVED.

VEGETATION - Use scientific names of plants

Sampling Point: B6

Tree Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
		0	= Total Cover	

Sapling/Shrub Stratum	Plot Size (15')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
		0	= Total Cover	

Herb Stratum	Plot Size (5')	Absolute % Cover	Dominant Species	Indicator Status
1	*Setaria faberi*	20	Y	FACU
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
		20	= Total Cover	

Woody Vine Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
		0	= Total Cover	

50/20 Thresholds

	20%	50%
Tree Stratum	0	0
Sapling/Shrub Stratum	0	0
Herb Stratum	4	10
Woody Vine Stratum	0	0

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across all Strata: 1 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 0.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	x 1 =		
FACW species	x 2 =		
FAC species	x 3 =		
FACU species	x 4 =		
UPL species	x 5 =		
Column totals	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

___ Rapid test for hydrophytic vegetation
___ Dominance test is >50%
___ Prevalence index is ≤3.0*
___ Morphogical adaptations* (provide supporting data in Remarks or on a separate sheet)
___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present? N

Remarks: (Include photo numbers here or on a separate sheet)

NON-NORMAL CIRCUMSTANCE, THE SAMPLING POINT HAS FARMING HISTORY AND VEGETATION HAS BEEN HISTORICALLY DISTURBED. DOES NOT MEET FAC-N TEST.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

SOIL **Sampling Point:** B6

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type*	Loc**	Texture	Remarks
0-11	7.5 YR 3/2	100					SIC	Ap
11-24	7.5 YR 4/3	80	7.5 YR 4/6	20	C	M	C	Bt

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains
**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

___ Histisol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
___ Depleted Below Dark Suface (A11)
___ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Dark Surface (S7) (**LRR R, MLRA 149B**)
___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**
___ Loamy Mucky Mineral (F1) (**LRR K, L**)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**
___ Coast Prairie Redox (A16) (**LRR K, L, R**)
___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
___ Dark Surface (S7) (**LRR K, L**
___ Polyvalue Below Surface (S8) (**LRR K, L**)
___ Thin Dark Surface (S9) (**LRR K, L**)
___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
___ Red Parent Material (F21)
___ Very Shallow Dark Surface (TF12)
___ Other (Explain in Remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____

Hydric soil present? N

Remarks:
NO HYDRIC SOIL INDICATORS OBSERVED.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: BRATT PROPERTY City/County: OZAUKEE Sampling Date: 4/20/20
Applicant/Owner: WILLIAM BRATT State: WISCONSIN Sampling Point: B7
Investigator(s): BRIAN BATES, PSS, PWS, CST Section, Township, Range: SECTION 31, T10N, R22E
Landform (hillslope, terrace, etc.): TOESLOPE Local relief (concave, convex, none): CONCAVE
Slope (%): 0 TO 1 Lat.: *** Long.: *** Datum: CONTACT J.E. ARTHUR AND ASSOCIAT
Soil Map Unit Name MANAWA SILT LOAM (MaA) NWI Classification: LISTED AS OTHER
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
Are vegetation ____, soil ____, or hydrology ____ significantly disturbed? Are "normal
Are vegetation ____, soil ____, or hydrology ____ naturally problematic? circumstances" present? Yes
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present? Y
Hydric soil present? Y
Indicators of wetland hydrology present? Y

Is the sampled area within a wetland? Y

If yes, optional wetland site ID: ____

Remarks: (Explain alternative procedures here or in a separate report.)

CLIMATIC CONDITIONS ARE NORMAL PER THE NRCS ANTECEDENT HYDROLOGIC CONDITION EVALUATION METHOD.

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- X Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- X FAC-Neutral Test (D5)
- ___ Microtopographic Relief (D4)

Field Observations:

Surface water present?	Yes	____	No	X	Depth (inches): ____
Water table present?	Yes	____	No	X	Depth (inches): ____
Saturation present? (includes capillary fringe)	Yes	____	No	X	Depth (inches): ____

Indicators of wetland hydrology present? Y

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION - Use scientific names of plants

Sampling Point: B7

Tree Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
		0	= Total Cover	

Sapling/Shrub Stratum	Plot Size (15')	Absolute % Cover	Dominant Species	Indicator Status
1	*Salix interior*	5	Y	FACW
2				
3				
4				
5				
6				
7				
8				
9				
10				
		5	= Total Cover	

Herb Stratum	Plot Size (5')	Absolute % Cover	Dominant Species	Indicator Status
1	*Typha angustifolia*	95	Y	OBL
2	*Solidago gigantea*	5	N	FACW
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
		100	= Total Cover	

Woody Vine Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
		0	= Total Cover	

50/20 Thresholds

	20%	50%
Tree Stratum	0	0
Sapling/Shrub Stratum	1	3
Herb Stratum	20	50
Woody Vine Stratum	0	0

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across all Strata: 2 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 100.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	x 1 =		
FACW species	x 2 =		
FAC species	x 3 =		
FACU species	x 4 =		
UPL species	x 5 =		
Column totals	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

___ Rapid test for hydrophytic vegetation

_X_ Dominance test is >50%

___ Prevalence index is ≤3.0*

___ Morphogical adaptations* (provide supporting data in Remarks or on a separate sheet)

___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)

MEETS FAC-N TEST.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

SOIL **Sampling Point:** B7

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type*	Loc**	Texture	Remarks
0-24	10 YR 2/1	85	10 YR 4/6	15	C	M	SIC	A

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains
**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

___ Histisol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
___ Depleted Below Dark Suface (A11)
___ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Dark Surface (S7) (**LRR R, MLRA 149B**)
___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**
___ Loamy Mucky Mineral (F1) (**LRR K, L**)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
X Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**
___ Coast Prairie Redox (A16) (**LRR K, L, R**)
___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
___ Dark Surface (S7) (**LRR K, L**
___ Polyvalue Below Surface (S8) (**LRR K, L**)
___ Thin Dark Surface (S9) (**LRR K, L**)
___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
___ Red Parent Material (F21)
___ Very Shallow Dark Surface (TF12)
___ Other (Explain in Remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____

Hydric soil present? ___Y___

Remarks:
THE SOILS ARE HYDRIC PER THE F6 INDICATOR.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: BRATT PROPERTY City/County: OZAUKEE Sampling Date: 4/20/20
Applicant/Owner: WILLIAM BRATT State: WISCONSIN Sampling Point: B8
Investigator(s): BRIAN BATES, PSS, PWS, CST Section, Township, Range: SECTION 31, T10N, R22E
Landform (hillslope, terrace, etc.): BACKSLOPE Local relief (concave, convex, none): NONE
Slope (%): 8 Lat.: *** Long.: *** Datum: CONTACT J.E. ARTHUR AND ASSOCIAT
Soil Map Unit Name MANAWA SILT LOAM (MaA) NWI Classification: NONE
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
Are vegetation X, soil ____, or hydrology ____ significantly disturbed? Are "normal
Are vegetation ____, soil ____, or hydrology ____ naturally problematic? circumstances" present? No
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	Y	**Is the sampled area within a wetland?**	N
Hydric soil present?	N		
Indicators of wetland hydrology present?	N	If yes, optional wetland site ID:	

Remarks: (Explain alternative procedures here or in a separate report.)

CLIMATIC CONDITIONS ARE NORMAL PER THE NRCS ANTECEDENT HYDROLOGIC CONDITION EVALUATION METHOD. NON-NORMAL CIRCUMSTANCE, THE SAMPLING POINT HAS FARMING HISTORY.

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Microtopographic Relief (D4)

Field Observations:

Surface water present?	Yes ____	No X	Depth (inches):	
Water table present?	Yes ____	No X	Depth (inches):	
Saturation present? (includes capillary fringe)	Yes ____	No X	Depth (inches):	

Indicators of wetland hydrology present? N

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

NO PRIMARY OR SECONDARY INDICATORS OBSERVED.

VEGETATION - Use scientific names of plants

Sampling Point: B8

Tree Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
		0	= Total Cover	

Sapling/Shrub Stratum	Plot Size (15')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
		0	= Total Cover	

Herb Stratum	Plot Size (5')	Absolute % Cover	Dominant Species	Indicator Status
1	*Barbarea vulgaris*	5	Y	FAC
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
		5	= Total Cover	

Woody Vine Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
		0	= Total Cover	

50/20 Thresholds

	20%	50%
Tree Stratum	0	0
Sapling/Shrub Stratum	0	0
Herb Stratum	1	3
Woody Vine Stratum	0	0

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across all Strata: 1 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 100.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species _____ x 1 = _____

FACW species _____ x 2 = _____

FAC species _____ x 3 = _____

FACU species _____ x 4 = _____

UPL species _____ x 5 = _____

Column totals _____ (A) _____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ Rapid test for hydrophytic vegetation

_X_ Dominance test is >50%

___ Prevalence index is ≤3.0*

___ Morphogical adaptations* (provide supporting data in Remarks or on a separate sheet)

___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)

NON-NORMAL CIRCUMSTANCE, THE SAMPLING POINT HAS FARMING HISTORY AND VEGETATION HAS BEEN HISTORICALLY DISTURBED. DOES NOT MEET FAC-N TEST.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

SOIL **Sampling Point:** B8

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type*	Loc**	Texture	Remarks
0-10	10 YR 3/2	100					SICL	Ap
10-24	5 YR 4/4	85	5 YR 4/6	15	C	M	C	Bt

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains
**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

___ Histisol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
___ Depleted Below Dark Suface (A11)
___ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Dark Surface (S7) (**LRR R, MLRA 149B**)
___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**
___ Loamy Mucky Mineral (F1) (**LRR K, L**)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**
___ Coast Prairie Redox (A16) (**LRR K, L, R**)
___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
___ Dark Surface (S7) (**LRR K, L**
___ Polyvalue Below Surface (S8) (**LRR K, L**)
___ Thin Dark Surface (S9) (**LRR K, L**)
___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
___ Red Parent Material (F21)
___ Very Shallow Dark Surface (TF12)
___ Other (Explain in Remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____

Hydric soil present? ___N___

Remarks:
NO HYDRIC SOIL INDICATORS OBSERVED.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: BRATT PROPERTY City/County: OZAUKEE Sampling Date: 4/20/20
Applicant/Owner: WILLIAM BRATT State: WISCONSIN Sampling Point: B9
Investigator(s): BRIAN BATES, PSS, PWS, CST Section, Township, Range: SECTION 31, T10N, R22E
Landform (hillslope, terrace, etc.): BACKSLOPE Local relief (concave, convex, none): NONE
Slope (%): 8 Lat.: *** Long.: *** Datum: CONTACT J.E. ARTHUR AND ASSOCIAT
Soil Map Unit Name MANAWA SILT LOAM (MaA) NWI Classification: NONE
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
Are vegetation X, soil ____, or hydrology ____ significantly disturbed? Are "normal
Are vegetation ____, soil ____, or hydrology ____ naturally problematic? circumstances" present? No
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	N	**Is the sampled area within a wetland?**	N
Hydric soil present?	N		
Indicators of wetland hydrology present?	N	If yes, optional wetland site ID:	

Remarks: (Explain alternative procedures here or in a separate report.)
CLIMATIC CONDITIONS ARE NORMAL PER THE NRCS ANTECEDENT HYDROLOGIC CONDITION EVALUATION METHOD. NON-NORMAL CIRCUMSTANCE, THE SAMPLING POINT HAS FARMING HISTORY.

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)
- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)
- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Microtopographic Relief (D4)

Field Observations:

Surface water present?	Yes ____	No X	Depth (inches):	
Water table present?	Yes ____	No X	Depth (inches):	
Saturation present? (includes capillary fringe)	Yes ____	No X	Depth (inches):	

Indicators of wetland hydrology present? N

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
NO PRIMARY OR SECONDARY INDICATORS OBSERVED.

VEGETATION - Use scientific names of plants

Sampling Point: B9

Tree Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
		0	= Total Cover	

Sapling/Shrub Stratum	Plot Size (15')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
		0	= Total Cover	

Herb Stratum	Plot Size (5')	Absolute % Cover	Dominant Species	Indicator Status
1	*Taraxacum officinale*	5	Y	FACU
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
		5	= Total Cover	

Woody Vine Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
		0	= Total Cover	

50/20 Thresholds

	20%	50%
Tree Stratum	0	0
Sapling/Shrub Stratum	0	0
Herb Stratum	1	3
Woody Vine Stratum	0	0

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across all Strata: 1 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 0.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species _____ x 1 = _____

FACW species _____ x 2 = _____

FAC species _____ x 3 = _____

FACU species _____ x 4 = _____

UPL species _____ x 5 = _____

Column totals _____ (A) _____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ Rapid test for hydrophytic vegetation

___ Dominance test is >50%

___ Prevalence index is ≤3.0*

___ Morphogical adaptations* (provide supporting data in Remarks or on a separate sheet)

___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present? N

Remarks: (Include photo numbers here or on a separate sheet)

NON-NORMAL CIRCUMSTANCE, THE SAMPLING POINT HAS FARMING HISTORY AND VEGETATION HAS BEEN HISTORICALLY DISTURBED. DOES NOT MEET FAC-N TEST.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

SOIL **Sampling Point:** B9

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type*	Loc**	Texture	Remarks
0-11	7.5 YR 3/2	100					SICL	Ap
11-24	5 YR 3/3	85	5 YR 4/4	15	C	M	C	Bt

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains
**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

___ Histisol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
___ Depleted Below Dark Suface (A11)
___ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Dark Surface (S7) (**LRR R, MLRA 149B**)
___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**
___ Loamy Mucky Mineral (F1) (**LRR K, L**)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**
___ Coast Prairie Redox (A16) (**LRR K, L, R**)
___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
___ Dark Surface (S7) (**LRR K, L**
___ Polyvalue Below Surface (S8) (**LRR K, L**)
___ Thin Dark Surface (S9) (**LRR K, L**)
___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
___ Red Parent Material (F21)
___ Very Shallow Dark Surface (TF12)
___ Other (Explain in Remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____

Hydric soil present? ___N___

Remarks:
NO HYDRIC SOIL INDICATORS OBSERVED.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: BRATT PROPERTY City/County: OZAUKEE Sampling Date: 4/20/20
Applicant/Owner: WILLIAM BRATT State: WISCONSIN Sampling Point: B10
Investigator(s): BRIAN BATES, PSS, PWS, CST Section, Township, Range: SECTION 31, T10N, R22E
Landform (hillslope, terrace, etc.): TOESLOPE Local relief (concave, convex, none): CONCAVE
Slope (%): 0 TO 1 Lat.: *** Long.: *** Datum: CONTACT J.E. ARTHUR AND ASSOCIAT
Soil Map Unit Name MANAWA SILT LOAM (MaA) NWI Classification: LISTED AS OTHER
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
Are vegetation ____, soil ____, or hydrology ____ significantly disturbed? Are "normal
Are vegetation ____, soil ____, or hydrology ____ naturally problematic? circumstances" present? Yes
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present? Y
Hydric soil present? Y
Indicators of wetland hydrology present? Y

Is the sampled area within a wetland? Y

If yes, optional wetland site ID: ____

Remarks: (Explain alternative procedures here or in a separate report.)

CLIMATIC CONDITIONS ARE NORMAL PER THE NRCS ANTECEDENT HYDROLOGIC CONDITION EVALUATION METHOD.

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- X Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- X FAC-Neutral Test (D5)
- ___ Microtopographic Relief (D4)

Field Observations:

Surface water present?	Yes	____	No	X	Depth (inches): ____
Water table present?	Yes	X	No	____	Depth (inches): -24
Saturation present? (includes capillary fringe)	Yes	X	No	____	Depth (inches): -18

Indicators of wetland hydrology present? Y

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION - Use scientific names of plants

Sampling Point: B10

Tree Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
		0	= Total Cover	

Sapling/Shrub Stratum	Plot Size (15')	Absolute % Cover	Dominant Species	Indicator Status
1	*Rhamnus cathartica*	5	Y	FAC
2	*Fraxinus pennsylvanica*	5	Y	FACW
3				
4				
5				
6				
7				
8				
9				
10				
		10	= Total Cover	

Herb Stratum	Plot Size (5')	Absolute % Cover	Dominant Species	Indicator Status
1	*Phalaris arundinacea*	90	Y	FACW
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
		90	= Total Cover	

Woody Vine Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
		0	= Total Cover	

50/20 Thresholds

	20%	50%
Tree Stratum	0	0
Sapling/Shrub Stratum	2	5
Herb Stratum	18	45
Woody Vine Stratum	0	0

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across all Strata: 3 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 100.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	x 1 =		
FACW species	x 2 =		
FAC species	x 3 =		
FACU species	x 4 =		
UPL species	x 5 =		
Column totals	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

___ Rapid test for hydrophytic vegetation

_X_ Dominance test is >50%

___ Prevalence index is ≤3.0*

___ Morphogical adaptations* (provide supporting data in Remarks or on a separate sheet)

___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)

MEETS FAC-N TEST.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

SOIL **Sampling Point:** B10

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type*	Loc**	Texture	Remarks
0-14	10 YR 3/2	95	10 YR 4/4	5	C	M	SIC	A
14-24	10 YR 2/1	70	10 YR 4/6	30	C	M	C	Bt

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains
**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

___ Histisol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
___ Depleted Below Dark Suface (A11)
___ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Dark Surface (S7) (**LRR R, MLRA 149B**)
___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**
___ Loamy Mucky Mineral (F1) (**LRR K, L**)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
_X_ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**
___ Coast Prairie Redox (A16) (**LRR K, L, R**)
___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
___ Dark Surface (S7) (**LRR K, L**
___ Polyvalue Below Surface (S8) (**LRR K, L**)
___ Thin Dark Surface (S9) (**LRR K, L**)
___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
___ Red Parent Material (F21)
___ Very Shallow Dark Surface (TF12)
___ Other (Explain in Remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____

Hydric soil present? __Y__

Remarks:
THE SOILS ARE HYDRIC PER THE F6 INDICATOR.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: BRATT PROPERTY City/County: OZAUKEE Sampling Date: 4/20/20
Applicant/Owner: WILLIAM BRATT State: WISCONSIN Sampling Point: B11
Investigator(s): BRIAN BATES, PSS, PWS, CST Section, Township, Range: SECTION 31, T10N, R22E
Landform (hillslope, terrace, etc.): BACKSLOPE Local relief (concave, convex, none): NONE
Slope (%): 6 Lat.: *** Long.: *** Datum: CONTACT J.E. ARTHUR AND ASSOCIAT
Soil Map Unit Name MANAWA SILT LOAM (MaA) NWI Classification: NONE
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
Are vegetation X, soil ____, or hydrology ____ significantly disturbed? Are "normal
Are vegetation ____, soil ____, or hydrology ____ naturally problematic? circumstances" present? No
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present? N
Hydric soil present? N
Indicators of wetland hydrology present? N

Is the sampled area within a wetland? N

If yes, optional wetland site ID: ____

Remarks: (Explain alternative procedures here or in a separate report.)

CLIMATIC CONDITIONS ARE NORMAL PER THE NRCS ANTECEDENT HYDROLOGIC CONDITION EVALUATION METHOD. NON-NORMAL CIRCUMSTANCE, THE SAMPLING POINT HAS FARMING HISTORY.

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Microtopographic Relief (D4)

Field Observations:

Surface water present?	Yes ____	No X	Depth (inches): ____	
Water table present?	Yes ____	No X	Depth (inches): ____	
Saturation present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____	

Indicators of wetland hydrology present? N

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

NO PRIMARY OR SECONDARY INDICATORS OBSERVED.

VEGETATION - Use scientific names of plants

Sampling Point: B11

Tree Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
		0	= Total Cover	

Sapling/Shrub Stratum	Plot Size (15')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
		0	= Total Cover	

Herb Stratum	Plot Size (5')	Absolute % Cover	Dominant Species	Indicator Status
1	*Plantago major*	5	Y	FACU
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
		5	= Total Cover	

Woody Vine Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
		0	= Total Cover	

50/20 Thresholds

	20%	50%
Tree Stratum	0	0
Sapling/Shrub Stratum	0	0
Herb Stratum	1	3
Woody Vine Stratum	0	0

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across all Strata: 1 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 0.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species _____ x 1 = _____

FACW species _____ x 2 = _____

FAC species _____ x 3 = _____

FACU species _____ x 4 = _____

UPL species _____ x 5 = _____

Column totals _____ (A) _____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ Rapid test for hydrophytic vegetation

___ Dominance test is >50%

___ Prevalence index is ≤3.0*

___ Morphogical adaptations* (provide supporting data in Remarks or on a separate sheet)

___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present? N

Remarks: (Include photo numbers here or on a separate sheet)

NON-NORMAL CIRCUMSTANCE, THE SAMPLING POINT HAS FARMING HISTORY AND VEGETATION HAS BEEN HISTORICALLY DISTURBED. DOES NOT MEET FAC-N TEST.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

SOIL **Sampling Point:** B11

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type*	Loc**	Texture	Remarks
0-10	7.5 YR 3/2	100					SUCL	Ap
10-13	10 YR 4/3	90	10 YR 4/6	10	C	M	SICL	Bt
13-24	5 YR 4/4	85	5 YR 4/6	15	C	M	C	C

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains
**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

___ Histisol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
___ Depleted Below Dark Suface (A11)
___ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Dark Surface (S7) (**LRR R, MLRA 149B**)
___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**
___ Loamy Mucky Mineral (F1) (**LRR K, L**)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**
___ Coast Prairie Redox (A16) (**LRR K, L, R**)
___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
___ Dark Surface (S7) (**LRR K, L**
___ Polyvalue Below Surface (S8) (**LRR K, L**)
___ Thin Dark Surface (S9) (**LRR K, L**)
___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
___ Red Parent Material (F21)
___ Very Shallow Dark Surface (TF12)
___ Other (Explain in Remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____

Hydric soil present? N

Remarks:
NO HYDRIC SOIL INDICATORS OBSERVED.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: BRATT PROPERTY City/County: OZAUKEE Sampling Date: 4/20/20
Applicant/Owner: WILLIAM BRATT State: WISCONSIN Sampling Point: B12
Investigator(s): BRIAN BATES, PSS, PWS, CST Section, Township, Range: SECTION 31, T10N, R22E
Landform (hillslope, terrace, etc.): BACKSLOPE Local relief (concave, convex, none): NONE
Slope (%): 6 Lat.: *** Long.: *** Datum: CONTACT J.E. ARTHUR AND ASSOCIAT
Soil Map Unit Name MANAWA SILT LOAM (MaA) NWI Classification: NONE
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
Are vegetation X, soil ____, or hydrology ____ significantly disturbed? Are "normal
Are vegetation ____, soil ____, or hydrology ____ naturally problematic? circumstances" present? No
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	N	**Is the sampled area within a wetland?**	N
Hydric soil present?	N		
Indicators of wetland hydrology present?	N	If yes, optional wetland site ID:	

Remarks: (Explain alternative procedures here or in a separate report.)
CLIMATIC CONDITIONS ARE NORMAL PER THE NRCS ANTECEDENT HYDROLOGIC CONDITION EVALUATION METHOD. NON-NORMAL CIRCUMSTANCE, THE SAMPLING POINT HAS FARMING HISTORY.

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)
- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)
- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Microtopographic Relief (D4)

Field Observations:

Surface water present?	Yes ____	No X	Depth (inches):	
Water table present?	Yes ____	No X	Depth (inches):	
Saturation present? (includes capillary fringe)	Yes ____	No X	Depth (inches):	

Indicators of wetland hydrology present? N

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
NO PRIMARY OR SECONDARY INDICATORS OBSERVED.

VEGETATION - Use scientific names of plants

Sampling Point: B12

Tree Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
		0	= Total Cover	

Sapling/Shrub Stratum	Plot Size (15')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
		0	= Total Cover	

Herb Stratum	Plot Size (5')	Absolute % Cover	Dominant Species	Indicator Status
1	*Taraxacum officinale*	5	Y	FACU
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
		5	= Total Cover	

Woody Vine Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
		0	= Total Cover	

50/20 Thresholds

	20%	50%
Tree Stratum	0	0
Sapling/Shrub Stratum	0	0
Herb Stratum	1	3
Woody Vine Stratum	0	0

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across all Strata: 1 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 0.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	x 1 =		
FACW species	x 2 =		
FAC species	x 3 =		
FACU species	x 4 =		
UPL species	x 5 =		
Column totals	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

___ Rapid test for hydrophytic vegetation
___ Dominance test is >50%
___ Prevalence index is ≤3.0*
___ Morphogical adaptations* (provide supporting data in Remarks or on a separate sheet)
___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present? N

Remarks: (Include photo numbers here or on a separate sheet)

NON-NORMAL CIRCUMSTANCE, THE SAMPLING POINT HAS FARMING HISTORY AND VEGETATION HAS BEEN HISTORICALLY DISTURBED. DOES NOT MEET FAC-N TEST.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

SOIL **Sampling Point:** B12

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type*	Loc**	Texture	Remarks
0-12	7.5 YR 3/2	100					SIC	Ap
12-24	5 YR 4/3	85	5 YR 4/6	15	C	M	C	Bt

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains
**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

___ Histisol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
___ Depleted Below Dark Suface (A11)
___ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Dark Surface (S7) (**LRR R, MLRA 149B**)
___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**
___ Loamy Mucky Mineral (F1) (**LRR K, L**)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**
___ Coast Prairie Redox (A16) (**LRR K, L, R**)
___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
___ Dark Surface (S7) (**LRR K, L**
___ Polyvalue Below Surface (S8) (**LRR K, L**)
___ Thin Dark Surface (S9) (**LRR K, L**)
___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
___ Red Parent Material (F21)
___ Very Shallow Dark Surface (TF12)
___ Other (Explain in Remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____

Hydric soil present? ___N___

Remarks:
NO HYDRIC SOIL INDICATORS OBSERVED.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: BRATT PROPERTY City/County: OZAUKEE Sampling Date: 4/20/20
Applicant/Owner: WILLIAM BRATT State: WISCONSIN Sampling Point: B13
Investigator(s): BRIAN BATES, PSS, PWS, CST Section, Township, Range: SECTION 31, T10N, R22E
Landform (hillslope, terrace, etc.): TOESLOPE Local relief (concave, convex, none): CONCAVE
Slope (%): 0 TO 1 Lat.: *** Long.: *** Datum: CONTACT J.E. ARTHUR AND ASSOCIAT
Soil Map Unit Name MANAWA SILT LOAM (MaA) NWI Classification: LISTED AS OTHER
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
Are vegetation ____, soil ____, or hydrology ____ significantly disturbed? Are "normal
Are vegetation ____, soil ____, or hydrology ____ naturally problematic? circumstances" present? Yes
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present? Y
Hydric soil present? Y
Indicators of wetland hydrology present? Y

Is the sampled area within a wetland? Y

If yes, optional wetland site ID: ____

Remarks: (Explain alternative procedures here or in a separate report.)

CLIMATIC CONDITIONS ARE NORMAL PER THE NRCS ANTECEDENT HYDROLOGIC CONDITION EVALUATION METHOD.

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- X Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- X FAC-Neutral Test (D5)
- ___ Microtopographic Relief (D4)

Field Observations:

Surface water present?	Yes	____	No	X	Depth (inches): ____
Water table present?	Yes	X	No	____	Depth (inches): -24
Saturation present? (includes capillary fringe)	Yes	X	No	____	Depth (inches): -22

Indicators of wetland hydrology present? Y

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION - Use scientific names of plants

Sampling Point: B13

Tree Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
		0	= Total Cover	

Sapling/Shrub Stratum	Plot Size (15')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
		0	= Total Cover	

Herb Stratum	Plot Size (5')	Absolute % Cover	Dominant Species	Indicator Status
1	*Phalaris arundinacea*	100	Y	FACW
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
		100	= Total Cover	

Woody Vine Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
		0	= Total Cover	

50/20 Thresholds

	20%	50%
Tree Stratum	0	0
Sapling/Shrub Stratum	0	0
Herb Stratum	20	50
Woody Vine Stratum	0	0

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across all Strata: 1 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 100.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species _____ x 1 = _____

FACW species _____ x 2 = _____

FAC species _____ x 3 = _____

FACU species _____ x 4 = _____

UPL species _____ x 5 = _____

Column totals _____ (A) _____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ Rapid test for hydrophytic vegetation

_X_ Dominance test is >50%

___ Prevalence index is ≤3.0*

___ Morphogical adaptations* (provide supporting data in Remarks or on a separate sheet)

___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)

MEETS FAC-N TEST.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

SOIL **Sampling Point:** B13

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type*	Loc**	Texture	Remarks
0-5	7.5 YR 3/2	70	7.5 YR 4/6	30	C	M	SIC	A
5-12	10 YR 3/2	90	10 YR 4/6	10	C	M	SIC	2A
12-24	10 YR 4/3	90	10 YR 4/6	10	C	M	C	Bt

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains
**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

___ Histisol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
___ Depleted Below Dark Suface (A11)
___ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Dark Surface (S7) (**LRR R, MLRA 149B**)
___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**
___ Loamy Mucky Mineral (F1) (**LRR K, L**)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
X Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**
___ Coast Prairie Redox (A16) (**LRR K, L, R**)
___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
___ Dark Surface (S7) (**LRR K, L**
___ Polyvalue Below Surface (S8) (**LRR K, L**)
___ Thin Dark Surface (S9) (**LRR K, L**)
___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
___ Red Parent Material (F21)
___ Very Shallow Dark Surface (TF12)
___ Other (Explain in Remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____

Hydric soil present? ___Y___

Remarks:
THE SOILS ARE HYDRIC PER THE F6 INDICATOR.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: BRATT PROPERTY City/County: OZAUKEE Sampling Date: 4/20/20
Applicant/Owner: WILLIAM BRATT State: WISCONSIN Sampling Point: B14
Investigator(s): BRIAN BATES, PSS, PWS, CST Section, Township, Range: SECTION 31, T10N, R22E
Landform (hillslope, terrace, etc.): BACKSLOPE Local relief (concave, convex, none): NONE
Slope (%): 2 TO 3 Lat.: *** Long.: *** Datum: CONTACT J.E. ARTHUR AND ASSOCIAT
Soil Map Unit Name MANAWA SILT LOAM NWI Classification: NONE
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
Are vegetation ____, soil ____, or hydrology ____ significantly disturbed? Are "normal
Are vegetation ____, soil ____, or hydrology ____ naturally problematic? circumstances" present? Yes
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present? N
Hydric soil present? N
Indicators of wetland hydrology present? N

Is the sampled area within a wetland? N

If yes, optional wetland site ID: ____

Remarks: (Explain alternative procedures here or in a separate report.)

CLIMATIC CONDITIONS ARE NORMAL PER THE NRCS ANTECEDENT HYDROLOGIC CONDITION EVALUATION METHOD.

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)

___ Surface Water (A1)
___ High Water Table (A2)
___ Saturation (A3)
___ Water Marks (B1)
___ Sediment Deposits (B2)
___ Drift Deposits (B3)
___ Algal Mat or Crust (B4)
___ Iron Deposits (B5)
___ Inundation Visible on Aerial Imagery (B7)
___ Sparsely Vegetated Concave Surface (B8)
___ Water-Stained Leaves (B9)
___ Aquatic Fauna (B13)
___ Marl Deposits (B15)
___ Hydrogen Sulfide Odor (C1)
___ Oxidized Rhizospheres on Living Roots (C3)
___ Presence of Reduced Iron (C4)
___ Recent Iron Reduction in Tilled Soils (C6)
___ Thin Muck Surface (C7)
___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

___ Surface Soil Cracks (B6)
___ Drainage Patterns (B10)
___ Moss Trim Lines (B16)
___ Dry-Season Water Table (C2)
___ Crayfish Burrows (C8)
___ Saturation Visible on Aerial Imagery (C9)
___ Stunted or Stressed Plants (D1)
___ Geomorphic Position (D2)
___ Shallow Aquitard (D3)
___ FAC-Neutral Test (D5)
___ Microtopographic Relief (D4)

Field Observations:
Surface water present? Yes ____ No X Depth (inches): ____
Water table present? Yes ____ No X Depth (inches): ____
Saturation present? Yes ____ No X Depth (inches): ____
(includes capillary fringe)

Indicators of wetland hydrology present? N

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
NO PRIMARY OR SECONDARY INDICATORS OBSERVED.

VEGETATION - Use scientific names of plants

Sampling Point: B14

Tree Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
		0	= Total Cover	

Sapling/Shrub Stratum	Plot Size (15')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
		0	= Total Cover	

Herb Stratum	Plot Size (5')	Absolute % Cover	Dominant Species	Indicator Status
1	*Bromus inermis*	60	Y	UPL
2	*Poa pratensis*	40	Y	FACU
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
		100	= Total Cover	

Woody Vine Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
		0	= Total Cover	

50/20 Thresholds

	20%	50%
Tree Stratum	0	0
Sapling/Shrub Stratum	0	0
Herb Stratum	20	50
Woody Vine Stratum	0	0

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across all Strata: 2 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 0.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species _____ x 1 = _____

FACW species _____ x 2 = _____

FAC species _____ x 3 = _____

FACU species _____ x 4 = _____

UPL species _____ x 5 = _____

Column totals _____ (A) _____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ Rapid test for hydrophytic vegetation

___ Dominance test is >50%

___ Prevalence index is ≤3.0*

___ Morphogical adaptations* (provide supporting data in Remarks or on a separate sheet)

___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present? N

Remarks: (Include photo numbers here or on a separate sheet)

DOES NOT MEET FAC-N TEST.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

SOIL **Sampling Point:** B14

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type*	Loc**	Texture	Remarks
0-7	7.5 YR 4/3	100					C	A
7-24	5 YR 4/4	85	5 YR 4/6	15	C	M	C	Bt

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains
**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

___ Histisol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
___ Depleted Below Dark Suface (A11)
___ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Dark Surface (S7) **(LRR R, MLRA 149B)**
___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
___ Thin Dark Surface (S9) **(LRR R, MLRA 149B**
___ Loamy Mucky Mineral (F1) **(LRR K, L)**
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B**
___ Coast Prairie Redox (A16) **(LRR K, L, R)**
___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
___ Dark Surface (S7) **(LRR K, L**
___ Polyvalue Below Surface (S8) **(LRR K, L)**
___ Thin Dark Surface (S9) **(LRR K,** L)
___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
___ Red Parent Material (F21)
___ Very Shallow Dark Surface (TF12)
___ Other (Explain in Remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____

Hydric soil present? ___N___

Remarks:
NO HYDRIC SOIL INDICATORS OBSERVED.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: BRATT PROPERTY City/County: OZAUKEE Sampling Date: 4/20/20
Applicant/Owner: WILLIAM BRATT State: WISCONSIN Sampling Point: B15
Investigator(s): BRIAN BATES, PSS, PWS, CST Section, Township, Range: SECTION 31, T10N, R22E
Landform (hillslope, terrace, etc.): BACKSLOPE Local relief (concave, convex, none): NONE
Slope (%): 4 TO 5 Lat.: *** Long.: *** Datum: CONTACT J.E. ARTHUR AND ASSOCIAT
Soil Map Unit Name KEWAUNEE SILTY CLAY LOAM (KoB2) NWI Classification: NONE
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
Are vegetation ____, soil ____, or hydrology ____ significantly disturbed? Are "normal
Are vegetation ____, soil ____, or hydrology ____ naturally problematic? circumstances" present? Yes
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	Y	**Is the sampled area within a wetland?**	N
Hydric soil present?	N		
Indicators of wetland hydrology present?	N	If yes, optional wetland site ID:	

Remarks: (Explain alternative procedures here or in a separate report.)

CLIMATIC CONDITIONS ARE NORMAL PER THE NRCS ANTECEDENT HYDROLOGIC CONDITION EVALUATION METHOD.

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Microtopographic Relief (D4)

Field Observations:

Surface water present?	Yes ____	No X	Depth (inches):	
Water table present?	Yes ____	No X	Depth (inches):	
Saturation present? (includes capillary fringe)	Yes ____	No X	Depth (inches):	

Indicators of wetland hydrology present? N

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
NO PRIMARY OR SECONDARY INDICATORS OBSERVED.

VEGETATION - Use scientific names of plants

Sampling Point: B15

Tree Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
		0	= Total Cover	

Sapling/Shrub Stratum	Plot Size (15')	Absolute % Cover	Dominant Species	Indicator Status
1	*Rhamnus cathartica*	5	Y	FAC
2				
3				
4				
5				
6				
7				
8				
9				
10				
		5	= Total Cover	

Herb Stratum	Plot Size (5')	Absolute % Cover	Dominant Species	Indicator Status
1	*Phalaris arundinacea*	60	Y	FACW
2	*Poa pratensis*	40	Y	FACU
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
		100	= Total Cover	

Woody Vine Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
		0	= Total Cover	

50/20 Thresholds

	20%	50%
Tree Stratum	0	0
Sapling/Shrub Stratum	1	3
Herb Stratum	20	50
Woody Vine Stratum	0	0

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across all Strata: 3 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 66.67% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species _____ x 1 = _____

FACW species _____ x 2 = _____

FAC species _____ x 3 = _____

FACU species _____ x 4 = _____

UPL species _____ x 5 = _____

Column totals _____ (A) _____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ Rapid test for hydrophytic vegetation

_X_ Dominance test is >50%

___ Prevalence index is ≤3.0*

___ Morphogical adaptations* (provide supporting data in Remarks or on a separate sheet)

___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)

DOMINATS EQUAL. DOES NOT MEET FAC-N TEST BASED ON NON-DOMINANTS.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

SOIL **Sampling Point:** B15

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type*	Loc**	Texture	Remarks
0-5	10 YR 3/2	100					SICL	HISTORICAL FILL
5-10	5 YR 4/4	90	5 YR 5/6	10	C	M	C	HISTORICAL FILL
10-17	10 YR 3/2	100					SICL	A
17-24	5 YR 4/4	80	5 YR 5/6	20	C	M	C	Bt

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains
**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

___ Histisol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
___ Depleted Below Dark Suface (A11)
___ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Dark Surface (S7) (**LRR R, MLRA 149B**)
___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**
___ Loamy Mucky Mineral (F1) (**LRR K, L**)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**
___ Coast Prairie Redox (A16) (**LRR K, L, R**)
___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
___ Dark Surface (S7) (**LRR K, L**
___ Polyvalue Below Surface (S8) (**LRR K, L**)
___ Thin Dark Surface (S9) (**LRR K, L**)
___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
___ Red Parent Material (F21)
___ Very Shallow Dark Surface (TF12)
___ Other (Explain in Remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____

Hydric soil present? ___N___

Remarks:
NO HYDRIC SOIL INDICATORS OBSERVED. IT IS UNKNOWN WHEN THE FILL WAS PLACED BUT IT WAS NOT PLACED RECENTLY.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: BRATT PROPERTY City/County: OZAUKEE Sampling Date: 4/20/20
Applicant/Owner: WILLIAM BRATT State: WISCONSIN Sampling Point: B16
Investigator(s): BRIAN BATES, PSS, PWS, CST Section, Township, Range: SECTION 31, T10N, R22E
Landform (hillslope, terrace, etc.): BACKSLOPE Local relief (concave, convex, none): CONCAVE
Slope (%): 2 TO 3 Lat.: *** Long.: *** Datum: CONTACT J.E. ARTHUR AND ASSOCIAT
Soil Map Unit Name MANAWA SILT LOAM (MaA) NWI Classification: NONE
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
Are vegetation ____, soil ____, or hydrology ____ significantly disturbed? Are "normal
Are vegetation ____, soil ____, or hydrology ____ naturally problematic? circumstances" present? Yes
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present? Y
Hydric soil present? Y
Indicators of wetland hydrology present? Y

Is the sampled area within a wetland? Y

If yes, optional wetland site ID: ____

Remarks: (Explain alternative procedures here or in a separate report.)

CLIMATIC CONDITIONS ARE NORMAL PER THE NRCS ANTECEDENT HYDROLOGIC CONDITION EVALUATION METHOD.

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- X FAC-Neutral Test (D5)
- ___ Microtopographic Relief (D4)

Field Observations:

Surface water present?	Yes	____	No	X	Depth (inches): ____
Water table present?	Yes	X	No	____	Depth (inches): -19
Saturation present? (includes capillary fringe)	Yes	X	No	____	Depth (inches): -11

Indicators of wetland hydrology present? Y

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION - Use scientific names of plants

Sampling Point: B16

Tree Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
		0	= Total Cover	

Sapling/Shrub Stratum	Plot Size (15')	Absolute % Cover	Dominant Species	Indicator Status
1	*Lonicera tatarica*	2		FACU
2				
3				
4				
5				
6				
7				
8				
9				
10				
		2	= Total Cover	

Herb Stratum	Plot Size (5')	Absolute % Cover	Dominant Species	Indicator Status
1	*Phalaris arundinacea*	100	Y	FACW
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
		100	= Total Cover	

Woody Vine Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
		0	= Total Cover	

50/20 Thresholds

	20%	50%
Tree Stratum	0	0
Sapling/Shrub Stratum	0	1
Herb Stratum	20	50
Woody Vine Stratum	0	0

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across all Strata: 1 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 100.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species _____ x 1 = _____

FACW species _____ x 2 = _____

FAC species _____ x 3 = _____

FACU species _____ x 4 = _____

UPL species _____ x 5 = _____

Column totals _____ (A) _____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ Rapid test for hydrophytic vegetation

X Dominance test is >50%

___ Prevalence index is ≤3.0*

___ Morphogical adaptations* (provide supporting data in Remarks or on a separate sheet)

___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)

MEETS FAC-N TEST.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

SOIL **Sampling Point:** B16

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type*	Loc**	Texture	Remarks
0-4	7.5 YR 3/2	100					SICL	HISTORICAL FILL
4-8	5 YR 4/4	80	5 YR 4/6	20	C	M	SICL	HISTORICAL FILL
8-24	10 YR 3/2	70	10 YR 5/6	30	C	M	SIC	A

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains
**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

___ Histisol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
___ Depleted Below Dark Suface (A11)
___ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Dark Surface (S7) (**LRR R, MLRA 149B**)
___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**
___ Loamy Mucky Mineral (F1) (**LRR K, L**)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
X Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**
___ Coast Prairie Redox (A16) (**LRR K, L, R**)
___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
___ Dark Surface (S7) (**LRR K, L**
___ Polyvalue Below Surface (S8) (**LRR K, L**)
___ Thin Dark Surface (S9) (**LRR K, L**)
___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
___ Red Parent Material (F21)
___ Very Shallow Dark Surface (TF12)
___ Other (Explain in Remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____

Hydric soil present? ___Y___

Remarks:
THE SOILS ARE HYDRIC PER THE F6 INDICATOR.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: BRATT PROPERTY City/County: OZAUKEE Sampling Date: 4/20/20
Applicant/Owner: WILLIAM BRATT State: WISCONSIN Sampling Point: B17
Investigator(s): BRIAN BATES, PSS, PWS, CST Section, Township, Range: SECTION 31, T10N, R22E
Landform (hillslope, terrace, etc.): BACKSLOPE Local relief (concave, convex, none): NONE
Slope (%): 4 to 5 Lat.: *** Long.: *** Datum: CONTACT J.E. ARTHUR AND ASSOCIAT
Soil Map Unit Name KEWAUNEE SILTY CLAY LOAM (KoB2) NWI Classification: NONE
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
Are vegetation ____, soil ____, or hydrology ____ significantly disturbed? Are "normal
Are vegetation ____, soil ____, or hydrology ____ naturally problematic? circumstances" present? Yes
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	N	**Is the sampled area within a wetland?**	N
Hydric soil present?	N		
Indicators of wetland hydrology present?	N	If yes, optional wetland site ID:	

Remarks: (Explain alternative procedures here or in a separate report.)

CLIMATIC CONDITIONS ARE NORMAL PER THE NRCS ANTECEDENT HYDROLOGIC CONDITION EVALUATION METHOD.

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Microtopographic Relief (D4)

Field Observations:

Surface water present?	Yes	____	No	X	Depth (inches): ____
Water table present?	Yes	____	No	X	Depth (inches): ____
Saturation present? (includes capillary fringe)	Yes	____	No	X	Depth (inches): ____

Indicators of wetland hydrology present? N

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
NO PRIMARY OR SECONDARY INDICATORS OBSERVED.

VEGETATION - Use scientific names of plants

Sampling Point: B17

Tree Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
		0	= Total Cover	

Sapling/Shrub Stratum	Plot Size (15')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
		0	= Total Cover	

Herb Stratum	Plot Size (5')	Absolute % Cover	Dominant Species	Indicator Status
1	*Poa pratensis*	90	Y	FACU
2	*Phalaris arundinacea*	10	N	FACW
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
		100	= Total Cover	

Woody Vine Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
		0	= Total Cover	

50/20 Thresholds

	20%	50%
Tree Stratum	0	0
Sapling/Shrub Stratum	0	0
Herb Stratum	20	50
Woody Vine Stratum	0	0

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across all Strata: 1 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 0.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column totals	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

___ Rapid test for hydrophytic vegetation
___ Dominance test is >50%
___ Prevalence index is ≤3.0*
___ Morphogical adaptations* (provide supporting data in Remarks or on a separate sheet)
___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present? N

Remarks: (Include photo numbers here or on a separate sheet)

DOES NOT MEET FAC-N TEST.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

SOIL **Sampling Point:** B17

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type*	Loc**	Texture	Remarks
0-7	7.5 YR 3/2	100					SICL	A
7-24	5 YR 4/4	85	5 YR 4/6	15	C	M	C	Bt

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains
**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

___ Histisol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
___ Depleted Below Dark Suface (A11)
___ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Dark Surface (S7) (**LRR R, MLRA 149B**)
___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**
___ Loamy Mucky Mineral (F1) (**LRR K, L**)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**
___ Coast Prairie Redox (A16) (**LRR K, L, R**)
___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
___ Dark Surface (S7) (**LRR K, L**
___ Polyvalue Below Surface (S8) (**LRR K, L**)
___ Thin Dark Surface (S9) (**LRR K, L**)
___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
___ Red Parent Material (F21)
___ Very Shallow Dark Surface (TF12)
___ Other (Explain in Remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____

Hydric soil present? ___N___

Remarks:
NO HYDRIC SOIL INDICATORS OBSERVED.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: BRATT PROPERTY City/County: OZAUKEE Sampling Date: 4/20/20
Applicant/Owner: WILLIAM BRATT State: WISCONSIN Sampling Point: B18
Investigator(s): BRIAN BATES, PSS, PWS, CST Section, Township, Range: SECTION 31, T10N, R22E
Landform (hillslope, terrace, etc.): TOESLOPE Local relief (concave, convex, none): CONCAVE
Slope (%): 0 TO 1 Lat.: *** Long.: *** Datum: CONTACT J.E. ARTHUR AND ASSOCIAT
Soil Map Unit Name MANAWA SILT LOAM (MaA) NWI Classification: FW FOREST/SHRUB
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
Are vegetation ____, soil ____, or hydrology ____ significantly disturbed? Are "normal
Are vegetation ____, soil ____, or hydrology ____ naturally problematic? circumstances" present? Yes
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	Y	**Is the sampled area within a wetland?**	Y
Hydric soil present?	Y		
Indicators of wetland hydrology present?	Y	If yes, optional wetland site ID:	

Remarks: (Explain alternative procedures here or in a separate report.)

CLIMATIC CONDITIONS ARE NORMAL PER THE NRCS ANTECEDENT HYDROLOGIC CONDITION EVALUATION METHOD.

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- X Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- X FAC-Neutral Test (D5)
- ___ Microtopographic Relief (D4)

Field Observations:

Surface water present?	Yes	____	No	X	Depth (inches): ____
Water table present?	Yes	X	No	____	Depth (inches): -16
Saturation present? (includes capillary fringe)	Yes	X	No	____	Depth (inches): -21

Indicators of wetland hydrology present? Y

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION - Use scientific names of plants

Sampling Point: B18

Tree Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1	*Tilia americana*	45	Y	FACU
2	*Fraxinus pennsylvanica*	15	Y	FACW
3	*Rhamnus cathartica*	10	N	FAC
4				
5				
6				
7				
8				
9				
10				
		70	= Total Cover	

Sapling/Shrub Stratum	Plot Size (15')	Absolute % Cover	Dominant Species	Indicator Status
1	*Fraxinus pennsylvanica*	10	Y	FACW
2	*Rhamnus cathartica*	10	Y	FAC
3	*Cornus alba*	5	Y	FACW
4				
5				
6				
7				
8				
9				
10				
		25	= Total Cover	

Herb Stratum	Plot Size (5')	Absolute % Cover	Dominant Species	Indicator Status
1	*Phalaris arundinacea*	100	Y	FACW
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
		100	= Total Cover	

Woody Vine Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
		0	= Total Cover	

50/20 Thresholds

	20%	50%
Tree Stratum	14	35
Sapling/Shrub Stratum	5	13
Herb Stratum	20	50
Woody Vine Stratum	0	0

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across all Strata: 6 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 83.33% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column totals	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

___ Rapid test for hydrophytic vegetation

_X_ Dominance test is >50%

___ Prevalence index is ≤3.0*

___ Morphogical adaptations* (provide supporting data in Remarks or on a separate sheet)

___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)

MEETS FAC-N TEST.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

SOIL **Sampling Point:** B18

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type*	Loc**	Texture	Remarks
0-19	7.5 YR 3/2	85	7.5 YR 4/4	15	C	M	SIC	A
19-24	7.5 YR 4/3	75	7.5 YR 4/6	25	C	M	C	Bt

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains
**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

___ Histisol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
___ Depleted Below Dark Suface (A11)
___ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Dark Surface (S7) (**LRR R, MLRA 149B**)
___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**
___ Loamy Mucky Mineral (F1) (**LRR K, L**)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
X Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**
___ Coast Prairie Redox (A16) (**LRR K, L, R**)
___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
___ Dark Surface (S7) (**LRR K, L**
___ Polyvalue Below Surface (S8) (**LRR K, L**)
___ Thin Dark Surface (S9) (**LRR K, L**)
___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
___ Red Parent Material (F21)
___ Very Shallow Dark Surface (TF12)
___ Other (Explain in Remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____

Hydric soil present? ___Y___

Remarks:
THE SOILS ARE HYDRIC PER THE F6 INDICATOR.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: BRATT PROPERTY City/County: OZAUKEE Sampling Date: 4/20/20
Applicant/Owner: WILLIAM BRATT State: WISCONSIN Sampling Point: B19
Investigator(s): BRIAN BATES, PSS, PWS, CST Section, Township, Range: SECTION 31, T10N, R22E
Landform (hillslope, terrace, etc.): BACKSLOPE Local relief (concave, convex, none): NONE
Slope (%): 4 TO 5 Lat.: *** Long.: *** Datum: CONTACT J.E. ARTHUR AND ASSOCIAT
Soil Map Unit Name KEWAUNEE SILTY CLAY LOAM (KoC2) NWI Classification: NONE
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
Are vegetation X, soil ____, or hydrology ____ significantly disturbed? Are "normal
Are vegetation ____, soil ____, or hydrology ____ naturally problematic? circumstances" present? No
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present? N
Hydric soil present? N
Indicators of wetland hydrology present? N

Is the sampled area within a wetland? N

If yes, optional wetland site ID: ____

Remarks: (Explain alternative procedures here or in a separate report.)

CLIMATIC CONDITIONS ARE NORMAL PER THE NRCS ANTECEDENT HYDROLOGIC CONDITION EVALUATION METHOD. NON-NORMAL CIRCUMSTANCE, THE SAMPLING POINT HAS FARMING HISTORY.

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Microtopographic Relief (D4)

Field Observations:

Surface water present?	Yes	____	No	X	Depth (inches): ____
Water table present?	Yes	____	No	X	Depth (inches): ____
Saturation present? (includes capillary fringe)	Yes	X	No	____	Depth (inches): -19

Indicators of wetland hydrology present? N

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

NO PRIMARY OR SECONDARY INDICATORS OBSERVED.

VEGETATION - Use scientific names of plants

Sampling Point: B19

Tree Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
		0	= Total Cover	

Sapling/Shrub Stratum	Plot Size (15')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
		0	= Total Cover	

Herb Stratum	Plot Size (5')	Absolute % Cover	Dominant Species	Indicator Status
1	*Poa pratensis*	40	Y	FACU
2	*Trifolium repens*	30	Y	FACU
3	*Plantago major*	10	N	FACU
4	*Taraxacum officinale*	10	N	FACU
5	*Bromus inermis*	5	N	UPL
6	*Rumex crispus*	5	N	FAC
7				
8				
9				
10				
11				
12				
13				
14				
15				
		100	= Total Cover	

Woody Vine Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
		0	= Total Cover	

50/20 Thresholds

	20%	50%
Tree Stratum	0	0
Sapling/Shrub Stratum	0	0
Herb Stratum	20	50
Woody Vine Stratum	0	0

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across all Strata: 2 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 0.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species _____ x 1 = _____

FACW species _____ x 2 = _____

FAC species _____ x 3 = _____

FACU species _____ x 4 = _____

UPL species _____ x 5 = _____

Column totals _____ (A) _____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ Rapid test for hydrophytic vegetation

___ Dominance test is >50%

___ Prevalence index is ≤3.0*

___ Morphogical adaptations* (provide supporting data in Remarks or on a separate sheet)

___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present? N

Remarks: (Include photo numbers here or on a separate sheet)

NON-NORMAL CIRCUMSTANCE, THE SAMPLING POINT HAS FARMING HISTORY AND VEGETATION HAS BEEN HISTORICALLY DISTURBED. DOES NOT MEET FAC-N TEST.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

SOIL **Sampling Point:** B19

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type*	Loc**	Texture	Remarks
0-12	7.5 YR 3/2	100					C	Ap
12-24	7.5 YR 4/4	75	7.5 YR 4/6	25	C	M	SIC	Bt

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains
**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

___ Histisol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
___ Depleted Below Dark Suface (A11)
___ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Dark Surface (S7) (**LRR R, MLRA 149B**)
___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**
___ Loamy Mucky Mineral (F1) (**LRR K, L**)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**
___ Coast Prairie Redox (A16) (**LRR K, L, R**)
___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
___ Dark Surface (S7) (**LRR K, L**
___ Polyvalue Below Surface (S8) (**LRR K, L**)
___ Thin Dark Surface (S9) (**LRR K, L**)
___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
___ Red Parent Material (F21)
___ Very Shallow Dark Surface (TF12)
___ Other (Explain in Remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____

Hydric soil present? __N__

Remarks:
NO HYDRIC SOIL INDICATORS OBSERVED.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: BRATT PROPERTY City/County: OZAUKEE Sampling Date: 4/20/20
Applicant/Owner: WILLIAM BRATT State: WISCONSIN Sampling Point: B20
Investigator(s): BRIAN BATES, PSS, PWS, CST Section, Township, Range: SECTION 31, T10N, R22E
Landform (hillslope, terrace, etc.): BACKSLOPE Local relief (concave, convex, none): NONE
Slope (%): 2 TO 3 Lat.: *** Long.: *** Datum: CONTACT J.E. ARTHUR AND ASSOCIAT
Soil Map Unit Name KEWAUNEE SILTY CLAY LOAM (KoB2) NWI Classification: NONE
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
Are vegetation ____, soil ____, or hydrology ____ significantly disturbed? Are "normal
Are vegetation ____, soil ____, or hydrology ____ naturally problematic? circumstances" present? Yes
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	Y	**Is the sampled area within a wetland?**	N
Hydric soil present?	N		
Indicators of wetland hydrology present?	N	If yes, optional wetland site ID:	

Remarks: (Explain alternative procedures here or in a separate report.)

CLIMATIC CONDITIONS ARE NORMAL PER THE NRCS ANTECEDENT HYDROLOGIC CONDITION EVALUATION METHOD.

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Microtopographic Relief (D4)

Field Observations:

Surface water present?	Yes	____	No	X	Depth (inches): ____
Water table present?	Yes	____	No	X	Depth (inches): ____
Saturation present? (includes capillary fringe)	Yes	X	No	____	Depth (inches): -23

Indicators of wetland hydrology present? N

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
ONLY ONE SECONDARY INDICATOR OBSERVED

VEGETATION - Use scientific names of plants

Sampling Point: B20

Tree Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1	*Fraxinus pennsylvanica*	35	Y	FACW
2				
3				
4				
5				
6				
7				
8				
9				
10				
		35	= Total Cover	

Sapling/Shrub Stratum	Plot Size (15')	Absolute % Cover	Dominant Species	Indicator Status
1	*Rhamnus cathartica*	5	Y	FAC
2				
3				
4				
5				
6				
7				
8				
9				
10				
		5	= Total Cover	

Herb Stratum	Plot Size (5')	Absolute % Cover	Dominant Species	Indicator Status
1	*Phalaris arundinacea*	95	Y	FACW
2	*Arctium minus*	5	N	FACU
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
		100	= Total Cover	

Woody Vine Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
		0	= Total Cover	

50/20 Thresholds

	20%	50%
Tree Stratum	7	18
Sapling/Shrub Stratum	1	3
Herb Stratum	20	50
Woody Vine Stratum	0	0

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across all Strata: 3 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 100.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species _____ x 1 = _____

FACW species _____ x 2 = _____

FAC species _____ x 3 = _____

FACU species _____ x 4 = _____

UPL species _____ x 5 = _____

Column totals _____ (A) _____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ Rapid test for hydrophytic vegetation

X Dominance test is >50%

___ Prevalence index is ≤3.0*

___ Morphogical adaptations* (provide supporting data in Remarks or on a separate sheet)

___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)

MEETS FAC-N TEST.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

SOIL **Sampling Point:** B20

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type*	Loc**	Texture	Remarks
0-23	7.5 YR 3/2	100					SICL	A
23-27	7.5 YR 2.5/1	95	7.5 YR 4/6	5	C	M	SIC	2A

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains
**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

___ Histisol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
___ Depleted Below Dark Suface (A11)
___ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Dark Surface (S7) (**LRR R, MLRA 149B**)
___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**
___ Loamy Mucky Mineral (F1) (**LRR K, L**)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**
___ Coast Prairie Redox (A16) (**LRR K, L, R**)
___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
___ Dark Surface (S7) (**LRR K, L**
___ Polyvalue Below Surface (S8) (**LRR K, L**)
___ Thin Dark Surface (S9) (**LRR K, L**)
___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
___ Red Parent Material (F21)
___ Very Shallow Dark Surface (TF12)
___ Other (Explain in Remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____

Hydric soil present? ___N___

Remarks:
NO HYDRIC SOIL INDICATORS OBSERVED.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: BRATT PROPERTY City/County: OZAUKEE Sampling Date: 4/20/20
Applicant/Owner: WILLIAM BRATT State: WISCONSIN Sampling Point: B21
Investigator(s): BRIAN BATES, PSS, PWS, CST Section, Township, Range: SECTION 31, T10N, R22E
Landform (hillslope, terrace, etc.): TOESLOPE Local relief (concave, convex, none): CONCAVE
Slope (%): 0 TO 1 Lat.: *** Long.: *** Datum: CONTACT J.E. ARTHUR AND ASSOCIAT
Soil Map Unit Name MANAWA SILT LOAM NWI Classification: NONE
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
Are vegetation ____, soil ____, or hydrology ____ significantly disturbed? Are "normal
Are vegetation ____, soil ____, or hydrology ____ naturally problematic? circumstances" present? Yes
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	Y	**Is the sampled area within a wetland?**	Y
Hydric soil present?	Y		
Indicators of wetland hydrology present?	Y	If yes, optional wetland site ID:	

Remarks: (Explain alternative procedures here or in a separate report.)

CLIMATIC CONDITIONS ARE NORMAL PER THE NRCS ANTECEDENT HYDROLOGIC CONDITION EVALUATION METHOD.

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- X Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- X FAC-Neutral Test (D5)
- ___ Microtopographic Relief (D4)

Field Observations:

Surface water present?	Yes	____	No	X	Depth (inches): ____
Water table present?	Yes	X	No	____	Depth (inches): -21
Saturation present? (includes capillary fringe)	Yes	X	No	____	Depth (inches): -14

Indicators of wetland hydrology present? Y

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION - Use scientific names of plants

Sampling Point: B21

Tree Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1	*Fraxinus pennsylvanica*	50	Y	FACW
2				
3				
4				
5				
6				
7				
8				
9				
10				
		50	= Total Cover	

Sapling/Shrub Stratum	Plot Size (15')	Absolute % Cover	Dominant Species	Indicator Status
1	*Rhamnus cathartica*	35	Y	FAC
2				
3				
4				
5				
6				
7				
8				
9				
10				
		35	= Total Cover	

Herb Stratum	Plot Size (5')	Absolute % Cover	Dominant Species	Indicator Status
1	*Phalaris arundinacea*	100	Y	FACW
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
		100	= Total Cover	

Woody Vine Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
		0	= Total Cover	

50/20 Thresholds

	20%	50%
Tree Stratum	10	25
Sapling/Shrub Stratum	7	18
Herb Stratum	20	50
Woody Vine Stratum	0	0

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across all Strata: 3 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 100.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column totals	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ___ Rapid test for hydrophytic vegetation
- X Dominance test is >50%
- ___ Prevalence index is ≤3.0*
- ___ Morphogical adaptations* (provide supporting data in Remarks or on a separate sheet)
- ___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)

MEETS FAC-N TEST.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

SOIL **Sampling Point:** B21

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type*	Loc**	Texture	Remarks
0-18	7.5 YR 3/2	50	7.5 YR 4/6	50	C	M	SICL	A
18-24	10 YR 4/2	60	10 YR 4/6	40	C	M	C	Bt

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains
**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

___ Histisol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
___ Depleted Below Dark Suface (A11)
___ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Dark Surface (S7) **(LRR R, MLRA 149B)**
___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
___ Thin Dark Surface (S9) **(LRR R, MLRA 149B**
___ Loamy Mucky Mineral (F1) **(LRR K,** L)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
X Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B**
___ Coast Prairie Redox (A16) **(LRR K, L, R)**
___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
___ Dark Surface (S7) **(LRR K, L**
___ Polyvalue Below Surface (S8) **(LRR K, L)**
___ Thin Dark Surface (S9) **(LRR K, L)**
___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
___ Red Parent Material (F21)
___ Very Shallow Dark Surface (TF12)
___ Other (Explain in Remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____

Hydric soil present? ___Y___

Remarks:
THE SOILS ARE HYDRIC PER THE F6 INDICATOR.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: BRATT PROPERTY City/County: OZAUKEE Sampling Date: 4/20/20
Applicant/Owner: WILLIAM BRATT State: WISCONSIN Sampling Point: B22
Investigator(s): BRIAN BATES, PSS, PWS, CST Section, Township, Range: SECTION 31, T10N, R22E
Landform (hillslope, terrace, etc.): BACKSLOPE Local relief (concave, convex, none): NONE
Slope (%): 4 TO 5 Lat.: *** Long.: *** Datum: CONTACT J.E. ARTHUR AND ASSOCIAT
Soil Map Unit Name MANAWA SILT LOAM (MaA) NWI Classification: NONE
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
Are vegetation X, soil ____, or hydrology ____ significantly disturbed? Are "normal
Are vegetation ____, soil ____, or hydrology ____ naturally problematic? circumstances" present? No
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present? N
Hydric soil present? N
Indicators of wetland hydrology present? N

Is the sampled area within a wetland? N

If yes, optional wetland site ID: ____

Remarks: (Explain alternative procedures here or in a separate report.)

CLIMATIC CONDITIONS ARE NORMAL PER THE NRCS ANTECEDENT HYDROLOGIC CONDITION EVALUATION METHOD. NON-NORMAL CIRCUMSTANCE, THE SAMPLING POINT HAS FARMING HISTORY.

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Microtopographic Relief (D4)

Field Observations:

Surface water present?	Yes ____	No X	Depth (inches): ____		
Water table present?	Yes ____	No X	Depth (inches): ____		
Saturation present? (includes capillary fringe)	Yes X	No ____	Depth (inches): -20		

Indicators of wetland hydrology present? N

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

NO PRIMARY OR SECONDARY INDICATORS OBSERVED.

VEGETATION - Use scientific names of plants

Sampling Point: B22

Tree Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
		0	= Total Cover	

Sapling/Shrub Stratum	Plot Size (15')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
		0	= Total Cover	

Herb Stratum	Plot Size (5')	Absolute % Cover	Dominant Species	Indicator Status
1	*Setaria faberi*	30	Y	FACU
2	*Poa pratensis*	30	Y	FACU
3	*Taraxacum officinale*	10	N	FACU
4	*Barbarea vulgaris*	5	N	FAC
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
		75	= Total Cover	

Woody Vine Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
		0	= Total Cover	

50/20 Thresholds

	20%	50%
Tree Stratum	0	0
Sapling/Shrub Stratum	0	0
Herb Stratum	15	38
Woody Vine Stratum	0	0

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across all Strata: 2 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 0.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	x 1 =		
FACW species	x 2 =		
FAC species	x 3 =		
FACU species	x 4 =		
UPL species	x 5 =		
Column totals	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

___ Rapid test for hydrophytic vegetation
___ Dominance test is >50%
___ Prevalence index is ≤3.0*
___ Morphogical adaptations* (provide supporting data in Remarks or on a separate sheet)
___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present? N

Remarks: (Include photo numbers here or on a separate sheet)

NON-NORMAL CIRCUMSTANCE, THE SAMPLING POINT HAS FARMING HISTORY AND VEGETATION HAS BEEN HISTORICALLY DISTURBED. DOES NOT MEET FAC-N TEST.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

SOIL **Sampling Point:** B22

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type*	Loc**	Texture	Remarks
0-11	7.5 YR 3/2	100					SICL	Ap
11-24	7.5 YR 4/3	85	7.5 YR 4/6	15	C	M	SC	Bt

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains
**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

___ Histisol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
___ Depleted Below Dark Suface (A11)
___ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Dark Surface (S7) (**LRR R, MLRA 149B**)
___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**
___ Loamy Mucky Mineral (F1) (**LRR K, L**)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**
___ Coast Prairie Redox (A16) (**LRR K, L, R**)
___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
___ Dark Surface (S7) (**LRR K, L**
___ Polyvalue Below Surface (S8) (**LRR K, L**)
___ Thin Dark Surface (S9) (**LRR K, L**)
___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
___ Red Parent Material (F21)
___ Very Shallow Dark Surface (TF12)
___ Other (Explain in Remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____

Hydric soil present? ___N___

Remarks:
NO HYDRIC SOIL INDICATORS OBSERVED.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: BRATT PROPERTY City/County: OZAUKEE Sampling Date: 4/20/20
Applicant/Owner: WILLIAM BRATT State: WISCONSIN Sampling Point: B23
Investigator(s): BRIAN BATES, PSS, PWS, CST Section, Township, Range: SECTION 31, T10N, R22E
Landform (hillslope, terrace, etc.): BACKSLOPE Local relief (concave, convex, none): NONE
Slope (%): 2 TO 3 Lat.: *** Long.: *** Datum: CONTACT J.E. ARTHUR AND ASSOCIAT
Soil Map Unit Name MANAWA SILT LOAM (MaA) NWI Classification: NONE
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
Are vegetation ____, soil ____, or hydrology ____ significantly disturbed? Are "normal
Are vegetation ____, soil ____, or hydrology ____ naturally problematic? circumstances" present? Yes
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present? N
Hydric soil present? N
Indicators of wetland hydrology present? N

Is the sampled area within a wetland? N

If yes, optional wetland site ID: ____

Remarks: (Explain alternative procedures here or in a separate report.)

CLIMATIC CONDITIONS ARE NORMAL PER THE NRCS ANTECEDENT HYDROLOGIC CONDITION EVALUATION METHOD.

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Microtopographic Relief (D4)

Field Observations:

Surface water present?	Yes	____	No	X	Depth (inches): ____
Water table present?	Yes	____	No	X	Depth (inches): ____
Saturation present? (includes capillary fringe)	Yes	X	No	____	Depth (inches): -23

Indicators of wetland hydrology present? N

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

NO PRIMARY OR SECONDARY INDICATORS OBSERVED.

VEGETATION - Use scientific names of plants

Sampling Point: B23

Tree Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1	*Fraxinus pennsylvanica*	70	Y	FACW
2	*Tilia americana*	20	Y	FACU
3				
4				
5				
6				
7				
8				
9				
10				
		90	= Total Cover	

Sapling/Shrub Stratum	Plot Size (15')	Absolute % Cover	Dominant Species	Indicator Status
1	*Rhamnus cathartica*	40	Y	FAC
2	*Lonicera tatarica*	10	Y	FACU
3				
4				
5				
6				
7				
8				
9				
10				
		50	= Total Cover	

Herb Stratum	Plot Size (5')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
		0	= Total Cover	

Woody Vine Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
		0	= Total Cover	

50/20 Thresholds

	20%	50%
Tree Stratum	18	45
Sapling/Shrub Stratum	10	25
Herb Stratum	0	0
Woody Vine Stratum	0	0

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across all Strata: 4 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 50.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	x 1 =		
FACW species	x 2 =		
FAC species	x 3 =		
FACU species	x 4 =		
UPL species	x 5 =		
Column totals	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

___ Rapid test for hydrophytic vegetation
___ Dominance test is >50%
___ Prevalence index is ≤3.0*
___ Morphogical adaptations* (provide supporting data in Remarks or on a separate sheet)
___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present? N

Remarks: (Include photo numbers here or on a separate sheet)

DOES NOT MEET FAC-N TEST.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

SOIL **Sampling Point:** B23

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type*	Loc**	Texture	Remarks
0-12	10 YR 3/1	100					SIL	A
12-24	10 YR 3/2	95	10 YR 4/6	5	C	M	SCL	Bt

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains
**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

___ Histisol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
___ Depleted Below Dark Suface (A11)
___ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Dark Surface (S7) (**LRR R, MLRA 149B**)
___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**
___ Loamy Mucky Mineral (F1) (**LRR K, L**)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**
___ Coast Prairie Redox (A16) (**LRR K, L, R**)
___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
___ Dark Surface (S7) (**LRR K, L**
___ Polyvalue Below Surface (S8) (**LRR K, L**)
___ Thin Dark Surface (S9) (**LRR K, L**)
___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
___ Red Parent Material (F21)
___ Very Shallow Dark Surface (TF12)
___ Other (Explain in Remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____

Hydric soil present? N

Remarks:
NO HYDRIC SOIL INDICATORS OBSERVED.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: BRATT PROPERTY City/County: OZAUKEE Sampling Date: 4/20/20
Applicant/Owner: WILLIAM BRATT State: WISCONSIN Sampling Point: B24
Investigator(s): BRIAN BATES, PSS, PWS, CST Section, Township, Range: SECTION 31, T10N, R22E
Landform (hillslope, terrace, etc.): TOESLOPE Local relief (concave, convex, none): CONCAVE
Slope (%): 0 TO 1 Lat.: *** Long.: *** Datum: CONTACT J.E. ARTHUR AND ASSOCIAT
Soil Map Unit Name MANAWA SILT LOAM (MaA) NWI Classification: NONE
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
Are vegetation ____, soil ____, or hydrology ____ significantly disturbed? Are "normal
Are vegetation ____, soil ____, or hydrology ____ naturally problematic? circumstances" present? Yes
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present? Y
Hydric soil present? Y
Indicators of wetland hydrology present? Y

Is the sampled area within a wetland? Y

If yes, optional wetland site ID: ____

Remarks: (Explain alternative procedures here or in a separate report.)

CLIMATIC CONDITIONS ARE NORMAL PER THE NRCS ANTECEDENT HYDROLOGIC CONDITION EVALUATION METHOD.

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- X Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- X Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Microtopographic Relief (D4)

Field Observations:

Surface water present?	Yes	____	No	X	Depth (inches): ____
Water table present?	Yes	____	No	X	Depth (inches): ____
Saturation present? (includes capillary fringe)	Yes	X	No	____	Depth (inches): -22

Indicators of wetland hydrology present? Y

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
NO PRIMARY OR SECONDARY INDICATORS OBSERVED.

VEGETATION - Use scientific names of plants

Sampling Point: B24

Tree Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1	*Fraxinus pennsylvanica*	80	Y	FACW
2	*Tilia americana*	5	N	FACU
3				
4				
5				
6				
7				
8				
9				
10				
		85	= Total Cover	

Sapling/Shrub Stratum	Plot Size (15')	Absolute % Cover	Dominant Species	Indicator Status
1	*Rhamnus cathartica*	15	Y	FAC
2	*Fraxinus pennsylvanica*	5	Y	FACW
3	*Prunus serotina*	5	Y	FACU
4				
5				
6				
7				
8				
9				
10				
		25	= Total Cover	

Herb Stratum	Plot Size (5')	Absolute % Cover	Dominant Species	Indicator Status
1	*Viola canadensis*	20	Y	FACU
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
		20	= Total Cover	

Woody Vine Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
		0	= Total Cover	

50/20 Thresholds

	20%	50%
Tree Stratum	17	43
Sapling/Shrub Stratum	5	13
Herb Stratum	4	10
Woody Vine Stratum	0	0

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across all Strata: 5 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 60.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	x 1 =		
FACW species	x 2 =		
FAC species	x 3 =		
FACU species	x 4 =		
UPL species	x 5 =		
Column totals	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

___ Rapid test for hydrophytic vegetation

_X_ Dominance test is >50%

___ Prevalence index is ≤3.0*

___ Morphogical adaptations* (provide supporting data in Remarks or on a separate sheet)

___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)

DOMINANTS EQUAL, DOES NOT MEET FAC-N TEST BASED ON NON-DOMINANTS.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

SOIL **Sampling Point:** B24

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type*	Loc**	Texture	Remarks
0-10	7.5 YR 3/2	95	7.5 YR 4/6	5	C	M	SIC	A
10-24	7.5 YR 4/4	75	7.5 YR 4/6	25	C	M	C	Bt

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains
**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

___ Histisol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
___ Depleted Below Dark Suface (A11)
___ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Dark Surface (S7) (**LRR R, MLRA 149B**)
___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**
___ Loamy Mucky Mineral (F1) (**LRR K, L**)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
X Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**
___ Coast Prairie Redox (A16) (**LRR K, L, R**)
___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
___ Dark Surface (S7) (**LRR K, L**
___ Polyvalue Below Surface (S8) (**LRR K, L**)
___ Thin Dark Surface (S9) (**LRR K, L**)
___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
___ Red Parent Material (F21)
___ Very Shallow Dark Surface (TF12)
___ Other (Explain in Remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____

Hydric soil present? ___Y___

Remarks:
THE SOILS ARE HYDRIC PER THE F6 INDICATOR.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: BRATT PROPERTY City/County: OZAUKEE Sampling Date: 4/20/20
Applicant/Owner: WILLIAM BRATT State: WISCONSIN Sampling Point: B25
Investigator(s): BRIAN BATES, PSS, PWS, CST Section, Township, Range: SECTION 31, T10N, R22E
Landform (hillslope, terrace, etc.): BACKSLOPE Local relief (concave, convex, none): NONE
Slope (%): 3 TO 4 Lat.: *** Long.: *** Datum: CONTACT J.E. ARTHUR AND ASSOCIAT
Soil Map Unit Name MANAWA SILT LOAM (MaA) NWI Classification: NONE
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
Are vegetation ____, soil ____, or hydrology ____ significantly disturbed? Are "normal
Are vegetation ____, soil ____, or hydrology ____ naturally problematic? circumstances" present? Yes
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present? N
Hydric soil present? N
Indicators of wetland hydrology present? N

Is the sampled area within a wetland? N

If yes, optional wetland site ID: ____

Remarks: (Explain alternative procedures here or in a separate report.)

CLIMATIC CONDITIONS ARE NORMAL PER THE NRCS ANTECEDENT HYDROLOGIC CONDITION EVALUATION METHOD.

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Microtopographic Relief (D4)

Field Observations:

Surface water present?	Yes ____	No X	Depth (inches): ____	
Water table present?	Yes ____	No X	Depth (inches): ____	
Saturation present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____	

Indicators of wetland hydrology present? N

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
NO PRIMARY OR SECONDARY INDICATORS OBSERVED.

VEGETATION - Use scientific names of plants

Sampling Point: B25

Tree Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1	*Fraxinus pennsylvanica*	60	Y	FACW
2	*Tilia americana*	20	Y	FACU
3				
4				
5				
6				
7				
8				
9				
10				
		80	= Total Cover	

Sapling/Shrub Stratum	Plot Size (15')	Absolute % Cover	Dominant Species	Indicator Status
1	*Prunus serotina*	20	Y	FACU
2	*Rhamnus cathartica*	20	Y	FAC
3				
4				
5				
6				
7				
8				
9				
10				
		40	= Total Cover	

Herb Stratum	Plot Size (5')	Absolute % Cover	Dominant Species	Indicator Status
1	*Viola canadensis*	20	Y	FACU
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
		20	= Total Cover	

Woody Vine Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
		0	= Total Cover	

50/20 Thresholds

	20%	50%
Tree Stratum	16	40
Sapling/Shrub Stratum	8	20
Herb Stratum	4	10
Woody Vine Stratum	0	0

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across all Strata: 5 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 40.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species _____ x 1 = _____

FACW species _____ x 2 = _____

FAC species _____ x 3 = _____

FACU species _____ x 4 = _____

UPL species _____ x 5 = _____

Column totals _____ (A) _____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ Rapid test for hydrophytic vegetation

___ Dominance test is >50%

___ Prevalence index is ≤3.0*

___ Morphogical adaptations* (provide supporting data in Remarks or on a separate sheet)

___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present? N

Remarks: (Include photo numbers here or on a separate sheet)

DOES NOT MEET FAC-N TEST.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

SOIL **Sampling Point:** B25

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type*	Loc**	Texture	Remarks
0-8	10 YR 2/2	100					SIL	A
8-24	7.5 YR 4/3	90	7.5 YR 4/6	10	C	M	SIC	Bt

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains
**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

___ Histisol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
___ Depleted Below Dark Suface (A11)
___ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Dark Surface (S7) (**LRR R, MLRA 149B**)
___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**
___ Loamy Mucky Mineral (F1) (**LRR K, L**)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**
___ Coast Prairie Redox (A16) (**LRR K, L, R**)
___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
___ Dark Surface (S7) (**LRR K, L**
___ Polyvalue Below Surface (S8) (**LRR K, L**)
___ Thin Dark Surface (S9) (**LRR K, L**)
___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
___ Red Parent Material (F21)
___ Very Shallow Dark Surface (TF12)
___ Other (Explain in Remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____

Hydric soil present? ___N___

Remarks:
NO HYDRIC SOIL INDICATORS OBSERVED.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: BRATT PROPERTY City/County: OZAUKEE Sampling Date: 4/20/20
Applicant/Owner: WILLIAM BRATT State: WISCONSIN Sampling Point: B26
Investigator(s): BRIAN BATES, PSS, PWS, CST Section, Township, Range: SECTION 31, T10N, R22E
Landform (hillslope, terrace, etc.): BACKSLOPE Local relief (concave, convex, none): NONE
Slope (%): 3 TO 4 Lat.: *** Long.: *** Datum: CONTACT J.E. ARTHUR AND ASSOCIAT
Soil Map Unit Name MANAWA SILT LOAM (MaA) NWI Classification: NONE
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
Are vegetation ____, soil ____, or hydrology ____ significantly disturbed? Are "normal
Are vegetation ____, soil ____, or hydrology ____ naturally problematic? circumstances" present? Yes
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present? N
Hydric soil present? N
Indicators of wetland hydrology present? N

Is the sampled area within a wetland? N

If yes, optional wetland site ID: ____

Remarks: (Explain alternative procedures here or in a separate report.)

CLIMATIC CONDITIONS ARE NORMAL PER THE NRCS ANTECEDENT HYDROLOGIC CONDITION EVALUATION METHOD.

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Microtopographic Relief (D4)

Field Observations:

Surface water present?	Yes ____	No X	Depth (inches): ____	
Water table present?	Yes ____	No X	Depth (inches): ____	
Saturation present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____	

Indicators of wetland hydrology present? N

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
NO PRIMARY OR SECONDARY INDICATORS OBSERVED.

VEGETATION - Use scientific names of plants

Sampling Point: B26

Tree Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1	*Carya ovata*	25	Y	FACU
2	*Fraxinus pennsylvanica*	25	Y	FACW
3	*Prunus serotina*	10	N	FACU
4				
5				
6				
7				
8				
9				
10				
		60	= Total Cover	

Sapling/Shrub Stratum	Plot Size (15')	Absolute % Cover	Dominant Species	Indicator Status
1	*Rhamnus cathartica*	10	Y	FAC
2	*Prunus serotina*	10	Y	FACU
3				
4				
5				
6				
7				
8				
9				
10				
		20	= Total Cover	

Herb Stratum	Plot Size (5')	Absolute % Cover	Dominant Species	Indicator Status
1	*Viola canadensis*	15	Y	FACU
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
		15	= Total Cover	

Woody Vine Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
		0	= Total Cover	

50/20 Thresholds

	20%	50%
Tree Stratum	12	30
Sapling/Shrub Stratum	4	10
Herb Stratum	3	8
Woody Vine Stratum	0	0

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across all Strata: 5 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 40.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column totals	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

___ Rapid test for hydrophytic vegetation
___ Dominance test is >50%
___ Prevalence index is ≤3.0*
___ Morphogical adaptations* (provide supporting data in Remarks or on a separate sheet)
___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present? N

Remarks: (Include photo numbers here or on a separate sheet)

DOES NOT MEET FAC-N TEST.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

SOIL **Sampling Point:** B26

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type*	Loc**	Texture	Remarks
0-7	10 YR 2/2	100					SIL	A
7-24	7.5 YR 4/3	90	7.5 YR 4/6	10	C	M	C	Bt

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains
**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

___ Histisol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
___ Depleted Below Dark Suface (A11)
___ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Dark Surface (S7) (**LRR R, MLRA 149B**)
___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**
___ Loamy Mucky Mineral (F1) (**LRR K, L**)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**
___ Coast Prairie Redox (A16) (**LRR K, L, R**)
___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
___ Dark Surface (S7) (**LRR K, L**
___ Polyvalue Below Surface (S8) (**LRR K, L**)
___ Thin Dark Surface (S9) (**LRR K, L**)
___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
___ Red Parent Material (F21)
___ Very Shallow Dark Surface (TF12)
___ Other (Explain in Remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____

Hydric soil present? N

Remarks:
NO HYDRIC SOIL INDICATORS OBSERVED.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: BRATT PROPERTY City/County: OZAUKEE Sampling Date: 4/20/20
Applicant/Owner: WILLIAM BRATT State: WISCONSIN Sampling Point: B27
Investigator(s): BRIAN BATES, PSS, PWS, CST Section, Township, Range: SECTION 31, T10N, R22E
Landform (hillslope, terrace, etc.): TOESLOPE Local relief (concave, convex, none): CONCAVE
Slope (%): 0 TO 1 Lat.: *** Long.: *** Datum: CONTACT J.E. ARTHUR AND ASSOCIAT
Soil Map Unit Name MANAWA SILT LOAM (MaA) NWI Classification: NONE
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
Are vegetation ____, soil ____, or hydrology ____ significantly disturbed? Are "normal
Are vegetation ____, soil ____, or hydrology ____ naturally problematic? circumstances" present? Yes
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present? Y
Hydric soil present? Y
Indicators of wetland hydrology present? Y

Is the sampled area within a wetland? Y

If yes, optional wetland site ID: ____

Remarks: (Explain alternative procedures here or in a separate report.)

CLIMATIC CONDITIONS ARE NORMAL PER THE NRCS ANTECEDENT HYDROLOGIC CONDITION EVALUATION METHOD.

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- X Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Microtopographic Relief (D4)

Field Observations:

Surface water present?	Yes	____	No	X	Depth (inches): ____
Water table present?	Yes	____	No	X	Depth (inches): ____
Saturation present? (includes capillary fringe)	Yes	X	No	____	Depth (inches): -15

Indicators of wetland hydrology present? Y

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION - Use scientific names of plants

Sampling Point: B27

Tree Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1	*Fraxinus pennsylvanica*	60	Y	FACW
2	*Rhamnus cathartica*	20	Y	FAC
3				
4				
5				
6				
7				
8				
9				
10				
		80	= Total Cover	

Sapling/Shrub Stratum	Plot Size (15')	Absolute % Cover	Dominant Species	Indicator Status
1	*Rhamnus cathartica*	15	Y	FAC
2	*Prunus serotina*	10	Y	FACU
3				
4				
5				
6				
7				
8				
9				
10				
		25	= Total Cover	

Herb Stratum	Plot Size (5')	Absolute % Cover	Dominant Species	Indicator Status
1	*Viola canadensis*	15	Y	FACU
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
		15	= Total Cover	

Woody Vine Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
		0	= Total Cover	

50/20 Thresholds

	20%	50%
Tree Stratum	16	40
Sapling/Shrub Stratum	5	13
Herb Stratum	3	8
Woody Vine Stratum	0	0

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across all Strata: 5 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 60.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column totals	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

___ Rapid test for hydrophytic vegetation

X Dominance test is >50%

___ Prevalence index is ≤3.0*

___ Morphogical adaptations* (provide supporting data in Remarks or on a separate sheet)

___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)

DOES NOT MEET FAC-N TEST.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

SOIL **Sampling Point:** B27

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type*	Loc**	Texture	Remarks
0-9	7.5 YR 2.5/1	95	7.5 YR 3/4	5	C	M	SIC	A
9-15	10 YR 2/1	90	10 YR 4/4	10	C	M	C	2A
15-24	7.5 YR 3/3	70	7.5 YR 4/6	30	C	M	C	Bt

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains
**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

___ Histisol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
___ Depleted Below Dark Suface (A11)
___ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Dark Surface (S7) (**LRR R, MLRA 149B**)
___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**
___ Loamy Mucky Mineral (F1) (**LRR K, L**)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
X Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**
___ Coast Prairie Redox (A16) (**LRR K, L, R**)
___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
___ Dark Surface (S7) (**LRR K, L**
___ Polyvalue Below Surface (S8) (**LRR K, L**)
___ Thin Dark Surface (S9) (**LRR K, L**)
___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
___ Red Parent Material (F21)
___ Very Shallow Dark Surface (TF12)
___ Other (Explain in Remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____

Hydric soil present? ___Y___

Remarks:
THE SOILS ARE HYDRIC PER THE F6 INDICATOR.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: BRATT PROPERTY City/County: OZAUKEE Sampling Date: 4/20/20
Applicant/Owner: WILLIAM BRATT State: WISCONSIN Sampling Point: B28
Investigator(s): BRIAN BATES, PSS, PWS, CST Section, Township, Range: SECTION 31, T10N, R22E
Landform (hillslope, terrace, etc.): BACKSLOPE Local relief (concave, convex, none): NONE
Slope (%): 2 TO 3 Lat.: *** Long.: *** Datum: CONTACT J.E. ARTHUR AND ASSOCIAT
Soil Map Unit Name KEWAUNEE SILTY CLAY KrD3 NWI Classification: NONE
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
Are vegetation X, soil ____, or hydrology ____ significantly disturbed? Are "normal
Are vegetation ____, soil ____, or hydrology ____ naturally problematic? circumstances" present? No
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present? N
Hydric soil present? N
Indicators of wetland hydrology present? N

Is the sampled area within a wetland? N

If yes, optional wetland site ID: ____

Remarks: (Explain alternative procedures here or in a separate report.)

CLIMATIC CONDITIONS ARE NORMAL PER THE NRCS ANTECEDENT HYDROLOGIC CONDITION EVALUATION METHOD. NON-NORMAL CIRCUMSTANCE, THE SAMPLING POINT HAS FARMING HISTORY.

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Microtopographic Relief (D4)

Field Observations:

Surface water present?	Yes	____	No	X	Depth (inches): ____
Water table present?	Yes	____	No	X	Depth (inches): ____
Saturation present? (includes capillary fringe)	Yes	X	No	____	Depth (inches): -20

Indicators of wetland hydrology present? N

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

NO PRIMARY OR SECONDARY INDICATORS OBSERVED.

VEGETATION - Use scientific names of plants

Sampling Point: B28

Tree Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
		0	= Total Cover	

Sapling/Shrub Stratum	Plot Size (15')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
		0	= Total Cover	

Herb Stratum	Plot Size (5')	Absolute % Cover	Dominant Species	Indicator Status
1	*Setaria faberi*	35	Y	FACU
2	*Poa pratensis*	25	Y	FACU
3	*Taraxacum officinale*	10	N	FACU
4	*Trifolium repens*	10	N	FACU
5	*Sonchus oleraceus*	5	N	FACU
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
		85	= Total Cover	

Woody Vine Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
		0	= Total Cover	

50/20 Thresholds

	20%	50%
Tree Stratum	0	0
Sapling/Shrub Stratum	0	0
Herb Stratum	17	43
Woody Vine Stratum	0	0

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across all Strata: 2 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 0.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species ____ x 1 = ____

FACW species ____ x 2 = ____

FAC species ____ x 3 = ____

FACU species ____ x 4 = ____

UPL species ____ x 5 = ____

Column totals ____ (A) ____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

___ Rapid test for hydrophytic vegetation

___ Dominance test is >50%

___ Prevalence index is ≤3.0*

___ Morphogical adaptations* (provide supporting data in Remarks or on a separate sheet)

___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present? N

Remarks: (Include photo numbers here or on a separate sheet)

NON-NORMAL CIRCUMSTANCE, THE SAMPLING POINT HAS FARMING HISTORY AND VEGETATION HAS BEEN HISTORICALLY DISTURBED. DOES NOT MEET FAC-N TEST.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

SOIL **Sampling Point:** B28

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type*	Loc**	Texture	Remarks
0-12	7.5 YR 3/3	100					SIL	Ap
12-24	5 YR 4/4	90	5 YR 5/6	10	C	M	C	Bt

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains
**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

___ Histisol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
___ Depleted Below Dark Suface (A11)
___ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Dark Surface (S7) (**LRR R, MLRA 149B**)
___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**
___ Loamy Mucky Mineral (F1) (**LRR K, L**)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**
___ Coast Prairie Redox (A16) (**LRR K, L, R**)
___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
___ Dark Surface (S7) (**LRR K, L**
___ Polyvalue Below Surface (S8) (**LRR K, L**)
___ Thin Dark Surface (S9) (**LRR K, L**)
___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
___ Red Parent Material (F21)
___ Very Shallow Dark Surface (TF12)
___ Other (Explain in Remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____

Hydric soil present? N

Remarks:
NO HYDRIC SOIL INDICATORS OBSERVED.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: BRATT PROPERTY City/County: OZAUKEE Sampling Date: 4/20/20
Applicant/Owner: WILLIAM BRATT State: WISCONSIN Sampling Point: B29
Investigator(s): BRIAN BATES, PSS, PWS, CST Section, Township, Range: SECTION 31, T10N, R22E
Landform (hillslope, terrace, etc.): BACKSLOPE Local relief (concave, convex, none): NONE
Slope (%): 3 TO 4 Lat.: *** Long.: *** Datum: CONTACT J.E. ARTHUR AND ASSOCIAT
Soil Map Unit Name KEWAUNEE SILT LOAM (KnB) NWI Classification: NONE
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
Are vegetation ____, soil ____, or hydrology ____ significantly disturbed? Are "normal
Are vegetation ____, soil ____, or hydrology ____ naturally problematic? circumstances" present? Yes
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present? Y
Hydric soil present? N
Indicators of wetland hydrology present? N

Is the sampled area within a wetland? N

If yes, optional wetland site ID: ____

Remarks: (Explain alternative procedures here or in a separate report.)

CLIMATIC CONDITIONS ARE NORMAL PER THE NRCS ANTECEDENT HYDROLOGIC CONDITION EVALUATION METHOD.

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Microtopographic Relief (D4)

Field Observations:

Surface water present?	Yes	____	No	X	Depth (inches): ____
Water table present?	Yes	____	No	X	Depth (inches): ____
Saturation present? (includes capillary fringe)	Yes	____	No	X	Depth (inches): ____

Indicators of wetland hydrology present? N

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
NO PRIMARY OR SECONDARY INDICATORS OBSERVED.

VEGETATION - Use scientific names of plants

Sampling Point: B29

Tree Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1	*Fraxinus pennsylvanica*	20	Y	FACW
2	*Carya ovata*	15	Y	FACU
3	*Rhamnus cathartica*	15	Y	FAC
4	*Quercus alba*	5	N	FACU
5				
6				
7				
8				
9				
10				
		55	= Total Cover	

Sapling/Shrub Stratum	Plot Size (15')	Absolute % Cover	Dominant Species	Indicator Status
1	*Rhamnus cathartica*	5	Y	FAC
2				
3				
4				
5				
6				
7				
8				
9				
10				
		5	= Total Cover	

Herb Stratum	Plot Size (5')	Absolute % Cover	Dominant Species	Indicator Status
1	*Erythronium americanum*	10	Y	UPL
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
		10	= Total Cover	

Woody Vine Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
		0	= Total Cover	

50/20 Thresholds

	20%	50%
Tree Stratum	11	28
Sapling/Shrub Stratum	1	3
Herb Stratum	2	5
Woody Vine Stratum	0	0

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across all Strata: 5 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 60.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	x 1 =		
FACW species	x 2 =		
FAC species	x 3 =		
FACU species	x 4 =		
UPL species	x 5 =		
Column totals	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

___ Rapid test for hydrophytic vegetation

X Dominance test is >50%

___ Prevalence index is ≤3.0*

___ Morphogical adaptations* (provide supporting data in Remarks or on a separate sheet)

___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)

DOES NOT MEET FAC-N TEST.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

SOIL **Sampling Point:** B29

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type*	Loc**	Texture	Remarks
0-7	10 YR 2/2	100					SIL	A
7-24	7.5 YR 4/3	85	7.5 YR 4/6	15	C	M	C	Bt

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains
**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

___ Histisol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
___ Depleted Below Dark Suface (A11)
___ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Dark Surface (S7) (**LRR R, MLRA 149B**)
___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**
___ Loamy Mucky Mineral (F1) (**LRR K, L**)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**
___ Coast Prairie Redox (A16) (**LRR K, L, R**)
___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
___ Dark Surface (S7) (**LRR K, L**
___ Polyvalue Below Surface (S8) (**LRR K, L**)
___ Thin Dark Surface (S9) (**LRR K, L**)
___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
___ Red Parent Material (F21)
___ Very Shallow Dark Surface (TF12)
___ Other (Explain in Remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____

Hydric soil present? ___N___

Remarks:
NO HYDRIC SOIL INDICATORS OBSERVED.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: BRATT PROPERTY City/County: OZAUKEE Sampling Date: 4/20/20
Applicant/Owner: WILLIAM BRATT State: WISCONSIN Sampling Point: B30
Investigator(s): BRIAN BATES, PSS, PWS, CST Section, Township, Range: SECTION 31, T10N, R22E
Landform (hillslope, terrace, etc.): TOESLOPE Local relief (concave, convex, none): CONCAVE
Slope (%): 0 TO 1 Lat.: *** Long.: *** Datum: CONTACT J.E. ARTHUR AND ASSOCIAT
Soil Map Unit Name MANAWA SILT LOAM (MaA) NWI Classification: NONE
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
Are vegetation ____, soil ____, or hydrology ____ significantly disturbed? Are "normal
Are vegetation ____, soil ____, or hydrology ____ naturally problematic? circumstances" present? Yes
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present? Y
Hydric soil present? Y
Indicators of wetland hydrology present? Y

Is the sampled area within a wetland? Y

If yes, optional wetland site ID: ____

Remarks: (Explain alternative procedures here or in a separate report.)

CLIMATIC CONDITIONS ARE NORMAL PER THE NRCS ANTECEDENT HYDROLOGIC CONDITION EVALUATION METHOD.

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- X FAC-Neutral Test (D5)
- ___ Microtopographic Relief (D4)

Field Observations:

Surface water present?	Yes	____	No	X	Depth (inches): ____
Water table present?	Yes	____	No	X	Depth (inches): ____
Saturation present? (includes capillary fringe)	Yes	____	No	X	Depth (inches): ____

Indicators of wetland hydrology present? Y

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION - Use scientific names of plants

Sampling Point: B30

Tree Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1	*Fraxinus pennsylvanica*	20	Y	FACW
2	*Rhamnus cathartica*	15	Y	FAC
3	*Quercus bicolor*	10	Y	FACW
4	*Carya ovata*	5	N	FACU
5				
6				
7				
8				
9				
10				
		50	= Total Cover	

Sapling/Shrub Stratum	Plot Size (15')	Absolute % Cover	Dominant Species	Indicator Status
1	*Rhamnus cathartica*	15	Y	FAC
2	*Lonicera tatarica*	10	Y	FACU
3	*Prunus serotina*	10	Y	FACU
4				
5				
6				
7				
8				
9				
10				
		35	= Total Cover	

Herb Stratum	Plot Size (5')	Absolute % Cover	Dominant Species	Indicator Status
1	*Viola canadensis*	20	Y	FACU
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
		20	= Total Cover	

Woody Vine Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
		0	= Total Cover	

50/20 Thresholds

	20%	50%
Tree Stratum	10	25
Sapling/Shrub Stratum	7	18
Herb Stratum	4	10
Woody Vine Stratum	0	0

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across all Strata: 7 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 57.14% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column totals	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

___ Rapid test for hydrophytic vegetation

X Dominance test is >50%

___ Prevalence index is ≤3.0*

___ Morphogical adaptations* (provide supporting data in Remarks or on a separate sheet)

___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)

DOES NOT MEET FAC-N TEST.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

SOIL **Sampling Point:** B30

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type*	Loc**	Texture	Remarks
0-6	7.5 YR 2.5/2	100					SIL	A
6-24	7.5 YR 3/2	85	7.5 YR 4/4	15	C	M	SIC	Bt

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains
**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

___ Histisol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
___ Depleted Below Dark Suface (A11)
___ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Dark Surface (S7) (**LRR R, MLRA 149B**)
___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**
___ Loamy Mucky Mineral (F1) (**LRR K, L**)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
X Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**
___ Coast Prairie Redox (A16) (**LRR K, L, R**)
___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
___ Dark Surface (S7) (**LRR K, L**
___ Polyvalue Below Surface (S8) (**LRR K, L**)
___ Thin Dark Surface (S9) (**LRR K, L**)
___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
___ Red Parent Material (F21)
___ Very Shallow Dark Surface (TF12)
___ Other (Explain in Remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____

Hydric soil present? ___Y___

Remarks:
THE SOILS ARE HYDRIC PER THE F6 INDICATOR.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: BRATT PROPERTY City/County: OZAUKEE Sampling Date: 4/20/20
Applicant/Owner: WILLIAM BRATT State: WISCONSIN Sampling Point: B31
Investigator(s): BRIAN BATES, PSS, PWS, CST Section, Township, Range: SECTION 31, T10N, R22E
Landform (hillslope, terrace, etc.): BACKSLOPE Local relief (concave, convex, none): NONE
Slope (%): 5 TO 6 Lat.: *** Long.: *** Datum: CONTACT J.E. ARTHUR AND ASSOCIAT
Soil Map Unit Name MANAWA SILT LOAM (MaA) NWI Classification: NONE
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
Are vegetation ____, soil ____, or hydrology ____ significantly disturbed? Are "normal
Are vegetation ____, soil ____, or hydrology ____ naturally problematic? circumstances" present? Yes
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present? N
Hydric soil present? N
Indicators of wetland hydrology present? N

Is the sampled area within a wetland? N

If yes, optional wetland site ID: ____

Remarks: (Explain alternative procedures here or in a separate report.)

CLIMATIC CONDITIONS ARE NORMAL PER THE NRCS ANTECEDENT HYDROLOGIC CONDITION EVALUATION METHOD.

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Microtopographic Relief (D4)

Field Observations:

Surface water present?	Yes ____	No X	Depth (inches): ____	
Water table present?	Yes ____	No X	Depth (inches): ____	
Saturation present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____	

Indicators of wetland hydrology present? N

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
NO PRIMARY OR SECONDARY INDICATORS OBSERVED.

VEGETATION - Use scientific names of plants

Sampling Point: B31

Tree Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1	*Tilia americana*	50	Y	FACU
2	*Carya ovata*	5	N	FACU
3	*Fraxinus pennsylvanica*	5	N	FACW
4	*Betula papyrifera*	5	N	FACU
5				
6				
7				
8				
9				
10				
		65	= Total Cover	

Sapling/Shrub Stratum	Plot Size (15')	Absolute % Cover	Dominant Species	Indicator Status
1	*Lonicera tatarica*	5	Y	FACU
2	*Rhamnus cathartica*	5	Y	FAC
3				
4				
5				
6				
7				
8				
9				
10				
		10	= Total Cover	

Herb Stratum	Plot Size (5')	Absolute % Cover	Dominant Species	Indicator Status
1	*Viola canadensis*	15	Y	FACU
2	*Rhamnus cathartica*	15	Y	FAC
3	*Lonicera tatarica*	15	Y	FACU
4	*Taraxacum officinale*	15	Y	FACU
5	*Poa pratensis*	10	N	FACU
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
		70	= Total Cover	

Woody Vine Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
		0	= Total Cover	

50/20 Thresholds

	20%	50%
Tree Stratum	13	33
Sapling/Shrub Stratum	2	5
Herb Stratum	14	35
Woody Vine Stratum	0	0

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across all Strata: 7 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 28.57% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	x 1 =		
FACW species	x 2 =		
FAC species	x 3 =		
FACU species	x 4 =		
UPL species	x 5 =		
Column totals	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

___ Rapid test for hydrophytic vegetation
___ Dominance test is >50%
___ Prevalence index is ≤3.0*
___ Morphogical adaptations* (provide supporting data in Remarks or on a separate sheet)
___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present? N

Remarks: (Include photo numbers here or on a separate sheet)

DOES NOT MEET FAC-N TEST.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

SOIL **Sampling Point:** B31

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type*	Loc**	Texture	Remarks
0-8	10 YR 3/2	100					SIL	A
8-12	10 YR 4/3	95	10 YR 4/6	5	C	M	L	E
12-24	5 YR 4/4	90	5 YR 4/6	10	C	M	C	Bt

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains
**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

___ Histisol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
___ Depleted Below Dark Suface (A11)
___ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Dark Surface (S7) (**LRR R, MLRA 149B**)
___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**
___ Loamy Mucky Mineral (F1) (**LRR K, L**)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**
___ Coast Prairie Redox (A16) (**LRR K, L, R**)
___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
___ Dark Surface (S7) (**LRR K, L**
___ Polyvalue Below Surface (S8) (**LRR K, L**)
___ Thin Dark Surface (S9) (**LRR K, L**)
___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
___ Red Parent Material (F21)
___ Very Shallow Dark Surface (TF12)
___ Other (Explain in Remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____

Hydric soil present? N

Remarks:
NO HYDRIC SOIL INDICATORS OBSERVED.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: BRATT PROPERTY City/County: OZAUKEE Sampling Date: 4/20/20
Applicant/Owner: WILLIAM BRATT State: WISCONSIN Sampling Point: B32
Investigator(s): BRIAN BATES, PSS, PWS, CST Section, Township, Range: SECTION 31, T10N, R22E
Landform (hillslope, terrace, etc.): BACKSLOPE Local relief (concave, convex, none): NONE
Slope (%): 5 TO 6 Lat.: *** Long.: *** Datum: CONTACT J.E. ARTHUR AND ASSOCIAT
Soil Map Unit Name KEWAUNEE SILTY CLAY LOAM (KoC2) NWI Classification: NONE
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
Are vegetation ____, soil ____, or hydrology ____ significantly disturbed? Are "normal
Are vegetation ____, soil ____, or hydrology ____ naturally problematic? circumstances" present? Yes
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	Y	**Is the sampled area within a wetland?**	N
Hydric soil present?	N		
Indicators of wetland hydrology present?	N	If yes, optional wetland site ID:	

Remarks: (Explain alternative procedures here or in a separate report.)

CLIMATIC CONDITIONS ARE NORMAL PER THE NRCS ANTECEDENT HYDROLOGIC CONDITION EVALUATION METHOD.

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- X FAC-Neutral Test (D5)
- ___ Microtopographic Relief (D4)

Field Observations:

Surface water present?	Yes	____	No	X	Depth (inches): ____
Water table present?	Yes	____	No	X	Depth (inches): ____
Saturation present? (includes capillary fringe)	Yes	X	No	____	Depth (inches): -16

Indicators of wetland hydrology present? N

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
ONLY ONE SECONDARY INDICATOR OBERVED.

VEGETATION - Use scientific names of plants

Sampling Point: B32

Tree Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1	*Fraxinus pennsylvanica*	25	Y	FACW
2	*Rhamnus cathartica*	10	Y	FAC
3				
4				
5				
6				
7				
8				
9				
10				
		35	= Total Cover	

Sapling/Shrub Stratum	Plot Size (15')	Absolute % Cover	Dominant Species	Indicator Status
1	*Rhamnus cathartica*	30	Y	FAC
2	*Lonicera tatarica*	5	N	FACU
3				
4				
5				
6				
7				
8				
9				
10				
		35	= Total Cover	

Herb Stratum	Plot Size (5')	Absolute % Cover	Dominant Species	Indicator Status
1	*Hydrophyllum virginianum*	15	Y	FAC
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
		15	= Total Cover	

Woody Vine Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
		0	= Total Cover	

50/20 Thresholds

	20%	50%
Tree Stratum	7	18
Sapling/Shrub Stratum	7	18
Herb Stratum	3	8
Woody Vine Stratum	0	0

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across all Strata: 4 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 100.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column totals	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

___ Rapid test for hydrophytic vegetation

X Dominance test is >50%

___ Prevalence index is ≤3.0*

___ Morphogical adaptations* (provide supporting data in Remarks or on a separate sheet)

___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)

MEETS FAC-N TEST.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

SOIL **Sampling Point:** B32

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type*	Loc**	Texture	Remarks
0-5	10 YR 3/2	100					SIC	A
5-24	7.5 YR 3/2	90	7.5 YR 4/4	10	C	M	C	Bt

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains
**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

___ Histisol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
___ Depleted Below Dark Suface (A11)
___ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Dark Surface (S7) (**LRR R, MLRA 149B**)
___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**
___ Loamy Mucky Mineral (F1) (**LRR K, L**)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**
___ Coast Prairie Redox (A16) (**LRR K, L, R**)
___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
___ Dark Surface (S7) (**LRR K, L**
___ Polyvalue Below Surface (S8) (**LRR K, L**)
___ Thin Dark Surface (S9) (**LRR K, L**)
___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
___ Red Parent Material (F21)
___ Very Shallow Dark Surface (TF12)
___ Other (Explain in Remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____

Hydric soil present? ___N___

Remarks:
NO HYDRIC SOIL INDICATORS OBSERVED.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: BRATT PROPERTY City/County: OZAUKEE Sampling Date: 4/20/20
Applicant/Owner: WILLIAM BRATT State: WISCONSIN Sampling Point: B33
Investigator(s): BRIAN BATES, PSS, PWS, CST Section, Township, Range: SECTION 31, T10N, R22E
Landform (hillslope, terrace, etc.): BACKSLOPE Local relief (concave, convex, none): CONCAVE
Slope (%): 2 TO 3 Lat.: *** Long.: *** Datum: CONTACT J.E. ARTHUR AND ASSOCIAT
Soil Map Unit Name KEWAUNEE SILTY CLAY LOAM (KoB2) NWI Classification: NONE
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
Are vegetation ____, soil ____, or hydrology ____ significantly disturbed? Are "normal
Are vegetation ____, soil ____, or hydrology ____ naturally problematic? circumstances" present? Yes
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present? Y
Hydric soil present? Y
Indicators of wetland hydrology present? Y

Is the sampled area within a wetland? Y

If yes, optional wetland site ID: ____

Remarks: (Explain alternative procedures here or in a separate report.)

CLIMATIC CONDITIONS ARE NORMAL PER THE NRCS ANTECEDENT HYDROLOGIC CONDITION EVALUATION METHOD.

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- X FAC-Neutral Test (D5)
- ___ Microtopographic Relief (D4)

Field Observations:

Surface water present?	Yes	____	No	X	Depth (inches): ____
Water table present?	Yes	X	No	____	Depth (inches): -17
Saturation present? (includes capillary fringe)	Yes	X	No	____	Depth (inches): -10

Indicators of wetland hydrology present? Y

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION - Use scientific names of plants

Sampling Point: B33

Tree Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
		0	= Total Cover	

Sapling/Shrub Stratum	Plot Size (15')	Absolute % Cover	Dominant Species	Indicator Status
1	*Rhamnus cathartica*	5	Y	FAC
2	*Cornus alba*	5	Y	FACW
3				
4				
5				
6				
7				
8				
9				
10				
		10	= Total Cover	

Herb Stratum	Plot Size (5')	Absolute % Cover	Dominant Species	Indicator Status
1	*Phalaris arundinacea*	100	Y	FACW
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
		100	= Total Cover	

Woody Vine Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
		0	= Total Cover	

50/20 Thresholds

	20%	50%
Tree Stratum	0	0
Sapling/Shrub Stratum	2	5
Herb Stratum	20	50
Woody Vine Stratum	0	0

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across all Strata: 3 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 100.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column totals	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

___ Rapid test for hydrophytic vegetation

X Dominance test is >50%

___ Prevalence index is ≤3.0*

___ Morphogical adaptations* (provide supporting data in Remarks or on a separate sheet)

___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)

MEETS FAC-N TEST.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

SOIL **Sampling Point:** B33

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type*	Loc**	Texture	Remarks
0-5	10 YR 4/3	100					SIC	HISTORICAL FILL
5-8	5 YR 4/4	95	5 YR 4/6	5	C	M	C	HISTORICAL FILL
8-20	7.5 YR 3/2	90	7.5 YR 4/4	10	C	M	SICL	A
20-24	7.5 YR 4/3	70	7.5 YR 4/6	30	C	M	C	Bt

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains
**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

___ Histisol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
___ Depleted Below Dark Suface (A11)
___ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Dark Surface (S7) (**LRR R, MLRA 149B**)
___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**
___ Loamy Mucky Mineral (F1) (**LRR K, L**)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
X Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**
___ Coast Prairie Redox (A16) (**LRR K, L, R**)
___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
___ Dark Surface (S7) (**LRR K, L**
___ Polyvalue Below Surface (S8) (**LRR K, L**)
___ Thin Dark Surface (S9) (**LRR K, L**)
___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
___ Red Parent Material (F21)
___ Very Shallow Dark Surface (TF12)
___ Other (Explain in Remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____

Hydric soil present? ___Y___

Remarks:
THE SOILS ARE HYDRIC PER THE F6 INDICATOR. IT IS UNKNOWN WHEN THE FILL WAS PLACED BUT IT WAS NOT RECENT.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: BRATT PROPERTY City/County: OZAUKEE Sampling Date: 4/20/20
Applicant/Owner: WILLIAM BRATT State: WISCONSIN Sampling Point: B34
Investigator(s): BRIAN BATES, PSS, PWS, CST Section, Township, Range: SECTION 31, T10N, R22E
Landform (hillslope, terrace, etc.): BACKSLOPE Local relief (concave, convex, none): CONCAVE
Slope (%): 2 TO 3 Lat.: *** Long.: *** Datum: CONTACT J.E. ARTHUR AND ASSOCIAT
Soil Map Unit Name KEWAUNEE SILT LOAM (KnB) NWI Classification: NONE
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
Are vegetation ____, soil ____, or hydrology ____ significantly disturbed? Are "normal
Are vegetation ____, soil ____, or hydrology ____ naturally problematic? circumstances" present? Yes
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	N	**Is the sampled area within a wetland?**	N
Hydric soil present?	N		
Indicators of wetland hydrology present?	N	If yes, optional wetland site ID:	

Remarks: (Explain alternative procedures here or in a separate report.)

CLIMATIC CONDITIONS ARE NORMAL PER THE NRCS ANTECEDENT HYDROLOGIC CONDITION EVALUATION METHOD.

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Microtopographic Relief (D4)

Field Observations:

Surface water present?	Yes ____	No X	Depth (inches): ____	**Indicators of wetland hydrology present?**	N
Water table present?	Yes ____	No X	Depth (inches): ____		
Saturation present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____		

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
NO PRIMARY OR SECONDARY INDICATORS OBSERVED.

VEGETATION - Use scientific names of plants

Sampling Point: B34

Tree Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
		0	= Total Cover	

Sapling/Shrub Stratum	Plot Size (15')	Absolute % Cover	Dominant Species	Indicator Status
1	*Rhamnus cathartica*	25	Y	FAC
2				
3				
4				
5				
6				
7				
8				
9				
10				
		25	= Total Cover	

Herb Stratum	Plot Size (5')	Absolute % Cover	Dominant Species	Indicator Status
1	*Poa pratensis*	100	Y	FACU
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
		100	= Total Cover	

Woody Vine Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
		0	= Total Cover	

50/20 Thresholds

	20%	50%
Tree Stratum	0	0
Sapling/Shrub Stratum	5	13
Herb Stratum	20	50
Woody Vine Stratum	0	0

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across all Strata: 2 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 50.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species _____ x 1 = _____

FACW species _____ x 2 = _____

FAC species _____ x 3 = _____

FACU species _____ x 4 = _____

UPL species _____ x 5 = _____

Column totals _____ (A) _____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ Rapid test for hydrophytic vegetation

___ Dominance test is >50%

___ Prevalence index is ≤3.0*

___ Morphogical adaptations* (provide supporting data in Remarks or on a separate sheet)

___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present? N

Remarks: (Include photo numbers here or on a separate sheet)

DOES NOT MEET FAC-N TEST.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

SOIL **Sampling Point:** B34

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type*	Loc**	Texture	Remarks
0-7	10 YR 3/2	100					SICL	A
7-24	7.5 YR 6/4	75	7.5 YR 5/8	25	C	M	C	Bt

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains
**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

___ Histisol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
___ Depleted Below Dark Suface (A11)
___ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Dark Surface (S7) (**LRR R, MLRA 149B**)
___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**
___ Loamy Mucky Mineral (F1) (**LRR K, L**)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**
___ Coast Prairie Redox (A16) (**LRR K, L, R**)
___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
___ Dark Surface (S7) (**LRR K, L**
___ Polyvalue Below Surface (S8) (**LRR K, L**)
___ Thin Dark Surface (S9) (**LRR K, L**)
___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
___ Red Parent Material (F21)
___ Very Shallow Dark Surface (TF12)
___ Other (Explain in Remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____

Hydric soil present? ___N___

Remarks:
NO HYDRIC SOIL INDICATORS OBSERVED.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: BRATT PROPERTY City/County: OZAUKEE Sampling Date: 4/20/20
Applicant/Owner: WILLIAM BRATT State: WISCONSIN Sampling Point: B35
Investigator(s): BRIAN BATES, PSS, PWS, CST Section, Township, Range: SECTION 31, T10N, R22E
Landform (hillslope, terrace, etc.): BACKSLOPE Local relief (concave, convex, none): NONE
Slope (%): 3 TO 4 Lat.: *** Long.: *** Datum: CONTACT J.E. ARTHUR AND ASSOCIAT
Soil Map Unit Name KEWAUNEE SILTY CLAY LOAM (KoB2) NWI Classification: NONE
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
Are vegetation ____, soil ____, or hydrology ____ significantly disturbed? Are "normal
Are vegetation ____, soil ____, or hydrology ____ naturally problematic? circumstances" present? Yes
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	Y	**Is the sampled area within a wetland?**	N
Hydric soil present?	N		
Indicators of wetland hydrology present?	N	If yes, optional wetland site ID:	

Remarks: (Explain alternative procedures here or in a separate report.)

CLIMATIC CONDITIONS ARE NORMAL PER THE NRCS ANTECEDENT HYDROLOGIC CONDITION EVALUATION METHOD.

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Microtopographic Relief (D4)

Field Observations:

Surface water present?	Yes ____	No X	Depth (inches):	
Water table present?	Yes ____	No X	Depth (inches):	
Saturation present? (includes capillary fringe)	Yes ____	No X	Depth (inches):	

Indicators of wetland hydrology present? N

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
NO PRIMARY OR SECONDARY INDICATORS OBSERVED.

VEGETATION - Use scientific names of plants

Sampling Point: B35

Tree Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1	*Fraxinus pennsylvanica*	10	Y	FACW
2				
3				
4				
5				
6				
7				
8				
9				
10				
		10	= Total Cover	

Sapling/Shrub Stratum	Plot Size (15')	Absolute % Cover	Dominant Species	Indicator Status
1	*Crataegus mollis*	15	Y	FAC
2	*Rhamnus cathartica*	10	Y	FAC
3	*Lonicera tatarica*	10	Y	FACU
4				
5				
6				
7				
8				
9				
10				
		35	= Total Cover	

Herb Stratum	Plot Size (5')	Absolute % Cover	Dominant Species	Indicator Status
1	*Poa pratensis*	85	Y	FACU
2	*Rhamnus cathartica*	5	N	FAC
3	*Lonicera tatarica*	5	N	FACU
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
		95	= Total Cover	

Woody Vine Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
		0	= Total Cover	

50/20 Thresholds

	20%	50%
Tree Stratum	2	5
Sapling/Shrub Stratum	7	18
Herb Stratum	19	48
Woody Vine Stratum	0	0

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across all Strata: 5 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 60.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	x 1 =		
FACW species	x 2 =		
FAC species	x 3 =		
FACU species	x 4 =		
UPL species	x 5 =		
Column totals	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

___ Rapid test for hydrophytic vegetation

X Dominance test is >50%

___ Prevalence index is ≤3.0*

___ Morphogical adaptations* (provide supporting data in Remarks or on a separate sheet)

___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)

DOES NOT MEET FAC-N TEST.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

SOIL **Sampling Point:** B35

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type*	Loc**	Texture	Remarks
0-11	10 YR 3/2	100					SIL	A
11-24	7.5 YR 4/3	85	7.5 YR 4/6	15	C	M	C	Bt

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains
**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

___ Histisol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
___ Depleted Below Dark Suface (A11)
___ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Dark Surface (S7) (**LRR R, MLRA 149B**)
___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**
___ Loamy Mucky Mineral (F1) (**LRR K, L**)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**
___ Coast Prairie Redox (A16) (**LRR K, L, R**)
___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
___ Dark Surface (S7) (**LRR K, L**
___ Polyvalue Below Surface (S8) (**LRR K, L**)
___ Thin Dark Surface (S9) (**LRR K, L**)
___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
___ Red Parent Material (F21)
___ Very Shallow Dark Surface (TF12)
___ Other (Explain in Remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____

Hydric soil present? ___N___

Remarks:
NO HYDRIC SOIL INDICATORS OBSERVED.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: BRATT PROPERTY City/County: OZAUKEE Sampling Date: 4/20/20
Applicant/Owner: WILLIAM BRATT State: WISCONSIN Sampling Point: B36
Investigator(s): BRIAN BATES, PSS, PWS, CST Section, Township, Range: SECTION 31, T10N, R22E
Landform (hillslope, terrace, etc.): TOESLOPE Local relief (concave, convex, none): CONCAVE
Slope (%): 0 TO 1 Lat.: *** Long.: *** Datum: CONTACT J.E. ARTHUR AND ASSOCIAT
Soil Map Unit Name KEWAUNEE SILT LOAM (KnB) NWI Classification: NONE
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
Are vegetation ____, soil ____, or hydrology ____ significantly disturbed? Are "normal
Are vegetation ____, soil ____, or hydrology ____ naturally problematic? circumstances" present? Yes
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	Y	**Is the sampled area within a wetland?**	Y
Hydric soil present?	Y		
Indicators of wetland hydrology present?	Y	If yes, optional wetland site ID:	

Remarks: (Explain alternative procedures here or in a separate report.)

CLIMATIC CONDITIONS ARE NORMAL PER THE NRCS ANTECEDENT HYDROLOGIC CONDITION EVALUATION METHOD.

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- X Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- X FAC-Neutral Test (D5)
- ___ Microtopographic Relief (D4)

Field Observations:

Surface water present?	Yes	___	No	X	Depth (inches): ___
Water table present?	Yes	X	No	___	Depth (inches): -2
Saturation present? (includes capillary fringe)	Yes	X	No	___	Depth (inches): 0

Indicators of wetland hydrology present? Y

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION - Use scientific names of plants

Sampling Point: B36

Tree Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
		0	= Total Cover	

Sapling/Shrub Stratum	Plot Size (15')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
		0	= Total Cover	

Herb Stratum	Plot Size (5')	Absolute % Cover	Dominant Species	Indicator Status
1	*Typha angustifolia*	70	Y	OBL
2	*Phalaris arundinacea*	30	Y	FACW
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
		100	= Total Cover	

Woody Vine Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
		0	= Total Cover	

50/20 Thresholds

	20%	50%
Tree Stratum	0	0
Sapling/Shrub Stratum	0	0
Herb Stratum	20	50
Woody Vine Stratum	0	0

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across all Strata: 2 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 100.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	x 1 =		
FACW species	x 2 =		
FAC species	x 3 =		
FACU species	x 4 =		
UPL species	x 5 =		
Column totals	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

___ Rapid test for hydrophytic vegetation

X Dominance test is >50%

___ Prevalence index is ≤3.0*

___ Morphogical adaptations* (provide supporting data in Remarks or on a separate sheet)

___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)

MEETS FAC-N TEST.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

SOIL **Sampling Point:** B36

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type*	Loc**	Texture	Remarks
0-10	10 YR 3/2	90	10 YR 4/6	10	C	M	SIC	A

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains
**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

___ Histisol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
___ Depleted Below Dark Suface (A11)
___ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Dark Surface (S7) (**LRR R, MLRA 149B**)
___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**
___ Loamy Mucky Mineral (F1) (**LRR K, L**)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
X Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**
___ Coast Prairie Redox (A16) (**LRR K, L, R**)
___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
___ Dark Surface (S7) (**LRR K, L**
___ Polyvalue Below Surface (S8) (**LRR K, L**)
___ Thin Dark Surface (S9) (**LRR K, L**)
___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
___ Red Parent Material (F21)
___ Very Shallow Dark Surface (TF12)
___ Other (Explain in Remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____

Hydric soil present? ___Y___

Remarks:
THE SOILS ARE HYDRIC PER THE F6 INDICATOR. TOO WET TO SAMPLE DEEPER.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: BRATT PROPERTY City/County: OZAUKEE Sampling Date: 4/20/20
Applicant/Owner: WILLIAM BRATT State: WISCONSIN Sampling Point: B37
Investigator(s): BRIAN BATES, PSS, PWS, CST Section, Township, Range: SECTION 31, T10N, R22E
Landform (hillslope, terrace, etc.): BACKSLOPE Local relief (concave, convex, none): NONE
Slope (%): 2 TO 3 Lat.: *** Long.: *** Datum: CONTACT J.E. ARTHUR AND ASSOCIAT
Soil Map Unit Name KEWAUNEE SILT LOAM (KnB) NWI Classification: NONE
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
Are vegetation X, soil ____, or hydrology ____ significantly disturbed? Are "normal
Are vegetation ____, soil ____, or hydrology ____ naturally problematic? circumstances" present? No
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present? N
Hydric soil present? N
Indicators of wetland hydrology present? N

Is the sampled area within a wetland? N

If yes, optional wetland site ID: ____

Remarks: (Explain alternative procedures here or in a separate report.)

CLIMATIC CONDITIONS ARE NORMAL PER THE NRCS ANTECEDENT HYDROLOGIC CONDITION EVALUATION METHOD. NON-NORMAL CIRCUMSTANCE, THE SAMPLING POINT HAS MOWING HISTORY.

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Microtopographic Relief (D4)

Field Observations:

Surface water present?	Yes ____	No X	Depth (inches): ____	
Water table present?	Yes ____	No X	Depth (inches): ____	
Saturation present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____	

Indicators of wetland hydrology present? N

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

NO PRIMARY OR SECONDARY INDICATORS OBSERVED.

VEGETATION - Use scientific names of plants

Sampling Point: B37

Tree Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
		0	= Total Cover	

Sapling/Shrub Stratum	Plot Size (15')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
		0	= Total Cover	

Herb Stratum	Plot Size (5')	Absolute % Cover	Dominant Species	Indicator Status
1	*Poa pratensis*	90	Y	FACU
2	*Trifolium repens*	10	N	FACU
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
		100	= Total Cover	

Woody Vine Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
		0	= Total Cover	

50/20 Thresholds

	20%	50%
Tree Stratum	0	0
Sapling/Shrub Stratum	0	0
Herb Stratum	20	50
Woody Vine Stratum	0	0

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across all Strata: 1 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 0.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column totals	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

___ Rapid test for hydrophytic vegetation

___ Dominance test is >50%

___ Prevalence index is ≤3.0*

___ Morphogical adaptations* (provide supporting data in Remarks or on a separate sheet)

___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present? N

Remarks: (Include photo numbers here or on a separate sheet)

NON-NORMAL CIRCUMSTANCE, THE SAMPLING POINT HAS MOWING HISTORY AND VEGETATION HAS BEEN HISTORICALLY DISTURBED. DOES NOT MEET FAC-N TEST.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

SOIL **Sampling Point:** B37

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type*	Loc**	Texture	Remarks
0-7	7.5 YR 3/2	100					C	A
7-24	7.5 YR 4/4	90	7.5 YR 4/6	10	C	M	SC	Bt

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains
**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

___ Histisol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
___ Depleted Below Dark Suface (A11)
___ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Dark Surface (S7) (**LRR R, MLRA 149B**)
___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**
___ Loamy Mucky Mineral (F1) (**LRR K, L**)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**
___ Coast Prairie Redox (A16) (**LRR K, L, R**)
___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
___ Dark Surface (S7) (**LRR K, L**
___ Polyvalue Below Surface (S8) (**LRR K, L**)
___ Thin Dark Surface (S9) (**LRR K, L**)
___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
___ Red Parent Material (F21)
___ Very Shallow Dark Surface (TF12)
___ Other (Explain in Remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____

Hydric soil present? N

Remarks:
NO HYDRIC SOIL INDICATORS OBSERVED.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: BRATT PROPERTY City/County: OZAUKEE Sampling Date: 4/20/20
Applicant/Owner: WILLIAM BRATT State: WISCONSIN Sampling Point: B38
Investigator(s): BRIAN BATES, PSS, PWS, CST Section, Township, Range: SECTION 31, T10N, R22E
Landform (hillslope, terrace, etc.): TOESLOPE Local relief (concave, convex, none): CONCAVE
Slope (%): 0 TO 1 Lat.: *** Long.: *** Datum: CONTACT J.E. ARTHUR AND ASSOCIAT
Soil Map Unit Name KEWAUNEE SILTY CLAY LOAM (KoB2) NWI Classification: NONE
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
Are vegetation ____, soil ____, or hydrology ____ significantly disturbed? Are "normal
Are vegetation ____, soil ____, or hydrology ____ naturally problematic? circumstances" present? Yes
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present? Y
Hydric soil present? Y
Indicators of wetland hydrology present? Y

Is the sampled area within a wetland? Y

If yes, optional wetland site ID: ____

Remarks: (Explain alternative procedures here or in a separate report.)

CLIMATIC CONDITIONS ARE NORMAL PER THE NRCS ANTECEDENT HYDROLOGIC CONDITION EVALUATION METHOD.

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- X Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- X FAC-Neutral Test (D5)
- ___ Microtopographic Relief (D4)

Field Observations:

Surface water present?	Yes ____	No X	Depth (inches):	____
Water table present?	Yes ____	No X	Depth (inches):	____
Saturation present? (includes capillary fringe)	Yes ____	No X	Depth (inches):	____

Indicators of wetland hydrology present? Y

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION - Use scientific names of plants

Sampling Point: B38

Tree Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
		0	= Total Cover	

Sapling/Shrub Stratum	Plot Size (15')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
		0	= Total Cover	

Herb Stratum	Plot Size (5')	Absolute % Cover	Dominant Species	Indicator Status
1	*Carex vulpinoidea*	75	Y	OBL
2	*Poa pratensis*	15	N	FACU
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
		90	= Total Cover	

Woody Vine Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
		0	= Total Cover	

50/20 Thresholds

	20%	50%
Tree Stratum	0	0
Sapling/Shrub Stratum	0	0
Herb Stratum	18	45
Woody Vine Stratum	0	0

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across all Strata: 1 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 100.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column totals	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

___ Rapid test for hydrophytic vegetation

_X_ Dominance test is >50%

___ Prevalence index is ≤3.0*

___ Morphogical adaptations* (provide supporting data in Remarks or on a separate sheet)

___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)

MEETS FAC-N TEST.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

SOIL **Sampling Point:** B38

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type*	Loc**	Texture	Remarks
0-4	7.5 YR 3/2	100					SICL	A
4-24	5 YR 4/4	90	5 YR 4/6	10	C	M	C	Bt

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains
**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

___ Histisol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
___ Depleted Below Dark Suface (A11)
___ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Dark Surface (S7) (**LRR R, MLRA 149B**)
___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**
___ Loamy Mucky Mineral (F1) (**LRR K, L**)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**
___ Coast Prairie Redox (A16) (**LRR K, L, R**)
___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
___ Dark Surface (S7) (**LRR K, L**
___ Polyvalue Below Surface (S8) (**LRR K, L**)
___ Thin Dark Surface (S9) (**LRR K, L**)
___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
X Red Parent Material (F21)
___ Very Shallow Dark Surface (TF12)
___ Other (Explain in Remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____

Hydric soil present? Y

Remarks:

NO NON-PROBLEMATIC HYDRIC SOIL INDICATORS ABOVE OBSERVED SO PROCEDURES FOR PROBLEMATIC HYDRIC SOIL INDICATORS EVALUATED. STEP 1. I VERIFIED THAT HYDROPHYTIC VEGETATION IS PRESENT. STEP 2. I VERIFIED THAT AT LEAST 1 PRIMARY OR TWO SECONDARY INDICATORS OF HYDROLOGY WERE PRESENT. STEP 3. THE SOIL PROFILE WAS THOROUGHLY DESCRIBED. THE LANDSCAPE SETTING IS IN A POSITION TO COLLECT AND CONCENTRATE WATER SINCE THE SAMPLING POINT IS LOCATED IN A DEPRESSION. NON-PROBLEMATIC HYDRIC SOIL INDICATORS ABOVE ARE POSSIBLY LACKING AS A RESULT OF THE RED PARENT MATERIAL SOILS. RED PARENT MATERIAL SOILS ARE PROBLEMATIC BECAUSE THEY ARE LESS LIKELY TO SHOW COLOR PATTERNS ASSOCIATED WITH REDUCING CONDITIONS. THE SOILS ARE HYDRIC PER THE F21 PROBLEMATIC HYDRIC SOIL INDICATOR.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: BRATT PROPERTY City/County: OZAUKEE Sampling Date: 4/20/20
Applicant/Owner: WILLIAM BRATT State: WISCONSIN Sampling Point: B39
Investigator(s): BRIAN BATES, PSS, PWS, CST Section, Township, Range: SECTION 31, T10N, R22E
Landform (hillslope, terrace, etc.): BACKSLOPE Local relief (concave, convex, none): NONE
Slope (%): 2 TO 3 Lat.: *** Long.: *** Datum: CONTACT J.E. ARTHUR AND ASSOCIAT
Soil Map Unit Name KEWAUNEE SILTY CLAY LOAM (KoB2) NWI Classification: NONE
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
Are vegetation ____, soil ____, or hydrology ____ significantly disturbed? Are "normal
Are vegetation ____, soil ____, or hydrology ____ naturally problematic? circumstances" present? Yes
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	N	**Is the sampled area within a wetland?**	N
Hydric soil present?	N		
Indicators of wetland hydrology present?	N	If yes, optional wetland site ID:	

Remarks: (Explain alternative procedures here or in a separate report.)

CLIMATIC CONDITIONS ARE NORMAL PER THE NRCS ANTECEDENT HYDROLOGIC CONDITION EVALUATION METHOD.

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Microtopographic Relief (D4)

Field Observations:

Surface water present?	Yes ____	No X	Depth (inches):	
Water table present?	Yes ____	No X	Depth (inches):	
Saturation present? (includes capillary fringe)	Yes ____	No X	Depth (inches):	

Indicators of wetland hydrology present? N

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
NO PRIMARY OR SECONDARY INDICATORS OBSERVED.

VEGETATION - Use scientific names of plants

Sampling Point: B39

Tree Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
		0	= Total Cover	

Sapling/Shrub Stratum	Plot Size (15')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
		0	= Total Cover	

Herb Stratum	Plot Size (5')	Absolute % Cover	Dominant Species	Indicator Status
1	*Poa pratensis*	90	Y	FACU
2	*Bromus inermis*	10	N	UPL
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
		100	= Total Cover	

Woody Vine Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
		0	= Total Cover	

50/20 Thresholds

	20%	50%
Tree Stratum	0	0
Sapling/Shrub Stratum	0	0
Herb Stratum	20	50
Woody Vine Stratum	0	0

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across all Strata: 1 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 0.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column totals	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

___ Rapid test for hydrophytic vegetation
___ Dominance test is >50%
___ Prevalence index is ≤3.0*
___ Morphogical adaptations* (provide supporting data in Remarks or on a separate sheet)
___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present? N

Remarks: (Include photo numbers here or on a separate sheet)

DOES NOT MEET FAC-N TEST.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

SOIL **Sampling Point:** B39

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type*	Loc**	Texture	Remarks
0-7	7.5 YR 3/2	100					SICL	A
7-24	5 YR 4/4	90	5 YR 4/6	10	C	M	C	Bt

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains
**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

___ Histisol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
___ Depleted Below Dark Suface (A11)
___ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Dark Surface (S7) (**LRR R, MLRA 149B**)
___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**
___ Loamy Mucky Mineral (F1) (**LRR K, L**)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**
___ Coast Prairie Redox (A16) (**LRR K, L, R**)
___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
___ Dark Surface (S7) (**LRR K, L**
___ Polyvalue Below Surface (S8) (**LRR K, L**)
___ Thin Dark Surface (S9) (**LRR K, L**)
___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
___ Red Parent Material (F21)
___ Very Shallow Dark Surface (TF12)
___ Other (Explain in Remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____

Hydric soil present? ___N___

Remarks:
NO HYDRIC SOIL INDICATORS OBSERVED.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: BRATT PROPERTY City/County: OZAUKEE Sampling Date: 4/20/20
Applicant/Owner: WILLIAM BRATT State: WISCONSIN Sampling Point: B40
Investigator(s): BRIAN BATES, PSS, PWS, CST Section, Township, Range: SECTION 31, T10N, R22E
Landform (hillslope, terrace, etc.): BACKSLOPE Local relief (concave, convex, none): CONCAVE
Slope (%): 0 TO 1 Lat.: *** Long.: *** Datum: CONTACT J.E. ARTHUR AND ASSOCIAT
Soil Map Unit Name KEWAUNEE SILTY CLAY LOAM (KoB2) NWI Classification: NONE
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
Are vegetation ____, soil ____, or hydrology ____ significantly disturbed? Are "normal
Are vegetation ____, soil ____, or hydrology ____ naturally problematic? circumstances" present? Yes
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present? Y
Hydric soil present? Y
Indicators of wetland hydrology present? Y

Is the sampled area within a wetland? Y

If yes, optional wetland site ID: ____

Remarks: (Explain alternative procedures here or in a separate report.)

CLIMATIC CONDITIONS ARE NORMAL PER THE NRCS ANTECEDENT HYDROLOGIC CONDITION EVALUATION METHOD.

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- X FAC-Neutral Test (D5)
- ___ Microtopographic Relief (D4)

Field Observations:

Surface water present?	Yes	____	No	X	Depth (inches): ____
Water table present?	Yes	____	No	X	Depth (inches): ____
Saturation present? (includes capillary fringe)	Yes	____	No	X	Depth (inches): ____

Indicators of wetland hydrology present? Y

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION - Use scientific names of plants

Sampling Point: B40

Tree Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
		0	= Total Cover	

Sapling/Shrub Stratum	Plot Size (15')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
		0	= Total Cover	

Herb Stratum	Plot Size (5')	Absolute % Cover	Dominant Species	Indicator Status
1	*Carex vulpinoidea*	70	Y	OBL
2	*Poa pratensis*	15	N	FACU
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
		85	= Total Cover	

Woody Vine Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
		0	= Total Cover	

50/20 Thresholds

	20%	50%
Tree Stratum	0	0
Sapling/Shrub Stratum	0	0
Herb Stratum	17	43
Woody Vine Stratum	0	0

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across all Strata: 1 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 100.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	x 1 =		
FACW species	x 2 =		
FAC species	x 3 =		
FACU species	x 4 =		
UPL species	x 5 =		
Column totals	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ___ Rapid test for hydrophytic vegetation
- X Dominance test is >50%
- ___ Prevalence index is ≤3.0*
- ___ Morphogical adaptations* (provide supporting data in Remarks or on a separate sheet)
- ___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)

MEETS FAC-N TEST.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

SOIL **Sampling Point:** B40

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type*	Loc**	Texture	Remarks
0-8	7.5 YR 2/2	95	7.5 YR 4/4	5	C	M	SICL	A
8-24	5 YR 4/4	90	5 YR 4/6	10	C	M	C	Bt

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains
**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

___ Histisol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
___ Depleted Below Dark Suface (A11)
___ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Dark Surface (S7) (**LRR R, MLRA 149B**)
___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**
___ Loamy Mucky Mineral (F1) (**LRR K, L**)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
X Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**
___ Coast Prairie Redox (A16) (**LRR K, L, R**)
___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
___ Dark Surface (S7) (**LRR K, L**
___ Polyvalue Below Surface (S8) (**LRR K, L**)
___ Thin Dark Surface (S9) (**LRR K, L**)
___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
___ Red Parent Material (F21)
___ Very Shallow Dark Surface (TF12)
___ Other (Explain in Remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____

Hydric soil present? ___Y___

Remarks:
THE SOILS ARE HYDRIC PER THE F6 INDICATOR.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: BRATT PROPERTY City/County: OZAUKEE Sampling Date: 4/20/20
Applicant/Owner: WILLIAM BRATT State: WISCONSIN Sampling Point: B41
Investigator(s): BRIAN BATES, PSS, PWS, CST Section, Township, Range: SECTION 31, T10N, R22E
Landform (hillslope, terrace, etc.): TOESLOPE Local relief (concave, convex, none): CONCAVE
Slope (%): 0 TO 1 Lat.: *** Long.: *** Datum: CONTACT J.E. ARTHUR AND ASSOCIAT
Soil Map Unit Name KEWAUNEE SILTY CLAY LOAM (KoB2) NWI Classification: NONE
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
Are vegetation ____, soil ____, or hydrology ____ significantly disturbed? Are "normal
Are vegetation ____, soil ____, or hydrology ____ naturally problematic? circumstances" present? Yes
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present? Y
Hydric soil present? Y
Indicators of wetland hydrology present? Y

Is the sampled area within a wetland? Y

If yes, optional wetland site ID: ____

Remarks: (Explain alternative procedures here or in a separate report.)

CLIMATIC CONDITIONS ARE NORMAL PER THE NRCS ANTECEDENT HYDROLOGIC CONDITION EVALUATION METHOD.

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- X FAC-Neutral Test (D5)
- ___ Microtopographic Relief (D4)

Field Observations:

Surface water present?	Yes	____	No	X	Depth (inches): ____
Water table present?	Yes	X	No	____	Depth (inches): -2
Saturation present? (includes capillary fringe)	Yes	X	No	____	Depth (inches): 0

Indicators of wetland hydrology present? Y

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION - Use scientific names of plants

Sampling Point: B41

Tree Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1	*Fraxinus pennsylvanica*	20	Y	FACW
2				
3				
4				
5				
6				
7				
8				
9				
10				
		20	= Total Cover	

Sapling/Shrub Stratum	Plot Size (15')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
		0	= Total Cover	

Herb Stratum	Plot Size (5')	Absolute % Cover	Dominant Species	Indicator Status
1	*Phalaris arundinacea*	90	Y	FACW
2	*Typha angustifolia*	10	N	OBL
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
		100	= Total Cover	

Woody Vine Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
		0	= Total Cover	

50/20 Thresholds

	20%	50%
Tree Stratum	4	10
Sapling/Shrub Stratum	0	0
Herb Stratum	20	50
Woody Vine Stratum	0	0

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across all Strata: 2 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 100.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	x 1 =		
FACW species	x 2 =		
FAC species	x 3 =		
FACU species	x 4 =		
UPL species	x 5 =		
Column totals	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ___ Rapid test for hydrophytic vegetation
- X Dominance test is >50%
- ___ Prevalence index is ≤3.0*
- ___ Morphogical adaptations* (provide supporting data in Remarks or on a separate sheet)
- ___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)

MEETS FAC-N TEST.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

SOIL **Sampling Point:** B41

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type*	Loc**	Texture	Remarks
0-7	10 YR 3/2	90	10 YR 4/6	10	C	M	SICL	A

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains
**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

___ Histisol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
___ Depleted Below Dark Suface (A11)
___ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Dark Surface (S7) (**LRR R, MLRA 149B**)
___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**
___ Loamy Mucky Mineral (F1) (**LRR K, L**)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
X Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**
___ Coast Prairie Redox (A16) (**LRR K, L, R**)
___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
___ Dark Surface (S7) (**LRR K, L**
___ Polyvalue Below Surface (S8) (**LRR K, L**)
___ Thin Dark Surface (S9) (**LRR K, L**)
___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
___ Red Parent Material (F21)
___ Very Shallow Dark Surface (TF12)
___ Other (Explain in Remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____

Hydric soil present? ___Y___

Remarks:
THE SOILS ARE HYDRIC PER THE F6 INDICATOR.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: BRATT PROPERTY City/County: OZAUKEE Sampling Date: 4/20/20
Applicant/Owner: WILLIAM BRATT State: WISCONSIN Sampling Point: B42
Investigator(s): BRIAN BATES, PSS, PWS, CST Section, Township, Range: SECTION 31, T10N, R22E
Landform (hillslope, terrace, etc.): BACKSLOPE Local relief (concave, convex, none): NONE
Slope (%): 2 TO 3 Lat.: *** Long.: *** Datum: CONTACT J.E. ARTHUR AND ASSOCIAT
Soil Map Unit Name KEWAUNEE SILTY CLAY LOAM (KoB2) NWI Classification: NONE
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
Are vegetation ____, soil ____, or hydrology ____ significantly disturbed? Are "normal
Are vegetation ____, soil ____, or hydrology ____ naturally problematic? circumstances" present? Yes
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	N	**Is the sampled area within a wetland?**	N
Hydric soil present?	N		
Indicators of wetland hydrology present?	N	If yes, optional wetland site ID:	

Remarks: (Explain alternative procedures here or in a separate report.)

CLIMATIC CONDITIONS ARE NORMAL PER THE NRCS ANTECEDENT HYDROLOGIC CONDITION EVALUATION METHOD.

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Microtopographic Relief (D4)

Field Observations:

Surface water present?	Yes ____	No X	Depth (inches):	
Water table present?	Yes ____	No X	Depth (inches):	
Saturation present? (includes capillary fringe)	Yes ____	No X	Depth (inches):	

Indicators of wetland hydrology present? N

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
NO PRIMARY OR SECONDARY INDICATORS OBSERVED.

VEGETATION - Use scientific names of plants

Sampling Point: B42

Tree Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1	*Fraxinus pennsylvanica*	20	Y	FACW
2				
3				
4				
5				
6				
7				
8				
9				
10				
		20	= Total Cover	

Sapling/Shrub Stratum	Plot Size (15')	Absolute % Cover	Dominant Species	Indicator Status
1	*Lonicera tatarica*	10	Y	FACU
2				
3				
4				
5				
6				
7				
8				
9				
10				
		10	= Total Cover	

Herb Stratum	Plot Size (5')	Absolute % Cover	Dominant Species	Indicator Status
1	*Poa pratensis*	100	Y	FACU
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
		100	= Total Cover	

Woody Vine Stratum	Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status
1				
2				
3				
4				
5				
		0	= Total Cover	

50/20 Thresholds

	20%	50%
Tree Stratum	4	10
Sapling/Shrub Stratum	2	5
Herb Stratum	20	50
Woody Vine Stratum	0	0

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across all Strata: 3 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 33.33% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species _____ x 1 = _____

FACW species _____ x 2 = _____

FAC species _____ x 3 = _____

FACU species _____ x 4 = _____

UPL species _____ x 5 = _____

Column totals _____ (A) _____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ Rapid test for hydrophytic vegetation

___ Dominance test is >50%

___ Prevalence index is ≤3.0*

___ Morphogical adaptations* (provide supporting data in Remarks or on a separate sheet)

___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present? N

Remarks: (Include photo numbers here or on a separate sheet)

DOES NOT MEET FAC-N TEST.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

SOIL **Sampling Point:** B42

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type*	Loc**	Texture	Remarks
0-7	7.5 YR 3/2	100					SICL	A
7-24	5 YR 4/4	85	5 YR 4/6	15	C	M	C	Bt

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains
**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

___ Histisol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
___ Depleted Below Dark Suface (A11)
___ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Dark Surface (S7) (**LRR R, MLRA 149B**)
___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**
___ Loamy Mucky Mineral (F1) (**LRR K, L**)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**
___ Coast Prairie Redox (A16) (**LRR K, L, R**)
___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
___ Dark Surface (S7) (**LRR K, L**
___ Polyvalue Below Surface (S8) (**LRR K, L**)
___ Thin Dark Surface (S9) (**LRR K, L**)
___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
___ Red Parent Material (F21)
___ Very Shallow Dark Surface (TF12)
___ Other (Explain in Remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____

Hydric soil present? ___N___

Remarks:
NO HYDRIC SOIL INDICATORS OBSERVED.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

APPENDIX C

FSA Slide Review

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

Filename: MILWAUKEE WSO AP
Station name: MILWAUKEE WSO AP
Station number: WI5479
County: Milwaukee

	Actual Rainfall Data					Rainfall Data Evaluation for Given Month (1 = "Dry"; 2 = "Normal"; 3 = "Wet", and ERROR = Missing Data for that month)					July Evaluation (3 Months Prior to July - Wet, Dry or Normal?)	August Eval. (3 Months Prior to August - Wet, Dry or Normal?)
Year	April	May	June	July	August	April	May	June	July	August		
1979	5.43	1.82	2.84	1.06	4.85	3	1	2	1	2	2	1
1980	4.02	1.81	4.67	3.39	5.06	2	1	3	2	3	2	2
1981	4.87	3.05	2.39	4.35	4.26	3	2	2	3	2	2	3
1982	4.47	2.76	3.06	3.88	3.33	2	2	2	2	2	2	2
1983	4.66	5.83	1.41	1.34	4.70	3	3	1	1	2	2	1
1984	5.04	4.21	4.07	3.39	2.93	3	3	2	2	2	3	2
1985	1.93	2.73	1.27	2.18	2.23	1	2	1	1	1	1	1
1986	1.83	2.74	4.51	6.15	8.82	1	2	3	3	3	2	3
1987	4.26	3.76	2.23	4.20	9.05	2	2	1	2	3	1	2
1988	4.12	0.50	0.70	1.53	3.25	2	1	1	1	2	1	1
1989	1.33	2.86	1.89	6.16	5.19	1	2	1	3	3	1	2
1990	2.67	7.56	4.97	3.02	4.68	1	3	3	2	2	3	3
1991	3.70	4.25	2.13	4.34	2.27	2	3	1	3	1	2	2
1992	2.41	0.60	3.13	5.64	3.50	1	1	2	3	2	1	2
1993	6.64	1.56	6.39	4.22	4.20	3	1	3	2	2	2	2
1994	2.35	0.67	3.08	2.51	4.91	1	1	2	2	3	1	2
1995	3.86	3.41	1.46	2.80	5.83	2	2	1	2	3	1	2
1996	2.99	2.89	5.47	1.61	1.24	2	2	3	1	1	3	2
1997	2.16	1.95	9.98	3.59	3.95	1	2	3	2	2	2	2
1998	4.18	2.48	2.82	1.78	5.98	2	2	2	1	3	2	1
1999	6.14	3.74	6.96	5.58	1.69	3	2	3	3	1	3	3
2000	3.64	8.42	3.42	7.12	5.17	2	3	2	3	3	2	3
2001	3.45	4.68	4.13	2.70	5.41	2	3	2	2	3	2	2
2002	3.59	2.31	2.99	2.33	4.73	2	2	2	1	2	2	1
2003	2.61	3.65	1.49	2.43	0.57	1	2	1	2	1	1	2
2004	1.87	8.18	4.07	3.25	3.43	1	3	2	2	2	2	2
2005	1.41	2.62	2.23	2.60	1.29	1	2	1	2	1	1	2
2006	4.23	3.73	2.54	5.23	2.18	2	2	2	3	1	2	3
2007	4.02	1.99	3.64	1.40	7.92	2	2	2	1	3	2	1
2008	4.42	2.92	12.27	3.20	0.88	2	2	3	2	1	3	2
2009	4.50	2.56	5.44	0.71	4.04	2	2	3	1	2	3	2

Normals are for 1971-2000 data

Month	
April	3.78
May	3.06
June	3.56
July	3.58
August	4.03

Normal inside 30% chance values
Dry: < lower bound for 30% chance
Wet: > upper bound for 30% chance

1 = Dry, 2 = Normal, 3 = Wet

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

REMOTELY SENSED DATA SUMMARY
"NORMAL" PRECIPITATION YEARS
BRATT PROPERTY

YEAR	RAINFALL	INTERPRETATION
1983	NORMAL	CR, Y, 6b-, 1
1986	NORMAL	CR, Y, 6e-, 1
1991	NORMAL	CR, Y, 6d-, 1
1993	NORMAL	CR, Y, 6a+, 1
1997	NORMAL	CR, Y, 3, 1
1998	NORMAL	CR, Y, 6a+, 1
2000	NORMAL	CR, Y, 6a, 1
2001	NORMAL	CR, Y, 6a-, 1
2002	NORMAL	CR, Y, 6a, 1

MINIMUM 5 YEARS OF IMAGERY AVAILABLE SO WET/DRY YEARS NOT REVIEWED.

9 OUT OF THE 9 NORMAL YEARS WITH OBSERVABLE SLIDES (100%) HAVE WETLAND SIGNATURES.

Y = Yes, signal indicates wetness (+ = strong, - = weak)

N = No wetness signature

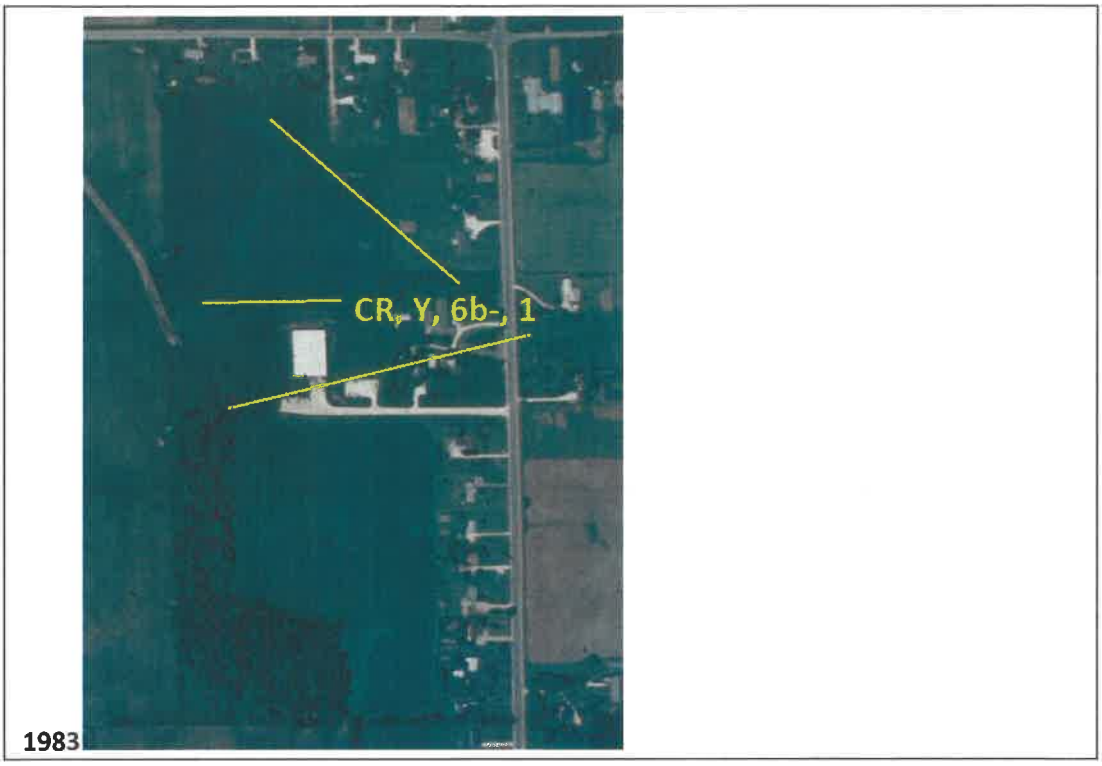
CR = Cropped (row crop of tilled)

NC = not cropped (hay, pasture, idle, etc.)

Feature	Color	Manipulation (year of installation)
1 = water	6a = dark green	7a = ditched
2 = mud flat	6b = light green	7b = tilled
3 = bare spot	6c = yellow	7c = filled
4 = drowned crop	6d = brown	7d = tree/brush removal
5 = planted late	6e = black	8 = plowed/tilled

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FSA SLIDE REVIEW





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FSA SLIDE REVIEW

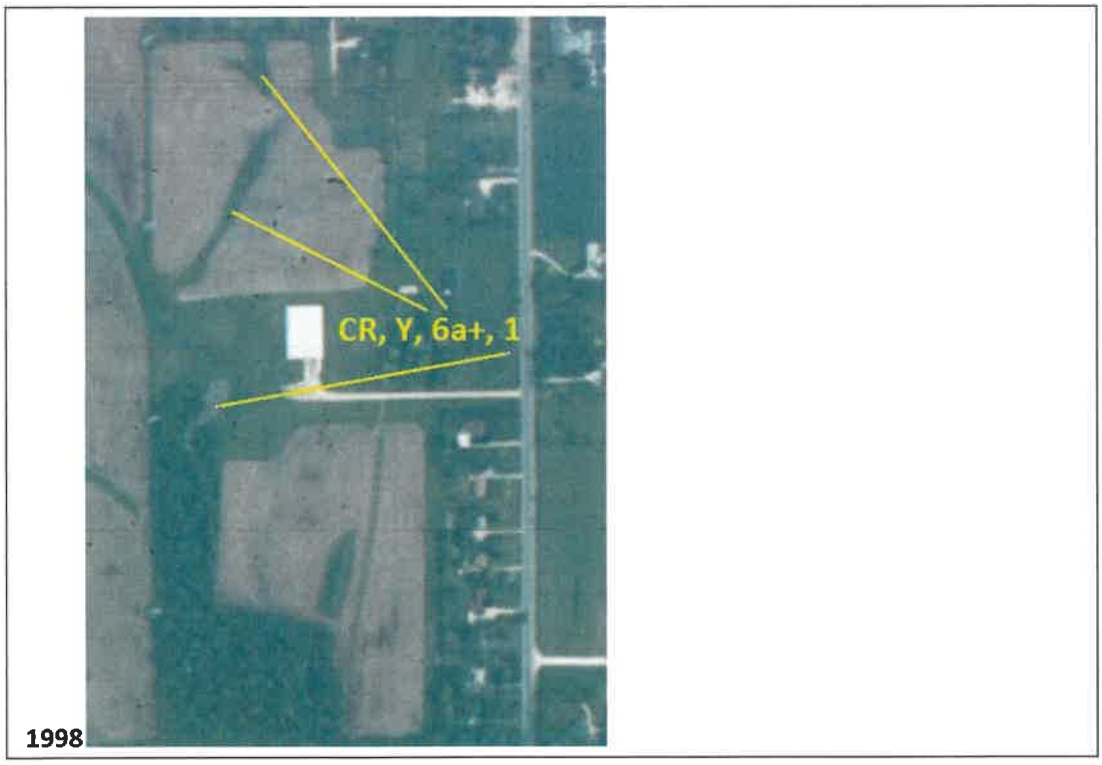




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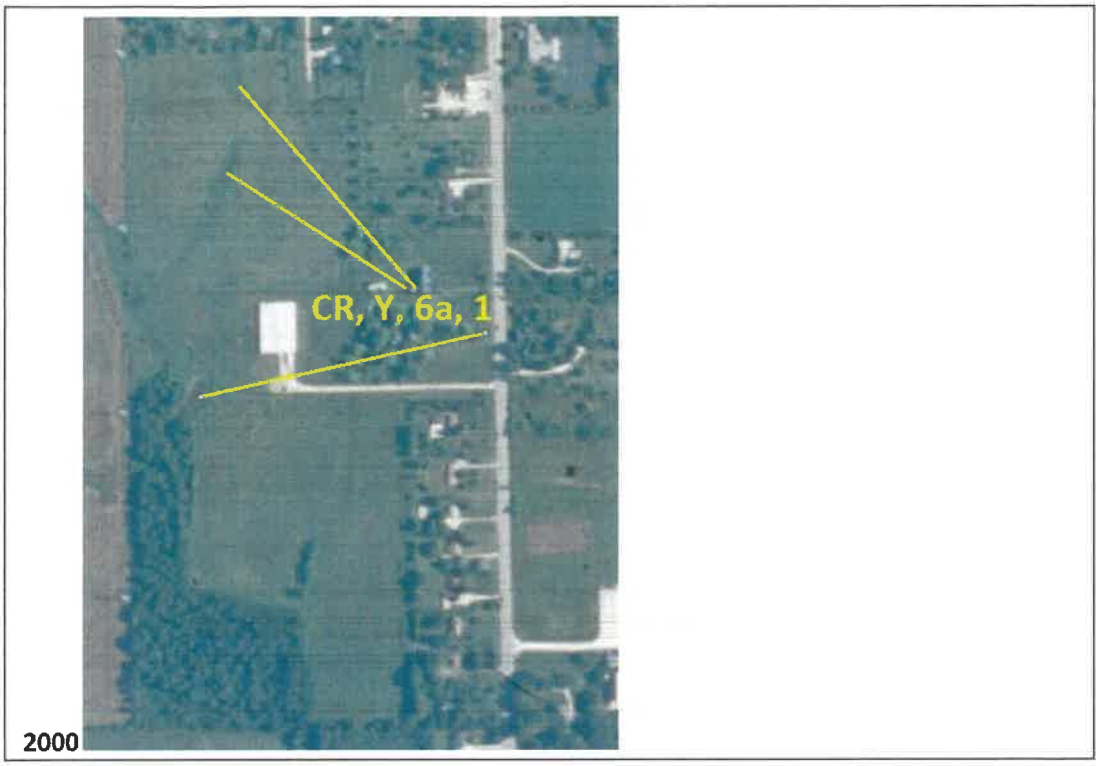
FSA SLIDE REVIEW

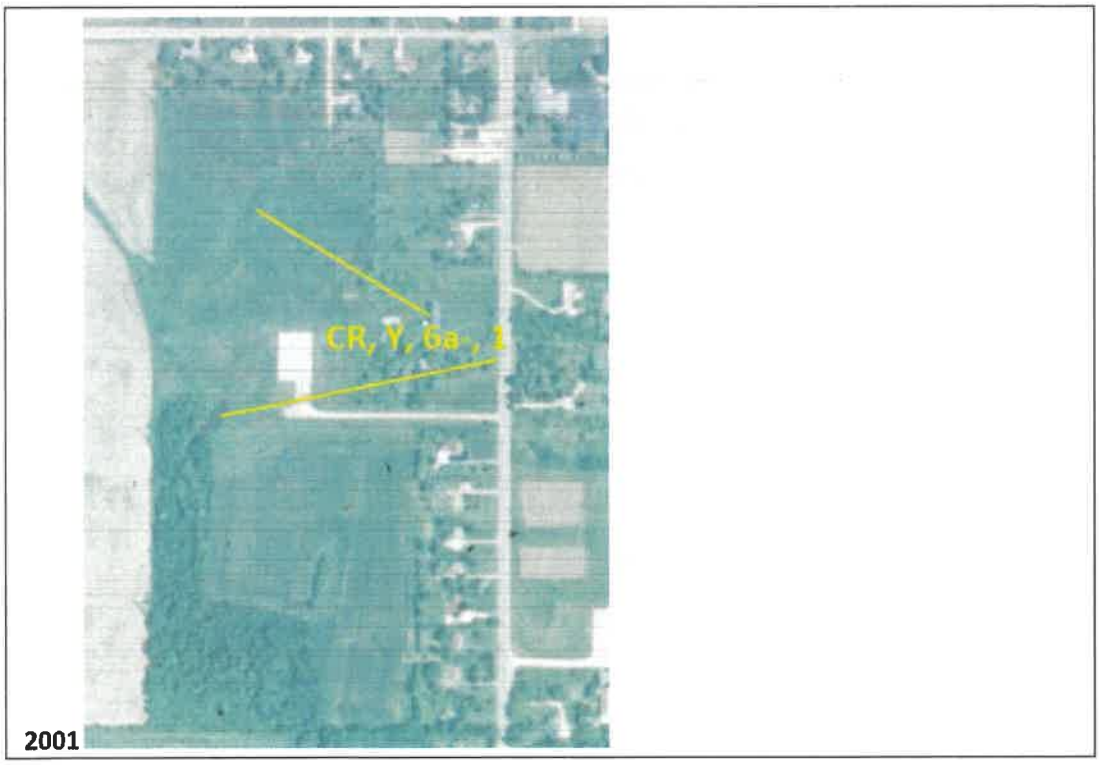




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FSA SLIDE REVIEW



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Barry Sullivan

From: Rezabek, Dale H - DNR <Dale.Rezabek@wisconsin.gov>
Sent: Wednesday, January 31, 2024 4:38 PM
To: Barry Sullivan
Subject: RE: Public Notice

CAUTION: This email originated from outside of the organization. Do not click links, open attachments, or reply unless you recognize the sender and know the content is safe.

Hi Barry,

I would like you to tell the committee that when they review the rezone case, that they should only rezone the project area from the shoreland-wetland district to uplands if the applicant can demonstrate to the satisfaction of the committee that there will be no significant adverse effects on wetlands, according to the ordinance elements in Section 7.1305 B. 1. Thru 7.

Thanks, Dale

We are committed to service excellence.
Visit our survey at http://dnr.wi.gov/customersurvey to evaluate how I did.

Dale Rezabek, PG (He/Him/His)
Water Management Specialist - Shoreland Specialist
WDNR Waterways Program
Phone: (920) 267-1739
Dale.Rezabek@wisconsin.gov

From: Barry Sullivan <bsullivan@ozaukeecounty.gov>
Sent: Friday, January 26, 2024 2:01 PM
To: Rezabek, Dale H - DNR <Dale.Rezabek@wisconsin.gov>; Stern, Andrea K - DNR <Andrea.Stern@wisconsin.gov>
Subject: Public Notice

Dale and Andrea –

Attached is a public notice. I had sent you this previous but when we started to set up the document share to go to the Natural Resources Committee, we noticed that I had the wrong meeting date. So, we had to pull it off and re-notice it for the March hearing date.

Regards,

Barry

Barry A. Sullivan
Sanitation and Zoning Specialist
Ozaukee County Land and Water Management Department
121 W. Main Street
Port Washington WI 53074
(262)284-8318

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Heartland
ECOLOGICAL GROUP INC

Assured Wetland Delineation Report

Bratt Property

Town of Grafton, Ozaukee County, Wisconsin

December 15, 2023

Project Number: 20231114

RECEIVED
DEC 19 2023
OZAUKEE COUNTY
LAND & WATER
MANAGEMENT DEPT

506 Springdale Street | Mount Horeb, WI 53572 | www.heartlandecological.com

Bratt Property

Town of Grafton, Ozaukee County, Wisconsin

December 15, 2023

Prepared for:

Mr. Kevin Parish

Parish Survey & Engineering

122 Wisconsin Street

West Bend, WI 53095

Prepared by:

Heartland Ecological Group, Inc.

506 Springdale Street

Mount Horeb, WI 53572

608-490-2450

www.heartlandecological.com

Prepared by: Keith Phelps, Environmental Technician

Reviewed by: Matthew Stangel, Environmental Scientist

Solutions for people, projects, and ecological resources.

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Appendix C | Wetland Determination Data Sheets

Appendix D | Site Photographs

Appendix E | Delineator Qualifications

Appendix F | NAIP Imagery

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

1.0 Introduction

Heartland Ecological Group, Inc. ("Heartland") completed an assured wetland determination and delineation on the Bratt Property site on October 17, 2023 at the request of Parish Survey & Engineering. Fieldwork was completed by Eric C. Parker, SPWS, and Matt Stangel, two assured delineators qualified via the Wisconsin Department of Natural Resources' (WDNR's) Wetland Delineation Assurance Program (Appendix E, Qualifications). The 44.73-acre site (the "Study Area") is southwest of the intersection of County Trunk Highway (CTH) T and CTH W, in the southeast ¼ of Section 31, T10N, R22E, Town of Grafton, Ozaukee County, WI (Figure 1, Appendix A). The purpose of the wetland delineation was to determine the location and extent of wetlands within the Study Area.

One (1) wetland area totaling approximately 10.55 acres was delineated and mapped within the Study Area (Figure 7, Appendix A). Two (2) unnamed waterways were also identified and mapped within the Study Area. Wetlands, waterways, and water bodies discussed in this report may be subject to federal regulation under the jurisdiction of the U.S. Army Corps of Engineers (USACE), state regulation under the jurisdiction of the WDNR, and local zoning authorities. Heartland recommends this report be submitted to local authorities, the WDNR, and USACE for final jurisdictional review and concurrence.

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2.0 Methods

2.1 Wetlands

Wetlands were determined and delineated using the criteria and methods described in the USACE Wetland Delineation Manual, T.R. Y-87-1 ("1987 Corps Manual") and the applicable *Regional Supplement to the Corps of Engineers Wetland Delineation Manual*. In addition, the *Guidance for Submittal of Delineation Reports to the St. Paul District USACE and the WDNR* (WDNR, 2015) was followed in completing the wetland delineation and report.

Determinations and delineations utilized available resources including the U.S. Geological Survey's (USGS) *WI 7.5 Minute Series (Topographic) Map* (Figure 2, Appendix A), the U.S. Department of Agriculture (USDA) Natural Resource Conservation Service's (NRCS) Soil Survey Geographic Database (SSURGO) *Web Soil Survey* (Figure 3, Appendix A), the WDNR's *Wetland Indicator* data layer (Figure 4, Appendix A), the WDNR's *Wisconsin Wetland Inventory* data layer (Figure 5, Appendix A), the WNDR's *24k Hydro Flowlines (Rivers and Streams)* data layer (Figure 2 and 5, Appendix A), the WDNR's *Color-Stretch LiDAR and Hillshade Image Service Layer* (Figure 6, Appendix A), and aerial imagery available through the USDA Farm Service Agency's (FSA) National Agriculture Imagery Program (NAIP).

Wetland determinations were completed on-site at sample points, often along transects, using the three (3) criteria (vegetation, soil, and hydrology) approach per the 1987 Corps Manual and the Regional Supplement. Procedures in these sources were followed to demonstrate that, under normal circumstances, wetlands were present or not present based on a predominance of hydrophytic vegetation, hydric soils, and wetland hydrology.

Atypical conditions were encountered within the Study Area due to the presence of agricultural fields including row-cropping and hay fields in areas with soils that may be hydric based on the *Web Soil Survey* and the WDNR *Surface Water Data Viewer's* wetland indicator data layer. Therefore, procedures for managed plant communities in the *Problematic hydrophytic vegetation* section described in Chapter 5 of the Regional Supplement were used. NAIP imagery were reviewed for evidence of crop stress, saturation, or inundation signatures. Sample point placements for the wetland delineation were partially determined based on such signatures.

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In actively farmed areas within the Study Area where hydric soils may be present, methods described in Chapter 5 (Difficult Wetland Situations) of the Regional Supplement were followed. Available aerial imagery was analyzed using procedures described in the *Guidance for Offsite Hydrology/Wetland Determinations* (USACE and Minnesota Board of Water and Soil Resources, July 2016 – "July 2016 Guidance"). An off-site aerial imagery analysis (Off-Site Analysis) was completed to document the presence or absence of wetland signatures and assist in the wetland determination. A wetland signature is evidence, recorded by aerial imagery, of ponding, flooding, or impacts of saturation for sufficient duration to meet wetland hydrology and possibly wetland vegetation criteria. Wetland signatures often vary based on the type and seasonal date of the aerial imagery. For example, there are seven (7) standardized signature types in actively farmed settings described in the July 2016 Guidance. To assist in interpretations of wetland signatures, a WETS analysis was used to compare antecedent precipitation in the three (3) months leading up to each aerial image to the long-term (30-year) precipitation averages and standard deviation to determine if antecedent precipitation conditions for each image was normal, wet, or dry. Areas within agricultural fields are typically determined to be wetland if hydric soils and wetland hydrology indicators are present and aerial images taken in the five (5) (or more) most recent normal antecedent precipitation images show at least one (1) of the wetland signatures per the July 2016 Guidance. Although the off-site analysis concentrates on imagery taken under normal antecedent precipitation conditions, the images determined to be taken under wet and dry antecedent precipitation conditions were also analyzed and considered. Determinations and delineation of wetlands in agricultural areas are typically based on an outline of the largest wetland signature on an image taken under "normal" antecedent conditions, and based on the consistency of the signatures (USDA, NRCS 1998).

Recent weather conditions influence the visibility or presence of certain wetland hydrology indicators. An assessment of recent precipitation patterns helps to determine if climatic/hydrologic conditions were typical when the field investigation was completed. Therefore, a review of antecedent precipitation in the 90 days leading up to the field investigation was completed. Using an Antecedent Precipitation Tool (APT) analysis developed by the USACE (Deters & Gutenson 2021), the amount of precipitation over these 90 days was compared to averages and standard deviation thresholds observed over the past 30 years to generally represent if conditions encountered during the investigation were

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normal, wet, or dry. Recent precipitation events in the weeks prior to the investigation were also considered while interpreting wetland hydrology indicators. Additionally, the Palmer Drought Severity Index was checked for long-term drought or moist conditions (NOAA, 2018).

The uppermost wetland boundary and sample points were identified and marked with wetland flagging and located with a Global Navigation Satellite System (GNSS) receiver capable of sub-meter accuracy. In some cases, wetland flagging was not utilized to mark the boundary and the location was only recorded with a GNSS receiver, particularly in active agricultural areas. The GNSS data was then used to map the wetlands using ESRI ArcGIS Pro™ software.

3.0 Results and Discussion

3.1 Desktop Review

Climatic Conditions

According to the APT analysis using the previous 90 days of precipitation data, conditions encountered at the time of the fieldwork were expected to be wetter than normal for the time of year (Appendix B). The Palmer Drought Severity Index was checked as part of the APT analysis, and the long-term conditions at the time of the fieldwork were in the mild drought range. Fieldwork was completed outside the dry-season based on long-term regional hydrology data utilized in the WebWIMP Climatic Water Balance and computed as part of the APT analysis.

General Topography and Land Use

The topography within the Study Area was rolling, with a southeast facing slope in the northwest portion of the Study Area and a relatively level flat plain in the southeast portion. A topographic high of approximately 705 feet above mean sea level (msl) occurs near the northwest corner, while a topographic low of approximately 655 feet above msl occurs near the southeast corner (Figures 2 and 6, Appendix A). Land uses within the Study Area and surrounding areas are primarily agricultural row cropping with residential, pasture, and woodland areas also present. General drainage is to the south and east towards waterways present in the central and northern portion of the Study Area.

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Soil Mapping

Soils mapped by the NRCS Soil Survey within the Study Area and their hydric status are summarized in Table 1. Wetlands identified during the field investigation are located primarily within areas mapped as hydric or partially hydric soils including wetland indicator soils (Figures 3 and 4, Appendix A).

Table 1. Summary of NRCS Mapped Soils within the Study Area

Soil Symbol: Soil Unit Name	Soil Unit Component	Soil Unit Component Percentage	Landform	Hydric status
KnB2: Kewaunee silt loam, 2 to 6 percent slopes, eroded	Kewaunee-Eroded	85-91	Ground moraines	No
	Manawa	8-12	Drainageways	No
	Poygan-Occasionally ponded	1-3	Depressions	Yes
KoB2: Kewaunee silty clay loam, 2 to 6 percent slopes, eroded	Kewaunee-Eroded	85-95	Moraines	No
	Kewaunee	2-7	Moraines	No
	Manawa	3-8	Drainageways	No
KoC2: Kewaunee silty clay loam, 6 to 12 percent slopes, eroded	Kewaunee-Eroded	85-95	Moraines	No
	Kewaunee	5-5	Moraines	No
	Sisson	0-5	Moraines	No
	Omro	0-5	Moraines	No
KrC3: Kewaunee silty clay, 6 to 12 percent slopes, severely eroded	Kewaunee-Severely eroded	92-97	Moraines	No
	Kewaunee-Eroded	3-8	Moraines	No
MaA: Manawa silt loam, 0 to 3 percent slopes	Manawa	80-91	Drainageways on ground moraines	No
	Kewaunee	6-11	Ground moraines	No
	Poygan-Occassionally ponded	3-9	Depressions	Yes
Sm: Sebewa silt loam, 0 to 2 percent slopes	Sebewa	80-95	Depressions	Yes
	Adrian	3-12	Lakebeds (relict)	Yes

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Soil Symbol: Soil Unit Name	Soil Unit Component	Soil Unit Component Percentage	Landform	Hydric status
	Ionia	1-5	Rises	No
	Fox	0-3	Rises	No

Wetland Mapping

The Wisconsin Wetlands Inventory (WWI) mapping (Figure 5, Appendix A) depicts three (3) wetland areas within the Study Area which are contiguous to one another and form a large wetland complex. One (1) scrub-shrub wetland (S3K) is depicted in the north-east and central portion of the Study Area, one (1) emergent/ wet meadow wetland is depicted in the south-central portion of the Study Area, and one (1) broadleaved forested/ scrub-shrub is present in the southeastern portion of the Study Area.

Waterway Mapping

The WDNR's Rivers and Streams data layer (Figure 5, Appendix A) depicts two (2) waterways within the Study Area. These intermittent waterways are present in the central and southern portion of the Study Area.

Previous Delineations and Landowner Contacts

Heartland is not aware of any prior wetland delineations conducted within the Study Area.

Aerial Photography

Available NAIP imagery of the Study Area from the period of 2005-2022 (Appendix F) was reviewed for evidence of wetland signatures and to gain insight into the site's recent history. The site exhibited no land disturbance (i.e. construction, earthwork, or timber harvesting) over the photo review period. The site has been devoted to agricultural row cropping in the northern, eastern, and western portions of the Study Area. The central and southern portions of the Study Area remained uncropped from 2005-2022.

Off-Site Analysis

Agricultural fields within the Study Area have significant mapped hydric or potentially hydric soils and were the focus of the off-site aerial imagery analysis (OSA) (Appendix F). From the

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aerial imagery, the secondary wetland hydrology indicators of "Saturation Visible on Aerial Imagery" (C9) and "Stunted or Stressed Plants" (D1) were noted in four (4) areas.

A total of twenty-one (21) aerial images were selected and reviewed based on availability and quality of the imagery. Of these images, thirteen (13) were taken under normal antecedent precipitation conditions. Signatures were noted in four (4) areas within the Study Area within landscape positions described by the NRCS to support hydric soil components and were the focus of the OSA. Wetland signatures per the July 2016 Guidance were not consistently noted in any of these areas on imagery taken under normal antecedent precipitation conditions. In imagery taken under wet antecedent precipitation conditions, such wetland signatures were noted in six (6) of the seven (7) images. In imagery taken under dry antecedent precipitation conditions, wetland signatures were not noted in the one (1) image.

Based on the off-site analysis, no (0) farmed areas were likely to be wetland prior to the fieldwork. There were no drain tile signatures noted in the off-site analysis.

3.2 Field Review

One (1) wetland was identified and delineated within the Study Area. Wetland determination data sheets (Appendix C) were completed at 21 sample points that were representative of the wetland and upland conditions near the boundary and where potential wetlands may be present based on the desktop review and field reconnaissance. Appendix D provides photographs, typically at the sample point locations of the wetlands and adjacent uplands. The wetland boundary and sample point locations are shown on Figure 7 (Appendix A) and the wetlands are summarized in Table 2 and detailed in the following sections.

Table 2. Summary of Wetlands Identified within the Study Area

Wetland ID	Wetland Description	*Surface Water Connections	*NR151 Protective Area	Acreage (on-site)
W-1	Wet Meadow/ Shrub-Carr	Contiguous to Waterways WW-1, WW-2	Less susceptible, 10-30 feet	10.55
				10.55

**Classification based on Heartland's professional opinion. Jurisdictional authority of wetland and waterway protective areas under NR 151 lies with the WDNR. Local zoning authorities may have additional restrictions. USACE has authority for determining federal jurisdiction of wetlands and waterways.*

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Wetland 1 (W-1)

Wetland 1 (W-1) is a 10.55-acre complex of wet meadow and shrub-carr located in the central and southern portion of the Study Area. The wetland was observed to be a former hardwood swamp which converted to wet meadow and shrub-carr plant communities after the loss of numerous green ash (*Fraxinus pennsylvanica*, FACW) trees due to Emerald Ash Borer.

Dominant vegetation observed in W-1 included reed canary grass (*Phalaris arundinacea*, FACW), boxelder (*Acer negundo*, FAC), multiflora rose (*Rosa multiflora*, UPL), giant goldenrod (*Solidago gigantea*, FACW), calico aster (*Symphyotrichum lateriflorum*, FAC), red-osier dogwood (*Cornus sericea*, FACW), New England aster (*Symphyotrichum novae-angliae*, FACW), purple-stem aster (*Symphyotrichum puniceum*, FACW), grey dogwood (*Cornus racemosa*, FAC), red top (*Agrostis gigantea*, FACW), and green ash. Therefore, the wetland vegetation parameter was met.

The Depleted Below Dark Surface (A11), Depleted Matrix (F3), and Redox Dark Surface (F6) hydric soil indicators were noted in various combinations within W-1, which is consistent with depressions of the mapped Manawa silt loam soil type. Thus, the hydric soil parameter was met.

The primary wetland hydrology indicators of High-Water Table (A2) and Saturation (A3) were noted within W-1, while secondary indicators included Geomorphic Position (D2) and a positive FAC-Neutral Test (D5). Therefore, the wetland hydrology parameter was met.

Wetland W-1 is contiguous with two (2) waterways present in the northern, central, and southern portions of the Study Area.

Waterways

Two (2) unnamed waterways were observed within the Study Area. The approximate centerline of the waterways was recorded in the field and is mapped on Figure 7, Appendix A. These waterways continued offsite to the north, east, and west and may be tributaries of the Milwaukee River.

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3.3 Other Considerations

This report is limited to the identification and delineation of wetlands within the Study Area. Other regulated environmental resources that result in land use restrictions may be present within the Study Area that were not evaluated by Heartland (e.g. navigable waterways, floodplains, cultural resources, and threatened or endangered species).

Wisconsin Act 183 provides exemptions to permitting requirements for certain nonfederal wetlands. Nonfederal wetlands are wetlands that are not subject to federal jurisdiction. Exemptions apply to projects in urban areas with wetland impacts up to 1-acre per parcel. An urban area is defined as an incorporated area; an area within ½ mile of an incorporated area; or an area served by a sewerage system. Exemptions for nonfederal wetlands also apply to projects in rural areas with wetland impacts up to three (3) acres per parcel. Exemptions in rural areas only apply to structures with an agricultural purpose such as buildings, roads, and driveways. The determination of federal and nonfederal wetlands MUST be made by the USACE through an Approved Jurisdictional Determination (AJD). This report may be submitted to the USACE to assist with their determination.

Wis. Adm. Code NR 151 ("NR 151") requires that a "protective area" (buffer) be determined from the Ordinary High-Water Mark (OHWM) of lakes, streams and rivers, or at the delineated boundary of wetlands. Per NR 151.12, the protective area width for "less susceptible" wetlands is determined by using 10% of the average wetland width, no less than 10 feet or more than 30 feet. "Moderately susceptible" wetlands, lakes, and perennial and intermittent streams identified on recent mapping require a protective area width of 50 feet; while "highly susceptible wetlands" are associated with outstanding or exceptional resource waters in areas of special natural resource interest and require protective area width of 75 feet. Table 2 above lists the potential wetland buffers per NR 151 for each wetland identified based on Heartland's professional opinion. Please note that jurisdictional authority on wetland and waterway protective areas under NR 151 lies with the WDNR. Local zoning authorities and regional planning organizations may have additional land use restrictions within or adjacent to wetlands.

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4.0 Conclusion

Heartland completed an assured wetland determination and delineation within the Bratt Property on October 17, 2023 at the request of Parish Survey & Engineering. Fieldwork was completed by Eric C. Parker, SPWS, and Matt Stangel, two assured delineators qualified via the WDNR Wetland Delineation Assurance Program (Appendix E). The Study Area lies in Section 31, T10N, R22E, Town of Grafton, Ozaukee County, WI (Figure 1, Appendix A).

One (1) wetland area was delineated and mapped within the 44.73-acre Study Area (Figure 7, Appendix A). The wetland, which may be classified as a complex of wet meadow and shrub-carr, totals approximately 10.55 acres within the Study Area. Two (2) unnamed waterways were also observed within the Study Area.

Wetlands, waterways, and water bodies discussed in this report may be subject to federal regulation under the jurisdiction of the USACE, state regulation under the jurisdiction of the WDNR, and the local zoning authority. Heartland recommends this report be submitted to the USACE and WDNR for final jurisdictional review and concurrence. Review by local authorities may be necessary for determination of any applicable zoning and setback restrictions.

Heartland recommends that all applicable regulatory agency reviews and permits are obtained prior to beginning work within the Study Area or within or adjacent to wetlands or waterways. Heartland can assist with evaluating the need for additional environmental reviews, surveys, or regulatory agency coordination in consideration of the proposed activity and land use as requested but is outside of the scope of the wetland delineation.

Experienced and qualified professionals completed the wetland determination and delineation using standard practices and professional judgment. Wetland boundaries may be affected by conditions present within the Study Area at the time of the fieldwork. All final decisions on wetlands and their boundaries are made by the USACE, the WDNR, and/or sometimes a local unit of government. Wetland determination and boundary reviews by regulatory agencies may result in modifications to the findings presented to the Client. These modifications may result from varying conditions between the time the wetland delineation was completed and the time of the review. Factors that may influence the findings may include but not limited to precipitation patterns, drainage modifications, changes or modification to vegetation, and the time of year.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

5.0 References

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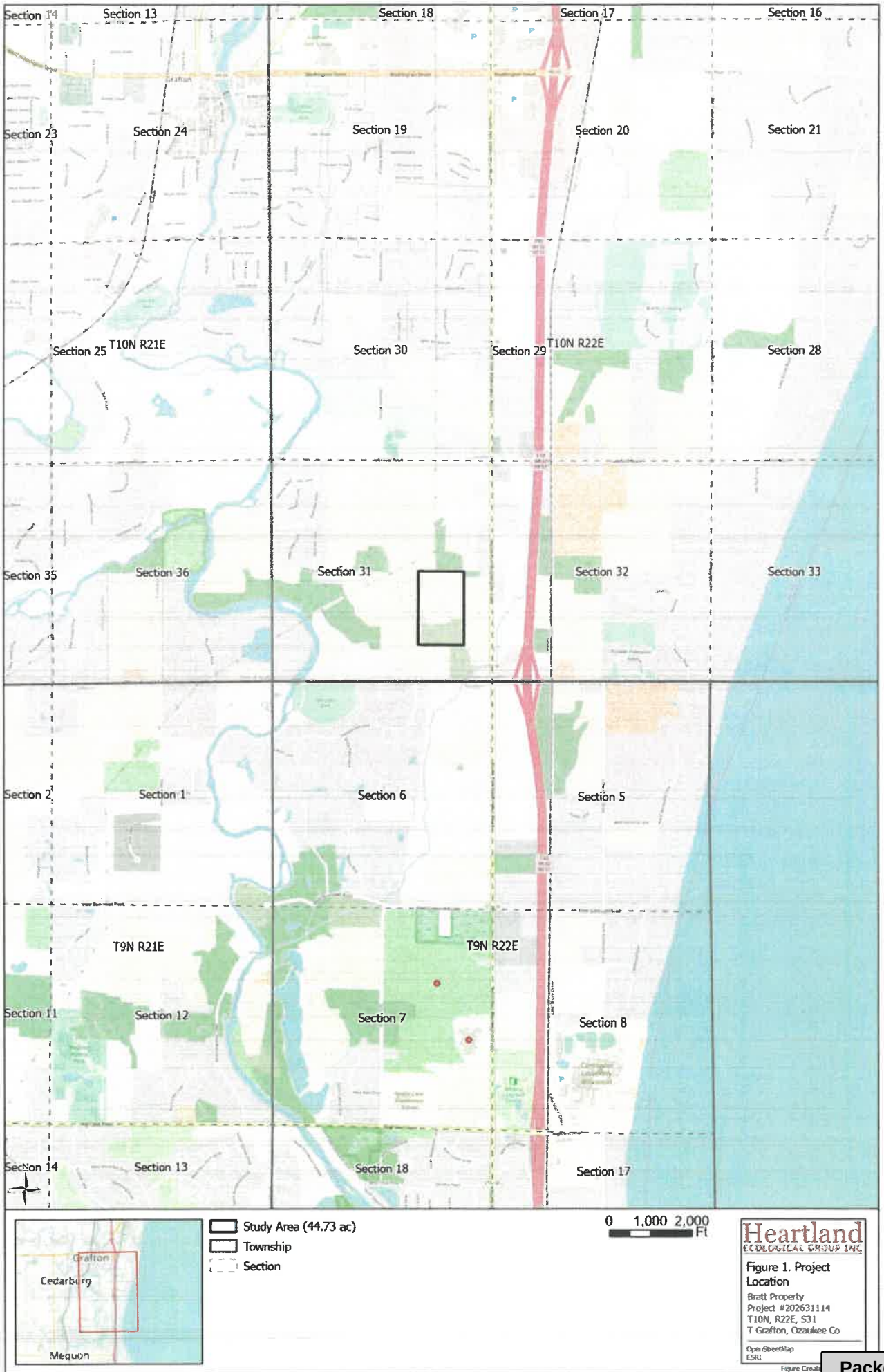
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Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

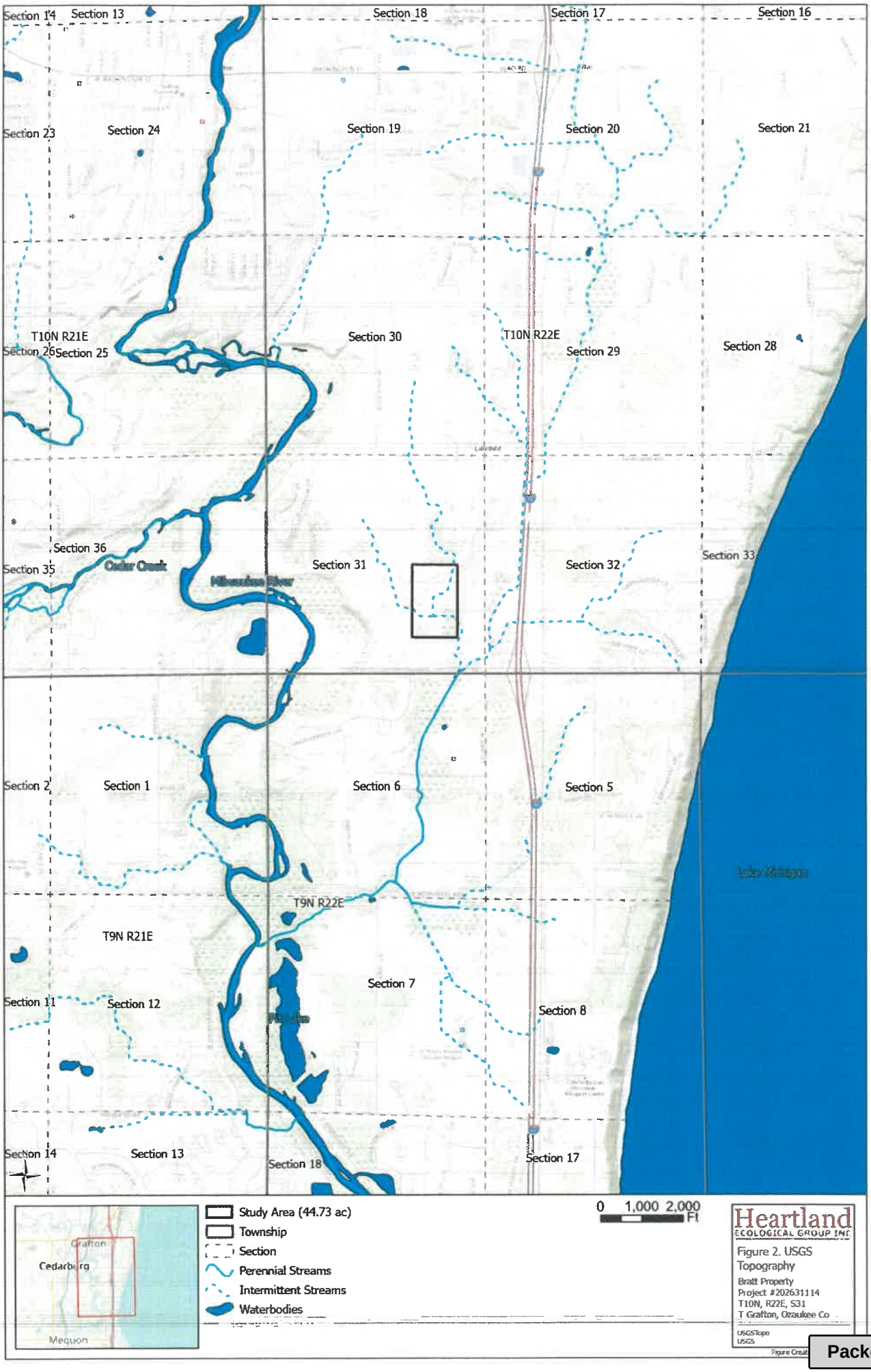
Parish Survey & Engineering
Bratt Property
Project #: 20231114
December 15, 2023

Appendix A | Figures

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,



Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,



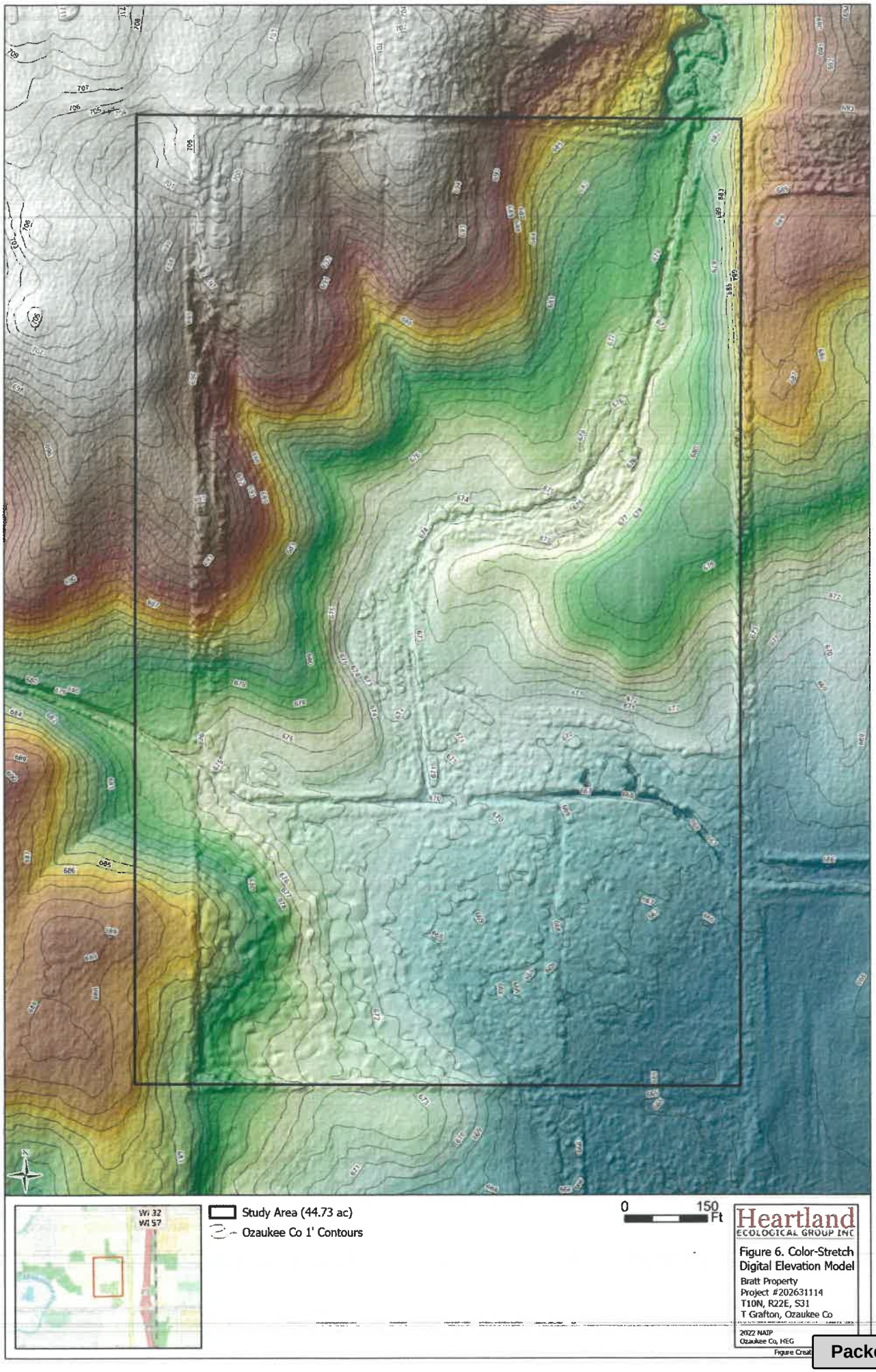
Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,



Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,


WI 32
WI 57
Study Area (44.73 ac)
SWDV Wetland Indicators
0
150
Ft
Heartland
ECOLOGICAL GROUP INC
Figure 4. SWDV Wetland Indicators
Bratt Property
Project #202631114
T10N, R22E, S31
T. Grafton, Ozaukee Co
2022 NAIP
WDNR


Study Area (44.73 ac)
WWI Wetland Polygons
WWI Wetland Points (None in Map Extent)
Perennial Streams (None in Map Extent)
Intermittent Streams
Waterbodies (None in Map Extent)
0
150
Ft
Heartland
ECOLOGICAL GROUP INC
Figure 5. Wisconsin Wetland Inventory
Bratt Property
Project #202631114
T10N, R22E, S31
T Grafton, Ozaukee Co
2022 NAIP
WDNR, USGS


Study Area (44.73 ac)
Ozaukee Co 1' Contours
0
150
Ft
Heartland
ECOLOGICAL GROUP INC
Figure 6. Color-Stretch Digital Elevation Model
Bratt Property
Project #202631114
T10N, R22E, S31
T Grafton, Ozaukee Co
2022 NAIP
Ozaukee Co, HEG



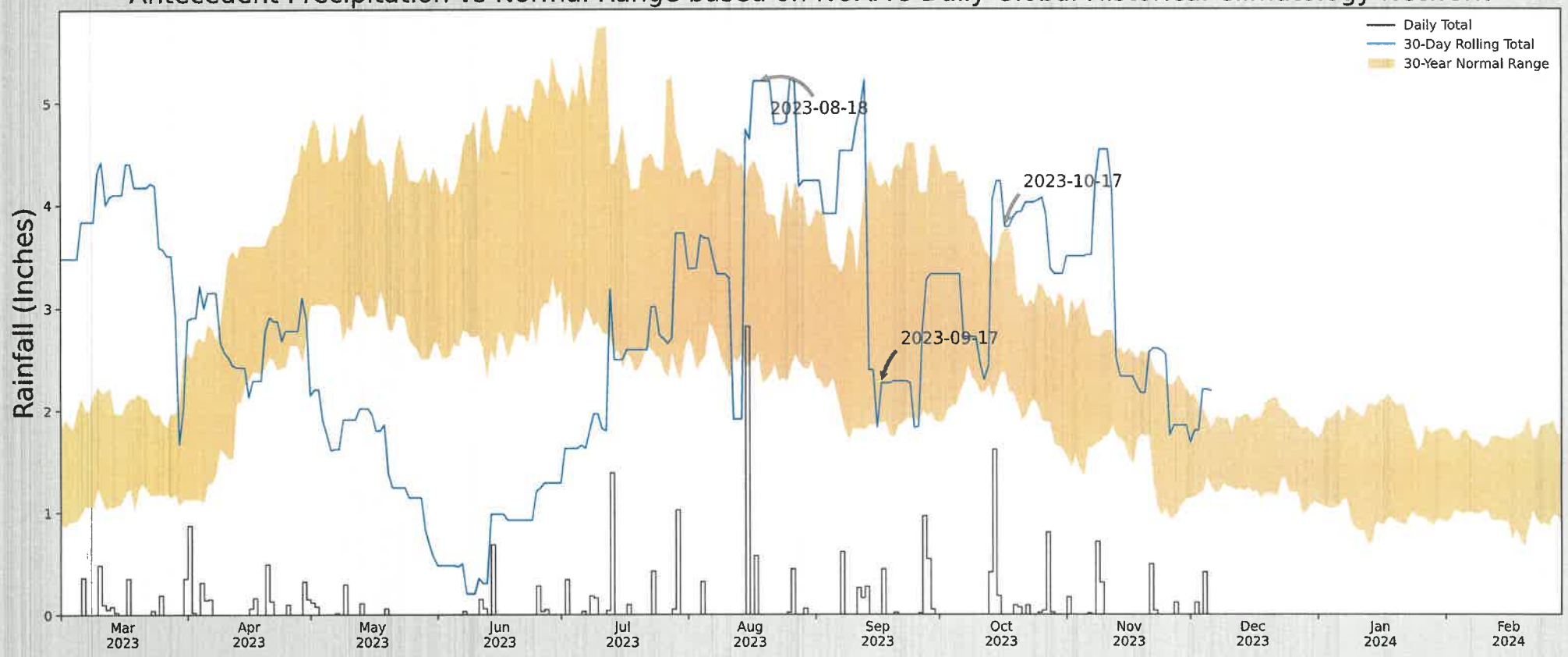
Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

Parish Survey & Engineering
Bratt Property
Project #: 20231114
December 15, 2023

Appendix B | APT Analysis

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	43.284922, -87.929141
Observation Date	2023-10-17
Elevation (ft)	673.55
Drought Index (PDSI)	Mild drought
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30th %ile (in)	70th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2023-10-17	2.364567	3.764173	3.783465	Wet	3	3	9
2023-09-17	1.88189	4.170866	2.26378	Normal	2	2	4
2023-08-18	2.595276	4.298819	5.200788	Wet	3	1	3
Result							Wetter than Normal - 16

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
GERMANTOWN WASTEWATER UTILITY	43.2389, -88.1222	870.079	10.221	196.529	6.608	11305	88
GERMANTOWN 0.6 S	43.2268, -88.1214	855.971	0.837	14.108	0.388	6	1
GERMANTOWN 1.3 NE	43.2313, -88.1023	887.139	1.131	17.06	0.528	2	0
HUBERTUS 3.1 E	43.2368, -88.1589	890.092	1.853	20.013	0.871	2	0
MENOMONEE FALLS 3.2 NNW	43.1882, -88.1555	881.89	3.884	11.811	1.794	2	0
CEDARBURG 3.7 WSW	43.2788, -88.0566	878.937	4.301	8.858	1.974	2	0
MENOMONEE FALLS 1.9 NNE	43.1735, -88.1141	835.958	4.537	34.121	2.196	0	1
JACKSON 0.5 SSE	43.3144, -88.1617	895.997	5.582	25.918	2.657	3	0
JACKSON 0.2 WSW	43.3201, -88.1682	888.123	6.069	18.044	2.841	4	0
WEST BEND	43.3681, -88.0858	939.961	9.113	69.882	4.738	20	0
W BEND FIRE STN #2	43.4319, -88.1603	895.013	13.472	24.934	6.398	4	0
MT MARY COLLEGE	43.0722, -88.0294	714.895	12.431	155.184	7.523	2	0

Figure and tables made by the **Antecedent Precipitation Tool** Version 1.0

Written by Jason Deters
U.S. Army Corps of Engineers

Parish Survey & Engineering
Bratt Property
Project #: 20231114
December 15, 2023

Appendix C | Wetland Determination Data Sheets

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 20231114 Bratt Property Grafton City/County: Ozaukee County Sampling Date: 2023-10-17

Applicant/Owner: Parish Survey & Engineering State: Wisconsin Sampling Point: P1

Investigator(s): Eric C Parker, SPWS, Matt Stangel Section, Township, Range: sec 31 T010N R022E

Landform (hillslope, terrace, etc.): Sideslope Local relief (concave, convex, none): None Slope (%): 3-7

Subregion (LRR or MLRA): LRR K, MLRA 95A Lat: 43.284122 Long: -87.927261 Datum: WGS84

Soil Map Unit Name: Manawa silt loam, 0 to 3 percent slopes NWI classification: T3/S3K (WWI)

Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No ✓ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✓	**Is the Sampled Area within a Wetland?** Yes _____ No ✓
Hydric Soil Present?	Yes _____	No ✓	
Wetland Hydrology Present?	Yes _____	No ✓	If yes, optional Wetland Site ID: _____

Remarks: (Explain alternative procedures here or in a separate report.)

APT indicates climatic conditions are in the wetter than normal range.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No ✓	Depth (inches): _____
Water Table Present?	Yes _____	No ✓	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes _____	No ✓	Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

NAIP imagery 2005-2022

Remarks:

No wetland hydrology indicators observed, no saturation.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

VEGETATION – Use scientific names of plants. Sampling Point: P1

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Tilia americana*	25	Y	FACU
2. *Ulmus americana*	10	Y	FACW
3.			
4.			
5.			
6.			
7.			
	35.0	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15)			
1. *LONICERA X BELLA*	20	Y	FACU
2. *RHAMNUS CATHARTICA*	10	Y	FAC
3. *ROSA MULTIFLORA*	7	N	FACU
4. *Prunus virginiana*	5	N	FACU
5.			
6.			
7.			
	42.0	= Total Cover	

Herb Stratum (Plot size: 5)			
1. *Ribes cynosbati*	10	Y	FACU
2. *Prunus virginiana*	10	Y	FACU
3. *Geum canadense*	7	Y	FAC
4. *RHAMNUS CATHARTICA*	7	Y	FAC
5. *Viola sororia*	5	N	FAC
6. *Symphyotrichum lateriflorum*	5	N	FAC
7. *Carex grisea*	2	N	FAC
8.			
9.			
10.			
11.			
12.			
	46.0	= Total Cover	

Woody Vine Stratum (Plot size: 30)			
1.			
2.			
3.			
4.			
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 8 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0.00	x 1 =	0.00
FACW species	10.00	x 2 =	20.00
FAC species	36.00	x 3 =	108.00
FACU species	77.00	x 4 =	308.00
UPL species	0.00	x 5 =	0.00
Column Totals:	123.00 (A)		436.00 (B)

Prevalence Index = B/A = 3.54

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ___ No ✓

Remarks: (Include photo numbers here or on a separate sheet.)

Brushy hardwoods. Fraxinus trees formerly co-dominant.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

SOIL

Sampling Point: P1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-11	10YR 3/2	100					L	
11-17	10YR 4/3	100					L	
17-24	7.5YR 5/3	100					SL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L)**
- ___ Polyvalue Below Surface (S8) **(LRR K, L)**
- ___ Thin Dark Surface (S9) **(LRR K, L)**
- ___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ✓

Remarks:

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 20231114 Bratt Property Grafton City/County: Ozaukee County Sampling Date: 2023-10-17

Applicant/Owner: Parish Survey & Engineering State: Wisconsin Sampling Point: P2

Investigator(s): Eric C Parker, SPWS, Matt Stangel Section, Township, Range: sec 31 T010N R022E

Landform (hillslope, terrace, etc.): Toeslope Local relief (concave, convex, none): Concave Slope (%): 0-2

Subregion (LRR or MLRA): LRR K, MLRA 95A Lat: 43.283968 Long: -87.927434 Datum: WGS84

Soil Map Unit Name: Manawa silt loam, 0 to 3 percent slopes NWI classification: T3/S3K (WWI)

Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No ✓ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓	No _____	**Is the Sampled Area within a Wetland?** Yes ✓ No _____
Hydric Soil Present?	Yes ✓	No _____	
Wetland Hydrology Present?	Yes ✓	No _____	If yes, optional Wetland Site ID: _____

Remarks: (Explain alternative procedures here or in a separate report.)

APT indicates climatic conditions are in the wetter than normal range.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ✓ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ✓ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ✓ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No ✓	Depth (inches): _____
Water Table Present?	Yes ✓	No _____	Depth (inches): 15
Saturation Present? (includes capillary fringe)	Yes ✓	No _____	Depth (inches): 11

Wetland Hydrology Present? Yes ✓ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

NAIP imagery 2005-2022

Remarks:

Riparian wetland along waterway

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

VEGETATION – Use scientific names of plants. Sampling Point: P2

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1. *ROSA MULTIFLORA*	10	Y	FACU
2. *Fraxinus pennsylvanica*	5	Y	FACW
3. *Acer negundo*	5	Y	FAC
4. *Prunus americana*	3	N	UPL
5. *RHAMNUS CATHARTICA*	2	N	FAC
6. *Cornus alba*	1	N	FACW
7.			
	26.0 = Total Cover		
Herb Stratum (Plot size: 5)			
1. *PHALARIS ARUNDINACEA*	40	Y	FACW
2. *Schoenoplectus tabernaemontani*	10	Y	OBL
3. *Solidago gigantea*	10	Y	FACW
4. *Cirsium arvense*	7	N	FACU
5. *Glyceria grandis*	5	N	OBL
6. *Ambrosia trifida*	5	N	FAC
7. *LYTHRUM SALICARIA*	5	N	OBL
8. *Rosa multiflora*	5	N	FACU
9. *Epilobium coloratum*	2	N	OBL
10. *Vitis riparia*	2	N	FAC
11.			
12.			
	91.0 = Total Cover		
Woody Vine Stratum (Plot size: 30)			
1.			
2.			
3.			
4.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 83.33 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	22.00	x 1 =	22.00
FACW species	56.00	x 2 =	112.00
FAC species	14.00	x 3 =	42.00
FACU species	22.00	x 4 =	88.00
UPL species	3.00	x 5 =	15.00
Column Totals:	117.00 (A)		279.00 (B)

Prevalence Index = B/A = 2.38

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- ✓ 2 - Dominance Test is >50%
- ✓ 3 - Prevalence Index is ≤3.0[1]
- ___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ✓ No ___

Remarks: (Include photo numbers here or on a separate sheet.)

SC associated with waterway. Fraxinus trees formerly dominant.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

SOIL Sampling Point: P2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-9	7.5YR 4/2	100					SIL	
9-19	7.5YR 4/2	98	7.5YR 4/4	2	C	M	SICL	
19-24	7.5YR 5/2	95	7.5YR 5/4	5	C	M	SIC	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ✓ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L)**
- ___ Polyvalue Below Surface (S8) **(LRR K, L)**
- ___ Thin Dark Surface (S9) **(LRR K, L)**
- ___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (If observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ✓ No ___

Remarks:

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 20231114 Bratt Property Grafton City/County: Ozaukee County Sampling Date: 2023-10-17

Applicant/Owner: Parish Survey & Engineering State: Wisconsin Sampling Point: P3

Investigator(s): Eric C Parker, SPWS, Matt Stangel Section, Township, Range: sec 31 T010N R022E

Landform (hillslope, terrace, etc.): Sideslope Local relief (concave, convex, none): None Slope (%): 3-7

Subregion (LRR or MLRA): LRR K, MLRA 95A Lat: 43.283842 Long: -87.927625 Datum: WGS84

Soil Map Unit Name: Manawa silt loam, 0 to 3 percent slopes NWI classification: T3/S3K (WWI)

Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No ✓ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓	No _____	**Is the Sampled Area within a Wetland?** Yes _____ No ✓
Hydric Soil Present?	Yes _____	No ✓	
Wetland Hydrology Present?	Yes _____	No ✓	If yes, optional Wetland Site ID: _____

Remarks: (Explain alternative procedures here or in a separate report.)

APT indicates climatic conditions are in the wetter than normal range.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No ✓	Depth (inches): _____
Water Table Present?	Yes _____	No ✓	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes _____	No ✓	Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

NAIP imagery 2005-2022

Remarks:

No wetland hydrology indicators observed, no saturation.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

VEGETATION – Use scientific names of plants. Sampling Point: P3

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer negundo*	20	Y	FAC
2. *MALUS PUMILA*	15	Y	UPL
3. *Crataegus coccinea; Crataegus lutelana; Crataegus pringlei; Crataegus pedicellata; Crataegus crmagnosa; C*	5	N	UPL
4.			
5.			
6.			
7.			
	40.0	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15)			
1. *RHAMNUS CATHARTICA*	15	Y	FAC
2.			
3.			
4.			
5.			
6.			
7.			
	15.0	= Total Cover	

Herb Stratum (Plot size: 5)			
1. *Glechoma hederacea*	60	Y	FACU
2. *RHAMNUS CATHARTICA*	20	Y	FAC
3. *Alliaria petiolata*	10	N	FACU
4. *Geum canadense*	3	N	FAC
5. *Cirsium arvense*	2	N	FACU
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	95.0	= Total Cover	

Woody Vine Stratum (Plot size: 30)			
1.			
2.			
3.			
4.			
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 60.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0.00	x 1 =	0.00
FACW species	0.00	x 2 =	0.00
FAC species	58.00	x 3 =	174.00
FACU species	72.00	x 4 =	288.00
UPL species	20.00	x 5 =	100.00
Column Totals:	150.00 (A)		562.00 (B)

Prevalence Index = B/A = 3.75

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- ✓ 2 - Dominance Test is >50%
- ___ 3 - Prevalence Index is ≤3.0[1]
- ___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ✓ No ___

Remarks: (Include photo numbers here or on a separate sheet.)

Brushy hardwoods. Fraxinus trees formerly co-dominant.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

SOIL

Sampling Point: P3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	7.5YR 3/2	100					SIL	
8-13	7.5YR 4/2	100					SIL	
13-17	7.5YR 4/2	98	7.5YR 4/3	2	C	M	SIL	
17-24	7.5YR 4/2	97	7.5YR 4/4	3	C	M	SCL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L)**
- ___ Polyvalue Below Surface (S8) **(LRR K, L)**
- ___ Thin Dark Surface (S9) **(LRR K, L)**
- ___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ✓

Remarks:

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 20231114 Bratt Property Grafton City/County: Ozaukee County Sampling Date: 2023-10-17

Applicant/Owner: Parish Survey & Engineering State: Wisconsin Sampling Point: P4

Investigator(s): Eric C Parker, SPWS, Matt Stangel Section, Township, Range: sec 31 T010N R022E

Landform (hillslope, terrace, etc.): Rise Local relief (concave, convex, none): None Slope (%): 0-2

Subregion (LRR or MLRA): LRR K, MLRA 95A Lat: 43.283143 Long: -87.927851 Datum: WGS84

Soil Map Unit Name: Manawa silt loam, 0 to 3 percent slopes NWI classification: T3/S3K (WWI)

Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No ✓ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✓	**Is the Sampled Area within a Wetland?** Yes _____ No ✓
Hydric Soil Present?	Yes _____	No ✓	
Wetland Hydrology Present?	Yes _____	No ✓	If yes, optional Wetland Site ID: _____

Remarks: (Explain alternative procedures here or in a separate report.)

APT indicates climatic conditions are in the wetter than normal range.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No ✓	Depth (inches): _____
Water Table Present?	Yes _____	No ✓	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes _____	No ✓	Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

NAIP imagery 2005-2022

Remarks:

No wetland hydrology indicators observed, no saturation.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

VEGETATION – Use scientific names of plants. Sampling Point: P4

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Tilia americana*	25	Y	FACU
2. *Quercus macrocarpa*	5	N	FACU
3.			
4.			
5.			
6.			
7.			
	30.0	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15)			
1. *Rosa multiflora*	7	Y	FACU
2. *Tilia americana*	7	Y	FACU
3. *RHAMNUS CATHARTICA*	3	N	FAC
4.			
5.			
6.			
7.			
	17.0	= Total Cover	

Herb Stratum (Plot size: 5)			
1. *Geum canadense*	20	Y	FAC
2. *Glechoma hederacea*	15	Y	FACU
3. *Symphyotrichum lateriflorum*	15	Y	FAC
4. *Solidago gigantea*	15	Y	FACW
5. *Carex grisea*	10	N	FAC
6. *RHAMNUS CATHARTICA*	5	N	FAC
7. *Alliaria petiolata*	3	N	FACU
8. *Viola sororia*	2	N	FAC
9.			
10.			
11.			
12.			
	85.0	= Total Cover	

Woody Vine Stratum (Plot size: 30)			
1.			
2.			
3.			
4.			
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 7 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 42.86 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0.00	x 1 =	0.00
FACW species	15.00	x 2 =	30.00
FAC species	55.00	x 3 =	165.00
FACU species	62.00	x 4 =	248.00
UPL species	0.00	x 5 =	0.00
Column Totals:	132.00 (A)		443.00 (B)

Prevalence Index = B/A = 3.36

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ___ No ✓

Remarks: (Include photo numbers here or on a separate sheet.)

Brushy hardwoods. Fraxinus trees formerly co-dominant.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

SOIL Sampling Point: P4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-9	7.5YR 3/2	100					SIL	
9-14	7.5YR 4/2	98	10YR 4/3	2	C	M	SIL	
14-18	7.5YR 4/2	97	7.5YR 4/4	3	C	M	SICL	
18-24	7.5YR 4/2	90	7.5YR 4/4	10	C	M	SICL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L)**
- ___ Polyvalue Below Surface (S8) **(LRR K, L)**
- ___ Thin Dark Surface (S9) **(LRR K, L)**
- ___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ✓

Remarks:

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 20231114 Bratt Property Grafton City/County: Ozaukee County Sampling Date: 2023-10-17

Applicant/Owner: Parish Survey & Engineering State: Wisconsin Sampling Point: P5

Investigator(s): Eric C Parker, SPWS, Matt Stangel Section, Township, Range: sec 31 T010N R022E

Landform (hillslope, terrace, etc.): Toeslope Local relief (concave, convex, none): Concave Slope (%): 0-2

Subregion (LRR or MLRA): LRR K, MLRA 95A Lat: 43.282896 Long: -87.927856 Datum: WGS84

Soil Map Unit Name: Sebewa silt loam, 0 to 2 percent slopes NWI classification: T3/S3K (WWI)

Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No ✓ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓	No _____	**Is the Sampled Area within a Wetland?** Yes ✓ No _____
Hydric Soil Present?	Yes ✓	No _____	
Wetland Hydrology Present?	Yes ✓	No _____	If yes, optional Wetland Site ID: _____

Remarks: (Explain alternative procedures here or in a separate report.)

APT indicates climatic conditions are in the wetter than normal range.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ✓ High Water Table (A2)
- ✓ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ✓ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ✓ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No ✓	Depth (inches): _____
Water Table Present?	Yes ✓	No _____	Depth (inches): 4
Saturation Present? (includes capillary fringe)	Yes ✓	No _____	Depth (inches): 0

Wetland Hydrology Present? Yes ✓ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

NAIP imagery 2005-2022

Remarks:

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

VEGETATION – Use scientific names of plants. Sampling Point: P5

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer saccharinum*	10	Y	FACW
2. *Ulmus americana*	7	Y	FACW
3.			
4.			
5.			
6.			
7.			
	17.0	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15)			
1. *Fraxinus pennsylvanica*	5	Y	FACW
2. *Prunus serotina*	2	Y	FACU
3. *ROSA MULTIFLORA*	1	N	FACU
4.			
5.			
6.			
7.			
	8.0	= Total Cover	

Herb Stratum (Plot size: 5)			
1. *Solidago gigantea*	25	Y	FACW
2. *PHALARIS ARUNDINACEA*	20	Y	FACW
3. *Symphyotrichum lateriflorum*	15	Y	FAC
4. *Geum canadense*	10	N	FAC
5. *Glechoma hederacea*	7	N	FACU
6. *Ranunculus hispidus*	7	N	FAC
7. *Rosa multiflora*	5	N	FACU
8. *Acer rubrum*	5	N	FAC
9. *Glyceria striata*	5	N	OBL
10. *Epilobium coloratum*	2	N	OBL
11.			
12.			
	101.0	= Total Cover	

Woody Vine Stratum (Plot size: 30)			
1.			
2.			
3.			
4.			
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 6 (A)

Total Number of Dominant Species Across All Strata: 7 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 85.71 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	7.00	x 1 =	7.00
FACW species	67.00	x 2 =	134.00
FAC species	37.00	x 3 =	111.00
FACU species	15.00	x 4 =	60.00
UPL species	0.00	x 5 =	0.00
Column Totals:	126.00 (A)		312.00 (B)

Prevalence Index = B/A = 2.48

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- ✓ 2 - Dominance Test is >50%
- ✓ 3 - Prevalence Index is ≤3.0[1]
- ___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ✓ No ___

Remarks: (Include photo numbers here or on a separate sheet.)
Mostly SC. Fraxinus trees formerly dominant, former HWS.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

SOIL

Sampling Point: P5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	7.5YR 4/2	100					SIL	
5-10	7.5YR 4/2	97	7.5YR 4/4	3	C	M	SIL	
10-24	7.5YR 4/1	90	7.5YR 4/6	10	C	M	SICL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ✓ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L)**
- ___ Polyvalue Below Surface (S8) **(LRR K, L)**
- ___ Thin Dark Surface (S9) **(LRR K, L)**
- ___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ✓ No ___

Remarks:

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 20231114 Bratt Property Grafton City/County: Ozaukee County Sampling Date: 2023-10-17

Applicant/Owner: Parish Survey & Engineering State: Wisconsin Sampling Point: P6

Investigator(s): Eric C Parker, SPWS, Matt Stangel Section, Township, Range: sec 31 T010N R022E

Landform (hillslope, terrace, etc.): Shoulder Local relief (concave, convex, none): Convex Slope (%): 3-7

Subregion (LRR or MLRA): LRR K, MLRA 95A Lat: 43.284216 Long: -87.930004 Datum: WGS84

Soil Map Unit Name: Manawa silt loam, 0 to 3 percent slopes NWI classification: None (WWI)

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No ✓ (If no, explain in Remarks.)

Are Vegetation ✓, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ____ No ✓

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No ✓	**Is the Sampled Area within a Wetland?** Yes ____ No ✓
Hydric Soil Present?	Yes ____	No ✓	
Wetland Hydrology Present?	Yes ____	No ✓	If yes, optional Wetland Site ID: ____

Remarks: (Explain alternative procedures here or in a separate report.)

Sample point located in an upland farm field planted to soybeans. Normal circumstances not present and vegetation significantly disturbed due to agricultural activities. APT indicates climatic conditions are in the wetter than normal range.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No ✓	Depth (inches): ____
Water Table Present?	Yes ____	No ✓	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No ✓	Depth (inches): ____

Wetland Hydrology Present? Yes ____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No wetland hydrology indicators observed, no saturation.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

VEGETATION – Use scientific names of plants. Sampling Point: P6

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		
Herb Stratum (Plot size: 5)			
1. *Amaranthus retroflexus*	15	Y	FACU
2. *Plantago major*	10	Y	FACU
3. *Ambrosia trifida*	5	N	FAC
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	30.0 = Total Cover		
Woody Vine Stratum (Plot size: 30)			
1.			
2.			
3.			
4.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0.00	x 1 =	0.00
FACW species	0.00	x 2 =	0.00
FAC species	5.00	x 3 =	15.00
FACU species	25.00	x 4 =	100.00
UPL species	0.00	x 5 =	0.00
Column Totals:	30.00 (A)		115.00 (B)

Prevalence Index = B/A = 3.83

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ___ No ✓

Remarks: (Include photo numbers here or on a separate sheet.)

Planted soybeans 70% of herb stratum; appear healthy.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

SOIL

Sampling Point: P6

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-14	10YR 3/2	100					SICL	
14-19	7.5YR 4/3	100					SIC	10% gravel

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L)**
- ___ Polyvalue Below Surface (S8) **(LRR K, L)**
- ___ Thin Dark Surface (S9) **(LRR K, L)**
- ___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ✓

Remarks:

Auger refusal at 19" due to rock and gravel.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 20231114 Bratt Property Grafton City/County: Ozaukee County Sampling Date: 2023-10-17

Applicant/Owner: Parish Survey & Engineering State: Wisconsin Sampling Point: P7

Investigator(s): Eric C Parker, SPWS, Matt Stangel Section, Township, Range: sec 31 T010N R022E

Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 0-2

Subregion (LRR or MLRA): LRR K, MLRA 95A Lat: 43.283987 Long: -87.930183 Datum: WGS84

Soil Map Unit Name: Manawa silt loam, 0 to 3 percent slopes NWI classification: None (WWI)

Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No ✓ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓	No _____	**Is the Sampled Area within a Wetland?** Yes ✓ No _____
Hydric Soil Present?	Yes ✓	No _____	
Wetland Hydrology Present?	Yes ✓	No _____	If yes, optional Wetland Site ID: _____

Remarks: (Explain alternative procedures here or in a separate report.)

APT indicates climatic conditions are in the wetter than normal range. Sample point located in a wet meadow.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ✓ High Water Table (A2)
- ✓ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ✓ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ✓ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No ✓	Depth (inches): _____
Water Table Present?	Yes ✓	No _____	Depth (inches): 0
Saturation Present? (includes capillary fringe)	Yes ✓	No _____	Depth (inches): 0

Wetland Hydrology Present? Yes ✓ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

VEGETATION – Use scientific names of plants. Sampling Point: P7

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		

Sapling/Shrub Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		

Herb Stratum (Plot size: 5)			
1. *Phalaris arundinacea*	100	Y	FACW
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	100.0 = Total Cover		

Woody Vine Stratum (Plot size: 30)			
1.			
2.			
3.			
4.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0.00	x 1 =	0.00
FACW species	100.00	x 2 =	200.00
FAC species	0.00	x 3 =	0.00
FACU species	0.00	x 4 =	0.00
UPL species	0.00	x 5 =	0.00
Column Totals:	100.00 (A)		200.00 (B)

Prevalence Index = B/A = 2.0

Hydrophytic Vegetation Indicators:

- ✓ 1 - Rapid Test for Hydrophytic Vegetation
- ✓ 2 - Dominance Test is >50%
- ✓ 3 - Prevalence Index is ≤3.0[1]
- ___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ✓ No ___

Remarks: (Include photo numbers here or on a separate sheet.)

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

SOIL Sampling Point: P7

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-11	10YR 3/1	90	7.5YR 5/6	10	C	M	SICL	
11-24	10YR 4/1	85	10YR 5/6	15	C	M	SICL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ✓ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ✓ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L)**
- ___ Polyvalue Below Surface (S8) **(LRR K, L)**
- ___ Thin Dark Surface (S9) **(LRR K, L)**
- ___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ✓ No ___

Remarks:

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 20231114 Bratt Property Grafton City/County: Ozaukee County Sampling Date: 2023-10-17

Applicant/Owner: Parish Survey & Engineering State: Wisconsin Sampling Point: P8

Investigator(s): Eric C Parker, SPWS, Matt Stangel Section, Township, Range: sec 31 T010N R022E

Landform (hillslope, terrace, etc.): Backslope Local relief (concave, convex, none): None Slope (%): 3-7

Subregion (LRR or MLRA): LRR K, MLRA 95A Lat: 43.283784 Long: -87.930257 Datum: WGS84

Soil Map Unit Name: Manawa silt loam, 0 to 3 percent slopes NWI classification: None (WWI)

Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No ✓ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✓	**Is the Sampled Area within a Wetland?** Yes _____ No ✓
Hydric Soil Present?	Yes _____	No ✓	
Wetland Hydrology Present?	Yes _____	No ✓	If yes, optional Wetland Site ID: _____

Remarks: (Explain alternative procedures here or in a separate report.)

APT indicates climatic conditions are in the wetter than normal range. Sample point located in an upland forest.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No ✓	Depth (inches): _____
Water Table Present?	Yes _____	No ✓	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes _____	No ✓	Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No wetland hydrology indicators observed, no saturation.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

VEGETATION – Use scientific names of plants. Sampling Point: P8

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Pinus strobus*	40	Y	FACU
2. *PICEA ABIES*	10	Y	UPL
3.			
4.			
5.			
6.			
7.			
	50.0	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15)			
1. *Fraxinus pennsylvanica*	5	Y	FACW
2.			
3.			
4.			
5.			
6.			
7.			
	5.0	= Total Cover	

Herb Stratum (Plot size: 5)			
1. *Viola sororia*	5	Y	FAC
2. *Prunus serotina*	5	Y	FACU
3. *Taraxacum officinale*	1	N	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	11.0	= Total Cover	

Woody Vine Stratum (Plot size: 30)			
1.			
2.			
3.			
4.			
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 40.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0.00	x 1 =	0.00
FACW species	5.00	x 2 =	10.00
FAC species	5.00	x 3 =	15.00
FACU species	46.00	x 4 =	184.00
UPL species	10.00	x 5 =	50.00
Column Totals:	66.00 (A)		259.00 (B)

Prevalence Index = B/A = 3.92

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ___ No ✓

Remarks: (Include photo numbers here or on a separate sheet.)

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

SOIL

Sampling Point: P8

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	10YR 3/2	100					SIL	
12-24	7.5YR 4/3	100					SIC	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L)**
- ___ Polyvalue Below Surface (S8) **(LRR K, L)**
- ___ Thin Dark Surface (S9) **(LRR K, L)**
- ___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ✓

Remarks:

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 20231114 Bratt Property Grafton City/County: Ozaukee County Sampling Date: 2023-10-17

Applicant/Owner: Parish Survey & Engineering State: Wisconsin Sampling Point: P9

Investigator(s): Eric C Parker, SPWS, Matt Stangel Section, Township, Range: sec 31 T010N R022E

Landform (hillslope, terrace, etc.): Backslope Local relief (concave, convex, none): None Slope (%): 3-7

Subregion (LRR or MLRA): LRR K, MLRA 95A Lat: 43.286221 Long: -87.930700 Datum: WGS84

Soil Map Unit Name: Kewaunee silty clay, 6 to 12 percent slopes, severely eroded NWI classification: None (WWI)

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No ✓ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No ✓	**Is the Sampled Area within a Wetland?** Yes ____ No ✓
Hydric Soil Present?	Yes ____	No ✓	
Wetland Hydrology Present?	Yes ____	No ✓	If yes, optional Wetland Site ID: ____

Remarks: (Explain alternative procedures here or in a separate report.)

APT indicates climatic conditions are in the wetter than normal range. Sample point located in an upland forest/tree line in a poorly defined overland swale.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No ✓	Depth (inches): ____
Water Table Present?	Yes ____	No ✓	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No ✓	Depth (inches): ____

Wetland Hydrology Present? Yes ____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No wetland hydrology indicators observed, no saturation.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

VEGETATION – Use scientific names of plants. Sampling Point: P9

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Pinus strobus*	25	Y	FACU
2. *PICEA ABIES*	10	Y	UPL
3.			
4.			
5.			
6.			
7.			
	35.0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15)			
1. *LONICERA X BELLA*	10	Y	FACU
2. *RHAMNUS CATHARTICA*	10	Y	FAC
3. *Fraxinus pennsylvanica*	5	Y	FACW
4.			
5.			
6.			
7.			
	25.0	= Total Cover	
Herb Stratum (Plot size: 5)			
1. *Bromus inermis*	30	Y	UPL
2. *Solidago canadensis*	20	Y	FACU
3. *Hesperis matronalis*	15	N	FACU
4. *Cirsium arvense*	15	N	FACU
5. *Arctium minus*	5	N	FACU
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	85.0	= Total Cover	
Woody Vine Stratum (Plot size: 30)			
1.			
2.			
3.			
4.			
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 7 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 28.57 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0.00	x 1 =	0.00
FACW species	5.00	x 2 =	10.00
FAC species	10.00	x 3 =	30.00
FACU species	90.00	x 4 =	360.00
UPL species	40.00	x 5 =	200.00
Column Totals:	145.00 (A)		600.00 (B)

Prevalence Index = B/A = 4.14

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ___ No ✓

Remarks: (Include photo numbers here or on a separate sheet.)

Dead Fraxinus pennsylvanica approximately 15% of tree stratum.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

SOIL

Sampling Point: P9

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-17	7.5YR 3/2	100					SICL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L)**
- ___ Polyvalue Below Surface (S8) **(LRR K, L)**
- ___ Thin Dark Surface (S9) **(LRR K, L)**
- ___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ✓

Remarks:

Auger refusal at 17" due to rocks.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 20231114 Bratt Property Grafton City/County: Ozaukee County Sampling Date: 2023-10-17

Applicant/Owner: Parish Survey & Engineering State: Wisconsin Sampling Point: P10

Investigator(s): Eric C Parker, SPWS, Matt Stangel Section, Township, Range: sec 31 T010N R022E

Landform (hillslope, terrace, etc.): Backslope Local relief (concave, convex, none): None Slope (%): 3-7

Subregion (LRR or MLRA): LRR K, MLRA 95A Lat: 43.285566 Long: -87.929753 Datum: WGS84

Soil Map Unit Name: Kewaunee silty clay, 6 to 12 percent slopes, severely eroded NWI classification: None (WWI)

Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No ✓ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✓	**Is the Sampled Area within a Wetland?** Yes _____ No ✓
Hydric Soil Present?	Yes _____	No ✓	
Wetland Hydrology Present?	Yes ✓	No _____	If yes, optional Wetland Site ID: _____

Remarks: (Explain alternative procedures here or in a separate report.)

APT indicates climatic conditions are in the wetter than normal range. Sample point located in an upland meadow in a vegetated swale within a farm field; normal circumstances present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ✓ Saturation Visible on Aerial Imagery (C9)
- ✓ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No ✓	Depth (inches): _____
Water Table Present?	Yes _____	No ✓	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes _____	No ✓	Depth (inches): _____

Wetland Hydrology Present? Yes ✓ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

OSA Review Area 3

Remarks:

C9 and D1 indicators derived from OSA.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

VEGETATION – Use scientific names of plants.

Sampling Point: P10

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		
Herb Stratum (Plot size: 5)			
1. *Phleum pratense*	30	Y	FACU
2. *Poa pratensis*	20	Y	FACU
3. *Taraxacum officinale*	15	Y	FACU
4. *Setaria pumila*	15	Y	FAC
5. *Erigeron annuus*	10	N	FACU
6. *Phalaris arundinacea*	10	N	FACW
7. *Amaranthus retroflexus*	3	N	FACU
8.			
9.			
10.			
11.			
12.			
	103.0 = Total Cover		
Woody Vine Stratum (Plot size: 30)			
1.			
2.			
3.			
4.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 25.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0.00	x 1 =	0.00
FACW species	10.00	x 2 =	20.00
FAC species	15.00	x 3 =	45.00
FACU species	78.00	x 4 =	312.00
UPL species	0.00	x 5 =	0.00
Column Totals:	103.00 (A)		377.00 (B)

Prevalence Index = B/A = 3.66

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ____ No ✓

Remarks: (Include photo numbers here or on a separate sheet.)

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

SOIL

Sampling Point: P10

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	7.5YR 3/2	100					SICL	
16-24	7.5YR 4/3	80	7.5YR 5/6	20	C	M	SICL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L)**
- ___ Polyvalue Below Surface (S8) **(LRR K, L)**
- ___ Thin Dark Surface (S9) **(LRR K, L)**
- ___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ✓

Remarks:

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 20231114 Bratt Property Grafton City/County: Ozaukee County Sampling Date: 2023-10-17

Applicant/Owner: Parish Survey & Engineering State: Wisconsin Sampling Point: P11

Investigator(s): Eric C Parker, SPWS, Matt Stangel Section, Township, Range: sec 31 T010N R022E

Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 0-2

Subregion (LRR or MLRA): LRR K, MLRA 95A Lat: 43.285277 Long: -87.929377 Datum: WGS84

Soil Map Unit Name: Manawa silt loam, 0 to 3 percent slopes NWI classification: S3K (WWI)

Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No ✓ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓	No _____	**Is the Sampled Area within a Wetland?** Yes ✓ No _____
Hydric Soil Present?	Yes ✓	No _____	
Wetland Hydrology Present?	Yes ✓	No _____	If yes, optional Wetland Site ID: _____

Remarks: (Explain alternative procedures here or in a separate report.)

APT indicates climatic conditions are in the wetter than normal range. Sample point located in a wet meadow.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ✓ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ✓ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ✓ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No ✓	Depth (inches): _____
Water Table Present?	Yes ✓	No _____	Depth (inches): 18
Saturation Present? (includes capillary fringe)	Yes ✓	No _____	Depth (inches): 0

Wetland Hydrology Present? Yes ✓ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

VEGETATION – Use scientific names of plants. Sampling Point: P11

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1. *Cornus alba*	15	Y	FACW
2. *Fraxinus pennsylvanica*	5	Y	FACW
3.			
4.			
5.			
6.			
7.			
	20.0 = Total Cover		
Herb Stratum (Plot size: 5)			
1. *Phalaris arundinacea*	100	Y	FACW
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	100.0 = Total Cover		
Woody Vine Stratum (Plot size: 30)			
1.			
2.			
3.			
4.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0.00	x 1 =	0.00
FACW species	120.00	x 2 =	240.00
FAC species	0.00	x 3 =	0.00
FACU species	0.00	x 4 =	0.00
UPL species	0.00	x 5 =	0.00
Column Totals:	120.00 (A)		240.00 (B)

Prevalence Index = B/A = 2.0

Hydrophytic Vegetation Indicators:

- ✓ 1 - Rapid Test for Hydrophytic Vegetation
- ✓ 2 - Dominance Test is >50%
- ✓ 3 - Prevalence Index is ≤3.0[1]
- ___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ✓ No ___

Remarks: (Include photo numbers here or on a separate sheet.)

Dead Fraxinus pennsylvanica in tree stratum.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

SOIL Sampling Point: P11

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 4/2	95	10YR 5/8	5			SICL	
10-24	7.5YR 4/1	80	10YR 5/6	20	C	M	SICL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ✓ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L)**
- ___ Polyvalue Below Surface (S8) **(LRR K, L)**
- ___ Thin Dark Surface (S9) **(LRR K, L)**
- ___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ✓ No ___

Remarks:

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 20231114 Bratt Property Grafton City/County: Ozaukee County Sampling Date: 2023-10-17

Applicant/Owner: Parish Survey & Engineering State: Wisconsin Sampling Point: P12

Investigator(s): Eric C Parker, SPWS, Matt Stangel Section, Township, Range: sec 31 T010N R022E

Landform (hillslope, terrace, etc.): Backslope Local relief (concave, convex, none): None Slope (%): 8-15

Subregion (LRR or MLRA): LRR K, MLRA 95A Lat: 43.286427 Long: -87.929605 Datum: WGS84

Soil Map Unit Name: Kewaunee silty clay, 6 to 12 percent slopes, severely eroded NWI classification: None (WWI)

Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No ✓ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✓	**Is the Sampled Area within a Wetland?** Yes _____ No ✓
Hydric Soil Present?	Yes _____	No ✓	
Wetland Hydrology Present?	Yes _____	No ✓	If yes, optional Wetland Site ID: _____

Remarks: (Explain alternative procedures here or in a separate report.)

APT indicates climatic conditions are in the wetter than normal range. Sample point located in an upland meadow; not farmed - normal circumstances present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ✓ Saturation Visible on Aerial Imagery (C9)
- ✓ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No ✓	Depth (inches): _____
Water Table Present?	Yes _____	No ✓	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes _____	No ✓	Depth (inches): _____

Wetland Hydrology Present? Yes ✓ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

OSA Review Area 4

Remarks:

C9 and D1 indicators derived from OSA.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

VEGETATION – Use scientific names of plants. Sampling Point: P12

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		
Herb Stratum (Plot size: 5)			
1. *Bromus inermis*	40	Y	UPL
2. *Poa pratensis*	30	Y	FACU
3. *Solidago canadensis*	15	N	FACU
4. *Andropogon gerardii*	15	N	FACU
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	100.0 = Total Cover		
Woody Vine Stratum (Plot size: 30)			
1.			
2.			
3.			
4.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0.00	x 1 =	0.00
FACW species	0.00	x 2 =	0.00
FAC species	0.00	x 3 =	0.00
FACU species	60.00	x 4 =	240.00
UPL species	40.00	x 5 =	200.00
Column Totals:	100.00 (A)		440.00 (B)

Prevalence Index = B/A = 4.4

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ____ No ✓

Remarks: (Include photo numbers here or on a separate sheet.)

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

SOIL Sampling Point: P12

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-17	7.5YR 3/2	100					SICL	
17-24	7.5YR 4/3	80	7.5YR 5/6	20	C	M	SIC	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L)**
- ___ Polyvalue Below Surface (S8) **(LRR K, L)**
- ___ Thin Dark Surface (S9) **(LRR K, L)**
- ___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ✓

Remarks:

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 20231114 Bratt Property Grafton City/County: Ozaukee County Sampling Date: 2023-10-17

Applicant/Owner: Parish Survey & Engineering State: Wisconsin Sampling Point: P13

Investigator(s): Eric C Parker, SPWS, Matt Stangel Section, Township, Range: sec 31 T010N R022E

Landform (hillslope, terrace, etc.): Backslope Local relief (concave, convex, none): None Slope (%): 3-7

Subregion (LRR or MLRA): LRR K, MLRA 95A Lat: 43.284802 Long: -87.928863 Datum: WGS84

Soil Map Unit Name: Manawa silt loam, 0 to 3 percent slopes NWI classification: None (WWI)

Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No ✓ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✓	**Is the Sampled Area within a Wetland?** Yes _____ No ✓
Hydric Soil Present?	Yes _____	No ✓	
Wetland Hydrology Present?	Yes ✓	No _____	If yes, optional Wetland Site ID: _____

Remarks: (Explain alternative procedures here or in a separate report.)

APT indicates climatic conditions are in the wetter than normal range. Sample point located in an upland old field; normal circumstances present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ✓ Saturation Visible on Aerial Imagery (C9)
- ✓ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No ✓	Depth (inches): _____
Water Table Present?	Yes _____	No ✓	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes _____	No ✓	Depth (inches): _____

Wetland Hydrology Present? Yes ✓ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

OSA Review Area 1

Remarks:

C9 and D1 indicators derived from OSA.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

VEGETATION – Use scientific names of plants.

Sampling Point: P13

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		
Herb Stratum (Plot size: 5)			
1. *Poa pratensis*	40	Y	FACU
2. *Dactylis glomerata*	20	Y	FACU
3. *Taraxacum officinale*	15	N	FACU
4. *TRIFOLIUM PRATENSE*	15	N	FACU
5. *Erigeron annuus*	10	N	FACU
6. *Rumex crispus*	10	N	FAC
7.			
8.			
9.			
10.			
11.			
12.			
	110.0 = Total Cover		
Woody Vine Stratum (Plot size: 30)			
1.			
2.			
3.			
4.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0.00	x 1 =	0.00
FACW species	0.00	x 2 =	0.00
FAC species	10.00	x 3 =	30.00
FACU species	100.00	x 4 =	400.00
UPL species	0.00	x 5 =	0.00
Column Totals:	110.00 (A)		430.00 (B)

Prevalence Index = B/A = 3.91

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ___ No ✓

Remarks: (Include photo numbers here or on a separate sheet.)

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

SOIL

Sampling Point: P13

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-16	7.5YR 3/1	100					SICL	
16-24	10YR 4/3	100					SICL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L)**
- ___ Polyvalue Below Surface (S8) **(LRR K, L)**
- ___ Thin Dark Surface (S9) **(LRR K, L)**
- ___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ✓

Remarks:

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 20231114 Bratt Property Grafton City/County: Ozaukee County Sampling Date: 2023-10-17

Applicant/Owner: Parish Survey & Engineering State: Wisconsin Sampling Point: P14

Investigator(s): Eric C Parker, SPWS, Matt Stangel Section, Township, Range: sec 31 T010N R022E

Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 0-2

Subregion (LRR or MLRA): LRR K, MLRA 95A Lat: 43.284495 Long: -87.929134 Datum: WGS84

Soil Map Unit Name: Manawa silt loam, 0 to 3 percent slopes NWI classification: S3K (WWI)

Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No ✓ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓	No _____	**Is the Sampled Area within a Wetland?** Yes ✓ No _____
Hydric Soil Present?	Yes ✓	No _____	
Wetland Hydrology Present?	Yes ✓	No _____	If yes, optional Wetland Site ID: _____

Remarks: (Explain alternative procedures here or in a separate report.)

APT indicates climatic conditions are in the wetter than normal range. Sample point located in a wet meadow.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ✓ High Water Table (A2)
- ✓ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ✓ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ✓ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No ✓	Depth (inches): _____
Water Table Present?	Yes ✓	No _____	Depth (inches): 0
Saturation Present? (includes capillary fringe)	Yes ✓	No _____	Depth (inches): 0

Wetland Hydrology Present? Yes ✓ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

VEGETATION – Use scientific names of plants.

Sampling Point: P14

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		
Herb Stratum (Plot size: 5)			
1. *Phalaris arundinacea*	95	Y	FACW
2. *Typha X glauca*	5	N	OBL
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	100.0 = Total Cover		
Woody Vine Stratum (Plot size: 30)			
1.			
2.			
3.			
4.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.00 (A/B)

Prevalence Index worksheet:

	Total % Cover of:		Multiply by:
OBL species	5.00	x 1 =	5.00
FACW species	95.00	x 2 =	190.00
FAC species	0.00	x 3 =	0.00
FACU species	0.00	x 4 =	0.00
UPL species	0.00	x 5 =	0.00
Column Totals:	100.00 (A)		195.00 (B)

Prevalence Index = B/A = 1.95

Hydrophytic Vegetation Indicators:

- ✓ 1 - Rapid Test for Hydrophytic Vegetation
- ✓ 2 - Dominance Test is >50%
- ✓ 3 - Prevalence Index is ≤3.0[1]
- ___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ✓ No ___

Remarks: (Include photo numbers here or on a separate sheet.)

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

SOIL Sampling Point: P14

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-11	10YR 4/2	90	7.5YR 5/6	10	C	M	SICL	
11-18	10YR 4/1	80	10YR 5/6	20	C	M	SICL	
18-24	10YR 6/1	80	10YR 5/8	20	C	M	SIC	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ✓ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L)**
- ___ Polyvalue Below Surface (S8) **(LRR K, L)**
- ___ Thin Dark Surface (S9) **(LRR K, L)**
- ___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ✓ No ___

Remarks:

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 20231114 Bratt Property Grafton City/County: Ozaukee County Sampling Date: 2023-10-17

Applicant/Owner: Parish Survey & Engineering State: Wisconsin Sampling Point: P15

Investigator(s): Eric C Parker, SPWS, Matt Stangel Section, Township, Range: sec 31 T010N R022E

Landform (hillslope, terrace, etc.): Backslope Local relief (concave, convex, none): None Slope (%): 3-7

Subregion (LRR or MLRA): LRR K, MLRA 95A Lat: 43.286548 Long: -87.928115 Datum: WGS84

Soil Map Unit Name: Manawa silt loam, 0 to 3 percent slopes NWI classification: None (WWI)

Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No ✓ (If no, explain in Remarks.)

Are Vegetation ✓, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No ✓

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✓	**Is the Sampled Area within a Wetland?** Yes _____ No ✓
Hydric Soil Present?	Yes _____	No ✓	
Wetland Hydrology Present?	Yes ✓	No _____	If yes, optional Wetland Site ID: _____

Remarks: (Explain alternative procedures here or in a separate report.)

APT indicates climatic conditions are in the wetter than normal range. Sample point located in an upland farm field planted to soybeans. Normal circumstances not present and vegetation significantly disturbed due to agricultural activities.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ✓ Saturation Visible on Aerial Imagery (C9)
- ✓ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No ✓	Depth (inches): _____
Water Table Present?	Yes _____	No ✓	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes _____	No ✓	Depth (inches): _____

Wetland Hydrology Present? Yes ✓ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

OSA Review Area 1

Remarks:

C9 and D1 indicators derived from OSA.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

VEGETATION – Use scientific names of plants. Sampling Point: P15

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		
Herb Stratum (Plot size: 5)			
1. *Amaranthus retroflexus*	20	Y	FACU
2. *Taraxacum officinale*	15	Y	FACU
3. *Plantago major*	5	N	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	40.0 = Total Cover		
Woody Vine Stratum (Plot size: 30)			
1.			
2.			
3.			
4.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0.00	x 1 =	0.00
FACW species	0.00	x 2 =	0.00
FAC species	0.00	x 3 =	0.00
FACU species	40.00	x 4 =	160.00
UPL species	0.00	x 5 =	0.00
Column Totals:	40.00 (A)		160.00 (B)

Prevalence Index = B/A = 4.0

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ___ No ✓

Remarks: (Include photo numbers here or on a separate sheet.)

Planted soybeans 60% of herb stratum; appear healthy.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

SOIL

Sampling Point: P15

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	10YR 3/1	100					SICL	
12-24	10YR 4/3	90	10YR 5/8	10	C	M	SICL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L)**
- ___ Polyvalue Below Surface (S8) **(LRR K, L)**
- ___ Thin Dark Surface (S9) **(LRR K, L)**
- ___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ✓

Remarks:

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 20231114 Bratt Property Grafton City/County: Ozaukee County Sampling Date: 2023-10-17

Applicant/Owner: Parish Survey & Engineering State: Wisconsin Sampling Point: P16

Investigator(s): Eric C Parker, SPWS, Matt Stangel Section, Township, Range: sec 31 T010N R022E

Landform (hillslope, terrace, etc.): Toeslope Local relief (concave, convex, none): Concave Slope (%): 0-2

Subregion (LRR or MLRA): LRR K, MLRA 95A Lat: 43.286233 Long: -87.927926 Datum: WGS84

Soil Map Unit Name: Manawa silt loam, 0 to 3 percent slopes NWI classification: S3K (WWI)

Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No ✓ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓	No _____	**Is the Sampled Area within a Wetland?** Yes ✓ No _____
Hydric Soil Present?	Yes ✓	No _____	
Wetland Hydrology Present?	Yes ✓	No _____	If yes, optional Wetland Site ID: _____

Remarks: (Explain alternative procedures here or in a separate report.)

APT indicates climatic conditions are in the wetter than normal range. Sample point located in a shrubby wet meadow.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ✓ High Water Table (A2)
- ✓ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ✓ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ✓ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No ✓	Depth (inches): _____	
Water Table Present?	Yes ✓	No _____	Depth (inches): 8	
Saturation Present? (includes capillary fringe)	Yes ✓	No _____	Depth (inches): 2	**Wetland Hydrology Present?** Yes ✓ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

VEGETATION – Use scientific names of plants. Sampling Point: P16

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Fraxinus pennsylvanica*	10	Y	FACW
2.			
3.			
4.			
5.			
6.			
7.			
	10.0	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15)			
1. *Fraxinus pennsylvanica*	20	Y	FACW
2.			
3.			
4.			
5.			
6.			
7.			
	20.0	= Total Cover	

Herb Stratum (Plot size: 5)			
1. *Phalaris arundinacea*	20	Y	FACW
2. *Solidago gigantea*	15	Y	FACW
3. *Symphyotrichum novae-angliae*	15	Y	FACW
4. *Sonchus arvensis*	10	N	FACU
5. *Geum canadense*	10	N	FAC
6. *Lythrum salicaria*	5	N	OBL
7. *Scirpus atrovirens*	5	N	OBL
8.			
9.			
10.			
11.			
12.			
	80.0	= Total Cover	

Woody Vine Stratum (Plot size: 30)			
1.			
2.			
3.			
4.			
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	10.00	x 1 =	10.00
FACW species	80.00	x 2 =	160.00
FAC species	10.00	x 3 =	30.00
FACU species	10.00	x 4 =	40.00
UPL species	0.00	x 5 =	0.00
Column Totals:	110.00 (A)		240.00 (B)

Prevalence Index = B/A = 2.18

Hydrophytic Vegetation Indicators:

- ✓ 1 - Rapid Test for Hydrophytic Vegetation
- ✓ 2 - Dominance Test is >50%
- ✓ 3 - Prevalence Index is ≤3.0[1]
- ___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ✓ No ___

Remarks: (Include photo numbers here or on a separate sheet.)

Dead Fraxinus pennsylvanica in tree stratum in addition to live trees noted above.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

SOIL

Sampling Point: P16

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	10YR 4/2	95	10YR 5/8	5			SICL	
12-24	7.5YR 4/1	85	10YR 5/8	15	C	M	SICL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ✓ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L)**
- ___ Polyvalue Below Surface (S8) **(LRR K, L)**
- ___ Thin Dark Surface (S9) **(LRR K, L)**
- ___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ✓ No ___

Remarks:

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 20231114 Bratt Property Grafton City/County: Ozaukee County Sampling Date: 2023-10-17

Applicant/Owner: Parish Survey & Engineering State: Wisconsin Sampling Point: P17

Investigator(s): Eric C Parker, SPWS, Matt Stangel Section, Township, Range: sec 31 T010N R022E

Landform (hillslope, terrace, etc.): Backslope Local relief (concave, convex, none): None Slope (%): 3-7

Subregion (LRR or MLRA): LRR K, MLRA 95A Lat: 43.286059 Long: -87.927465 Datum: WGS84

Soil Map Unit Name: Kewaunee silty clay loam, 6 to 12 percent slopes, eroded NWI classification: None (WWI)

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No ✓ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No ✓	**Is the Sampled Area within a Wetland?** Yes ____ No ✓
Hydric Soil Present?	Yes ____	No ✓	
Wetland Hydrology Present?	Yes ____	No ✓	If yes, optional Wetland Site ID: ____

Remarks: (Explain alternative procedures here or in a separate report.)

APT indicates climatic conditions are in the wetter than normal range. Sample point located in an upland old field; normal circumstances present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No ✓	Depth (inches): ____
Water Table Present?	Yes ____	No ✓	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No ✓	Depth (inches): ____

Wetland Hydrology Present? Yes ____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No wetland hydrology indicators observed, no saturation.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

VEGETATION – Use scientific names of plants.

Sampling Point: P17

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		
Herb Stratum (Plot size: 5)			
1. *Poa pratensis*	50	Y	FACU
2. *Taraxacum officinale*	20	Y	FACU
3. *Rumex crispus*	15	N	FAC
4. *TRIFOLIUM PRATENSE*	10	N	FACU
5. *Dactylis glomerata*	10	N	FACU
6. *Erigeron annuus*	10	N	FACU
7. *Daucus carota*	10	N	UPL
8.			
9.			
10.			
11.			
12.			
	125.0 = Total Cover		
Woody Vine Stratum (Plot size: 30)			
1.			
2.			
3.			
4.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0.00	x 1 =	0.00
FACW species	0.00	x 2 =	0.00
FAC species	15.00	x 3 =	45.00
FACU species	100.00	x 4 =	400.00
UPL species	10.00	x 5 =	50.00
Column Totals:	125.00 (A)		495.00 (B)

Prevalence Index = B/A = 3.96

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ___ No ✓

Remarks: (Include photo numbers here or on a separate sheet.)

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

SOIL

Sampling Point: P17

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-11	7.5YR 3/2	100					SICL	
11-24	5YR 4/4	100					SIC	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L)**
- ___ Polyvalue Below Surface (S8) **(LRR K, L)**
- ___ Thin Dark Surface (S9) **(LRR K, L)**
- ___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ✓

Remarks:

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 20231114 Bratt Property Grafton City/County: Ozaukee County Sampling Date: 2023-10-17

Applicant/Owner: Parish Survey & Engineering State: Wisconsin Sampling Point: P18

Investigator(s): Eric C Parker, SPWS, Matt Stangel Section, Township, Range: sec 31 T010N R022E

Landform (hillslope, terrace, etc.): Sideslope Local relief (concave, convex, none): None Slope (%): 0-2

Subregion (LRR or MLRA): LRR K, MLRA 95A Lat: 43.283088 Long: -87.929341 Datum: WGS84

Soil Map Unit Name: Kewaunee silt loam, 2 to 6 percent slopes, eroded NWI classification: None Depicted (WWI)

Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No ✓ (If no, explain in Remarks.)

Are Vegetation ✓, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No ✓

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓	No _____	**Is the Sampled Area within a Wetland?** Yes _____ No ✓
Hydric Soil Present?	Yes _____	No ✓	
Wetland Hydrology Present?	Yes _____	No ✓	If yes, optional Wetland Site ID: _____

Remarks: (Explain alternative procedures here or in a separate report.)

APT indicates climatic conditions are in the wetter than normal range. White pine plantation, not NC.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No ✓	Depth (inches): _____
Water Table Present?	Yes _____	No ✓	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes _____	No ✓	Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

NAIP imagery 2005-2022

Remarks:

No wetland hydrology indicators observed, no saturation.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

VEGETATION – Use scientific names of plants. Sampling Point: P18

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. *MALUS PUMILA*	7	Y	UPL
2. *Fraxinus pennsylvanica*	5	Y	FACW
3.			
4.			
5.			
6.			
7.			
	12.0	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15)			
1. *RHAMNUS CATHARTICA*	30	Y	FAC
2.			
3.			
4.			
5.			
6.			
7.			
	30.0	= Total Cover	

Herb Stratum (Plot size: 5)			
1. *RHAMNUS CATHARTICA*	3	Y	FAC
2. *Symphyotrichum lateriflorum*	2	Y	FAC
3. *Agrimonia gryposepala*	2	Y	FACU
4. *Glechoma hederacea*	1	N	FACU
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	8.0	= Total Cover	

Woody Vine Stratum (Plot size: 30)			
1. *Vitis riparia*	5	Y	FAC
2.			
3.			
4.			
	5.0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across All Strata: 7 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 71.43 (A/B)

Prevalence Index worksheet:

	Total % Cover of:		Multiply by:
OBL species	0.00	x 1 =	0.00
FACW species	5.00	x 2 =	10.00
FAC species	40.00	x 3 =	120.00
FACU species	3.00	x 4 =	12.00
UPL species	7.00	x 5 =	35.00
Column Totals:	55.00	(A)	177.00 (B)

Prevalence Index = B/A = 3.22

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- ✓ 2 - Dominance Test is >50%
- ___ 3 - Prevalence Index is ≤3.0[1]
- ___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ✓ No ___

Remarks: (Include photo numbers here or on a separate sheet.)

White pine plantation - not NC. Pinus strobus cover 40%.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

SOIL Sampling Point: P18

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	7.5YR 3/2	100					L	
8-13	7.5YR 3/1	100					SICL	
13-18	7.5YR 4/3	100					SICL	
18-24	7.5YR 4/6	100					SICL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L)**
- ___ Polyvalue Below Surface (S8) **(LRR K, L)**
- ___ Thin Dark Surface (S9) **(LRR K, L)**
- ___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ____ No ✓

Remarks:

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 20231114 Bratt Property Grafton City/County: Ozaukee County Sampling Date: 2023-10-17

Applicant/Owner: Parish Survey & Engineering State: Wisconsin Sampling Point: P19

Investigator(s): Eric C Parker, SPWS, Matt Stangel Section, Township, Range: sec 31 T010N R022E

Landform (hillslope, terrace, etc.): Toeslope Local relief (concave, convex, none): Concave Slope (%): 0-2

Subregion (LRR or MLRA): LRR K, MLRA 95A Lat: 43.283134 Long: -87.929132 Datum: WGS84

Soil Map Unit Name: Manawa silt loam, 0 to 3 percent slopes NWI classification: E1K (WWI)

Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No ✓ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓	No _____	**Is the Sampled Area within a Wetland?** Yes ✓ No _____
Hydric Soil Present?	Yes ✓	No _____	
Wetland Hydrology Present?	Yes ✓	No _____	If yes, optional Wetland Site ID: _____

Remarks: (Explain alternative procedures here or in a separate report.)

APT indicates climatic conditions are in the wetter than normal range.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ✓ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ✓ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No ✓	Depth (inches): _____
Water Table Present?	Yes _____	No ✓	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes _____	No ✓	Depth (inches): _____

Wetland Hydrology Present? Yes ✓ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

NAIP imagery 2005-2022

Remarks:

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

VEGETATION – Use scientific names of plants. Sampling Point: P19

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Fraxinus pennsylvanica*	5	Y	FACW
2.			
3.			
4.			
5.			
6.			
7.			
	5.0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15)			
1. *Cornus alba*	15	Y	FACW
2. *Cornus racemosa*	15	Y	FAC
3. *Fraxinus pennsylvanica*	10	Y	FACW
4. *RHAMNUS CATHARTICA*	5	N	FAC
5.			
6.			
7.			
	45.0	= Total Cover	
Herb Stratum (Plot size: 5)			
1. *Solidago gigantea*	25	Y	FACW
2. *Symphyotrichum puniceum*	10	Y	OBL
3. *Symphyotrichum lateriflorum*	10	Y	FAC
4. *Geum aleppicum*	5	N	FAC
5. *RHAMNUS CATHARTICA*	3	N	FAC
6. *Fragaria virginiana*	3	N	FACU
7. *Taraxacum officinale*	2	N	FACU
8.			
9.			
10.			
11.			
12.			
	58.0	= Total Cover	
Woody Vine Stratum (Plot size: 30)			
1. *Vitis riparia*	5	Y	FAC
2.			
3.			
4.			
	5.0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 8 (A)

Total Number of Dominant Species Across All Strata: 8 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.00 (A/B)

Prevalence Index worksheet:

	Total % Cover of:		Multiply by:
OBL species	10.00	x 1 =	10.00
FACW species	55.00	x 2 =	110.00
FAC species	43.00	x 3 =	129.00
FACU species	5.00	x 4 =	20.00
UPL species	0.00	x 5 =	0.00
Column Totals:	113.00 (A)		269.00 (B)

Prevalence Index = B/A = 2.38

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- ✓ 2 - Dominance Test is >50%
- ✓ 3 - Prevalence Index is ≤3.0[1]
- ___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ✓ No ___

Remarks: (Include photo numbers here or on a separate sheet.)

Mostly SC. Fraxinus tree saplings coming in, former HWS.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

SOIL

Sampling Point: P19

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	7.5YR 3/1	100					SIL	
8-16	7.5YR 3/1	97	7.5YR 3/3	3	C	M	SICL	
16-24	7.5YR 5/2	93	7.5YR 5/4	7	C	M	SIC	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ✓ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L)**
- ___ Polyvalue Below Surface (S8) **(LRR K, L)**
- ___ Thin Dark Surface (S9) **(LRR K, L)**
- ___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ✓ No ___

Remarks:

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 20231114 Bratt Property Grafton City/County: Ozaukee County Sampling Date: 2023-10-17

Applicant/Owner: Parish Survey & Engineering State: Wisconsin Sampling Point: P20

Investigator(s): Eric C Parker, SPWS, Matt Stangel Section, Township, Range: sec 31 T010N R022E

Landform (hillslope, terrace, etc.): Shoulder Local relief (concave, convex, none): Convex Slope (%): 0-2

Subregion (LRR or MLRA): LRR K, MLRA 95A Lat: 43.283482 Long: -87.928138 Datum: WGS84

Soil Map Unit Name: Manawa silt loam, 0 to 3 percent slopes NWI classification: T3/S3K (WWI)

Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No ✓ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✓	**Is the Sampled Area within a Wetland?** Yes _____ No ✓
Hydric Soil Present?	Yes _____	No ✓	
Wetland Hydrology Present?	Yes _____	No ✓	If yes, optional Wetland Site ID: _____

Remarks: (Explain alternative procedures here or in a separate report.)

APT indicates climatic conditions are in the wetter than normal range. Sample point located in an upland forest.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No ✓	Depth (inches): _____
Water Table Present?	Yes _____	No ✓	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes _____	No ✓	Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No wetland hydrology indicators observed, no saturation.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

VEGETATION – Use scientific names of plants. Sampling Point: P20

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Quercus macrocarpa*	20	Y	FACU
2. *Tilia americana*	10	Y	FACU
3. *Malus ioensis; Pyrus ioensis*	10	Y	UPL
4. *Fraxinus pennsylvanica*	5	N	FACW
5.			
6.			
7.			
	45.0	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15)			
1. *RHAMNUS CATHARTICA*	20	Y	FAC
2. *Crataegus mollis*	10	Y	FAC
3.			
4.			
5.			
6.			
7.			
	30.0	= Total Cover	

Herb Stratum (Plot size: 5)			
1. *Alliaria petiolata*	30	Y	FACU
2. *Solidago canadensis*	10	N	FACU
3. *Geum canadense*	10	N	FAC
4. *Impatiens capensis*	5	N	FACW
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	55.0	= Total Cover	

Woody Vine Stratum (Plot size: 30)			
1.			
2.			
3.			
4.			
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 33.33 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0.00	x 1 =	0.00
FACW species	10.00	x 2 =	20.00
FAC species	40.00	x 3 =	120.00
FACU species	70.00	x 4 =	280.00
UPL species	10.00	x 5 =	50.00
Column Totals:	130.00 (A)		470.00 (B)

Prevalence Index = B/A = 3.62

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ___ No ✓

Remarks: (Include photo numbers here or on a separate sheet.)

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

SOIL

Sampling Point: P20

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-15	10YR 3/2	100					SICL	
15-24	10YR 3/2	90	7.5YR 5/6	10	C	M	SIC	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L)**
- ___ Polyvalue Below Surface (S8) **(LRR K, L)**
- ___ Thin Dark Surface (S9) **(LRR K, L)**
- ___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ___ No ✓

Remarks:

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 20231114 Bratt Property Grafton City/County: Ozaukee County Sampling Date: 2023-10-17

Applicant/Owner: Parish Survey & Engineering State: Wisconsin Sampling Point: P21

Investigator(s): Eric C Parker, SPWS, Matt Stangel Section, Township, Range: sec 31 T010N R022E

Landform (hillslope, terrace, etc.): Toeslope Local relief (concave, convex, none): Concave Slope (%): 0-2

Subregion (LRR or MLRA): LRR K, MLRA 95A Lat: 43.283409 Long: -87.928488 Datum: WGS84

Soil Map Unit Name: Manawa silt loam, 0 to 3 percent slopes NWI classification: E1K (WWI)

Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No ✓ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓	No _____	**Is the Sampled Area within a Wetland?** Yes ✓ No _____
Hydric Soil Present?	Yes ✓	No _____	
Wetland Hydrology Present?	Yes ✓	No _____	If yes, optional Wetland Site ID: _____

Remarks: (Explain alternative procedures here or in a separate report.)

APT indicates climatic conditions are in the wetter than normal range.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ✓ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ✓ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No ✓	Depth (inches): _____
Water Table Present?	Yes ✓	No _____	Depth (inches): 19
Saturation Present? (includes capillary fringe)	Yes ✓	No _____	Depth (inches): 15

Wetland Hydrology Present? Yes ✓ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

NAIP imagery 2005-2022

Remarks:

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

VEGETATION – Use scientific names of plants. Sampling Point: P21

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		
Herb Stratum (Plot size: 5)			
1. *Agrostis gigantea*	50	Y	FACW
2. *Symphyotrichum puniceum*	40	Y	OBL
3. *PHALARIS ARUNDINACEA*	30	Y	FACW
4. *Scirpus atrovirens*	5	N	OBL
5. *Solidago gigantea*	3	N	FACW
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	128.0 = Total Cover		
Woody Vine Stratum (Plot size: 30)			
1.			
2.			
3.			
4.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	45.00	x 1 =	45.00
FACW species	83.00	x 2 =	166.00
FAC species	0.00	x 3 =	0.00
FACU species	0.00	x 4 =	0.00
UPL species	0.00	x 5 =	0.00
Column Totals:	128.00 (A)		211.00 (B)

Prevalence Index = B/A = 1.65

Hydrophytic Vegetation Indicators:

- ✓ 1 - Rapid Test for Hydrophytic Vegetation
- ✓ 2 - Dominance Test is >50%
- ✓ 3 - Prevalence Index is ≤3.0[1]
- ___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ✓ No ___

Remarks: (Include photo numbers here or on a separate sheet.)
Mostly WM w/scattered shrubs and planted spruces.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

SOIL

Sampling Point: P21

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-7	7.5YR 4/2	100					SIL	
7-17	7.5YR 4/2	95	7.5YR 4/4	5	C	M	SICL	
17-24	7.5YR 5/2	90	7.5YR 5/6	10	C	M	SIC	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ✓ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L)**
- ___ Polyvalue Below Surface (S8) **(LRR K, L)**
- ___ Thin Dark Surface (S9) **(LRR K, L)**
- ___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ✓ No ___

Remarks:

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

Parish Survey & Engineering
Bratt Property
Project #: 20231114
December 15, 2023

Appendix D | Site Photographs

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

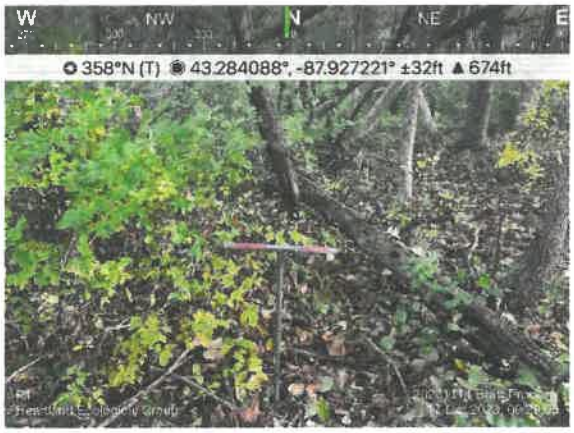


Photo #1 Sample point P1



Photo #2 Sample point P1



Photo #3 Sample point P1



Photo #4 Sample point P1



Photo #5 Sample point P2



Photo #6 Sample point P2

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,



Photo #7 Sample point P2



Photo #8 Sample point P2



Photo #9 Sample point P3



Photo #10 Sample point P3



Photo #11 Sample point P3

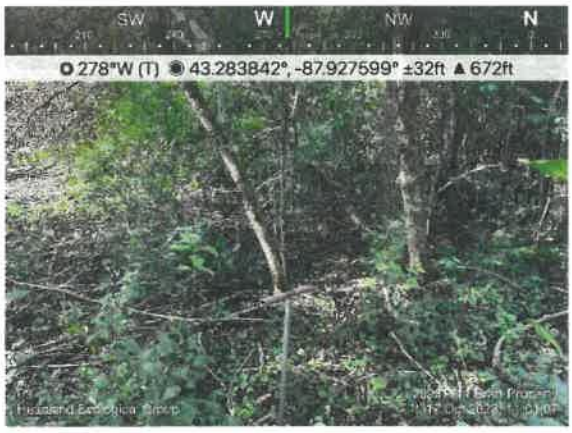


Photo #12 Sample point P3

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,



Photo #13 Sample point P4



Photo #14 Sample point P4



Photo #15 Sample point P4



Photo #16 Sample point P4



Photo #17 Sample point P5



Photo #18 Sample point P5

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,



Photo #19 Sample point P5



Photo #20 Sample point P5



Photo #21 Sample point P6



Photo #22 Sample point P6

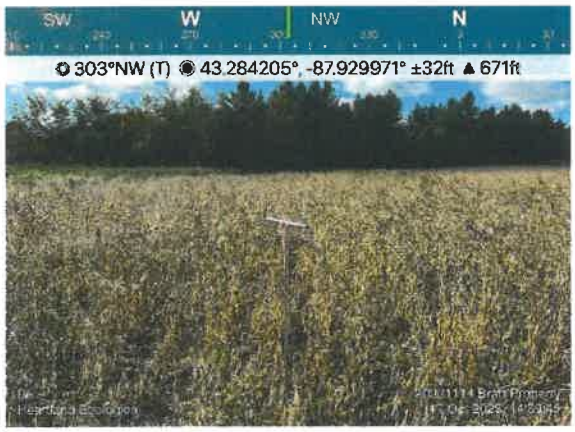


Photo #23 Sample point P6



Photo #24 Sample point P6

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,



Photo #25 Sample point P7



Photo #26 Sample point P7



Photo #27 Sample point P7



Photo #28 Sample point P7



Photo #29 Sample point P8

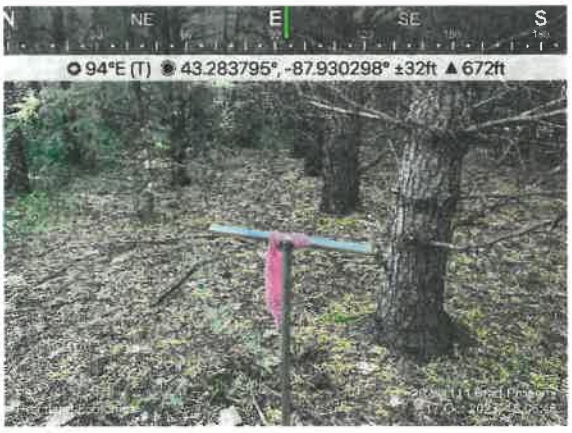


Photo #30 Sample point P8

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,



Photo #31 Sample point P8

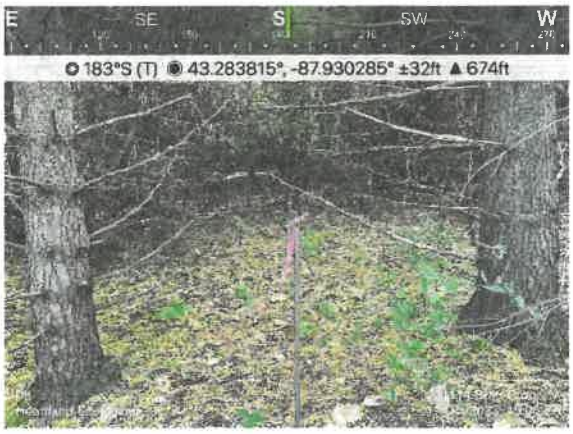


Photo #32 Sample point P8

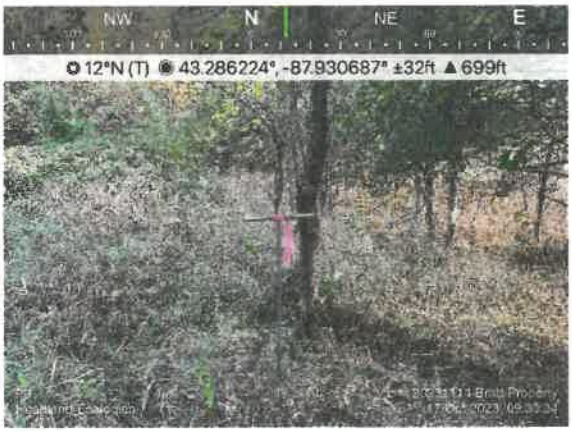


Photo #33 Sample point P9



Photo #34 Sample point P9



Photo #35 Sample point P9

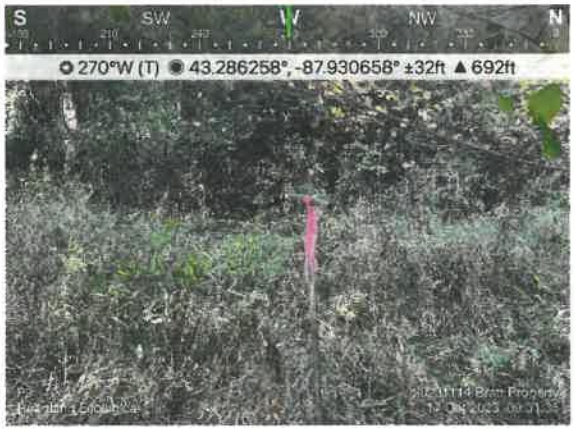


Photo #36 Sample point P9

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

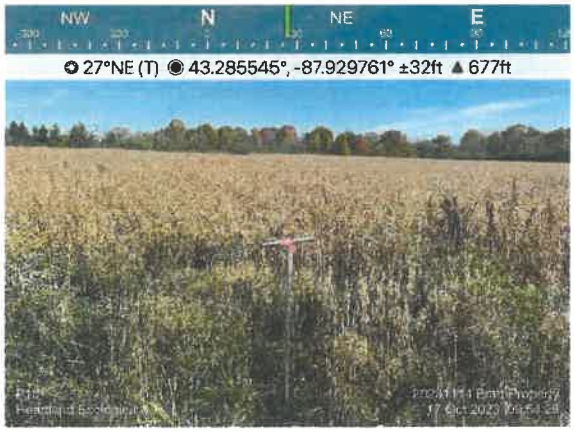


Photo #37 Sample point P10



Photo #38 Sample point P10

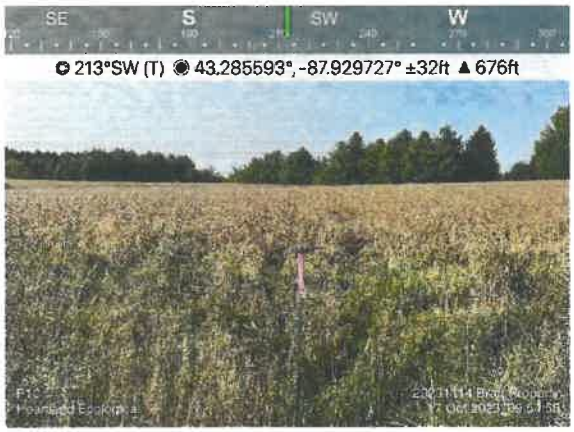


Photo #39 Sample point P10



Photo #40 Sample point P10

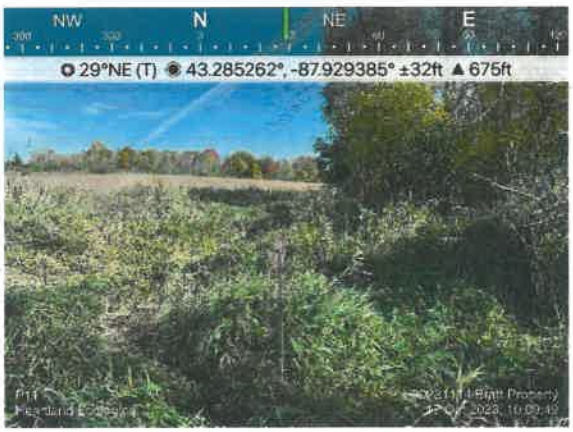


Photo #41 Sample point P11



Photo #42 Sample point P11

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,



Photo #43 Sample point P11



Photo #44 Sample point P11



Photo #45 Sample point P12



Photo #46 Sample point P12



Photo #47 Sample point P12



Photo #48 Sample point P12

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,



Photo #49 Sample point P13



Photo #50 Sample point P13



Photo #51 Sample point P13



Photo #52 Sample point P13



Photo #53 Sample point P14



Photo #54 Sample point P14

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,



Photo #55 Sample point P14

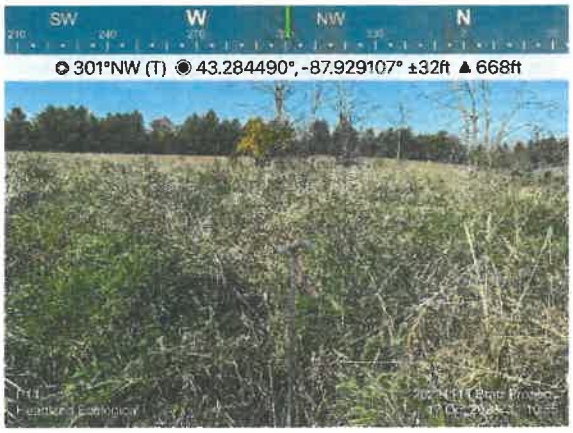


Photo #56 Sample point P14



Photo #57 Sample point P15



Photo #58 Sample point P15



Photo #59 Sample point P15

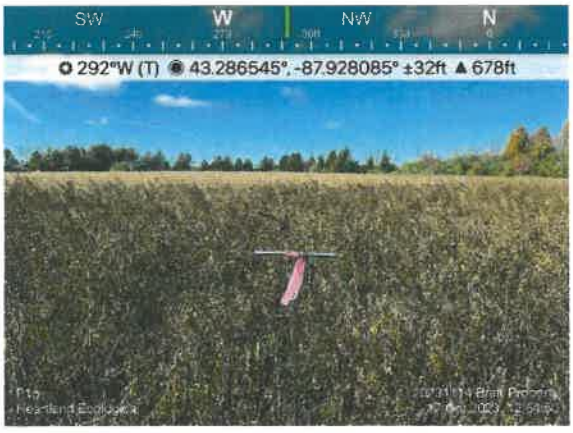


Photo #60 Sample point P15

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,



Photo #61 Sample point P16

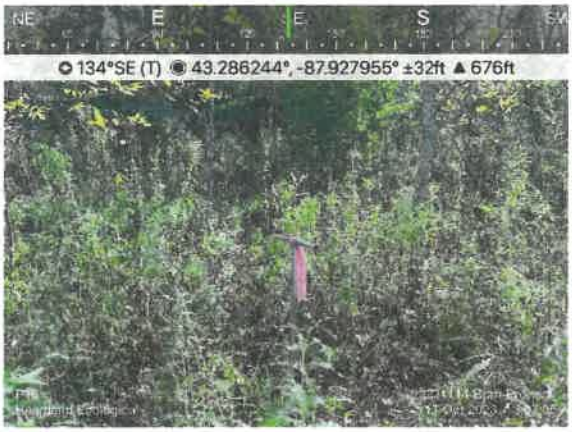


Photo #62 Sample point P16



Photo #63 Sample point P16



Photo #64 Sample point P16



Photo #65 Sample point P17

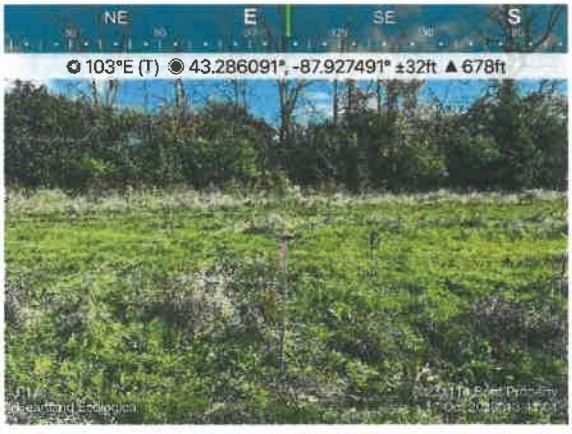


Photo #66 Sample point P17

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,



Photo #67 Sample point P17



Photo #68 Sample point P17



Photo #69 Sample point P18



Photo #70 Sample point P18



Photo #71 Sample point P18

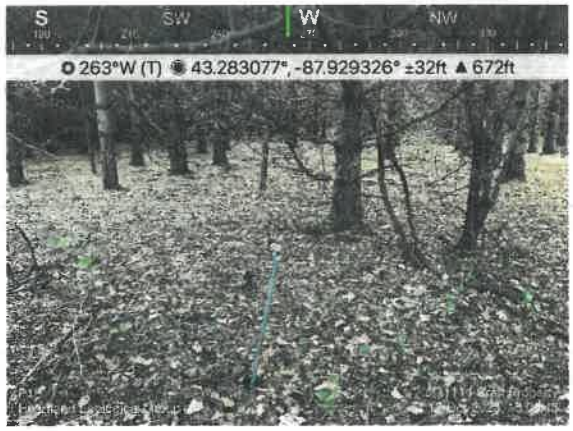


Photo #72 Sample point P18

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

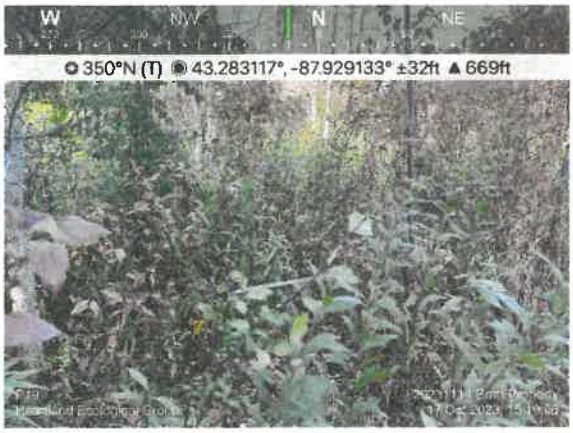


Photo #73 Sample point P19



Photo #74 Sample point P19



Photo #75 Sample point P19

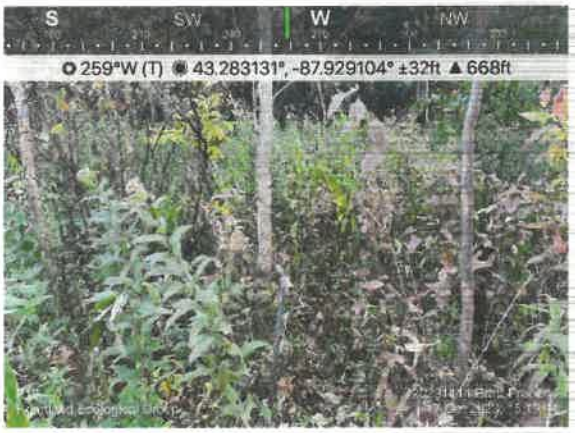


Photo #76 Sample point P19



Photo #77 Sample point P20



Photo #78 Sample point P20

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

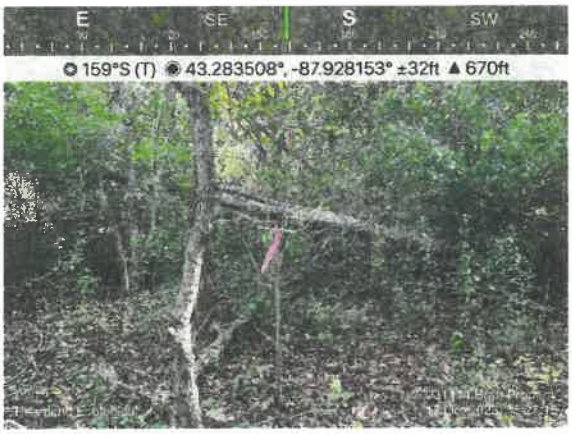


Photo #79 Sample point P20

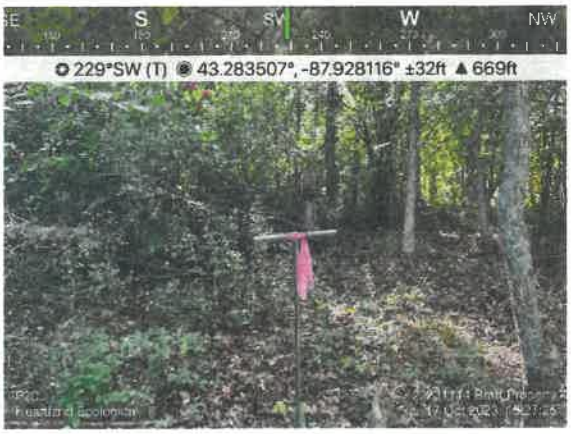


Photo #80 Sample point P20



Photo #81 Sample point P21



Photo #82 Sample point P21



Photo #83 Sample point P21



Photo #84 Sample point P21

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,



Photo #85 Photo of waterway WW-1



Photo #86 Photo of WW-1 and OHWM flags



Photo #87 Photo of WW-2



Photo #88 Photo of WW-2



Photo #89 Photo of WW-2

Photo #90 Sample point P15

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

Parish Survey & Engineering
Bratt Property
Project #: 20231114
December 15, 2023

Appendix E | Delineator Qualifications

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
1027 W St Paul Ave
Milwaukee WI, WI, 53233

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

April 3, 2023

Matt Stangel
Heartland Ecological Group, Inc.
243 E Wilbur Ave.
Milwaukee, WI 53207

Subject: 2023 Assured Wetland Delineator Confirmation

Dear Mr. Stangel:

This letter provides Wisconsin Department of Natural Resources (WDNR) confirmation for the wetland delineations you conduct during the 2023 growing season. You and your clients will not need to wait for the WDNR to review your wetland delineations before moving forward with project planning. This will help expedite the review process for WDNR's wetland regulatory program. Your name and contact information is listed on our website at: http://dnr.wi.gov/topic/wetlands/assurance.html.

In the instance where a municipality may require a letter of confirmation for your work prior to moving forward in the local regulatory process, this letter shall serve as that confirmation. Although your wetland delineations do not require WDNR field review, inclusion of a Wetland Delineation Report is required for projects needing State authorized wetland, waterway and/or storm water permit approvals.

To comply with Chapter 23.321, State Statutes, please supply the department with a polygon shapefile of the wetland boundaries delineated within the project area. Please do not include data such as parcel boundaries, project limits, wetland graphic representation symbols, etc. If internal upland polygons are found within a wetland polygon, then please label as UPLAND. The shapefile should utilize a State Plane Projection and be overlain onto recent aerial photography. If a different projection system is used, please indicate in which system the data are projected. In the correspondence sent with the shapefile, please supply a brief description of each wetland's plant community (eg: wet meadow, floodplain forest, etc.). Please send these data to Calvin Lawrence (608-266-0756 or email at calvin.lawrence@wisconsin.gov).

If you or any client has a question regarding your status in the Wetland Delineation Professional Assurance Program, contact me by email at kara.brooks@wisconsin.gov or phone at 414-308-6780. Thank you for all your hard work and best wishes for the upcoming field season.

Sincerely,

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

Kara Brooks
Wetland Identification Coordinator
Bureau of Watershed Management

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

Heartland
ECOLOGICAL GROUP INC

Matt Stangel, WPIT

Environmental Scientist
243 E. Wilbur Avenue
Milwaukee, WI 53207
matt@heartlandecological.com
(920) 419-5634



Mr. Stangel holds a B.A. degree in Geography as well as an M.S. in Freshwater Sciences and Technology from the University of Wisconsin – Milwaukee. He has over 8 years of professional experience in environmental science including wetland delineation, ecological restoration, natural area management, and environmental sampling and analysis. Matt is proficient with ESRI ArcGIS software and supports Heartland's projects by processing field data and creating map figures. He has completed basic (2017) and advanced (2018) wetland delineation courses through UW-La Crosse and has assisted on hundreds of wetland delineations for public and private clientele. He is an assured wetland delineator and a certified endangered resources reviewer with the DNR, and a Wetland Professional in Training (WPIT) with the Society of Wetland Scientists.

Education

BA, Geography, Environmental Geography Emphasis, University of WI – Milwaukee, 2011

MS, Freshwater Sciences and Technology, University of WI – Milwaukee, 2016

Basic Wetland Delineation Training, University of WI – La Crosse, WI, 2017

Advanced Wetland Delineation, University of WI - La Crosse, WI, 2018

Critical Methods in Wetland Delineation, University of WI - La Crosse Continuing Education and Extension, Madison, WI, 2017-2021

Grasses and Sedges Identification and Sampling, University of WI – Stevens Point, Schmeeckle Reserve, Stevens Point, WI, 2019

Registrations

Assured Wetland Delineator, WDNR, 2022-present

Wetland Professional in Training (WPIT), Society of Wetland Scientists Professional Certification Program, 2020-present

Certified Endangered Resources Reviewer, WDNR, 2017-present

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

Appendix F | NAIP Imagery

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

Heartland
ECOLOGICAL GROUP INC

Field data sheet reference (if applicable): _____

TABLE A1

Wetland Hydrology from Aerial Imagery - Recording Form*

Project Name: Bratt Property *Date:* 10/17/2023 *County:* Ozaukee
Investigator: Matt Stangel *Legal Description (T, R, S):* T10N R22E S31

Summary Table

Date Image Taken*	Image Source	Climate Condition (wet, dry, normal)	Image Interpretation(s) See OSA Review Areas Image figure for outlines of Areas 1-4				
			Area: 1 (P13)	Area: 2 (P15)	Area 3 (P10)	Area 4 (P12)	
June 1993	FSA Slide	Normal	NSS	NV/NSS	NV/NSS	NV/NSS	
June 1994	FSA Slide	Dry	NSS	NV/NSS	NV/NSS	NV/NSS	
May 1995	FSA Slide	Normal	NV/NSS	NV/NSS	NV/NSS	NV/NSS	
June 1996	FSA Slide	Normal	SS	NV/NSS	NV/NSS	NV/NSS	
June 1997	FSA Slide	Normal	NV/NSS	NV/NSS	NV/NSS	NV/NSS	
June 1998	FSA Slide	Wet	NV/NSS	SS	SS	NV/NSS	
June 1999	FSA Slide	Wet	SS	SS	WS (Green)	NSS	
July 2000	FSA Slide	Normal	NV/NSS	NV/NSS	NV/NSS	NV/NSS	
June 2001	FSA Slide	Normal	NV/NSS	NV/NSS	NV/NSS	NV/NSS	
July 2002	FSA Slide	Normal	NV/NSS	NV/NSS	NV/NSS	NV/NSS	
2005-06-02	NAIP	Normal	NV/NSS	NV/NSS	WS (Green)	NV/NSS	
2006-06-12	NAIP	Wet	SS-	NSS	SS	NSS	
2008-07-05	NAIP	Normal	SS	SS	SS	DO	
2010-06-28	NAIP	Wet	NV/NSS	NV/NSS	NC	NV/NSS	
2013-06-19	NAIP	Wet	NV/NSS	NV/NSS	NC	SS	
2015-09-22	NAIP	Wet	NV/NSS	NV/NSS	NV/NSS	NV/NSS	
2017-07-03	NAIP	Wet	SS	NV/NSS	CS	CS	
2018-09-14	NAIP	Normal	NV/NSS	NV/NSS	NV/NSS	NV/NSS	
2020-09-02	NAIP	Normal	CS	CS	CS	NV/NSS	
2022-05-01	Maxar	Normal	SS	SS	NC	SS	
2022-06-03	NAIP	Normal	NV/NSS	CS	CS, WS (Green)	CS	
Normal Climate Condition			**Area: 1 (P13)**	**Area: 2 (P15)**	**Area 3 (P10)**	**Area 4 (P12)**	
Number of Normal Years			13	13	13	13	
Number with wet signatures			4	4	5	3	
Percent with wet signatures			31%	31%	38%	23%	

Key

WS - Wetland Signature	SS - Soil Wetness Signature	CS - Crop Stress
NC - Not Cropped	AP - Altered Pattern	NV - Normal Vegetative Cover
DO - Drowned Out	SW - Standing Water	NSS - No Soil Wetness Signature
Other labels or comments:		

* Images that were taken after the 20th of their respective month were evaluated under the following month's table to account for otherwise missing precitation data from the start of the month to the date the image was recorded.

- Use above key to label image interpretations. It is imperative that the reviewer read and understand the guidance associated with the use of these labels. If alternate labels are used, indicate in box above.
- If less than five (5) images taken during normal climate conditions are available, use an equal number of images taken during wet and dry climate conditions and use as many images as you have available. Describe the results using this methodology in your report.

* Source: http://www.bwsr.state.mn.us/wetlands/delineation/Guidance_for_Offsite_Hydrology_and_Wetland_Determinations.pdf

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

Heartland
ECOLOGICAL GROUP INC

Field data sheet reference (if applicable): _____

Wetland Determination from Aerial Imagery - Recording Form*

Project Name: Bratt Property *Date:* 10/17/2023 *County:* Ozaukee

Investigator: Matt Stangel *Legal Description (T, R, S):* T10N R22E S31

Use the decision matrix below to create Table A2

Hydric Soils Present?[1]	Identified on NWI or WWI?[2]	Percent with Wet Signatures from TABLE A1	Field Verification Required?[3]	Wetland?
Yes	Yes	>50%	No	Yes
Yes	Yes	30-50%	No	Yes
Yes	Yes	<30%	Yes	Yes, if other hydrology indicators are present
Yes	No	>50%	No	Yes
Yes	No	30-50%	Yes	Yes, if other hydrology indicators are present
Yes	No	<30%	No	No
No	Yes	>50%	No	Yes
No	Yes	30-50%	No	Yes
No	Yes	<30%	No	No
No	No	>50%	Yes	Yes, if other hydrology indicators are present
No	No	30-50%	Yes	Yes, if other hydrology indicators are present
No	No	<30%	No	No

[1] The presence of hydric soils can be determined from the "Hydric Rating by Map Unit Feature" under "Land Classifications" from the Web Soil Survey. "Not Hydric" is the only category considered to not have hydric soils. Field sampling for the presence/absence of hydric soil indicators can be used in lieu of the hydric rating if appropriately documented by providing completed field data sheets.

[2] At minimum, the most updated NWI data available for the area must be reviewed for this step. Any and all other local or regional wetland maps that are publically available should be reviewed.

[3] Area should be reviewed in the field for the presence/absence of wetland hydrology indicators per the applicable 87 Manual Regional Supplement, including the D2

TABLE A2

Area	Hydric Soils Present?[1]	Identified on NWI or WWI?	Percent with Wet Signatures from TABLE A1	Other Hydrology Indicators Present?[1]	Wetland?
1	No	No	31%	No	No
2	No	No	31%	No	No
3	No	No	38%	No	No
4	No	No	23%	No	No

[1] Answer "N/A" if field verification is not required and was not conducted.

* Source: http://www.bwsr.state.mn.us/wetlands/delineation/Guidance_for_Offsite_Hydrology_and_Wetland_Determinations.pdf

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

May Analysis

Date	Monthly Rainfall in Inches [1]						Weighted Sum	Relative Wetness
	February	Weighted Precip	March	Weighted Precip	April	Weighted Precip		
May 1995	0.13	1	2.11	4	4.04	6	11	Normal
2022-05-01	0.43	1	2.39	6	2.76	6	13	Normal
30% chance less than**	0.82		1.12		2.56			
30 Year Average**	1.36		1.86		3.75			
30% chance more than**	1.65		2.26		4.47			

Germantown Wastewater Utility
30-Year Precipitation Data (1992-2022) from NOAA Website
http://agacis.rcc-acis.org/

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

June Analysis

Date	Monthly Rainfall in Inches [1]						Weighted Sum	Relative Wetness
	March	Weighted Precip	April	Weighted Precip	May	Weighted Precip		
June 1993	1.56	2	8.47	6	2.66	6	14	Normal
June 1994	0.83	1	1.28	2	1.57	3	6	Dry
June 1996	0.50	1	3.20	4	2.94	6	11	Normal
June 1997	1.37	2	1.23	2	4.12	6	10	Normal
June 1998	4.18	3	4.48	6	2.76	6	15	Wet
June 1999	1.46	2	6.75	6	4.97	9	17	Wet
June 2001	0.32	1	3.90	4	4.63	9	14	Normal
2005-06-02	1.22	2	1.09	2	3.15	6	10	Normal
2006-06-12	3.14	3	4.24	4	6.11	9	16	Wet
2013-06-19	1.12	2	6.70	6	5.62	9	17	Wet
2022-06-03	2.39	3	2.76	4	2.04	3	10	Normal
30% chance less than**	1.12		2.56		2.60			
30 Year Average**	1.86		3.75		3.85			
30% chance more than**	2.26		4.47		4.61			

Germantown Wastewater Utility
30-Year Precipitation Data (1992-2022) from NOAA Website
http://agacis.rcc-acis.org/

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

July Analysis

Date	Monthly Rainfall in Inches [1]						Weighted Sum	Relative Wetness
	April	Weighted Precip	May	Weighted Precip	June	Weighted Precip		
July 2000	2.96	2	8.28	6	4.60	6	14	Normal
July 2002	3.91	2	2.30	2	5.85	9	13	Normal
2008-07-05	7.79	3	1.33	2	9.87	9	14	Normal
2010-06-28	5.01	3	3.28	4	6.50	9	16	Wet
2017-07-03	4.36	2	4.97	6	6.63	9	17	Wet
30% chance less than**	2.56		2.60		2.67			
30 Year Average**	3.75		3.85		4.61			
30% chance more than**	4.47		4.61		5.21			

Germantown Wastewater Utility
30-Year Precipitation Data (1992-2022) from NOAA Website
http://agacis.rcc-acis.org/

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

September Analysis

Date	Monthly Rainfall in Inches [1]						Weighted Sum	Relative Wetness
	June	Weighted Precip	July	Weighted Precip	August	Weighted Precip		
2018-09-14	3.98	2	2.63	2	9.45	9	13	Normal
2020-09-02	2.28	1	4.00	4	3.24	6	11	Normal
30% chance less than**	2.67		2.73		2.68			
30 Year Average**	4.61		3.93		3.96			
30% chance more than**	5.21		4.67		4.74			

Germantown Wastewater Utility
30-Year Precipitation Data (1992-2022) from NOAA Website
http://agacis.rcc-acis.org/

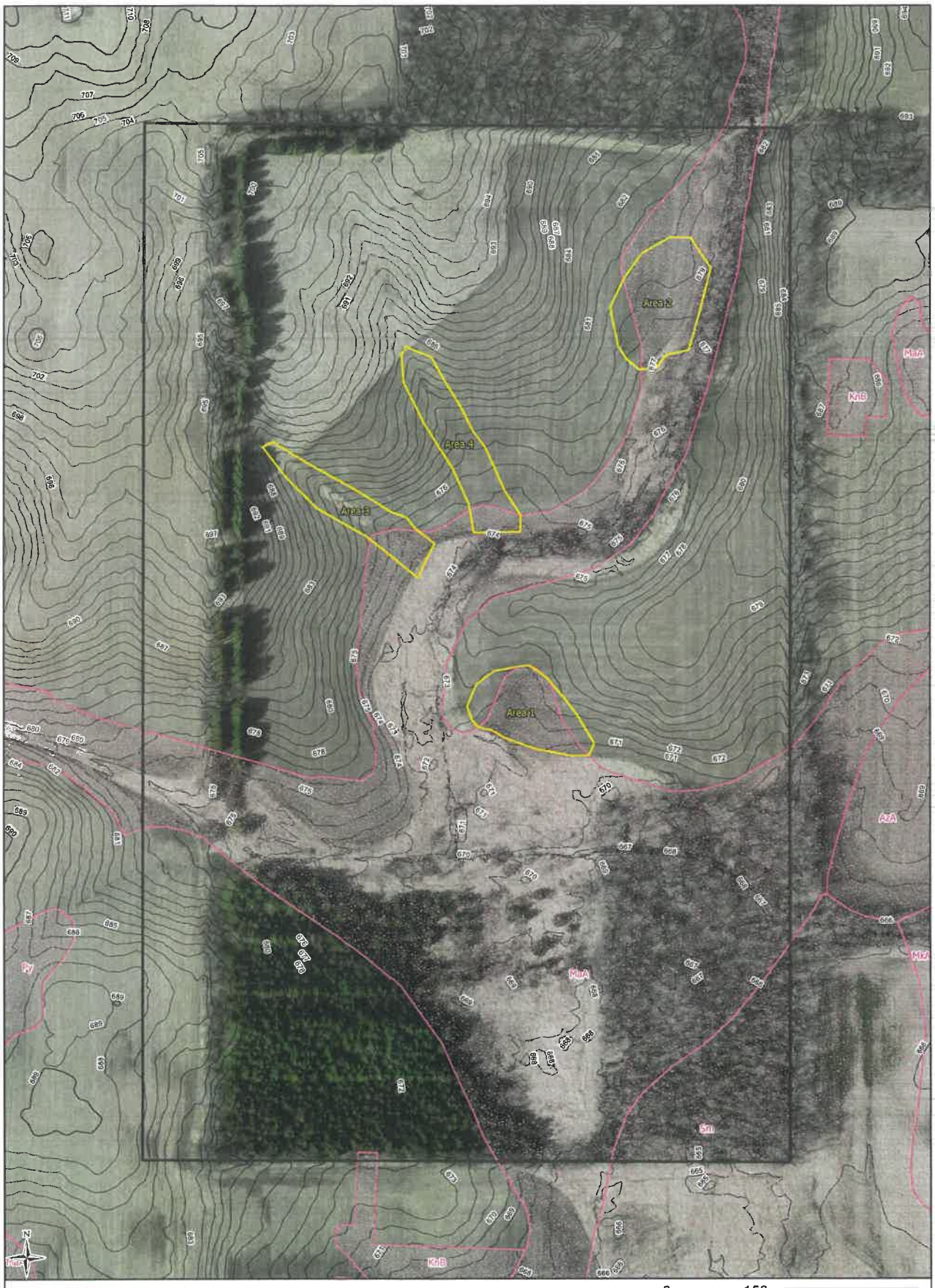
Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

October Analysis

Date	Monthly Rainfall in Inches [1]						Weighted Sum	Relative Wetness
	July	Weighted Precip	August	Weighted Precip	September	Weighted Precip		
2015-09-22	3.12	2	3.89	4	5.40	9	15	Wet
30% chance less than**	2.73		2.68		1.84			
30 Year Average**	3.93		3.96		3.20			
30% chance more than**	4.67		4.74		3.90			

Germantown Wastewater Utility
30-Year Precipitation Data (1992-2022) from NOAA Website
http://agacis.rcc-acis.org/

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,



Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

June 1993

Normal



Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

June 1994

Dry



Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

May 1995

Normal



Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

June 1996

Normal



Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

June 1997

Normal



Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

June 1998

Wet



Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

June 1999

Wet



Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,



Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

June 2001

Normal



Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,



Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,


Study Area (44.73 ac)
0
200
Ft
Heartland
ECOLOGICAL GROUP INC
Appendix: 2005-06-02
NAIP Aerial Imagery
Bratt Property
Project #202631114
T10N, R22E, S31
T Grafton, Ozaukee Co
2005 NAIP
USDA



Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,


WI 32
WI 57
Study Area (44.73 ac)
0
200
Ft
Heartland
ECOLOGICAL GROUP INC
Appendix: 2008-07-05
NAIP Aerial Imagery
Bratt Property
Project #202631114
T10N, R22E, S31
T Grafton, Ozaukee Co
2008 NAIP
USDA



Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,


WI 32
WI 57
Study Area (44.73 ac)
0
200
Ft
Heartland
ECOLOGICAL GROUP INC
Appendix: 2013-06-19
NAIP Aerial Imagery
Bratt Property
Project #202631114
T10N, R22E, S31
T Grafton, Ozaukee Co
2013 NAIP
USDA


Study Area (44.73 ac)
0
200
Ft
Heartland
ECOLOGICAL GROUP INC
Appendix: 2015-09-22
NAIP Aerial Imagery
Bratt Property
Project #202631114
T10N, R22E, S31
T Grafton, Ozaukee Co
2015 NAIP
USDA


WI 32
WI 57
Study Area (44.73 ac)
0
200
Ft
Heartland
ECOLOGICAL GROUP INC
Appendix: 2017-07-03
NAIP Aerial Imagery
Bratt Property
Project #202631114
T10N, R22E, S31
T Grafton, Ozaukee Co
2017 NAIP
USDA



Heartland
ECOLOGICAL GROUP INC

Appendix: 2018-09-14
NAIP Aerial Imagery

Bratt Property
Project #202631114
T10N, R22E, S31
T Grafton, Ozaukee Co

2018 NAIP
USDA

Figure Created

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,


WI 32
WI 57
Study Area (44.73 ac)
0
200
Ft
Heartland
ECOLOGICAL GROUP INC
Appendix: 2020-09-02
NAIP Aerial Imagery
Bratt Property
Project #202631114
T10N, R22E, S31
T Grafton, Ozaukee Co
2020 NAIP
USDA



Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,


WI 32
WI 57
Study Area (44.73 ac)
0
200
Ft
Heartland
ECOLOGICAL GROUP INC
Appendix: 2022-06-23
NAIP Aerial Imagery
Bratt Property
Project #202631114
T10N, R22E, S31
T Grafton, Ozaukee Co
2022 NAIP
USDA

State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
1027 W St. Paul Ave.
Milwaukee, WI, 53233

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

January 19th, 2024

GP-SE-2023-46-03794

Robert Bach
PO Box 460446
Fort Lauderdale, FL 33346
[sent electronically]

RE: Coverage under the wetland statewide general permit to impact wetlands from residential, commercial, and industrial activities, located in the Town of Grafton, Ozaukee County

Dear Mr. Bach:

Thank you for submitting an application for a General Permit to impact 3,509SF of wetlands for residential activities located in the NE 1/4 of SE 1/4, Section 31, Township 10, Range 22E, Town of Grafton, Ozaukee 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. **The discharge(s) from the proposed activity will comply with water quality requirements.**

Please re-read the permit eligibility standards and conditions. The eligibility standards can be found on the GP1 application checklist or in the GP1 statewide general permit. 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 me, your local Water Management Specialist, at (414) 430-7129 or at michelle.soderling@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,

Michelle Soderling

Michelle Soderling
Water Management Specialist

Email CC: Amy Heffernan, USACE Project Manager
Jessica Wolff, Grafton Zoning
Josh Bohn, Parish Survey Engineering

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

You agree to comply with the following conditions:

1. **Application**. You shall submit a complete application package to the Department as outlined in the application requirements (section 2) section 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 coverage under general permit WDNR-GP1-2023 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.

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-GP1-2023.

5. **Expiration**. The time limit for completing an activity authorized by the provisions of WDNR-GP1-2023 ends 5 years after the date on which the activity is considered to be authorized under WDNR-GP1-2023 or until the activity is completed, whichever occurs first. The Department's use of general permit WDNR-GP1-2022 established under s. 281.36(3g) Wis. Stats. expires on June 30, 2028.

6. **Written authorization for modification of scope.** Any modification to the wetland impacts authorized under this general permit must be approved by the Department in writing to ensure that the project continues to meet the general permit eligibility in section 1. Separate permitting is necessary if the modified project scope no longer meets general permit eligibility.

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

8. **Project Start**. You shall notify the Department using the information provided on the confirmation of coverage letter you receive before starting any activity and again not more than 5 days after each activity is completed.

9. **Project Completion.** Within one week after completing the regulated activity, you shall submit to the Department a statement certifying the project complies 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.

10. **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.

11. **Permit Compliance**. The department may revoke coverage of this permit if it is not constructed in compliance with the terms and conditions of this permit. Any act of noncompliance with this permit constitutes a permit violation and is grounds for enforcement action.

12. **Construction Timing**. Once wetland work begins, all construction activities in those wetlands 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.

13. **Construction**. No other portion of the wetland may be disturbed beyond the area designated in the submitted plans.

14. **Proper Maintenance**. You must maintain the activity authorized by WDNR-GP1-2023 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 and waterways.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

15. **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-GP1-2023 and applicable laws.

16. **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: https://dnr.wisconsin.gov/, keyword "stormwater technical standards". 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 the waterway.

17. **Equipment use**. The equipment used in the wetlands must be low ground weight equipment as specified by the manufacturer specifications.

18. **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.

19. **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 NR 40, Wis. Adm. Code. These protocols and practices can be found on the Department website at http://dnr.wi.gov/topic/Invasives/bmp.html Keyword: "equipment operator" and at http://dnr.wi.gov/topic/Invasives/documents/EquipOper.pdf.

20. **Federal and State Threatened and Endangered Species**. WDNR-GP1-2023 does not affect the Department'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 Department 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.

21. **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.

22. **Historic Properties and Cultural Resources**. WDNR-GP1-2023 does not affect the Department's responsibility to ensure that all authorizations comply with Section 106 of the National Historic Preservation Act and s. 44.40, Wis. Stats. No Department 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

23. **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.**

24. **Suitable fill material**. All fill authorized under this permit must consist of clean suitable soil, as defined by s. NR 500.03(214), Wis. Adm. 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.

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

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

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

27. **Reevaluation of Decision**. The Department may suspend 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-GP1-2023.
b. The information provided by the applicant in support of the permit application proves to have been false, incomplete, or inaccurate.

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

CERTIFIED SURVEY MAP # _____

TO DIVIDE LOT 1 OF CERTIFIED SURVEY MAP 4120, RECORDED AS DOCUMENT NO. 1105888, BEING PART OF THE NORTHEAST 1/4 AND THE SOUTHEAST 1/4 OF THE NORTHEAST 1/4 OF SECTION 31, TOWNSHIP 10 NORTH, RANGE 22 EAST, TOWN OF GRAFTON, COUNTY OF OZAUKEE, STATE OF WISCONSIN.

SURVEYOR'S CERTIFICATE

I, J. SCOTT HENKEL, PROFESSIONAL LAND SURVEYOR, DO HEREBY CERTIFY THAT I HAVE SURVEYED, DIVIDED, AND MAPPED THE FOLLOWING LAND AS DIRECTED BY THE OWNER, QTIP TRUST A:

TO DIVIDE LOT 1 OF CERTIFIED SURVEY MAP NO. 4120, RECORDED AS DOCUMENT NO. 1105888 BEING PART OF THE NORTHEAST 1/4 AND THE SOUTHEAST 1/4 OF THE NORTHEAST 1/4 OF SECTION 31, TOWNSHIP 10 NORTH, RANGE 22 EAST IN THE TOWN OF GRAFTON, COUNTY OF OZAUKEE, STATE OF WISCONSIN, DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHEAST CORNER OF THE NORTHEAST 1/4 OF SAID SECTION 31;
THENCE SOUTH 02°02'24" EAST, 912.00 FEET, ALONG THE EAST LINE OF SAID NORHEAST 1/4;
THENCE SOUTH 88°34'06" WEST, 50.00 FEET, TO THE WEST LINE OF PORT WASHINGTON ROAD AND THE POINT OF BEGINNING OF THIS DESCRIPTION;
THENCE SOUTH 02°02'24" EAST, 595.47 FEET, ALONG SAID WEST LINE;
THENCE SOUTH 88°25'18" WEST, 1271.39 FEET, ALONG THE SOUTH LINE OF SAID LOT 1;
THENCE NORTH 01°59'34" WEST, 1310.04 FEET, ALONG THE EAST LINE OF SAID LOT 1;
THENCE NORTH 88°34'57" EAST, 682.44 FEET, ALONG THE NORTH LINE OF SAID LOT 1;
THENCE SOUTH 02°01'33" EAST, 234.00 FEET, ALONG THE EAST LINE OF SAID LOT 1;
THENCE NORTH 88°34'57" EAST, 187.10 FEET, ALONG SAID EAST LINE;
THENCE SOUTH 02°02'24" EAST, 477.11 FEET, ALONG SAID EAST LINE;
THENCE NORTH 88°34'06" EAST, 400.86 FEET, ALONG SAID EAST LINE TO THE POINT OF BEGINNING.

CONTAINING 1,333,757 SQUARE FEET / 30.6188 ACRES, MORE OR LESS.

I FURTHER CERTIFY THAT THE MAP PREPARED IS A CORRECT REPRESENTATION OF ALL OF THE EXTERIOR BOUNDARIES AS SHOWN AND THAT I HAVE FULLY COMPLIED WITH THE PROVISIONS OF CHAPTER 236.34 OF THE WISCONSIN STATUTES, AND THE TOWN OF GRAFTON LAND DIVISION ORDINANCE.

_____
J. SCOTT HENKEL, PLS 2495

RECEIVED
DEC 19 2023
OZAUKEE COUNTY
LAND & WATER
MANAGEMENT DEPT

OWNER'S CERTIFICATE

AS OWNER, RUSSELL I. BRATT TRUST, WE HEREBY CERTIFY THAT WE CAUSED THE LAND DESCRIBED TO BE SURVEYED, DIVIDED, AND MAPPED, AS REPRESENTED HEREON. WE ALSO CERTIFY THAT THIS MAP IS IN ACCORDANCE WITH WISCONSIN STATUTES 236.34 AND THE TOWN OF GRAFTON LAND DIVISION ORDINANCE.

_____ _____

STATE OF WISCONSIN
:SS
_____ COUNTY

PERSONALY CAME BEFORE ME THIS _____ DAY OF _____, 202___,

_____, AND _____, TO ME KNOWN AS THE PERSON(S) WHO EXECUTED THE FOREGOING INSTRUMENT AND ACKNOWLEDGED SAME.

_____
NOTARY PUBLIC, STATE OF WISCONSIN MY COMMISSION EXPIRES: _____

PSE
122 Wisconsin Street, West Bend, WI 53095
262.346.7800 kparish@parishse.com
FN: PD-13-23 Date: 11/14/23

CERTIFIED SURVEY MAP # _____

TO DIVIDE LOT 1 OF CERTIFIED SURVEY MAP 4120, RECORDED AS DOCUMENT NO. 1105888, BEING PART OF THE NORTHEAST 1/4 AND THE SOUTHEAST 1/4 OF THE NORTHEAST 1/4 OF SECTION 31, TOWNSHIP 10 NORTH, RANGE 22 EAST, TOWN OF GRAFTON, COUNTY OF OZAUKEE, STATE OF WISCONSIN.

TOWN OF GRAFTON PLAN COMMISSION APPROVAL

THIS CERTIFIED SURVEY MAP IS HEREBY APPROVED BY THE TOWN OF GRAFTON PLAN COMMISSION ON THIS _____

DAY OF _____, 202___.

_____ LESTER A. BARTEL, JR., CHAIRMAN

_____ SARA JACOBY, TOWN CLERK/PLANNER

TOWN OF GRAFTON TOWN BOARD APPROVAL

THIS CERTIFIED SURVEY MAP IS HEREBY APPROVED BY THE TOWN OF GRAFTON TOWN BOARD ON THIS _____

DAY OF _____, 202___.

_____ LESTER A. BARTEL, JR., TOWN CHAIRMAN

_____ SARA JACOBY, TOWN CLERK

EXTRATERRITORIAL REVIEW AND APPROVAL

CITY OF MEQUON PLANNING COMMISSION APPROVAL

THIS CERTIFIED SURVEY MAP IS HEREBY APPROVED BY THE CITY OF MEQUON PLANNING COMMISSION ON THIS_____

DAY OF _____, 202___.

_____ ANDREW NERBUN, MAYOR

RECEIVED
DEC 19 2023
OZAUKEE COUNTY
LAND & WATER
MANAGEMENT DEPT

PSE
122 Wisconsin Street, West Bend, WI 53095
262.346.7800 kparish@parishse.com

FN: PD-13-23 Date: 11/14/23

SHEET 4 OF 4

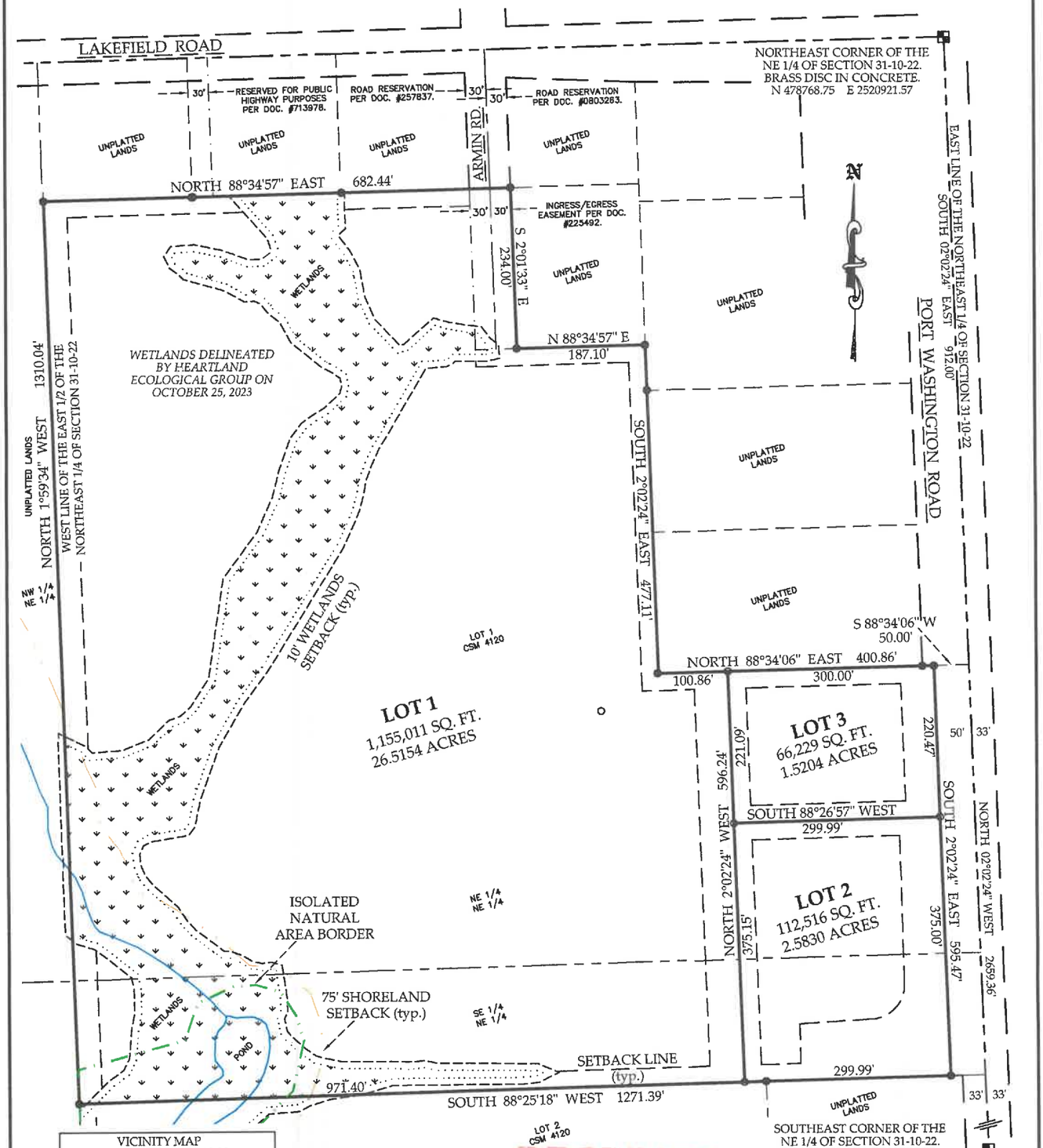
CERTIFIED SURVEY MAP # _____

TO DIVIDE LOT 1 OF CERTIFIED SURVEY MAP 4120, RECORDED AS DOCUMENT NO. 1105888, BEING PART OF THE NORTHEAST 1/4 AND THE SOUTHEAST 1/4 OF THE NORTHEAST 1/4 OF SECTION 31, TOWNSHIP 10 NORTH, RANGE 22 EAST, TOWN OF GRAFTON, COUNTY OF OZAUKEE, STATE OF WISCONSIN.

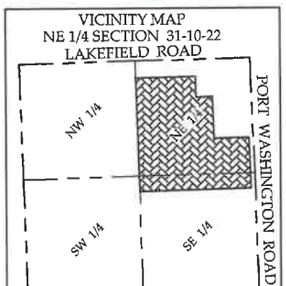
PRELIMINARY

0 100 200

OWNER:
RUSSELL I. BRATT TRUST
PO BOX 460446
FT. LAUDERDALE, FL 33346



VICINITY MAP
NE 1/4 SECTION 31-10-22
LAKEFIELD ROAD



LEGEND

- ● 1" IRON PIPE FOUND, OR AS NOTED
- ○ 3/4"x18" REBAR WEIGHING 1.13 LBS/FOOT SET. (RECORDED AS)
- ⊕ TEST PIT

RECEIVED
DEC 19 2023
OZAUKEE COUNTY LAND & WATER MANAGEMENT DEPT

BEARINGS ARE REFERENCED TO THE WISCONSIN STATE PLANE COORDINATE SYSTEM, SOUTH ZONE, (NAD83). THE EAST LINE OF NE 1/4 OF SECTION 31-10-22 BEARS NORTH 02°02'24" WEST.

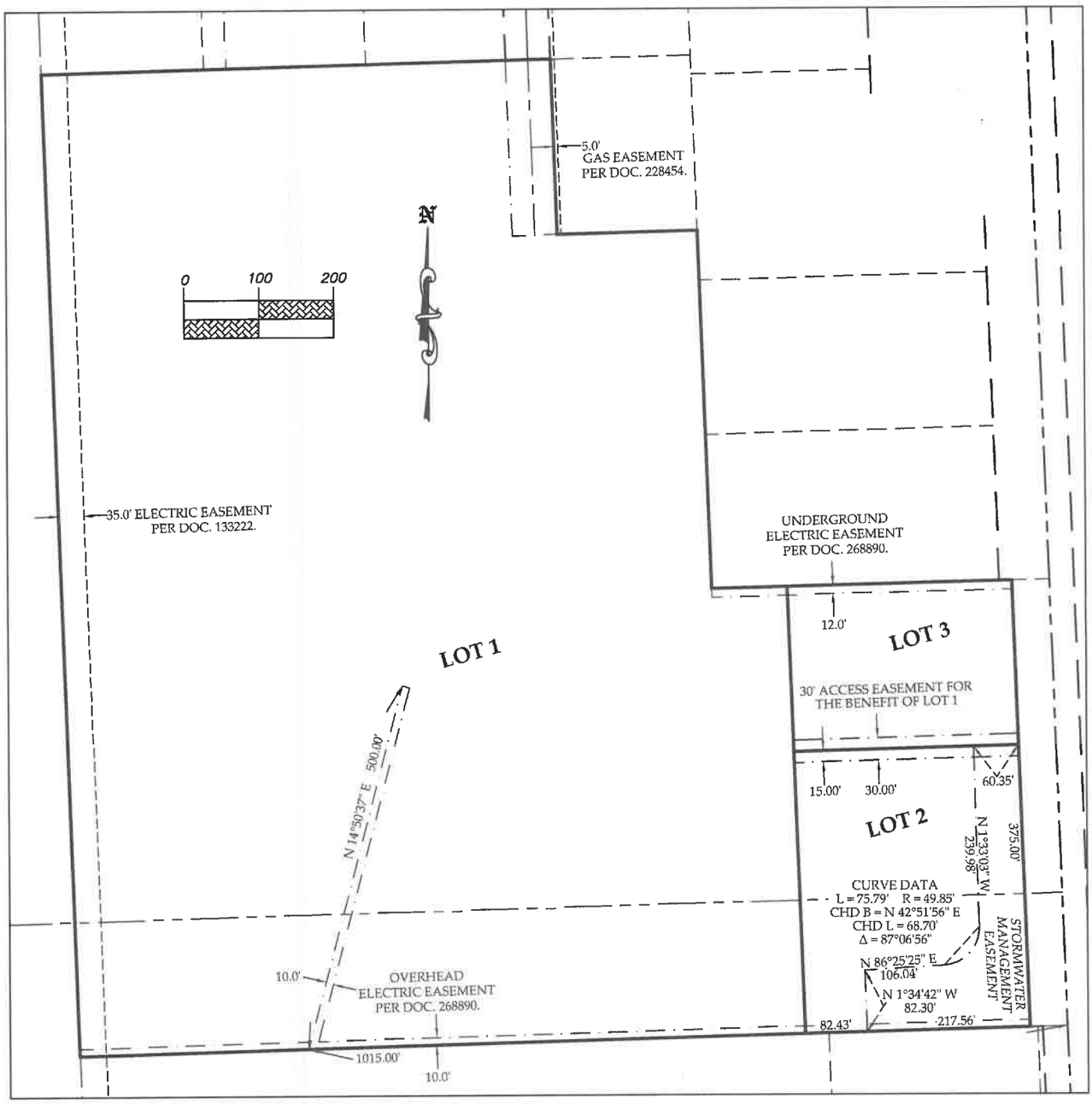
PSE
122 Wisconsin Street, West Bend, WI 53095
262.346.7800 kparish@parishse.com

FN: PD-13-23 Date: 11/14/23

SURVEYED BY JOSEPH W. DAVID
MAPPED BY J. SCOTT HENKEL, PLS

CERTIFIED SURVEY MAP # _____

TO DIVIDE LOT 1 OF CERTIFIED SURVEY MAP 4120, RECORDED AS DOCUMENT NO. 1105888, BEING PART OF THE NORTHEAST 1/4 AND THE SOUTHEAST 1/4 OF THE NORTHEAST 1/4 OF SECTION 31, TOWNSHIP 10 NORTH, RANGE 22 EAST, TOWN OF GRAFTON, COUNTY OF OZAUKEE, STATE OF WISCONSIN.



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DEC 14 2023
OZAUKEE COUNTY
LAND & WATER
MANAGEMENT DEPT

PSE
122 Wisconsin Street, West Bend, WI 53095
262.346.7800 kparish@parishse.com

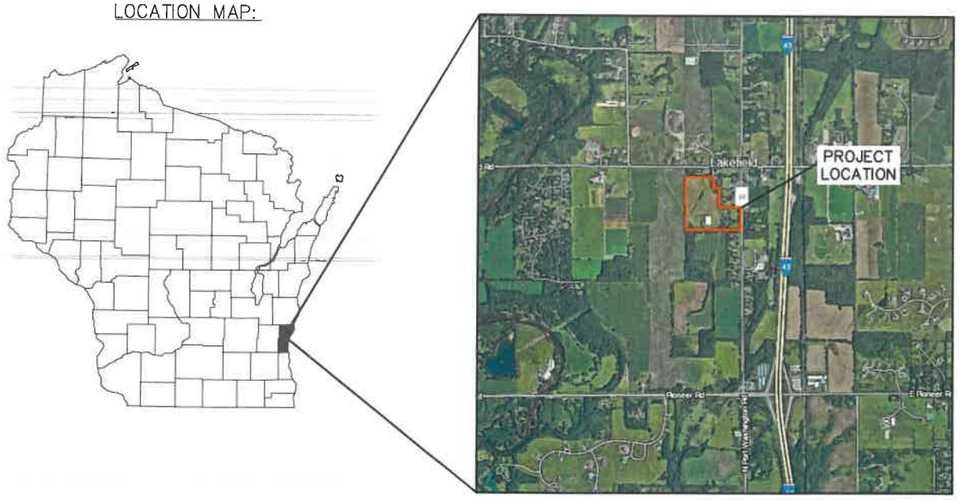
FN: PD-13-23 Date: 11/14/23

P2 BUSINESS CONDOS

391 PORT WASHINGTON ROAD
TOWN OF GRAFTON, WI 53024

RECEIVED
DEC 19 2023
OZAUKEE COUNTY
LAND & WATER
MANAGEMENT DEPT

LOCATION MAP:



P2 DEVELOPMENT &
PROPERTY MANAGEMENT
524 Technology Way
Saukville, WI 53080-1677
www.p2development.com
(262) 377-7259

PROJECT CONTACTS:

OWNER:
P2 DEVELOPMENT
ATTN: ROBERT BACH
524 TECHNOLOGY WAY
SAUKVILLE, WI 53080

CIVIL:
PSE, LLC
ATTN: KEVIN PARISH
122 WISCONSIN STREET
WEST BEND, WI 53095

DIGGERS HOTLINE
Dial 811 or (800)242-8511
www.DiggersHotline.com

CIVIL SHEET INDEX:

SHEET	SHEET TITLE
C.100	TITLE
C1.01	EXISTING CONDITIONS PLAN
C1.02	PROPOSED SITE PLAN
C1.03	PHASING PLAN
C1.04	EROSION CONTROL PLAN
C1.05	SOUTHEAST GRADING PLAN
C1.06	SOUTHWEST GRADING PLAN
C1.07	NORTHEAST GRADING PLAN
C1.08	NORTHWEST GRADING PLAN
C1.09	UTILITY PLAN
C1.10	LANDSCAPE PLAN
C1.11	MULTI-TENANT LANDSCAPE PLAN
C1.12	YIELD PLAN
C1.13	LIGHTING PLAN
C2.01	STORMWATER MANAGEMENT DETAILS
C2.02	STORMWATER MANAGEMENT DETAILS
C2.03	EROSION CONTROL DETAILS

REVISIONS:

NO.	DATE	DESCRIPTION
1	XX-XX-XX	XXXXXXXXXXXXXXXXXX

PSE
PARISH SURVEY & ENGINEERING
122 Wisconsin Street, West Bend, WI 53095
262.346.7800 www.parishse.com

PROJECT TITLE:
P2 BUSINESS CONDOS
391 PORT WASHINGTON ROAD
TOWN OF GRAFTON, WI

PLAN TITLE:
TITLE SHEET

DRAWN BY: JAB
DESIGNED BY: KJP
CHECKED BY: KJP

PLAN DATE: 12-18-2023

PROJECT NO: \PD-13-23\

PRELIMINARY

SHEET NO: C1.00

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

LAKEFIELD ROAD (C.T.H. T)

EX. 15" CMP CULVERT
EX. 21" RCP CULVERT
EX. 12" CMP CULVERT
EX. TELEPHONE PEDESTAL
EX. 12" CMP CULVERT
EX. POWER POLE
EX. 15" CMP CULVERT
EX. POWER POLE
EX. 15" CMP CULVERT
EX. 18" CMP CULVERT
EX. STORM MH
EX. INLET
EX. POWER POLE
EX. TELEPHONE PEDESTAL
EX. SEPTIC MH
EX. POWER POLE
EX. 15" CMP CULVERT
60' ACCESS EASEMENT
EXISTING TREELINE (TO REMAIN)

TAX PARCEL ID# 060310101100
TAX PARCEL ID# 060310101000
TAX PARCEL ID# 060310100950
TAX PARCEL ID# 060310102000
TAX PARCEL ID# 060310101900
TAX PARCEL ID# 060310101200
TAX PARCEL ID# 060310101600
TAX PARCEL ID# 060310101700
TAX PARCEL ID# 060310101800

ARMIN ROAD
PORT WASHINGTON ROAD (C.T.H. W)

WETLAND (DELINEATED BY BATES SOIL & WATER TESTING 6/23/2020)
EXISTING TREELINE (TO REMAIN)
35' WEPCO EASEMENT
EX. FARM FIELD
LOT 1 CSM NO. 4120 (30.62 Acres)
MAYBEE WATERWAY
ISOLATED NATURAL AREA
EXISTING POND
EX. GRAVEL
EX. GRAVEL DRIVEWAY

EXISTING BARN (DEMO)
EXISTING HOUSE (DEMO)
EXISTING METAL BUILDING
EXISTING DRIVEWAY
EX. MAN DOOR
EX. OH DOOR (NOT IN USE)
EX. LOADING DOCK
EX. OH DOOR
EX. WELL
EX. SEPTIC
EX. CONCRETE LOADING DOCK
EX. LID
EX. 12" CMP CULVERT
24"X24" BOX CULVERT
EX. TELEPHONE PEDESTAL
EX. POWER POLE
EX. ENTRANCE
EX. 15" CMP CULVERT

0 75 150

LEGEND:

- 896 – EXISTING MINOR CONTOUR.
- 895 – EXISTING MAJOR CONTOUR.
- OHEL – OVERHEAD ELECTRIC LINE.
- BuEl – BURIED ELECTRIC LINE.
- BuTel – BURIED TELEPHONE LINE.
- FO – FIBER OPTIC LINE.
- GAS – GAS LINE.
- SAN – SANITARY SEWER MAIN OR LATERAL.
- WAT – WATER MAIN OR SERVICE.
- STORM SEWER LINE.
- ELEC – ELECTRIC METER.
- GAS – GAS METER.
- GAS VALVE.
- FIRE HYDRANT.
- POWER POLE.
- SN – SANITARY SEWER MANHOLE.
- ST – STORM SEWER MANHOLE.
- STORM SEWER INLET.
- T – TELEPHONE PEDESTAL.
- TRAN – TRANSFORMER.
- W – WATER VALVE.

REVISIONS:

NO.	DATE	DESCRIPTION
1	XX-XX-XX	XXXXXXXXXXXXXXXXXX

PARISH SURVEY & ENGINEERING
122 Wisconsin Street, West Bend, WI 53095
Tel: 262.338.2000 www.parishsurvey.com

PROJECT TITLE:
P2 BUSINESS CONDOS
391 PORT WASHINGTON ROAD
TOWN OF GRAFTON, WI

PLAN TITLE:
EXISTING CONDITIONS PLAN

DRAWN BY: JAB
DESIGNED BY: KJP
CHECKED BY: KJP

PLAN DATE: 11-15-2023
PROJECT NO: \PD-13-23\
PRELIMINARY
SHEET NO:

P2 DEVELOPMENT & PROPERTY MANAGEMENT
524 Technology Way
Saukville, WI 53080-1677
www.p2development.com
(262) 377-7259

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,



SITE INFORMATION BLOCK	
Site Address:	391 Port Washington Road
Legal Description:	Lot 1 CSM No. 4120
Site Acreage	30.62 Acres
Current Zoning:	BP-1 & PW

Building & Paving Setback Requirements	Building	Parking
Front	50 feet	25 feet
Side	25 feet	25 feet
Rear	25 feet	25 feet

Proposed Parking	No. of Stalls
Lot 1	413
Lot 2	47
Lot 3	32
Total	492

Lot 1 Proposed Site Areas

Description	Area (sf)	Percentage
Building	259,208	22.44
Asphalt/Concrete	210,018	18.18
Total Impervious	469,226	40.63
Lawn	685,785	59.37
Total	1,155,011	100.00

Lot 2 Proposed Site Areas

Description	Area (sf)	Percentage
Building	11,750	10.44
Asphalt/Concrete	35,923	31.93
Total Impervious	47,673	42.37
Lawn	64,843	57.63
Total	112,516	100.00

Lot 3 Proposed Site Areas

Description	Area (sf)	Percentage
Building	8,000	12.08
Asphalt/Concrete	23,826	35.97
Total Impervious	31,826	48.05
Lawn	34,404	51.95
Total	66,230	100.00

REVISIONS:

NO.	DATE	DESCRIPTION
1	XX-XX-XX	XXXXXXXXXXXXXXXXXX

PARISH SURVEY & ENGINEERING
122 Wisconsin Street, West Bend, WI 53095
262-306-7800 www.parishinc.com

PROJECT TITLE:
P2 BUSINESS CONDOS
391 PORT WASHINGTON ROAD
TOWN OF GRAFTON, WI

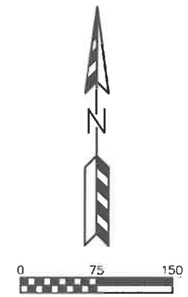
PLAN TITLE:
PROPOSED SITE PLAN

DRAWN BY: **KJP**
DESIGNED BY: **KJP**
CHECKED BY: **KJP**
PLAN DATE: **12-04-2023**
PROJECT NO: **\PD-13-23**
PRELIMINARY
SHEET NO:

P2 DEVELOPMENT & PROPERTY MANAGEMENT
524 Technology Way
Saukville, WI 53080-1677
www.p2development.com
(262) 377-7259

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,





LEGEND

- PHASE I — 19 BUILDINGS
- PHASE II — 9 BUILDINGS
- PHASE III — 17 BUILDINGS
- PHASE IV — 15 BUILDINGS

TOTAL = 60 BUILDINGS

REVISIONS:

NO.	DATE	DESCRIPTION
1	XX-XX-XX	XXXXXXXXXXXXXXXXXX

PSA
PARISH SURVEY & ENGINEERING
122 Wisconsin Street, West Bend, WI 53095
262-677-4480

PROJECT TITLE:
P2 BUSINESS CONDOS
391 PORT WASHINGTON ROAD
TOWN OF GRAFTON, WI

PLAN TITLE:
PHASING PLAI

DRAWN BY: **KJP**
DESIGNED BY: **KJP**
CHECKED BY: **KJP**

PLAN DATE: **11/15/2023**

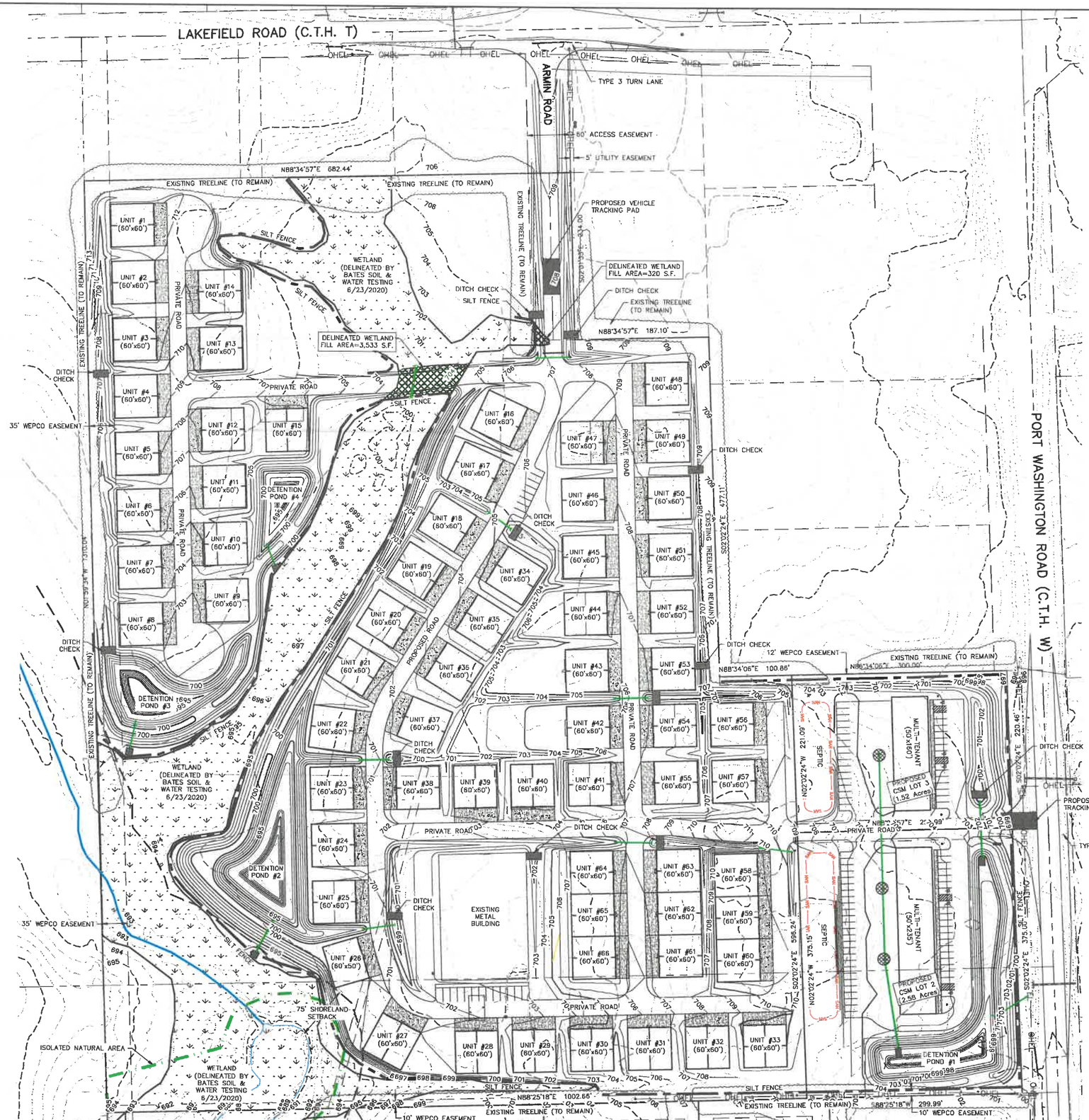
PROJECT NO: \PD-13-23\

PRELIMINARY

SHEET NO:

P2 DEVELOPMENT & PROPERTY MANAGEMENT
524 Technology Way
Saukville, WI 53080-1677
www.p2development.com
(262) 377-7259

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,



N

0 75 150

LEGEND:

- 936 – EXISTING MINOR CONTOUR.
- 935 – EXISTING MAJOR CONTOUR.
- 936 – PROPOSED MINOR CONTOUR.
- 935 – PROPOSED MAJOR CONTOUR.
- – PROPOSED STORM SEWER.
- – EXISTING STORM SEWER.
- – INSTALL WISDOT TYPE D INLET PROTECTION.
- – INSTALL SILT FENCE.
- – INSTALL DITCH CHECK.
- – DRAINAGE ARROW.

NOTE: EROSION MATTING TO BE PLACED ON ALL DISTURBED AREA OF 4:1 OR GREATER, INCLUDING DITCHES AND STORMWATER PONDS. EROSION MAT CLASS I, TYPE B SHALL BE USED.

SILT FENCE=4710 LF
TRACKING PAD=2 EA

REVISIONS:

NO.	DATE	DESCRIPTION
1	XX-XX-XX	XXXXXXXXXXXXXXXXX

PARISH SURVEY & ENGINEERING
122 Wisconsin Street, West Bend, WI 53095
262.306.7800 www.parishsurvey.com

PROJECT TITLE:
P2 BUSINESS CONDOS
391 PORT WASHINGTON ROAD
TOWN OF GRAFTON, WI

PLAN TITLE:
OVERALL GRADING & EROSION CONTROL PLAI

DRAWN BY: KJP
DESIGNED BY: KJP
CHECKED BY: KJP

PLAN DATE: 11-15-2023

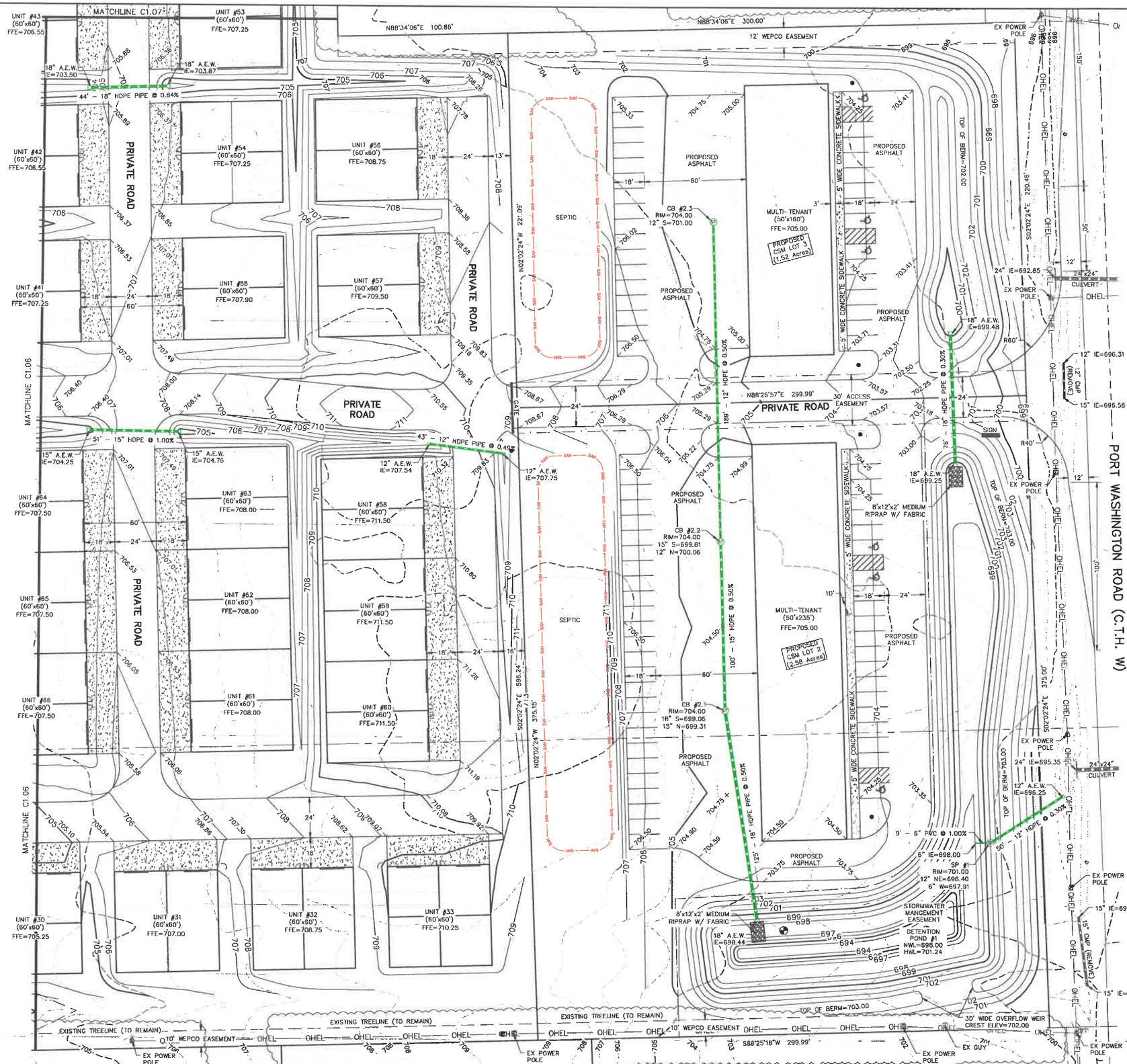
PROJECT NO: \PD-13-23\

PRELIMINARY

SHEET NO:

P2 DEVELOPMENT & PROPERTY MANAGEMENT
524 Technology Way
Saukville, WI 53080-1677
www.p2development.com
(262) 377-7259

Attachment: Combined G2 Development and QTIP Trust A Property - Town of Grafton, Shoreland & Floodplain Zoning Map Amendment (



LEGEND:

- 936 — EXISTING MINOR CONTOUR.
- 935 — EXISTING MAJOR CONTOUR.
- 936 — PROPOSED MINOR CONTOUR.
- 935 — PROPOSED MAJOR CONTOUR.
- EX 934.23 — EXISTING SPOT ELEVATION.
- 934.23 — PROPOSED CURB FLANGE ELEVATION.
- TC 934.23 — PROPOSED TOP OF CURB ELEVATION.
- SW 934.23 — PROPOSED SIDEWALK ELEVATION.
- EP 934.23 — PROPOSED EDGE OF PAVEMENT ELEVATION.
- EXP 934.23 — PROPOSED BUILDING EXPOSURE ELEVATION.
- FFE 934.23 — PROPOSED BUILDING FIRST FLOOR ELEVATION.
- PROPOSED STORM SEWER.
- EXISTING STORM SEWER.

REVISIONS:

NO.	DATE	DESCRIPTION
1	XX-XX-XX	XXXXXXXXXXXXXXXXXX

PSE
PARISH SURVEY & ENGINEERING
122 Wisconsin Street, West Bend, WI 53095
www.parishsurvey.com

PROJECT TITLE:
P2 BUSINESS CONDOS
391 PORT WASHINGTON ROAD
TOWN OF GRAFTON, WI

PLAN TITLE:
SOUTHEAST GRADING PLAN

DRAWN BY: **KJP**
DESIGNED BY: **KJP**
CHECKED BY: **KJP**

PLAN DATE: **11-15-2023**

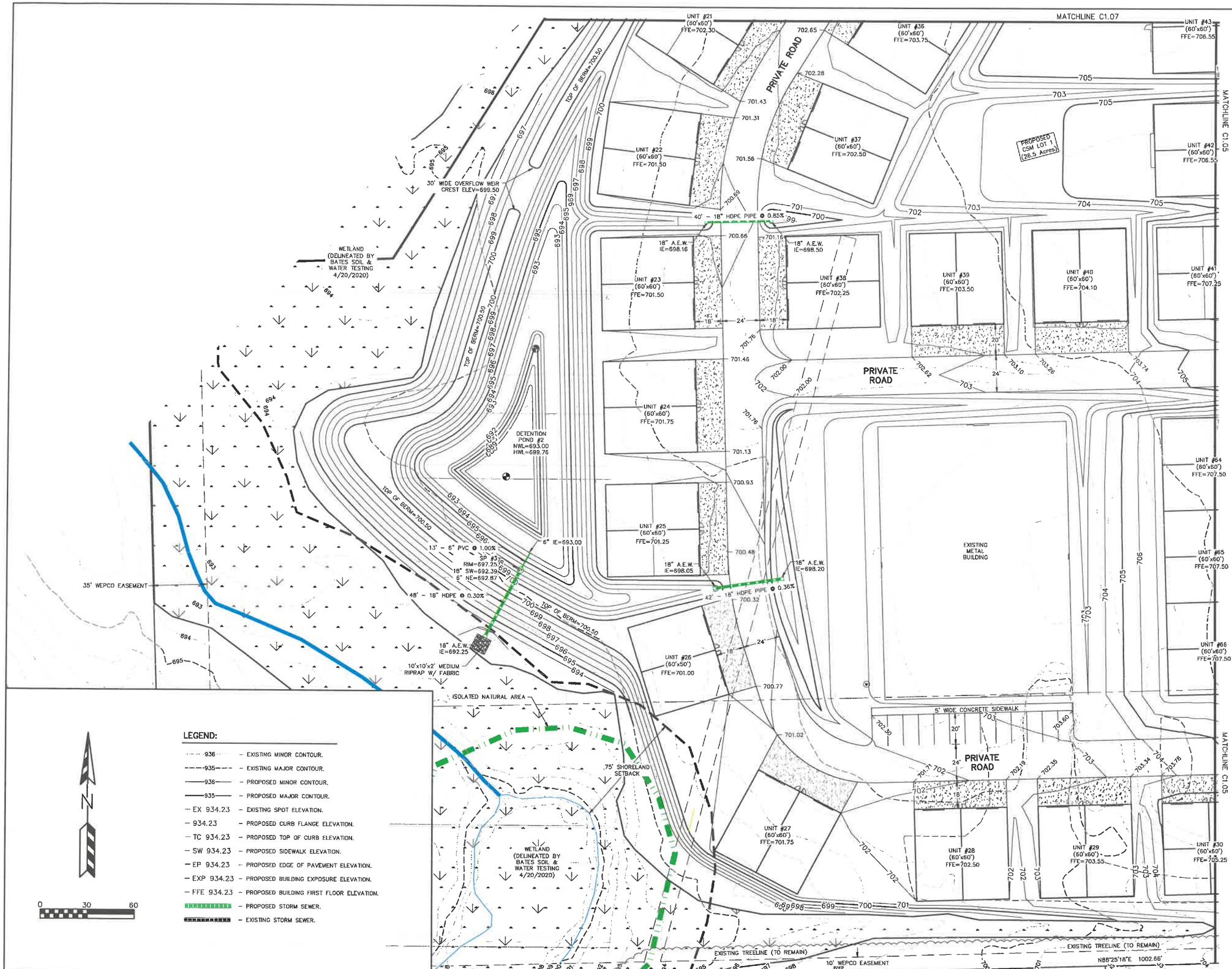
PROJECT NO: **\PD-13-23**

PRELIMINARY

SHEET NO:

P2 DEVELOPMENT & PROPERTY MANAGEMENT
524 Technology Way
Saukville, WI 53080-1677
www.p2development.com
(262) 377-7259

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,



REVISIONS:

NO.	DATE	DESCRIPTION
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PSE
PARISH SURVEY & ENGINEERING
122 Wisconsin Street, West Bend, WI 53095

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

PROJECT TITLE:
P2 BUSINESS CONDOS
391 PORT WASHINGTON ROAD
TOWN OF GRAFTON, WI

PLAN TITLE:
SOUTHWEST GRADING PLAN

DRAWN BY: KJP
DESIGNED BY: KJP
CHECKED BY: KJP

PLAN DATE: 11-15-2023

PROJECT NO: \PD-13-23\

PRELIMINARY

SHEET NO:

P2 DEVELOPMENT & PROPERTY MANAGEMENT
524 Technology Way
Saukville, WI 53080-1677
www.p2development.com
(262) 377-7259

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- PROPOSED STORM SEWER.
- EXISTING STORM SEWER.

0 30 60

LAKEFIELD ROAD (C.T.H. T)

ARMIN ROAD

PRIVATE ROAD

EX POWER POLE (TO RELOCATE)

EX POWER POLE

EX GUY

EX GRAVEL DRIVEWAY (REPLACE TO LOT LINE)

EX GRAVEL ROAD (TO RECONSTRUCT)

5' UTILITY EASEMENT

60' ACCESS EASEMENT

TYPE 3 TURN LANE

EXISTING TREELINE (TO REMAIN)

DELINEATED WETLAND FILL AREA=320 S.F.

DELINEATED WETLAND FILL AREA=3,533 S.F.

WETLAND (DELINEATED BY BATES SOIL & WATER TESTING 4/20/2020)

S02°01'33"E 234.00'

S02°02'24"E 477.11'

N89°34'57"E 187.10'

12" A.E.W. IE=704.90

12" A.E.W. IE=704.77

12" A.E.W. IE=702.66

12" A.E.W. IE=702.54

30" A.E.W. IE=701.30

30" A.E.W. IE=700.18

12" HDPE @ 0.50%

12" HDPE @ 0.58%

42" - 30" HDPE PIPE @ 1.00%

UNIT #48 (60'x60') FFE=710.00

UNIT #47 (60'x60') FFE=709.15

UNIT #46 (60'x60') FFE=708.50

UNIT #45 (60'x60') FFE=707.85

UNIT #44 (60'x60') FFE=707.25

UNIT #43 (60'x60') FFE=706.55

UNIT #16 (60'x60') FFE=706.50

UNIT #17 (60'x60') FFE=705.75

UNIT #18 (60'x60') FFE=705.00

UNIT #19 (60'x60') FFE=704.05

UNIT #20 (60'x60') FFE=702.15

UNIT #21 (60'x60') FFE=702.30

UNIT #34 (60'x60') FFE=705.60

UNIT #35 (60'x50') FFE=704.55

UNIT #36 (60'x60') FFE=703.75

6 STALLS

SWALE WITH BERM TO DETENTION POND #2

MATCHLINE C1.05

MATCHLINE C1.06

MATCHLINE C1.08

MATCHLINE C1.08

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(262) 377-7259

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1	XX-XX-XX	XXXXXXXXXXXXXXXXXX

P2 PARISH SURVEY & ENGINEERING
122 Wisconsin Street, West Bend, WI 53095
262.242.7000 www.parishinc.com

PROJECT TITLE:
P2 BUSINESS CONDOS
391 PORT WASHINGTON ROAD
TOWN OF GRAFTON, WI

PLAN TITLE:
NORTHEAST GRADING PLAN

DRAWN BY: KJP
DESIGNED BY: KJP
CHECKED BY: KJP

PLAN DATE: 11-15-2023

PROJECT NO: \PD-13-23\

PRELIMINARY

SHEET NO:

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

MATCHLINE C1.07

MATCHLINE C1.07

MATCHLINE C1.06

N88°34'57"E 682.44'

WETLAND (DELINEATED BY BATES SOIL & WATER TESTING 4/20/2020)

EXISTING TREELINE (TO REMAIN)

PRIVATE ROAD

PRIVATE ROAD

TOP OF BERM=702.00

30' WIDE OVERFLOW WEIR CREST ELEV=701.00

SP #5
RIM=700.50
12" SE=698.08
6" NW=698.44

25' - 12" HDPE @ 0.30%

12" A.E.W.
IE=698.00

10'x7'x2' MEDIUM RIPRAP W/ FABRIC

DETENTION POND #4
NWL=698.50
HWL=700.63

5' - 6" PVC @ 1.00%
6" IE=698.50

WETLAND (DELINEATED BY BATES SOIL & WATER TESTING 4/20/2020)

TOP OF BERM=700.00

30' WIDE OVERFLOW WEIR CREST ELEV=699.00

SP #4
RIM=698.50
12" S=694.34
6" N=695.92

31' - 12" HDPE @ 0.30%

12" A.E.W.
IE=694.25

10'x10'x2' MEDIUM RIPRAP W/ FABRIC

DETENTION POND #3
NWL=696.00
HWL=698.80

6" IE=695.00

8' - 6" PVC @ 1.00%

TOP OF BERM=700.00

UNIT #1 (60'x80') FFE=712.75

UNIT #2 (60'x60') FFE=712.00

UNIT #3 (60'x80') FFE=711.30

UNIT #4 (60'x60') FFE=709.65

UNIT #5 (60'x60') FFE=708.15

UNIT #6 (60'x60') FFE=706.60

UNIT #7 (60'x60') FFE=705.00

UNIT #8 (60'x60') FFE=703.50

UNIT #9 (60'x60') FFE=703.50

UNIT #10 (60'x60') FFE=705.15

UNIT #11 (60'x60') FFE=706.75

UNIT #12 (60'x60') FFE=708.35

UNIT #13 (60'x60') FFE=710.65

UNIT #14 (60'x60') FFE=711.30

UNIT #15 (60'x60') FFE=707.15

EXISTING TREELINE (TO REMAIN)

EXISTING TREELINE (TO REMAIN)

EXISTING TREELINE (TO REMAIN)

N01°59'34"W 1310.04'

35' WEPCO EASEMENT

75' SHORELAND SETBACK

LEGEND:

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- 935 – EXISTING MAJOR CONTOUR.
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- PROPOSED STORM SEWER.
- EXISTING STORM SEWER.

0 30 60

P2 DEVELOPMENT & PROPERTY MANAGEMENT
524 Technology Way
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www.p2development.com
(262) 377-7259

REVISIONS:

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1	XX-XX-XX	XXXXXXXXXXXXXXXXXX

PARISH SURVEY & ENGINEERING
122 Wisconsin Street, West Bend, WI 53095
262.348.7800
www.parishse.com

PROJECT TITLE:
P2 BUSINESS CONDOS
391 PORT WASHINGTON ROAD
TOWN OF GRAFTON, WI

PLAN TITLE:
NORTHWEST GRADING PLAN

DRAWN BY: KJP
DESIGNED BY: KJP
CHECKED BY: KJP

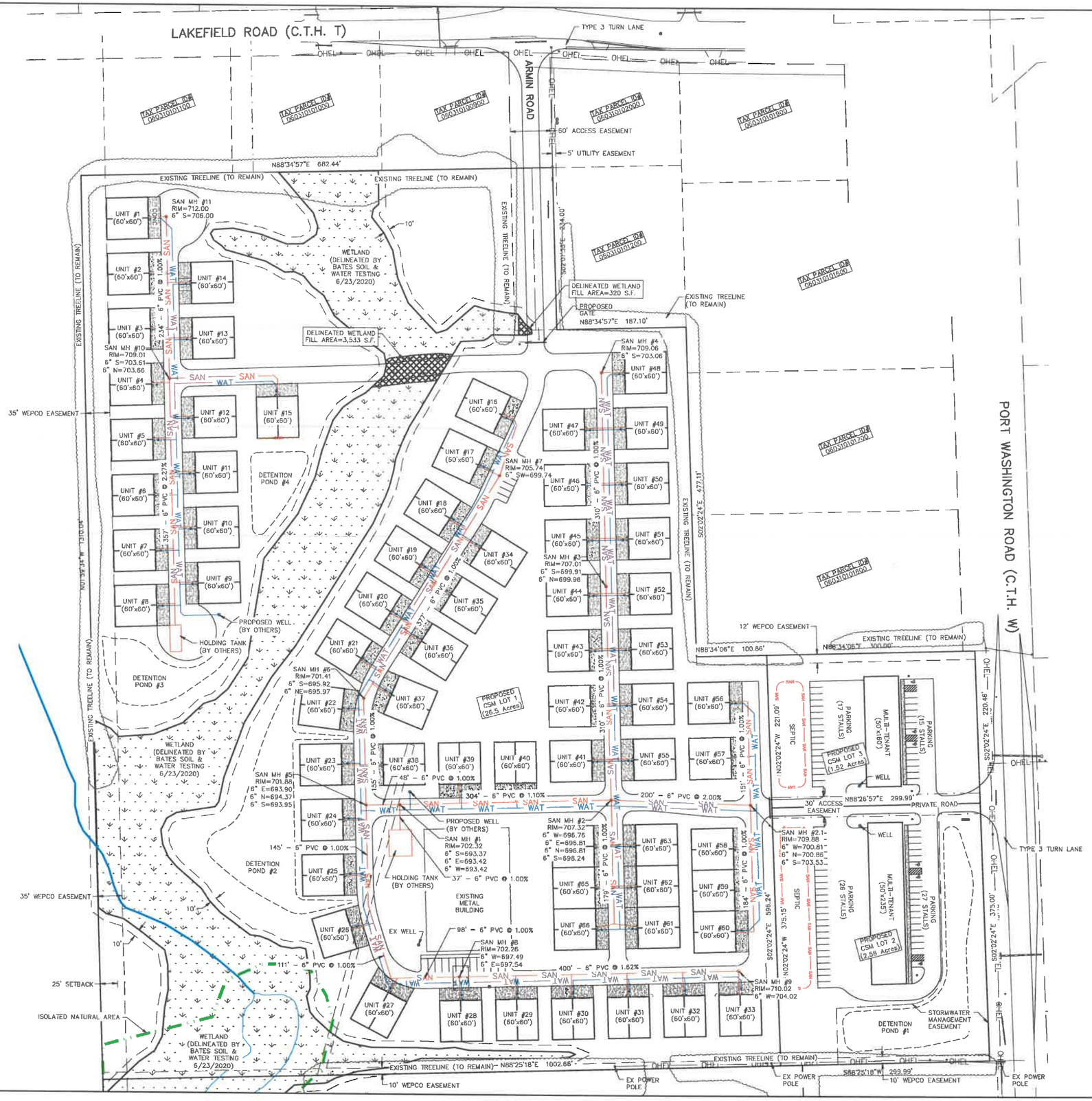
PLAN DATE: 11-15-2023

PROJECT NO: \PD-13-23\

PRELIMINARY

SHEET NO:
C1.09

Attachment: Combined G2 Development and QTIP Trust A Property - Town of Grafton, Shoreland & Floodplain Zoning Map Amendment (6.a.2.b)



UTILITY NOTES:

- ONE SANITARY LATERAL PER BUILDING
- SANITARY LATER SHALL BE 4" PVC @ 1.04%
- ALL WATER MAIN SHALL BE 2" HDPE
- ONE WATER SERVICE TO EACH BUILDING.
- EACH SERVICE WILL BE 1 ¼" HDPE.

REVISIONS:

NO.	DATE	DESCRIPTION
1	XX-XX-XX	XXXXXXXXXXXXXXXXX

PSE
PARISH SURVEY & ENGINEERING
122 Wisconsin Street, West Bend, WI 53095

PROJECT TITLE:
P2 BUSINESS CONDOS
391 PORT WASHINGTON ROAD
TOWN OF GRAFTON, WI

PLAN TITLE:
UTILITY PLAN

DRAWN BY: KJP
DESIGNED BY: KJP
CHECKED BY: KJP

PLAN DATE: 11-15-2023

PROJECT NO: \PD-13-23\

PRELIMINARY

SHEET NO:
C1.00

P2 DEVELOPMENT & PROPERTY MANAGEMENT
524 Technology Way
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(262) 377-7259

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

LAKEFIELD ROAD (C.T.H. T)

ARMIN ROAD

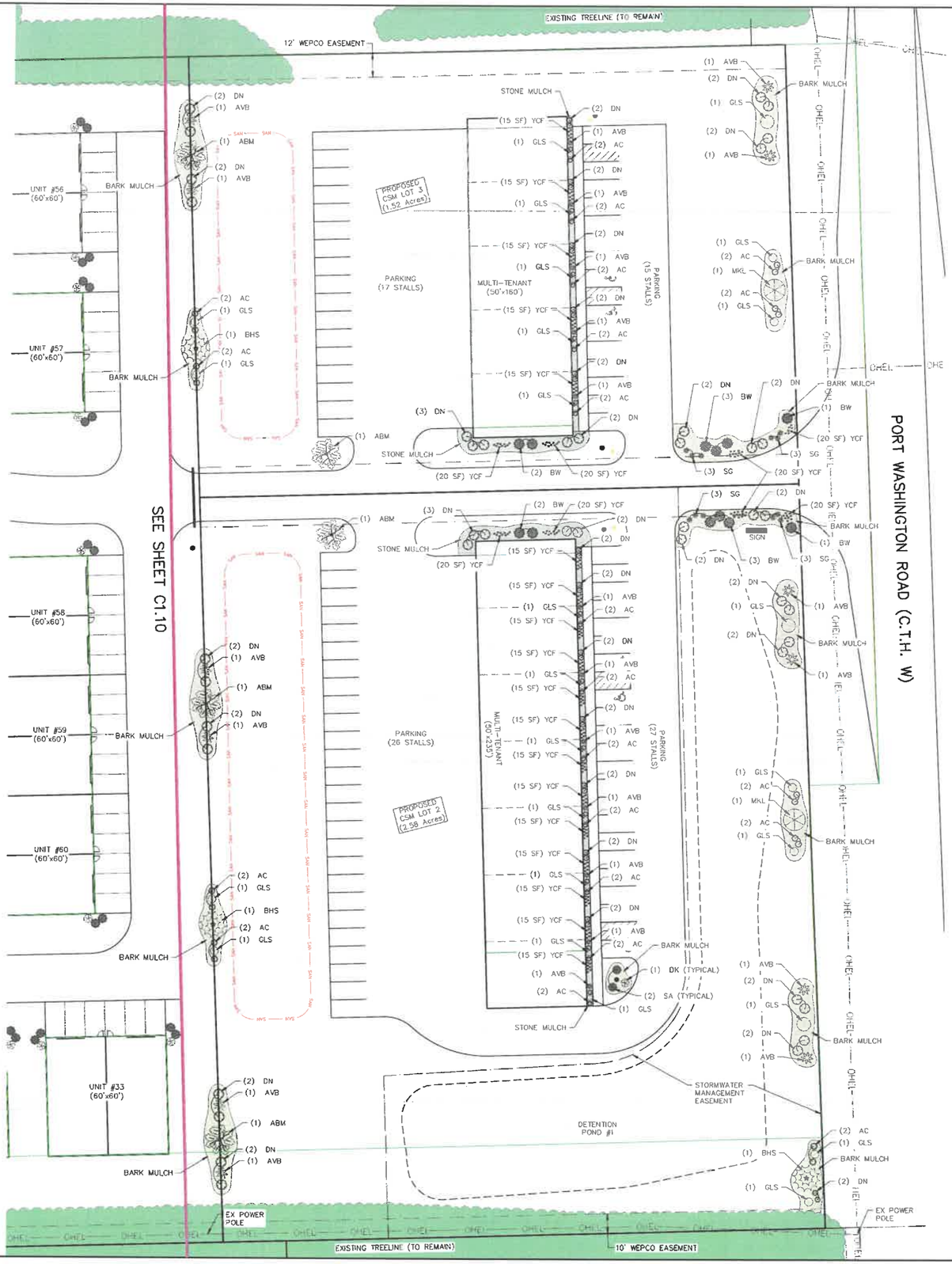
PORT WASHINGTON ROAD (C.T.H. W)

SEE SHEET C1.11

EXISTING TREELINE (TO REMAIN)

EXISTING TREELINE (TO REMAIN)

EXISTING TREELINE (TO REMAIN)



MULTI-TENANT PLANT LIST

KEY	QTY	SIZE	COMMON NAME	ROOT
	(5)		CANOPY TREES	
ABM	5	2"	AUTUMN BLAZE MAPLE	BB
	(3)		EVERGREEN TREES	
BHS	3	4'	BLACK HILLS SPRUCE	BB
	(176)		DECIDUOUS SHRUBS	
AC	42	18"	ALPINE CURRANT	POT
AVB	24	36"	ARROWWOOD VIBURNUM	POT
DN	68	24"	DIABLO NINEBARK	POT
DK	1	36"	KODIAK ORANGE DIERVILLA	POT
GLS	25	18"	GRO LOW SUMAC	POT
SG	12	18"	GOLDFLAME SPIREA	POT
MKL	2	36"	MISS KIM LILAC	BB
SA	2	18"	AUTUMN JOY SEDUM	POT
	(12)		LOW EVERGREEN SHRUBS	
BW	12	1 G	BOXWOOD	CON
	(430)		PERENNIALS	
YCF	430	SF	YELLOW CONEFLOWER	CON

NOTES:

1) DESIGNATED LAWN AREAS TO RECEIVE A MINIMUM OF 6" OF TOPSOIL, STARTER FERTILIZER, AND LOCALLY GROWN BLUEGRASS SOD.
2) LANDSCAPING ADJACENT TO BUILDINGS AND DESIGNATED PLANTING BEDS TO BE MULCHED WITH #2 WASHED STONE MULCH SPREAD TO A DEPTH OF 3" OVER WEED BARRIER FABRIC.
3) FOUNDATION PLANTING BEDS AND DESIGNATED PLANTING BEDS TO BE MULCHED WITH SHREDDED HARDWOOD BARK MULCH SPREAD TO A DEPTH OF 3".
4) INDIVIDUAL TREES AND SHRUB GROUPINGS IN LAWN AREAS TO RECEIVE SHREDDED HARDWOOD BARK MULCH PLANT RINGS (4' DIAMETER) SPREAD TO A DEPTH OF 3"
5) DESIGNATED PLANTING BEDS TO BE SEPARATED FROM LAWN AREAS WITH 5" BLACK VINYL EDGING.
6) OWNER WILL BE RESPONSIBLE FOR LANDSCAPE MAINTENANCE AFTER COMPLETION AND ACCEPTANCE OF THE PROJECT.

– SHREDDED HARDWOOD BARK MULCH

– #2 WASHED STONE MULCH

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524 Technology Way
Saukville, WI 53080-1677
www.p2development.com
(262) 377-7259

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NO.	DATE	DESCRIPTION
1	X-XX-XX	XXXXXXXXXXXXXXXXXX

PARISH SURVEY & ENGINEERING
122 Wisconsin Street, West Bend, WI 53095
262.338.2661
www.parishsurvey.com

PROJECT TITLE:
P2 BUSINESS CONDOS
391 PORT WASHINGTON ROAD
TOWN OF GRAFTON, WI

PLAN TITLE:
MULTI-TENANT LANDSCAPE PLAN

DRAWN BY: **JAB**
DESIGNED BY: **KJP**
CHECKED BY: **KJP**

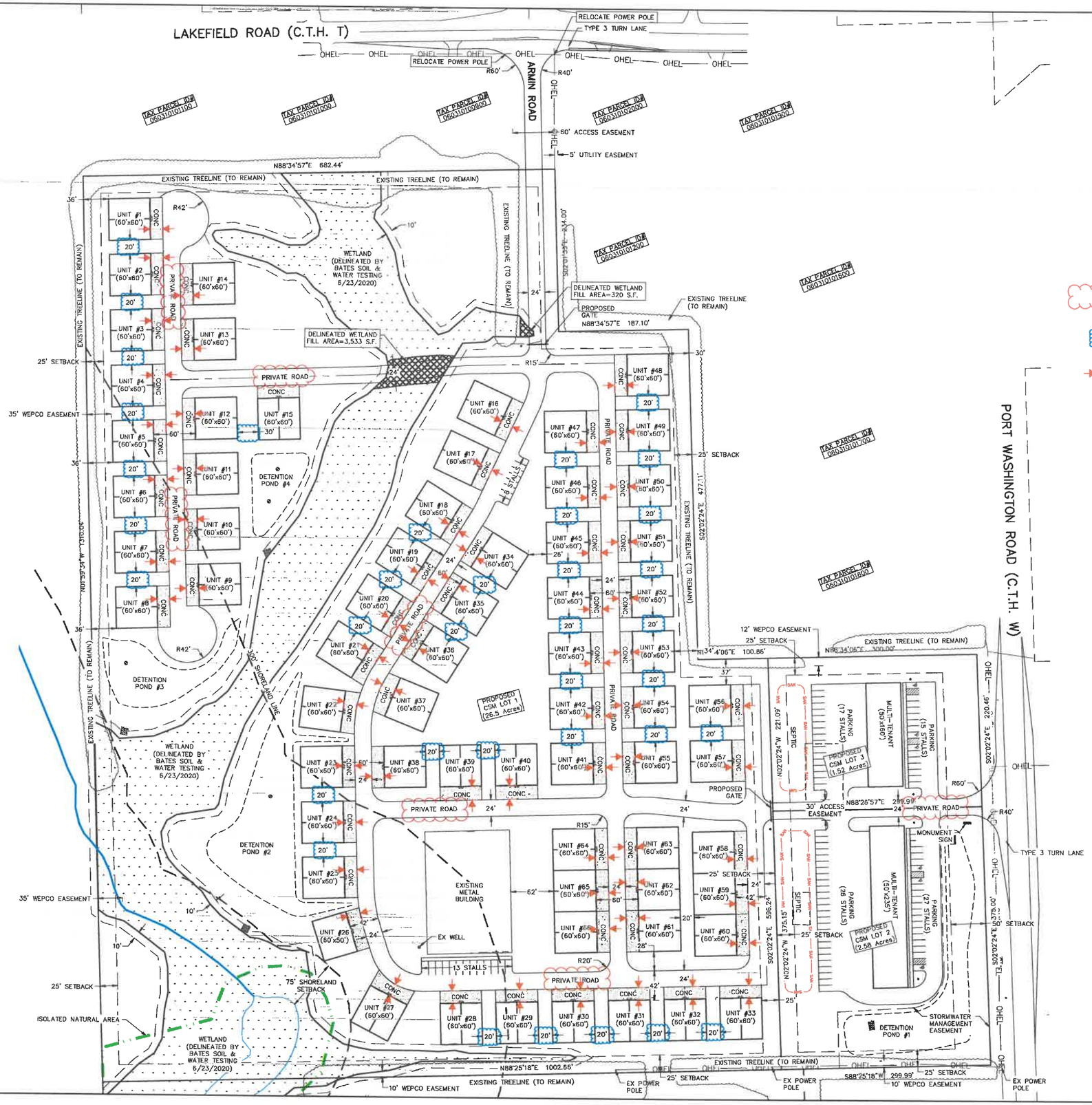
PLAN DATE: **12-04-2023**

PROJECT NO: **\PD-13-23**

PRELIMINARY

SHEET NO: **C1.11**

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,



0 75 150

LEGEND

- PRIVATE ROADWAY IN PUD THAT WOULD BE A PUBLIC ROAD WITHIN THE UNDERLYING ZONING DISTRICTS.
- SIDEYARD SETBACKS BETWEEN BUILDINGS SHALL NOT BE LESS THAN 25 FEET, SO A TOTAL OF 50 FEET, PER THE PW & BP-1 ZONING DITSTRICTS.
- BP-1 & PW ZONING DISTRICTS REQUIRE A 50-FOOT STREET SETBACK. SINCE THESE ARE PRIVATE ROADS WITHIN A PUD, THE BUILDINGS ARE 18-FEET FROM THE EDGE OF THE ROAD.

NOTE: PER PW & BP-1 ZONING DISTRICTS, EACH BUILDING SHOULD HAVE A MINIMUM LOT SIZE OF 80,000 SF AND 40,000 SF, RESPECTIVELY. WITH A PUD, THIS IS A DEVIATION FROM THE UNDERLYING ZONING CODES.

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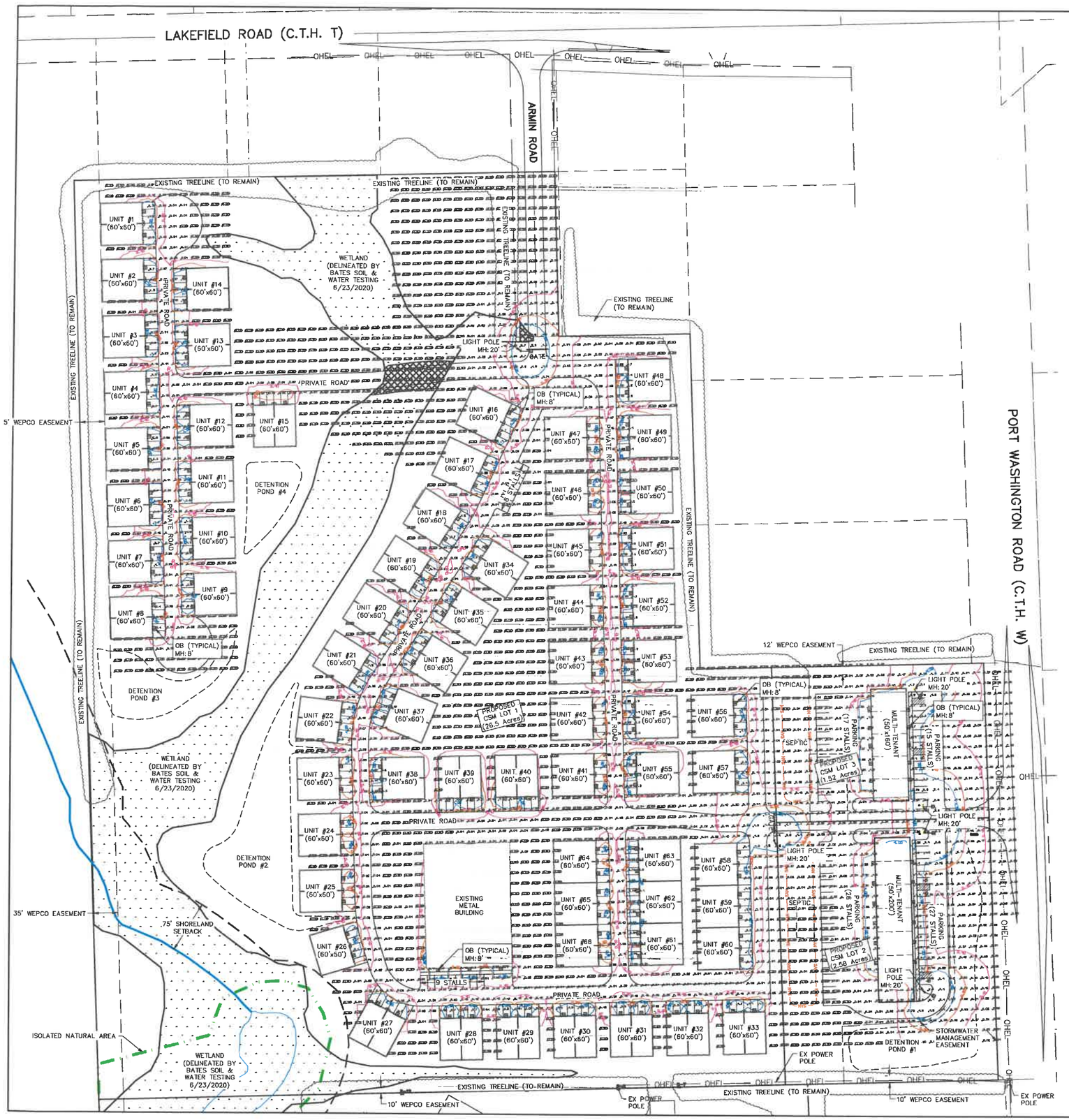
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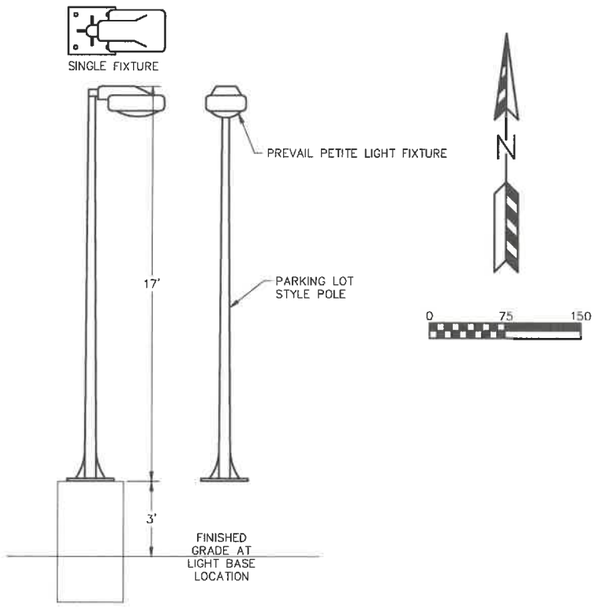
PROJECT TITLE:
P2 BUSINESS CONDOS
391 PORT WASHINGTON ROAD
TOWN OF GRAFTON, WI

PLAN TITLE:
YIELD PLAN

DRAWN BY: **MBS**
DESIGNED BY: **KJP**
CHECKED BY: **KJP**
PLAN DATE: **11-15-2023**
PROJECT NO: **\PD-13-23**
PRELIMINARY
SHEET NO:

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,





PARKING LOT LIGHTING DETAIL

CALCULATION SUMMARY

Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
STORAGE AREA	Illuminance	Fc	0.38	9.46	0.00	N.A.	N.A.

LUMINAIRE SCHEDULE

Symbol	Qty	Label	Manufacturer	Description	Arrangement	Lum. Lumens	Lum. Watts	LLF
—⊡	6	0A	COOPER LIGHTING SOLUTIONS – LUMARK (FORMERLY EATON)	PRV-C25-D-UNV-T4-BZ	SINGLE	13,140	96	0.900
⊡	157	0B	COOPER LIGHTING SOLUTIONS – LUMARK (FORMERLY EATON)	AXCS1A	SINGLE	1,805	13.5	0.900

NOTES:

1) STANDARD REFLECTANCE OF 80/50/20 UNLESS NOTED OTHERWISE
2) NOT A CONSTRUCTION DOCUMENT, FOR DESIGN PURPOSES ONLY
3) STANDARD INDOOR CALC POINTS @ 30 A.F.F. UNLESS NOTED OTHERWISE
4) STANDARD OUTDOOR CALC POINTS @ GRADE UNLESS NOTED OTHERWISE
5) PSE ASSUMES NO RESPONSIBILITY FOR INSTALLED LIGHT LEVELS DUE TO FIELD CONDITIONS, ETC.

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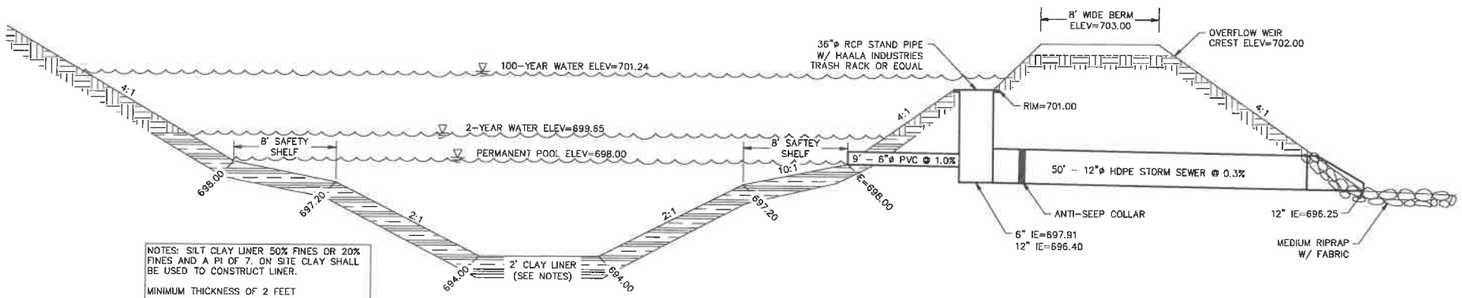
PROJECT TITLE:
P2 BUSINESS CONDOS
391 PORT WASHINGTON ROAD
TOWN OF GRAFTON, WI

PLAN TITLE:
LIGHTING PLAN

DRAWN BY: **JAB**
DESIGNED BY: **KJP**
CHECKED BY: **KJP**
PLAN DATE: **12-04-2023**
PROJECT NO: **\PD-13-23**
PRELIMINARY
SHEET NO:

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

WET DETENTION BASIN CONSTRUCTION SHALL CONFORM TO WISCONSIN DNR TECHNICAL STANDARD (#1001)

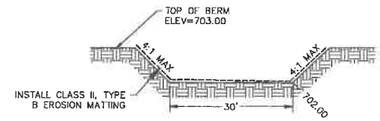


NOTES: SILT CLAY LINER 50% FINES OR 20% FINES AND A PI OF 7. ON SITE CLAY SHALL BE USED TO CONSTRUCT LINER.

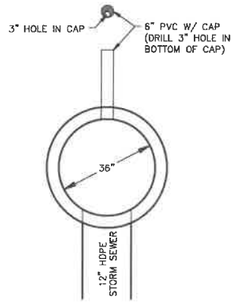
MINIMUM THICKNESS OF 2 FEET

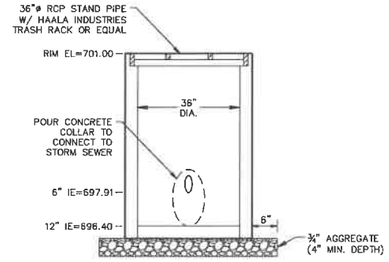
LINER MUST EXTEND ABOVE THE PERMANENT POOL UP TO THE 2 YEAR ELEVATION

WET DETENTION POND CROSS SECTION



OVERFLOW WEIR CROSS SECTION

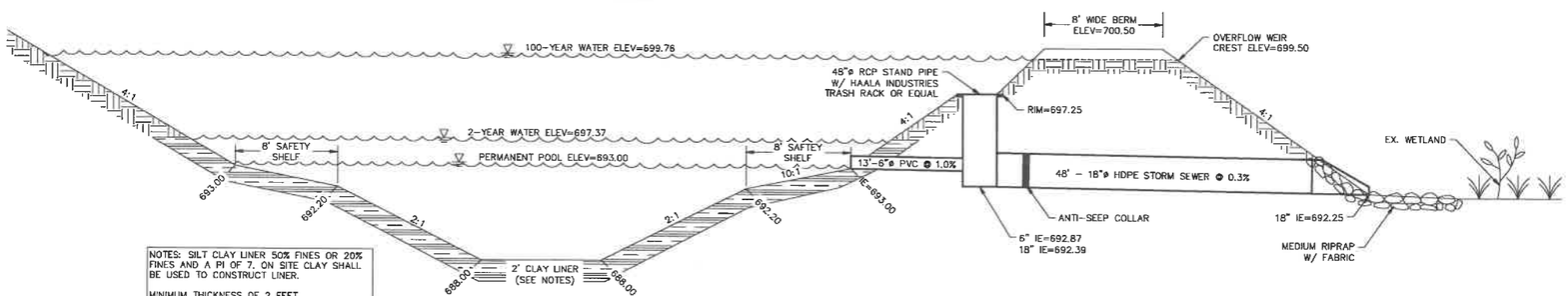




STAND PIPE DETAIL

WET DETENTION POND #1 DETAILS

WET DETENTION BASIN CONSTRUCTION SHALL CONFORM TO WISCONSIN DNR TECHNICAL STANDARD (#1001)

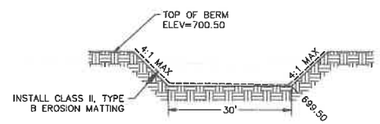


NOTES: SILT CLAY LINER 50% FINES OR 20% FINES AND A PI OF 7. ON SITE CLAY SHALL BE USED TO CONSTRUCT LINER.

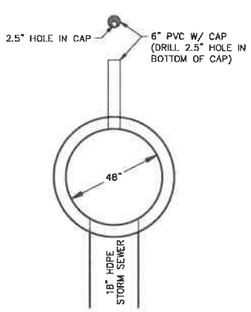
MINIMUM THICKNESS OF 2 FEET

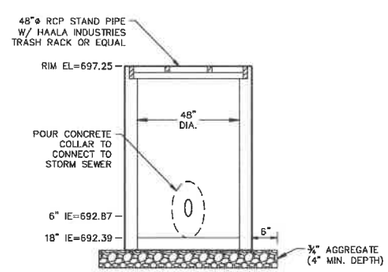
LINER MUST EXTEND ABOVE THE PERMANENT POOL UP TO THE 2 YEAR ELEVATION

WET DETENTION POND CROSS SECTION



OVERFLOW WEIR CROSS SECTION





STAND PIPE DETAIL

WET DETENTION POND #2 DETAILS

REVISIONS:		
NO.	DATE	DESCRIPTION
1	XX-XX-XX	XXXXXXXXXXXXXXXXXX

PSG
PARISH SURVEY & ENGINEERING
122 Wisconsin Street, West Bend, WI 53095
262.306.7870 www.randolee.com

PROJECT TITLE:
P2 BUSINESS CONDOS
391 PORT WASHINGTON ROAD
TOWN OF GRAFTON, WI

PLAN TITLE:
STORMWATER MANAGEMENT DETAILS

DRAWN BY: **KJP**
DESIGNED BY: **KJP**
CHECKED BY: **KJP**

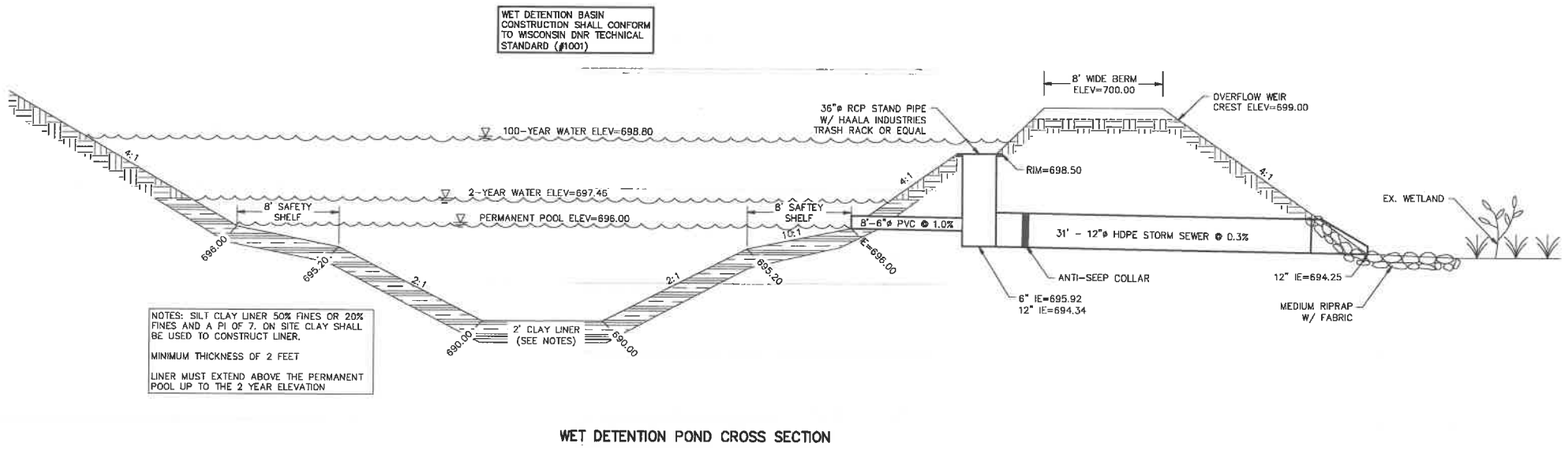
PLAN DATE: **11-15-2023**

PROJECT NO: \PD-13-23\

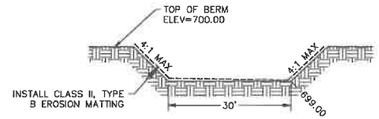
PRELIMINARY

SHEET NO: **C2.01**

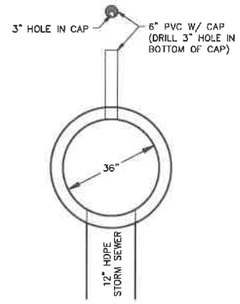
Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

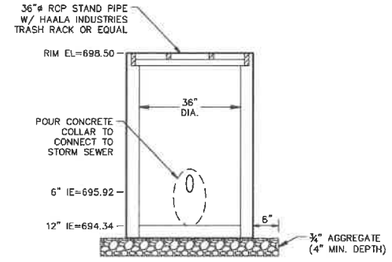


WET DETENTION POND CROSS SECTION



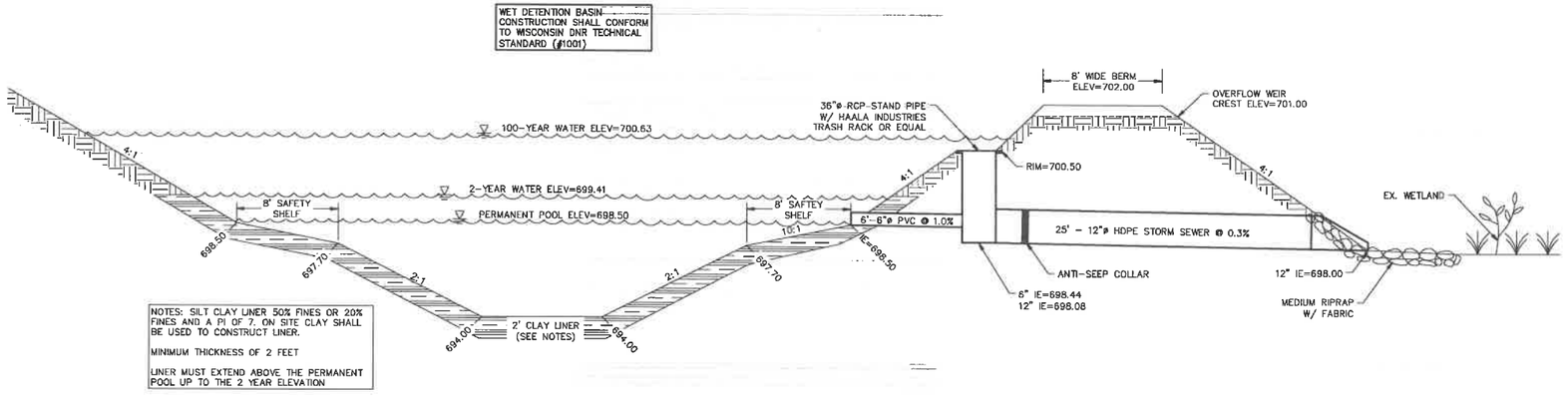
OVERFLOW WEIR CROSS SECTION



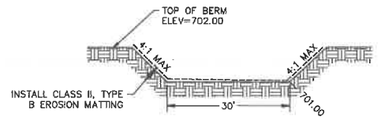


STAND PIPE DETAIL

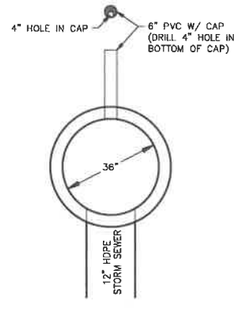
WET DETENTION POND #3 DETAILS

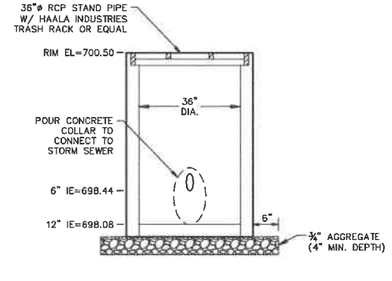


WET DETENTION POND CROSS SECTION



OVERFLOW WEIR CROSS SECTION





STAND PIPE DETAIL

WET DETENTION POND #4 DETAILS

REVISIONS:

NO.	DATE	DESCRIPTION
1	XX-XX-XX	XXXXXXXXXXXXXXXXXXXX

PARISH SURVEY & ENGINEERING
122 Wisconsin Street, West Bend, WI 53095
262-644-7600
www.parishsurvey.com

PROJECT TITLE:
P2 BUSINESS CONDOS
391 PORT WASHINGTON ROAD
TOWN OF GRAFTON, WI

PLAN TITLE:
STORMWATER MANAGEMENT DETAILS

DRAWN BY: **KJP**
DESIGNED BY: **KJP**
CHECKED BY: **KJP**

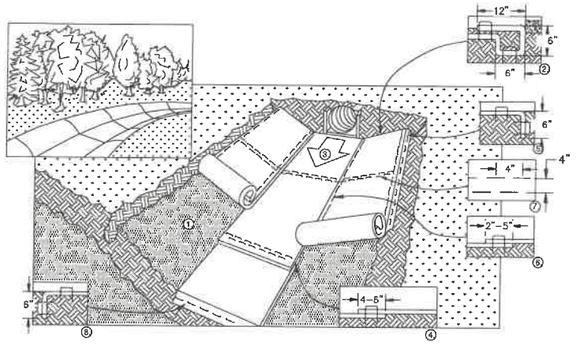
PLAN DATE: **11-15-2023**

PROJECT NO: \PD-13-23\

PRELIMINARY

SHEET NO:

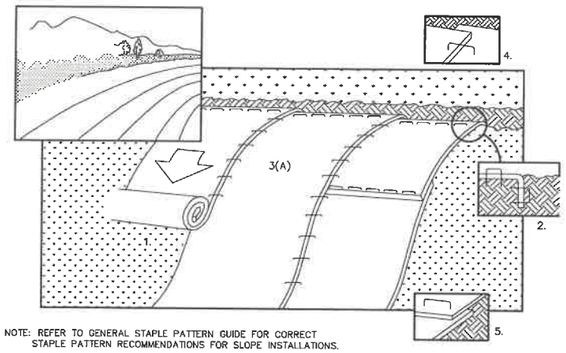
Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,



1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING APPLICATION OF FERTILIZER AND SEED.
2. BEGIN AT THE TOP OF THE CHANNEL BY ANCHORING THE BLANKET IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE BLANKET
3. ROLL CENTER BLANKET IN DIRECTION OF WATER FLOW IN BOTTOM OF CHANNEL. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO THE SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS RECOMMENDED BY THE MANUFACTURER.
4. PLACE CONSECUTIVE BLANKETS END OVER END (SHINGLE STYLE) WITH A 4–6" OVERLAP. USE A DOUBLE ROW OF STAPLES STAGGERED 4" APART AND 4" ON CENTER TO SECURE BLANKETS.
5. FULL LENGTH EDGE OF BLANKETS AT TOP OF SIDE SLOPE MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
6. ADJACENT BLANKETS MUST BE OVERLAPPED APPROXIMATELY 4" AND STAPLED.
7. A STAPLE CHECK SLOT IS RECOMMENDED AT 30 TO 40 FOOT INTERVALS. USE A DOUBLE ROW OF STAPLES STAGGERED 4" APART AND 4" ON CENTER OVER ENTIRE WIDTH OF THE CHANNEL.
8. THE TERMINAL END OF THE BLANKETS MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.

NOTE: ALL STAPLES MUST BE 6" OR GREATER IN LENGTH

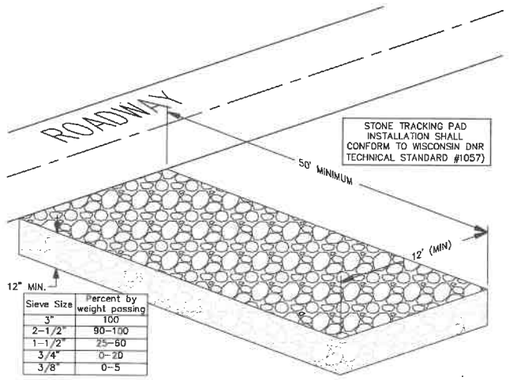
EROSION CONTROL MAT – CHANNEL INSTALLATION



NOTE: REFER TO GENERAL STAPLE PATTERN GUIDE FOR CORRECT STAPLE PATTERN RECOMMENDATIONS FOR SLOPE INSTALLATIONS.

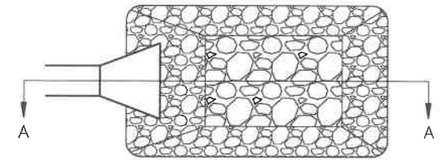
1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING APPLICATION OF FERTILIZER AND SEED. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
3. ROLL THE BLANKETS (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE.
4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2" OVERLAP.
5. WHEN BLANKETS MUST BE SPLICED DOWN THE SLOPE, PLACE BLANKETS END OVER END (SHINGLE STYLE) WITH APPROXIMATELY 4" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY
6. ALL BLANKETS MUST BE SECURELY FASTENED TO THE SLOPE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS RECOMMENDED BY THE MANUFACTURER.

EROSION CONTROL MAT – SLOPE INSTALLATION



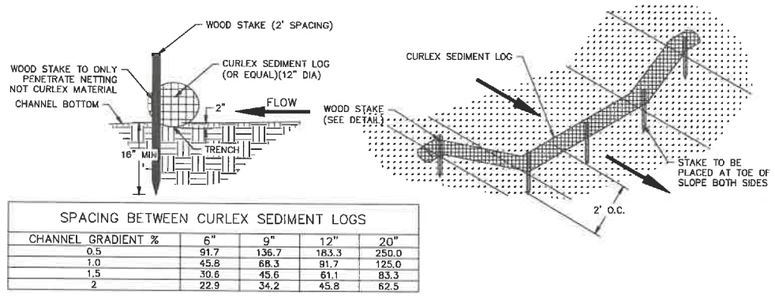
Sieve Size	Percent by weight passing
3"	100
2–1/2"	90–100
1–1/2"	25–60
3/4"	0–20
3/8"	0–5

STONE TRACKING PAD DETAIL



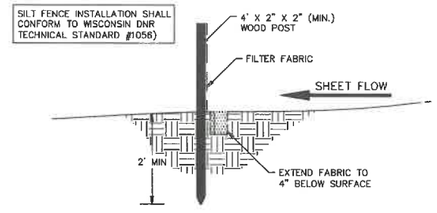
RIPRAP SHALL BE PLACED AS DEFINED IN SECTION 606 OF WISCONSIN D.O.T. SPECIFICATIONS. STONE SIZES SHALL BE WELL GRADED WITH A MINIMUM OF 6 INCH DIAMETER.

RIPRAP/STILLING BASIN DETAIL



SPACING BETWEEN CURLEX SEDIMENT LOGS				
CHANNEL GRADIENT %	6"	9"	12"	20"
0.5	91.7	136.7	183.3	250.0
1.0	45.8	68.3	91.7	125.0
1.5	30.6	45.6	61.1	83.3
2	22.9	34.2	45.8	62.5

SEDIMENT LOG DETAIL



SILT FENCE CONSTRUCTION (SHEET FLOW)

REVISIONS:

NO.	DATE	DESCRIPTION
1	XX-XX-XX	XXXXXXXXXXXXXXXXXXXX

PARISH SURVEY & ENGINEERING
122 Wisconsin Street, West Bend, WI 53095
262.346.7800
www.parishse.com

PROJECT TITLE:
P2 BUSINESS CONDOS
391 PORT WASHINGTON ROAD
TOWN OF GRAFTON, WI

PLAN TITLE:
EROSION CONTROL DETAILS

DRAWN BY: **JAB**
DESIGNED BY: **JAB**
CHECKED BY: **JAB**

PLAN DATE: **11-15-2023**

PROJECT NO: \PD-13-23\

PRELIMINARY

SHEET NO:

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

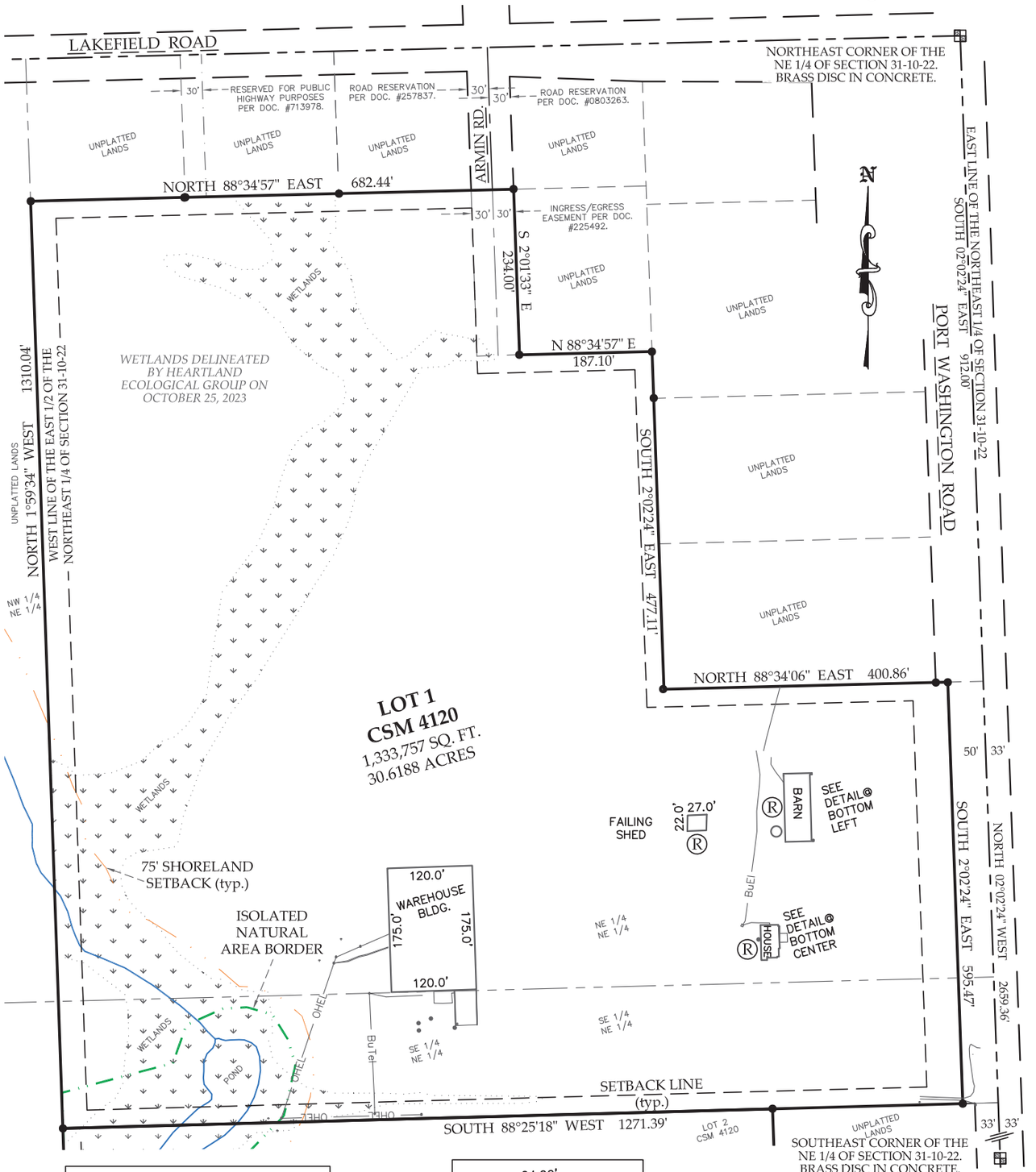
PLAT OF SURVEY

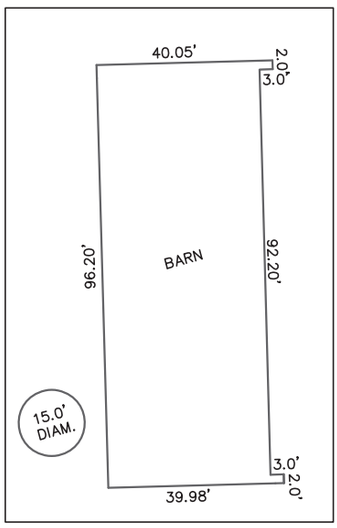
LOT 1 OF CERTIFIED SURVEY MAP 4120, RECORDED AS DOCUMENT NO. 1105888, BEING PART OF THE NORTHEAST 1/4 AND THE SOUTHEAST 1/4 OF THE NORTHEAST 1/4 OF SECTION 31, TOWNSHIP 10 NORTH, RANGE 22 EAST, TOWN OF GRAFTON, COUNTY OF OZAUKEE, STATE OF WISCONSIN.

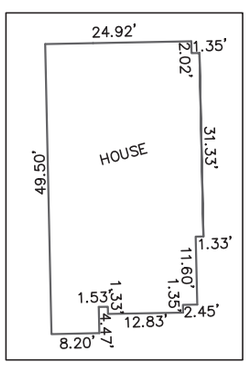
0 100 200

OWNER:
G3 DEVELOPMENT LLC
4512 N 127TH STREET
BUTLER, WI 53007

LEGEND
- ● 1" IRON PIPE FOUND, OR AS NOTED
- ○ 3/4"x18" REBAR WEIGHING 1.13 LBS/FOOT SET.
- Ⓡ TO BE RAZED







BEARINGS ARE REFERENCED TO THE WISCONSIN STATE PLANE COORDINATE SYSTEM, SOUTH ZONE, (NAD83). THE EAST LINE OF NE 1/4 OF SECTION 31–10–22 BEARS NORTH 02°02'24" WEST.

THIS SURVEY IS MADE FOR THE EXCLUSIVE USE OF THE PRESENT OWNER OF THE PROPERTY, AND ALSO THOSE WHO PURCHASE, MORTGAGE OR GUARANTEE THE TITLE THERETO WITHIN 1 YEAR FROM THE DATE HEREON.

I HEREBY CERTIFY THAT I HAVE SURVEYED THE ABOVE DESCRIBED PROPERTY AND THE ABOVE MAP IS A TRUE REPRESENTATION THEREOF AND SHOWS THE SIZE AND LOCATION OF THE PROPERTY, ITS EXTERIOR BOUNDARIES, THE LOCATION AND DIMENSION OF ALL VISIBLE STRUCTURES THEREON, FENCES, APPARENT EASEMENTS, ROADWAYS AND VISIBLE ENCROACHMENT, IF ANY, AND THAT I HAVE COMPLIED WITH WISCONSIN CHAPTER A–E 7.

WISCONSIN
J. SCOTT HENKEL
2495
PLYMOUTH, WI
LAND SURVEYOR

JANUARY 8, 2024

SHEET 1 OF 1

SURVEYED BY JOSEPH W. DAVID
MAPPED BY J. SCOTT HENKEL, PLS

PSE
122 Wisconsin Street, West Bend, WI 53095
262.346.7800 kparish@parishse.com

FN: PD–13–23 Date: 1/8/24

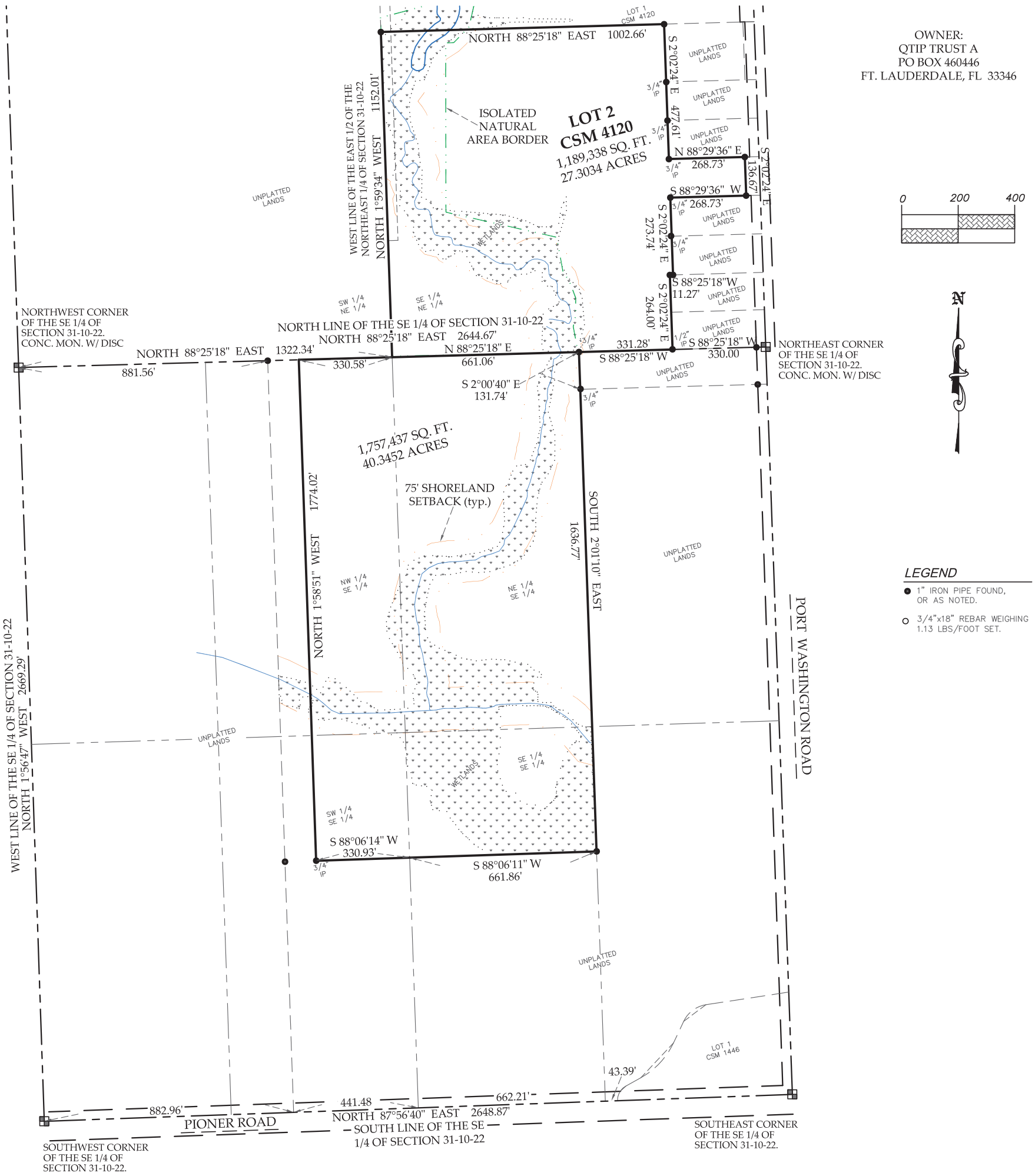
Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton, Section 31)

PLAT OF SURVEY

LOT 2 OF CERTIFIED SURVEY MAP 4120, RECORDED AS DOCUMENT NO. 1105888, BEING PART OF THE NORTHEAST 1/4 AND THE SOUTHEAST 1/4 OF THE NORTHEAST 1/4 OF SECTION 31, TOWNSHIP 10 NORTH, RANGE 22 EAST, TOWN OF GRAFTON, COUNTY OF OZAUKEE, STATE OF WISCONSIN.

AND,

THE NORTH FORTY (40) ACRES OF THE WEST HALF OF THE EAST HALF OF THE SOUTHEAST QUARTER (W1/2 E1/2 SE1/4) OF SECTION THIRTY-ONE (31), TOWNSHIP TEN (10) NORTH, RANGE TWENTY-TWO (22) EAST, AND OF THE EAST HALF OF THE EAST HALF OF THE WEST HALF OF THE SOUTHEAST QUARTER (E1/2 E1/2 W1/2 SE1/4) OF SECTION THIRTY-ONE (31), TOWNSHIP TEN (10) NORTH, RANGE TWENTY-TWO (22) EAST, TOWN OF GRAFTON, OZAUKEE COUNTY, WISCONSIN.



THIS SURVEY IS MADE FOR THE EXCLUSIVE USE OF THE PRESENT OWNER OF THE PROPERTY, AND ALSO THOSE WHO PURCHASE, MORTGAGE OR GUARANTEE THE TITLE THERETO WITHIN 1 YEAR FROM THE DATE HEREON.

I HEREBY CERTIFY THAT I HAVE SURVEYED THE ABOVE DESCRIBED PROPERTY AND THE ABOVE MAP IS A TRUE REPRESENTATION THEREOF AND SHOWS THE SIZE AND LOCATION OF THE PROPERTY, ITS EXTERIOR BOUNDARIES, THE LOCATION AND DIMENSION OF ALL VISIBLE STRUCTURES THEREON, FENCES, APPARENT EASEMENTS, ROADWAYS AND VISIBLE ENCROACHMENT, IF ANY, AND THAT I HAVE COMPLIED WITH WISCONSIN CHAPTER A-E 7.

WISCONSIN
J. SCOTT HENKEL
2495
PLYMOUTH, WI
LAND SURVEYOR

JANUARY 8, 2024

SURVEYED BY JOSEPH W. DAVID
MAPPED BY J. SCOTT HENKEL, PLS

PSE
122 Wisconsin Street, West Bend, WI 53095
262.346.7800 kparish@parishse.com

FN: PD-13-23 Date: 01/08/24

SHEET 1 OF 1

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton, Section 31)

RECEIVED
NOV 03 2023
OZAUKEE COUNTY
LAND & WATER
MANAGEMENT DEPT

Andy Holschbach, Director
Edward J. Pfister, Sanitation & Zoning Coordinator
Jeffrey P. Bell, Land & Water Coordinator
www.co.ozaukee.wi.us

OZAUKEE COUNTY

LAND AND WATER MANAGEMENT DEPARTMENT

PETITION TO CHANGE ZONING CLASSIFICATION

TO THE OZAUKEE COUNTY NATURAL RESOURCES COMMITTEE:

Ladies & Gentleman:

The undersigned hereby petitions the Ozaukee County Natural Resource Committee to change the zoning classification of the following land in Ozaukee County, Wisconsin, from:

Shoreland and Wetland District (Existing Zoning District) to Shoreland District (Proposed Zoning District)

Owner: G3 Development QTIP Trust A Russell I Bratt Trust	**Agent:** Robert Bach
Telephone Number: (262) 894-5466	**Telephone Number:** 414-573-1147
E-Mail Address: ryan.bratt89@gmail.com	**E-Mail Address:** robert3bach@gmail.com
Mailing Address: PO Box 460446	**Mailing Address:** 524 Technology Way
City, State, Zip: Fort Lauderdale, FL 33346	**City, State, Zip:** Saukville, WI 53080
Project Address (if different than mailing address): 351 Port Washington Road	

4512 N 127th Street Butler WI 53007
2000 S Ocean Lane Unit 201 Ft. Lauderdale FL 33316

Tax Key Number(s): 060310102100 (Lot 1); 06-031-13-002.00; 06-031-04-010.00 (Lot 2)

Legal Description (¼/¼, Section, Township-Range, Municipality):
NE 1/4 & part of the SE 1/4 of the NE 1/4 of S 31, T 10, N-R 22 E, Town of Grafton

Lot Number:	Block Number:	Subdivision Name or CSM #
1 + Lot 2	N/A	4120 Doc #1055888 (06-021-01-04-010.00 (Lot 1); 06-021-01-021.00 Lot 2)

Additional Information:
Wetland Rezoning - Recognize Wetland Delineations & Rezone Proposed Road Crossing

NOTICE TO PETITIONERS

The procedure to rezone / amend the Ozaukee County Shoreland and Floodplain Zoning Ordinance must comply with the statue and administrative rule provisions described in Sections 7.1300-7.1305. The criteria that the board must consider to reach a decision on the petition are stated in the ordinance [Sections 7.1300 (comprehensive), 7.1302 (floodplain), and 7.1305 (shoreland-wetland)].

This petition (original only) and any support documents must be filed with the Ozaukee County Land & Water Management Department one month in advance of the applicable Natural Resources Committee meeting date. Required support documents include:

(1) A survey clearly showing the boundaries (wetland / floodplain) of any area to be rezoned, and
(2) A written statement that addresses the criteria in ordinance Sections 7.1300-711305 as they relate to the proposed rezoning, if applicable (see descriptions on back page). **Application materials shall be limited to 8.50 x 11.00, 8.50 x 14.00, or 11.00 17.00 sheets.** *Petitions will be considered at the next available committee meeting.*

(continued on page 2)

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

NOTICE TO PETITIONERS (continued)

Notice of a public hearing on the petition will be published as a Class II notice under CH. 985, Wisconsin Statutes. The applicant will be notified of the date, time, and location of the hearing. It is advisable for the applicant or an agent for the applicant to attend the hearing.

A rezoning application fee of $330.00, **payable to Ozaukee County**, is due at the time the petition is filed.

Comprehensive Rezoning

Section 7.1300 - Applies to all areas within the shoreland zoning jurisdictional area except floodplain and wetland areas. Rezoning of floodplain or wetland areas are regulated under Sections 7.1302 & 7.1305 (see below).

Floodplain Rezoning

Section 7.1302 - Floodplain management regulations may only be removed by rezoning the area to remove it from the floodplain provided the property:

(a) is filled to an elevation 2 feet above the regional flood elevation and is contiguous to lands outside the floodplain, or
(b) was above the regional flood elevation at the time of the effective date of the floodplain zoning map (mapped floodplain error).

Shoreland-Wetland Rezoning

Section 7.1305 - A wetland, or portion thereof, in the shoreland-wetland district shall not be rezoned if the proposed rezoning may result in a significant adverse impact upon any of the following:

1. Storm and flood water storage capacity;
2. Preservation of dry season stream flow, the discharge of groundwater to a wetland, the recharge of groundwater from a wetland to another area, or the flow of groundwater through a wetland;
3. Filtering or storage of sediments, nutrients, heavy metals, or organic compounds that would otherwise drain into navigable waters;
4. Shoreline protection against soil erosion;
5. Fish spawning, breeding, nursery or feeding grounds;
6. Wildlife habitat;
7. Areas of special recreational, scenic, or scientific interest, including scarce wetland types.

Section 7.1305(C) - If the Wisconsin Department of Natural Resources notifies the natural resources committee or county board that a proposed text or map amendment to the shoreland-wetland provisions of this ordinance may have a significant adverse impact upon any of the criteria listed above, that amendment, if approved by the county board, shall contain the following provision:

"This amendment shall not take effect until more than 30 days have elapsed after written notice of the county board approval of this amendment is mailed to the DNR. During that 30-day period the department may notify the county board that it will adopt a superseding shoreland ordinance for the county under Section 59.692 (6), Wis. Stats. If the department does so notify the county board, the effect of this amendment shall be stayed until the Section 59.692 (6) adoption procedure is completed or otherwise terminated."

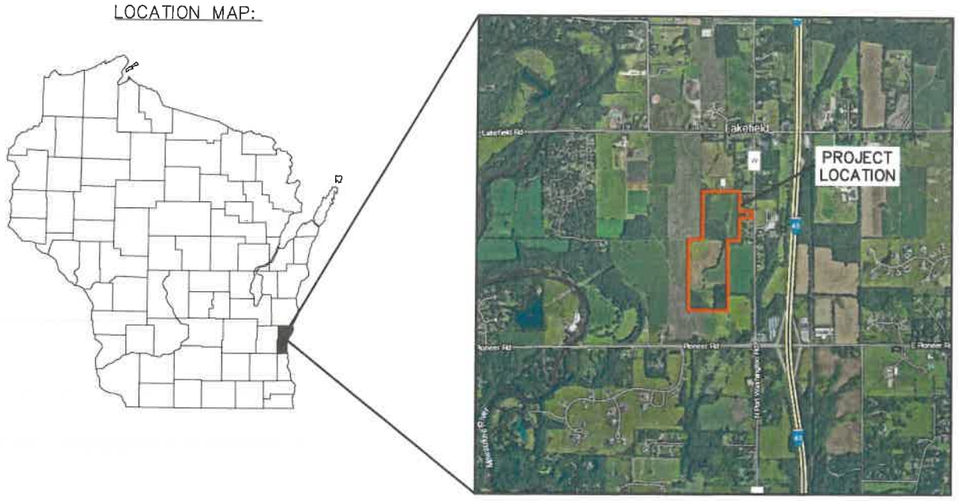
Signature (Owner/Agent):	Date:	Petition Fee:
Robert Bach	11-2-23	330.00
		Petition Date: 12-19-2023
(For Department use only)		Check / Receipt Number: 4952/17486
Date of NR Committee Approval:	Date of County Board Approval:	
Comments: 1/4/2024 - Mailed out Neighbor Letters-RB 1/4/2024 - Sent Public Notice to Ozaukee Press by email.-RB		

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

WINDING BROOK SUBDIVISION

PORT WASHINGTON ROAD
TOWN OF GRAFTON, WI 53024

LOCATION MAP:



RECEIVED
DEC 14 2023
OZAUKEE COUNTY
LAND & WATER
MANAGEMENT DEPT

PROJECT CONTACTS:

OWNER:
QTIP TRUST A, LLC
P.O. BOX 460446
FT. LAUDERDALE, FL 33346

CIVIL:
PSE, LLC
ATTN: KEVIN PARISH
122 WISCONSIN STREET
WEST BEND, WI 53095

DIGGERS HOTLINE
Dial 811 or (800)242-8511
www.DiggersHotline.com

CIVIL SHEET INDEX:

SHEET	SHEET TITLE
C.100	TITLE
C1.01	EXISTING CONDITIONS PLAN
C1.02	PROPOSED SITE PLAN
C1.03	EROSION CONTROL PLAN
C1.04	NORTH POND PLAN
C1.05	NORTH CENTRAL POND PLAN
C1.06	SOUTH CENTRAL POND PLAN
C1.07	SOUTH POND PLAN
C2.01	STREET A PLAN & PROFILE 1+00–6+00
C2.02	STREET B PLAN & PROFILE 10+00–16+00
C2.03	STREET B PLAN & PROFILE 16+00–22+00
C2.04	STREET B PLAN & PROFILE 22+00–28+00
C2.05	STREET B PLAN & PROFILE 28+00–34+00
C2.06	STREET B PLAN & PROFILE 34+00–38+00
C2.07	STREET C PLAN & PROFILE 40+00–42+00
C3.01	SITE DETAILS
C3.02	EROSION CONTROL DETAILS

REVISIONS:

NO.	DATE	DESCRIPTION
1	XX–XX–XX	XXXXXXXXXXXXXXXXXX

PSE
PARISH SURVEY & ENGINEERING
122 Wisconsin Street, West Bend, WI 53095
262.334.7901 www.parishpse.com

PROJECT TITLE:
WINDING BROOK SUBDIVISION
PORT WASHINGTON ROAD
TOWN OF GRAFTON, WI

PLAN TITLE:
TITLE SHEET

DRAWN BY: JAB
DESIGNED BY: KJP
CHECKED BY: KJP

PLAN DATE: 11-15-2023

PROJECT NO: \PD-13-23\

PRELIMINARY

SHEET NO:
C1.00

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

NORTH PORT WASHINGTON ROAD

EX. TELEPHONE PEDESTAL
EX. ELECTRIC MH
EX. ENTRANCE
EX. 15" CMP CULVERT
EX. POWER POLE
EX. GRAVEL DRIVEWAY
EX. TELEPHONE PEDESTAL (2)
TAX PARCEL ID# 060310400300
TAX PARCEL ID# 060310400800
TAX PARCEL ID# 060310400900
TAX PARCEL ID# 060310400500
TAX PARCEL ID# 060310400400
TAX PARCEL ID# 060310400200
TAX PARCEL ID# 060310400500
TAX PARCEL ID# 060311300300
TAX PARCEL ID# 060311300100
TAX PARCEL ID# 060310401000
TAX PARCEL ID# 060310200100
TAX PARCEL ID# 060311300200
ISOLATED NATURAL AREA
STREAM
75' SHORELAND SETBACK
WETLAND (DELINEATED BY BATES SOIL & WATER TESTING 4/20/2020)
WETLAND (DELINEATED BY HEARTLAND ECOLOGICAL GROUP, INC. 10/26/2023)
FEMA ZONE AE FLOODPLAIN ELEV=667.6
EX. FARM FIELD

LEGEND:

- 896 — EXISTING MINOR CONTOUR.
- 895 — EXISTING MAJOR CONTOUR.
- OHEL — OVERHEAD ELECTRIC LINE.
- BUE — BURIED ELECTRIC LINE.
- BUTE — BURIED TELEPHONE LINE.
- FO — FIBER OPTIC LINE.
- GAS — GAS LINE.
- SAN — SANITARY SEWER MAIN OR LATERAL.
- W — WATER MAIN OR SERVICE.
- STORM SEWER LINE.
- ELEC — ELECTRIC METER.
- GAS — GAS METER.
- GAS — GAS VALVE.
- FIRE HYDRANT.
- POWER POLE.
- SANITARY SEWER MANHOLE.
- STORM SEWER MANHOLE.
- STORM SEWER INLET.
- TELEPHONE PEDESTAL.
- TRANSFORMER.
- WATER VALVE.

N

0 100 200

NO.	DATE	DESCRIPTION
1	XX-XX-XX	XXXXXXXXXXXXXXXXX

REVISIONS:

PARISH SURVEY & ENGINEERING
122 Wisconsin Street, West Bend, WI 53095
262-644-7020 www.parishsurvey.com

PROJECT TITLE:
WINDING BROOK SUBDIVISION
PORT WASHINGTON ROAD
TOWN OF GRAFTON, WI

PLAN TITLE:
EXISTING CONDITIONS PLAN

DRAWN BY: JAB
DESIGNED BY: KJP
CHECKED BY: KJP

PLAN DATE: 11-15-2023

PROJECT NO: \PD-13-23\

PRELIMINARY

SHEET NO:
C1.01

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

NORTH PORT WASHINGTON ROAD

PROPOSED TYPE 3 ACCESS

OHEL

OUTLOT 1

OUTLOT 2

OUTLOT 3

OUTLOT 4

WINDING BROOK LANE

WINDING BROOK DRIVE

TAX PARCEL ID# 060310400300

TAX PARCEL ID# 060310400600

TAX PARCEL ID# 060310400500

TAX PARCEL ID# 060310400400

TAX PARCEL ID# 060310400200

TAX PARCEL ID# 060310400100

TAX PARCEL ID# 060311300300

TAX PARCEL ID# 060311300100

TAX PARCEL ID# 060310200100

50' SETBACK

20'

66' R.O.W.

22'

66' ROW

LOT 1

LOT 2

LOT 3

LOT 4

LOT 5

LOT 6

LOT 7

LOT 8

LOT 9

LOT 10

LOT 11

LOT 12

LOT 13

LOT 14

LOT 15

LOT 16

LOT 17

LOT 18

LOT 19

LOT 20

LOT 21

LOT 22

LOT 23

LOT 24

LOT 25

LOT 26

LOT 27

LOT 28

R78'

R42'

NORTH POND

NORTH CENTRAL POND

SOUTH CENTRAL POND

SOUTH POND

DELINEATED WETLAND FILL AREA=3509 S.F.

PROPOSED WALKING PATH

STREAM

WETLAND (DELINEATED BY HEATLAND ECOLOGICAL GROUP, INC. 10/26/2023)

WETLAND (DELINEATED BY BATES SOIL & WATER TESTING 4/20/2020)

ISOLATED NATURAL AREA

FEMA ZONE AE FLOODPLAIN ELEV=857.6

STORMWATER MANGEMENT EASEMENT

20' EASEMENT

20' TYP

25'

PROPOSED ROAD DEDICATION

EX. FARM FIELD

0 100 200

REVISIONS:

NO.	DATE	DESCRIPTION
1	XX-XX-XX	XXXXXXXXXXXXXXXXX

PARISH SURVEY & ENGINEERING
122 Wisconsin Street, West Bend, WI 53095
(262) 442-7660

PROJECT TITLE:
WINDING BROOK SUBDIVISION
PORT WASHINGTON ROAD
TOWN OF GRAFTON, WI

PLAN TITLE:
PROPOSED SITE PLAN

DRAWN BY: KJP
DESIGNED BY: KJP
CHECKED BY: KJP

PLAN DATE: 11-15-2023

PROJECT NO: \PD-13-23\

PRELIMINARY

SHEET NO:

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

NOTE: EROSION MATTING TO BE PLACED ON ALL DISTURBED AREA, INCLUDING ROADWAY DITCHES AND STORMWATER PONDS. EROSION MAT TYPE B SHALL BE USED.

SILT FENCE=3,437 LF
DITCH CHECKS=26 EA
TRACKING PAD=1 EA

STAGES OF CONSTRUCTION TIME SCHEDULE:

APRIL 15, 2024

1. INSTALL SITE SILT FENCE AND TEMPORARY CONSTRUCTION ENTRANCES AS SHOWN ON PLANS. ANY ADDITIONAL CONSTRUCTION ENTRANCES IF APPROVED BY THE TOWN OF GRAFTON SHALL HAVE A TRACKING PAD.

APRIL 16, 2024 – SEPTEMBER 1, 2024

2. STRIP TOPSOIL WITHIN THE LIMITS OF THE WET DETENTION PONDS AND CONSTRUCT A TEMPORARY STOCKPILE, TO BE SEEDED AND SILT FENCE PLACED AROUND THE PERIMETER.
3. CONSTRUCT BOTH WET DETENTION PONDS. ALL GRADING SHALL DIRECT ALL RUN-OFF TO THE WET DETENTION PONDS THROUGHOUT THE CONSTRUCTION PROCESS.
4. STRIP REMAINING TOPSOIL WITHIN GRADING LIMITS AND CONSTRUCT TEMPORARY TOPSOIL STOCKPILE LOCATION ACCORDING TO "SPECIFICATIONS FOR GRADING & EROSION CONTROL" ON "CONSTRUCTION NOTES PAGE".
5. BEGIN PROPOSED SITE GRADING – RESEED SECTIONS OF PROJECT THROUGHOUT THE GRADING PROCESS TO MINIMIZE RUN-OFF.
6. CONTINUE SITE GRADING.
7. INSTALL BASE COURSES, PROPOSED PAVEMENTS
8. APPLY FINAL STABILIZATION TO ENTIRE SITE.

SEPTEMBER 2 – 15, 2024

ALL PERMANENT SEEDING SHALL BE COMPLETED BY SEPTEMBER 15. ALL TEMPORARY SEEDING SHALL BE COMPLETED BY OCTOBER 15 (REFER TO DNR STANDARD 1059.)

STABILIZATION FOR ALL EXPOSED SOIL AFTER OCTOBER 15 SHALL CONSIST OF ANIONIC POLYARCRYLAMIDE (PAM) IN ADDITION TO TEMPORARY SEEDING IN AREAS WITHOUT EROSION CONTROL MAT. PLACE PAM IN ACCORDANCE WITH WDNR TECHNICAL STANDARD 1050. AFTER OCTOBER 15 ALL SLOPES 4:1 OR STEEPER THAT ARE NOT PERMANENTLY VEGETATED SHALL HAVE EROSION MAT INSTALLED IN PREPARATION OF WINTER CONDITIONS.

SPREAD SALVAGED OR IMPORTED TOPSOIL IN PROPOSED LANDSCAPE AREAS AND RESTORE.

CONTRACTOR MAY MODIFY SEQUENCING AS NEEDED TO COMPLETE CONSTRUCTION IF EROSION CONTROLS ARE MAINTAINED IN ACCORDANCE WITH THE CONSTRUCTION SITE EROSION CONTROL REQUIREMENTS SET FORTH IN FEDERAL, STATE & LOCAL PERMITS. NOTIFY TOWN OF GRAFTON PRIOR TO CHANGE.

AS CONDITIONS WARRANT DURING CONSTRUCTION ADDITIONAL BMPS SHALL BE INSTALLED TO REDUCE THE MIGRATION OF SEDIMENT THE THE MAXIMUM EXTENT PRACTICABLE

REMOVE ALL TEMPORARY EROSION CONTROL MEASURES AFTER SITE IS STABILIZED AND STABILIZE AND AREAS DISTURBED BY REMOVAL OF BMPS.

0 100 200

LEGEND:

- 936 – EXISTING MINOR CONTOUR.
- 935 – EXISTING MAJOR CONTOUR.
- 936 – PROPOSED MINOR CONTOUR.
- 935 – PROPOSED MAJOR CONTOUR.
- – PROPOSED STORM SEWER.
- – EXISTING STORM SEWER.
- – INSTALL SILT FENCE.
- – INSTALL DITCH CHECK.
- – DRAINAGE ARROW.

NORTH PORT WASHINGTON ROAD

TYPE 3 TURN LANE

PROPOSED VEHICLE TRACKING PAD

OUTLOT 1 | OUTLOT 2 | OUTLOT 3 | OUTLOT 4

NORTH POND | NORTH CENTRAL POND | SOUTH CENTRAL POND | SOUTH POND

DELINEATED WETLAND FILL AREA=3,509 S.F.

WETLAND (DELINEATED BY BATES SOIL & WATER TESTING 4/20/2020)

WETLAND (DELINEATED BY HEARTLAND ECOLOGICAL GROUP, INC. 10/26/2023)

75' SHORELAND SETBACK

20' EASEMENT

66' R.O.W.

PROPOSED PATH

FEMA ZONE AE FLOODPLAIN ELEV=667.6

STREAM

DITCH TO SOUTH CENTAL POND

DITCH TO SOUTH POND

EX. FARM FIELD

TAX PARCEL ID# 060310400300 | 060310400900 | 060310400600 | 060310400500 | 060310400400 | 060310400200 | 060310400100 | 060311300300 | 060311300100 | 060310200100

LOT 1 – LOT 25

SILT FENCE | DITCH CHECK | RIPRAP | 18" CMP | 36" CMP

PARISH SURVEY & ENGINEERING
122 Wisconsin Street, West Bend, WI 53095
(262) 416-7600
www.parishsurvey.com

NO.	DATE	DESCRIPTION
REVISIONS:		
1		XX-XX-XX XXXXXXXXXXXXXXXXX

PROJECT TITLE:
WINDING BROOK SUBDIVISION
PORT WASHINGTON ROAD
TOWN OF GRAFTON, WI

PLAN TITLE:
OVERALL GRADING & EROSION CONTR PLAN

DRAWN BY: KJP
DESIGNED BY: KJP
CHECKED BY: KJP

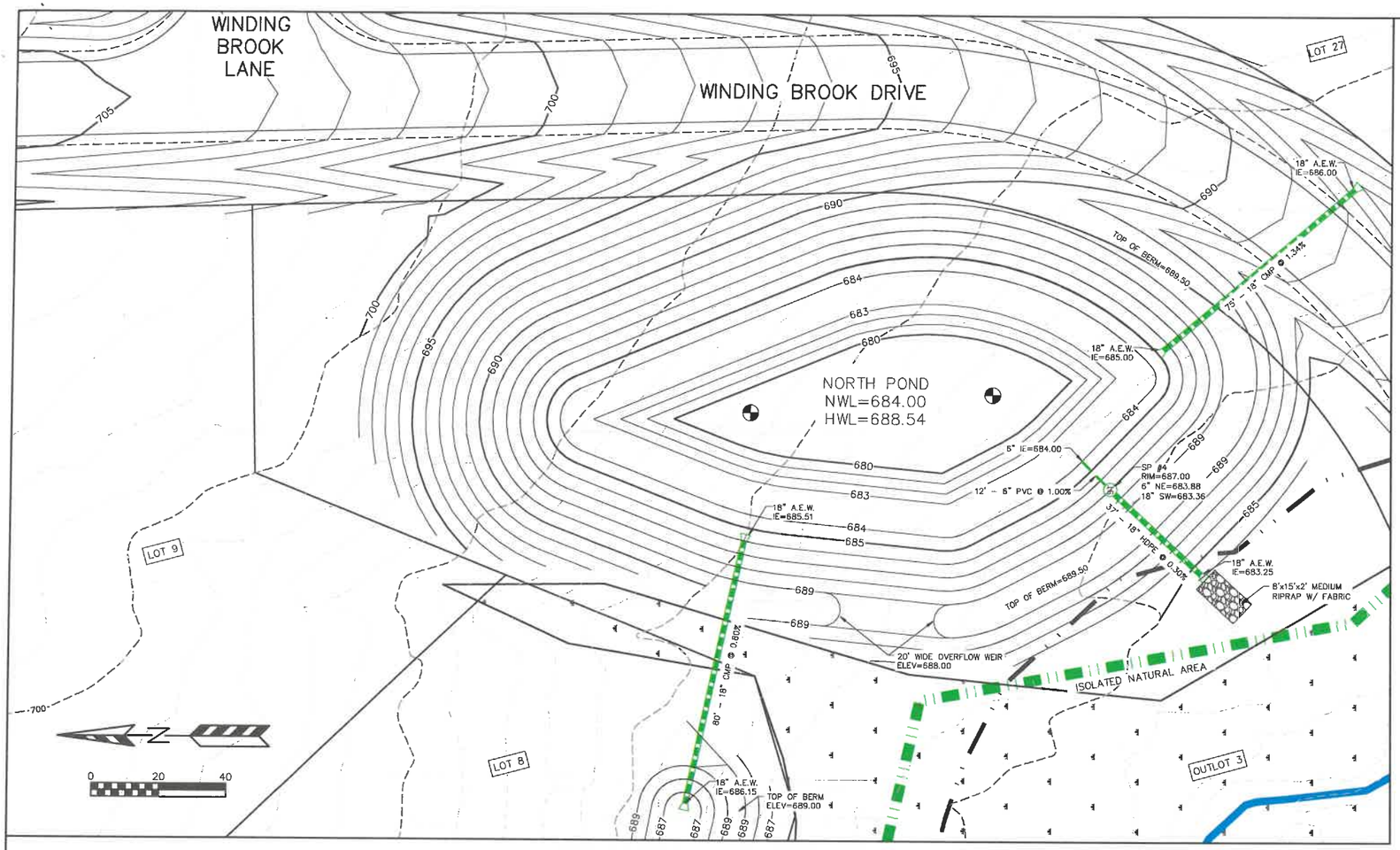
PLAN DATE: 11-15-2023

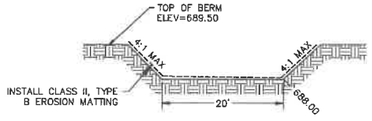
PROJECT NO: \PD-13-23\

PRELIMINARY

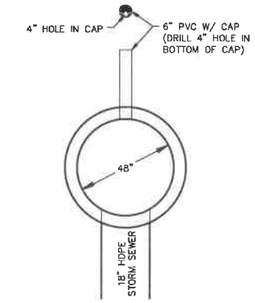
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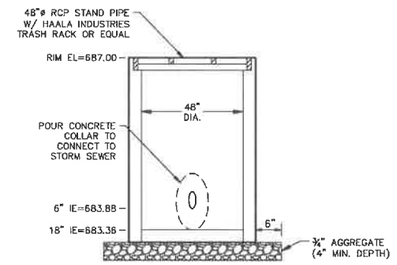
Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,



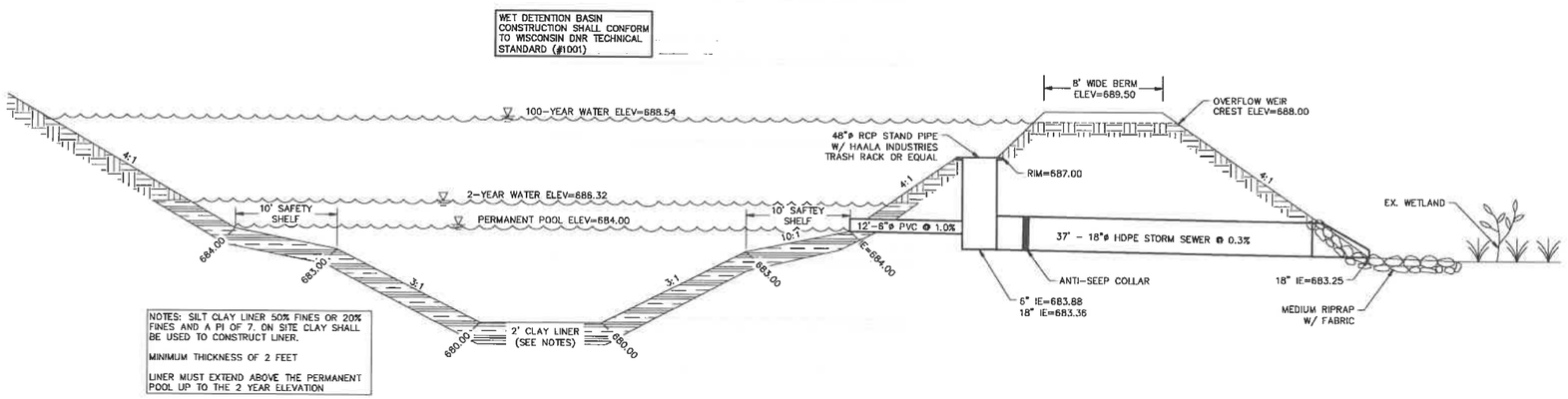


OVERFLOW WEIR CROSS SECTION





STAND PIPE DETAIL



WET DETENTION POND CROSS SECTION

REVISIONS:

NO.	DATE	DESCRIPTION
1	XX-XX-XX	XXXXXXXXXXXXXXXXXX

PARISH SURVEY & ENGINEERING
122 Wisconsin Street, West Bend, WI 53095
262-242-7600 www.parishsurvey.com

PROJECT TITLE:
WINDING BROOK SUBDIVISION
PORT WASHINGTON ROAD
TOWN OF GRAFTON, WI

PLAN TITLE:
NORTH POND PLAN

DRAWN BY: **KJP**
DESIGNED BY: **KJP**
CHECKED BY: **KJP**

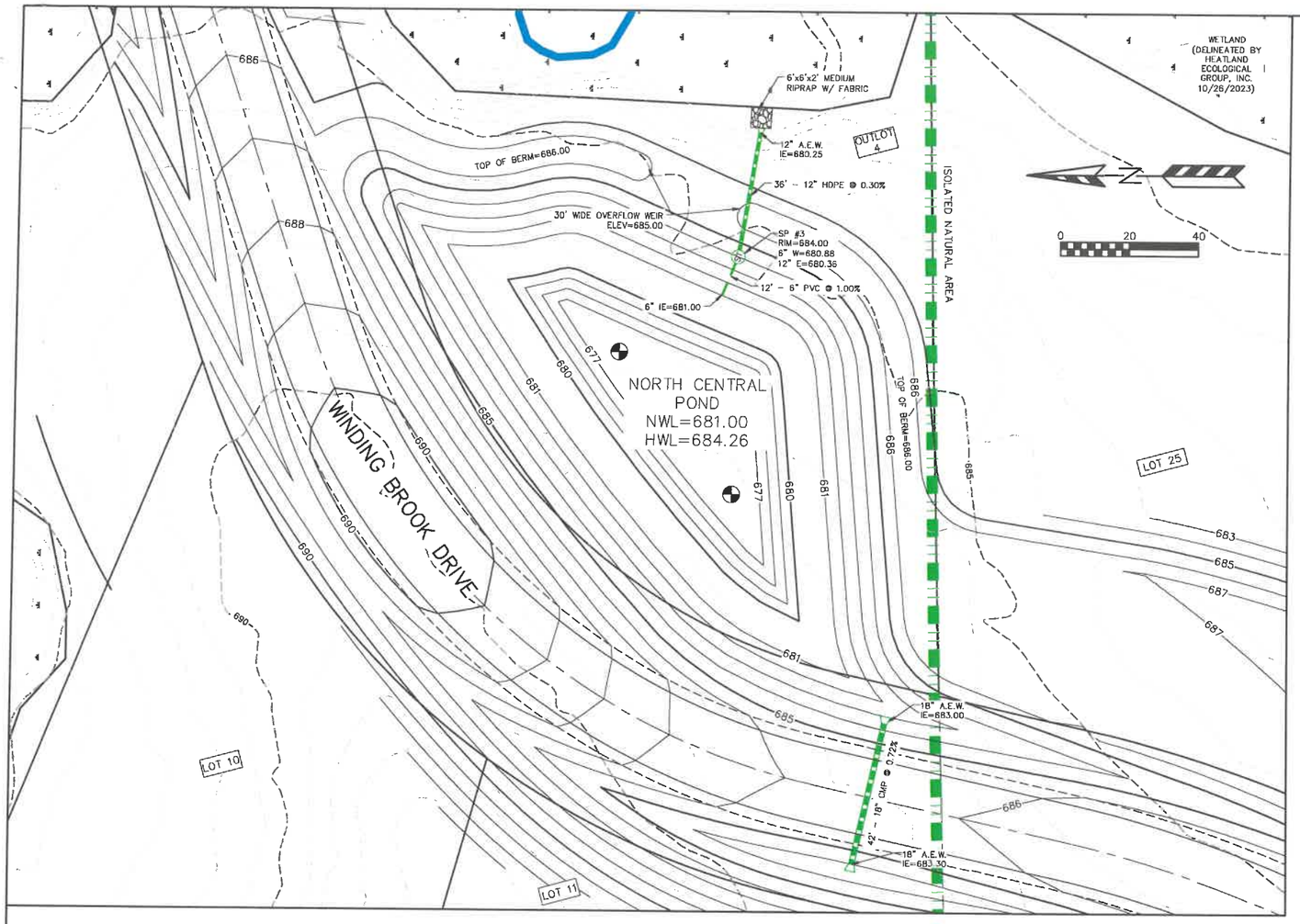
PLAN DATE: **11-15-2023**

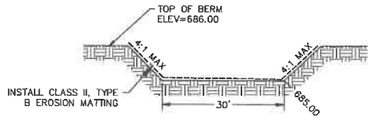
PROJECT NO: \PD-13-23\

PRELIMINARY

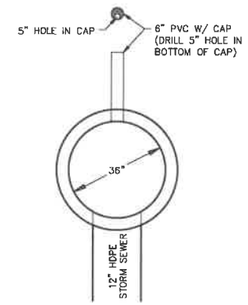
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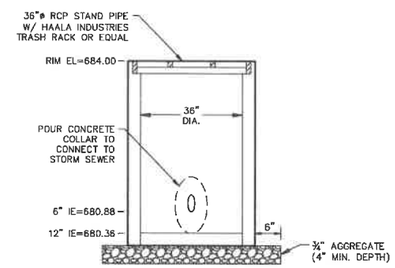
Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,



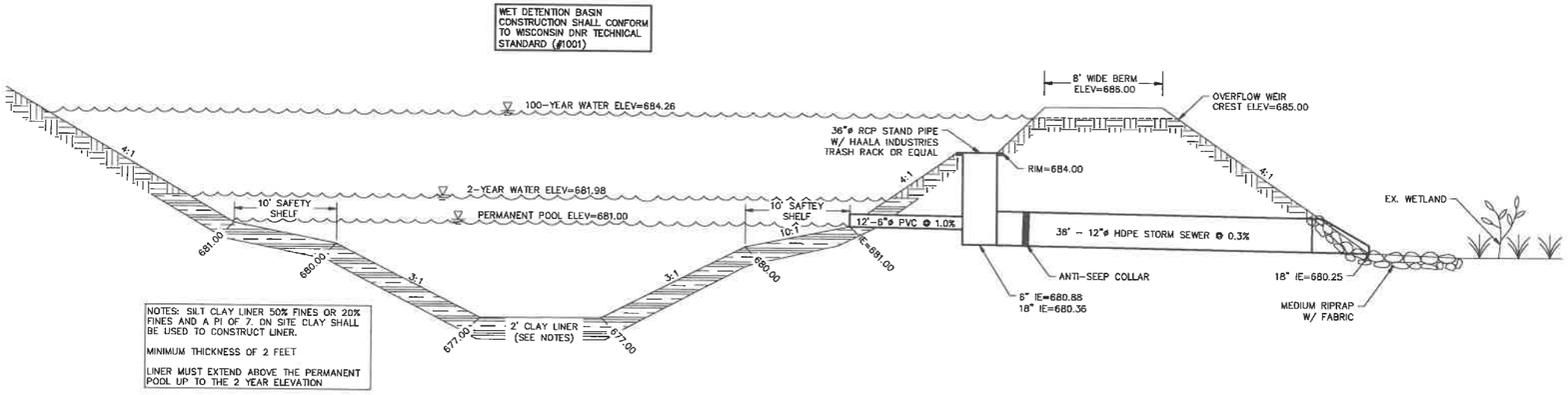


OVERFLOW WEIR CROSS SECTION





STAND PIPE DETAIL



WET DETENTION POND CROSS SECTION

REVISIONS:		
NO.	DATE	DESCRIPTION
1	XX-XX-XX	XXXXXXXXXXXXXXXXX

PARISH SURVEY & ENGINEERING
122 Wisconsin Street, West Bend, WI 53095
262-242-7600

PROJECT TITLE:
WINDING BROOK SUBDIVISION
PORT WASHINGTON ROAD
TOWN OF GRAFTON, WI

PLAN TITLE:
NORTH CENTRAL POND PLAN

DRAWN BY: **KJP**
DESIGNED BY: **KJP**
CHECKED BY: **KJP**

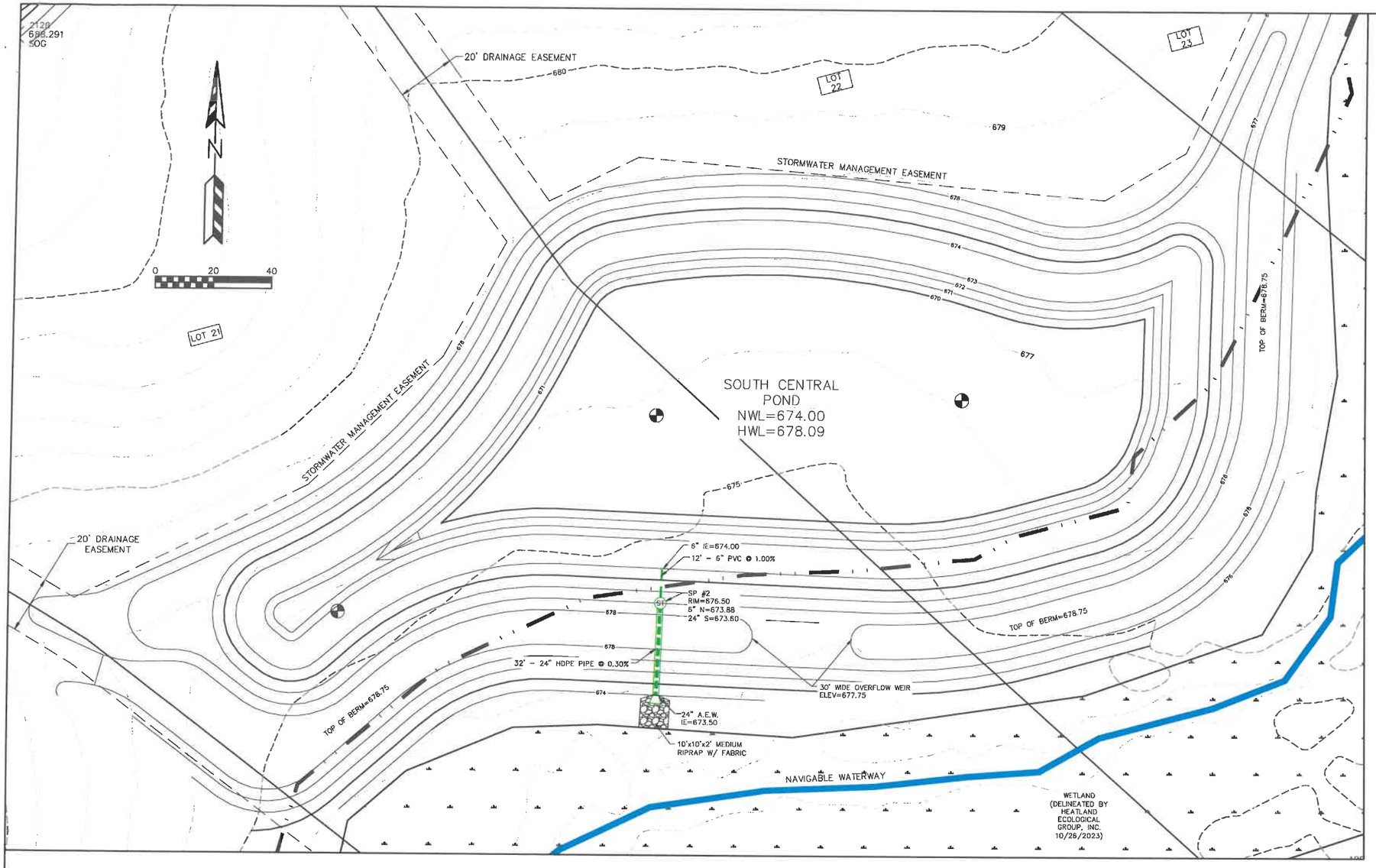
PLAN DATE: **11-15-2023**

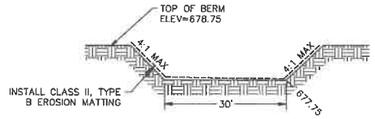
PROJECT NO: \PD-13-23\

PRELIMINARY

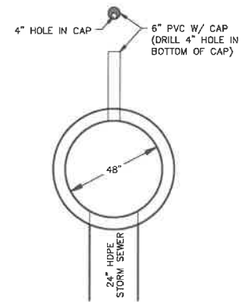
SHEET NO:
C1.05

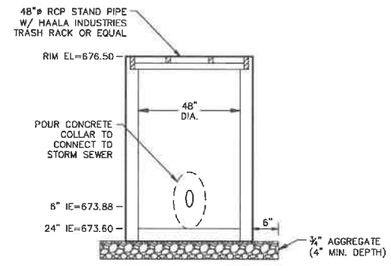
Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,



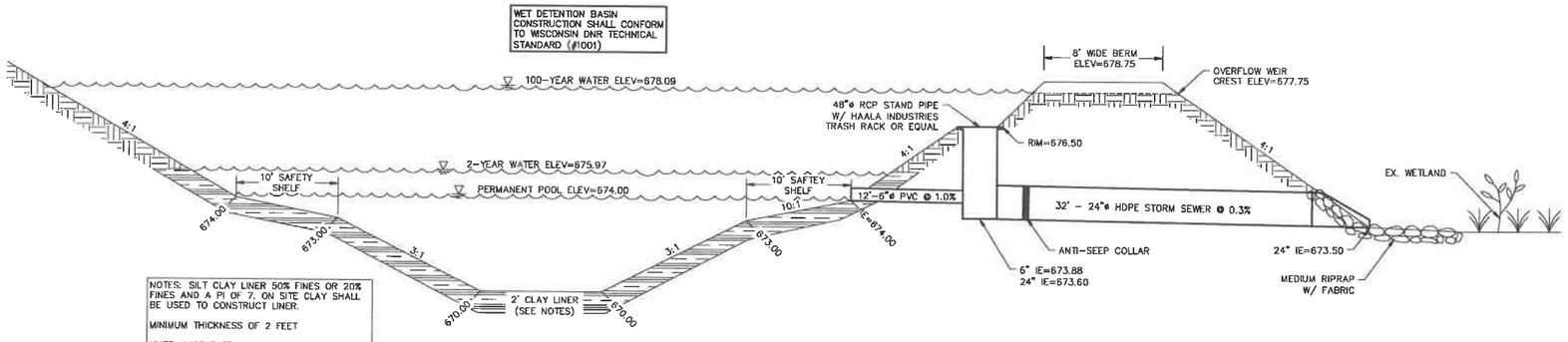


OVERFLOW WEIR CROSS SECTION





STAND PIPE DETAIL



WET DETENTION POND CROSS SECTION

REVISIONS:		
NO.	DATE	DESCRIPTION
1	XX-XX-XX	XXXXXXXXXXXXXXXXXX

PARISH SURVEY & ENGINEERING
122 Wisconsin Street, West Bend, WI 53095
(262) 306-0446 (Main)

PROJECT TITLE:
WINDING BROOK SUBDIVISION
PORT WASHINGTON ROAD
TOWN OF GRAFTON, WI

PLAN TITLE:
SOUTH CENTRAL POND PLAN

DRAWN BY: **KJP**
DESIGNED BY: **KJP**
CHECKED BY: **KJP**

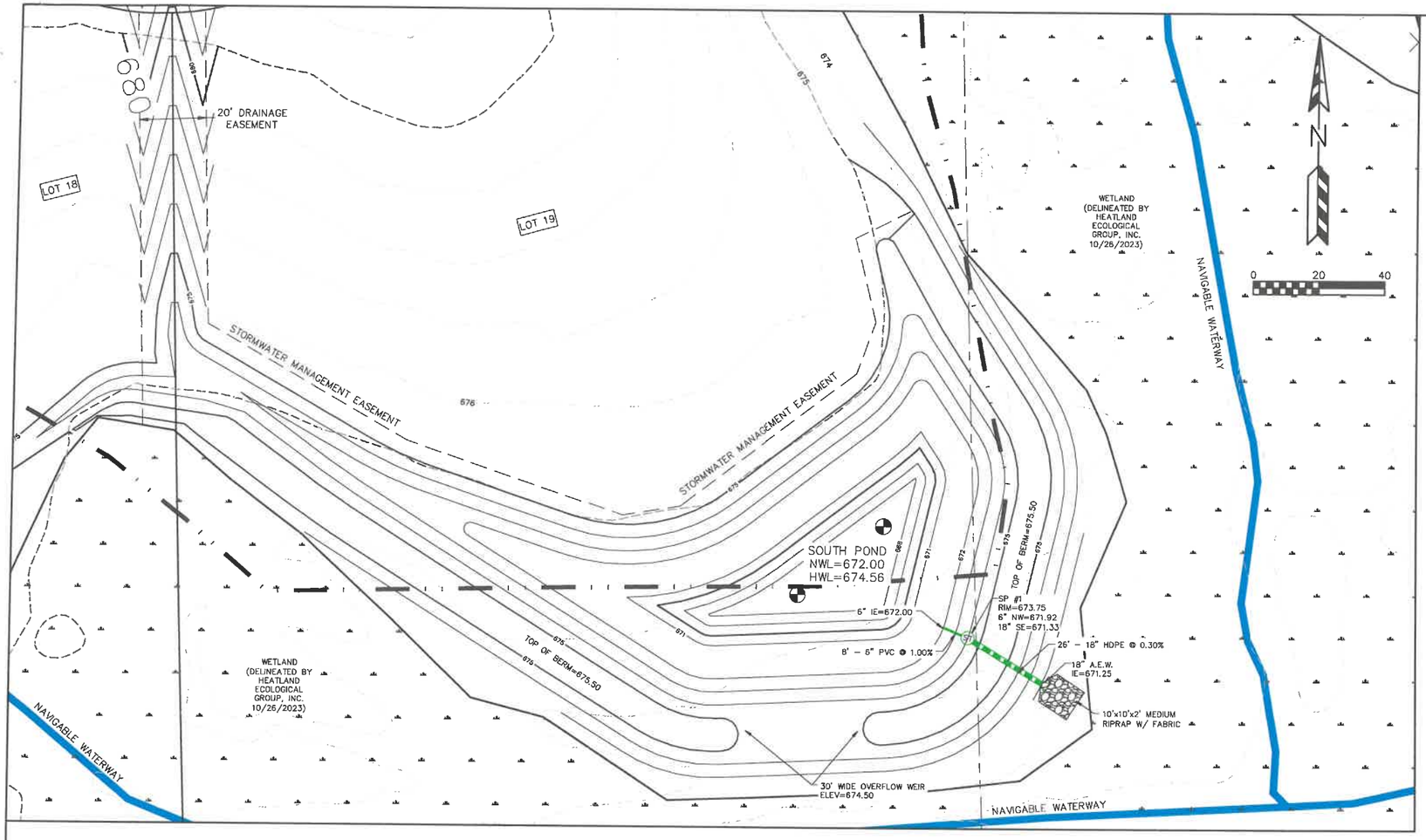
PLAN DATE: **11-15-2023**

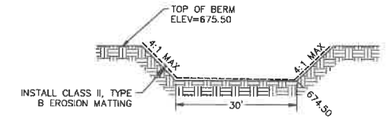
PROJECT NO: **\PD-13-23**

PRELIMINARY

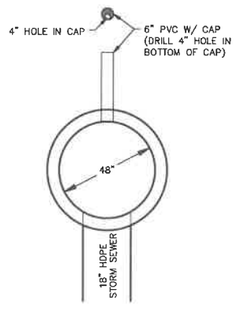
SHEET NO:
C1.06

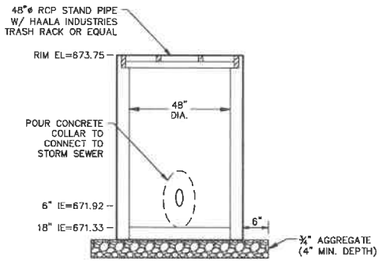
Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,



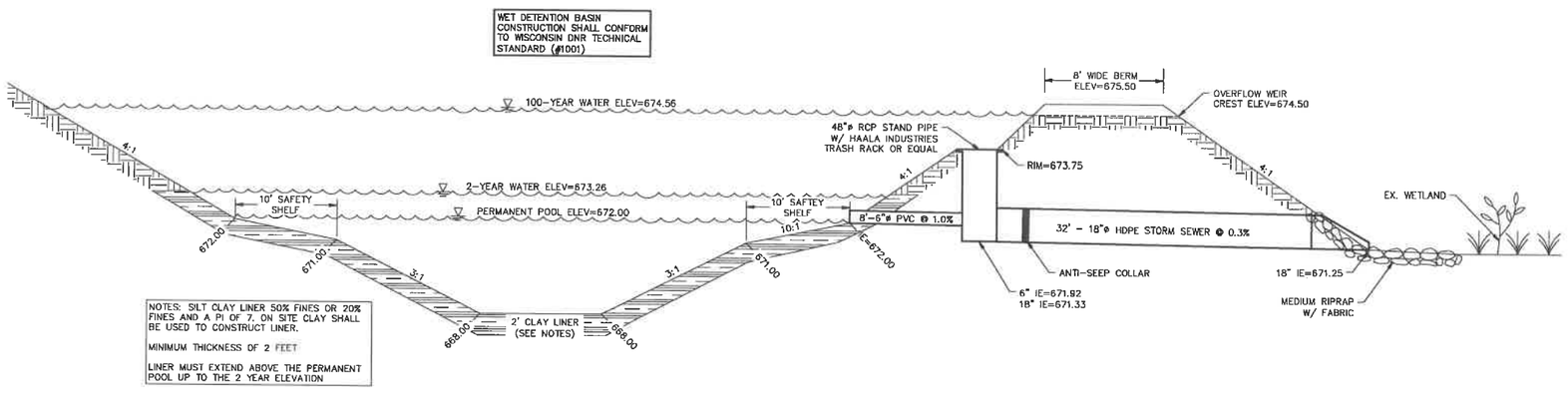


OVERFLOW WEIR CROSS SECTION





STAND PIPE DETAIL



WET DETENTION POND CROSS SECTION

NO.	DATE	REVISIONS: DESCRIPTION
1	XX-XX-XX	XXXXXXXXXXXXXXXXX

PARISH SURVEY & ENGINEERING
122 Wisconsin Street, West Bend, WI 53095

PROJECT TITLE:
WINDING BROOK SUBDIVISION
PORT WASHINGTON ROAD
TOWN OF GRAFTON, WI

PLAN TITLE:
SOUTH POND PLAN

DRAWN BY: **KJP**
DESIGNED BY: **KJP**
CHECKED BY: **KJP**

PLAN DATE: **11-15-2023**

PROJECT NO: \PD-13-23\

PRELIMINARY

SHEET NO:
C1.07

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

PSE PARISH SURVEY & ENGINEERING
122 Wisconsin Street, West Bend, WI 53095 (262) 346-7800

LOT 9
59,700 SF
1.3705 ACRES

LOT 1
45,845 SF
1.0525 ACRES

LOT 28
44,528 SF
1.0222 ACRES

OUTLOT 3
250,469 SF
5.7500 ACRES

OUTLOT 2
9,495 SF
0.2180 ACRES

OUTLOT 1
9,495 SF
0.2180 ACRES

22'
66' R.O.W.
50' SETBACK
37' RADIUS
18" A.E.W.
IE=701.43
IE=701.31
LP: 1+35.50
Elev: 703.78
HP: 2+58.42
Elev: 704.90
18" CMP @ 0.30%
41'
10.5'
DITCH
8.5'
SHOULDER
3'
11'
WINDING BROOK DRIVE
WINDING BROOK LANE
NORTH PORT WASHINGTON ROAD
EX. POWER POLE
TYPE 3 ACCESS
EX. 15" CMP CULVERT
EX. ENTRANCE
EX. GRAVEL DRIVEWAY
(TO BE REMOVED)
OHEL
GAS
1+00
2+00
2+50
3+00
3+50
4+00
5+00
5+50
6+00
6+50
0
20
40

VPI STA. = 1+30.50
VPI EL. = 703.68
g1 = -2.00%
g2 = 1.00%
CURVE LEN = 30.00
K = 10.00

VPI STA. = 2+73.42
VPI EL. = 705.11
g1 = 1.00%
g2 = -3.50%
CURVE LEN = 54.00
K = 12.00

GRADE BREAK STA = 1+00.00
ELEV = 704.29
GRADE BREAK STA = 1+11.00
ELEV = 703.98
VPC STA = 1+15.50
VPC EL = 703.98
LP STA = 1+35.50
ELEV = 703.78
VPT STA = 1+45.50
VPT EL = 703.83
VPC STA = 2+46.42
VPC EL = 704.84
HP STA = 2+58.42
ELEV = 704.90
VPT STA = 3+00.42
VPT EL = 704.17
GRADE BREAK STA = 6+00.00
ELEV = 693.68
GRADE BREAK STA = 6+21.81
ELEV = 693.03
-2.00%
2.00%
1.00%
-3.50%
-3.00%
18" CMP
PROPOSED CENTERLINE PROFILE
EXISTING CENTERLINE PROFILE
PROPOSED ELEVATION
EXISTING ELEVATION

	0+50	1+00	1+50	2+00	2+50	3+00	3+50	4+00	4+50	5+00	5+50	6+00
PROPOSED ELEVATION		704.29	703.84	703.88	704.13	704.38	704.63	704.87	704.79	704.18	703.31	702.43
EXISTING ELEVATION		702.46	702.56	702.79	703.27	703.64	703.78	703.56	703.23	702.67	701.90	701.06
	701.56	700.68	699.81	698.93	698.06	697.18	696.31	695.43	694.56	693.68	693.07	693.02
	698.91	699.00	699.00	698.84	698.36	698.03	696.54	695.22	694.42	693.62		

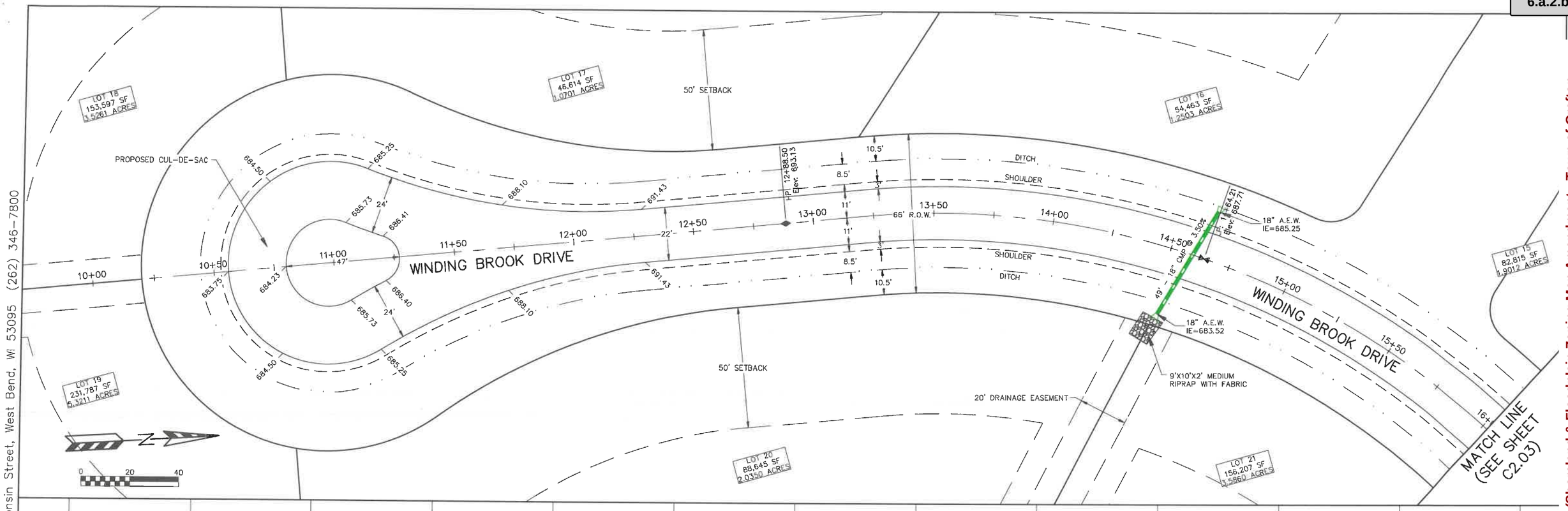
720 716 712 708 704 700 696 692 688 684

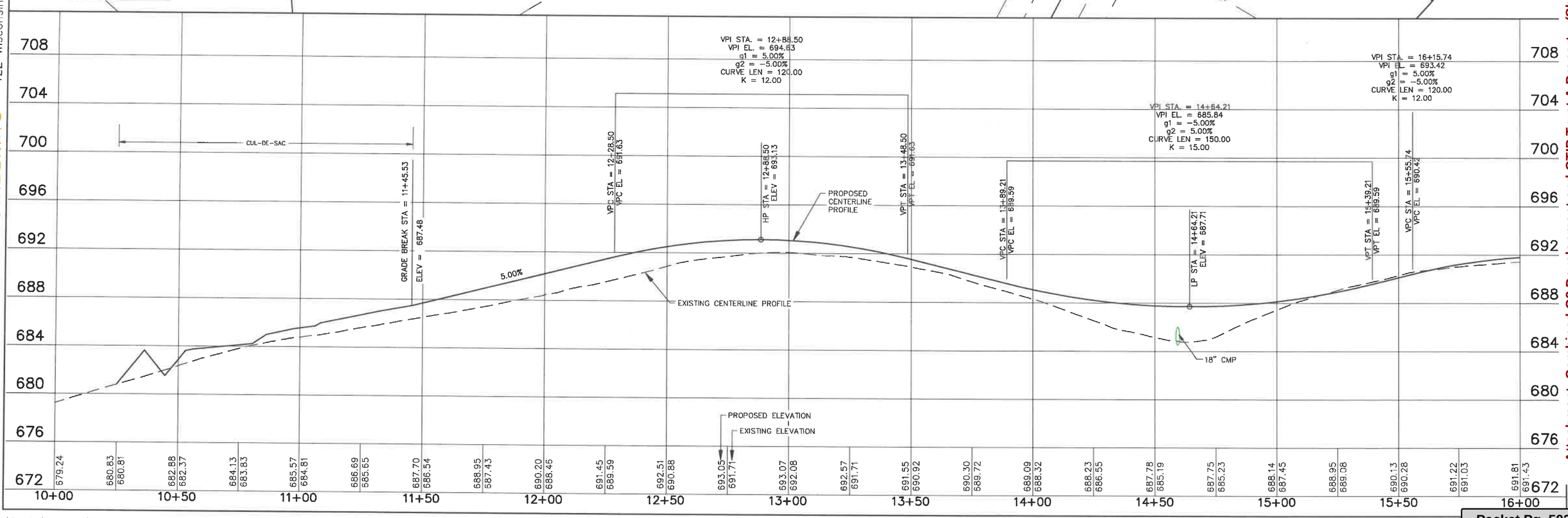
\Projects\PD-13-23\SUBDIVISION P&P - STREET A.DWG

WINDING BROOK SUBDIVISION PD-13-23 11/15/2023

PSE PARISH SURVEY & ENGINEERING
122 Wisconsin Street, West Bend, WI 53095 (262) 346-7800

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,





\Projects\PD-13-23\SUBDIVISION P&P - STREET B.DWG

WINDING BROOK SUBDIVISION PD-13-23 11/15/2023

PSE PARISH SURVEY & ENGINEERING 122 Wisconsin Street, West Bend, WI 53095 (262) 346-7800

MATCH LINE (SEE SHEET C2.02)

MATCH LINE (SEE SHEET C2.04)

LOT 15 82,815 SF 1.9012 ACRES

LOT 14 65,057 SF 1.4935 ACRES

LOT 13 47,992 SF 1.1017 ACRES

LOT 12 43,980 SF 1.0096 ACRES

LOT 21 156,207 SF 3.5860 ACRES

LOT 22 144,876 SF 3.3259 ACRES

LOT 23 90,873 SF 2.0862 ACRES

LOT 24 61,243 SF 1.4059 ACRES

LOT 25 59,542 SF 1.3669 ACRES

50' SETBACK

50' SETBACK

DITCH

SHOULDER

WINDING BROOK DRIVE

SHOULDER

DITCH

66' R.O.W.

16+00 16+50 17+00 17+50 18+00 18+50 19+00 19+50 20+00 20+50 21+00 21+50 22+00

HP: 16+15.74 Elev: 691.92

LP: 17+57.38 Elev: 688.21

HP: 19+41.11 Elev: 694.02

18" A.E.W. IE=685.75

18" A.E.W. IE=685.00

18" CMP @ 1.62%

45'

10.5' 8.5' 11' 11' 8.5' 10.5'

9'X10'X2' MEDIUM RIPRAP WITH FABRIC

20' DRAINAGE EASEMENT

0 20 40

VPI STA. = 17+57.38
VPI EL. = 686.33
g1 = -5.00%
g2 = 5.00%
CURVE LEN = 150.00
K = 15.00

VPI STA. = 19+41.11
VPI EL. = 695.52
g1 = 5.00%
g2 = -5.00%
CURVE LEN = 120.00
K = 12.00

VPI STA. = 21+00.00
VPI EL. = 687.58
g1 = -5.00%
g2 = -1.00%
CURVE LEN = 104.00
K = 26.00

HP STA = 16+15.74
ELEV = 691.92

VPT STA = 16+75.74
VPT EL = 690.44

VPC STA = 16+82.38
VPC EL = 690.08

LP STA = 17+57.38
ELEV = 688.21

VPT STA = 18+32.38
VPT EL = 690.08

VPC STA = 18+81.11
VPC EL = 692.52

HP STA = 19+41.11
ELEV = 694.02

VPT STA = 20+01.11
VPT EL = 692.52

VPC STA = 20+48.00
VPC EL = 690.15

VPT STA = 21+22.00
VPT EL = 687.06

-5.00% 5.00% -5.00%

PROPOSED CENTERLINE PROFILE

EXISTING CENTERLINE PROFILE

18" CMP

PROPOSED ELEVATION

EXISTING ELEVATION

	16+00	16+50	17+00	17+50	18+00	18+50	19+00	19+50	20+00	20+50	21+00	21+50	22+00
PROPOSED ELEVATION	691.81	691.88	691.43	690.45	689.31	688.56	688.23	688.31	688.81	689.73	690.96	692.21	693.32
EXISTING ELEVATION	691.43	691.11	690.54	689.83	688.96	687.40	685.88	686.38	688.43	690.65	691.92	692.69	692.80
	693.91	693.99	693.54	692.58	691.33	690.08	688.97	688.10	687.47	687.08	686.83	686.58	
	693.25	693.11	692.38	691.61	690.79	689.39	687.48	686.12	685.59	685.36	685.50	685.62	

712 708 704 700 696 692 688 684 680 676

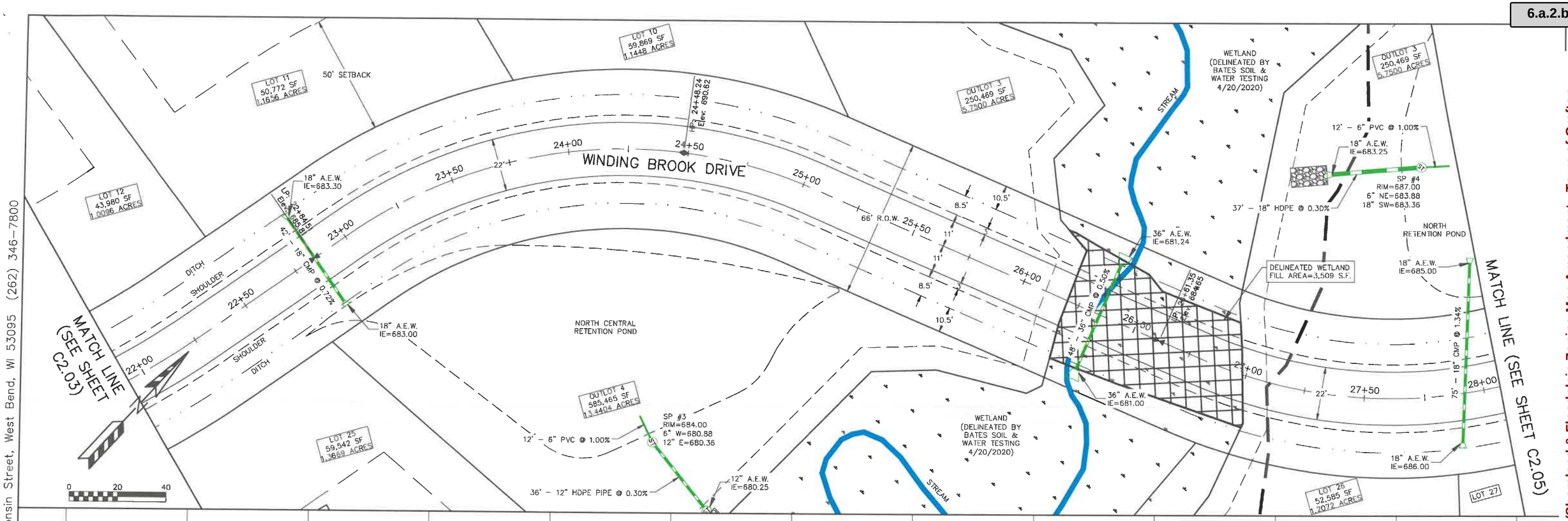
\Projects\PD-13-23\SUBDIVISION P&P - STREET B.DWG

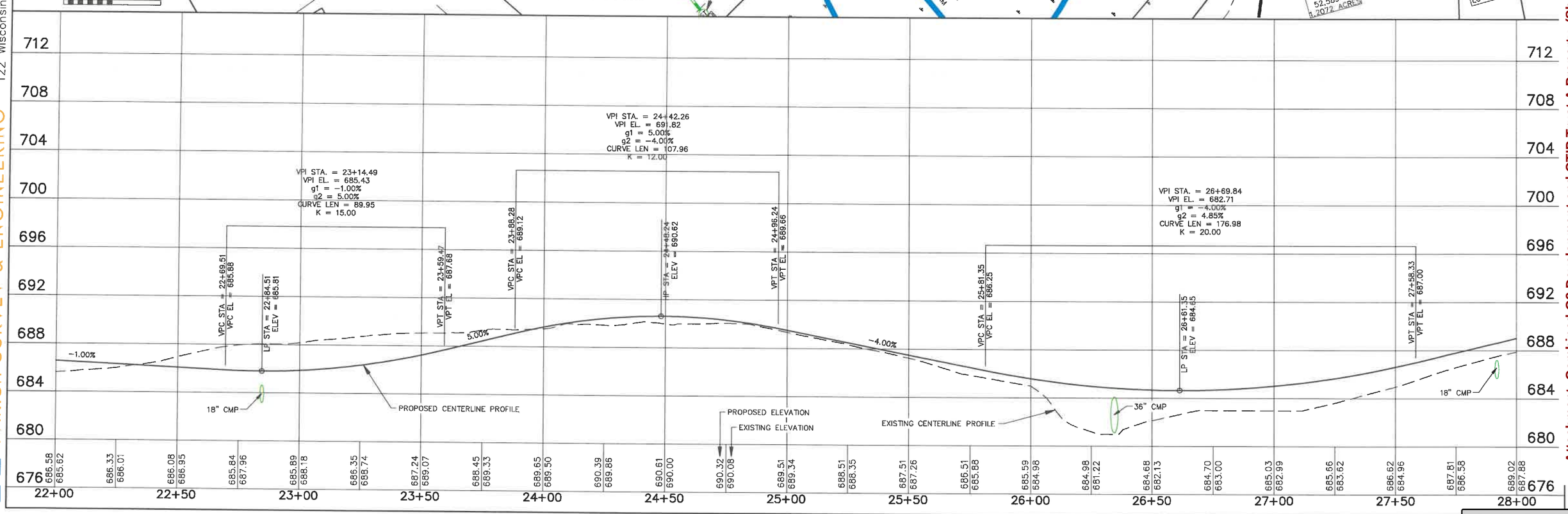
WINDING BROOK SUBDIVISION PD-13-23 11/15/2023

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

PSE PARISH SURVEY & ENGINEERING 122 Wisconsin Street, West Bend, WI 53095 (262) 346-7800

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,





MATCH LINE (SEE SHEET C2.04)

MATCH LINE (SEE SHEET C2.06)

NORTH RETENTION POND

OUTLOT 3
250,469 SF
5.7500 ACRES

LOT 9
59,700 SF
1.3705 ACRES

LOT 27
48,479 SF
1.1129 ACRES

LOT 28
44,528 SF
1.0222 ACRES

LOT 1
45,845 SF
1.0525 ACRES

50' SETBACK

WINDING BROOK DRIVE

66' R.O.W.

DITCH
SHOULDER
10.5'
8.5'
11'
3%

37' RADIUS

41' - 18" CMP @ 0.30%

18" A.E.W.
IE=701.31

18" A.E.W.
IE=701.43

WINDING BROOK LANE

g2 = 1.50%
CURVE LEN = 40.19
K = 12.00

HP: 33+67.79
Elev: 708.07

28+00 28+50 29+00 29+50 30+00 30+50 31+00 31+50 32+00 32+50 33+00 33+50 34+00

GRADE BREAK STA = 30+70.44
ELEV = 702.14

VPC STA = 30+98.34
VPC EL = 703.49

GRADE BREAK STA = 31+20.82
ELEV = 704.37

VPT STA = 31+38.53
VPT EL = 704.77

GRADE BREAK STA = 31+66.44
ELEV = 705.18

GRADE BREAK STA = 33+31.43
ELEV = 707.66

VPC STA = 33+49.79
VPC EL = 707.93

GRADE BREAK STA = 33+82.3
ELEV = 707.98

4.85%

1.50%

PROPOSED CENTERLINE PROFILE

EXISTING CENTERLINE PROFILE

PROPOSED ELEVATION

EXISTING ELEVATION

	28+00	28+50	29+00	29+50	30+00	30+50	31+00	31+50	32+00	32+50	33+00	33+50	34+00
PROPOSED	689.02	690.24	691.45	692.66	693.87	695.08	696.30	697.51	698.72	699.93	701.15	702.36	703.57
EXISTING	687.88	688.99	689.40	690.15	691.29	692.60	694.44	696.52	697.76	698.86	699.93	700.93	701.88
PROPOSED	704.49	705.31	705.69	706.06	706.44	706.81	707.19	707.55	707.94	708.05	707.64		
EXISTING	704.37	705.32	706.08	706.37	706.62	706.88	706.87	706.90	706.84	706.65			

716 712 708 704 700 696 692 688 684 680

0 20 40

PSE PARISH SURVEY & ENGINEERING 122 Wisconsin Street, West Bend, WI 53095 (262) 346-7800

\Projects\PD-13-23\SUBDIVISION P&P - STREET B.DWG

WINDING BROOK SUBDIVISION PD-13-23 11/15/2023

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

MATCH LINE (SEE SHEET C2.05)

LOT 9 59,700 SF 1.3705 ACRES

LOT 8 61,942 SF 1.4220 ACRES

LOT 7 66,518 SF 1.5270 ACRES

LOT 6 49,189 SF 1.1292 ACRES

LOT 5 45,427 SF 1.0429 ACRES

LOT 4 43,884 SF 1.0074 ACRES

LOT 3 43,596 SF 1.0008 ACRES

LOT 2 44,045 SF 1.0111 ACRES

50' SETBACK

34+00

34+50

35+00

35+50

36+00

36+50

37+00

37+50

37+96

DITCH

SHOULDER

18" A.E.W. IE=703.61

52' 18" CMP @ 0.30%

18" A.E.W. IE=703.45

22' 66' R.O.W. 11' 11'

10.5' 8.5' 8.5' 10.5'

701.07

699.42 698.37 697.49 699.03 698.85 697.77 697.29 699.27 699.11 697.96 699.87 699.25 698.63

24' 24'

WINDING BROOK DRIVE

PROPOSED CUL-DE-SAC

20' 20'

0 20 40

724 720 716 712 708 704 700 696 692 688

VPT STA = 34+09.50
VPT EL = 707.14

GRADE BREAK STA = 34+32.68
ELEV = 706.54

GRADE BREAK STA = 34+70.08
ELEV = 705.24

GRADE BREAK STA = 36+18.18
ELEV = 700.09

CUL-DE-SAC

-3.48%

PROPOSED CENTERLINE PROFILE

EXISTING CENTERLINE PROFILE

PROPOSED ELEVATION

EXISTING ELEVATION

34+00	34+50	35+00	35+50	36+00	36+50	37+00	37+50	38+00
707.64 / 706.65	706.81 / 706.29	705.94 / 706.04	705.07 / 705.30	704.20 / 704.25	703.33 / 703.08	702.46 / 701.82	701.59 / 700.61	700.72 / 699.67
700.00 / 699.07	699.67 / 698.37	699.37 / 697.64	699.27 / 696.53	698.04 / 695.39	697.55 / 694.48	696.00 / 693.81		

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\Projects\PD-13-23\SUBDIVISION P&P - STREET B.DWG

WINDING BROOK SUBDIVISION PD-13-23 11/15/2023

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

PSE PARISH SURVEY & ENGINEERING 122 Wisconsin Street, West Bend, WI 53095 (262) 346-7800

WINDING BROOK DRIVE

WINDING BROOK DRIVE

22'

66' R.O.W.

22'

66' R.O.W.

DITCH

SHOULDER

50' SETBACK

50' SETBACK

50' SETBACK

50' SETBACK

LOT 1
45,845 SF
1.0525 ACRES

LOT 2
44,045 SF
1.0111 ACRES

LOT 3
43,596 SF
1.0008 ACRES

LOT 4
43,884 SF
1.0074 ACRES

40+00

24'

42

12+42+07

18" CMP @ 0.30%

18" A.E.W.
IE=703.45

52'

18" A.E.W.
IE=703.61

43'

40+50

41+50

24'

41+00

34' RADIUS

SHOULDER

DITCH

SHOULDER

DITCH

SHOULDER

DITCH

HP: 40+78.29
Elev: 708.46

WETLAND (DELINEATED BY BATES SOIL & WATER TESTING 4/20/2020)

N88°25'18"E 1002.86'

0 20 40

VPI STA. = 40+84.29
VPI EL. = 708.58
g1 = 1.00%
g2 = -2.00%
CURVE LEN = 36.00
K = 12.00

GRADE BREAK STA = 40+00.00
ELEV = 708.07

GRADE BREAK STA = 40+11.02
ELEV = 707.85

VPC STA = 40+66.29
VPC EL = 708.40

HP STA = 40+78.29
ELEV = 708.46

VPT STA = 41+02.29
VPT EL = 708.22

GRADE BREAK STA = 42+01.27
ELEV = 708.24

GRADE BREAK STA = 42+12.31
ELEV = 706.44

PROPOSED CENTERLINE PROFILE

-1.99%

1.00%

-2.00%

1.83%

EXISTING CENTERLINE PROFILE

18" CMP

PROPOSED ELEVATION

EXISTING ELEVATION

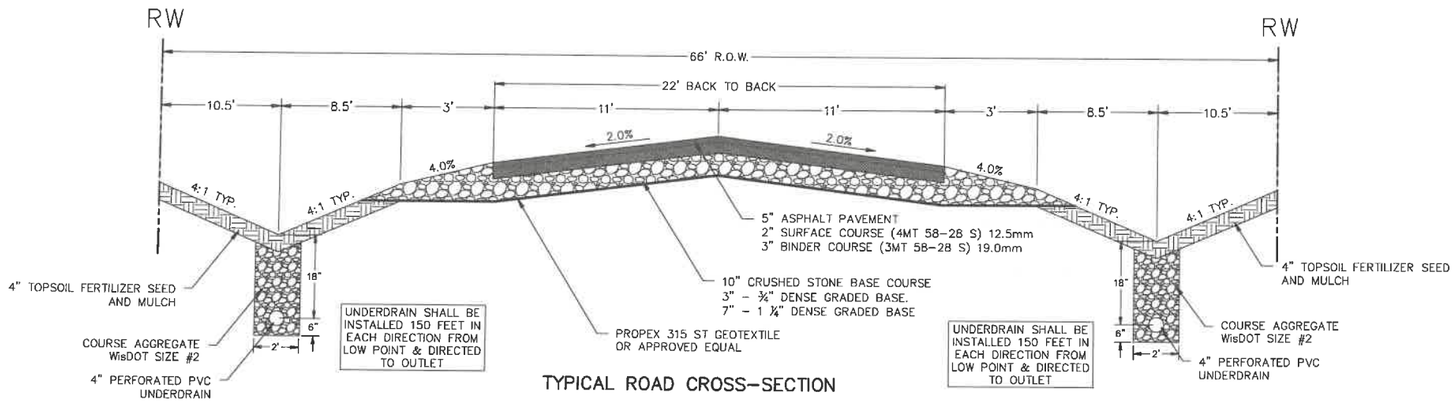
	39+50	40+00	40+50	41+00	41+50	42+00	42+50
PROPOSED ELEVATION		708.07	707.99	708.24	708.46	708.26	707.77	707.27	706.77	706.27	
EXISTING ELEVATION		706.86	707.00	707.00	707.21	707.26	706.87	706.37	706.19	706.08	

728 724 720 716 712 708 704 700 696 692

\Projects\PD-13-23\SUBDIVISION P&P - STREET C.DWG

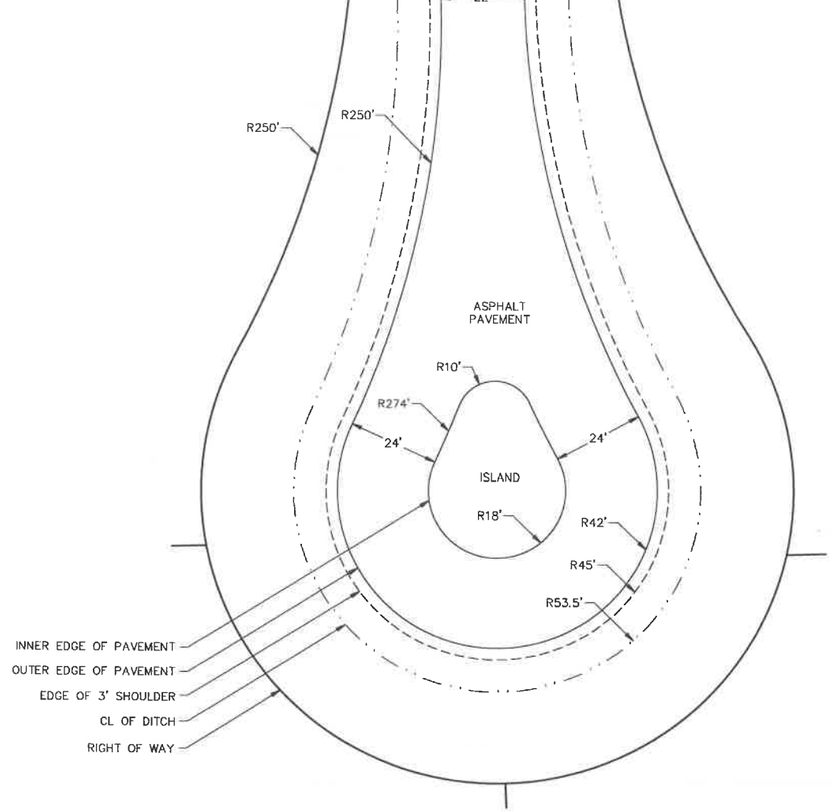
WINDING BROOK SUBDIVISION PD-13-23 11/15/2023

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,



TYPICAL ROAD CROSS-SECTION

CUL-DE-SAC DETAIL



NO.	DATE	DESCRIPTION
1	XX-XX-XX	XXXXXXXXXXXXXXXXXX

REVISIONS:

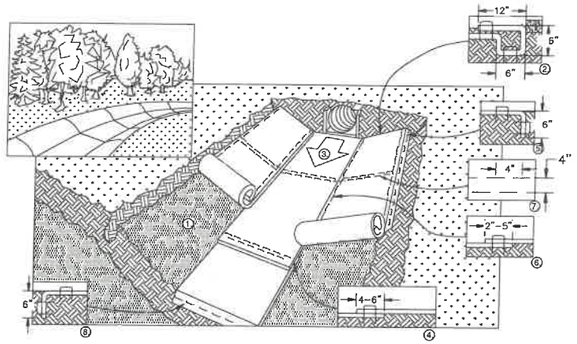
PARISH SURVEY & ENGINEERING
122 Wisconsin Street, West Bend, WI 53095
262.334.7800
www.parishsurvey.com

PROJECT TITLE:
WINDING BROOK SUBDIVISION
PORT WASHINGTON ROAD
TOWN OF GRAFTON, WI

PLAN TITLE:
SITE DETAILS

DRAWN BY: **JAB**
DESIGNED BY: **JAB**
CHECKED BY: **KJP**
PLAN DATE: **11-15-2023**
PROJECT NO: \PD-13-23\
PRELIMINARY
SHEET NO: **C2.01**

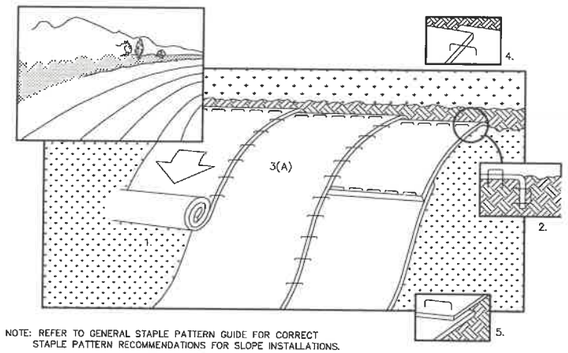
Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,



1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING APPLICATION OF FERTILIZER AND SEED.
2. BEGIN AT THE TOP OF THE CHANNEL BY ANCHORING THE BLANKET IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE BLANKET
3. ROLL CENTER BLANKET IN DIRECTION OF WATER FLOW IN BOTTOM OF CHANNEL. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO THE SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS RECOMMENDED BY THE MANUFACTURER.
4. PLACE CONSECUTIVE BLANKETS END OVER END (SHINGLE STYLE) WITH A 4-6" OVERLAP. USE A DOUBLE ROW OF STAPLES STAGGERED 4" APART AND 4" ON CENTER TO SECURE BLANKETS.
5. FULL LENGTH EDGE OF BLANKETS AT TOP OF SIDE SLOPE MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
6. ADJACENT BLANKETS MUST BE OVERLAPPED APPROXIMATELY 4" AND STAPLED.
7. A STAPLE CHECK SLOT IS RECOMMENDED AT 30 TO 40 FOOT INTERVALS. USE A DOUBLE ROW OF STAPLES STAGGERED 4" APART AND 4" ON CENTER OVER ENTIRE WIDTH OF THE CHANNEL.
8. THE TERMINAL END OF THE BLANKETS MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.

NOTE: ALL STAPLES MUST BE 6" OR GREATER IN LENGTH

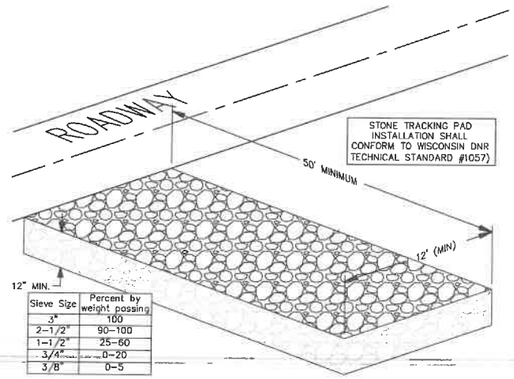
EROSION CONTROL MAT – CHANNEL INSTALLATION



NOTE: REFER TO GENERAL STAPLE PATTERN GUIDE FOR CORRECT STAPLE PATTERN RECOMMENDATIONS FOR SLOPE INSTALLATIONS.

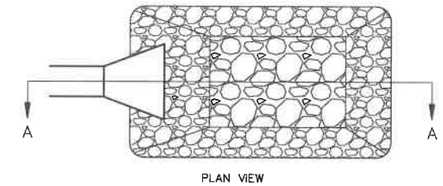
1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING APPLICATION OF FERTILIZER AND SEED. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
3. ROLL THE BLANKETS (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE.
4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2" OVERLAP.
5. WHEN BLANKETS MUST BE SPLICED DOWN THE SLOPE, PLACE BLANKETS END OVER END (SHINGLE STYLE) WITH APPROXIMATELY 4" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY
6. ALL BLANKETS MUST BE SECURELY FASTENED TO THE SLOPE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS RECOMMENDED BY THE MANUFACTURER.

EROSION CONTROL MAT – SLOPE INSTALLATION



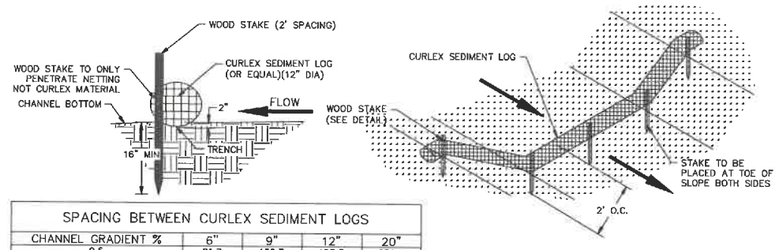
Sieve Size	Percent by weight passing
3"	100
2-1/2"	90-100
1-1/2"	25-60
3/4"	0-20
3/8"	0-5

STONE TRACKING PAD DETAIL



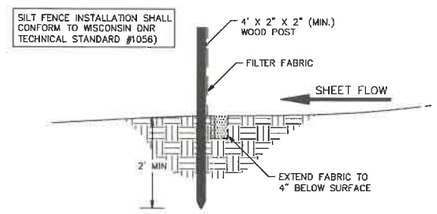
RIPRAP SHALL BE PLACED AS DEFINED IN SECTION 606 OF WISCONSIN D.O.T. SPECIFICATIONS. STONE SIZES SHALL BE WELL GRADED WITH A MINIMUM OF 6 INCH DIAMETER.

RIPRAP/STILLING BASIN DETAIL



SPACING BETWEEN CURLEX SEDIMENT LOGS				
CHANNEL GRADIENT %	6"	9"	12"	20"
0.5	91.7	136.7	183.3	250.0
1.0	45.8	68.3	91.7	125.0
1.5	30.6	45.6	61.1	83.3
2	22.9	34.2	45.8	62.5

SEDIMENT LOG DETAIL



SILT FENCE CONSTRUCTION (SHEET FLOW)

REVISIONS:

NO.	DATE	DESCRIPTION
1	XX-XX-XX	XXXXXXXXXXXXXXXXXX

PARISH SURVEY & ENGINEERING
122 Wisconsin Street, West Bend, WI 53095
262-335-7400
www.parishsurvey.com

PROJECT TITLE:
WINDING BROOK SUBDIVISION
PORT WASHINGTON ROAD
TOWN OF GRAFTON, WI

PLAN TITLE:
EROSION CONTROL DETAILS

DRAWN BY: **JAB**
DESIGNED BY: **JAB**
CHECKED BY: **JAB**

PLAN DATE: **11-15-2023**

PROJECT NO: \PD-13-23\

PRELIMINARY

SHEET NO:

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
1027 W St. Paul Ave.
Milwaukee, WI, 53233

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

January 19th, 2024

GP-SE-2023-46-03794

Robert Bach
PO Box 460446
Fort Lauderdale, FL 33346
[sent electronically]

Dear Mr. Bach,

The Wisconsin Department of Natural Resources received a water quality certification request pursuant to 40 CFR Part 121, requested by Robert Bach for a project located in the Town of Grafton, Ozaukee County, WI.

The Wisconsin Department of Natural Resources (DNR) has examined this certification request as it relates to Clean Water Act Section 401, Wis. Stat. Chs. 30, 281, and 283, and Wis. Adm. Code Ch. NR 299. The DNR has determined the certification request satisfies the requirements under 40 CFR § 121.5. The DNR has also determined that the discharge from the proposed project will comply with water quality requirements. Therefore, **DNR will grant water quality certification without the need for special conditions**.

Please be aware that 401 Water Quality 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. Specifically, if the DNR has issued coverage under a state general permit for the project, the permittee is required to follow all eligibility requirements and permit conditions. In addition, this 401 Water Quality Certification 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.

Please reach out to me at michelle.soderling@wisconsin.gov or at (414) 430-7129 if you have any questions or concerns about this certification.

Sincerely,

Michelle Soderling

Michelle Soderling
Water Management Specialist

CC: Amy Heffernan, USACE Project Manager

Attachment: Combined G2 Development and QTIP Trust A Property (Shoreland & Floodplain Zoning Map Amendment - Town of Grafton,

Natural Resources Committee

AGENDA INFORMATION SHEET

AGENDA DATE: **March 7, 2024**
DEPARTMENT: **Land and Water Management**
DIRECTOR: **Katie Vogeler**
PREPARER: **Geoff Schramm**

Agenda Summary Land & Water Management Reports

ATTACHMENTS:

- February 2024 news (PDF)
- February LWM Financials (PDF)

NATURAL RESOURCES COMMITTEE

LAND AND WATER MANAGEMENT DEPARTMENT

CURRENT PROJECTS
AND
REPORT UPDATES

FEBRUARY 2024



MISSION STATEMENT

To protect, preserve, and enhance natural resources, local ecology, and the quality of life

Ozaukee County Administration Center
Room 223
121 W. Main Street, P. O. Box 994
Port Washington, WI 53074-0994
Phone: 262-284-8313

Attachment: February 2024 news (Land & Water Management Reports)

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Land & Water Resource Management

- **Conservation Planning/Farmland Preservation (FPP)**
  - 94 farms currently participating in Farmland Preservation Program; status reviews to be completed on about 25% of the farms in 2024 to ensure compliance with the FPP soil and water performance standards. A landowner did a grass waterway project to stay in compliance
- **Best Management Practices Design and Certification**
  - Collaborating with NRCS on cost share projects
  - Projects include, grass waterway, roof runoff projects, rip rap, and stacking pad runoff storage, manure abandonment and waste storage projects
- **Administration of Cost-Share Agreements (grants)**
  - 2024 SWRM bonded grant – $56,200; SWRM SEG grant – $25,000.
  - Multi Discharge Variance $22451
- **Nutrient Management**
  - DATCP SEG funds have started to be contracted with landowners. A reminder letter was sent to all operators in the county about DATCP 590 NMP requirements.
  - **Environmental Education**
  - Poster contest information was shared with schools—1 school participated. 1st place posters have moved onto SE Area Poster contest 1 student advanced to the State contest
- **NR151Compliance Tracking**
  - No activity
- **Manure Storage Ordinance**
  - Starting to organize to update
- **Stormwater Management & Construction Site Erosion Control-WPDES Permit**
  - Stantec is finalizing the SLAMM modeling to evaluate nonpoint source pollutant loadings on county property in the MS4 area for compliance with the DNR stormwater permit. A commitment letter was sent to WI DNR.
- **Buffer Initiative—Conservation Reserve Enhancement Program (CREP)**

  1 landowner in Belgium has officially participated, an inquiry from a Port Washington resident for land eligibility
- **Wildlife Damage and Abatement**
  - 2023 reimbursement request will be sent to DNR soon—Approx. $11,000 reimbursement check will be received sometime before June.
- **Tree, Shrub, Prairie Grass & Wildflower Seed Program/Pollinator Plant & Grass Sale**
  - Program is 100% online for purchases—148 tree orders have been received. 41 plant orders
- **Invasive Species**
  - No activity
- **Conservation/ Clean Farm Families**
  - Soil Health Workshop took place February 8, 2024 with Blake Vince.
  - Annual reports have both been submitted for 2023's grant funding received (FFLM and DATCP PLW).
  - Applying for an additional grant with SARE for financial assistance with Nitrogen Study at the Highway 57 Demonstration Plot.
  - Presented at the Urban Ecology Center and DATCP PLW annual workshop.

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Sanitation Program

- **Sanitation Ordinance**
  - Eight sanitation ordinance violations.
  - Maintenance: Zero notices were sent in February; the Office of Corporation Counsel continues action with non-compliant owners; 1807 reports filed to da in 2024
- **POWTS Plan Reviews, Permits, and Final Inspections**
  - Thirteen plan reviews; seventeen sanitary permits; three final inspection report one abandonment permit filed.
- **Wisconsin Fund**
  - No qualified applicants for fiscal year 2024 to date.
- **Miscellaneous**
  - Working with electronic sanitation permitting system along with LIO.



Shoreland and Floodplain Zoning

- **Shoreland and Floodplain Zoning Ordinance**
  - Two applicants in February.
- **Permits**
  - Three shoreland zoning permits for February.
- **National Flood Insurance/Community Rating System (CRS)**
  - Provided floodplain information to numerous landowners, completed NFIP information to lenders and realtors.
- **Non-metallic Mining Reclamation**
- Working with the Town of Cedarburg and Jackson on Lannon Mine stock pile.

Miscellaneous
- Working on floodplain and shoreland ordinance changes. We are also workin with the DNR and FEMA to adopt new maps in the next few months. .

Land and Water Management Department

Katie Vogeler, Director
Geoff Schramm, Land & Water Coordinator
Ed Pfister, Sanitation & Zoning Coordinator
Chase Brouillette, Soil & Water Conservationist
Barry Sullivan, Sanitation & Zoning Specialist
Tony Austin, Technical Support Specialist

Ozaukee County Committee Report

General Fund Land & Water Management

For the One Month Ending Wednesday, January 31, 2024

Profit and Loss Statement ACTUAL TO AMENDED BUDGET

	Current Month Actual	2024 YTD Actual	2024 Amended Budget	Budget Balance	% Budget YTD
Revenues					
Intergovernmental Revenues	($316,158)	($316,158)	$431,517	$747,675	-73.27%
Public Charges for Services	$9,382	$9,382	$154,010	$144,628	6.09%
Licenses & Permits	$12,286	$12,286	$113,000	$100,714	10.87%
Other Revenue	$27,600	$27,600	$67,600	$40,000	40.83%
Total Revenues	**($266,890)**	**($266,890)**	**$766,127**	**$1,033,017**	**-34.84%**
Expenditures					
Salaries	$22,585	$22,585	$654,966	$632,381	3.45%
Fringe Benefits	$24,423	$24,423	$232,091	$207,668	10.52%
Travel/Training	$650	$650	$16,725	$16,075	3.89%
Supplies	$1,438	$1,438	$25,828	$24,390	5.57%
Purchased Services	$471	$471	$144,124	$143,653	0.33%
Interdepartment Charges	$12	$12	$44,983	$44,971	0.03%
Grants	$119	$119	$251,100	$250,981	0.05%
Other Expenses	$3,314	$3,314	$97,718	$94,404	3.39%
Total Operating Expenditures	**$53,012**	**$53,012**	**$1,467,535**	**$1,414,523**	**3.61%**
Capital Outlay					
Total Expenditures	**$53,012**	**$53,012**	**$1,467,535**	**$1,414,523**	**3.61%**
Net Increase (Decrease)	**($319,902)**	**($319,902)**	**($701,408)**	**($381,506)**	**45.61%**

Equity:

Attachment: February LWM Financials (Land & Water Management Reports)

Natural Resources Committee

AGENDA INFORMATION SHEET

AGENDA DATE: **March 7, 2024**
DEPARTMENT: **UW Extension**
DIRECTOR: **Cindy Sarkady**
PREPARER: **Claudia Breitengross**

Agenda Summary Extension Marketing Specialist

BACKGROUND INFORMATION: This position is shared with Washington, Sheboygan, Fond du lac and Walworth counties currently. The role of the specialist is to create marketing materials for the program areas which include promoting programs for 4-H, Community Development and Ag on Facebook, in e-newsletters, monthly reports and video campaigns. The marketing role also updates the website and works to have all materials translated to reach all audience and create accessible documents for people with disabilities. The marketing specialist uses analytical research to make sure the audience are reading our materials and accessing our programs due to our efforts**.**

ANALYSIS: This position is crucial in supporting the Educators and offering assistance to our part-time support staff.

FISCAL IMPACT: If the position started on March 1, 2024

Balance Current Year: $7,541

Next Year's Estimated Cost: If the position is supported in 2025 the cost would be $9,049

FUNDING SOURCE:

County Levy: $7,541 would be used to contract with UW Extension for 5 hours of a shared marketing person for 10 months in 2024. There is a cost saving balance of $10,598 due to vacancies in the 136 contract that already been approved for 2024**.**

Non-County Levy:

Indicate source: 136 contract salary savings due to the 4-H Educator starting 1/29, the CD Educator starting 2/19 and the vacancy of the Dairy Educator estimated start date 5/1.

RECOMMENDED MOTION: To approve the contract with UW Extension for a .125 marketing specialist using the salary savings in the 136 contract of $7,541

NATURAL RESOURCES COMMITTEE

Natural Resources Committee

AGENDA INFORMATION SHEET

AGENDA DATE: **March 7, 2024**
DEPARTMENT: **UW Extension**
DIRECTOR: **Cindy Sarkady**
PREPARER: **Claudia Breitengross**

Agenda Summary UW-Madison Division of Extension Reports

ATTACHMENTS:

- January 2024 Report (PDF)
- 2024 Oversight Comm Recommended PnL Amended Bdgt2.2024 (PDF)

NATURAL RESOURCES COMMITTEE

Extension
UNIVERSITY OF WISCONSIN-MADISON
OZAUKEE COUNTY

January 2024 Report

Agriculture

Regional Agriculture Educators



If it happens on a farm or in a field, the Extension Institute of Agriculture works with you to achieve better results. Our innovative dairy management programs range from genetics to farm and business management. Extension researchers work hand-in-hand with row crop, forage and fresh produce growers to provide best practices for every aspect of the growing phase. We also advise communities on using sustainable practices to create inviting spaces free from invasive species

Agriculture Highlights

- ***Crops:*** Liz Gartman, Crops Educator
  - Quality forage production is the cornerstone of dairy cattle feeding programs. As the dairy industry is a key economic driver in Wisconsin, it is necessary to provide research driven recommendations to forage producers as they manage cropping decisions. Extension has a robust level of expertise in the forage production space, however many client facing publications have not been updated as specialists and educators have retired or moved on. As new staff join the Extension team, refreshing this forage production resource became a priority to ensure the most relevant information is available to forage producers. A team of Extension educators and specialists in the crops, dairy and livestock programs have catalogued and are assessing the priority and importance of each resource posted on the previous website, and are strategically moving content forward and refreshing content where more relevant work has been done. This provides forage producers with reliable information and research that allows them to make the best decisions for their operations.
  - Planning for a series of listening sessions for dairy producers and nutritionists where we will engage attendees to share their input related to custom dairy heifer grazing in Wisconsin. This activity is designed to determine what barriers to implementation exist when integrating more dairy heifers into perennial landscape grazing systems so we can develop future programs to support producers in these systems.
  - Planning for a Regional Ag Day program for farmers, agronomists, nutritionists and other agriculture professionals in collaboration with the Cedar Creek Farmers in Washington county. The goal is to provide timely livestock, dairy and crop production and marketing updates to producers so they can make informed animal and crop management decisions in 2024. (Location type: Both) (Liz Gartman)

- ***Dairy:*** Tina Kohlman, Dairy Educator
  - A bi-weekly radio interview for farmers, agricultural industry persons, youth livestock, and youth dairy where they learned about extension agriculture related resources, information, and timely webinars to help them to be connected and supported, and make better informed decisions regarding their farm business operations or youth large animal project to improve farm business viability, environmental sustainability, and food safety.

Attachment: January 2024 Report (UW-Madison Division of Extension Reports)

An EEO/AA employer, University of Wisconsin-Madison Division of Extension provides equal opportunities in employment and programming, including Title VI, Title IX, the Americans with Disabilities Act (ADA) and Section 504 of the Rehabilitation Act requirements.

Extension
UNIVERSITY OF WISCONSIN-MADISON
OZAUKEE COUNTY

January 2024 Report

Additional Impacts for County

Other Programming Efforts

- **Real Colors® Personality Test Facilitation:** Real Colors® is a fun and interactive workshop that will provide participants with skills to understand human behavior and skills that are easy to incorporate into work life and everyday life. The techniques learned through Real Colors® can help bring about lasting, positive change, resulting in higher levels of success for all. The Community Development Educator facilitates Real Colors® Workshop for local public, private, and nonprofit organizations often searching for a tool for staff development, communication, and team building. If you would like to find out more information about Real Colors® facilitation for your organization, contact the Community Development Educator.
    - **Why choose Real Colors® Facilitation through UW-Extension?** Check out this video highlighting the impact of Real Colors® Facilitation: Real Colors Video link

Attachment: January 2024 Report (UW-Madison Division of Extension Reports)

We teach, learn, lead and serve, connecting people with the University of Wisconsin, and engaging with them in transforming lives and communities.

UW-Madison Division of Extension Ozaukee County Office

121 W. Main St.
Port Washington, WI 53074

P: 262-284-8288
F: 262-284-8100
711 Wisconsin Relay

Cindy Sarkady
Area Extension Director

Colleen Machut
4-H Program Educator

Paul Roback
Community Development Educator

Liz Gartman
Crops Educator

Vacant
Dairy Educator

Claudia Breitengross
Susan Hopkins
Support Staff

An EEO/AA employer, University of Wisconsin-Madison Division of Extension provides equal opportunities in employment and programming, including Title VI, Title IX, the Americans with Disabilities Act (ADA) and Section 504 of the Rehabilitation Act requirements.

Ozaukee County Committee Report

General Fund University of Wisconsin Extension

For the One Month Ending Wednesday, January 31, 2024

Profit and Loss Statement ACTUAL TO AMENDED BUDGET

	Current Month Actual	2024 YTD Actual	2024 Amended Budget	Budget Balance	% Budget YTD
Revenues					
Intergovernmental Revenues	-	-	$3,890	$3,890	0.00%
Public Charges for Services	-	-	$7,980	$7,980	0.00%
Total Revenues	**-**	**-**	**$11,870**	**$11,870**	**0.00%**
Expenditures					
Salaries	$2,353	$2,353	$66,305	$63,952	3.55%
Fringe Benefits	$302	$302	$8,253	$7,951	3.66%
Travel/Training	-	-	$13,588	$13,588	0.00%
Supplies	$673	$673	$17,940	$17,267	3.75%
Purchased Services	$123	$123	$106,664	$106,541	0.12%
Interdepartment Charges	-	-	$20,619	$20,619	0.00%
Other Expenses	-	-	$1,043	$1,043	0.00%
Total Operating Expenditures	**$3,451**	**$3,451**	**$234,412**	**$230,961**	**1.47%**
Capital Outlay					
Total Expenditures	**$3,451**	**$3,451**	**$234,412**	**$230,961**	**1.47%**
Net Increase (Decrease)	**($3,451)**	**($3,451)**	**($222,542)**	**($219,091)**	**1.55%**

Equity:

Attachment: 2024 Oversight Comm Recommended PnL Amended Bdgt2.2024 (UW-Madison Division of Extension Reports)

Natural Resources Committee

AGENDA INFORMATION SHEET

AGENDA DATE: **March 7, 2024**
DEPARTMENT: **Register of Deeds**
DIRECTOR: **Jennifer Laurin**
PREPARER: **Jennifer Laurin**

Agenda Summary Register of Deeds/Land Info Department Report

ATTACHMENTS:

- February Department Report (DOCX)
- ROD (PDF)
- Land Information (PDF)

NATURAL RESOURCES COMMITTEE

Register of Deeds

Land Information

February 2024 Department Report

Register of Deeds Office: We recorded 772 documents in January, compared to 867 for the same period the year before. 84.07% of the documents this month were recorded as a digital record. We had a profit of $23,258.00 for January.

In January we received $149,468.40 in Transfer Fees. Of that amount $119,574.72 was the portion that went to the State, and $29,893.68 was the portion that went to the County.

We recently updated our Online Access Agreement to include the use of Laredo Connect, which is an online portal for our contract customers to obtain their statements and invoices. Here customers can deposit money into their escrow accounts by the use of a credit card or ACH. If a customer's balance drops below the minimum required in their account, they are automatically locked out until they add additional funds. This has streamlined our escrow process as we no longer have to track escrow balances in the office.

Land Information Office: This office had a profit of $1,461.00 for January.

Attachment: February Department Report (Register of Deeds/Land Info Monthly Department Report)

Ozaukee County Committee Report

General Fund Register of Deeds

For the One Month Ending Wednesday, January 31, 2024
Profit and Loss Statement ACTUAL TO AMENDED BUDGET

	Current Month Actual	2024 YTD Actual	2024 Amended Budget	Budget Balance	% Budget YTD
Revenues					
Public Charges for Services	$57,284	$57,284	$1,000,000	$942,716	5.73%
Total Revenues	**$57,284**	**$57,284**	**$1,000,000**	**$942,716**	**5.73%**
Expenditures					
Salaries	$12,215	$12,215	$260,054	$247,839	4.70%
Fringe Benefits	$12,938	$12,938	$94,314	$81,376	13.72%
Travel/Training	$25	$25	$2,700	$2,675	0.93%
Supplies	$157	$157	$1,325	$1,168	11.85%
Purchased Services	$8,601	$8,601	$103,150	$94,549	8.34%
Interdepartment Charges	$40	$40	$36,437	$36,397	0.11%
Other Expenses	$50	$50	-	($50)	0.00%
Total Operating Expenditures	**$34,026**	**$34,026**	**$497,980**	**$463,954**	**6.83%**
Capital Outlay					
Total Expenditures	**$34,026**	**$34,026**	**$497,980**	**$463,954**	**6.83%**
Net Increase (Decrease)	**$23,258**	**$23,258**	**$502,020**	**$478,762**	**4.63%**

Equity:

Attachment: ROD (Register of Deeds/Land Info Monthly Department Report)

Ozaukee County Committee Report

Special Revenue Fund Land Information

For the One Month Ending Wednesday, January 31, 2024
Profit and Loss Statement ACTUAL TO AMENDED BUDGET

	Current Month Actual	2024 YTD Actual	2024 Amended Budget	Budget Balance	% Budget YTD
Revenues					
Taxes	-	-	$57,535	$57,535	0.00%
Intergovernmental Revenues	-	-	$11,000	$11,000	0.00%
Public Charges for Services	$6,736	$6,736	$100,000	$93,264	6.74%
Total Revenues	**$6,736**	**$6,736**	**$168,535**	**$161,799**	**4.00%**
Expenditures					
Salaries	$2,490	$2,490	$64,722	$62,232	3.85%
Fringe Benefits	$2,241	$2,241	$20,930	$18,689	10.71%
Travel/Training	$525	$525	$7,000	$6,475	7.50%
Supplies	-	-	$16,500	$16,500	0.00%
Purchased Services	$19	$19	$54,000	$53,981	0.04%
Interdepartment Charges	-	-	$4,846	$4,846	0.00%
Other Expenses	-	-	$537	$537	0.00%
Total Operating Expenditures	**$5,275**	**$5,275**	**$168,535**	**$163,260**	**3.13%**
Capital Outlay					
Total Expenditures	**$5,275**	**$5,275**	**$168,535**	**$163,260**	**3.13%**
Net Increase (Decrease)	**$1,461**	**$1,461**	**-**	**($1,461)**	**0.00%**

Equity:

Attachment: Land Information (Register of Deeds/Land Info Monthly Department Report)

Natural Resources Committee

AGENDA INFORMATION SHEET

AGENDA DATE: **March 7, 2024**
DEPARTMENT: **Planning and Parks**
DIRECTOR: **Andrew Struck**
PREPARER: **Andrew Struck**

Agenda Summary Stone Wall Farms, Inc., owner, PO Box 893, Cedarburg, Wisconsin 53012, and James Schneider, North Shore Engineering, Inc., applicant, 11433 N. Port Washington Road, Mequon, Wisconsin 53092, are requesting land division approval for a minor land division by Certified Survey Map (CSM) in accord with Section 7.1400 (Land Division Requirements) of the County Ordinance. The Property is located just east of 10607 Bridge Street, Town of Cedarburg, Ozaukee County, Wisconsin, being a division of part of the Northeast ¼ and the Northwest ¼ of the Southwest ¼ of Section 29, Township 10 North, Range 21 East, in the Town of Cedarburg, Ozaukee County, Wisconsin. Parcel Number(s): 030290901600. Total Acreage to be Divided: approximately +/- 4.112 acres

BACKGROUND INFORMATION: Stone Wall Farms, Inc., owner, PO Box 893, Cedarburg, Wisconsin 53012, and James Schneider, North Shore Engineering, Inc., applicant, 11433 N. Port Washington Road, Mequon, Wisconsin 53092, are requesting land division approval for a minor land division by Certified Survey Map (CSM) in accord with Section 7.1400 (Land Division Requirements) of the County Ordinance. The Property is located just east of 10607 Bridge Street, Town of Cedarburg, Ozaukee County, Wisconsin, being a division of part of the Northeast ¼ and the Northwest ¼ of the Southwest ¼ of Section 29, Township 10 North, Range 21 East, in the Town of Cedarburg, Ozaukee County, Wisconsin. Parcel Number(s): 030290901600. Total Acreage to be Divided: approximately +/- 4.112 acres.

ANALYSIS: See attached Staff Report and Recommendations

FISCAL IMPACT: NA **Balance Current Year:** NA **Next Year's Estimated Cost:** NA

FUNDING SOURCE: County Levy: Non-County Levy: X

Indicate source: Land Division Review Fee

RECOMMENDED MOTION: See attached Staff Report and Recommendations

ATTACHMENTS:

- StoneWallFarms_TCedarburg_NeighborLetter_2.15.24_ATSFinal022224 (PDF)
- LS-5532-24-Stone Wall Farms-CSM_1-30-24 (PDF)
- StoneWallFarms_MapPacketCompress (PDF)
- StaffReportNRC_030724_StoneWallFarms_2.20.24_ATSFinal022224 (PDF)

NATURAL RESOURCES COMMITTEE

OZAUKEE COUNTY
PLANNING & PARKS DEPARTMENT

PLANNING DIVISION
Andrew T. Struck, Director
https://www.ozaukeecounty.gov/540/Planning-Parks

Monday, February 26, 2024

TO WHOM IT MAY CONCERN AND ALL INTERESTED PARTIES:

OZAUKEE COUNTY NATURAL RESOURCES COMMITTEE MEETING

NOTICE IS HEREBY GIVEN that a meeting of the Ozaukee County Natural Resources Committee will be held on **Thursday, March 7, 2024 at 9:00 a.m. in Room A-200 of the Ozaukee County Administration Center, 121 W. Main Street, Port Washington, WI 53074**

The public and all interested persons are invited to attend this meeting and/or comment on the proposed preliminary Certified Survey Map (CSM) and land division. Discussion and action by the Natural Resources Committee will follow the public comment. The Natural Resources Committee agenda can be found on the Ozaukee County website at: https://www.ozaukeecounty.gov/agendacenter. You are receiving this notification as a courtesy because your property is located adjacent to the proposed property land division. The public and all interested persons are invited to attend this public meeting and/or comment.

The land division CSM, supporting documents, and staff report are on file with the Ozaukee County Planning and Parks Department for review, Monday - Friday from 8:30 a.m. to 4:30 p.m. in Room 220, 121 W. Main St., Port Washington, WI 53074. To ensure that a staff member is available for assistance, please call us at the number listed at the bottom of this page prior to your visit. They will also be posted as part of the agenda for the Natural Resources Committee on the County website (noted above). If you have any questions, concerns, or comments on the land division / certified survey map, you are invited to attend the meeting and/or make your comments known. You may also send your written comments to the Department (navallone@ozaukeecounty.gov), and they will be read before the Committee.

Stone Wall Farms, Inc., owner, PO Box 893, Cedarburg, Wisconsin 53012, and **James Schneider, North Shore Engineering, Inc.,** applicant, 11433 N. Port Washington Road, Mequon, Wisconsin 53092, are requesting **land division approval for a minor land division by Certified Survey Map (CSM)** in accord with Section 7.1400 (Land Division Requirements) of the County Ordinance. **The proposed minor land division will create four (4) new lots (Lots 1-4) as part of the CSM in the Town of Cedarburg.**

Affecting the following described real estate:
The Property, located just east of 10607 Bridge Street, **Town of Cedarburg**, Ozaukee County, Wisconsin, being a division of part of the Northeast ¼ and the Northwest ¼ of the Southwest ¼ of Section 29, Township 10 North, Range 21 East, in the Town of Cedarburg, Ozaukee County, Wisconsin. **Parcel Number(s)**: 030290901600. Total Acreage to be Divided: approximately +/- 4.112 acres.

NRC Chairperson, Rob Holyoke
Natural Resources Committee

121 W. Main Street, P.O. Box 994, Port Washington, WI 53074
Phone: (262) 284-8257 Metro: (262) 238-8257 Fax: (262) 284-8269

Attachment: StoneWallFarms_TCedarburg_NeighborLetter_2.15.24_ATSFinal022224 (P&PDept_LandDivision_StoneWallFarms_TCedarburg)

Attachment: LS-5532-24-Stone Wall Farms-CSM_1-30-24 (P&PDept_LandDivision_StoneWallFarms_TCedarburg)

CERTIFIED SURVEY MAP NO. _____

A DIVISION OF PART OF THE NORTHEAST 1/4 AND NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 29, TOWN 10 NORTH, RANGE 21 EAST, IN THE TOWN OF CEDARBURG, OZAUKEE COUNTY, WISCONSIN.

NORTH SHORE ENGINEERING, INC.
Consulting Engineers & Land Surveyors
11433 N. Port Washington Rd., Mequon, Wisconsin, 53092
(262) 241-9400 - FAX: (262) 241-5337
www.northshoreengineering.net

WISCONSIN
JAMES G. SCHNEIDER
S-2127
MEQUON
WI
LAND SURVEYOR
1-30-2024

NOTES :

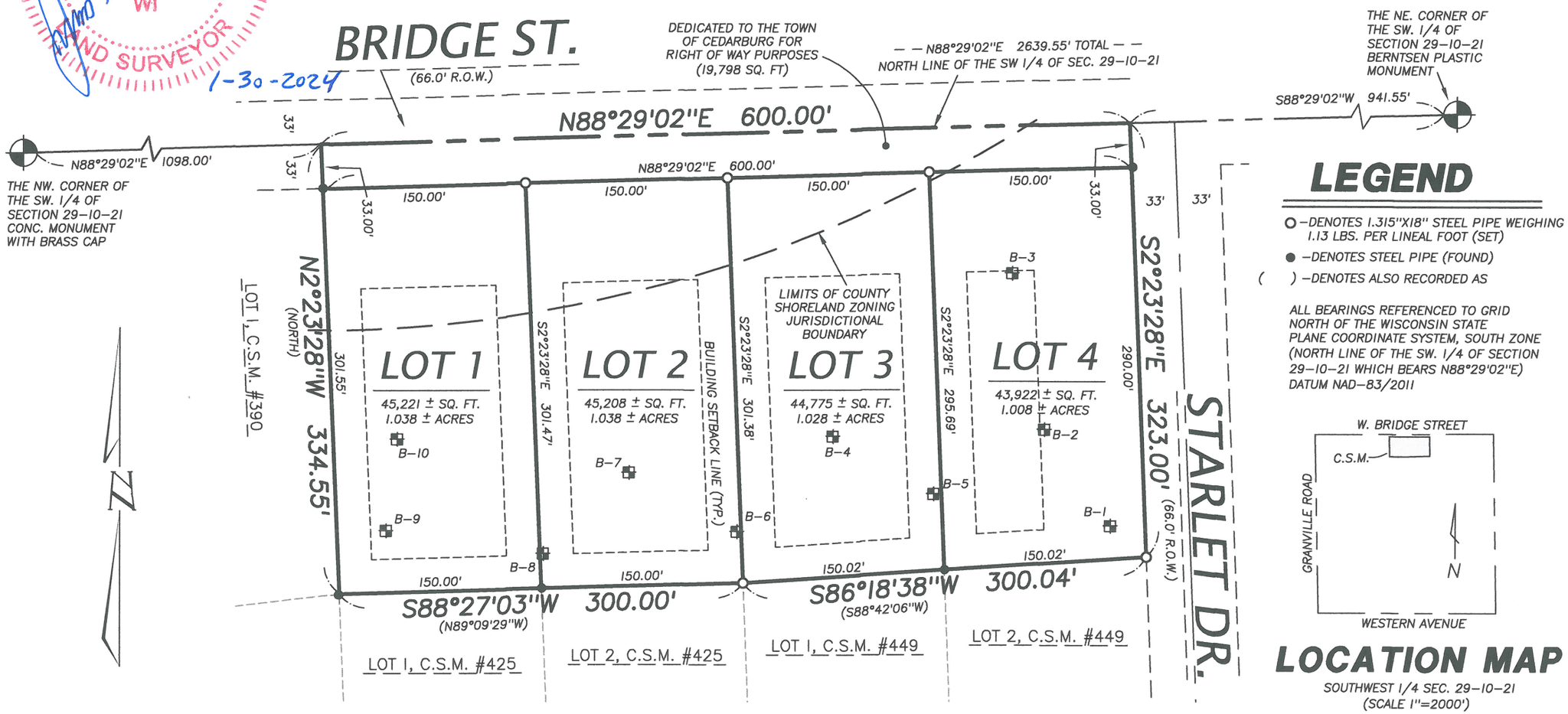
1. THIS PROPERTY IS ALSO SUBJECT TO EASEMENTS OF RECORD.
2. THIS PROPERTY IS PRESENTLY ZONED R-2 (SINGLE FAMILY RESIDENTIAL DISTRICT)

SETBACK NOTE :
FRONT YARD = 75.0'
REAR YARD = 25.0'
SIDE YARD = 25.0'

OWNER :
STONE WALL FARMS, INC.
c/o SARAH STARRETT
P.O. BOX 893
CEDARBURG, WI 53012

0 100 150 200 300

SCALE 1" = 100'



LEGEND

- O —DENOTES 1.315"X18" STEEL PIPE WEIGHING 1.13 LBS. PER LINEAL FOOT (SET)
- ● —DENOTES STEEL PIPE (FOUND)
- ( ) —DENOTES ALSO RECORDED AS

ALL BEARINGS REFERENCED TO GRID NORTH OF THE WISCONSIN STATE PLANE COORDINATE SYSTEM, SOUTH ZONE (NORTH LINE OF THE SW. 1/4 OF SECTION 29-10-21 WHICH BEARS N88°29'02"E) DATUM NAD-83/2011

LOCATION MAP

SOUTHWEST 1/4 SEC. 29-10-21
(SCALE 1"=2000')

THIS INSTRUMENT DRAFTED BY JAMES G. SCHNEIDER

SHEET 1 OF 4 SHEETS

CERTIFIED SURVEY MAP NO. _____

A DIVISION OF PART OF THE NORTHEAST 1/4 AND NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 29, TOWN 10 NORTH, RANGE 21 EAST, IN THE TOWN OF CEDARBURG, OZAUKEE COUNTY, WISCONSIN.

SURVEYOR'S CERTIFICATE

I, James G. Schneider, Professional Land Surveyor, do hereby certify:

THAT I have surveyed, divided and mapped the following parcel of land:

Part of the Northeast 1/4 and Northwest 1/4 of the Southwest 1/4 of Section 29, Township 10 North, Range 21 East, in the Town of Cedarburg, Ozaukee County, Wisconsin, bounded and described as follows:

Commencing at the Northwest corner of the Southwest 1/4 of said Section 29; thence N88°29'02"E along the North line of said Southwest 1/4 Section, 1098.00 feet to the point of beginning of lands to be described; thence continuing N88°29'02"E along the North line of said Southwest 1/4 Section, 600.00 feet to the Northerly extension of the West right of way line of Starlet Drive; thence S2°23'28"E along said West right of way line, 323.00 feet to the Northeast corner of Lot 2 of Certified Survey Map No. 449; thence S86°18'38"W along the North line of Lot 2 and Lot 1 of Certified Survey Map No. 449, 300.04 feet to the Northeast corner of Lot 2 of Certified Survey Map No. 425; thence S88°27'03"W along the North line of Lot 2 and Lot 1 of Certified Survey Map No. 425, 300.00 feet to the Southeast corner of Lot 1 of Certified Survey Map No. 390; thence N2°23'28"W along the East line of Lot 1 of Certified Survey Map No. 390 and it's Northerly extension, 334.55 feet to the point of beginning.

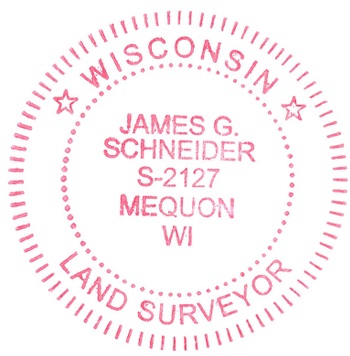
Said lands containing 4.566 acres of land, more or less.

That I have made such survey, land division, and plat at the direction of Stone Wall Farms, Inc., OWNER of said lands.

That such map is a correct representation of all the exterior boundaries of the land surveyed and the land division thereof made.

That I have complied with Chapter 236.34 of the Wisconsin Statutes and the regulations of the Town of Cedarburg in surveying and mapping the same.

James G. Schneider S-2127 1-30-2024



This instrument was drafted by James G. Schneider

Attachment: LS-5532-24-Stone Wall Farms-CSM_1-30-24 (P&PDept_LandDivision_StoneWallFarms_TCedarburg)

CERTIFIED SURVEY MAP NO. _____

A DIVISION OF PART OF THE NORTHEAST 1/4 AND NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 29, TOWN 10 NORTH, RANGE 21 EAST, IN THE TOWN OF CEDARBURG, OZAUKEE COUNTY, WISCONSIN.

CORPORATE OWNER'S CERTIFICATE

I, Sarah N. L. Starrett (President) of Stone Wall Farms, Inc., OWNER, do hereby certify: THAT, I have caused the lands described in the foregoing certificate of James G. Schneider, Surveyor, to be surveyed, divided, mapped, and dedicated.

WITNESS the hand and seal of said OWNERS on this _____ day of _____, 20___.

_____ _____

Witness Sarah N. L. Starrett
(President)

STATE OF WISCONSIN)
OZAUKEE COUNTY)ss
PERSONALLY came before me on this _____ day of _____, 20__ the above named Sarah N. L. Starrett (President) to me known to be the person who executed the foregoing certificate and acknowledged the same.

_____ My Commission expires. _____

Notary Public

TOWN OF CEDARBURG PLAN COMMISSION APPROVAL

APPROVED by the Town of Cedarburg Plan Commission on this _____ day of _____, 20___.

_____ _____

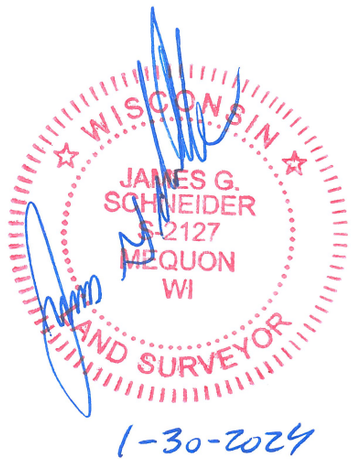
David Salvaggio, Town Chairman Jack Johnston, Town Clerk

TOWN OF CEDARBURG TOWN BOARD APPROVAL

APPROVED by the Town of Cedarburg Town Board this _____ day of _____, 20___.

_____ _____

David Salvaggio, Town Chairman Jack Johnston, Town Clerk



This instrument was drafted by James G. Schneider

Attachment: LS-5532-24-Stone Wall Farms-CSM_1-30-24 (P&PDept_LandDivision_StoneWallFarms_TCedarburg)

CERTIFIED SURVEY MAP NO. _____

A DIVISION OF PART OF THE NORTHEAST 1/4 AND NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 29, TOWN 10 NORTH, RANGE 21 EAST, IN THE TOWN OF CEDARBURG, OZAUKEE COUNTY, WISCONSIN.

EXTRATERRITORIAL REVIEW AND APPROVAL

CITY OF CEDARBURG PLAN COMMISSION APPROVAL

APPROVED by the City of Cedarburg Plan Commission on this _____ day of _____, 20___.

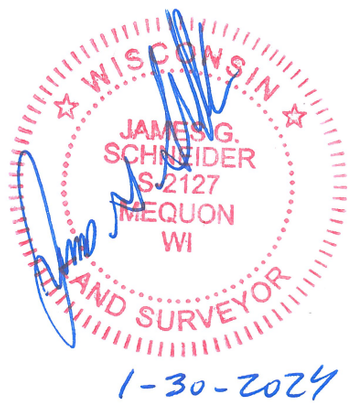
_____
Michael J. O'Keefe,
Mayor and Plan Commission Chairman

APPROVAL OF THE OZAUKEE COUNTY NATURAL RESOURCES COMMITTEE, COUNTY PLANNING AGENCY

Resolved, that this Certified Survey Map, in the Town of Cedarburg, by Sarah N. L. Starrett (President) of Stone Wall Farms, Inc., owner, is hereby approved by the authority of the Natural Resources Committee of the Ozaukee County Board of Supervisors under the provisions of Section 7.1200 and Chapter 13 of the County Ordinance.

Dated this _____ day of _____, 20_____.

_____
Rob Holyoke,
Chairperson of the Natural Resources Committee



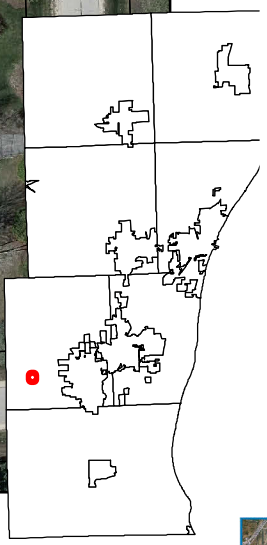
1-30-2024

This instrument was drafted by James G. Schneider

Attachment: LS-5532-24-Stone Wall Farms-CSM_1-30-24 (P&PDept_LandDivision_StoneWallFarms_TCedarburg)

Stone Wall Farms, Inc., 030290901600
Part of the NE 1/4 and NW 1/4 of the SW 1/4, Section 29, T10N, R21E
Town of Cedarburg





Legend

- Parcel 030290901600
- Parcel Polygons

N 0 65 130 260 Feet

Ozaukee County Plan
February, 2024

Attachment: StoneWallFarms_MapPacketCompress (P&PDept_LandDivision_StoneWallFarms_TCedarburg)

Stone Wall Farms, Inc., Parcel 030290901600
Town of Cedarburg
Adjacent Landowners



Legend

- 300ftBuffer
- Parcel 030290901600
- Parcel Polygons

N 0 115 230 460 Feet

Ozaukee County Plan
February, 2024

Attachment: StoneWallFarms_MapPacketCompress (P&PDept_LandDivision_StoneWallFarms_TCedarburg)

Stone Wall Farms, Inc., Parcel 030290901600
Town of Cedarburg
Hydrography



Legend

- Shoreland and Floodplain Zoning
- Parcel 030290901600
- Parcel Polygons

N

0 65 130 260 Feet

Ozaukee County Plan
February, 2024

Attachment: StoneWallFarms_MapPacketCompress (P&PDept_LandDivision_StoneWallFarms_TCedarburg)

Stone Wall Farms, Inc., Parcel 030290901600
Town of Cedarburg
Soils (NRCS SSURGO, 2022)



Legend

- Parcel 030290901600
- Parcel Polygons

N

0 65 130 260 Feet

Ozaukee County Plan
February, 2024

Attachment: StoneWallFarms_MapPacketCompress (P&PDept_LandDivision_StoneWallFarms_TCedarburg)

Stone Wall Farms, Inc., Parcel 030290901600
Town of Cedarburg
Environmental Corridors



Legend

Env. Corridor (SEWRPC, 2015)

- INRA
- PEC
- SEC
- Parcel 030290901600
- Parcel Polygons

N 0 65 130 260 Feet

Ozaukee County Plan
February, 2024

Attachment: StoneWallFarms_MapPacketCompress (P&PDept_LandDivision_StoneWallFarms_TCedarburg)

Stone Wall Farms, Inc., Parcel 030290901600
Town of Cedarburg
Ozaukee County 2035 Future Land Use Amendment 2



Legend

- Parcel 030290901600
- Parcel Polygons

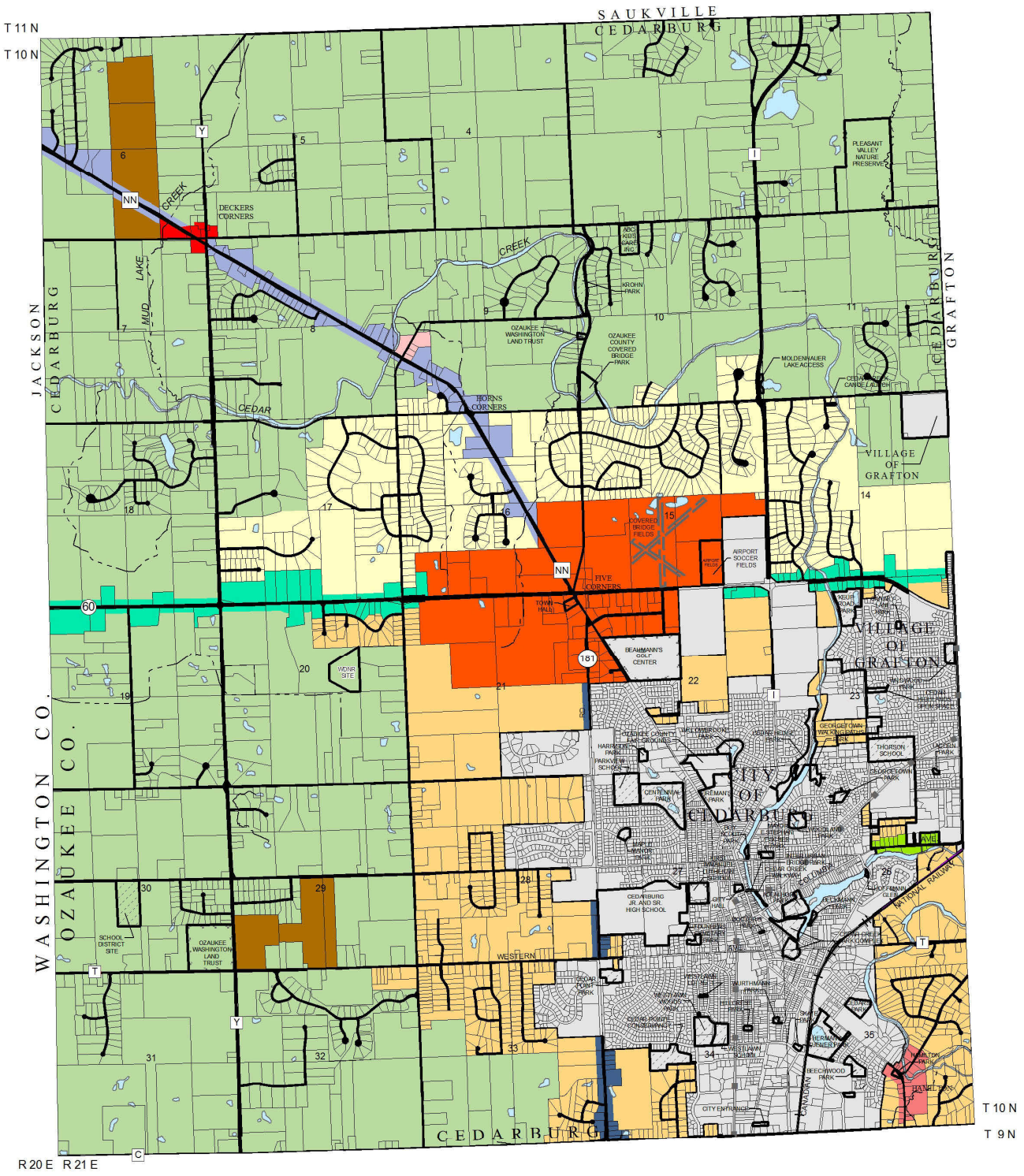
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0 65 130 260 Feet

Ozaukee County Plan
February, 2024

Attachment: StoneWallFarms_MapPacketCompress (P&PDept_LandDivision_StoneWallFarms_TCedarburg)

TOWN OF CEDARBURG PLANNED LAND USE MAP: 2035



Neighborhoods

- RN-C — Rural neighborhood - Countryside
- RN-N — Residential Neighborhood - North
- RN-S — Residential Neighborhood - South

Districts

- BD-DC — Business District - Deckers Corners
- BD-HC — Business District - Horns Corners
- BD-C — Business District - Columbia
- HD-H — Historic District - Hamilton
- BD-FC — Business District - Five Corners
- FPD — Farmland Protection District

Corridors

- APC-NN — Arterial Parkway Corridor - Highway NN
- APC-60 — Arterial Parkway Corridor - STH 60
- APC-WR — Arterial Parkway Corridor - Wauwatosa Road

- STREETS AND HIGHWAYS
- SURFACE WATER

N

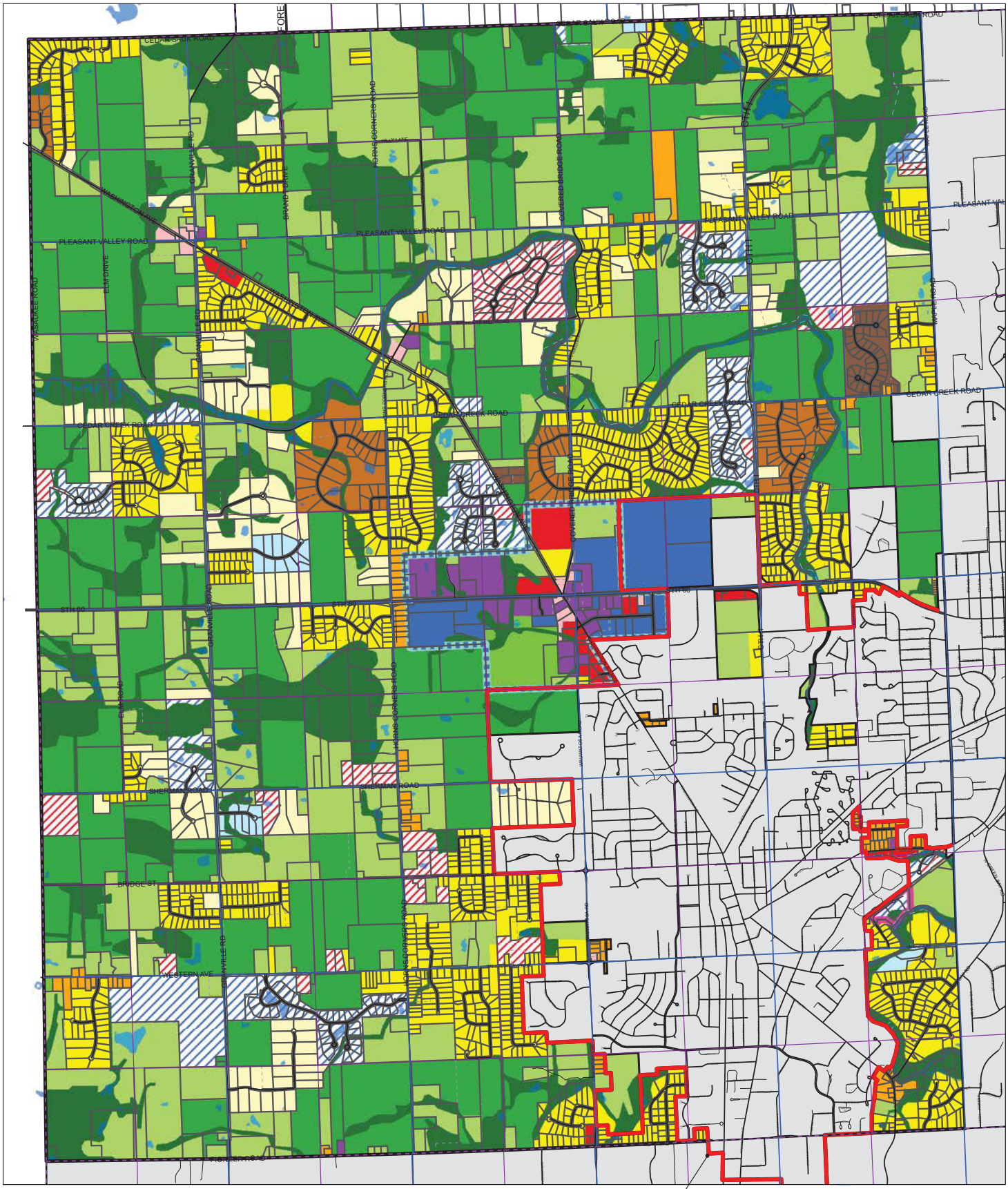
0 2,500

Source: Town of Cedarburg, Planning and Design Institute Inc., Ozaukee County, and SEWRPC.

Attachment: StoneWallFarms_MapPacketCompress (P&PDept_LandDivision_StoneWallFarms_TCedarburg)

TOWN of CEDARBURG

Date: 2/28/2023



Legend

- PUD Planned Unit Developments
- HTCOD Town Center Overlay District
- A-1 Agricultural District
- A-2 Prime Agricultural District
- B-1 Neighborhood Business District
- B-2 Planned Business District
- B-3 Business District
- CR-A Countryside Residential A
- CR-B Countryside Residential B
- E-1 Estate Residential District
- R-1 Single Family Residential District
- R-2 Single Family Residential District
- R-3 Single Family Residential District
- TR Transitional Residential District
- TR-2 Transitional Residential District
- P-1 Public and Private Park District
- M-1 Industrial District
- M-2 Planned Industrial District
- M-3 Quarrying District
- C-1 Conservancy District

Certification:
I, the undersigned, Town Chairman of the Town of Cedarburg, Ozaukee County, Wisconsin, do hereby certify that the Zoning Map, Town of Cedarburg, Ozaukee County, Wisconsin on . Changes thereafter shall not be effective until entered and attested on the certified copy.

Attestation

David Salvaggio, Town Chairman Date:

Eric Ryer, Town Administrator Date:

City of Cedarburg Annexation Limit

0 0.25 0.5 1 1.5 2 Miles

The data is provided without warranty of any representation of accuracy, timeliness, or completeness. It is the responsibility of the requestor to determine accuracy, timeliness, completeness and appropriateness of its use. The Town makes no warranty, expressed or implied to the use of the mapped data.

N

Attachment: StoneWallFarms_MapPacketCompress (P&PDept_LandDivision_StoneWallFarms_TCedarburg)

TOWN of CEDARBURG
Preserving Yesterday's Heritage for Tomorrow.

Meeting:	**Plan Commission**
Place:	1293 Washington Ave, Cedarburg
Date/Time:	February 21, 2024 / 7:00PM*
Web Page:	www.townofcedarburgwi.gov
Posted:	February 16, 2024

*This meeting will also be held remotely online. For remote access, see the instructions in the meeting packet or email eryer@townofcedarburgwi.gov for information.

Chairman	David Salvaggio	Administrator	Eric Ryer
Plan Commissioner	Kerry Carmichael	Town Attorney	Brad Hoeft
Plan Commissioner	Don Borgwardt	Director of Public Works	Adam Monticelli
Plan Commissioner	Tom Gaertig	Director of Parks & Recreation	Paul Jungbauer
Plan Commissioner	Larry Lechner	Town Treasurer	Katie LeBlanc
Plan Commissioner	Steve Wolf	Consulting Planner	Amy Barrows
Plan Commissioner	Anne Lewandowski	Asst. Administrator/Clerk	Jack Johnston

Note: A quorum of Town Board of Supervisors may be present at this meeting for the purpose of gathering information and possible participation in the Plan Commission discussion on items listed on this agenda. However, unless otherwise noted in this agenda, no official action by the Town Board will be taken at this meeting.

1. **CALL TO ORDER/PLEDGE OF ALLEGIANCE**

2. **MINUTES OF PREVIOUS MEETINGS**
   a. Approval of January 17, 2024 Plan Commission Meeting Minutes*

3. **PUBLIC HEARING**
   a. Public hearing on a conditional use permit application by CSH Building LLC & Bone Bed LLC (Flying Fur) to operate a dog daycare, short-term boarding and grooming business related to a text amendment application in the B-3 business district **[NW ¼ of Section 22, ~2.02 acres, zoned B-3 Business District]***

4. **OLD BUSINESS**
   a. None

5. **NEW BUSINESS**
   a. Discussion and possible recommendation on a text amendment application to amend Section 320-21 subsection C of the B-3 Business District of the Town Code of Ordinances to allow for "professional dog care services" such as dog daycare, short-term boarding and grooming as conditional uses in the B-3 Business **District [Petitioner: CSH Building LLC/Bone Bed Fur LLC]***
   b. Discussion and possible recommendation on a conditional use permit application by CSH Building LLC & Bone Bed LLC (Flying Fur) to operate a dog daycare, short-term boarding and grooming business related to a text amendment application in the B-3 business district **[NW ¼ of Section 22, ~2.02 acres, zoned B-3 Business District]***
   c. Discussion and possible recommendation on an architectural and site plan review for a 3,800 square foot outbuilding for the property located at 2305 Brandt Drive (private road extension) **[Petitioner: Cameron Mikkelson NW ¼ Sec. 5, 11.6 acres, E-1 Estate Residential & C-1 Conservancy District]***
   d. Discussion and possible recommendation on a minor land division application for the parcel with tax key #03-029-09-016.00 **[Petitioner: James Schneider SW ¼ Sec. 29, parent parcel 4.56 acres]***
   e. Discussion and feedback regarding the Zoning Code Update (discuss and define purpose and intent of existing and proposed zoning districts; recommended permitted and conditional uses; nonconforming uses and other provisions of Chapter 320 Zoning), and concept Zoning district map changes and updates*

Attachment: StoneWallFarms_MapPacketCompress (P&PDept_LandDivision_StoneWallFarms_TCedarburg)

6. ADJOURNMENT

*At the Plan Commission's discretion, the Commission may take comment from the public

Note: A quorum of Town Board of Supervisors may be present at this meeting for the purpose of gathering information and possible discussion on items listed on this agenda. However, unless otherwise noted in this agenda, no official action by the Town Board will be taken at this meeting.

Attachment: StoneWallFarms_MapPacketCompress (P&PDept_LandDivision_StoneWallFarms_TCedarburg)

PLANNING & PARKS DEPARTMENT

Andrew T. Struck, Director
https://www.ozaukeecounty.gov/540/Planning-Parks

Attachment: StaffReportNRC_030724_StoneWallFarms_2.20.24_ATSFinal022224 (P&PDept_LandDivision_StoneWallFarms_TCedarburg)

Staff Report – Natural Resources Committee – March 7, 2024

Stone Wall Farms, Inc., owner, PO Box 893, Cedarburg, Wisconsin 53012, and **James Schneider, North Shore Engineering, Inc.,** applicant, 11433 N. Port Washington Road, Mequon, Wisconsin 53092, are requesting **land division approval for a minor land division by Certified Survey Map (CSM)** in accord with Section 7.1400 (Land Division Requirements) of the County Ordinance to create a division of land in the shoreland area, which results in a "minor land division", a division of a lot, parcel or tract of land by the owner thereof or the owner's agent for the purpose of transfer of ownership or building development, where the act of division creates three or more parcels or building sites, inclusive of the original remnant parcel, any one of which is five acres or less by division or successive division within a five-year period. **The proposed minor land division will create four (4) new lots (Lots 1-4) as part of the CSM in the Town of Cedarburg.**

Affecting the following described real estate:

The Property, located just east of 10607 Bridge Street, **Town of Cedarburg**, Ozaukee County, Wisconsin, being a division of part of the Northeast ¼ and the Northwest ¼ of the Southwest ¼ of Section 29, Township 10 North, Range 21 East, in the Town of Cedarburg, Ozaukee County, Wisconsin. **Parcel Number(s)**: 030290901600. Total Acreage to be Divided: approximately +/- 4.112 acres.

Section 7.1409 of the Ozaukee County Shoreland and Floodplain Zoning Ordinance, "Review Criteria", states that in accordance with Section NR 115.05 (4) of the Wisconsin Administrative Code, the Natural Resources Committee shall consider the following factors in its review of proposed land divisions:

A) Hazards to the health, safety, or welfare of future residents of the land division
B) Proper relationship to adjoining areas
C) Public access to navigable waters in accordance with Section 236.16 (3) of the Wisconsin Statutes
D) Adequate stormwater management facilities
E) Conformity to Federal, State, and local laws and ordinances including consistency with the adopted *Multi-jurisdictional Comprehensive Plan for Ozaukee County: 2035*.

The Planning and Parks Department finds that:

1) A Planning and Parks Department **Staff Advisory Review Meeting** for the proposed **Minor Land Division (by CSM)** application was over the phone on 7/27/2023 and 01/19/2024. Subsequent submittals and emails provided additional details and information.

2) The Planning and Parks Department finds that **portions of the parcel(s) (Property(ies))** to be land divided through a certified survey map **ARE under Ozaukee County Land Division Review Requirements and within the Ozaukee County Shoreland and Floodplain Zoning jurisdiction**. **Ozaukee County is an "approving authority" on this minor land division / CSM. Ozaukee County shall be listed as an approving authority on the certified survey map.**

3) The Planning and Parks Department finds that the **lot sizes specified on the certified survey map conform to Section 7.0302,** "Lots Not Served by Public Sanitary Sewer", where the minimum lot area shall be 20,000 sq. ft. and the minimum average lot width shall be 100 feet, with at least 100 feet of frontage at the ordinary high-water mark.

121 W. Main Street, P.O. Box 994, Port Washington, WI 53074
Phone: (262) 284-8257 Metro: (262) 238-8257 Fax: (262) 284-8269

4) The Planning and Parks Department finds that **the parcel(s)** (*Property(ies)*) **DO NOT** contain portions **100-year floodplain. The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood. A Zone AE (Base Flood Elevations Determined) with both floodway (The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights) and flood fringe and Zone X (Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood). The property is within a Zone X,** according to the National Flood Insurance Program (NFIP) Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) map for Ozaukee County, Wisconsin and Unincorporated Areas, Panel 166 of 270, Map Number 55089C0166F, Map Revised Date, December 4, 2007.

5) The Planning and Parks Department finds that **the minor land division by CSM shows a division of Lots 1 – 4, ranging from +/-1.008 acres to +/-1.038 Acres, with all four Lots being less than or equal to 5 acres.** According to the current Ozaukee County Shoreland and Floodplain Zoning ordinance (Chapter 7.1400), a **"minor land division"** is *a division of a lot, parcel or tract of land by the owner thereof or the owner's agent for the purpose of transfer of ownership or building development, where the act of division creates three or more parcels or building sites, inclusive of the original remnant parcel, any one of which is five acres or less by division or successive division within a five-year period*.

6) The Planning and Parks Department finds that the **Town of Cedarburg 2035 planned land use is Rural neighborhood – Countryside (Town of Cedarburg Planned Land Use Map: 2035 May 2, 2012 Amendment), and the existing Town of Cedarburg zoning is Single Family Residential District (R-2). The Department further finds that the Ozaukee County 2035 planned land use is Medium Density Residential (Multi-jurisdictional Comprehensive Plan for Ozaukee County: 2035 Amendment 2, December 2013). Therefore, the CSM and Town of Cedarburg's planned land use Rural neighborhood - Countryside is consistent with the Multi-jurisdictional Comprehensive Plan for Ozaukee County: 2035 Medium Density. The preliminary CSM has been discussed with the Town of Cedarburg's Plan Commission at their February 21, 2024 meeting. A public hearing is scheduled for the March 6, 2024 Town Board meeting. Furthermore, this parcel is in the City of Cedarburg's Extraterritorial Plat Review Jurisdiction.**

7) The **NRCS SSURGO soils** for the Property(ies) (parcel(s)) are indicated on the Soils Exhibit Map and consist of the following soil types: **HmB2—Hochheim loam**, 2 to 6 percent slopes, eroded; and **NnA – Nenno silt loam**, 1 to 3 percent slopes (**minor hydric component**). Hydric ("wetland") soils are noted in the above listing. The northwestern section of the parcel is within the Ozaukee County Shoreland and Floodplain Zoning jurisdiction. Per the Ozaukee County Soil Survey (Table 5) on **limitations for and factors affecting Residential Development** it states for the Hochheim loam (HmB2), "Slight on slopes of less than 12 percent, moderate on slopes of 12 to 20 percent, and severe on slopes of 20 percent or more; erosion is a serious hazard in steep areas"; and for the Nenno silt loam (NnA), "Moderate; temporary high water table; basements are wet. In addition, some of the above listed soil types have **limitations for and factors affecting onsite sewage disposal systems** according to the Ozaukee County Soil Survey (Table 5).

8) The Planning and Parks Department finds that the **soil borings, or otherwise specified locations for Private On-site Wastewater Treatment Systems (POWTS)**, **WERE** conducted and/or submitted for the newly created lots. An approved interpretive mound system design and report was also submitted for Lot 4.

9) The Planning and Parks Department finds that **there ARE NOT known wetlands** per the Wisconsin Wetland Inventory (WWI)/SEWRPC wetland map (WDNR 2019), the Ozaukee County NRCS Wetland Inventory maps, the Ozaukee County Private Wetland Inventory GIS database and/or the official County Shoreland and Floodplain Zoning maps. A wetland delineation (North Shore Engineering, Inc., 6/27/2023) has been submitted as part of the certified survey map review for Lots 1-4 also showing no identified wetlands. **Thus, the are no delineated wetlands located on the CSM nor a text reference / label on**

121 W. Main Street, P.O. Box 994, Port Washington, WI 53074
Phone: (262) 284-8257 Metro: (262) 238-8257 Fax: (262) 284-8269

Attachment: StaffReportNRC_030724_StoneWallFarms_2.20.24_ATSFinal022224 (P&PDept_LandDivision_StoneWallFarms_TCedarburg)

the certified survey map sourcing the wetland data. A WDNR and/or USACOE concurrence l has been provided (WDNR, 07/28/2023).

10) The Planning and Parks Department finds that there is **additional proposed road access off of Bridge Street an existing Town Road, and Starlet Drive, an existing Town Road** to the newly created lots as part of this certified survey map. Access is proposed to Lots 1-3 via Bridge Street, and access to Lot 4 is proposed via Starlet Drive. There is no existing access to the parcel. The owners/agent **WILL NOT** require a County Highway Access Control permit based on access off of Bridge Street and Starlet Drive, both Town Roads. A proposed drainage plan / grading plan was **NOT** provided for review for the certified survey map lots or access driveways.

11) **A general site grading, erosion control, proposed drainage, and stormwater management plan has NOT been provided as part of the certified survey map.** The location of any existing subsurface tiles and/or plans to destroy or reroute these tiles has **NOT** been provided to the Planning and Parks Department. The certified survey map **DOES NOT** specify the proposed location of construction phase erosion and sediment control measures. The Department **DID NOT** receive a copy of any received WPDES Construction Site Storm Water Runoff Permits from WDNR and/or corresponding determination letter.

12) The Planning and Parks Department finds that the CSM **DOES depict and/or by text reference the County Shoreland and Floodplain Zoning Jurisdictional Boundary and Area. The County Shoreland and Floodplain Zoning Jurisdictional Boundary/Area is regulated under County Ordinance.** The County ordinance states that the Shoreland and Floodplain Zoning Jurisdictional boundary is defined by "the area within the following distances from the ordinary high-water mark of navigable waters: 1,000 feet from a navigable lake, pond or flowage; 300 feet from a navigable river or stream or to the landward side of the 100-year regulatory floodplain boundary, whichever distance is greater". There is **NO** text reference note that the **County Shoreland Zoning Jurisdictional Boundary/Area is regulated under County Ordinance.**

13) The Planning and Parks Department finds that **there ARE NOT primary environmental corridors as delineated by SEWRPC on the Property(ies). There ARE NOT other associated unregulated County planned park and open space sites, proposed recreation trails, secondary environmental corridors, natural areas, critical species habitats sites, critical aquatic habitat areas and/or sites of geological significance, as identified by SEWRPC, located on the parcel(s) (Property(ies)).** *Per the Multi-jurisdictional Comprehensive Plan for Ozaukee County, rural density residential development may be accommodated in upland environmental corridors, provided that buildings are kept off steep slopes. The maximum number of housing units accommodated at a proposed development site within the environmental corridor should be limited to the number determined by dividing the total corridor acreage within the site, less the acreage covered by surface water and wetlands, by five. The permitted housing units may be in single-family or multi-family structures. When rural residential development is accommodated, conservation subdivision designs are strongly encouraged.*

14) There is **NOT** a navigable waterway(s) on the Property(ies) / (Parcel(s)); therefore, the County requirement for public access to the navigable waterway within one-half mile intervals as measured along the waterway from this Property(ies) is not required. Public access to navigable waterways is required within one-half mile intervals, as measured along the stream shore of a navigable waterbody per Wis. Stats. Chapter 236.

The Planning and Parks Department has no objection to the land division and recommends approval of the Certified Survey Map with the following conditions and corrections:

1) **Any further future land division of these Properties (these parcels) resulting in a "subdivision" as defined by Wis. Stats. Chapter 236** as *"a division of a lot, parcel, or tract of land by the owner thereof or the owner's agent for the purpose of sale or of building development, where: (a) The act of division creates five (5) or more parcels or building sites of 1 ½ acres each or less in area; or (b) Five (5) or more parcels or building sites of 1 ½ acres each or less in area are created by successive divisions within a period of five (5) years",* **will require CSM approval by Ozaukee County, in accord with Section 236, Wisconsin State Statutes**,

121 W. Main Street, P.O. Box 994, Port Washington, WI 53074
Phone: (262) 284-8257 Metro: (262) 238-8257 Fax: (262) 284-8269

Attachment: StaffReportNRC_030724_StoneWallFarms_2.20.24_ATSFinal022224 (P&PDept_LandDivision_StoneWallFarms_TCedarburg)

including public access requirements, in accord with Section 236.16 (3) Wisconsin Statutes, for subdivis abutting on a navigable lake or stream or appropriate waivers and land dedications as specified by the County Planning Agency. **Also, any successive land division (redivision) of this certified survey map and/or parcels within a five (5) year period will require approval by the Ozaukee County Planning and Parks Department and Ozaukee County Natural Resources Committee. As there IS NOT a navigable waterway(s) on the Property(ies) / (Parcel(s)), the County requirement for public access to the navigable waterway within one-half mile intervals as measured along the waterway from these Property(ies) DOES NOT apply. Public access to navigable waterways is required within one-half mile intervals, as measured along the stream shore of a navigable waterbody under Wis. Stats. Chapter 236. Furthermore, Ozaukee County SHALL BE listed as an approving authority/agency on the final certified survey map and a signature block included in the approvals.**

2) The CSM / land division **MAY** require review and approval under the extraterritorial platting jurisdictional authority of the City of Cedarburg. **This parcel is in the City of Cedarburg's extraterritorial platting review jurisdiction.**

3) **The CSM SHALL provide a text note on the face of the CSM that "the areas within the County Shoreland Zoning Jurisdictional Boundary as depicted on the certified survey map and/or with text are subject to the provisions of the Ozaukee County Shoreland and Floodplain Zoning Ordinance".**

4) A **site grading, proposed drainage, stormwater management (as may be required) and erosion control plan** shall be provided to the Land and Water Management Department for review and approval **PRIOR** to construction activities. In addition, a site grading, proposed drainage, stormwater management (as may be required) and erosion control plan **SHALL** be followed for building and development within the certified survey map and be in accord with the requirements of the WDNR NR 216, NR 151 and Wis. Stats. Chapter 30. Any construction activities should include erosion and sediment control measures (erosion control plan) that conform to the technical standards and specifications as outlined at the Wisconsin Department of Natural Resources website: http://dnr.wi.gov/water/wm/nps/stormwater/techstds.htm and in the *Wisconsin Construction Site Best Management Practice Handbook (WDNR Pub. WR-222)*. The erosion control plan measures should be installed prior to construction activity to prevent sediment delivery off the property or into any nearby navigable waterways and wetlands. These controls must be maintained until the soil is adequately re-vegetated or otherwise protected to prevent erosion. Once the vegetation is adequate to prevent the erosion, the barriers shall be removed. The soils noted above for the *Property* may have limitations for various aspects of the proposed development including hydric soils, high water tables and limitations for residential, industrial or commercial construction. The soil conditions will be reviewed in more detail with specific grading, excavating, filling and/or development plans submitted as part of required County shoreland zoning permitting for these various development and construction activities. **Also, the location of any existing subsurface tiles and plans to destroy or reroute these tiles must be provided to the Land and Water Management Department for review and approval. In addition, the site-grading plan should include profiles and cross-sections of the proposed road / driveway grades, ditches and culverts and MUST be submitted for review by the Land and Water Management Department PRIOR to construction and development activity on the *Property*. The proposed CSM DOES NOT specify proposed stormwater management features or drainage easements for the new lots. If any stormwater management features and/or drainage easements are proposed, the maintenance requirements, restrictive covenants and/or responsible party (ies) for any drainage easements must be specified or agreement referenced on the certified survey map along with the ability of the Town of Cedarburg (as desired) and Ozaukee County to enter the drainage and stormwater management feature easements for inspection. Furthermore, all stormwater management features and drainage easements need to be labeled and depicted on the certified survey map. When there is not a proposed change in land use resulting from the current land division, a text statement on the certified survey map referencing the requirement of the County Land and Water Management Department to review and approve of a site grading, drainage, stormwater management, and erosion control plan prior to any development or construction activities relating to this land division can be made in lieu of the above documentation being provided at the time of land division approval.**

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5) A **Shoreland Permit from Ozaukee County** shall be required for filling, grading, lagooning, dredging, ditching and excavating activities as described in Section 7.0500 of the Ozaukee County Shoreland and Floodplain Zoning Ordinance. For example, a Shoreland Permit may be required for the grading and excavating of roads, stormwater detention facilities and/or lots that are within the County Shoreland and Floodplain Zoning Jurisdictional Boundary. According to Section 7.0301, "No Filling in Floodplain Areas," for lots created after the effective date of this ordinance, no filling shall be permitted within the floodplain to accommodate those uses listed in Section 7.0809.D unless a variance is granted by the Board of Adjustment in accordance with Section 7.1206. Other filling activities in the Floodplain Districts shall be granted by Ozaukee County in accordance with Section 7.0803. The Board and applicant must be aware that if the project is approved, the Permit will not be issued until after the appeal period has expired. The appeal period runs for thirty (30) days after a public hearing. During that period, any interested party can appeal the decision, either approved or denied, to Circuit Court. Any work done during this time is at the applicant's own risk. Any use permitted under Section 7.0500 (Section 7.0502 and 7.0504) is subject to obtaining any **Shoreland Permits** required therein. Except where another section of the County ordinance specifically exempts certain types of development from this requirement, **a shoreland permit shall be obtained from the County Zoning Administrator according to Section 7.0500.**

6) **Mitigation of Impervious Surface Standards (Section 7.0600) and/or Requirements for Nonconforming Uses and Structures Located within the Shoreland Zone per the Shoreland Permit shall be according to Ozaukee County Ordinance Section 7.1001 (Mitigation Plan Requirements).** 7.0601 PURPOSE Establish impervious surface standards to protect water quality and fish and wildlife habitat and to protect against pollution of navigable waters. The following impervious surface standards shall apply to the construction, reconstruction, expansion, replacement or relocation of any impervious surface on a riparian lot or parcel and any non-riparian lot or parcel that is located entirely within 300 feet of the ordinary high-water mark of any navigable waterway. 7.0602 CALCULATION OF PERCENTAGE OF IMPERVIOUS SURFACE Percentage of impervious surface shall be calculated by dividing the surface area of the existing and proposed impervious surfaces on the portion of a lot or parcel that is within 300 feet of the ordinary high-water mark by the total surface area of the lot or parcel, and multiplied by 100. Impervious surfaces described in Section 7.0605 shall be excluded from the calculation of impervious surface on the lot or parcel. If an outlot lies between the ordinary high water mark and the developable lot or parcel and both are in common ownership, the lot or parcel and the outlot shall be considered one lot or parcel for the purposes of calculating the percentage of impervious surface. For properties within a condominium, the impervious surface calculations apply to the entire condominium property. 7.0603 GENERAL IMPERVIOUS SURFACE STANDARD Except as otherwise allowed in Sections 7.0604 through 7.0605 the county shall allow up to 15 percent impervious surface on the portion of a lot or parcel that is within 300 feet of the ordinary high-water mark. 7.0604 MAXIMUM IMPERVIOUS SURFACE STANDARD A property may exceed the impervious surface standard under 7.0603 provided the following standards are met: A. For properties where the general impervious surface standard applies under Section 7.0603 a property owner may have more than 15 percent impervious surface but not more than 30 percent impervious surface on the portion of a lot or parcel that is within 300 feet of the ordinary high-water mark. B. For properties that exceed the standard under Section 7.0603 but do not exceed the maximum standard under Section 7.0604(A) a permit can be issued for development with a mitigation plan that meets the standards found in Section 7.1000. 7.0605 TREATED IMPERVIOUS SURFACES Impervious surfaces that can be documented to demonstrate they meet either of the following standards shall be excluded from the impervious surface calculations under Section 7.0602 A. The impervious surface is treated by devices such as storm water ponds, constructed wetlands, infiltration basins, rain gardens, bio-swales or other engineered systems. B. The runoff from the impervious surface discharges to an internally drained pervious area that retains the runoff on or off the parcel and allows infiltration into the soil.

7) **Land disturbance and/or construction activities shall be in accord with Ozaukee County Ordinance Section 7.0600 (Impervious Surface Standards), WDNR NR 151 and 216 for stormwater management and construction site erosion control. Ozaukee County approval for these activities is conditional upon a Wisconsin Department of Natural Resources (WDNR) permit under NR 216 being obtained and a copy provided to the Ozaukee County Land and Water Management Department prior to any construction or development activities.**

8) **Removal of natural vegetation in the shoreland area (Section 7.0400, Removal of Shore Cover)**, particularly along the area parallel to a navigable creek, except for removal of noxious weeds and dead, diseased or non-native invasive vegetation or according to a forester approved written silvicultural thinning

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plan, shall be minimized and in accordance with accepted forest management and soil conservation prac which protect water quality. In addition, in the strip of land 35 feet inland from the ordinary high water mark, (buffer zone) the removal of trees and shrubs shall be limited as follows: 1. The County may allow routine maintenance of vegetation. 2. The county may allow removal of trees and shrubs in the vegetative buffer zone to create access and viewing corridors. Per Section 59.692(1f) (b), Wis. Stats, the viewing corridor may be at least 35 feet wide for every 100 feet of shoreline frontage. The viewing corridor may run contiguously for the entire maximum width of shoreline frontage owned. 3. The county may allow removal of trees and shrubs in the vegetative buffer zone on a parcel with 10 or more acres of forested land consistent with "generally accepted forestry management practices" as defined in Chapter NR 1.25(2) (b), Wisconsin Administrative Code, and described in department publication Wisconsin Forest Management Guidelines (publication FR-226), provided that vegetation removal be consistent with these practices. 4. The county may allow removal of vegetation within the vegetative buffer zone to manage exotic or invasive species, damaged vegetation, vegetation that must be removed to control disease, or vegetation creating an imminent safety hazard, provided that any vegetation removed be replaced by replanting in the same area as soon as practicable. 5. The county may authorize by permit additional vegetation management activities in the vegetative buffer zone. The permit issued under this subd. par. shall require that all management activities comply with detailed plans approved by the county and designed to control erosion by limiting sedimentation into the waterbody, to improve the plant community by replanting in the same area, and to maintain and monitor the newly restored area. The permit also shall require an enforceable restriction to preserve the newly restored area. B. Note: Section 59.692(1f)(a), Wis. Stats, prohibits counties from requiring a property owner to establish a vegetative buffer zone on previously developed land or expand an existing vegetative buffer zone. However, as part of a county shoreland mitigation standards, the establishment or expansion of the vegetative buffer may remain an option (see Section 7.1000) C. In shoreland areas more than 35 feet inland from the ordinary high water mark, cutting of trees and shrubs shall be allowed when accomplished using accepted forest management and soil conservation practices which protect water quality

9) **Soil borings HAVE been conducted and/or submitted to the Department and/or POWTS locations otherwise specified as part of this CSM, and soil testing locations HAVE been added to the CSM. This land division DOES NOT assure "suitable" lots for building or development. As such, any future land division or development activities for this preliminary plat will require the review of soil borings to evaluate the need for any new, expanded or modified private on-site wastewater treatment systems (POWTS) PRIOR to any land disturbance activities unless holding tanks are otherwise a system of choice in the Town. Therefore, any new, expanded or modified private on-site wastewater treatment system (POWTS) will require additional review and permits from the Land and Water Management Department PRIOR to construction.** Please arrange an appointment with Land and Water Management sanitation staff if you have questions regarding your future and current POWTS for this project. The soils noted above for the *Property* may have limitations for various aspects of the proposed development including hydric soils, high water tables and **limitations for POWTS**, and residential, industrial and commercial construction. The soil conditions will be reviewed in more detail with specific grading, excavating, filling and/or POWTS development plans submitted as part of required County permitting for these various POWTS development and construction activities. A soils exhibit has been produced for the certified survey map showing the soil types per the Ozaukee County Soil Survey (NRCS SSURGO soils) relative to the existing parcel. **Final soil evaluations shall be completed for each proposed lot in compliance with the Department of Commerce Administrative Code for the identified septic areas indicated on the certified survey map and/or site grading plans.**

10) **Additional permitting MAY** be required by the U.S. Army Corps of Engineers (USACOE) under Section 404 of the Clean Water Act and by the Wisconsin Department of Natural Resources (WDNR) under Wisconsin State Statute Chapter 30 for wetlands and water quality certification (NR 103) issues associated with future development activities on the *Property(ies)*, including grading and development of the private driveways.

11) All other required federal, state, county and local permits **SHALL BE** acquired prior to any construction or development activities.

12) According to the Ozaukee County Shoreland and Floodplain Zoning Ordinance, the **owner(s) or agent must submit the final CSM within 12 months of land division approval by the Natural Resources Committee**, unless an extension is requested in writing to the Planning and Parks Department and subsequently approved. If the certified survey map is approved conditionally **and** the conditions of the certified survey map approval

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have been met, **please provide the Planning and Parks Department with the ORIGINAL final CSM with signature block for the Chairperson of the Natural Resources Committee. Please schedule a time for the final CSM to be signed.**

13) **The certified survey map / land division is conditional upon the approval of the land division / CSM by the Town of Cedarburg, and the City of Cedarburg (under the extraterritorial platting review jurisdiction).**

END – NA_02202024

Cc: WDNR - Water Regulation and Zoning Specialist, Sarah Szabo
WDNR – Water Resources Engineer, Peter Wood
Ozaukee County – Land and Water Management Department – Director LWMD, Katie Voegler
Ozaukee County – Highway Department – Director of Public Works, Jon Edgren
Town of Cedarburg – Town Municipal Clerk/Assistance Administrator, Jack Johnston
City of Cedarburg – Jon Censky, Planner
Owners(s) – Stone Wall Farms, Inc. C/O John Lane
Applicant/Surveyor – James Schneider, North Shore Engineering, Inc.

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Natural Resources Committee

AGENDA INFORMATION SHEET

AGENDA DATE: **March 7, 2024**
DEPARTMENT: **Planning and Parks**
DIRECTOR: **Andrew Struck**
PREPARER: **Andrew Struck**

Agenda Summary Mardel D Habersetzer Family Trust, owner, 4612 Pleasant Valley Rd., Cedarburg, Wisconsin 53012, and Thomas L. Sykora, applicant, 2321 Ridgewood Rd., Grafton, Wisconsin 53024, are requesting land division approval for a minor land division by Certified Survey Map (CSM) in accord with Section 7.1400 (Land Division Requirements) of the County Ordinance. The Property is located at 4408 Pleasant Valley Road, Town of Cedarburg, Ozaukee County, Wisconsin, being a redivision of part of Lot 2 of Certified Survey Map No. 3103, being a part of the Southeast ¼ of the Southeast ¼ of Section 2, Township 10 North, Range 21 East, in the Town of Cedarburg, Ozaukee County, Wisconsin. Parcel Number(s): 030021600800. Total Acreage to be Divided: approximately +/- 6.738 acres.

BACKGROUND INFORMATION: Mardel D Habersetzer Family Trust, owner, 4612 Pleasant Valley Rd., Cedarburg, Wisconsin 53012, and Thomas L. Sykora, applicant, 2321 Ridgewood Rd., Grafton, Wisconsin 53024, are requesting land division approval for a minor land division by Certified Survey Map (CSM) in accord with Section 7.1400 (Land Division Requirements) of the County Ordinance. The Property is located at 4408 Pleasant Valley Road, Town of Cedarburg, Ozaukee County, Wisconsin, being a redivision of part of Lot 2 of Certified Survey Map No. 3103, being a part of the Southeast ¼ of the Southeast ¼ of Section 2, Township 10 North, Range 21 East, in the Town of Cedarburg, Ozaukee County, Wisconsin. Parcel Number(s): 030021600800. Total Acreage to be Divided: approximately +/- 6.738 acres.

ANALYSIS: See attached Staff Report and Recommendations.

FISCAL IMPACT: NA **Balance Current Year:** NA **Next Year's Estimated Cost:** NA

FUNDING SOURCE: County Levy: **Non-County Levy:** X

Indicate source: Land Division Review Fee

RECOMMENDED MOTION: See attached Staff Report and Recommendations.

ATTACHMENTS:

- Sykora_TCedarburg_NeighborLetter_2.15.24_ATSFinal022324 (PDF)
- LS-5636-23-Habersetzer-CSM_Rev-1-29-24 (PDF)
- Sykora_MapPacket2.23.24Compress (PDF)
- StaffReportNRC_030724_Habersetzer_2.20.24_ATSFinal022324 (PDF)

NATURAL RESOURCES COMMITTEE

OZAUKEE COUNTY
PLANNING & PARKS DEPARTMENT

PLANNING DIVISION
Andrew T. Struck, Director
https://www.ozaukeecounty.gov/540/Planning-Parks

Monday, February 26, 2024

TO WHOM IT MAY CONCERN AND ALL INTERESTED PARTIES:

OZAUKEE COUNTY NATURAL RESOURCES COMMITTEE MEETING

NOTICE IS HEREBY GIVEN that a meeting of the Ozaukee County Natural Resources Committee will be held on **Thursday, March 7, 2024 at 9:00 a.m. in Room A-200 of the Ozaukee County Administration Center, 121 W. Main Street, Port Washington, WI 53074**

The public and all interested persons are invited to attend this meeting and/or comment on the proposed preliminary Certified Survey Map (CSM) and land division. Discussion and action by the Natural Resources Committee will follow the public comment. The Natural Resources Committee agenda can be found on the Ozaukee County website at: https://www.ozaukeecounty.gov/agendacenter. You are receiving this notification as a courtesy because your property is located adjacent to the proposed property land division. The public and all interested persons are invited to attend this public meeting and/or comment.

The land division CSM, supporting documents, and staff report are on file with the Ozaukee County Planning and Parks Department for review, Monday - Friday from 8:30 a.m. to 4:30 p.m. in Room 220, 121 W. Main St., Port Washington, WI 53074. To ensure that a staff member is available for assistance, please call us at the number listed at the bottom of this page prior to your visit. They will also be posted as part of the agenda for the Natural Resources Committee on the County website (noted above). If you have any questions, concerns, or comments on the land division / certified survey map, you are invited to attend the meeting and/or make your comments known. You may also send your written comments to the Department (navallone@ozaukeecounty.gov), and they will be read before the Committee.

Mardel D Habersetzer Family Trust, owner, 4612 Pleasant Valley Rd., Cedarburg, Wisconsin 53012, and **Thomas L. Sykora,** applicant, 2321 Ridgewood Rd., Grafton, Wisconsin 53024, are requesting **land division approval for a minor land division by Certified Survey Map (CSM)** in accord with Section 7.1400 (Land Division Requirements) of the County Ordinance. **The proposed minor land division will create four (4) new lots (Lots 1-4) as part of the CSM in the Town of Cedarburg.** The minor land division is being combined with a lot line adjustment with parcel 030021600700, owned by Gary and Mary Habersetzer, and a lot line adjustment with parcel 030021600500, owned by Daryl Moze. The property has been sold and is pending recording. The CSM is consistent with these lot line adjustments.

Affecting the following described real estate:
The Property is located at 4408 Pleasant Valley Road, **Town of Cedarburg**, Ozaukee County, Wisconsin, being a redivision of part of Lot 2 of Certified Survey Map No. 3103, being a part of the Southeast ¼ of the Southeast ¼ of Section 2, Township 10 North, Range 21 East, in the Town of Cedarburg, Ozaukee County, Wisconsin. **Parcel Number(s)**: 030021600800. Total Acreage to be Divided: approximately +/- 6.738 acres.

NRC Chairperson, Rob Holyoke
Natural Resources Committee

Attachment: Sykora_TCedarburg_NeighborLetter_2.15.24_ATSFinal022324 (P&PDept_LandDivision_HabersetzerFamilyTrust_TCedarburg)

CERTIFIED SURVEY MAP NO. _____

A REDIVISION OF PART OF LOT 2 OF CERTIFIED SURVEY MAP NO. 3103, BEING A PART OF THE SOUTHEAST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 2, TOWNSHIP 10 NORTH, RANGE 21 EAST, IN THE TOWN OF CEDARBURG, OZAUKEE COUNTY, WISCONSIN.

0 100 150 200 300

SCALE 1" = 100'

12-21-2023
REV. 1-29-2024

NORTH SHORE ENGINEERING, INC.
Consulting Engineers & Land Surveyors
11433 N. Port Washington Rd., Mequon, Wisconsin, 53092
(262) 241-9400 • FAX: (262) 241-5337
www.northshoreengineering.net

WISCONSIN
JAMES G. SCHNEIDER
S-2127
MEQUON
WI
LAND SURVEYOR

OWNER :
MARDEL D. HABERSETZER FAMILY TRUST
4408 PLEASANT VALLEY ROAD
CEDARBURG, WI 53024

SETBACK NOTE :
FRONT YARD = 75.0'
REAR YARD = 25.0'
SIDE YARD = 25.0'

NOTES :
1. THIS PROPERTY IS ALSO SUBJECT TO EASEMENTS OF RECORD.
2. THIS PROPERTY IS PRESENTLY ZONED R-2 (SINGLE FAMILY RESIDENTIAL DISTRICT)

LOCATION MAP
SOUTHEAST 1/4 SEC. 2-10-21
(SCALE 1"=2000')

N
MAPLE RD.
C.S.M.
PLEASANT VALLEY RD.

THE NE. CORNER OF THE SE. 1/4 OF SECTION 2-10-21 CONCRETE MON. WITH BRASS CAP

S2°29'54"E 2037.79'

S88°36'20"W 40.01'

(N88°36'15"E)
N88°36'20"E 671.62'

LOT 2, C.S.M #925

68'
205.16'
259.78'
40.0'

12.5'
12.5'
DRIVE TURN-OUTS (TYPICAL)
35.0'
25' WIDE ACCESS EASEMENT, TO BE CREATED UNDER A SEPARATE DOCUMENT, BY OTHERS

(S2°28'44"E)
S2°29'54"E 233.98'

N2°28'39"W 243.50'
B-2

LOT 2
50,808 ± SQ. FT.
1.166 ± ACRES
B-4
B-3
B-1

LOT 1
62,020 ± SQ. FT.
1.424 ± ACRES

SETBACK LINE (TYP.)
251.03'

LIMITS OF COUNTY SHORELAND ZONING JURISDICTIONAL BOUNDARY

T 3
± SQ. FT.
ACRES
B-9
B-8

S2°19'03"E 561.05'

S86°30'21"W 205.86'

S86°30'21"W 259.86'
(S86°30'16"W 259.99')

40.0'
EAST LINE OF THE SE 1/4 OF SEC. 2-10-21
N2°29'54"W (N2°28'44"W)
2630.31' TOTAL

177.0'

PART OF LOT 2
C.S.M. #3103

SHED (TO BE RAZED)
SHED
B-6
B-5
B-7
SHED

S2°28'39"E (S2°28'44"E)
310.00'

LOT 4
63,940 ± SQ. FT.
1.468 ± ACRES

310.02'

SHED
SHED
SHED
GARAGE
SHED
UNPLATTED LANDS
HOUSE #4408
HOUSE #2101

33.0'
N2°29'54"W 592.52'

MAPLE ROAD
(R.O.W. VARIES)

206.69'
206.73'
S86°30'21"W 413.42'
(S86°30'16"W)

50.0'
33.0'
33.0'

SOUTH LINE OF THE SE 1/4 OF SEC. 2-10-21
S86°30'21"W 2623.39' TOTAL
(S86°30'16"W)

THE SE. CORNER OF THE SE. 1/4 OF SECTION 2-10-21 CONCRETE MON. WITH BRASS CAP

PLEASANT VALLEY ROAD
(R.O.W. VARIES)

THIS INSTRUMENT DRAFTED BY JAMES G. SCHNEIDER

SHEET 1 OF 5 SHEETS

Attachment: LS-5636-23-Habersetzer-CSM_Rev-1-29-24 (P&PDept_LandDivision_HabersetzerFamilyTrust_TCedarburg)

CERTIFIED SURVEY MAP NO. _____

A REDIVISION OF PART OF LOT 2 OF CERTIFIED SURVEY MAP NO. 3103, BEING A PART OF THE SOUTHEAST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 2, TOWNSHIP 10 NORTH, RANGE 21 EAST, IN THE TOWN OF CEDARBURG, OZAUKEE COUNTY, WISCONSIN.

0 100 150 200 300

SCALE 1" = 100'

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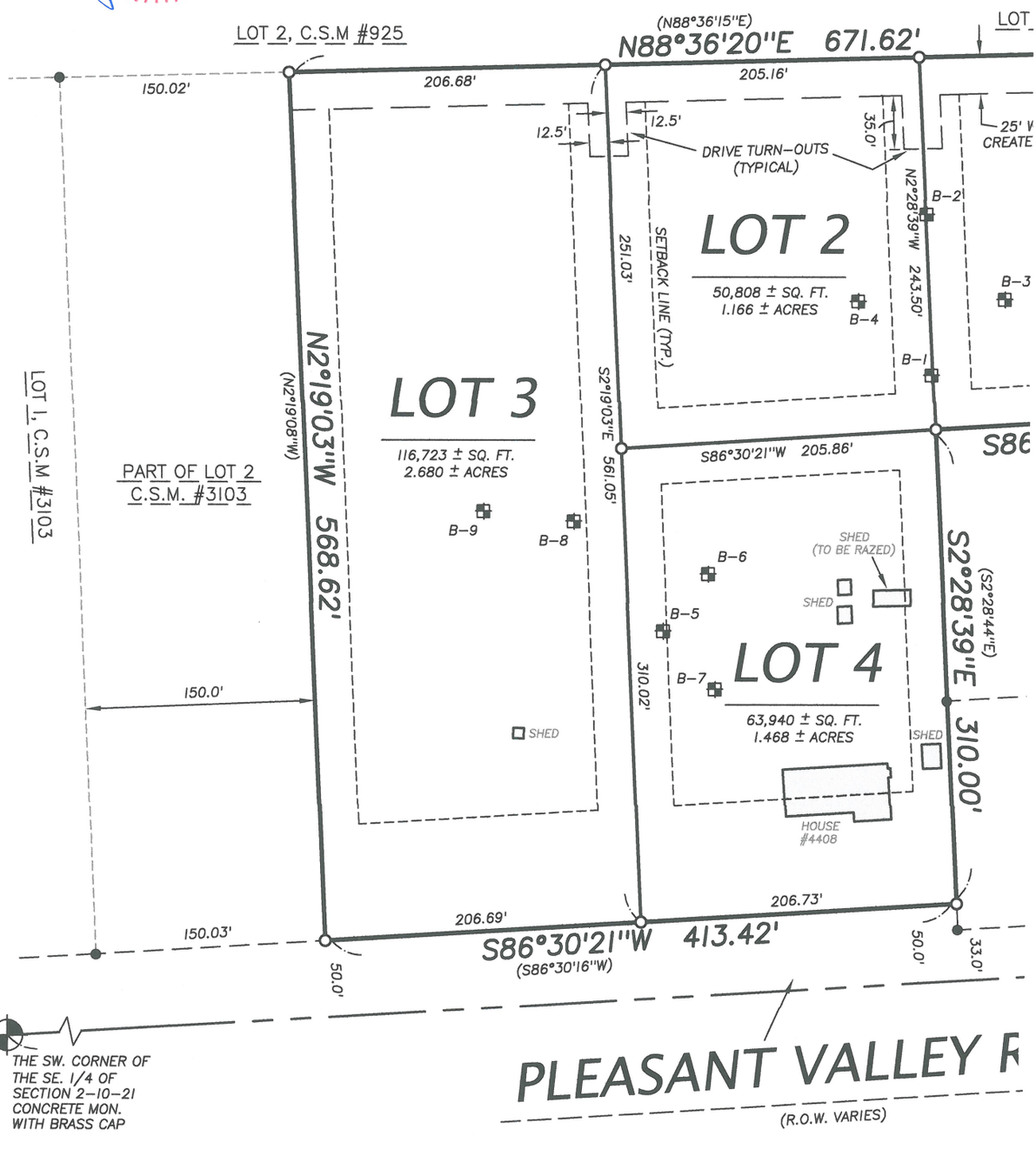
12-21-2023
REV. 1-29-2024

N

LEGEND

- O —DENOTES 1.315"X18" STEEL PIPE WEIGHING 1.13 LBS. PER LINEAL FOOT (SET)
- ● —DENOTES STEEL PIPE (FOUND)
- ( ) —DENOTES ALSO RECORDED AS

ALL BEARINGS REFERENCED TO GRID NORTH OF THE WISCONSIN STATE PLANE COORDINATE SYSTEM, SOUTH ZONE, SOUTH LINE OF THE SE. 1/4 OF SECTION 2-10-21 WHICH BEARS S86°30'21"W (NAD83/2011)



THIS INSTRUMENT DRAFTED BY JAMES G. SCHNEIDER

SHEET 2 OF 5 SHEETS

Attachment: LS-5636-23-HabersetzerCSM_Rev-1-29-24 (P&PDept_LandDivision_HabersetzerFamilyTrust_TCedarburg)

CERTIFIED SURVEY MAP NO. _____

A DIVISION OF PART OF LOT 2 OF CERTIFIED SURVEY MAP NO. 3103, BEING PART OF THE SOUTHEAST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 2, TOWN 10 NORTH, RANGE 21 EAST, IN THE TOWN OF CEDARBURG, OZAUKEE COUNTY, WISCONSIN.

SURVEYOR'S CERTIFICATE

I, James G. Schneider, Professional Land Surveyor, do hereby certify:

THAT I have surveyed, divided and mapped the following parcel of land:

Part of Lot 2 of Certified Survey Map No. 3103, being part of the Southeast 1/4 of the Southeast 1/4 of Section 2, Township 10 North, Range 21 East, in the Town of Cedarburg, Ozaukee County, Wisconsin, bounded and described as follows:

Commencing at the Southeast corner of the Southeast 1/4 of said Section 2; thence N2°29'54"W along the East line of said Southeast 1/4 Section, 592.52 feet to the Easterly extension of the North line of Lot 2 of Certified Survey Map (CSM) No. 3103; thence S88°36'20"W along said North line, 40.01 feet to a point in the West right of way line of Maple Road, and the point of beginning of lands to be described; thence S2°29'54"E along said West right of way line, 233.98 feet to a point 177.00 feet as measured at right angles from the Southerly line of said Lot 2; thence S86°30'21"W and parallel with the Southerly line of said Lot 2, 259.86 feet to a point in the Northerly extension of the Easterly line of said Lot 2; thence S2°28'39"E along said Easterly line, 310.00 feet to a point in the North right of way line of Pleasant Valley Road; thence S86°30'21"W along said North right of way line, 413.42 feet to a point 150.00 feet as measured at right angles from the West line of said Lot 2; thence N2°19'03"W and parallel with the West line of said Lot 2, 568.62 feet to a point in the North line of said Lot 2 and the South line of Lot 2 of CSM No. 925; thence N88°36'20"E along the North line of Lot 2 of CSM No. 3103 and the South line Lot 2 of CSM No. 925, 671.62 feet to the point of beginning.

Said lands containing 6.738 acres of land, more or less.

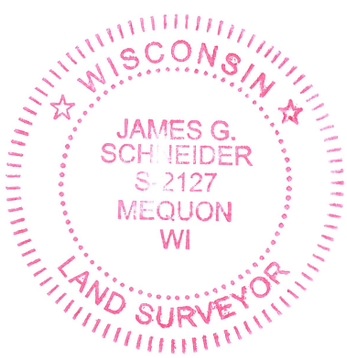
That I have made such survey, land division, and plat at the direction of Mardel D. Habersetzer Family Trust, OWNER of said lands.

That such map is a correct representation of all the exterior boundaries of the land surveyed and the land division thereof made.

That I have complied with Chapter 236.34 of the Wisconsin Statutes and the regulations of the Town of Cedarburg in surveying and mapping the same.

12-21-2023

James G. Schneider S-2127



This instrument was drafted by James G. Schneider

Attachment: LS-5636-23-Habersetzer-CSM_Rev-1-29-24 (P&PDept_LandDivision_HabersetzerFamilyTrust_TCedarburg)

CERTIFIED SURVEY MAP NO. _____

A DIVISION OF PART OF LOT 2 OF CERTIFIED SURVEY MAP NO. 3103, BEING PART OF THE SOUTHEAST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 2, TOWN 10 NORTH, RANGE 21 EAST, IN THE TOWN OF CEDARBURG, OZAUKEE COUNTY, WISCONSIN.

OWNER'S CERTIFICATE

I, Gary N. Habersetzer (Trustee) of the Mardel D. Habersetzer Family Trust, OWNER, do hereby certify: THAT I have caused the lands described in the foregoing certificate of James G. Schneider, Surveyor, to be surveyed, divided, and mapped.

_____ _____
Witness Gary N. Habersetzer (Trustee)

WITNESS the hand and seal of said OWNER on this _____ day of _____ 20__.

STATE OF WISCONSIN)
OZAUKEE COUNTY)ss
PERSONALLY came before me on this _____ day of _____,20___ Gary N. Habersetzer (Trustee) of the Mardel D. Habersetzer Family Trust, to me known to be the person who executed the foregoing certificate and acknowledged the same.

_____ My Commission expires. _____
Notary Public

TOWN OF CEDARBURG PLAN COMMISSION APPROVAL

APPROVED by the Town of Cedarburg Plan Commission on this _____ day of _____, 20___.

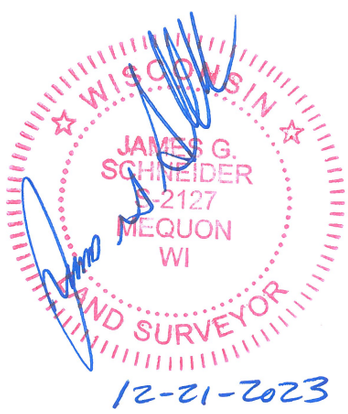
_____ _____
David Salvaggio, Town Chairman Jack Johnston, Town Clerk

TOWN OF CEDARBURG TOWN BOARD APPROVAL

APPROVED by the Town of Cedarburg Town Board this _____ day of _____, 20___.

_____ _____
David Salvaggio, Town Chairman Jack Johnston, Town Clerk

This instrument was drafted by James G. Schneider



Attachment: LS-5636-23-Habersetzer-CSM_Rev-1-29-24 (P&PDept_LandDivision_HabersetzerFamilyTrust_TCedarburg)

CERTIFIED SURVEY MAP NO. _____

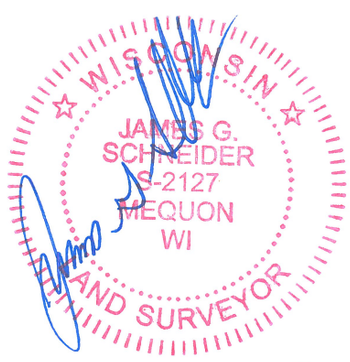
A DIVISION OF PART OF LOT 2 OF CERTIFIED SURVEY MAP NO. 3103, BEING PART OF THE SOUTHEAST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 2, TOWN 10 NORTH, RANGE 21 EAST, IN THE TOWN OF CEDARBURG, OZAUKEE COUNTY, WISCONSIN.

APPROVAL OF THE OZAUKEE COUNTY NATURAL RESOURCES COMMITTEE, COUNTY PLANNING AGENCY

Resolved, that this Certified Survey Map, in the Town of Cedarburg, by Gary N. Habersetzer (Trustee) of the Mardel D. Habersetzer Family Trust, owner, is hereby approved by the authority of the Natural Resources Committee of the Ozaukee County Board of Supervisors under the provisions of Section 7.1200 and Chapter 13 of the County Ordinance.

Dated this _____ day of _____, 20_____.

_____
Rob Holyoke,
Chairperson of the Natural Resources Committee

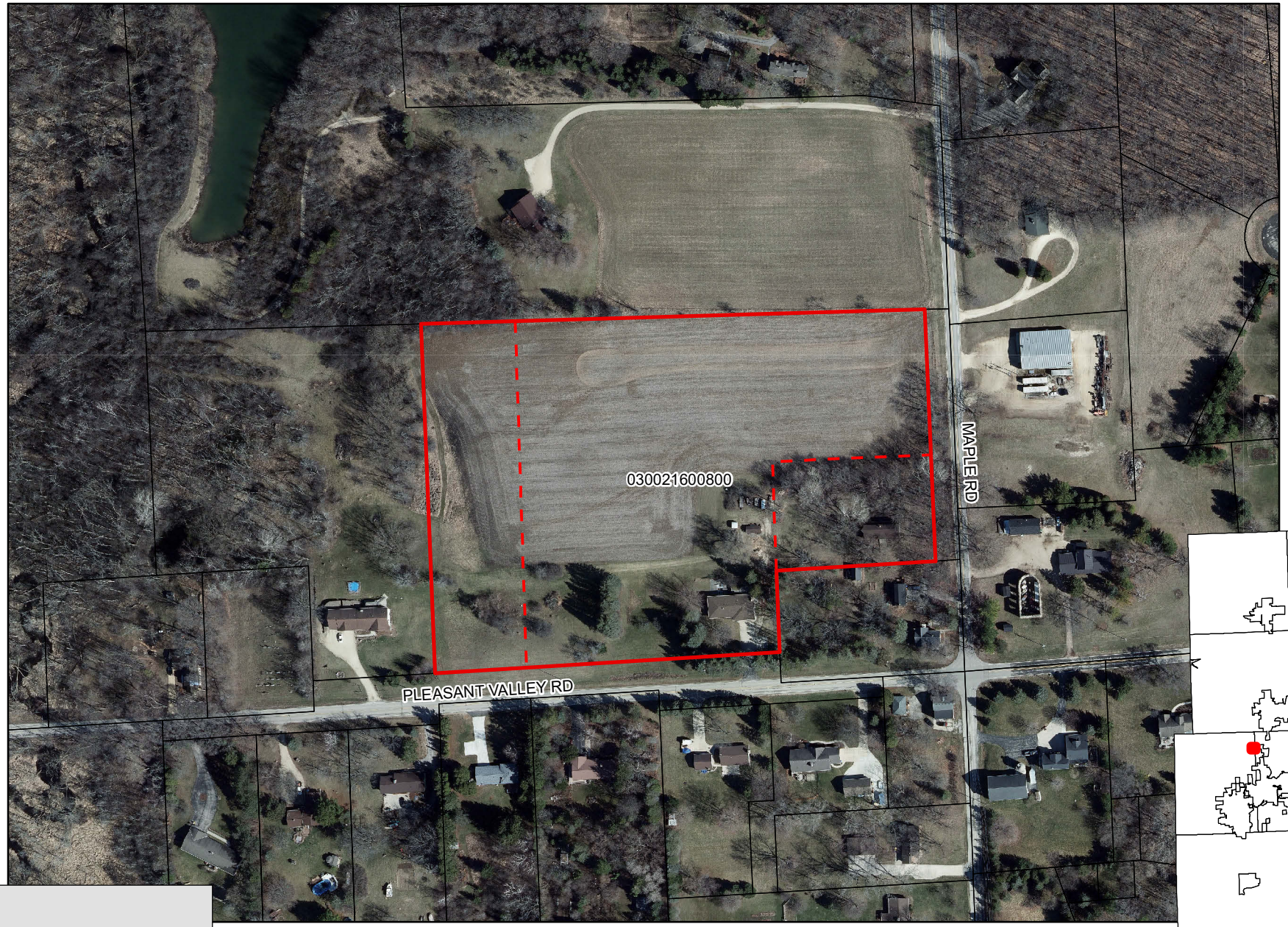


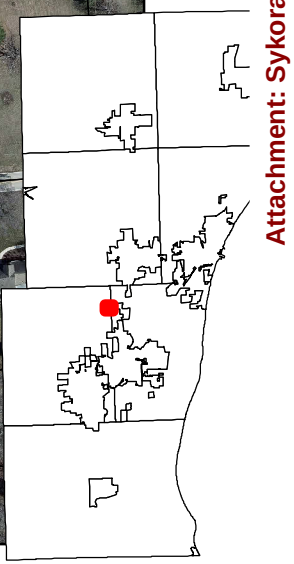
This instrument was drafted by James G. Schneider

12-21-2023
REV. 1-2-2024

Attachment: LS-5636-23-Habersetzer-CSM_Rev-1-29-24 (P&PDept_LandDivision_HabersetzerFamilyTrust_TCedarburg)

Habersetzer Family Trust, 030021600800
Redivision of Part of Lot 2 CSM No. 3103, Part of SE 1/4 of the SE 1/4, Sec. 2, T10N, R21E
Town of Cedarburg





Legend

- Parcel 030021600800
- Lot Line Adjustments (approx.)
- Parcel Polygons

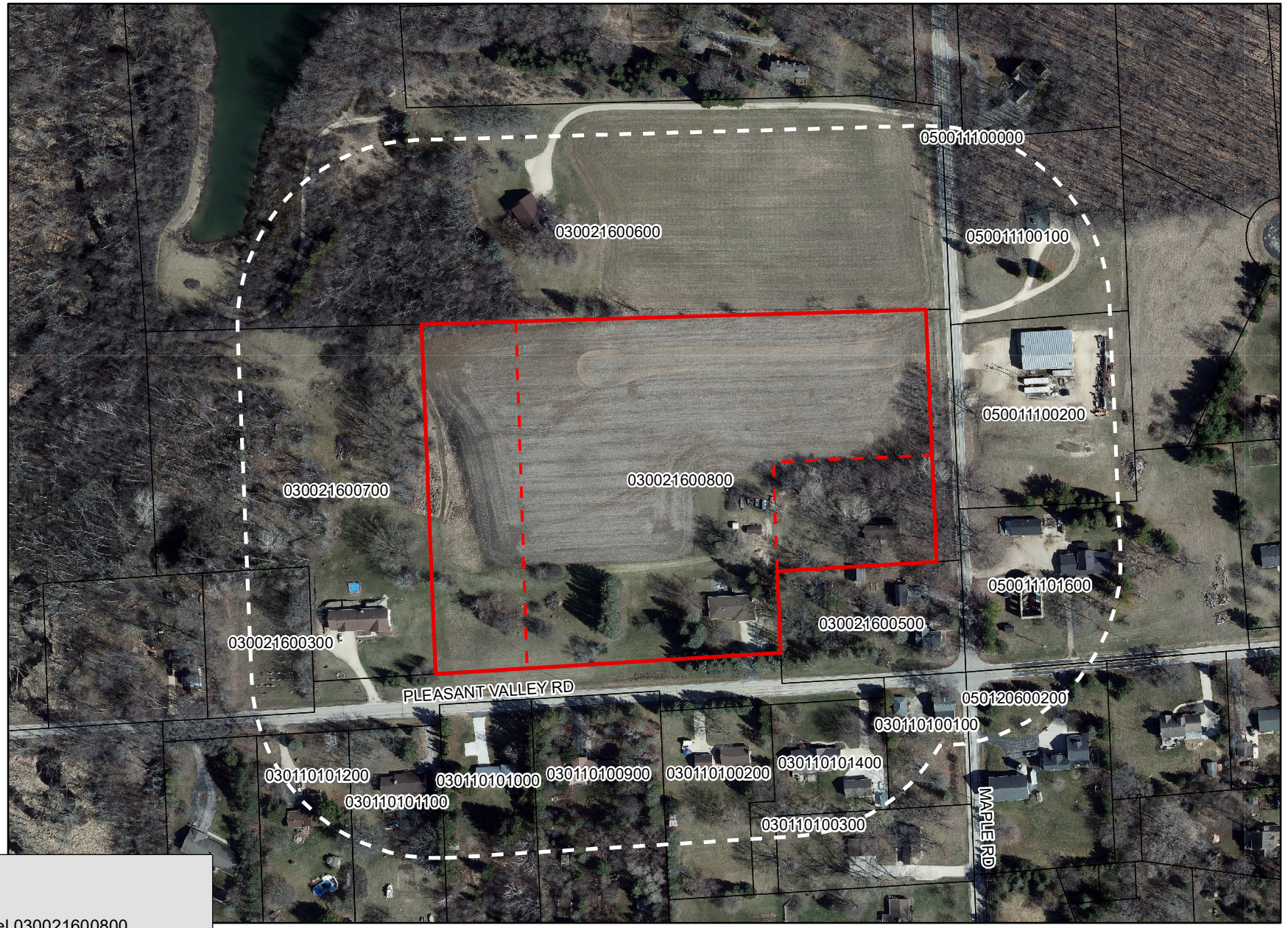
N

0 200 400 800 Feet

Ozaukee County Pla
February, 2024

Attachment: Sykora_MapPacket2.23.24Compress

Habersetzer Family Trust, 030021600800
Town of Cedarburg
Adjacent Landowners



Legend

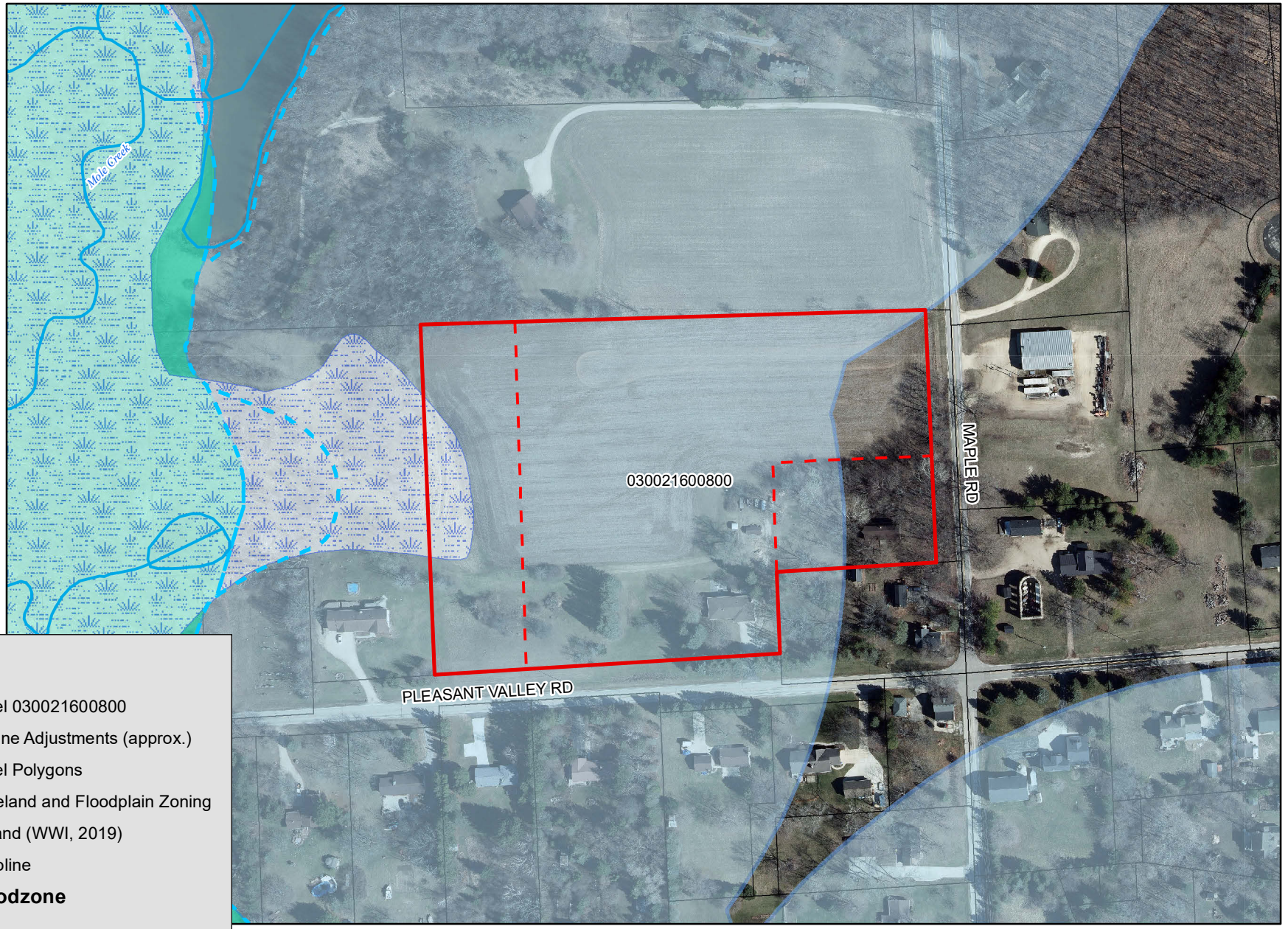
- Parcel 030021600800
- Lot Line Adjustments (approx.)
- 300ft Buffer
- Parcel Polygons

N 0 200 400 800 Feet

Ozaukee County Pla
February, 2024

Attachment: Sykora_MapPacket2.23.24Compress

Habersetzer Family Trust, 030021600800
Town of Cedarburg
Hydrography



Legend

- Parcel 030021600800
- Lot Line Adjustments (approx.)
- Parcel Polygons
- Shoreland and Floodplain Zoning
- Wetland (WWI, 2019)
- Hydroline

FEMA Floodzone

- A
- AE - 100 Year Floodplain w/ BFE

FEMA Floodway

- FLOODWAY

N

0 200 400 800 Feet

Ozaukee County Pla
February, 2024

Attachment: Sykora_MapPacket2.23.24Compress

Habersetzer Family Trust, 030021600800
Town of Cedarburg
Soils (NRCS SSURGO, 2022)



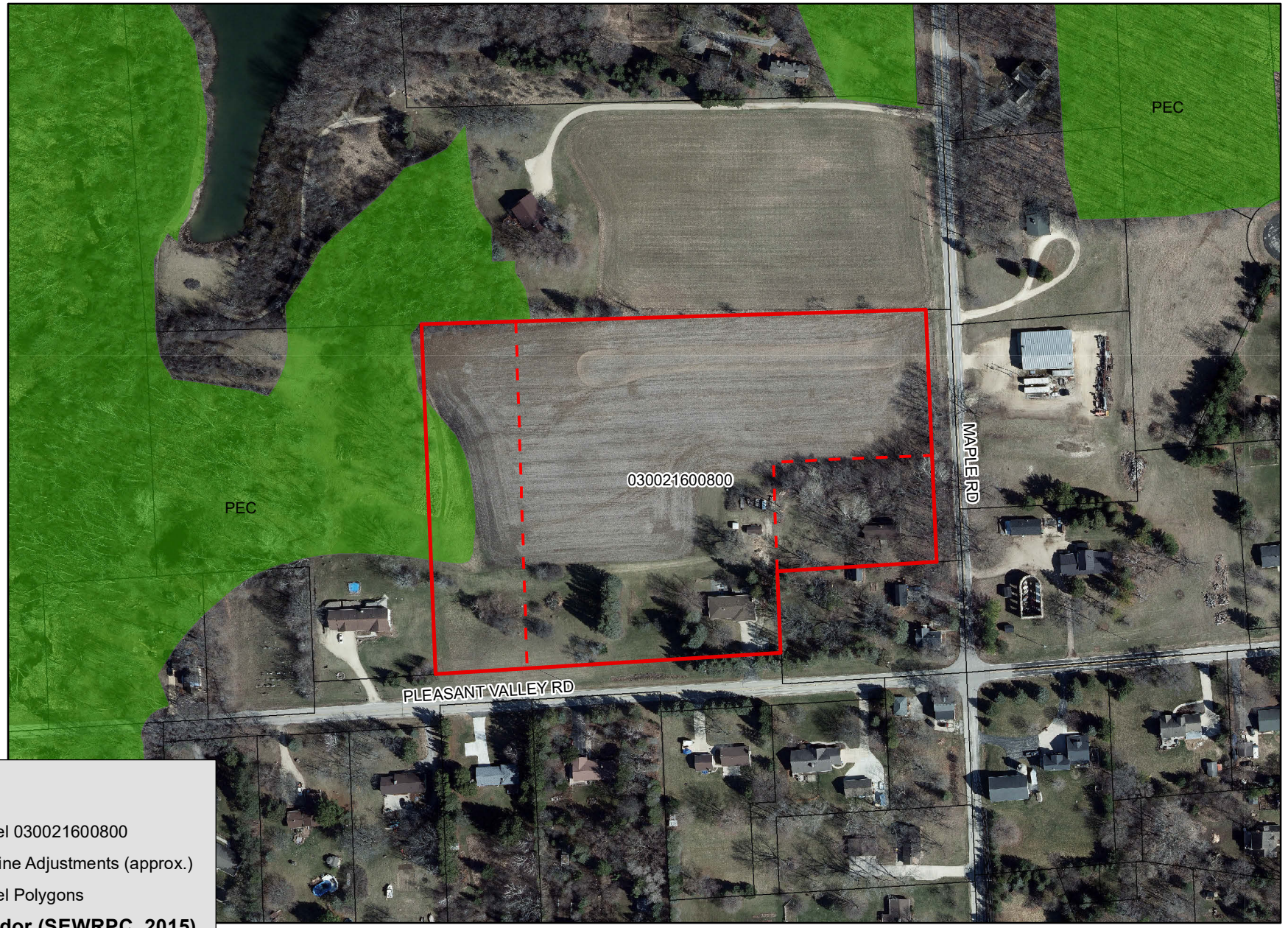
Legend

- Parcel 030021600800
- Lot Line Adjustments (approx.)
- Parcel Polygons

Ozaukee County Pla
February, 2024

Attachment: Sykora_MapPacket2.23.24Compress

Habersetzer Family Trust, 030021600800
Town of Cedarburg
Environmental Corridors



Legend

- Parcel 030021600800
- Lot Line Adjustments (approx.)
- Parcel Polygons

Env. Corridor (SEWRPC, 2015)

- INRA
- PEC
- SEC

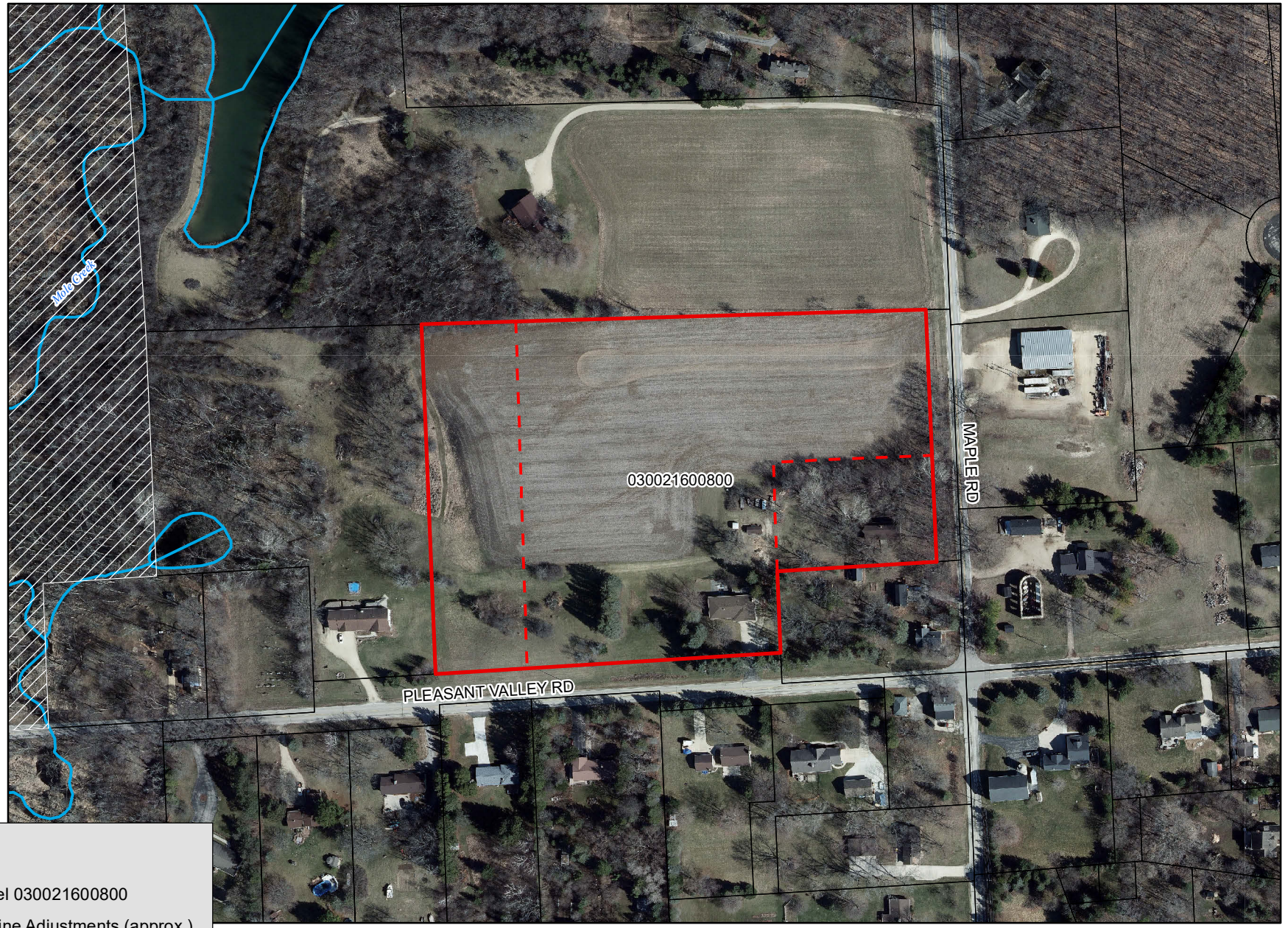
N

0 200 400 800 Feet

Ozaukee County Pla
February, 2024

Attachment: Sykora_MapPacket2.23.24Compress

Habersetzer Family Trust, 030021600800
Town of Cedarburg
Park and Open Space Sites



Legend

- Parcel 030021600800
- Lot Line Adjustments (approx.)
- Pleasant Valley Parks & Trails
- Parcel Polygons
- Hydroline

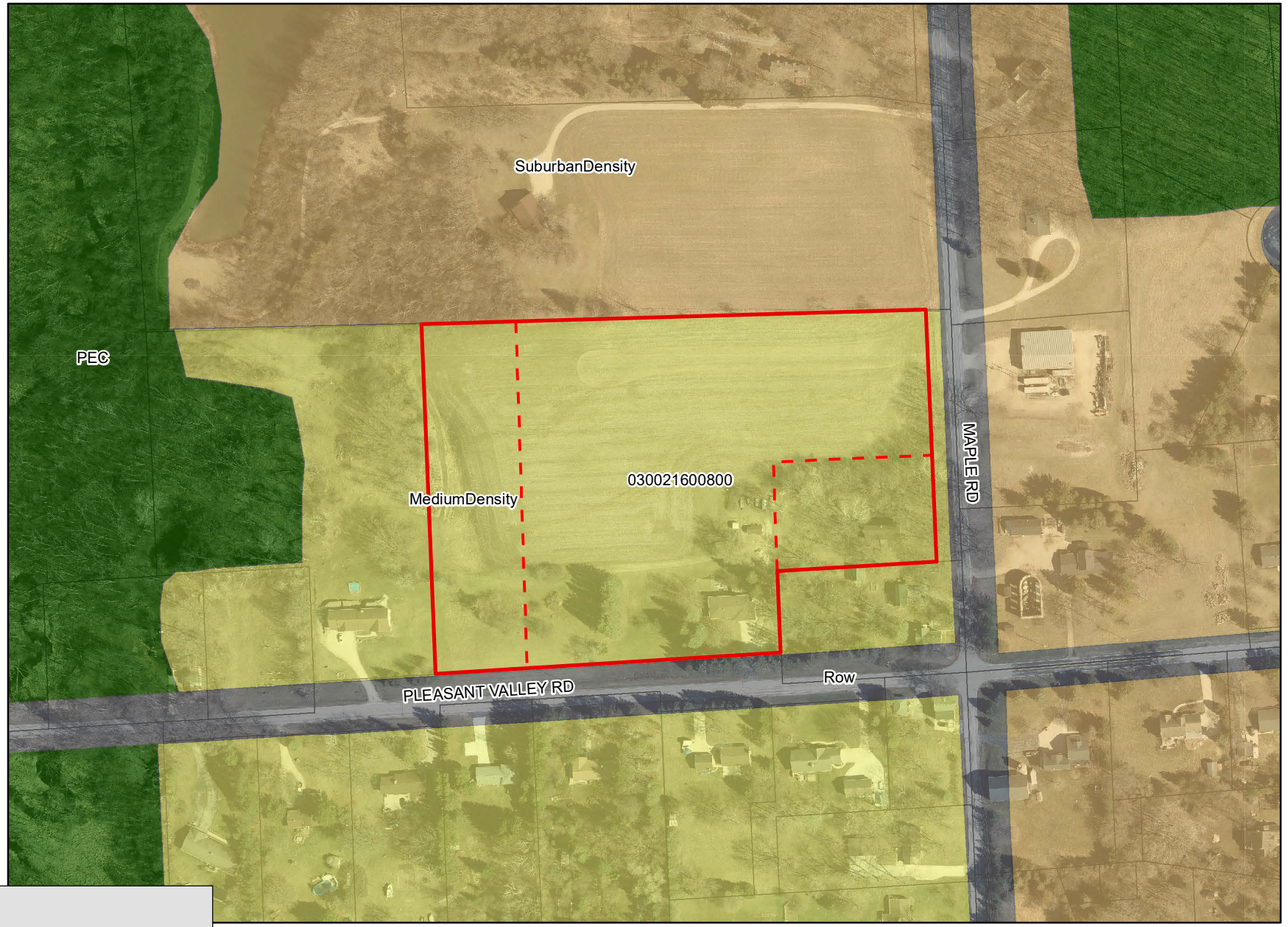
N

0 200 400 800 Feet

Ozaukee County Pla
February, 2024

Attachment: Sykora_MapPacket2.23.24Compress

Habersetzer Family Trust, 030021600800
Town of Cedarburg
Ozaukee County 2035 Future Land Use Amendment 2



Legend

- Parcel 030021600800
- Lot Line Adjustments (approx.)
- Parcel Polygons

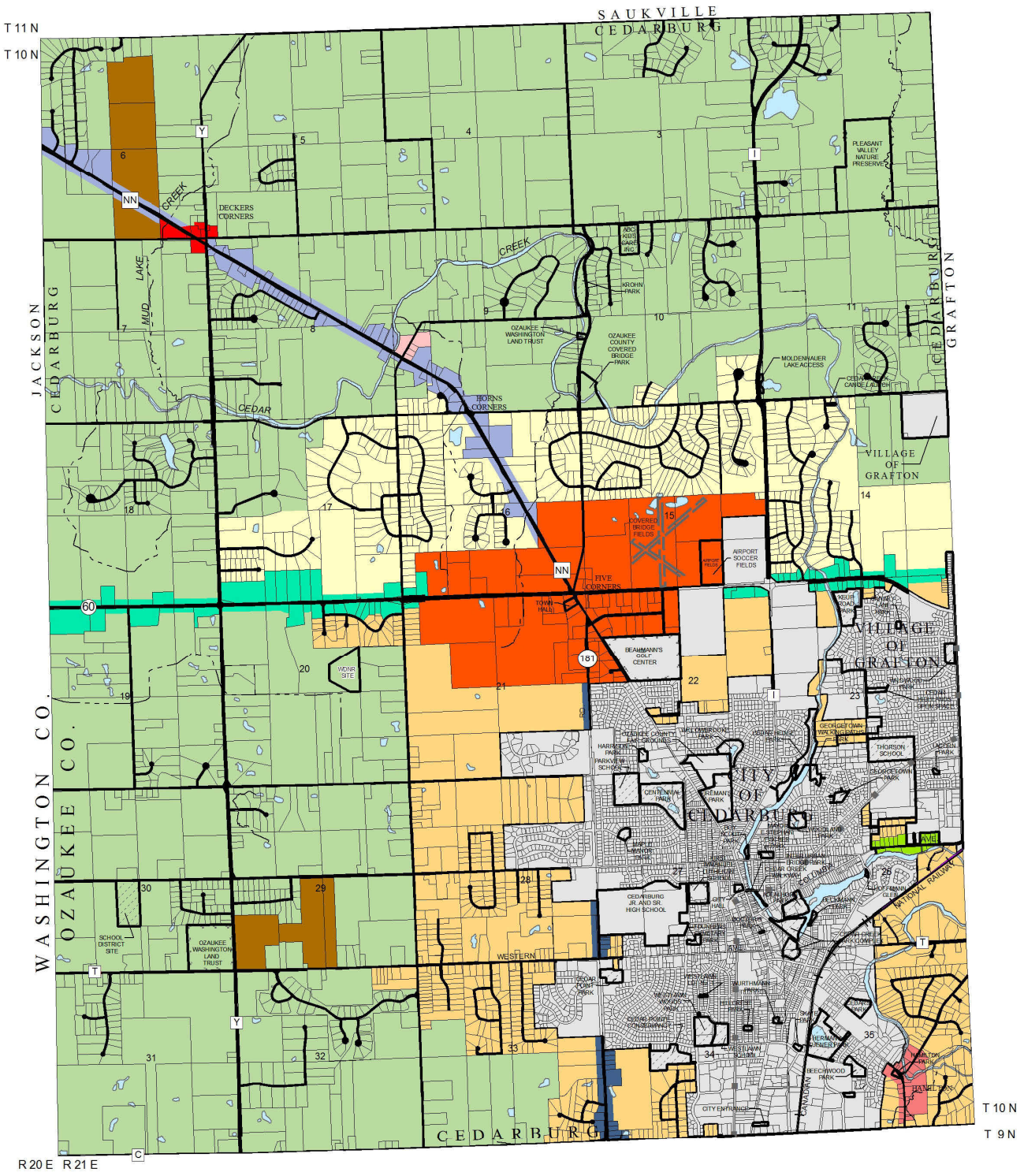
N

0 200 400 800 Feet

Ozaukee County Pla
February, 2024

Attachment: Sykora_MapPacket2.23.24Compress

TOWN OF CEDARBURG PLANNED LAND USE MAP: 2035



Neighborhoods

- RN-C — Rural neighborhood - Countryside
- RN-N — Residential Neighborhood - North
- RN-S — Residential Neighborhood - South

Districts

- BD-DC — Business District - Deckers Corners
- BD-HC — Business District - Horns Corners
- BD-C — Business District - Columbia
- HD-H — Historic District - Hamilton
- BD-FC — Business District - Five Corners
- FPD — Farmland Protection District

Corridors

- APC-NN — Arterial Parkway Corridor - Highway NN
- APC-60 — Arterial Parkway Corridor - STH 60
- APC-WR — Arterial Parkway Corridor - Wauwatosa Road

- STREETS AND HIGHWAYS
- SURFACE WATER

N

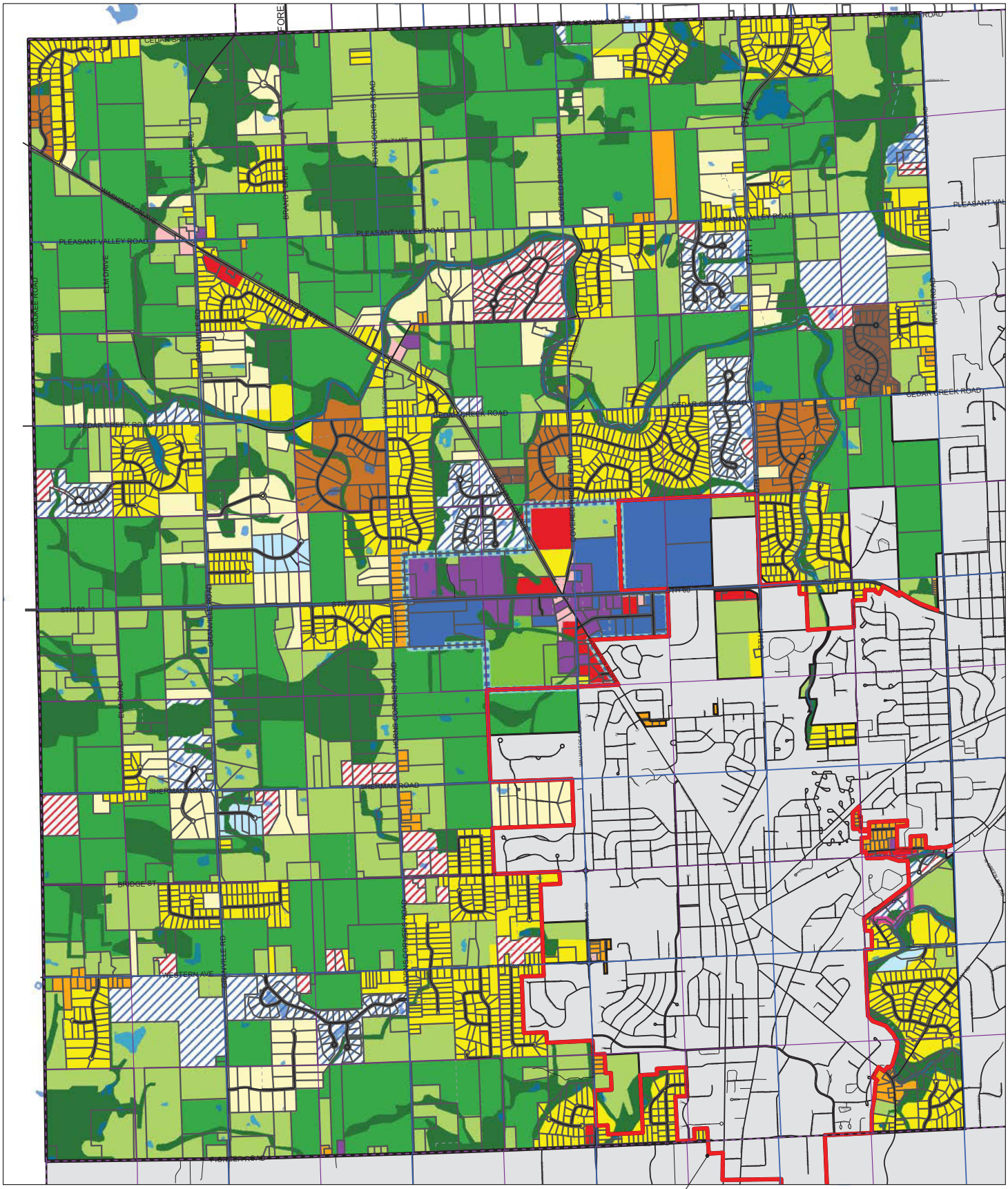
0 2,500

Source: Town of Cedarburg, Planning and Design Institute Inc., Ozaukee County, and SEWRPC.

Attachment: Sykora_MapPacket2.23.24Compress (P&PDept_LandDivision_HabersetzerFamilyTrust_TCedarburg)

TOWN of CEDARBURG

Date: 2/28/2023



Legend

- PUD Planned Unit Developments
- TCOD Town Center Overlay District
- A-1 Agricultural District
- A-2 Prime Agricultural District
- B-1 Neighborhood Business District
- B-2 Planned Business District
- B-3 Business District
- CR-A Countryside Residential A
- CR-B Countryside Residential B
- E-1 Estate Residential District
- R-1 Single Family Residential District
- R-2 Single Family Residential District
- R-3 Single Family Residential District
- TR Transitional Residential District
- TR-2 Transitional Residential District
- P-1 Public and Private Park District
- M-1 Industrial District
- M-2 Planned Industrial District
- M-3 Quarrying District
- C-1 Conservancy District

Certification:
I, the undersigned, Town Chairman of the Town of Cedarburg, Ozaukee County, Wisconsin, do hereby certify that the Zoning Map, Town of Cedarburg, Ozaukee County, Wisconsin on . Changes thereafter shall not be effective until entered and attested on the certified copy.

Attestation

David Salvaggio, Town Chairman Date:

Eric Ryer, Town Administrator Date:

City of Cedarburg Annexation Limit

0 0.25 0.5 1 1.5 2 Miles

The data is provided without warranty of any representation of accuracy, timeliness, or completeness. It is the responsibility of the requestor to determine accuracy, timeliness, completeness and appropriateness of its use. The Town makes no warranty, expressed or implied to the use of the mapped data.

N

Attachment: Sykora_MapPacket2.23.24Compress (P&PDept_LandDivision_HabersetzerFamilyTrust_TCedarburg)

OZAUKEE COUNTY CERTIFIED SURVEY MAP

BEING A PORTION OF A TRACT OF LAND AS DESCRIBED IN VOLUME 237, PAGE 208 AND IN VOLUME 237, PAGE 209, ALL BEING SITUATED IN THE SOUTHEAST ONE-QUARTER OF THE SOUTHEAST ONE-QUARTER OF SECTION 2, TOWNSHIP 10 NORTH, RANGE 21 EAST, TOWN OF CEDARBURG, OZAUKEE COUNTY, WISCONSIN

RECORDED

1998 DEC -8 AM 11: 55

REGISTER OF DEEDS

WISCONSIN
MARK H. BANTOM
S-1668
Port Washington
SURVEYOR

CITY & TWP OF CEDARBURG

NOTES

1. THE ENTIRE LOT IS UNDER OZAUKEE COUNTY SHORELAND ZONING
2. THERE IS AN IMPACT FEE DUE AND PAYABLE TO THE TOWN OF CEDARBURG AT THE TIME OF CLOSING, BY VIRTUE OF THE LAND DIVISION

LEGEND

- FOUND 1" IRON PIPE UNLESS OTHERWISE NOTED
- SET 1"x 24" IRON PIPE, WEIGHT 1.13 LBS PER LIN. FT.
- SET PK NAIL

CURRENT ZONING R-2
75' MINIMUM BUILDING SETBACK
25' SIDEYARDS
25' REARYARD

GRAPHIC SCALE
0 50 100 200 400

BEARINGS BASED ON STATE PLANE COORDINATE SYSTEM SOUTH ZONE

CERTIFIED SURVEY MAP 935

RECORDED AS N89°33'46"E

LOT 1
224,078 SQ FT / 5.119 ACRES GROSS
19,000 SQ FT / 0.430 ACRES R/W
214,078 SQ FT / 4.939 ACRES NET

LOT 2
478,912 SQ FT / 10.99 ACRES GROSS
44,431 SQ FT / 1.02 ACRES R/W
434,481 SQ FT / 9.97 ACRES NET

PLEASANT VALLEY ROAD

MAPLE ROAD

TO BE DEDICATED TO THE PUBLIC FOR ROAD PURPOSES

POINT OF BEGINNING

V1051, P665 ROBERT DENOW D&H SURVEY1997

GRID 5021021 2540972 EL 814.4

GRID 4993152.8 2538467.53 EL 817.36

Attachment: Sykora_MapPacket2.23.24Compress (P&PDept_LandDivision_HabersetzerFamilyTrust_TCedarburg)

STATE BAR OF WISCONSIN FORM 7 - 2003

TRUSTEE'S DEED

Document Number | Document Name

THIS DEED, made between **Gary N. Habersetzer, Trustee** of the **Mardel D. Habersetzer Family Trust** ("Grantor"), and **Daryl Moze** ("Grantee").

Grantor conveys to Grantee, without warranty, the following described real estate, together with the rents, profits, fixtures and other appurtenant interests, in **OZAUKEE** County, State of Wisconsin:

Recording Area

Name and Return Address
Daryl Moze
2101 maple Road
Grafton Wi
53024

Part of 03-002-16-008.00

Parcel Identification Number (PIN)

All that part of **Lot Two (2),** of **Certified Survey Map No. 3103,** recorded in the office of the Register of Deeds for Ozaukee County, Wisconsin on December 8, 1998 in Volume 22 of Certified Survey Maps, page 74, as Document No. 619558, being a portion of a tract of land as described in Volume 237, page 208 and in Volume 237, page 209, all being situated in the Southeast 1/4 of the Southeast 1/4 of Section 2, Township 10 North, Range 21 East, in the Town of Cedarburg, County of Ozaukee, State of Wisconsin, bounded and described as follows:
Commencing at the Southeast corner of the Southeast 1/4 of said Section 2; thence North 2° 29' 54" West along the East line of said 1/4 Section, 183.00 feet to a point in the Easterly extension of the Southerly line of said Lot 2; thence South 86° 30' 21" West along said Southerly line extension, 40.01 feet to a point in the West right of way line of Maple Road, said point also being the Southeasterly corner of said Lot 2 and the point of beginning of lands to be described; thence continuing South 86° 30' 21" West along the Southerly line of said Lot 2, 259.93 (recorded as 259.99) feet; thence North 2° 28' 39" West, 177.00 feet; thence North 86° 30' 21" East and parallel with the Southerly line of said Lot 2, 259.86 feet to a point in the West right of way line of Maple Road; thence South 2° 29' 54" East along said right of way line, 177.00 feet to the point of beginning.

This Parcel is to be combines with Tax Key Number 03-002-16-005.00 to make one parcel

Dated this 21st day of February, 2024.

Gary Habersetzer (SEAL)
***By: Gary N. Habersetzer, Trustee**

AUTHENTICATION

Signature(s) _____

Authenticated this _____ day of _____, _____

*_____

TITLE: MEMBER STATE BAR OF WISCONSIN
(if not, _____
Authorized by §706.06, Wis. Stats.)

THIS INSTRUMENT WAS DRAFTED BY

Jeffrey P. Patterson

State Bar Wisconsin No. 1005690

(Signatures may be authenticated or acknowledged. Both are not necessary.)
2430024-00003

ACKNOWLEDGEMENT

State of Wisconsin,
Washington County. } SS.

Personally came before me this 21st day of February, 2024, the above named **Gary N. Habersetzer, Trustee** to me known to be the person(s) who executed the foregoing instrument and acknowledged the same.

*Kristen Keely

Notary Public, State of Wisconsin
My commission is permanent. (If not, state expiration date: 2/7/2027.)

KRISTEN KEELY NOTARY PUBLIC STATE OF WISCONSIN

* Names of persons signing in any capacity must be typed or printed below their signature.

TRDEED

Packe

State Bar of Wisconsin Form 3-2003

QUIT CLAIM DEED

Document Number | Document Name

THIS DEED, made between Gary N. Habersetzer, Trustee of the Mardel D. Habersetzer Family Trust ("Grantor," whether one or more), and Gary N. Habersetzer, A Married Person ("Grantee," whether one or more).

Grantor quit claims to Grantee the following described real estate, together with the rents, profits, fixtures and other appurtenant interests, in Ozaukee County, State of Wisconsin ("Property") (if more space is needed, please attach addendum):

See Attached Exhibit A for Legal Description

Recording Area

Name and Return Address

Gary N. Habersetzer
4612 Pleasant Valley Road
Grafton, WI 53024

Part of 03-002-16-008.00
Parcel Identification Number (PIN)

This is ____ homestead property.
(is) (is not)

Dated 2/21/2024

_____ (SEAL)
*

*Gary N Habersetzer, Trustee (SEAL)

_____ (SEAL)
*

_____ (SEAL)
*

AUTHENTICATION

Signature(s) _____

authenticated on _____

*

TITLE: MEMBER STATE BAR OF WISCONSIN
(If not, authorized by Wis. Stat. § 706.06)

THIS INSTRUMENT DRAFTED BY:

Gary N. Habersetzer

ACKNOWLEDGMENT

STATE OF WISCONSIN

Washington COUNTY)

Personally came before me on 2/21/2024
the above-named Gary N. Habersetzer

to me known to be the person(s) who executed the foregoing instrument and acknowledged the same.

* Kristen Keely

Notary Public, State of Wisconsin
My Commission (is permanent) (expires: 2/7/27)

KRISTEN KEELY NOTARY PUBLIC STATE OF WISCONSIN

(Signatures may be authenticated or acknowledged. Both are not necessary.)

NOTE: THIS IS A STANDARD FORM. ANY MODIFICATIONS TO THIS FORM SHOULD BE CLEARLY IDENTIFIED.

QUIT CLAIM DEED © 2003 STATE BAR OF WISCONSIN FORM NO. 3-2003

* Type name below signatures

Attachment: Sykora_MapPacket2.23.24Compress (P&PDept_LandDivision_HabersetzerFamilyTrust_TCedarburg)

EXHIBIT A

The West 150.00 feet of Lot 2 of Certified Survey Map No. 3103, being part of the Southeast 1/4 of the Southeast 1/4 of Section 2, Township 10 North, Range 21 East, in the Town of Cedarburg, Ozaukee County, Wisconsin, bounded and described as follows:

Commencing at the Southeast corner of the Southeast 1/4 of said Section 2; thence S86º30'21"W along the South line of said 1/4 Section, 863.59 feet to a point in the southerly extension of the West line said Lot 2; thence N2º19'03"W along said West line extension, 50.01 feet to a point in the North right of way line of Pleasant Valley Road, said point also being the Southwest corner of said Lot 2 and the point of beginning of lands to be described; thence continuing N2º19'03"W along the West line of said Lot 2, 574.12 (recorded as 574.44) feet to the Northwest corner of said Lot 2; thence N88º36'20"E along the North line of said Lot 2, 150.02 feet; thence S2º19'03"E and parallel with the West line of said Lot 2, 568.62 feet to a point in the North right of way line of Pleasant Valley Road; thence S86º30'21"W along said right of way line, 150.03 to the point of beginning.

This parcel is to be combined with tax key number 03-002-16-007.00 to make one parcel

Attachment: Sykora_MapPacket2.23.24Compress (P&PDept_LandDivision_HabersetzerFamilyTrust_TCedarburg)

PLANNING & PARKS DEPARTMENT

Andrew T. Struck, Director
https://www.ozaukeecounty.gov/540/Planning-Parks

Staff Report – Natural Resources Committee – March 7, 2024

Mardel D Habersetzer Family Trust, owner, 4612 Pleasant Valley Rd., Cedarburg, Wisconsin 53012, and **Thomas L. Sykora,** applicant, 2321 Ridgewood Rd., Grafton, Wisconsin 53024, are requesting **land division approval for a minor land division by Certified Survey Map (CSM)** in accord with Section 7.1400 (Land Division Requirements) of the County Ordinance to create a division of land in the shoreland area, which results in a "minor land division", a division of a lot, parcel or tract of land by the owner thereof or the owner's agent for the purpose of transfer of ownership or building development, where the act of division creates three or more parcels or building sites, inclusive of the original remnant parcel, any one of which is five acres or less by division or successive division within a five-year period. **The proposed minor land division will create four (4) new lots (Lots 1-4) as part of the CSM in the Town of Cedarburg.** The minor land division is being combined with a lot line adjustment with parcel 030021600700, owned by Gary and Mary Habersetzer, and a lot line adjustment with parcel 030021600500, owned by Daryl Moze. The property has been sold and is pending recording. The CSM is consistent with these lot line adjustments.

Affecting the following described real estate:

The Property is located at 4408 Pleasant Valley Road, **Town of Cedarburg**, Ozaukee County, Wisconsin, being a redivision of part of Lot 2 of Certified Survey Map No. 3103, being a part of the Southeast ¼ of the Southeast ¼ of Section 2, Township 10 North, Range 21 East, in the Town of Cedarburg, Ozaukee County, Wisconsin. **Parcel Number(s)**: 030021600800. Total Acreage to be Divided: approximately +/- 6.738 acres.

Section 7.1409 of the Ozaukee County Shoreland and Floodplain Zoning Ordinance, "Review Criteria", states that in accordance with Section NR 115.05 (4) of the Wisconsin Administrative Code, the Natural Resources Committee shall consider the following factors in its review of proposed land divisions:

A) Hazards to the health, safety, or welfare of future residents of the land division
B) Proper relationship to adjoining areas
C) Public access to navigable waters in accordance with Section 236.16 (3) of the Wisconsin Statutes
D) Adequate stormwater management facilities
E) Conformity to Federal, State, and local laws and ordinances including consistency with the adopted *Multi-jurisdictional Comprehensive Plan for Ozaukee County: 2035*.

The Planning and Parks Department finds that:

1) A Planning and Parks Department **Staff Advisory Review Meeting** for the proposed **Minor Land Division (by CSM)** application was held in-person on 10/13/2023. Subsequent submittals, phone calls and emails provided additional details and information.

2) The Planning and Parks Department finds that **portions of the parcel(s) (Property(ies))** to be land divided through a certified survey map **ARE under Ozaukee County Land Division Review Requirements and within the Ozaukee County Shoreland and Floodplain Zoning jurisdiction**. **Ozaukee County is an "approving authority" on this minor land division / CSM. Ozaukee County shall be listed as an approving authority on the certified survey map.**

3) The Planning and Parks Department finds that the **lot sizes specified on the certified survey map conform to Section 7.0302,** "Lots Not Served by Public Sanitary Sewer", where the minimum lot area shall be 20,000 sq. ft. and the minimum average lot width shall be 100 feet, with at least 100 feet of frontage at the ordinary high-water mark.

121 W. Main Street, P.O. Box 994, Port Washington, WI 53074
Phone: (262) 284-8257 Metro: (262) 238-8257 Fax: (262) 284-8269

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4) The Planning and Parks Department finds that **the parcel(s)** (*Property(ies)*) **DO NOT** contain portions of the **100-year floodplain. The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood. A Zone AE (Base Flood Elevations Determined) with both floodway (The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights) and flood fringe and Zone X (Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood). The property is within a Zone X,** according to the National Flood Insurance Program (NFIP) Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) map for Ozaukee County, Wisconsin and Unincorporated Areas, Panel 177 of 270, Map Number 55089C0177F, Map Revised Date, December 4, 2007.

5) The Planning and Parks Department finds that **the minor land division by CSM shows a division of Lots 1 – 4, ranging from** +/-**1.116 acres to** +/-**2.680 Acres, with all four Lots being less than or equal to 5 acres.** According to the current Ozaukee County Shoreland and Floodplain Zoning ordinance (Chapter 7.1400), a **"minor land division"** is *a division of a lot, parcel or tract of land by the owner thereof or the owner's agent for the purpose of transfer of ownership or building development, where the act of division creates three or more parcels or building sites, inclusive of the original remnant parcel, any one of which is five acres or less by division or successive division within a five-year period*.

6) The Planning and Parks Department finds that the **Town of Cedarburg 2035 planned land use is Rural neighborhood – Countryside (Town of Cedarburg Planned Land Use Map: 2035 May 2, 2012 Amendment), and the existing Town of Cedarburg zoning is Single Family Residential District (R-2). The Department further finds that the Ozaukee County 2035 planned land use is Medium Density Residential (Multi-jurisdictional Comprehensive Plan for Ozaukee County: 2035 Amendment 2, December 2013). Therefore, the CSM and Town of Cedarburg's planned land use Rural neighborhood - Countryside is consistent with the Multi-jurisdictional Comprehensive Plan for Ozaukee County: 2035 Medium Density. The preliminary CSM has been postponed from the Town of Cedarburg's Plan Commission February 21, 2024 meeting until the lot line adjustments are completed (Town of Cedarburg staff communication 2/21/2024). Furthermore, these parcel(s) are in the Village of Grafton's extraterritorial platting review jurisdiction.**

7) The **NRCS SSURGO soils** for the Property(ies) (parcel(s)) are indicated on the Soils Exhibit Map and consist of the following soil types: **CeB2—Casco loam**, 2 to 6 percent slopes, eroded; **HsB2—Hochheim-Sisson-Casco complex,** 2 to 6 percent slopes, eroded; **HsC2—Hochheim-Sisson-Casco complex,** 6 to 12 percent slopes, eroded; **HsD2—Hochheim-Sisson-Casco complex**, 12 to 20 percent slopes, eroded; and **ZuB2 – Zurich silt loam**, 2 to 6 percent slopes, eroded. Hydric ("wetland") soils are noted in the above listing. The northwestern section of the parcel is within the Ozaukee County Shoreland and Floodplain Zoning jurisdiction. Per the Ozaukee County Soil Survey (Table 5) on **limitations for and factors affecting Residential Development** it states for the Casco loam (CeB2), "Slight on slopes of 0 to 6 percent, moderate on slopes of 12 to 20 percent, and severe on slopes of more than 20 percent; droughty; sloping areas are erodible"; for Hochheim-Sisson-Casco complex (HsB2), "Slight on slopes of less than 12 percent, moderate on slopes of 12 to 20 percent, and severe on slopes of 20 percent or more; erosion is a serious hazard in steep areas"; for Hochheim-Sisson-Casco complex (HsC2), "Slight on slopes of less than 12 percent, moderate on slopes of 12 to 20 percent, and severe on slopes of 20 percent or more; erosion is a serious hazard in steep areas"; for Hochheim-Sisson-Casco complex (HsD2), Slight on slopes of less than 12 percent, moderate on slopes of 12 to 20 percent, and severe on slopes of 20 percent or more; erosion is a serious hazard in steep areas"; and for the Zurich silt loam (ZuB2), "Moderate; moderate bearing capacity; moderate stability". In addition, some of the above listed soil types have **limitations for and factors affecting onsite sewage disposal systems** according to the Ozaukee County Soil Survey (Table 5).

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8) The Planning and Parks Department finds that the **soil borings, or otherwise specified locations Private On-site Wastewater Treatment Systems (POWTS)**, **WERE** conducted, but **NOT** submitted for the newly created lots.

9) The Planning and Parks Department finds that **there ARE NOT known wetlands** per the Wisconsin Wetland Inventory (WWI)/SEWRPC wetland map (WDNR 2019), the Ozaukee County NRCS Wetland Inventory maps, the Ozaukee County Private Wetland Inventory GIS database and/or the official County Shoreland and Floodplain Zoning maps. A wetland analysis (North Shore Engineering, Inc., 11/02/2023) has been submitted as part of the certified survey map review for Lots 1-4 also showing no identified wetlands based on site conditions and historical aerial photography. **Thus, the are no delineated wetlands located on the CSM nor a text reference / label on the certified survey map sourcing the wetland data. A WDNR and/or USACOE concurrence letter has NOT been provided.**

10) The Planning and Parks Department finds that there is **additional proposed road access off of Maple Road an existing Town Road** to the newly created lots as part of this certified survey map. Existing access to the parcel is off of Pleasant Valley Road, an existing Town Road. The owners/agent **WILL NOT** require a County Highway Access Control permit based on access off of Maple Road and Pleasant Valley Road, both Town Roads. A proposed drainage plan / grading plan was **NOT** provided for review for the certified survey map lots or access driveways.

11) **A general site grading, erosion control, proposed drainage, and stormwater management plan has NOT been provided as part of the certified survey map.** The location of any existing subsurface tiles and/or plans to destroy or reroute these tiles has **NOT** been provided to the Planning and Parks Department. The certified survey map **DOES NOT** specify the proposed location of construction phase erosion and sediment control measures. The Department **DID NOT** receive a copy of any received WPDES Construction Site Storm Water Runoff Permits from WDNR and/or corresponding determination letter.

12) The Planning and Parks Department finds that the CSM **DOES depict and/or by text reference the County Shoreland and Floodplain Zoning Jurisdictional Boundary and Area. The County Shoreland and Floodplain Zoning Jurisdictional Boundary/Area is regulated under County Ordinance.** The County ordinance states that the Shoreland and Floodplain Zoning Jurisdictional boundary is defined by "the area within the following distances from the ordinary high-water mark of navigable waters: 1,000 feet from a navigable lake, pond or flowage; 300 feet from a navigable river or stream or to the landward side of the 100-year regulatory floodplain boundary, whichever distance is greater". There is **NO** text reference note that the **County Shoreland Zoning Jurisdictional Boundary/Area is regulated under County Ordinance.**

13) The Planning and Parks Department finds that **there ARE NOT primary environmental corridors as delineated by SEWRPC on the Property(ies). There ARE NOT other associated unregulated County planned park and open space sites, proposed recreation trails, secondary environmental corridors, natural areas, critical species habitats sites, critical aquatic habitat areas and/or sites of geological significance, as identified by SEWRPC, located on the parcel(s) (Property(ies)).** The property is located adjacent to Pleasant Valley Park and Trails in the Town of Cedarburg. *Per the Multi-jurisdictional Comprehensive Plan for Ozaukee County, rural density residential development may be accommodated in upland environmental corridors, provided that buildings are kept off steep slopes. The maximum number of housing units accommodated at a proposed development site within the environmental corridor should be limited to the number determined by dividing the total corridor acreage within the site, less the acreage covered by surface water and wetlands, by five. The permitted housing units may be in single-family or multi-family structures. When rural residential development is accommodated, conservation subdivision designs are strongly encouraged.*

14) There is **NOT** a navigable waterway(s) on the Property(ies) / (Parcel(s)); therefore, the County requirement for public access to the navigable waterway within one-half mile intervals as measured along the waterway from this Property(ies) is not required. Public access to navigable waterways is required within one-half mile intervals, as measured along the stream shore of a navigable waterbody per Wis. Stats. Chapter 236. The property is adjacent to Mole Creek.

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The Planning and Parks Department has no objection to the land division and recommends approval of the Certified Survey Map with the following conditions and corrections:

1) **Any further future land division of these Properties (these parcels) resulting in a "subdivision" as defined by Wis. Stats. Chapter 236** as *"a division of a lot, parcel, or tract of land by the owner thereof or the owner's agent for the purpose of sale or of building development, where: (a) The act of division creates five (5) or more parcels or building sites of 1 ½ acres each or less in area; or (b) Five (5) or more parcels or building sites of 1 ½ acres each or less in area are created by successive divisions within a period of five (5) years",* **will require CSM approval by Ozaukee County, in accord with Section 236, Wisconsin State Statutes**, including public access requirements, in accord with Section 236.16 (3) Wisconsin Statutes, for subdivisions abutting on a navigable lake or stream or appropriate waivers and land dedications as specified by the County Planning Agency. **Also, any successive land division (redivision) of this certified survey map and/or parcels within a five (5) year period will require approval by the Ozaukee County Planning and Parks Department and Ozaukee County Natural Resources Committee. As there IS NOT a navigable waterway(s) on the Property(ies) / (Parcel(s)), the County requirement for public access to the navigable waterway within one-half mile intervals as measured along the waterway from these Property(ies) DOES NOT apply. Public access to navigable waterways is required within one-half mile intervals, as measured along the stream shore of a navigable waterbody under Wis. Stats. Chapter 236. Furthermore, Ozaukee County SHALL BE listed as an approving authority/agency on the final certified survey map and a signature block included in the approvals.**

2) The CSM / land division **MAY** require review and approval under the extraterritorial platting jurisdictional authority of the Village of Grafton. **This parcel is in the Village of Grafton's extraterritorial platting review jurisdiction.**

3) **The CSM SHALL provide a text note on the face of the CSM that "the areas within the County Shoreland Zoning Jurisdictional Boundary as depicted on the certified survey map and/or with text are subject to the provisions of the Ozaukee County Shoreland and Floodplain Zoning Ordinance".**

4) A **site grading, proposed drainage, stormwater management (as may be required) and erosion control plan** shall be provided to the Land and Water Management Department for review and approval **PRIOR** to construction activities. In addition, a site grading, proposed drainage, stormwater management (as may be required) and erosion control plan **SHALL** be followed for building and development within the certified survey map and be in accord with the requirements of the WDNR NR 216, NR 151 and Wis. Stats. Chapter 30. Any construction activities should include erosion and sediment control measures (erosion control plan) that conform to the technical standards and specifications as outlined at the Wisconsin Department of Natural Resources website: http://dnr.wi.gov/water/wm/nps/stormwater/techstds.htm and in the *Wisconsin Construction Site Best Management Practice Handbook (WDNR Pub. WR-222)*. The erosion control plan measures should be installed prior to construction activity to prevent sediment delivery off the property or into any nearby navigable waterways and wetlands. These controls must be maintained until the soil is adequately re-vegetated or otherwise protected to prevent erosion. Once the vegetation is adequate to prevent the erosion, the barriers shall be removed. The soils noted above for the *Property* may have limitations for various aspects of the proposed development including hydric soils, high water tables and limitations for residential, industrial or commercial construction. The soil conditions will be reviewed in more detail with specific grading, excavating, filling and/or development plans submitted as part of required County shoreland zoning permitting for these various development and construction activities. **Also, the location of any existing subsurface tiles and plans to destroy or reroute these tiles must be provided to the Land and Water Management Department for review and approval. In addition, the site-grading plan should include profiles and cross-sections of the proposed road / driveway grades, ditches and culverts and MUST be submitted for review by the Land and Water Management Department PRIOR to construction and development activity on the *Property*. The proposed CSM DOES NOT specify proposed stormwater management features or drainage easements for the new lots. If any stormwater management features and/or drainage easements are proposed, the maintenance requirements, restrictive covenants and/or**

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responsible party (ies) for any drainage easements must be specified or agreement referenced on the certified survey map along with the ability of the Town of Cedarburg (as desired) and Ozaukee County to enter the drainage and stormwater management feature easements for inspection. Furthermore, all stormwater management features and drainage easements need to be labeled and depicted on the certified survey map. When there is not a proposed change in land use resulting from the current land division, a text statement on the certified survey map referencing the requirement of the County Land and Water Management Department to review and approve of a site grading, drainage, stormwater management, and erosion control plan prior to any development or construction activities relating to this land division can be made in lieu of the above documentation being provided at the time of land division approval.

5) A **Shoreland Permit from Ozaukee County** shall be required for filling, grading, lagooning, dredging, ditching and excavating activities as described in Section 7.0500 of the Ozaukee County Shoreland and Floodplain Zoning Ordinance. For example, a Shoreland Permit may be required for the grading and excavating of roads, stormwater detention facilities and/or lots that are within the County Shoreland and Floodplain Zoning Jurisdictional Boundary. According to Section 7.0301, "No Filling in Floodplain Areas," for lots created after the effective date of this ordinance, no filling shall be permitted within the floodplain to accommodate those uses listed in Section 7.0809.D unless a variance is granted by the Board of Adjustment in accordance with Section 7.1206. Other filling activities in the Floodplain Districts shall be granted by Ozaukee County in accordance with Section 7.0803. The Board and applicant must be aware that if the project is approved, the Permit will not be issued until after the appeal period has expired. The appeal period runs for thirty (30) days after a public hearing. During that period, any interested party can appeal the decision, either approved or denied, to Circuit Court. Any work done during this time is at the applicant's own risk. Any use permitted under Section 7.0500 (Section 7.0502 and 7.0504) is subject to obtaining any **Shoreland Permits** required therein. Except where another section of the County ordinance specifically exempts certain types of development from this requirement, **a shoreland permit shall be obtained from the County Zoning Administrator according to Section 7.0500.**

6) **Mitigation of Impervious Surface Standards (Section 7.0600) and/or Requirements for Nonconforming Uses and Structures Located within the Shoreland Zone per the Shoreland Permit shall be according to Ozaukee County Ordinance Section 7.1001 (Mitigation Plan Requirements).** 7.0601 PURPOSE Establish impervious surface standards to protect water quality and fish and wildlife habitat and to protect against pollution of navigable waters. The following impervious surface standards shall apply to the construction, reconstruction, expansion, replacement or relocation of any impervious surface on a riparian lot or parcel and any non-riparian lot or parcel that is located entirely within 300 feet of the ordinary high-water mark of any navigable waterway. 7.0602 CALCULATION OF PERCENTAGE OF IMPERVIOUS SURFACE Percentage of impervious surface shall be calculated by dividing the surface area of the existing and proposed impervious surfaces on the portion of a lot or parcel that is within 300 feet of the ordinary high-water mark by the total surface area of the lot or parcel, and multiplied by 100. Impervious surfaces described in Section 7.0605 shall be excluded from the calculation of impervious surface on the lot or parcel. If an outlot lies between the ordinary high water mark and the developable lot or parcel and both are in common ownership, the lot or parcel and the outlot shall be considered one lot or parcel for the purposes of calculating the percentage of impervious surface. For properties within a condominium, the impervious surface calculations apply to the entire condominium property. 7.0603 GENERAL IMPERVIOUS SURFACE STANDARD Except as otherwise allowed in Sections 7.0604 through 7.0605 the county shall allow up to 15 percent impervious surface on the portion of a lot or parcel that is within 300 feet of the ordinary high-water mark. 7.0604 MAXIMUM IMPERVIOUS SURFACE STANDARD A property may exceed the impervious surface standard under 7.0603 provided the following standards are met: A. For properties where the general impervious surface standard applies under Section 7.0603 a property owner may have more than 15 percent impervious surface but not more than 30 percent impervious surface on the portion of a lot or parcel that is within 300 feet of the ordinary high-water mark. B. For properties that exceed the standard under Section 7.0603 but do not exceed the maximum standard under Section 7.0604(A) a permit can be issued for development with a mitigation plan that meets the standards found in Section 7.1000. 7.0605 TREATED IMPERVIOUS SURFACES Impervious surfaces that can be documented to demonstrate they meet either of the following standards shall be excluded from the impervious surface calculations under Section 7.0602 A. The impervious surface is treated by devices such as storm water ponds, constructed wetlands, infiltration basins, rain gardens, bio-swales or other engineered systems. B. The runoff from the impervious surface discharges to an internally drained pervious area that retains the runoff on or off the parcel and allows infiltration into the soil.

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7) **Land disturbance and/or construction activities shall be in accord with Ozaukee County Ordinance Section 7.0600 (Impervious Surface Standards), WDNR NR 151 and 216 for stormwater management and construction site erosion control. Ozaukee County approval for these activities is conditional upon a Wisconsin Department of Natural Resources (WDNR) permit under NR 216 being obtained and a copy provided to the Ozaukee County Land and Water Management Department prior to any construction or development activities.**

8) **Removal of natural vegetation in the shoreland area (Section 7.0400, Removal of Shore Cover)**, particularly along the area parallel to a navigable creek, except for removal of noxious weeds and dead, diseased or non-native invasive vegetation or according to a forester approved written silvicultural thinning plan, shall be minimized and in accordance with accepted forest management and soil conservation practices which protect water quality. In addition, in the strip of land 35 feet inland from the ordinary high water mark, (buffer zone) the removal of trees and shrubs shall be limited as follows: 1. The County may allow routine maintenance of vegetation. 2. The county may allow removal of trees and shrubs in the vegetative buffer zone to create access and viewing corridors. Per Section 59.692(1f) (b), Wis. Stats, the viewing corridor may be at least 35 feet wide for every 100 feet of shoreline frontage. The viewing corridor may run contiguously for the entire maximum width of shoreline frontage owned. 3. The county may allow removal of trees and shrubs in the vegetative buffer zone on a parcel with 10 or more acres of forested land consistent with "generally accepted forestry management practices" as defined in Chapter NR 1.25(2) (b), Wisconsin Administrative Code, and described in department publication Wisconsin Forest Management Guidelines (publication FR-226), provided that vegetation removal be consistent with these practices. 4. The county may allow removal of vegetation within the vegetative buffer zone to manage exotic or invasive species, damaged vegetation, vegetation that must be removed to control disease, or vegetation creating an imminent safety hazard, provided that any vegetation removed be replaced by replanting in the same area as soon as practicable. 5. The county may authorize by permit additional vegetation management activities in the vegetative buffer zone. The permit issued under this subd. par. shall require that all management activities comply with detailed plans approved by the county and designed to control erosion by limiting sedimentation into the waterbody, to improve the plant community by replanting in the same area, and to maintain and monitor the newly restored area. The permit also shall require an enforceable restriction to preserve the newly restored area. B. Note: Section 59.692(1f)(a), Wis. Stats, prohibits counties from requiring a property owner to establish a vegetative buffer zone on previously developed land or expand an existing vegetative buffer zone. However, as part of a county shoreland mitigation standards, the establishment or expansion of the vegetative buffer may remain an option (see Section 7.1000) C. In shoreland areas more than 35 feet inland from the ordinary high water mark, cutting of trees and shrubs shall be allowed when accomplished using accepted forest management and soil conservation practices which protect water quality

9) **Soil borings HAVE been conducted and/or submitted to the Department and/or POWTS locations otherwise specified as part of this CSM, and soil testing locations HAVE been added to the CSM. This land division DOES NOT assure "suitable" lots for building or development. As such, any future land division or development activities for this preliminary plat will require the review of soil borings to evaluate the need for any new, expanded or modified private on-site wastewater treatment systems (POWTS) PRIOR to any land disturbance activities unless holding tanks are otherwise a system of choice in the Town. Therefore, any new, expanded or modified private on-site wastewater treatment system (POWTS) will require additional review and permits from the Land and Water Management Department PRIOR to construction.** Please arrange an appointment with Land and Water Management sanitation staff if you have questions regarding your future and current POWTS for this project. The soils noted above for the *Property* may have limitations for various aspects of the proposed development including hydric soils, high water tables and **limitations for POWTS**, and residential, industrial and commercial construction. The soil conditions will be reviewed in more detail with specific grading, excavating, filling and/or POWTS development plans submitted as part of required County permitting for these various POWTS development and construction activities. A soils exhibit has been produced for the certified survey map showing the soil types per the Ozaukee County Soil Survey (NRCS SSURGO soils) relative to the existing parcel. **Final soil evaluations shall be completed for each proposed lot in compliance with the Department of Commerce Administrative Code for the identified septic areas indicated on the certified survey map and/or site grading plans.**

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10) **Additional permitting <u>MAY</u>** be required by the U.S. Army Corps of Engineers (USACOE) under Section of the Clean Water Act and by the Wisconsin Department of Natural Resources (WDNR) under Wisconsin State Statute Chapter 30 for wetlands and water quality certification (NR 103) issues associated with future development activities on the *Property(ies)*, including grading and development of the private driveways.

11) All other required federal, state, county and local permits **<u>SHALL BE</u>** acquired prior to any construction or development activities.

12) According to the Ozaukee County Shoreland and Floodplain Zoning Ordinance, the **owner(s) or agent must submit the final CSM within 12 months of land division approval by the Natural Resources Committee**, unless an extension is requested in writing to the Planning and Parks Department and subsequently approved. If the certified survey map is approved conditionally **and** the conditions of the certified survey map approval have been met, **please provide the Planning and Parks Department with the <u>ORIGINAL</u> final CSM <u>with a signature block for the Chairperson of the Natural Resources Committee</u>. <u>Please schedule a time for the final CSM to be signed.</u>**

13) **The certified survey map / land division is conditional upon the approval of the land division / CSM by the Town of Cedarburg and the Village of Grafton.**

END – NA_02232024

Cc: WDNR - Water Regulation and Zoning Specialist, Sarah Szabo
WDNR – Water Resources Engineer, Peter Wood
Ozaukee County – Land and Water Management Department – Director LWMD, Katie Voegler
Ozaukee County – Highway Department – Director of Public Works, Jon Edgren
Town of Cedarburg – Town Municipal Clerk/Assistance Administrator, Jack Johnston
Applicant – Thomas L. Sykora
Owners(s) – Mardel D Habersetzer Family Trust C/O Gary Habersetzer, Trustee
Surveyor – James Schneider, North Shore Engineering, Inc.
Village of Grafton – Jessica Wolff, Assistant Village Admin./Comm. Development Director

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Natural Resources Committee

AGENDA INFORMATION SHEET

AGENDA DATE: **March 7, 2024**
DEPARTMENT: **Planning and Parks**
DIRECTOR: **Andrew Struck**
PREPARER: **Andrew Struck**

Agenda Summary Increase of Revenue Budget Amendment for a Wisconsin Department of Natural Resources Surface Water Planning Grant to Support Water Quality Monitoring Activities on the Little Menomonee River and Creek, Mole Creek and Ulao Creek in Ozaukee County

BACKGROUND INFORMATION: The Ozaukee County - Planning and Parks Department (Department) was awarded a grant from the Wisconsin Department of Natural Resources (WDNR) Surface Water Planning (SWP) Grant Program. Specifically, this grant will fund County activities to continue to monitor water quality conditions on the Little Menomonee River and Creek in the City of Mequon, Mole Creek in the Town of Saukville and Ulao Creek in the Town of Grafton and Village of Grafton. Water quality monitoring will provide data to establish pre and post construction conditions at the ongoing habitat restoration projects being implemented on all streams and allow for analysis of water quality impacts as a result of restoration activities. The habitat restoration projects include: stream remeandering, restoration of hydrologically and biologically functional floodplains, bank and in-stream structure restoration, wetland enhancements, invasive vegetation management and control, and native vegetation planting and restoration. Specifically, this SWP grant will support continuous and grab sample water quality monitoring to determine the effectiveness of stream remeandering and floodplain/wetland restoration as a best management practice to reduce pollutant loads (e.g., Total Maximum Daily Loads - TMDL's). County staff will complete continuous water quality monitoring activities (conductivity, water temperature, water depth, dissolved oxygen, and pH), and grab sample water quality monitoring (E. coli, total phosphorus, orthophosphate, chloride and total suspended solids) according to approved USEPA Quality Assurance Project Plan (QAPP) procedures and methodologies and consistent with Total Maximum Daily Load (TMDL) procedures. This project is a continuation of WDNR grants received by the Department from 2017-2022 for similar water quality monitoring and is consistent with other grant funded projects being implemented within the Fish Passage Program and overall Ecological Division.

ANALYSIS: The total WDNR SWP grant award is $10,000. The Ozaukee County Natural Resources Committee unanimously approved the submittal and acceptance of the WDNR SWP grant at its August 3, 2023 meeting (Ayes: Holyoke, Jobs, Matera, Schoessow; Excused: Ross) and the Ozaukee County Board of Supervisors unanimously approved Resolution 23-21 at its September 6, 2023 meeting (Ayes - 19, Nays - 0, Absent - 7). WDNR SWP grants are awarded for up to 67% of the total project cost up to $10,000. The remaining project match will be provided by in-kind staff time, travel and equipment for a total project cost of $21,811. There have been no changes to the budget or project scope since grant submittal.

FISCAL IMPACT: Balance Current Year: NONE (Additional Program Revenue of $10,000)

Next Year's Estimated Cost: NONE

FUNDING SOURCE: County Levy: Non-County Levy: X

Indicate source: WDNR SWP and in-kind Department staff time, travel and equipment.

RECOMMENDED MOTION: Approve and recommend to the Ozaukee County Board of Supervisors the budget amendment for the Wisconsin Department of Natural Resources - Surface Water Planning grant for water quality monitoring activities on Little Menomonee River and Creek and Mole Creek and Ulao Creek in Ozaukee County in conjunction with large-scale habitat restoration projects.

ATTACHMENTS:

- BA_2024_NRC03072024_WDNR_SWP_WQMonitoringGrant_BA_FinalATS022024 (PDF)
- P&P_Dept_SurfaceWaterPlanning2023_Application_Maps (PDF)

NATURAL RESOURCES COMMITTEE

Budget Amendment Request Committee Approval Form

Resolution No: _____

Period Transfer Recorded: _____

TO: Finance Committee

FROM: Planning and Parks Department
Department Name

Date of Request: 2/14/2024

Type of Budget Amendment (check one)

Increase of Revenue:	X
Fund Transfer:	
Supplemental Appropriations:	

Debit / Expense			Credit / Revenue		
Acct #	222-01-01-54106-000	$ 10,000	A/C #	222-01-01-42310-000	$ 10,000
	-	/ -		-	/ -
	Pre-request Account's Budget	/ *Changed To*		*Pre-request Account's Budget*	/ *Changed To*
Cost Ctr & A/C Desc	Professional Services		Cost Ctr & A/C Desc	State Aid - 2024 WDNR SWP LMR, Mole, Ulao	
Acct #		$	A/C #		$ -
	-	/ -		-	/ -
	Pre-request Account's Budget	/ *Changed To*		*Pre-request Account's Budget*	/ *Changed To*
Cost Ctr & A/C Desc			Cost Ctr & A/C Desc		
Acct #		$	A/C #		$ -
	-	/ -		-	/ -
	Pre-request Account's Budget	/ *Changed To*		*Pre-request Account's Budget*	/ *Changed To*
Cost Ctr & A/C Desc			Cost Ctr & A/C Desc		
Acct #		$ -	A/C #		$ -
	-	/ -		-	/ -
	Pre-request Account's Budget	/ *Changed To*		*Pre-request Account's Budget*	/ *Changed To*
Cost Ctr & A/C Desc			Cost Ctr & A/C Desc		
Acct #		$ -	A/C #		$ -
	-	/ -		-	/ -
	Pre-request Account's Budget	/ *Changed To*		*Pre-request Account's Budget*	/ *Changed To*
Cost Ctr & A/C Desc			Cost Ctr & A/C Desc		
Acct #		$ -	A/C #		$ -
	-	/ -		-	/ -
	Pre-request Account's Budget	/ *Changed To*		*Pre-request Account's Budget*	/ *Changed To*
Cost Ctr & A/C Desc			Cost Ctr & A/C Desc		
	Total Debits:	10,000		Total Credits:	10,000

Reason for Request (Be Specific). Also fill out Support Document for County Board.

This is an increase in revenue for a grant received (Project #222-0006-00042) from the Wisconsin Department of Natural Resources Surface Water Planning grant program to support water quality monitoring at the Little Menomonee River and Creek in the City of Mequon, Mole Creek in the Town of Saukville, and Ulao Creek in the Town and Village of Grafton. This increase in revenue is for: 1) Professional Services (e.g., laboratory testing).

Department Head Signature

Rob Holyoke
TYPE IN Oversight Committee Chairperson's Name

Oversight Committee Members

Date of Meeting

Finance Committee Members

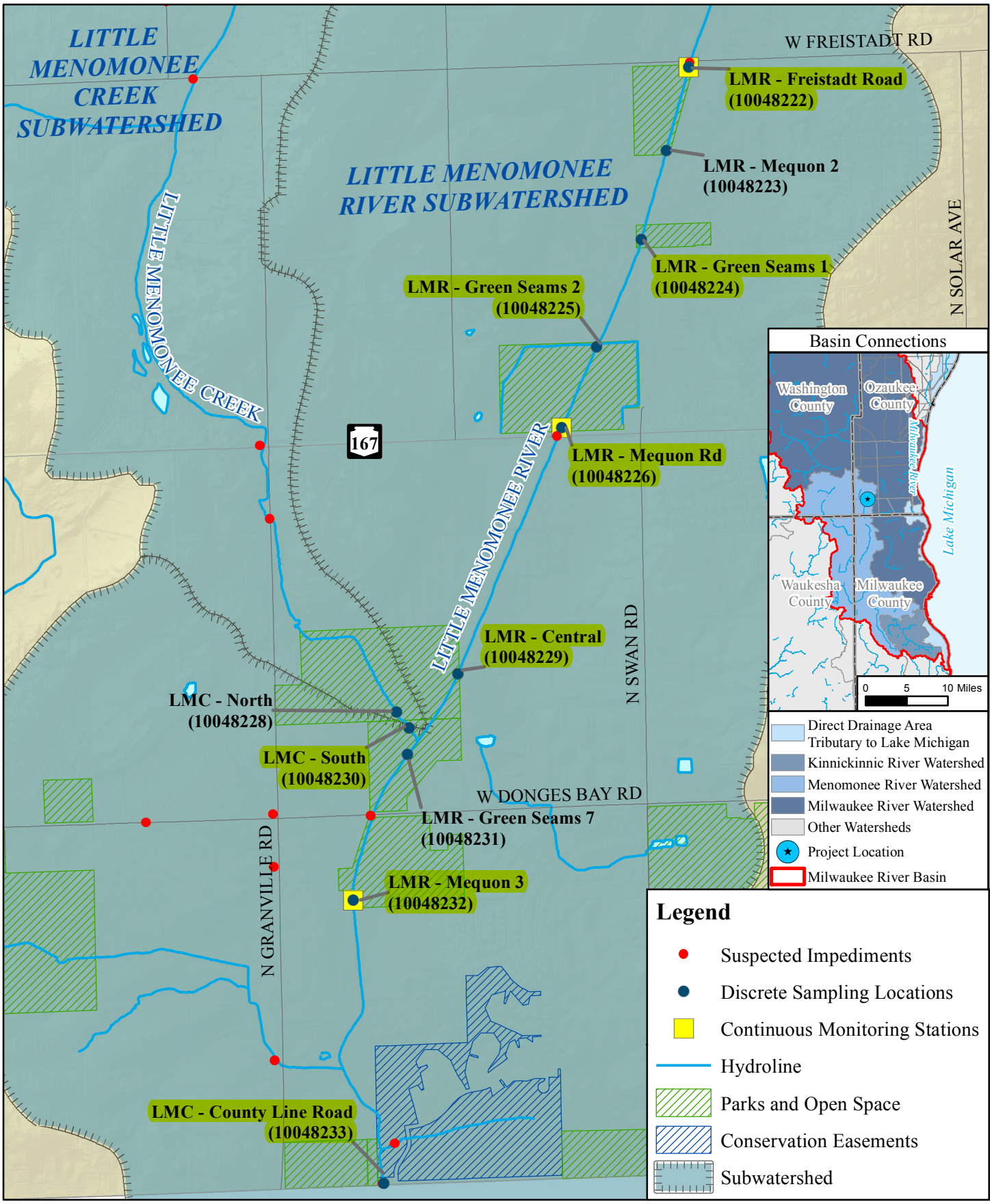
Date of Meeting

Date Amended: _____

Budget Amended By: _____

Attachment: BA_2024_NRC03072024_WDNR_SWP_WQMonitoringGrant_BA_FinalATS022024

Little Menomonee River and Creek Water Quality Sampling Locations



Attachment: P&P_Dept_SurfaceWaterPlanning2023_Application_Maps

OZAUKEE COUNTY PLANNING AND PARKS

OZAUKEE FISH PASSAGE PROGRAM

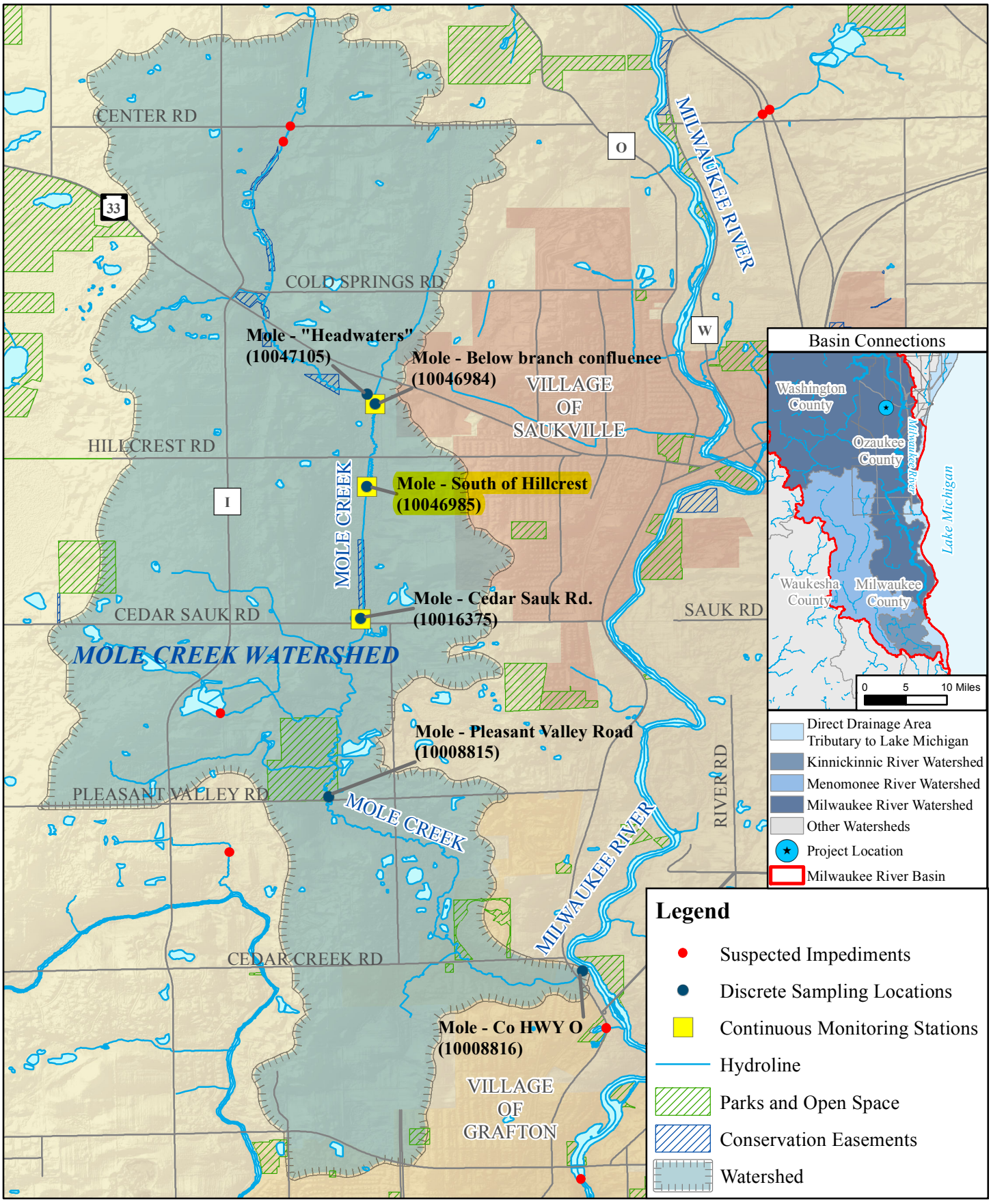
0 1,250 2,500 5,000 Feet

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Map Produced By: Ozaukee County Planning and Parks Department
9/4/2019

Highlighted sites proposed for monitoring in WDNR SWP FY24 Grant Application

Mole Creek Water Quality Sampling Locations



Attachment: P&P_Dept_SurfaceWaterPlanning2023_Application_Maps

OZAUKEE COUNTY PLANNING AND PARKS

OZAUKEE FISH PASSAGE PROGRAM

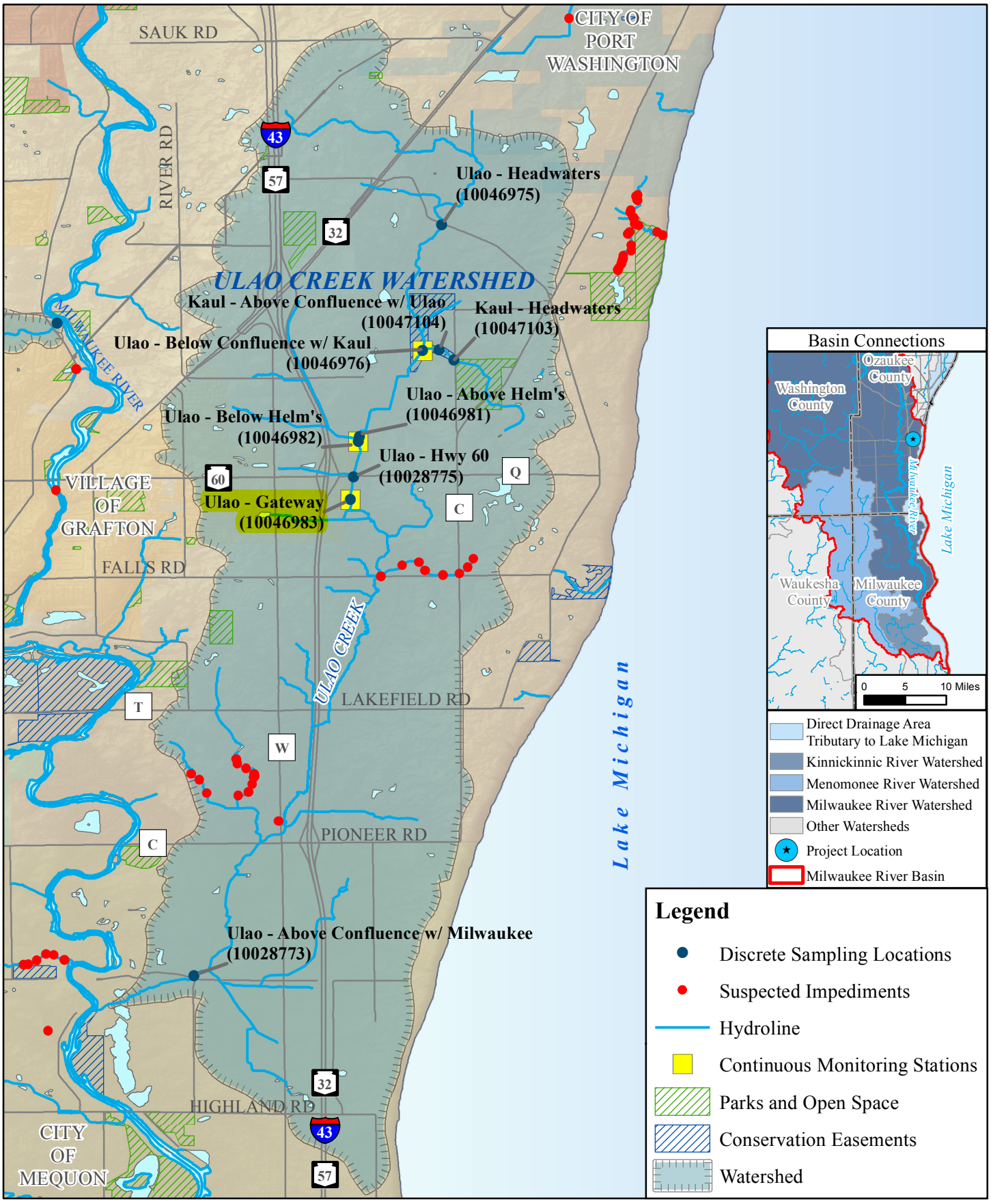
0 2,500 5,000 10,000 Feet

N

Map Produced By: Ozaukee County Planning and Parks Department
9/4/2019

Highlighted sites proposed for monitoring in WDNR SWP FY24 Grant Application

Ulao Creek Water Quality Sampling Locations



OZAUKEE COUNTY PLANNING AND PARKS

OZAUKEE FISH PASSAGE PROGRAM

0 3,500 7,000 14,000 Feet

N

Map Produced By: Ozaukee County Planning and Parks Department
9/4/2019

Highlighted sites proposed for monitoring in WDNR SWP FY24 Grant

Attachment: P&P_Dept_SurfaceWaterPlanning2023_Application_Maps

Natural Resources Committee

AGENDA INFORMATION SHEET

AGENDA DATE: **March 7, 2024**
DEPARTMENT: **Planning and Parks**
DIRECTOR: **Andrew Struck**
PREPARER: **Andrew Struck**

Agenda Summary Increase of Revenue Budget Amendment for a Wisconsin Department of Natural Resources Surface Water Management – Surface Water Restoration Grant to Support Stream Restoration Activities in Tendick Nature Park

BACKGROUND INFORMATION: The Ozaukee County - Planning and Parks Department (Department) was awarded a grant from the Wisconsin Department of Natural Resources (WDNR) Surface Water Management (SWM) Surface Water Restoration (SWR) grant program to support County-sponsored fish and wildlife habitat restoration projects. Specifically, this grant will support County activities to conduct stream restoration activities on Tendick Creek in coordination with wetland enhancement activities in Tendick Nature Park in the Town of Saukville. Secured Fund for Lake Michigan (FFLM) grant funding has supported design and engineering and construction activities for five completed fish passage impediment removal or restoration projects on Tendick Creek. The Department has also worked with consultants to complete design and engineering plans for stream and wetland restoration and enhancement work on and adjacent to Tendick Creek as an essential next step in improving the overall ecological diversity and sustainability of the watershed. The WDNR SWM SWR grant will support Department activities to remeander and restore a reach of degraded stream channel on Tendick Creek in Tendick Nature Park upstream of County Trunk Highway O to provide in-stream diversity and a sustainable gradient in conjunction with wetland and floodplain reconnection and restoration.

ANALYSIS: The total WDNR SWM SWR grant award is $25,000. The Ozaukee County Natural Resources Committee unanimously approved the submittal and acceptance of the WDNR SWM WR grant at its September 7, 2023 meeting (Ayes: Holyoke, Jobs, Matera, Ross, Schoessow) and the Ozaukee County Board of Supervisors unanimously approved Resolution 23-26 at its October 4, 2023 meeting (Ayes - 21, Nays - 0, Absent - 5). The WDNR SWM SWR grants cover up to 75% of the total project cost with a funding cap of $25,000. Project match will be provided by a secured FFLM grant ($8,333) for a total project cost of $33,333. There have been no changes to the budget or project scope since grant submittal; however, the original application for the stream restoration work was submitted under the WDNR SWM Management Plan Implementation category and WDNR staff indicated this project would be more compatible with the SWR category, as reflected in the grant award.

FISCAL IMPACT: Balance Current Year: NONE (Additional Program Revenue - $25,000)

Next Year's Estimated Cost: NONE

FUNDING SOURCE: County Levy: Non-County Levy: X

Indicate source: Secured WDNR SWM SWR and FFLM grants.

RECOMMENDED MOTION: Approve and recommend to the Ozaukee County Board of Supervisors the budget amendment for the Wisconsin Department of Natural Resources Surface Water Management - Surface Water Restoration grant to support stream restoration activities in Tendick Nature County Park.

ATTACHMENTS:

- Inc Rev WDNR Stream Tendick #2 of 4 (PDF)
- P&P_Dept_TendickCreekandWetlandRestorationPlans (PDF)
- P&P_Dept_Tendick Master Map, BMW 2.15.2024 (PDF)

NATURAL RESOURCES COMMITTEE

Budget Amendment Request Committee Approval Form

Resolution No: _____

Period Transfer Recorded: _____

TO: Finance Committee

FROM: Planning and Parks Department
Department Name

Date of Request: 2/14/2024

Type of Budget Amendment (check one)

Increase of Revenue:	X
Fund Transfer:	
Supplemental Appropriations:	

Debit / Expense				Credit / Revenue			
Acct #	222-01-01-55103-000	$	25,000	A/C #	222-01-01-42310-000	$	25,000
	-	/	-		-	/	-
	Pre-request Account's Budget	/	*Changed To*		*Pre-request Account's Budget*	/	*Changed To*
Cost Ctr & A/C Desc	Highway - Grounds Maintenance / Construction			Cost Ctr & A/C Desc	State Aid - 2024 WDNR SWM SWR Tendick Creek		
Acct #		$		A/C #		$	-
	-	/	-		-	/	-
	Pre-request Account's Budget	/	*Changed To*		*Pre-request Account's Budget*	/	*Changed To*
Cost Ctr & A/C Desc				Cost Ctr & A/C Desc			
Acct #		$		A/C #		$	-
	-	/	-		-	/	-
	Pre-request Account's Budget	/	*Changed To*		*Pre-request Account's Budget*	/	*Changed To*
Cost Ctr & A/C Desc				Cost Ctr & A/C Desc			
Acct #		$	-	A/C #		$	-
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	Pre-request Account's Budget	/	*Changed To*		*Pre-request Account's Budget*	/	*Changed To*
Cost Ctr & A/C Desc				Cost Ctr & A/C Desc			
Acct #		$	-	A/C #		$	-
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	-	/	-		-	/	-
	Pre-request Account's Budget	/	*Changed To*		*Pre-request Account's Budget*	/	*Changed To*
Cost Ctr & A/C Desc				Cost Ctr & A/C Desc			
	Total Debits:		25,000		Total Credits:		25,000

Reason for Request (Be Specific). Also fill out Support Document for County Board.

This is an increase in revenue for a grant received (Project #222-0006-00044) from the Wisconsin Department of Natural Resources Surface Water Management - Surface Water Restoration grant program to support stream restoration activities in Tendick Nature Park in the Town of Saukville. This increase in revenue is for: 1) Highway - Grounds Maintenance / Construction for project implementation.

Department Head Signature

Rob Holyoke
TYPE IN Oversight Committee Chairperson's Name

Oversight Committee Members

Date of Meeting

Finance Committee Members

Date of Meeting

Date Amended: _____

Budget Amended By: _____

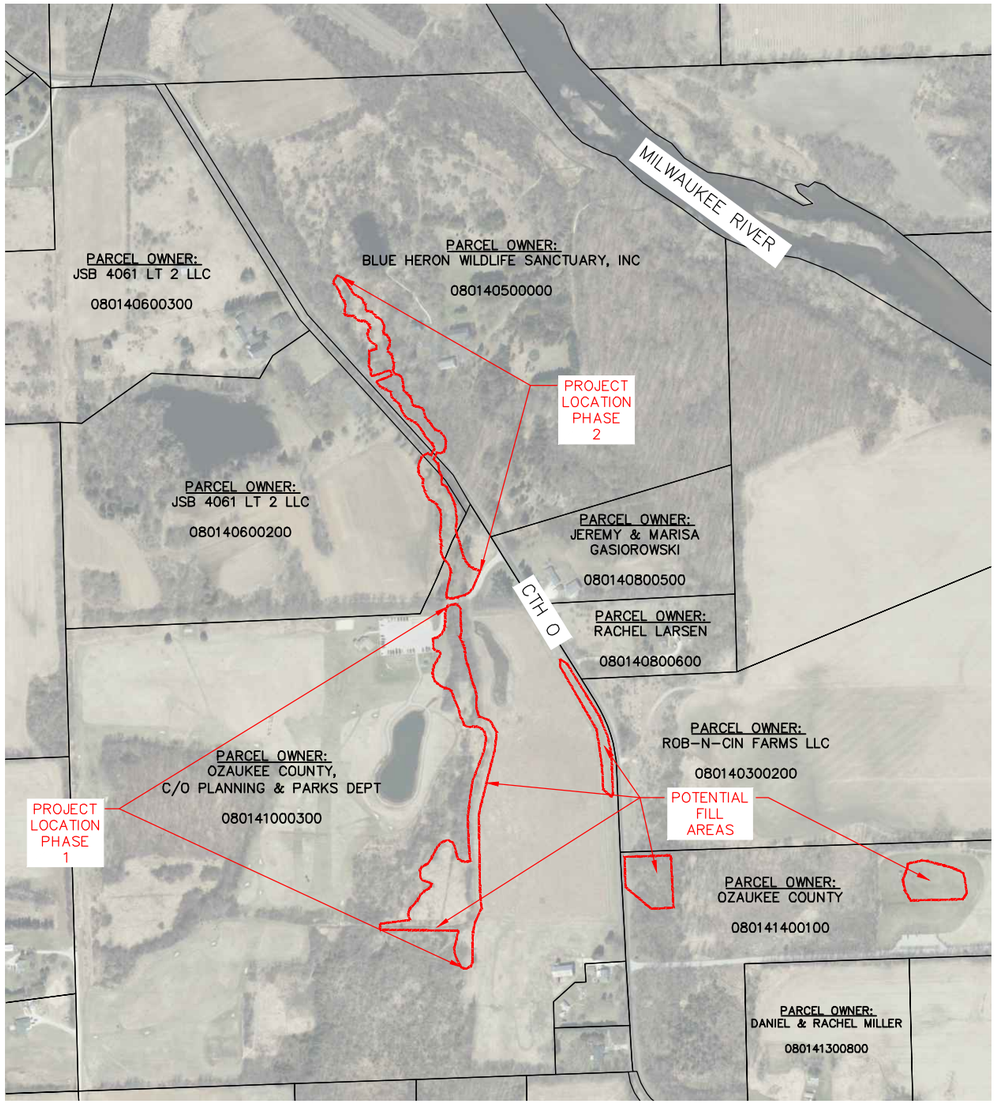
Attachment: Inc Rev WDNR Stream Tendick #2 of 4 (P&PDept_IncRev_BA_WDNR_SWM_SWRGrant_StreamRestoration_Tendick)

OZAUKEE COUNTY, WISCONSIN

FISH PASSAGE RESTORATION
TENDICK CREEK

AT: ~750' DOWNSTREAM & ~2,000' UPSTREAM OF CTH O

SEC 14, TOWNSHIP 11 NORTH, RANGE 21 EAST,
TOWN OF SAUKVILLE, OZAUKEE COUNTY, WISCONSIN



Project Quantity Table			
Item	Unit	Phase 1 Quantity	Phase 2 Quantity
6'x6' Box Culvert	LF	-	48
12' Box Culvert End Section	EA	-	2
Box Culvert Drop Wall	EA	-	1
72" Dia. Corrugated Metal Pipe	LF	-	54
Trackout Control Device	EA	1	3
Silt Fence	LF	1,453	593
Medium Riprap	CY	-	103
Channel Bed Material	CY	80	160
Culvert Bed Material	CY	-	50
Non-woven Coir Fabric (North American Green C125BN, Nedia C400B, or equivalent)	SY	2830	1,110
Project Earthwork Table			
Existing Stream Length	LF	494	1,417
Proposed Stream Length	LF	624	1,688
Disturbance Area	SF	211,676	126,544
South Wetland Scrape Earthwork	CY	182 (Cut)	-
North Wetland Scrape Earthwork	CY	1,434 (Cut)	-
Stream Earthwork (17+00-23+50)	CY	1,822 (Cut)	-
Stream Earthwork (10+00-17+00)	CY	-	1,285 (Cut)
Stream Earthwork (6+00-10+00)	CY	-	251 (Cut)
Stream Earthwork (0+00-6+00)	CY	-	292 (Cut)
Potential Fill Areas*			
East-West Path Between Wetland Scapes	CY	126 (Fill)	-
North-South Path Along North Wetland Scape	CY	290 (Fill)	-
CTH O Embankment (West)	CY	1,260 (Fill)	-
CTH O Embankment Fill (East)/East Park Parcel	CY	2,271 (Fill)	-
Archery Range (East Park Parcel)	CY	-	2,433 (Fill)

*Fill areas to be used as needed. Any additional fill will be trucked to Hawthorne Hills County Park. All volumes assume 1:1 ratio. No shrink or swell factors are associated with volumes. Contractor to use descretion for fill locations and amount.

Fund for Lake Michigan
Clearly making a deep impact.

HORIZONTAL DATUM: NAD 1983 STATE PLANE WISCONSIN SOUTH

VERTICAL DATUM: NAVD88
EXISTING CONTOURS SHOWN ON PLANS WERE GENERATED FROM 2015 OZAUKEE COUNTY LIDAR

OWNER:

OZAUKEE COUNTY PLANNING & PARKS DEPT.
121 W. MAIN STREET
PORT WASHINGTON, WI 53074
PH.: 262/238-8257

OZAUKEE COUNTY PLANNING AND PARKS
OZAUKEE FISH PASSAGE PROGRAM

ENGINEERS:

R.A. SMITH, INC
16745 W BLUEMOUND RD
BROOKFIELD, WI 53005-5938
PH.: 262/781-1000
FAX: 262/781-8466

FISH CREEK RESTORATION LLC
PH.: 608/977-1856
FISH CREEK RESTORATION

N

GRAPHIC SCALE
2500 0 2500 5000 10000
(IN FEET)

PLAN INDEX

SHEET NO.	DESCRIPTION
COVER	COVER SHEET
01-03	OVERVIEW PLAN
04	TYPICAL STREAM PLAN, PROFILE, & SECTION
05-14	ROUGHENED CHANNEL PLAN & PROFILE
15	WETLAND SCRAPES
16-18	CROSS SECTIONS
19	BLUE HERON DRIVEWAY PLAN & PROFILE
20	CTH O CULVERT PLAN & PROFILE
21-22	DETAILS

BENCHMARK	NORTHING	EASTING	ELEVATION
6	524096.601	2511649.828	801.77
1001	525586.154	2511467.198	781.03
1002	523786.860	2511743.671	801.38
1003	524101.386	2511816.871	801.50
1004	524447.082	2511891.827	803.81
1005	524855.362	2511641.119	793.24
1006	525192.511	2511395.343	786.37
1007	525435.996	2511334.647	781.94
1008	525203.391	2511509.466	789.82
1009	523914.008	2511634.879	801.75
1010	523806.847	2511862.451	801.12
1011	524291.097	2511786.544	799.13
1012	524689.774	2511834.293	803.65
1059	525346.500	2511263.939	783.63

Know what's below. Call before you dig.

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DESCRIPTION	DATE

raSmith
CREATIVITY BEYOND ENGINEERING
16745 W. Bluemound Road
Brookfield, WI 53005-5938
(262) 781-1000
rasmith.com
Brookfield, WI | Milwaukee, WI | Appleton, WI | Madison, WI
Cedarburg, WI | Naperville, IL | Irvine, CA

FISH PASSAGE RESTORATION
OZAUKEE COUNTY, WISCONSIN

TENDICK CREEK
COVER SHEET

WISCONSIN
RILEY R. STONE
E-46601-6
SUMMIT
WI
2-12-24
PROFESSIONAL ENGINEER

WISCONSIN
BENJAMIN O. LEE
E-44656-6
MADISON
WISCONSIN
2/12/24
PROFESSIONAL ENGINEER

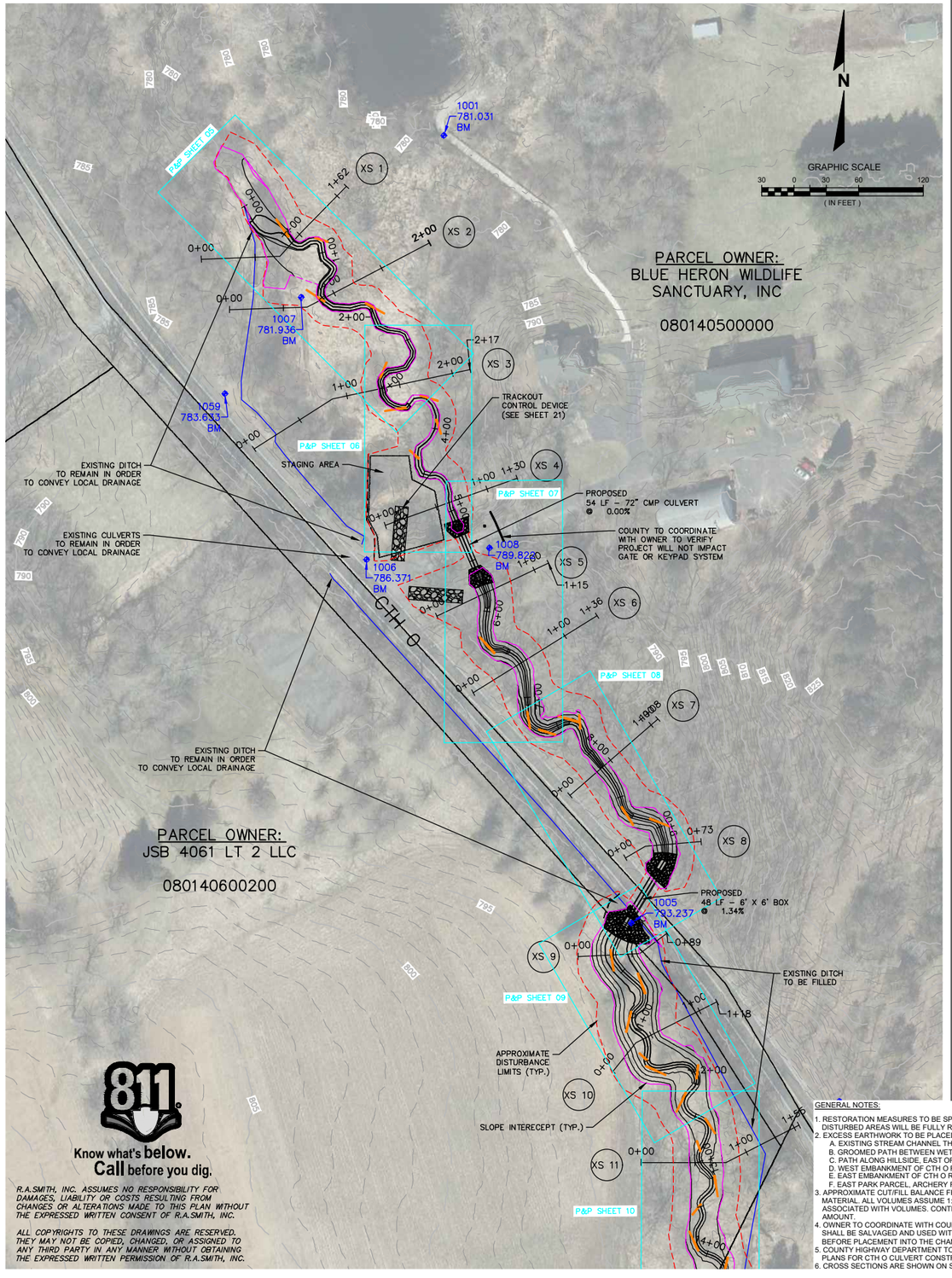
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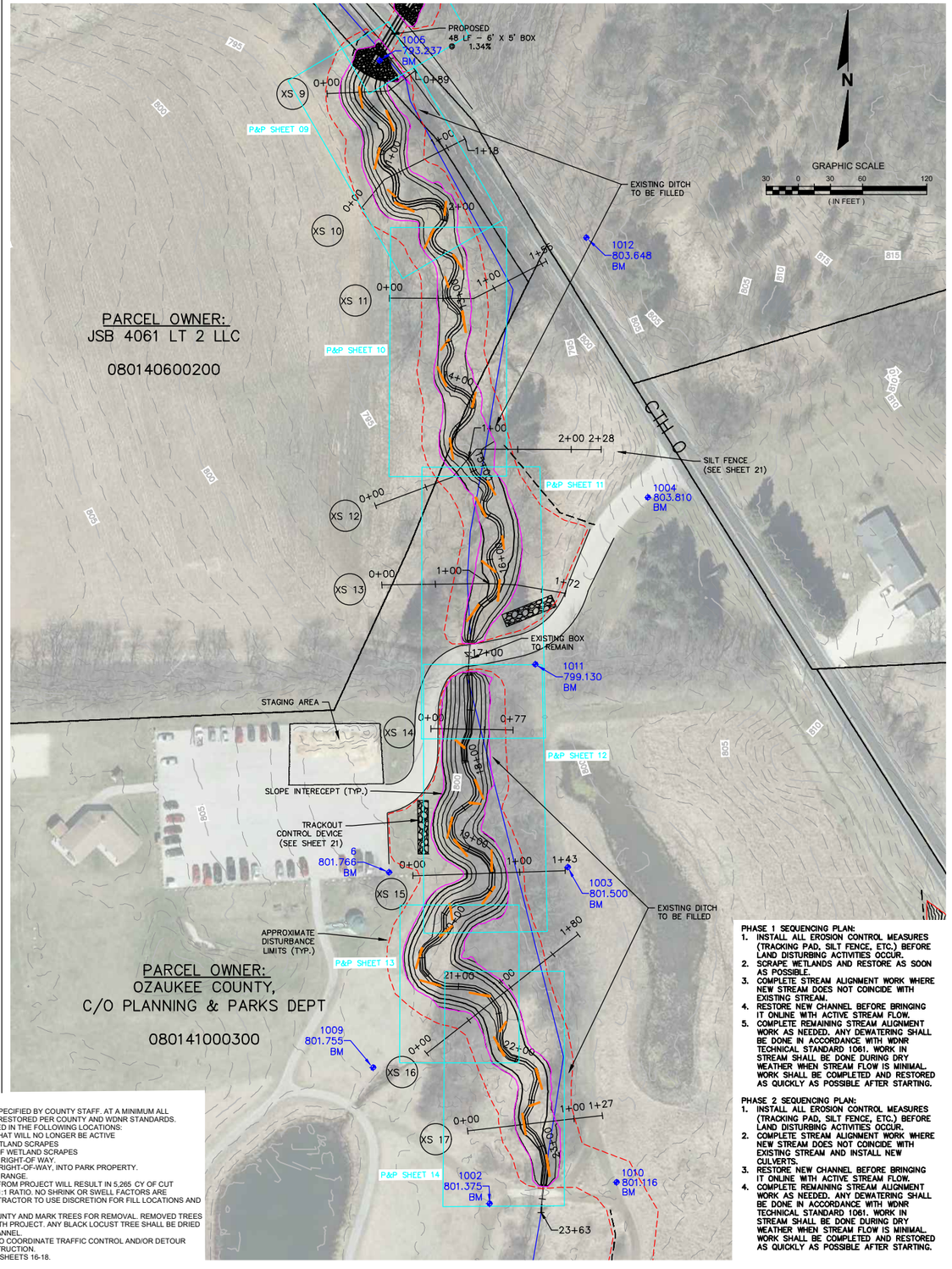
DATE: 02/12/2024
SCALE: 1" = 300'
JOB NO. 2210877
PROJECT MANAGER: RILEY R. STONE, P.E.
DESIGNED BY: RRS/BL
CHECKED BY: RRS/BL

SHEET NUMBER
COVER

Attachment: P&P_Dept_TendickCreekandWetlandRestorationPlans

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GENERAL NOTES:

1. RESTORATION MEASURES TO BE SPECIFIED BY COUNTY STAFF. AT A MINIMUM ALL DISTURBED AREAS WILL BE FULLY RESTORED PER COUNTY AND WDNR STANDARDS.
2. EXCESS EARTHWORK TO BE PLACED IN THE FOLLOWING LOCATIONS:
   A. EXISTING STREAM CHANNEL THAT WILL NO LONGER BE ACTIVE
   B. GROOMED PATH BETWEEN WETLAND SCRAPES
   C. PATH ALONG HILLSIDE, EAST OF WETLAND SCRAPES
   D. WEST EMBANKMENT OF CTH O RIGHT-OF WAY.
   E. EAST EMBANKMENT OF CTH O RIGHT-OF-WAY, INTO PARK PROPERTY.
   F. EAST PARK PARCEL, ARCHERY RANGE.
3. APPROXIMATE CUT/FILL BALANCE FROM PROJECT WILL RESULT IN 5,265 CY OF CUT MATERIAL. ALL VOLUMES ASSUME 1:1 RATIO. NO SHRINK OR SWELL FACTORS ARE ASSOCIATED WITH VOLUMES. CONTRACTOR TO USE DISCRETION FOR FILL LOCATIONS AND AMOUNT.
4. OWNER TO COORDINATE WITH COUNTY AND MARK TREES FOR REMOVAL. REMOVED TREES SHALL BE SALVAGED AND USED WITH PROJECT. ANY BLACK LOCUST TREE SHALL BE DRIED BEFORE PLACEMENT INTO THE CHANNEL.
5. COUNTY HIGHWAY DEPARTMENT TO COORDINATE TRAFFIC CONTROL AND/OR DETOUR PLANS FOR CTH O CULVERT CONSTRUCTION.
6. CROSS SECTIONS ARE SHOWN ON SHEETS 16-18.

PHASE 1 SEQUENCING PLAN:
1. INSTALL ALL EROSION CONTROL MEASURES (TRACKING PAD, SILT FENCE, ETC.) BEFORE LAND DISTURBING ACTIVITIES OCCUR.
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FISH PASSAGE RESTORATION
OZAUKEE COUNTY, WISCONSIN

TENDICK CREEK
OVERVIEW PLAN

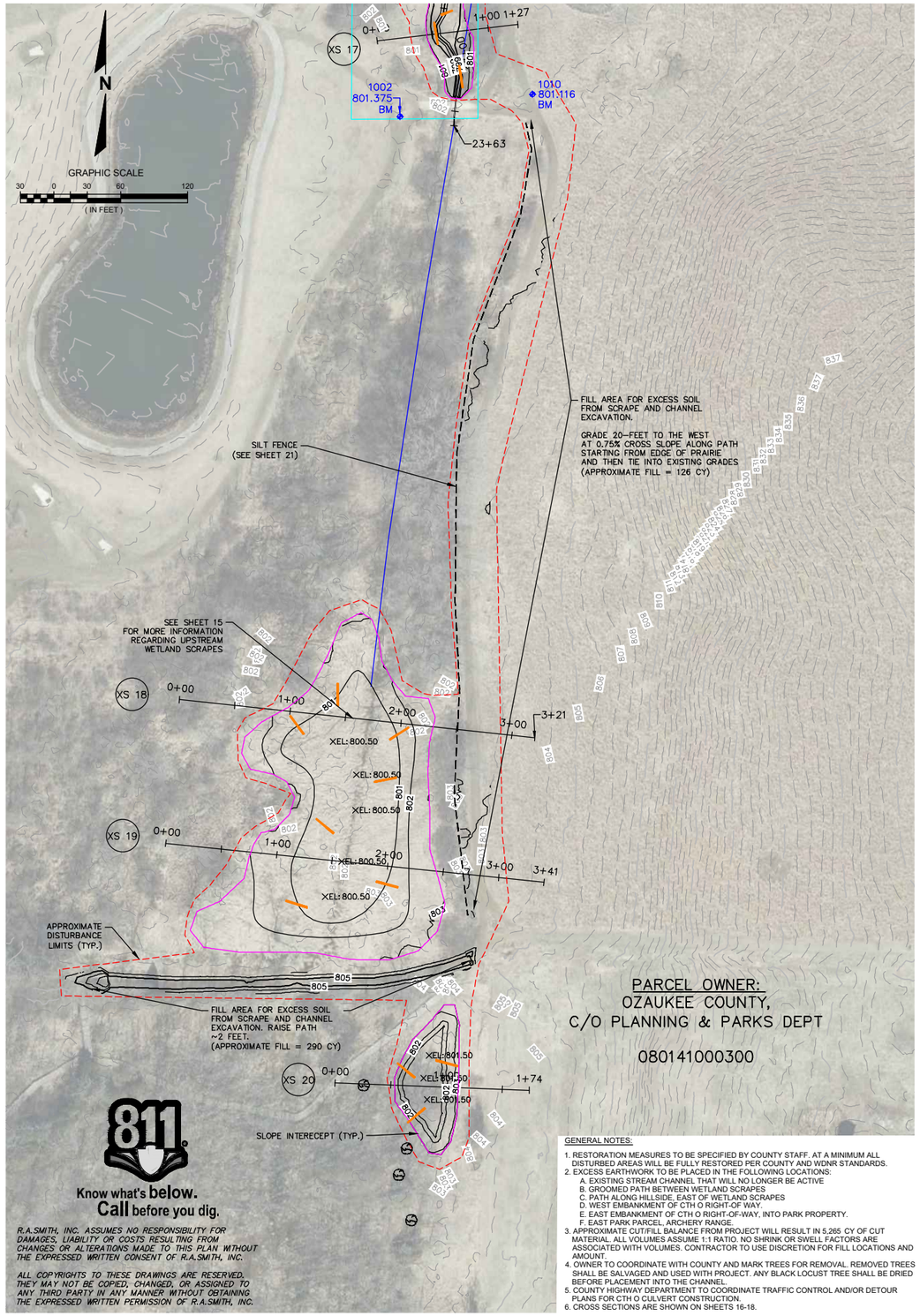
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DATE: 02/12/2024
SCALE: 1" = 60'
JOB NO. 2210877
PROJECT MANAGER: RILEY R. STONE, P.E.
DESIGNED BY: RRS/BL
CHECKED BY: RRS/BL

SHEET NUMBER
01

Attachment: P&P_Dept_TendickCreekandWetlandRestorationPlans

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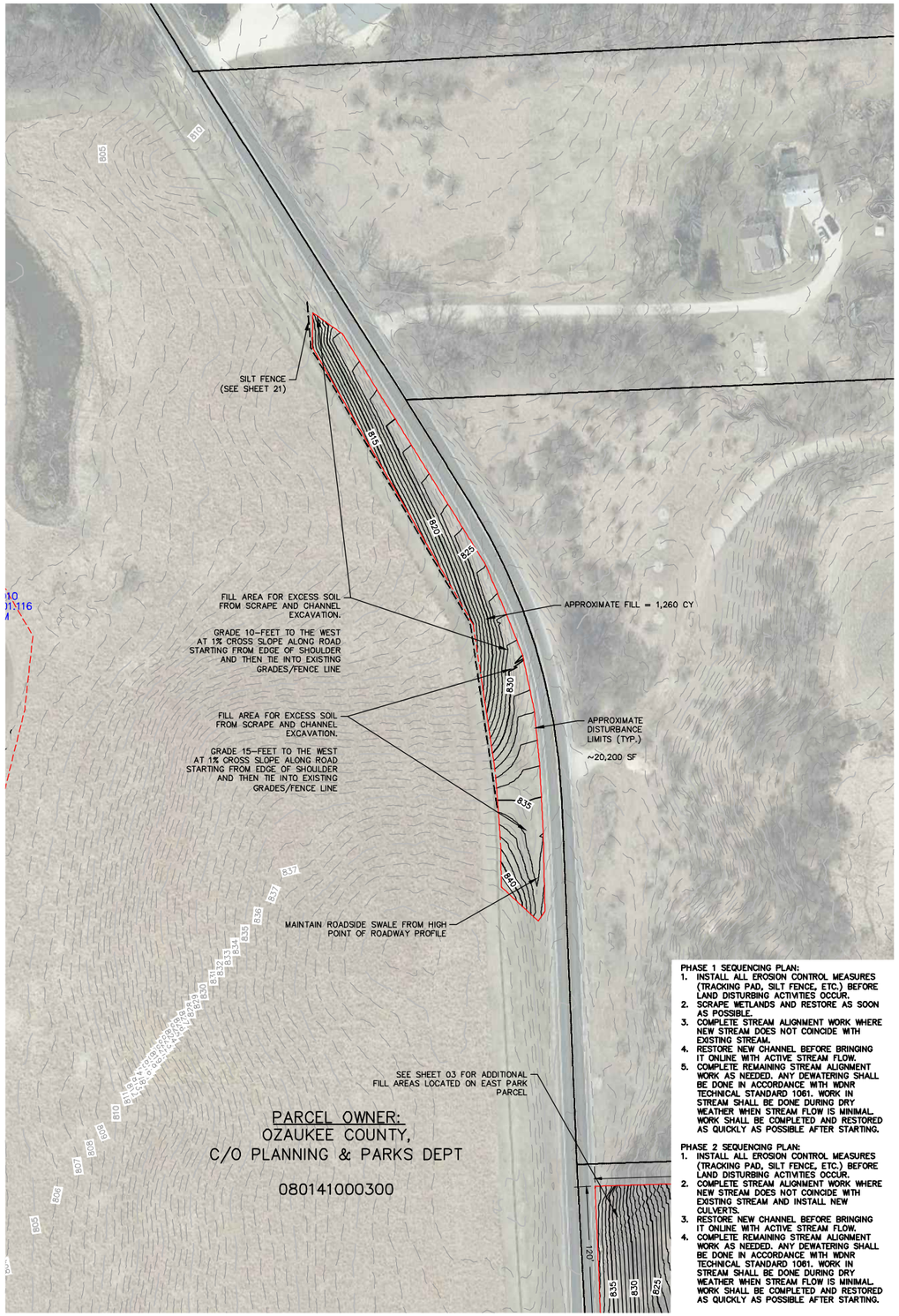


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DATE	DESCRIPTION

raSmith
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rasmith.com
Brookfield, WI | Milwaukee, WI | Appleton, WI | Madison, WI
Cedarburg, WI | Naperville, IL | Irvine, CA

FISH PASSAGE RESTORATION
OZAUKEE COUNTY, WISCONSIN

TENDICK CREEK
OVERVIEW PLAN

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DATE: 02/12/2024
SCALE: 1" = 60'
JOB NO. 2210877
PROJECT MANAGER: RILEY R. STONE, P.E.
DESIGNED BY: RRS/BL
CHECKED BY: RRS/BL

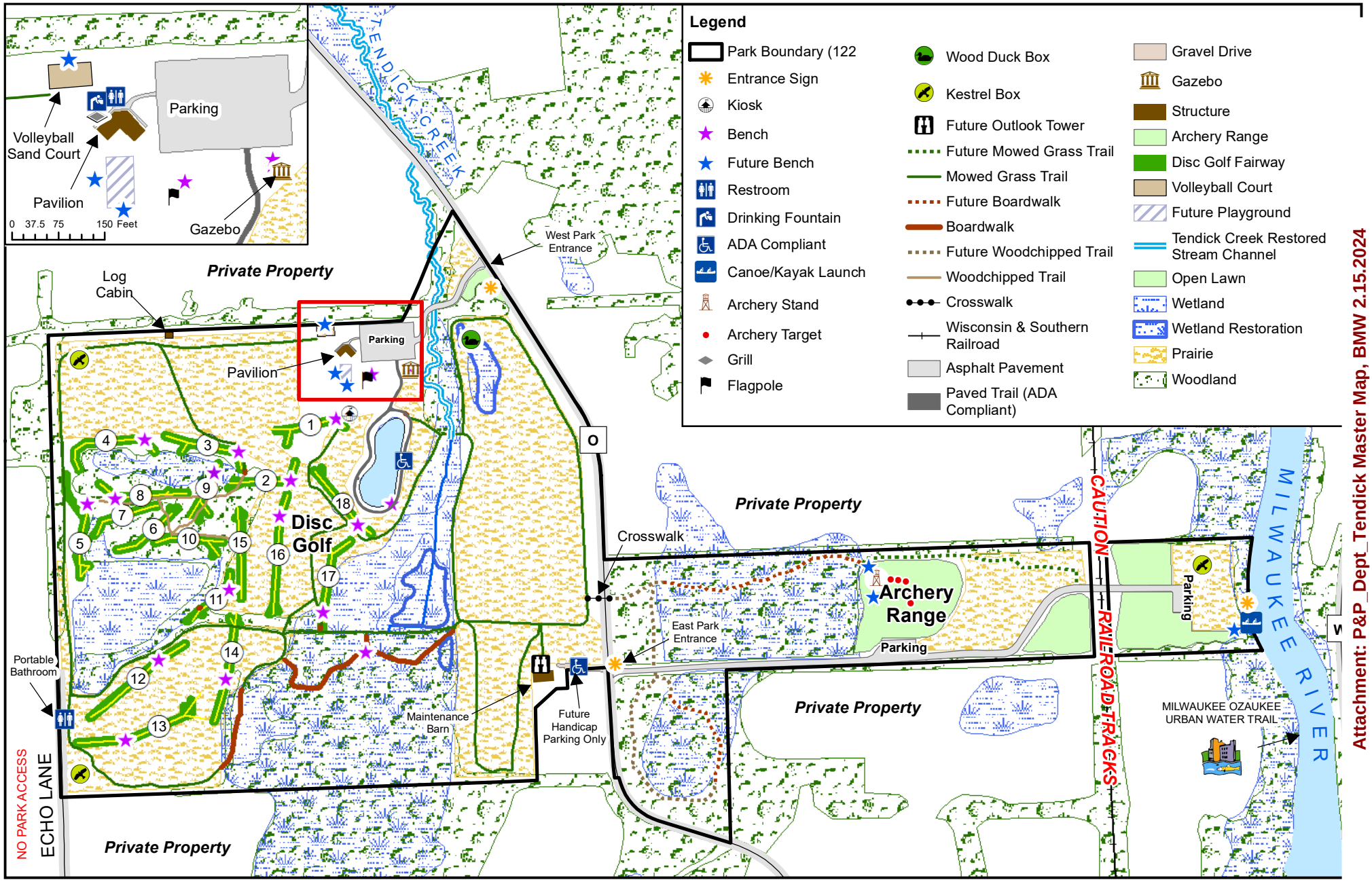
SHEET NUMBER
02

Attachment: P&P_Dept_TendickCreekandWetlandRestorationPlans

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Tendick Nature County Park

3919 County Highway O, Saukville, WI 53080



Attachment: P&P_Dept_Tendick Master Map, BMW 2.15.2024

0 250 500 1,000 Feet

N

Ozaukee County Parks Reservations:

Map Produced B
Ozaukee County Planni
and Parks Department

Natural Resources Committee

AGENDA INFORMATION SHEET

AGENDA DATE: **March 7, 2024**
DEPARTMENT: **Planning and Parks**
DIRECTOR: **Andrew Struck**
PREPARER: **Andrew Struck**

Agenda Summary Increase of Revenue Budget Amendment for a Wisconsin Department of Natural Resources Surface Water Management – Management Plan Implementation Grant to Support Wetland Enhancement Activities in Tendick Nature Park

BACKGROUND INFORMATION: The Ozaukee County - Planning and Parks Department (Department) was awarded a grant from the Wisconsin Department of Natural Resources (WDNR) Surface Water Management (SWM) Management Plan Implementation (MPI) grant program to support County-sponsored fish and wildlife habitat restoration projects. Specifically, this grant will support County activities to conduct wetland enhancement activities adjacent to Tendick Creek in coordination with stream restoration activities in Tendick Nature Park in the Town of Saukville. Secured Fund for Lake Michigan (FFLM) grant funding has supported design and engineering and construction activities for five completed fish passage impediment removal or restoration projects on Tendick Creek. The Department has also worked with consultants to complete design and engineering plans for stream and wetland restoration and enhancement work on and adjacent to Tendick Creek as an essential next step in improving the overall ecological diversity and sustainability of the watershed. The WDNR SWM MPI grant will support Department activities to complete wetland enhancement activities adjacent to Tendick Creek in Tendick Nature Park in conjunction with stream remeandering and restoration activities.

ANALYSIS: The total WDNR SWM MPI grant award is $50,000. The Ozaukee County Natural Resources Committee unanimously approved the submittal and acceptance of the WDNR SWM MPI grant at its September 7, 2023 meeting (Ayes: Holyoke, Jobs, Matera, Ross, Schoessow) and the Ozaukee County Board of Supervisors unanimously approved Resolution 23-25 at its October 4, 2023 meeting (Ayes - 21, Nays - 0, Absent - 5). The WDNR SWM MPI grants cover up to 75% of the total project cost with a funding cap of $50,000. Project match will be provided by a secured FFLM grant ($16,666) for a total project cost of $66,666. There have been no changes to the budget or project scope since grant submittal; however, the original application for the wetland enhancement work was submitted under the WDNR SWM Surface Water Restoration category and WDNR staff indicated this project would be more compatible with the MPI category, as reflected in the grant award.

FISCAL IMPACT: Balance Current Year: NONE (Additional Program Revenue - $50,000)

Next Year's Estimated Cost: NONE

FUNDING SOURCE: County Levy: Non-County Levy: X

Indicate source: Secured DNR SWM MPI and FFLM grants

RECOMMENDED MOTION: Approve and recommend to the Ozaukee County Board of Supervisors the budget amendment for the Wisconsin Department of Natural Resources Surface Water Management - Management Plan Implementation grant to support wetland restoration and enhancement activities in Tendick Nature County Park.

ATTACHMENTS:

- BA_2024_NRC03072024_WDNR_SWM_MPI_TendickWetlands_BA_ATSFinal022224 (PDF)
- P&P_Dept_Tendick Master Map, BMW 2.15.2024 (PDF)
- P&P_Dept_TendickCreekandWetlandRestorationPlans (PDF)

NATURAL RESOURCES COMMITTEE

Budget Amendment Request Committee Approval Form

Resolution No: _____

Period Transfer Recorded: _____

TO: Finance Committee

FROM: Planning and Parks Department
Department Name

Date of Request: 2/14/2024

Type of Budget Amendment (check one)

Increase of Revenue:	X
Fund Transfer:	
Supplemental Appropriations:	

Debit / Expense				Credit / Revenue			
Acct #	222-01-01-51101-000	$ 10,000		A/C #	222-01-01-42310-000	$ 50,000	
	-	/ -			-	/ -	
	Pre-request Account's Budget	/ Changed To			Pre-request Account's Budget	/ Changed To	
Cost Ctr & A/C Desc	Regular Salaries & Wages			Cost Ctr & A/C Desc	State Aid - 2024 WDNR SWM MPI Tendick Wetlands		
Acct #	222-01-01-55103-000	$ 40,000		A/C #		$ -	
	-	/ -			-	/ -	
	Pre-request Account's Budget	/ Changed To			Pre-request Account's Budget	/ Changed To	
Cost Ctr & A/C Desc	Highway - Grounds Maintenance / Construction			Cost Ctr & A/C Desc			
Acct #		$		A/C #		$ -	
	-	/ -			-	/ -	
	Pre-request Account's Budget	/ Changed To			Pre-request Account's Budget	/ Changed To	
Cost Ctr & A/C Desc				Cost Ctr & A/C Desc			
Acct #		$ -		A/C #		$ -	
	-	/ -			-	/ -	
	Pre-request Account's Budget	/ Changed To			Pre-request Account's Budget	/ Changed To	
Cost Ctr & A/C Desc				Cost Ctr & A/C Desc			
Acct #		$ -		A/C #		$ -	
	-	/ -			-	/ -	
	Pre-request Account's Budget	/ Changed To			Pre-request Account's Budget	/ Changed To	
Cost Ctr & A/C Desc				Cost Ctr & A/C Desc			
Acct #		$ -		A/C #		$ -	
	-	/ -			-	/ -	
	Pre-request Account's Budget	/ Changed To			Pre-request Account's Budget	/ Changed To	
Cost Ctr & A/C Desc				Cost Ctr & A/C Desc			
	Total Debits:	50,000			Total Credits:	50,000	

Reason for Request (Be Specific). Also fill out Support Document for County Board.

This is an increase in revenue for a grant received (Project #222-0006-00043) from the Wisconsin Department of Natural Resources Surface Water Management - Management Plan Implementation grant program to support wetland enhancement activities in Tendick Nature Park in the Town of Saukville. This increase in revenue is for: 1) Regular Salaries & Wages; and, 2) Highway - Grounds Maintenance / Construction for project implementation.

Department Head Signature

Rob Holyoke
TYPE IN Oversight Committee Chairperson's Name

Oversight Committee Members

Date of Meeting

Finance Committee Members

Date of Meeting

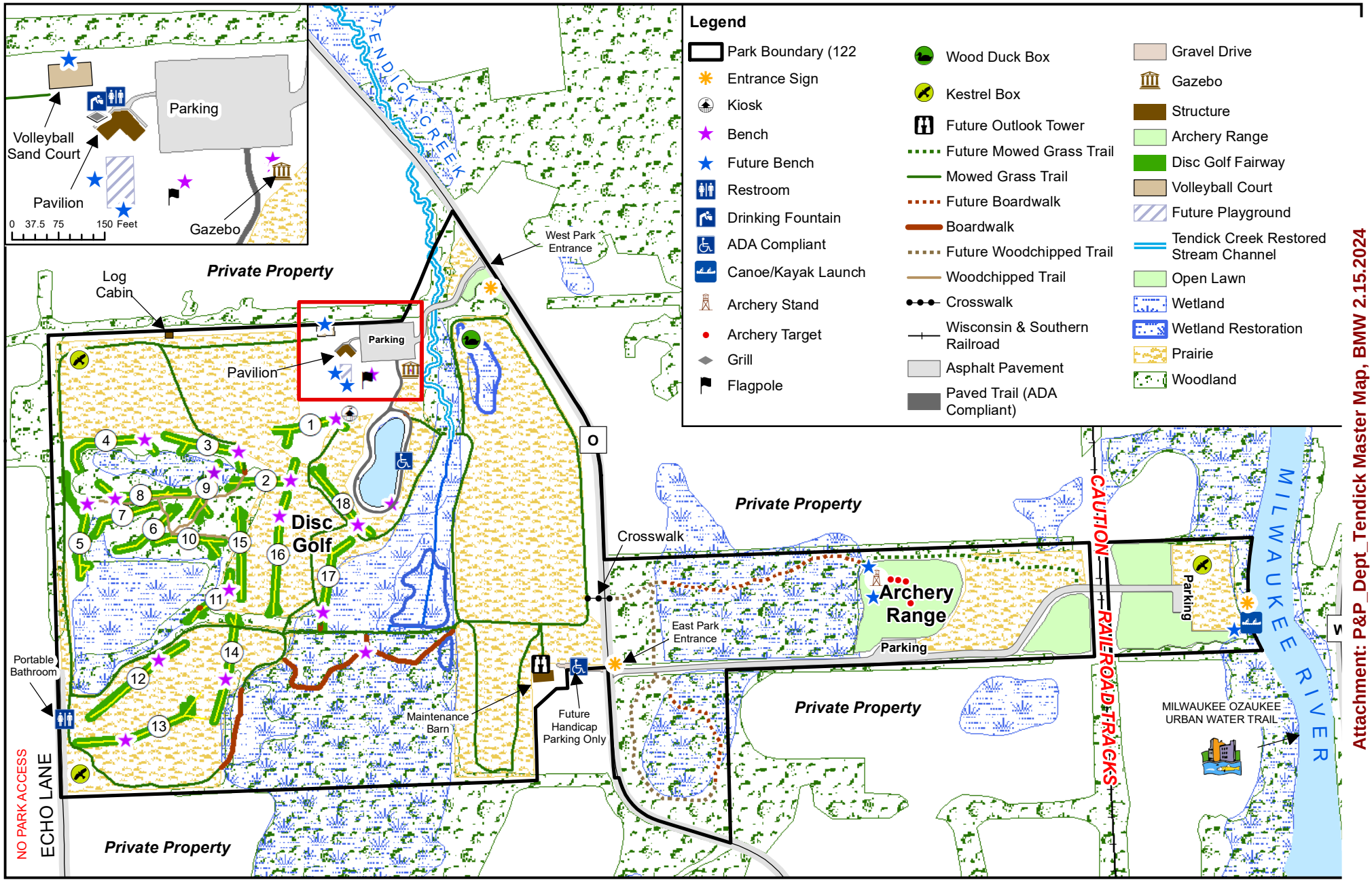
Date Amended: _____

Budget Amended By: _____

Attachment: BA_2024_NRC03072024_WDNR_SWM_MPI_TendickWetlands_BA_ATSFinal022224

Tendick Nature County Park

3919 County Highway O, Saukville, WI 53080



Attachment: P&P_Dept_Tendick Master Map, BMW 2.15.2024

0 250 500 1,000 Feet

N

Ozaukee County Parks Reservations:

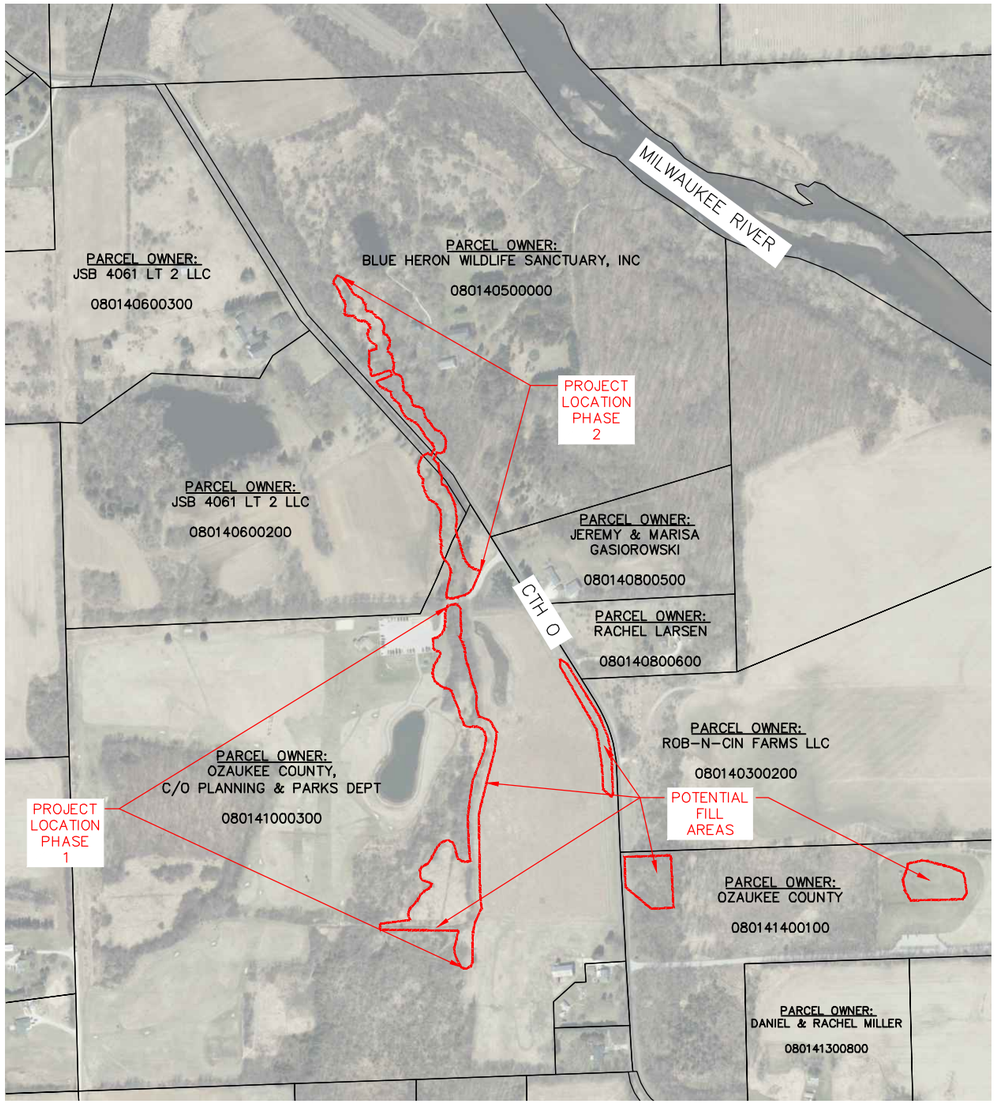
Map Produced B
Ozaukee County Planni
and Parks Department

OZAUKEE COUNTY, WISCONSIN

FISH PASSAGE RESTORATION
TENDICK CREEK

AT: ~750' DOWNSTREAM & ~2,000' UPSTREAM OF CTH O

SEC 14, TOWNSHIP 11 NORTH, RANGE 21 EAST,
TOWN OF SAUKVILLE, OZAUKEE COUNTY, WISCONSIN



Project Quantity Table			
Item	Unit	Phase 1 Quantity	Phase 2 Quantity
6'x6' Box Culvert	LF	-	48
12' Box Culvert End Section	EA	-	2
Box Culvert Drop Wall	EA	-	1
72" Dia. Corrugated Metal Pipe	LF	-	54
Trackout Control Device	EA	1	3
Silt Fence	LF	1,453	593
Medium Riprap	CY	-	103
Channel Bed Material	CY	80	160
Culvert Bed Material	CY	-	50
Non-woven Coir Fabric (North American Green C125BN, Nedia C400B, or equivalent)	SY	2830	1,110
Project Earthwork Table			
Existing Stream Length	LF	494	1,417
Proposed Stream Length	LF	624	1,688
Disturbance Area	SF	211,676	126,544
South Wetland Scrape Earthwork	CY	182 (Cut)	-
North Wetland Scrape Earthwork	CY	1,434 (Cut)	-
Stream Earthwork (17+00-23+50)	CY	1,822 (Cut)	-
Stream Earthwork (10+00-17+00)	CY	-	1,285 (Cut)
Stream Earthwork (6+00-10+00)	CY	-	251 (Cut)
Stream Earthwork (0+00-6+00)	CY	-	292 (Cut)
Potential Fill Areas*			
East-West Path Between Wetland Scapes	CY	126 (Fill)	-
North-South Path Along North Wetland Scape	CY	290 (Fill)	-
CTH O Embankment (West)	CY	1,260 (Fill)	-
CTH O Embankment Fill (East)/East Park Parcel	CY	2,271 (Fill)	-
Archery Range (East Park Parcel)	CY	-	2,433 (Fill)

*Fill areas to be used as needed. Any additional fill will be trucked to Hawthorne Hills County Park. All volumes assume 1:1 ratio. No shrink or swell factors are associated with volumes. Contractor to use descretion for fill locations and amount.

Fund for Lake Michigan
Clearly making a deep impact.

HORIZONTAL DATUM: NAD 1983 STATE PLANE WISCONSIN SOUTH

VERTICAL DATUM: NAVD88
EXISTING CONTOURS SHOWN ON PLANS WERE GENERATED FROM 2015 OZAUKEE COUNTY LIDAR

OWNER:

OZAUKEE COUNTY PLANNING & PARKS DEPT.
121 W. MAIN STREET
PORT WASHINGTON, WI 53074
PH.: 262/238-8257

OZAUKEE COUNTY PLANNING AND PARKS
OZAUKEE FISH PASSAGE PROGRAM

ENGINEERS:

R.A. SMITH, INC
16745 W BLUEMOUND RD
BROOKFIELD, WI 53005-5938
PH.: 262/781-1000
FAX: 262/781-8466

FISH CREEK RESTORATION LLC
PH.: 608/977-1856
FISH CREEK RESTORATION

N

GRAPHIC SCALE
2500 0 2500 5000 10000
(IN FEET)

PLAN INDEX

SHEET NO.	DESCRIPTION
COVER	COVER SHEET
01-03	OVERVIEW PLAN
04	TYPICAL STREAM PLAN, PROFILE, & SECTION
05-14	ROUGHENED CHANNEL PLAN & PROFILE
15	WETLAND SCRAPES
16-18	CROSS SECTIONS
19	BLUE HERON DRIVEWAY PLAN & PROFILE
20	CTH O CULVERT PLAN & PROFILE
21-22	DETAILS

BENCHMARK	NORTHING	EASTING	ELEVATION
6	524096.601	2511649.828	801.77
1001	525586.154	2511467.198	781.03
1002	523786.860	2511743.671	801.38
1003	524101.386	2511816.871	801.50
1004	524447.082	2511891.827	803.81
1005	524855.362	2511641.119	793.24
1006	525192.511	2511395.343	786.37
1007	525435.996	2511334.647	781.94
1008	525203.391	2511509.466	789.82
1009	523914.008	2511634.879	801.75
1010	523806.847	2511862.451	801.12
1011	524291.097	2511786.544	799.13
1012	524689.774	2511834.293	803.65
1059	525346.500	2511263.939	783.63

Know what's below. Call before you dig.

WISCONSIN PROFESSIONAL ENGINEER
BENJAMIN O. LEE
E-44656-6
MADISON
WISCONSIN
2/12/24

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DESCRIPTION | DATE

raSmith
CREATIVITY BEYOND ENGINEERING
16745 W. Bluemound Road
Brookfield, WI 53005-5938
(262) 781-1000
rasmith.com
Brookfield, WI | Milwaukee, WI | Appleton, WI | Madison, WI
Cedarburg, WI | Naperville, IL | Irvine, CA

FISH PASSAGE RESTORATION
OZAUKEE COUNTY, WISCONSIN

TENDICK CREEK
COVER SHEET

WISCONSIN PROFESSIONAL ENGINEER
RILEY R. STONE
E-46601-6
SUMMIT
WI
2-12-24

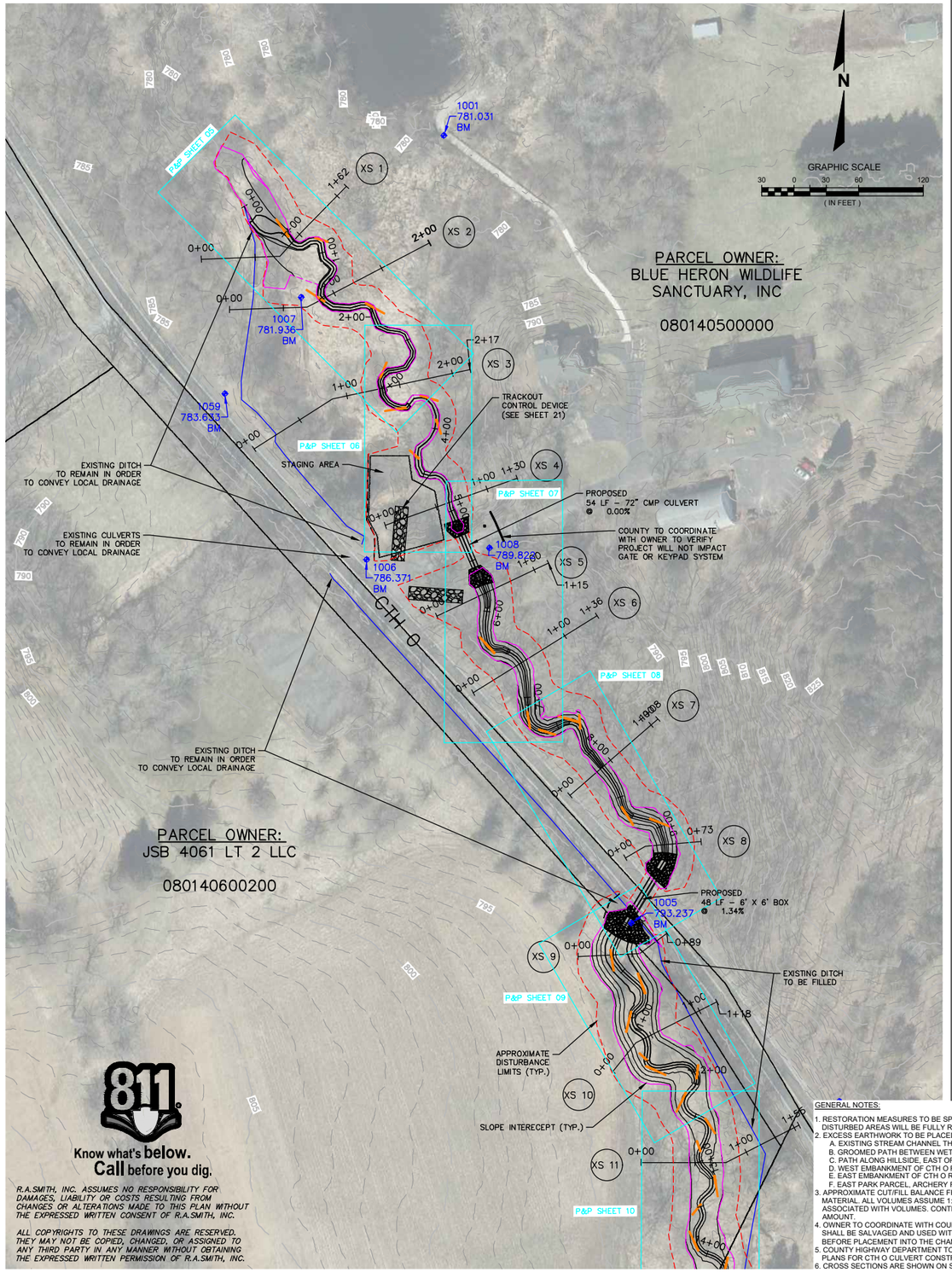
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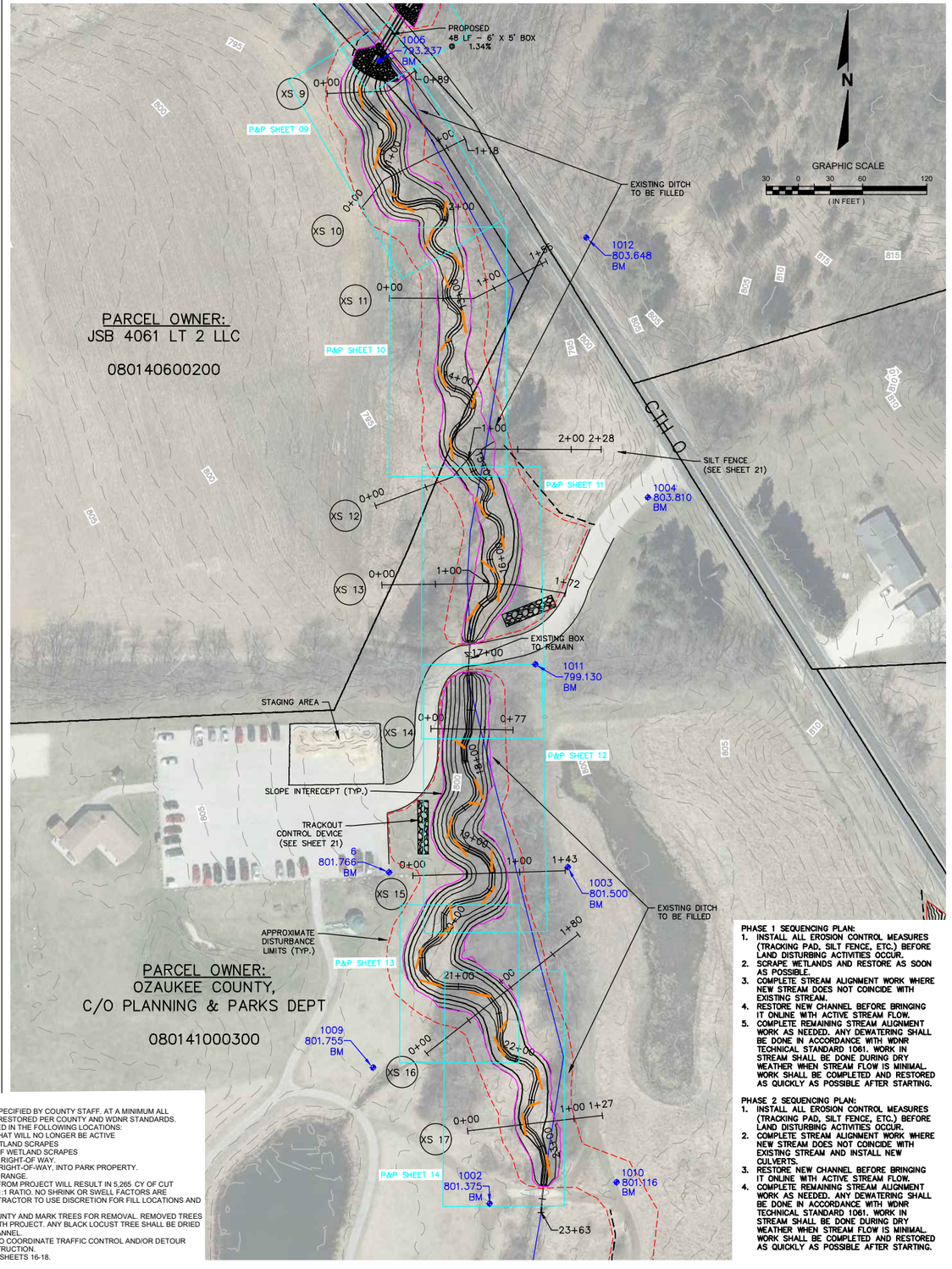
DATE: 02/12/2024
SCALE: 1" = 300'
JOB NO. 2210877
PROJECT MANAGER: RILEY R. STONE, P.E.
DESIGNED BY: RRS/BL
CHECKED BY: RRS/BL

SHEET NUMBER
COVER

Attachment: P&P_Dept_TendickCreekandWetlandRestorationPlans

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GENERAL NOTES:

1. RESTORATION MEASURES TO BE SPECIFIED BY COUNTY STAFF. AT A MINIMUM ALL DISTURBED AREAS WILL BE FULLY RESTORED PER COUNTY AND WDNR STANDARDS.
2. EXCESS EARTHWORK TO BE PLACED IN THE FOLLOWING LOCATIONS:
   A. EXISTING STREAM CHANNEL THAT WILL NO LONGER BE ACTIVE
   B. GROOMED PATH BETWEEN WETLAND SCRAPES
   C. PATH ALONG HILLSIDE, EAST OF WETLAND SCRAPES
   D. WEST EMBANKMENT OF CTH O RIGHT-OF WAY.
   E. EAST EMBANKMENT OF CTH O RIGHT-OF-WAY, INTO PARK PROPERTY.
   F. EAST PARK PARCEL, ARCHERY RANGE.
3. APPROXIMATE CUT/FILL BALANCE FROM PROJECT WILL RESULT IN 5,265 CY OF CUT MATERIAL. ALL VOLUMES ASSUME 1:1 RATIO. NO SHRINK OR SWELL FACTORS ARE ASSOCIATED WITH VOLUMES. CONTRACTOR TO USE DISCRETION FOR FILL LOCATIONS AND AMOUNT.
4. OWNER TO COORDINATE WITH COUNTY AND MARK TREES FOR REMOVAL. REMOVED TREES SHALL BE SALVAGED AND USED WITH PROJECT. ANY BLACK LOCUST TREE SHALL BE DRIED BEFORE PLACEMENT INTO THE CHANNEL.
5. COUNTY HIGHWAY DEPARTMENT TO COORDINATE TRAFFIC CONTROL AND/OR DETOUR PLANS FOR CTH O CULVERT CONSTRUCTION.
6. CROSS SECTIONS ARE SHOWN ON SHEETS 16-18.

PHASE 1 SEQUENCING PLAN:
1. INSTALL ALL EROSION CONTROL MEASURES (TRACKING PAD, SILT FENCE, ETC.) BEFORE LAND DISTURBING ACTIVITIES OCCUR.
2. SCRAPE WETLANDS AND RESTORE AS SOON AS POSSIBLE.
3. COMPLETE STREAM ALIGNMENT WORK WHERE NEW STREAM DOES NOT COINCIDE WITH EXISTING STREAM.
4. RESTORE NEW CHANNEL BEFORE BRINGING IT ONLINE WITH ACTIVE STREAM FLOW.
5. COMPLETE REMAINING STREAM ALIGNMENT WORK AS NEEDED. ANY DEWATERING SHALL BE DONE IN ACCORDANCE WITH WDNR TECHNICAL STANDARD 1061. WORK IN STREAM SHALL BE DONE DURING DRY WEATHER WHEN STREAM FLOW IS MINIMAL. WORK SHALL BE COMPLETED AND RESTORED AS QUICKLY AS POSSIBLE AFTER STARTING.

PHASE 2 SEQUENCING PLAN:
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16745 W. Bluemound Road
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(262) 781-1000
rasmith.com
Brookfield, WI | Milwaukee, WI | Appleton, WI | Madison, WI
Cedarburg, WI | Naperville, IL | Irvine, CA

FISH PASSAGE RESTORATION
OZAUKEE COUNTY, WISCONSIN

TENDICK CREEK
OVERVIEW PLAN

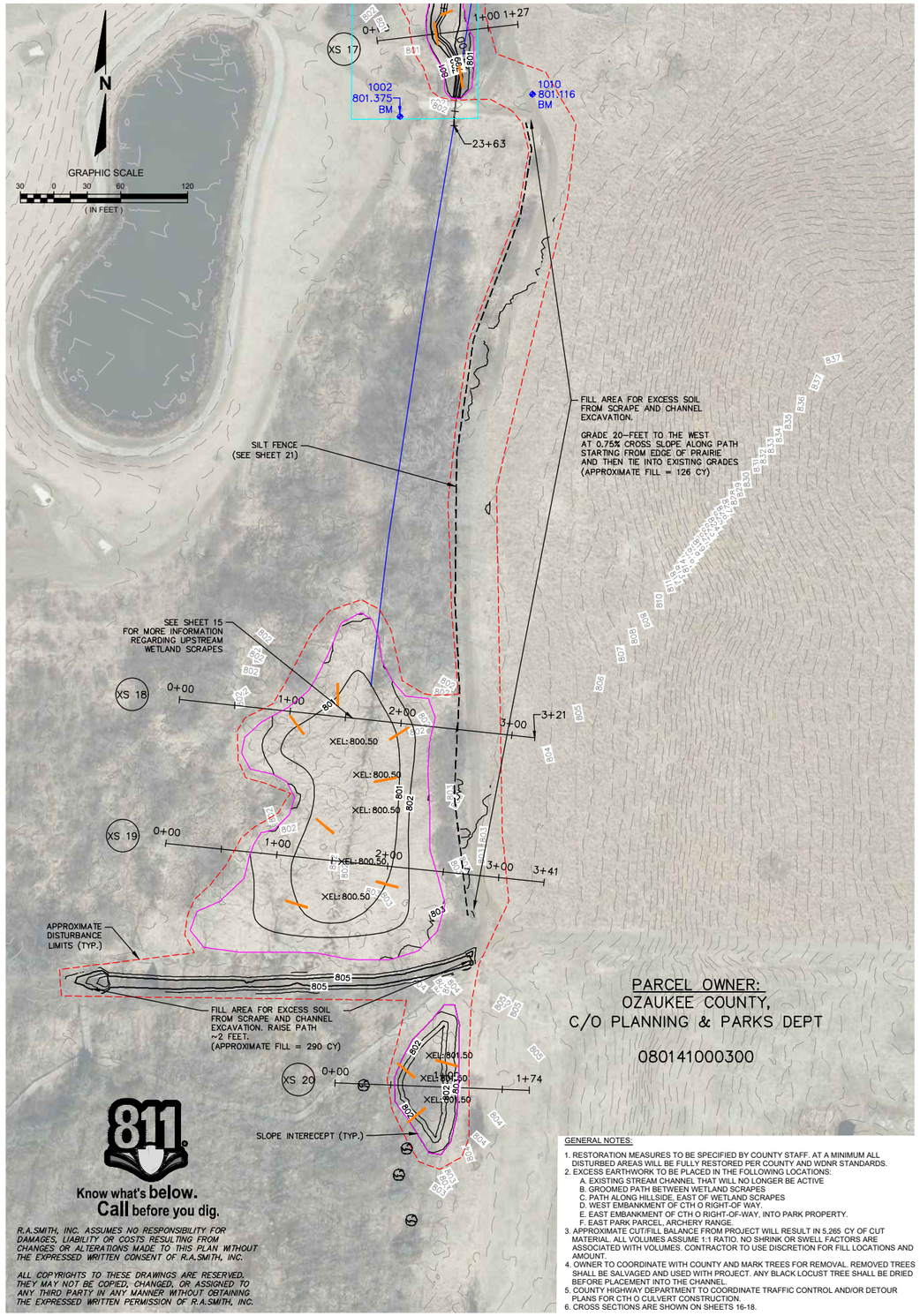
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DATE: **02/12/2024**
SCALE: **1" = 60'**
JOB NO. **2210877**
PROJECT MANAGER: **RILEY R. STONE, P.E.**
DESIGNED BY: **RRS/BL**
CHECKED BY: **RRS/BL**

SHEET NUMBER
01

Attachment: P&P_Dept_TendickCreekandWetlandRestorationPlans

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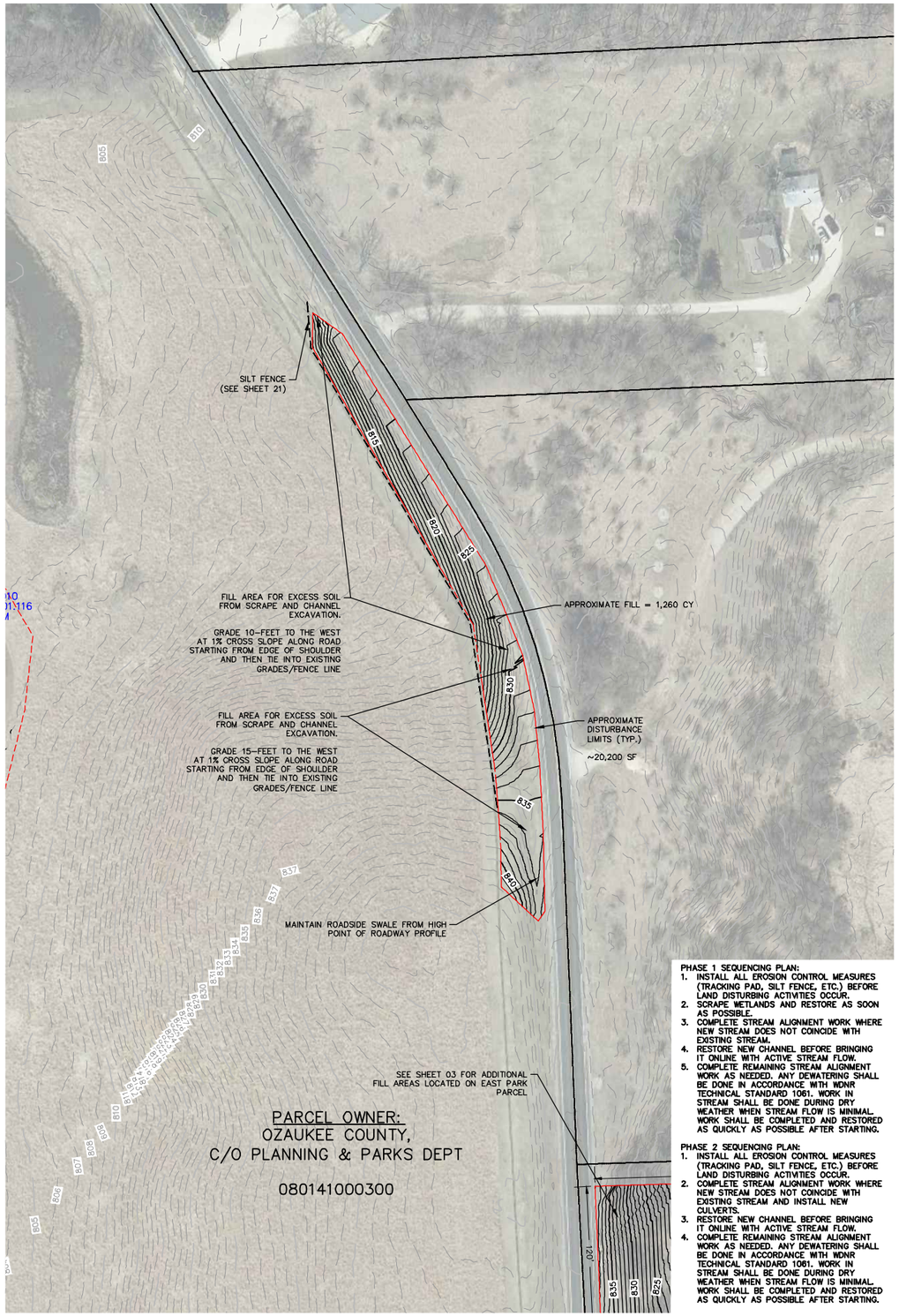
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   E. EAST EMBANKMENT OF CTH O RIGHT-OF-WAY, INTO PARK PROPERTY.
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rasmith.com
Brookfield, WI | Milwaukee, WI | Appleton, WI | Madison, WI
Cedarburg, WI | Naperville, IL | Irvine, CA

FISH PASSAGE RESTORATION
OZAUKEE COUNTY, WISCONSIN

TENDICK CREEK
OVERVIEW PLAN

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DATE: 02/12/2024
SCALE: 1" = 60'
JOB NO. 2210877
PROJECT MANAGER: RILEY R. STONE, P.E.
DESIGNED BY: RRS/BL
CHECKED BY: RRS/BL

SHEET NUMBER
02

Attachment: P&P_Dept_TendickCreekandWetlandRestorationPlans

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Natural Resources Committee

AGENDA INFORMATION SHEET

AGENDA DATE: **March 7, 2024**
DEPARTMENT: **Planning and Parks**
DIRECTOR: **Andrew Struck**
PREPARER: **Andrew Struck**

Agenda Summary Submittal and Acceptance of a National Fish and Wildlife Foundation Sustain Our Great Lakes Grant for Invasive Vegetation Management in the Upper Milwaukee River Project Area

BACKGROUND INFORMATION: The Ozaukee County Planning and Parks Department (Department) proposes to submit a grant application to the National Fish and Wildlife Foundation (NFWF) Sustain Our Great Lakes (SOGL) program to continue to improve the local ecology within the Upper Milwaukee River (UMR) Project Area, by controlling and managing 200 acres of aquatic and terrestrial invasive vegetation. The 2,325 acres UMR Project Area encompasses ecologically significant lands including five Ozaukee County Parks (Ehlers County Park, Hawthorne Hills County Park and Golf Course, the Milwaukee River Oxbow Nature Preserve County Park, Tendick Nature County Park and Waubedonia County Park) (602 total acres), the Milwaukee River Mesic Woods Natural Area (NA-2) (377 acres) and 995 acres of SEWRPC designated primary environmental corridor along 6.6 miles of Milwaukee River corridor. Specifically, this grant will support funding of County staff operations and contracting with private contractors and conservation corps teams (i.e. AmeriCorps NCCC, Milwaukee Community Service Corps, Great Lakes CCC and Wisconsin Youth Conservation Corps) for assistance with invasive species management in the UMR Project Area. A NFWF SOGL funding category under this opportunity prioritizes the retreatment/management of previously treated areas under recent NFWF SOGL funding and the expansion of existing invasive management efforts adjacent to or strategically connected to existing control efforts. The Department received a NFWF SOGL grant in 2020 for invasive species management throughout the Ozaukee County Park System and the proposed project would be a continuation of recent management and expansion to new areas. This project is supported by the County Park and Open Space Plan <https://www.co.ozaukee.wi.us/645/Park-Open-Space> <https://www.co.ozaukee.wi.us/645/Park-Open-Space> within the standards set for the preservation and management of open spaces including natural areas, critical species habitats, primary and secondary environmental corridors and isolated natural resource areas to maintain their natural value (pages 77 - 92, 111), the Comprehensive Plan for Ozaukee County: 2035 <http://www.sewrpc.org/SEWRPCFiles/Publications/CAPR/capr-285-comp-plan-for-ozaukee-co.pdf> <http://www.sewrpc.org/SEWRPCFiles/Publications/CAPR/capr-285-comp-plan-for-ozaukee-co.pdf> "Invasive Species Issue" with a goal of protecting Ozaukee County's naturally occurring bio-diversity through several programs that outline the control of invasive species (pages 287 - 288) and the Ozaukee Land and Water Resource Management Plan <http://www.ozheroinhelp.org/DocumentCenter/View/212/Ozaukee-Land--Water-Plan-2011-2015?bidId=> <http://www.ozheroinhelp.org/DocumentCenter/View/212/Ozaukee-Land--Water-Plan-2011-2015?bidId=> under objective A "Habitat Protection and Restoration under Goal 1 "Improved Land and Resources" through management of invasive species (pages 4, 53,

57). This project is also supported by the Great Lakes Restoration Initiative Action Plan III <https://www.epa.gov/sites/production/files/2019-10/documents/glri-action-plan-3-201910-30pp.pdf> <https://www.epa.gov/sites/production/files/2019-10/documents/glri-action-plan-3-201910-30pp.pdf> (pages 3, 9-14).

ANALYSIS: NFWF SOGL proposals are due April 18, 2024. The NFWF SOGL request is $200,000. A 1:1 non-federal match is encouraged, with a portion of that to be provided by private foundation and other grant funding (e.g. Southeastern Wisconsin Invasive Species Consortium, Inc. (SEWISC), We Energies Foundation (WEF), Wisconsin Department of Natural Resources (WDNR) - County Conservation Aids (CCA), Fund for Lake Michigan (FLM) and other Private Foundations (to be applied for)) ($31,500) and in-kind County staff time (including GC staff funded by the golf course enterprise fund), contractual (Dept. budget), equipment and supplies (Dept. budget and golf course enterprise fund) ($73,825) for a total project cost of $305,325.

FISCAL IMPACT: Balance Current Year: NONE

Next Year's Cost: NONE (Additional Revenue ($200,000)

FUNDING SOURCE: County Levy _X__ Non-County Levy_X_

Indicate source: Pending NFWF SOGL, SEWISC, WEF, WDNR CCA, FFLM and Other Private Foundation grants and in-kind Department staff time, contractual, equipment and supplies (incl. Golf Course Enterprise Fund)

RECOMMENDED MOTION: Approve the submittal, acceptance and implementation of a grant by the Planning and Parks Department to the National Fish and Wildlife Foundation Sustain Our Great Lakes Program for invasive species management in the Upper Milwaukee River Project Area.

ATTACHMENTS:

- P&P_Dept_NFWFSOGL_Factsheet (PDF)
- AS2024_NRC03072024_GrantApplicationSummary_NFWFSOGL_UMRProjectArea_InvasiveSpeciesMgmt_ATSFinal022224 (PDF)
- P&P_Dept_UpperMilwaukeeRiver_ProjectAreaMap (PDF)

NATURAL RESOURCES COMMITTEE

Sustain Our Great Lakes

NFWF CONTACTS

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Naomi Attaway
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Regional Programs
Naomi.Attaway@nfwf.org
202-595-2496

PARTNERS

- Careus Foundation
- Cleveland-Cliffs
- General Mills
- Ralph C. Wilson Jr. Foundation
- U.S. Environmental Protection Agency
- U.S. Fish and Wildlife Service
- U.S. Forest Service
- USDA Natural Resources Conservation Service

ABOUT NFWF

Chartered by Congress in 1984, the National Fish and Wildlife Foundation (NFWF) protects and restores the nation's fish, wildlife, plants and habitats. Working with federal, corporate and individual partners, NFWF has funded more than 6,000 organizations and generated a total conservation impact of $8.1 billion. NFWF is an equal opportunity provider.



Lake Superior, Minnesota

MISSION

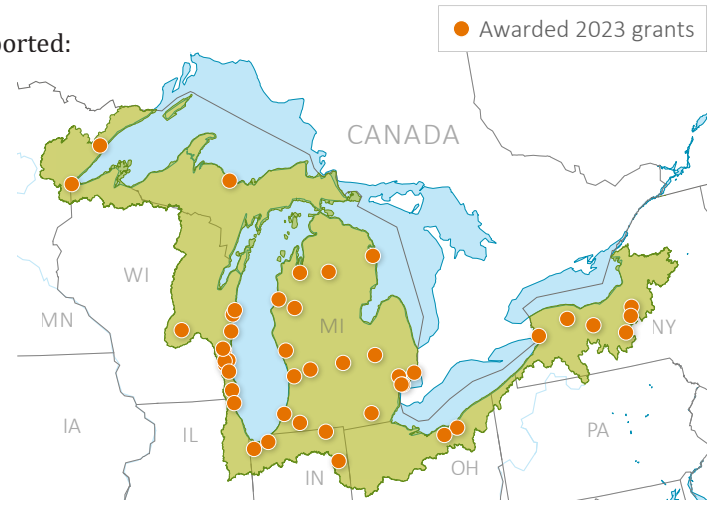
Administered by National Fish and Wildlife Foundation (NFWF), the Sustain Our Great Lakes (SOGL) grant program is a public–private partnership that supports restoration in the Great Lakes Basin. This program receives funding and other support from Careus Foundation, Cleveland-Cliffs, General Mills, Milwaukee Metropolitan Sewerage District, Ralph C. Wilson Jr. Foundation, Walder Foundation, U.S. Environmental Protection Agency, U.S. Fish and Wildlife Service, USDA Forest Service, and USDA Natural Resources Conservation Service. The mission of this program is to restore and enhance fish, wildlife, and habitat in the Great Lakes Basin by leveraging funding, building conservation capacity, and focusing partners and resources toward key ecological issues. A significant portion of program funding is provided by the Great Lakes Restoration Initiative, a federal program designed to conserve, restore and enhance the Great Lakes ecosystem.

PROGRAM ACHIEVEMENTS

To date, SOGL has awarded a total of $128.6 million through 496 grants. Grantees matched SOGL's investment with an additional $155 million, bringing the total on-the-ground conservation impact to more than $283.6 million.

These investments have supported:

2,560 STREAM MILES
of aquatic connectivity restoration
346 MILLION GALLONS
of additional stormwater storage
53,160 ACRES
of wetland and associated upland habitat restoration
96,000 ACRES
of regenerative agricultural practices implemented on farmland



Attachment: P&P_Dept_NFWFSOGL_Factsheet (P&PDept_SubmitAccept_NFWFSOGLGrant_InvasiveSppMgmt_UMRProjectArea)

GRANT APPLICATION SUMMARY

Project Name: Invasive Species Management in the Upper Milwaukee River Project Area
Grant Name/Agency: National Fish and Wildlife Foundation SOGL **CFDA/State ID:**
Department: Planning & Parks **Exp Acct.** **Preparer:** Tina Kroening
Total Project Amount: $305,325 **Grant Match Required:** 50% **Rev Acct.** **Approver:** Andrew Struck

Strategy: (Linkages to other planning efforts)
- POSP for Ozaukee County (P. 77-92, 111)
- Comprehensive Plan for Ozaukee County: 2035 (P. 287-288)
- Ozaukee County Land and Water Resource Management Plan (P. 4, 53, 57)
- Great Lakes Restoration Action Plan III (P. 3, 9-14)

Project Scope and Expectations
- 200 acres actively managed for invasive species
- Invasive species management in 5 Ozaukee County Parks encompassing 602 acres
- Including Ehlers, Hawthorne Hills, Milwaukee River Oxbow, Tendick and Waubedonia Co. Parks
- Improved ecology in and around designated Natural Area (NA-2) and along the Milwaukee River
- Follow up to past USEPA-GLRI and NFWF SOGL invasive species management projects

Other Grants Supporting Project	Status	Amount
Fund for Lake Michigan	Pending	$20,000
WDNR CCA	Pending	$2,500
SEWISC	Pending	$2,000
WEF, Other Foundations	Pending	

Project Partners:
- Americorps NCCC, GLCCC, MCSC, WisCorps
- SEWISC, WDNR LMPN
- Ozaukee Washington Land Trust
- Blue Heron Wildlife Sanctuary, Pine View Wildlife Rehab Center

Project Landowner Upon Completion:
- Ozaukee County, Blue Heron Wildlife Sanctuary, Pine View Wildlife Rehab Center, Private Landowners

GRANT EXPENSE	
Operational Expense	**$**
Salaries & Benefits	$63,611
Supplies	$5,864
Travel / Training	$2,275
Capital Expense	**$**
Contractual (Corps)	$128,250
TOTAL	**$200,000**
% PROJECT	**66%**

GRANT/PROJECT MATCH	
Operational Match	**$**
Salaries & Benefits	$41,000
Contractual/Dept Budget	$11,000
Supplies/Dept Budget	$2,750
Travel/Dept Budget	$1,075
Equipment Use/Dept	$18,000
Other Grants	**$**
Fund for Lake Michigan	$20,000
WDNR CCA	$2,500
SEWISC	$2,000
WEF, Other Foundations	$7,000
TOTAL	**$105,325**
% MATCH	**34%**

GRANT SUPPORTED STAFF	
Positon	**$**
Director	
Program Manager	
Conservation Biologist	
Nat Res & GIS Tech	
TOTAL	**$70,000**

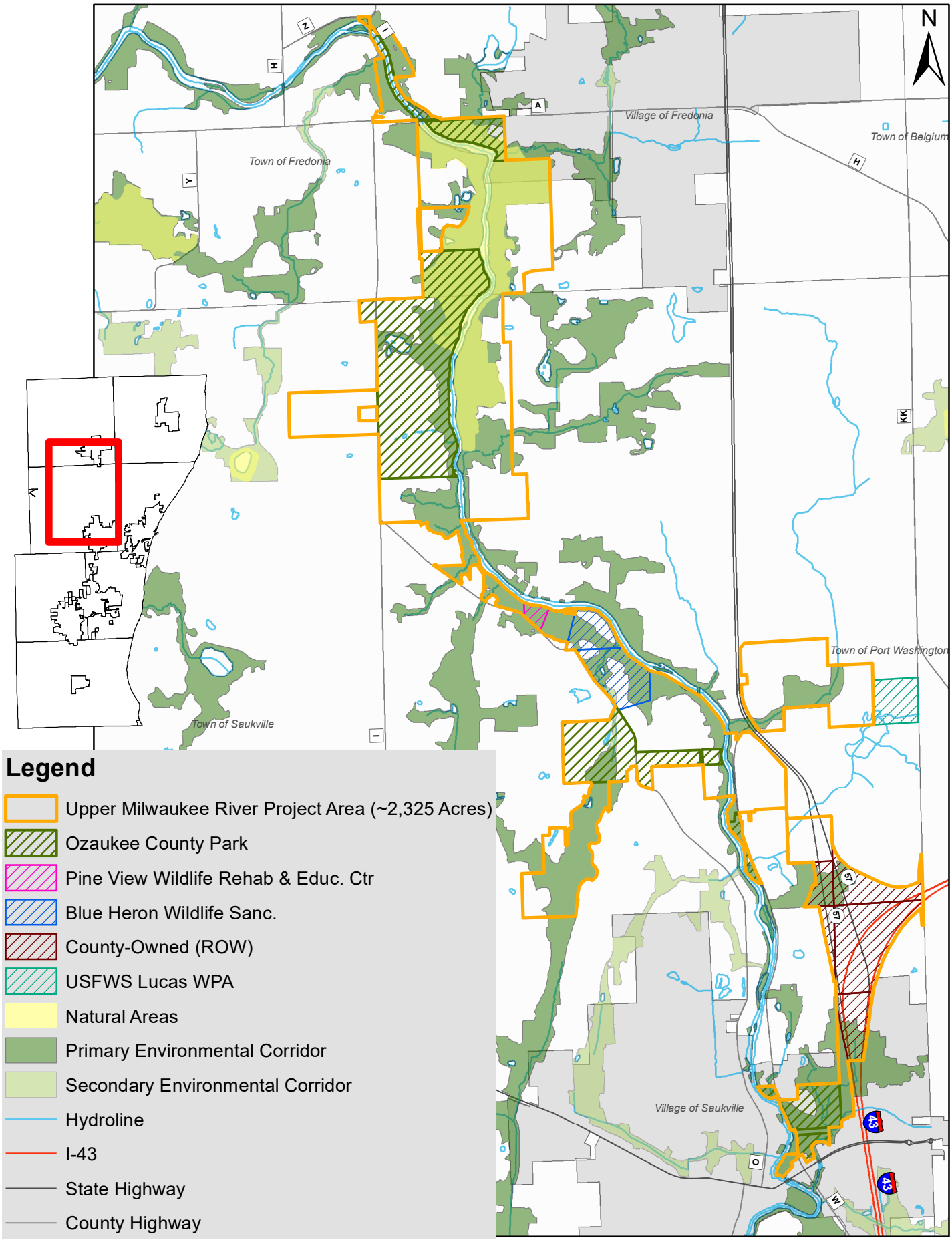
DEPARTMENT REVENUES	
Department	**$**
Salaries & Benefits	$63,611
Contractual (Corps)	$128,250
Supplies	$5,864
Travel / Training	$2,275
TOTAL	**$200,000**

Project Risks:	Comments
Weather/site conditions	Approx 50% operational match from non-levy (GC Ent
Contractor availibility	Serve as match for other grants
Timelines	
Pending grant match funding	

Major Milestones			Date
Full Grant Application			Apr-24
Grant Award			Oct-24
Invasive Species Management			Dec-27
Duration:	3 Years	**Extension:**	NA

Attachment:

Upper Milwaukee River Project Area - NFWF SOGL 2024



Legend

- Upper Milwaukee River Project Area (~2,325 Acres)
- Ozaukee County Park
- Pine View Wildlife Rehab & Educ. Ctr
- Blue Heron Wildlife Sanc.
- County-Owned (ROW)
- USFWS Lucas WPA
- Natural Areas
- Primary Environmental Corridor
- Secondary Environmental Corridor
- Hydroline
- I-43
- State Highway
- County Highway

0 0.375 0.75 1.5 Miles

Ozaukee Cour
February, 2024

Attachment: P&P_Dept_UpperMilwaukeeRiver_ProjectAreaMap

Natural Resources Committee

AGENDA INFORMATION SHEET

AGENDA DATE: **March 7, 2024**
DEPARTMENT: **Planning and Parks**
DIRECTOR: **Andrew Struck**
PREPARER: **Andrew Struck**

Agenda Summary Submittal and Acceptance of National Fish and Wildlife Foundation – Sustain Our Great Lakes Grant for Habitat Restoration and Public Access Improvements at Clay Bluffs Cedar Gorge Nature Preserve - Phase II

The Ozaukee County - Planning and Parks Department (Department) proposes to submit a grant application to the National Fish and Wildlife Foundation (NFWF) Sustain Our Great Lakes (SOGL) grant program to fund County activities to continue habitat restoration and improve public access at Clay Bluffs Cedar Gorge Nature Preserve County Park (Nature Preserve). The Department and the Ozaukee Washington Land Trust recently acquired the 134-acre Clay Bluffs Nature Preserve in fall 2022 with the support of Ozaukee County, multiple direct federal and state grants and contributions from local partners and private donors. The Nature Preserve, located on the Lake Michigan shoreline, is undeveloped and there is significant public interest in restoration and improving public access both throughout the new park and to Lake Michigan. In addition, habitat restoration and public access improvements are part of the goals and requirements of several of the acquisition grants inclusive of the Park Master Plan and OWLT conservation easement. A Wisconsin Coastal Management Program grant was awarded in 2020 to support development of a Master Plan for the Nature Preserve. The Master Plan includes native restoration of the existing marginal farmland to prairie/grassland, forest (e.g., coastal lake forest) and wetlands, addressing Lake Michigan bluff erosion and stability through restoration, management of invasive species, passive recreational use and access to Lake Michigan, and enhancement and restoration of the existing coastal forest and wetland habitat. NFWF SOGL and associated match grant funding would support design and construction of wetland, native prairie and forest restoration and a pedestrian trail loop with boardwalks on the middle third acreage of the Nature Preserve. The Department received a NFWF SOGL grant in 2023 for similar wetland habitat restoration work at Virmond County Park. The Department also received WCMP and WDNR Stewardship grants in 2023 for similar public access and habitat restoration activities in the southern third acreage of the Nature Preserve and this project represents a continuation of these efforts. This project is supported by the following plans: the County Park and Open Space Plan <https://www.co.ozaukee.wi.us/DocumentCenter/View/729/Park-and-Open-Space-Plan-for-Ozaukee-County-3rd-Edition?bidId=> related to the importance of wetlands and restoration and public access to rivers, streams and lakes and trail projects (p. 12, 18, 74, 99, 108), the Comprehensive Plan for Ozaukee County: 2035 <http://www.sewrpc.org/SEWRPCFiles/Publications/CAPR/capr-285-comp-plan-for-ozaukee-co.pdf> <http://www.sewrpc.org/SEWRPCFiles/Publications/CAPR/capr-285-comp-plan-for-ozaukee-co.pdf> related to stormwater management, wetlands and surface water quality, public access to rivers, streams and lakes, and invasive species management (p. 77, 101, 176, 269, 277-284, 287, 452, 456, 558, 559), the County Strategic Plan 2020-2024 <https://www.co.ozaukee.wi.us/DocumentCenter/View/14493/Ozaukee-County-Strategic-Plan-

2020-24> (p. 13) related to the enhance quality of life assets strategic goal, the Land and Water Resource Management Plan for Ozaukee County 2021-2030 https://www.sewrpc.org/SEWRPCFiles/Environment/LandWaterResourceManagementPla/capr-338-OZ-County-Land-and-Water-Resource-Management-Draft.pdf (pages 11, 103, 143, 195), to promote and implement habitat preservation and restoration and stormwater management practices and the final draft of the Clay Bluffs Cedar Gorge Nature Preserve County Park Master Plan.

ANALYSIS: The NFWF SOGL grant request is $500,000. The recommended 1:1 matching funding will be provided by pending WDNR Stewardship ($249,999) and Fund for Lake Michigan (FFLM) ($250,001) grants for a total project cost of $1,000,000.

FISCAL IMPACT: Balance Current Year: NONE

Next Year's Estimated Cost: NONE (Additional Program Revenue $500,000)

FUNDING SOURCE: County Levy: Non-County Levy: X

Indicate source: Pending NFWF SOGL, WDNR Stewardship and FFLM grants.

RECOMMENDED MOTION: Approve the submittal, acceptance, and implementation of a grant by the Planning and Parks Department to the National Fish and Wildlife Foundation - Sustain Our Great Lakes grant program to fund habitat restoration and public access improvements at Clay Bluffs Cedar Gorge Nature Preserve County Park.

ATTACHMENTS:

- P&P_Dept_NFWFSOGL_Factsheet (PDF)
- P&P_Dept_CBCGNP Site Plan, NFWF 2.14.2024 (PDF)
- AS2024_NRC0307024_NFWFSOGL_CBCGNPImprovements_Grant Summary Spreadsheet_ATSFinal022224 (PDF)

NATURAL RESOURCES COMMITTEE

FACT SHEET

Sustain Our Great Lakes

NFWF CONTACTS

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612-564-7296

Naomi Attaway
Coordinator,
Regional Programs
Naomi.Attaway@nfwf.org
202-595-2496

PARTNERS

- Careus Foundation
- Cleveland-Cliffs
- General Mills
- Ralph C. Wilson Jr. Foundation
- U.S. Environmental Protection Agency
- U.S. Fish and Wildlife Service
- U.S. Forest Service
- USDA Natural Resources Conservation Service

ABOUT NFWF

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Lake Superior, Minnesota

MISSION

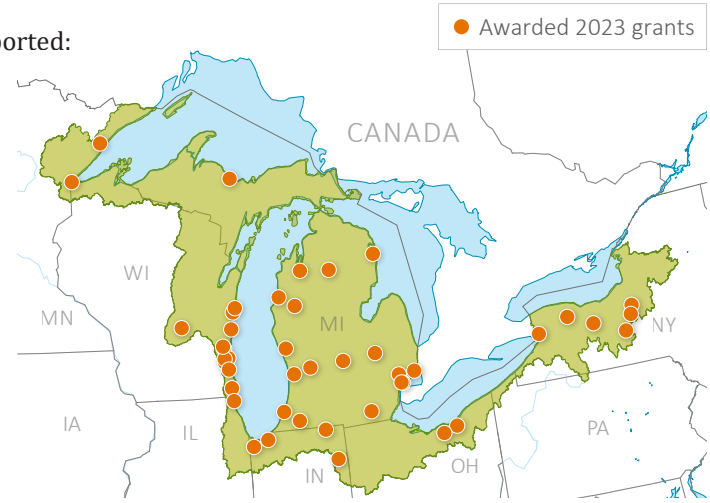
Administered by National Fish and Wildlife Foundation (NFWF), the Sustain Our Great Lakes (SOGL) grant program is a public–private partnership that supports restoration in the Great Lakes Basin. This program receives funding and other support from Careus Foundation, Cleveland-Cliffs, General Mills, Milwaukee Metropolitan Sewerage District, Ralph C. Wilson Jr. Foundation, Walder Foundation, U.S. Environmental Protection Agency, U.S. Fish and Wildlife Service, USDA Forest Service, and USDA Natural Resources Conservation Service. The mission of this program is to restore and enhance fish, wildlife, and habitat in the Great Lakes Basin by leveraging funding, building conservation capacity, and focusing partners and resources toward key ecological issues. A significant portion of program funding is provided by the Great Lakes Restoration Initiative, a federal program designed to conserve, restore and enhance the Great Lakes ecosystem.

PROGRAM ACHIEVEMENTS

To date, SOGL has awarded a total of $128.6 million through 496 grants. Grantees matched SOGL's investment with an additional $155 million, bringing the total on-the-ground conservation impact to more than $283.6 million.

These investments have supported:

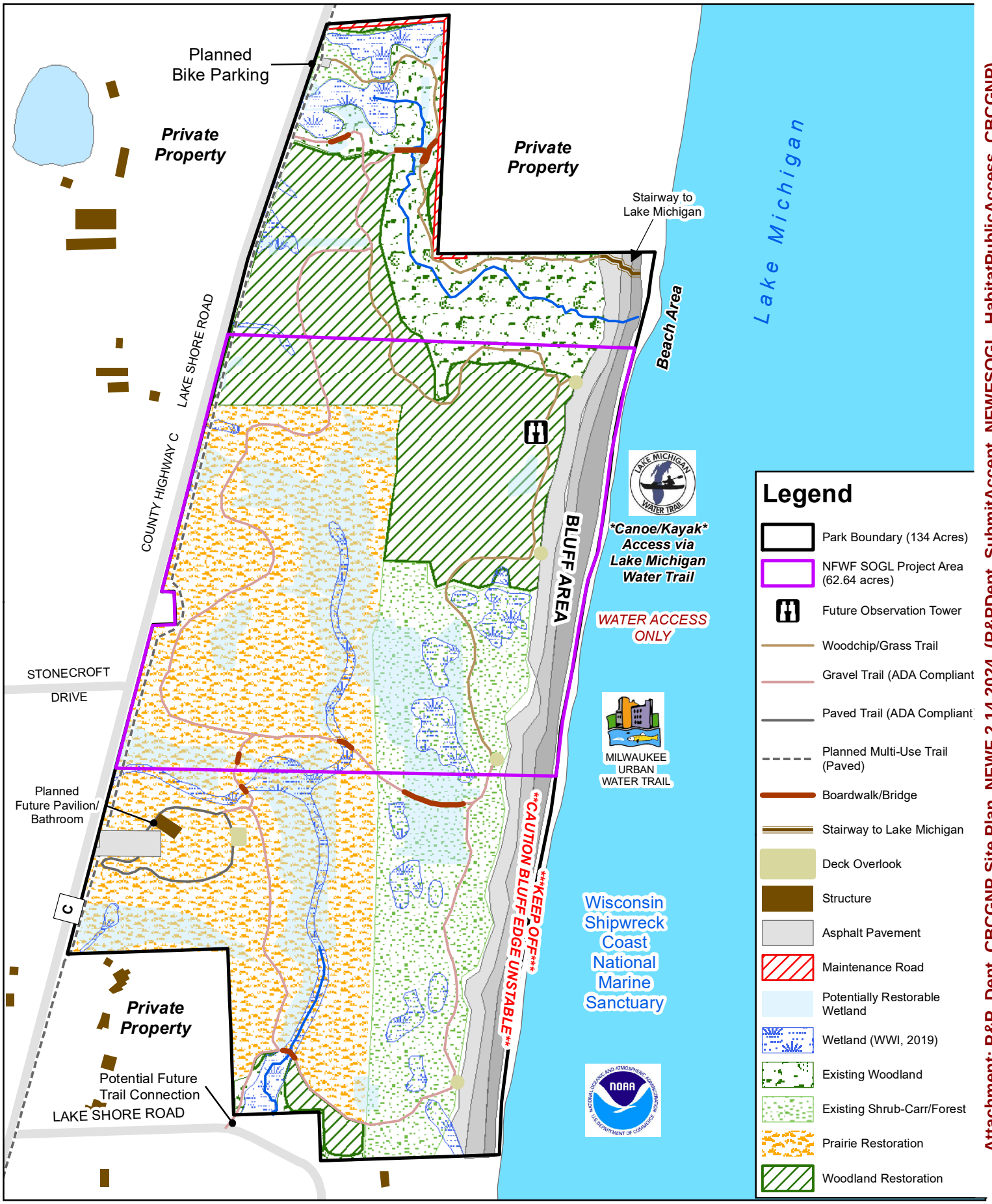
2,560 STREAM MILES
of aquatic connectivity restoration
346 MILLION GALLONS
of additional stormwater storage
53,160 ACRES
of wetland and associated upland habitat restoration
96,000 ACRES
of regenerative agricultural practices implemented on farmland



Attachment: P&P_Dept_NFWFSOGL_Factsheet (P&PDept_SubmitAccept_NFWFSOGL_HabitatPublicAccess_CBCGNP)

Clay Bluffs Cedar Gorge Nature Preserve

Lake Shore Road, Grafton, WI 53024



Attachment: P&P_Dept_CBCGNP Site Plan, NFWF 2.14.2024 (P&PDept_SubmitAccept_NFWFSOGL_HabitatPublicAccess_CBCGNP)

0 250 500 1,000 Feet

N

Map Produced by Ozaukee County Planning

GRANT APPLICATION SUMMARY

Project Name: Habitat Restoration and Public Access Improvements at CBCGNP
Grant Name/Agency: National Fish and Wildlife Foundation SOGL **CFDA/State ID:**
Department: Planning & Parks **Exp Acct.** **Preparer:** Matt Aho
Total Project Amount: $1,000,000 **Grant Match Required:** 50% **Rev Acct.** **Approver:** Andrew Struck

Strategy: (Linkages to other planning efforts)
- Comprehensive Plan for Ozaukee County: 2035 (P.77, 176, 277, 278-284, 452, 456)
- Ozaukee County Land and Water Resource Management Plan (P. 49, 89)
- Park and Open Space Plan for Ozaukee County (P. 12, 18, 74, 99, 108)
- Ozaukee County Strategic Plan 2020-2024 (P. 11, 103, 143, 195)
- Draft Master Plan for Clay Bluffs Cedar Gorge Nature Preserve County Park

Project Scope and Expectations
- Wetland restoration
- Trail and boardwalk construction
- Native prairie restoration
- Forest restoration
- Public access and Nature Preserve improvements

Other Grants Supporting Project	Status	Amount
WDNR Stewardship	Pending	$249,999
FFLM	Pending	$250,001
		$0
		$0

Project Partners:
- NFWF SOGL
- WDNR Stewardship, FFLM
- OWLT

Project Landowner Upon Completion:
- Ozaukee County

GRANT EXPENSE	
Operational Expense	**$**
Personnel & FB	$125,000
Travel	$2,500
Supplies	$22,500
Capital Expense	**$**
Contractual	$350,000
TOTAL	**$500,000**
% PROJECT	**50%**

GRANT/PROJECT MATCH	
Operational Match	**$**
Other Grants	**$**
WDNR Stewardship	$249,999
FFLM	$250,001
Donations	
TOTAL	**$500,000**
% MATCH	**50%**

GRANT SUPPORTED STAFF	
Positon	**$**
Director	
Program Manager	
Senior Planner	
Conservation Biologists	
Natural Res & GIS Tech	
TOTAL	

DEPARTMENT REVENUES	
Department	**$**
Personnel & FB	$125,000
Travel	$2,500
Supplies	$22,500
Contractual	$350,000
TOTAL	**$500,000**

Project Risks:	Comments
▪ Weather/site conditions	▪ Overall estimated costs without final E&D
▪ Contractor (HWY) availibility	▪ Serve as match for other grants
▪ Timelines	▪ Overall project costs ~ $1,000,000
▪ Pending grant match funding	

Major Milestones	Date
Grant Award	Jan-25
Engineering and Design Plans	Apr-25
Construction and Restoration	Dec-28

Duration: 3 years **Extension:** NA

Attachment: AS2024_NRC0307024_NFWFSOGL_CBCGNPImprovements_Grant Summary

RESOLUTION NO. (ID # 9939)

SUBMITTAL AND ACCEPTANCE OF A WISCONSIN DEPARTMENT OF NATURAL RESOURCES KNOWLES-NELSON STEWARDSHIP LOCAL ASSISTANCE GRANT FOR HABITAT RESTORATION AND PUBLIC ACCESS IMPROVEMENTS AT CLAY BLUFFS CEDAR GORGE NATURE PRESERVE

WHEREAS, Ozaukee County, through the Planning and Parks Department, acquired and added an environmentally significant parcel, known as the Clay Bluffs Cedar Gorge Nature Preserve consisting of 134 +/- acres, part of the NW ¼ and SW ¼, Section 3 and part of the NW ¼, Section 10, T. 10 N., R 22 E., City of Port Washington, Ozaukee County, Wisconsin, as part of the Ozaukee County Park System on August 26, 2022; and

WHEREAS, property acquisition and inclusion into the Ozaukee County Park System protected unique statewide and Great Lakes significant 110-ft-high clay seepage bluffs, Cedar Heights Gorge and Port Washington Clay Banks Natural Areas of Local Significance, existing and potentially restorable wetlands, woodlands, a deep wooded coastal gorge with a stream draining to Lake Michigan, 0.7 miles of Lake Michigan shoreline and beach, primary environmental corridor (as designated by the Southeastern Wisconsin Regional Planning Commission), habitat within two Important Bird Areas (Ozaukee Bight Lakeshore Migration Corridor and Harrington Beach-Kohler Andrae Lakeshore Migration Corridor), as well as migratory bird stopover habitat along the National Lake Michigan Flyway, and outstanding public access to Lake Michigan, the National Lake Michigan Water Trail and the newly designated Wisconsin Shipwreck Coast National Marine Sanctuary; and

WHEREAS, on July 1, 2020, the Ozaukee County Board of Supervisors adopted Resolution 20-15 authorizing the acquisition of the Clay Bluffs Cedar Gorge Nature Preserve (134 +/- acres) for inclusion in the Ozaukee County Park System and reaffirming the $200,000 County match contribution and directing the Planning and Parks Department to seek out additional grant funding to cover the balance of the acquisition cost; and

WHEREAS, the $200,000 County contribution, secured $300,000 Phase I and $261,000 Phase II US Fish and Wildlife Service Joint Venture Program grants, a secured $538,290 US Fish and Wildlife Service National Coastal Wetlands Conservation Program grant, a secured $600,000 US Forest Service Community Forest Program grant, an awarded $250,000 WCMP/NOAA grant, an awarded $450,000 Wisconsin Department of Natural Resources Office of Great Waters/USEPA Great Lakes Restoration Initiative grant, a $10,000 Town of Grafton contribution and additional funding from the Ozaukee Washington Land Trust (OWLT) (private donations and awarded state ARPA funding) supported the overall acquisition costs for the 134 +/- acre Nature Preserve; and

WHEREAS, public access improvements and habitat restoration projects are part of the goals and requirements of several of the acquisition grants inclusive of the Park Master Plan and OWLT conservation easement; and

WHEREAS, a WCMP Coastal Resiliency grant was awarded in 2020 to support development of a Master Plan for the Nature Preserve, which includes native restoration of the existing marginal farmland to prairie/grassland, forest (e.g., coastal lake forest) and wetlands, addressing Lake Michigan bluff erosion and stability through restoration, management of

invasive species, passive recreational use and access to Lake Michigan, and enhancement and restoration of the existing coastal forest and wetland habitat; and

WHEREAS, WDNR Stewardship and associated match grant funding would support design and construction of wetland, native prairie and forest restoration and a pedestrian trail loop with boardwalks on the middle third acreage of the Nature Preserve; and

WHEREAS, financial aid is required to carry out the project; and

WHEREAS, the WDNR Knowles-Nelson Stewardship Local Assistance grant will fund up to 50% of the total project cost with the required match funding provided by pending grants from the Fund for Lake Michigan and National Fish and Wildlife Foundation - Sustain Our Great Lakes Program; and

NOW, THEREFORE, BE IT RESOLVED, by the Ozaukee County Board of Supervisors that the Ozaukee County Planning and Parks Department has budgeted a sum sufficient to fully and satisfactorily complete the project and the Planning and Parks Director is authorized on behalf of Ozaukee County to sign and submit a Wisconsin Department of Natural Resources Knowles-Nelson Stewardship Local Assistance program funding grant application, sign a grant agreement between Ozaukee County and the WDNR, submit quarterly and/or final reports to the WDNR to satisfy the grant agreement, submit grant reimbursement requests to the WDNR along with necessary supporting documentation within 6 months of the project completion date, and sign and submit other required documentation and take necessary actions to initiate, direct, and complete the approved project within the provided funding timeline.

BE IT FURTHER RESOLVED that Ozaukee County will comply with state or federal rules for the programs; may perform force account work; will maintain the completed project in an attractive, inviting and safe manner; will keep the project open to the general public during reasonable hours consistent with the type of facility; and will obtain from the State of Wisconsin Department of Natural Resources and/or the National Park Service approval in writing before any change is made in the use of the project site.

BE IT FURTHER RESOLVED, by the Ozaukee County Board of Supervisors that the County Clerk shall forward a copy of this resolution to the Wisconsin Department of Natural Resources.

Dated at Port Washington, Wisconsin, this 1st day of May, 2024.

SUMMARY: *Submittal and acceptance of a Wisconsin Department of Natural Resources Knowles-Nelson Local Assistance grant by the Planning and Parks Department for habitat restoration and public access improvements at Clay Bluffs Cedar Gorge Nature Preserve.*

VOTE REQUIRED: Majority

NATURAL RESOURCES COMMITTEE

NATURAL RESOURCES COMMITTEE

Natural Resources Committee

AGENDA INFORMATION SHEET

AGENDA DATE: **March 7, 2024**
DEPARTMENT: **Planning and Parks**
DIRECTOR: **Andrew Struck**
PREPARER: **Andrew Struck**

Agenda Summary Submittal and Acceptance of a Wisconsin Department of Natural Resources Knowles-Nelson Stewardship Local Assistance Grant for Habitat Restoration and Public Access Improvements at Clay Bluffs Cedar Gorge Nature Preserve

BACKGROUND INFORMATION: The Ozaukee County - Planning and Parks Department (Department) proposes to submit a grant application to the Wisconsin Department of Natural Resources (WDNR) Knowles-Nelson Stewardship Local Assistance (Stewardship) grant program to fund County activities to continue habitat restoration activities and improve public access at Clay Bluffs Cedar Gorge Nature Preserve County Park (Nature Preserve). The Department and the Ozaukee Washington Land Trust recently acquired the 134-acre Clay Bluffs Nature Preserve in fall 2022 with the support of Ozaukee County, multiple federal and state grants and contributions from local partners and private donors. The Nature Preserve, located on the Lake Michigan shoreline, is undeveloped and there is significant public interest in habitat restoration and improving public access both throughout the new park and to Lake Michigan. In addition, habitat restoration and public access improvements projects are part of the goals and requirements of several of the acquisition grants inclusive of the Park Master Plan and OWLT conservation easement. A Wisconsin Coastal Management Program (WCMP) Coastal Resiliency grant was awarded in 2020 to support development of a Master Plan for the Nature Preserve. The Master Plan includes native restoration of the existing marginal farmland to prairie/grassland, forest (e.g., coastal lake forest) and wetlands, addressing Lake Michigan bluff erosion and stability through restoration, management of invasive species, passive recreational use and access to Lake Michigan, and enhancement and restoration of the existing coastal forest and wetland habitat. WDNR Stewardship and associated match grant funding would support the design and construction of wetland, native prairie and forest restoration and pedestrian trail loop with boardwalks on the middle third acreage of the Nature Preserve. The Department received WCMP and WDNR Stewardship grants in 2023 for similar public access and habitat restoration activities in the southern third acreage of the Nature Preserve and this project represents a continuation of these efforts. This project is supported by the following plans: the County Park and Open Space Plan <https://www.co.ozaukee.wi.us/DocumentCenter/View/729/Park-and-Open-Space-Plan-for-Ozaukee-County-3rd-Edition?bidId=> related to the importance of wetlands and restoration and public access to rivers, streams and lakes and trail projects (p. 12, 18, 74, 99, 108), the Comprehensive Plan for Ozaukee County: 2035 <http://www.sewrpc.org/SEWRPCFiles/Publications/CAPR/capr-285-comp-plan-for-ozaukee-co.pdf> <http://www.sewrpc.org/SEWRPCFiles/Publications/CAPR/capr-285-comp-plan-for-ozaukee-co.pdf> related to stormwater management, wetlands and surface water quality, public

access to rivers, streams and lakes, and invasive species management (p. 77, 101, 176, 269, 277-284, 287, 452, 456, 558, 559), the County Strategic Plan 2020-2024 <https://www.co.ozaukee.wi.us/DocumentCenter/View/14493/Ozaukee-County-Strategic-Plan-2020-24> (p. 13) related to the enhance quality of life assets strategic goal, the Land and Water Resource Management Plan for Ozaukee County 2021-2030 https://www.sewrpc.org/SEWRPCFiles/Environment/LandWaterResourceManagementPla/capr-338-OZ-County-Land-and-Water-Resource-Management-Draft.pdf (pages 11, 103, 143, 195), to promote and implement habitat preservation and restoration and stormwater management practices and the final draft of the Clay Bluffs Cedar Gorge Nature Preserve County Park Master Plan.

ANALYSIS: The WDNR Stewardship grant submittals are due May 1, 2024 and the grant request is $249,999. The required 1:1 matching funding will be provided by pending National Fish and Wildlife Foundation (NFWF) Sustain Our Great Lakes (SOGL) ($500,000) and Fund for Lake Michigan (FFLM) ($250,001) grants for a total project cost of $1,000,000.

FISCAL IMPACT: Balance Current Year: NONE

Next Year's Estimated Cost: NONE (Additional Program Revenue $249,999)

FUNDING SOURCE: County Levy: Non-County Levy: X

Indicate source: Pending WDNR Stewardship, NFWF SOGL and FFLM grants.

RECOMMENDED MOTION: Approve and recommend to the Ozaukee County Board of Supervisors the resolution for submittal and acceptance of a grant by the Planning and Parks Department to the Wisconsin Department of Natural Resources Knowles-Nelson Stewardship Local Assistance Program to fund habitat restoration and public access improvements at Clay Bluffs Cedar Gorge Nature Preserve County Park.

ATTACHMENTS:

- P&P_Dept_About WDNR Stewardship Grants (PDF)
- P&P_Dept_CBCGNP Site Plan, WDNR STU 2.14.2024 (PDF)
- AS2024_NRC0307024_WDNRStewardship_CBCGNPImprovements_Grant Summary Spreadsheet_ATSFinal022224 (PDF)

Knowles-Nelson Stewardship Program Grants
Local units of government application process

Local units of government (LUGs) are eligible applications for four Stewardship grant programs administered by the DNR. Applicants are advised that grant awards will be subject to the availability of funds and any procedural changes that may result from the forthcoming state budget and Federal appropriations.

Knowles-Nelson Stewardship local assistance grant programs

- Aids for the Acquisition and Development of Local Parks (ADLP)
- Urban Green Space (UGS) grants
- Urban Rivers (UR) grants
- Acquisition of Development Rights (ADR)

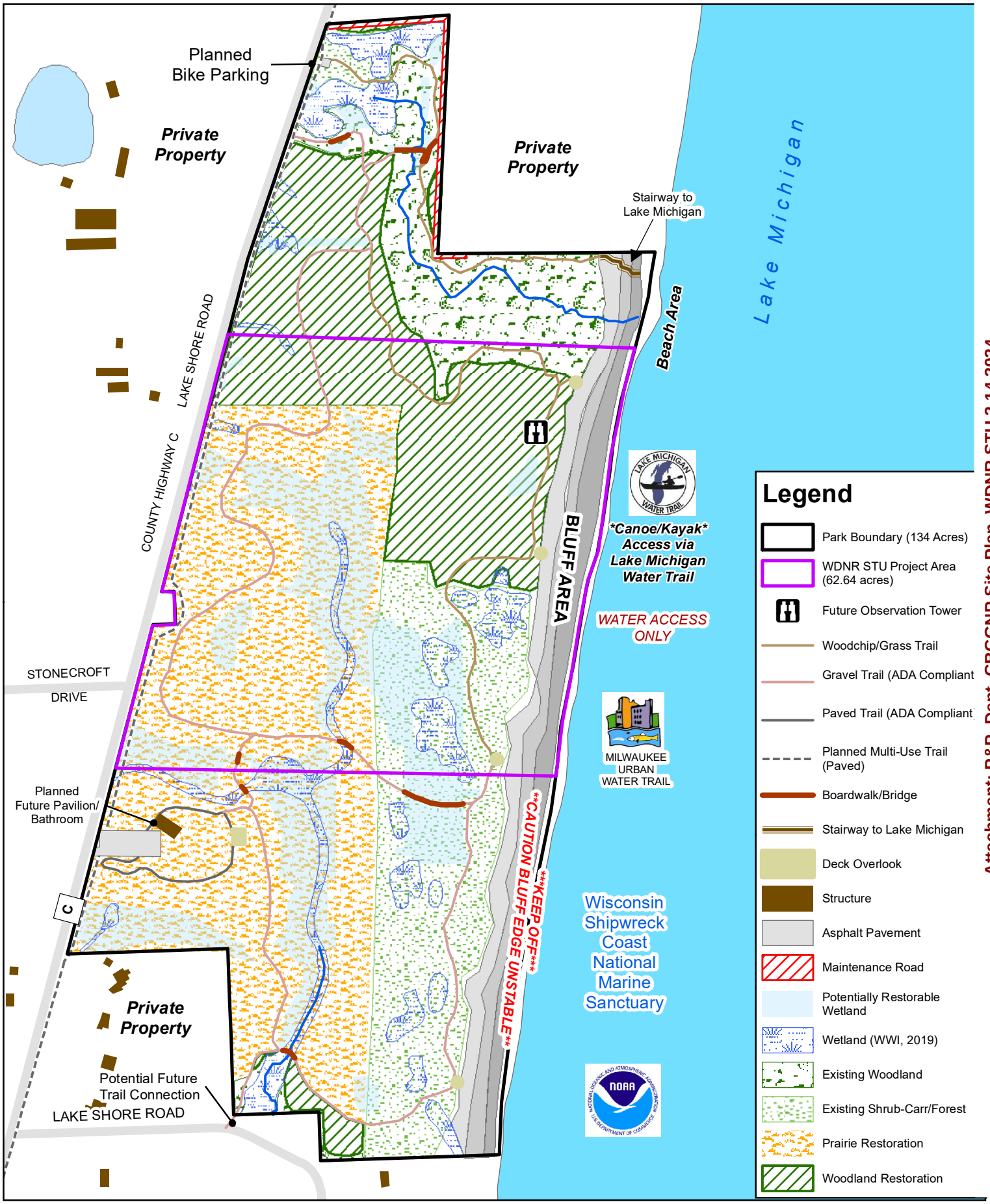
The programs listed above are administered under the Local Assistance Stewardship Grant Program and share an application form. Nonprofit conservation organizations (NCOs) are eligible to apply to the Stewardship Local Assistance Grant Program for land acquisition projects. Local sponsors work with a DNR Regional Grant Specialist (RGS) to plan projects, follow program requirements and complete grant applications. The following is an overview of the Stewardship LUG grant process. Potential applicants are highly encouraged to contact their Regional Grant Specialist for further details regarding the grant process and application guidance.

- Applications for Stewardship LUG grants are accepted once a year. Stewardship LUG, LWCF, and RTP grants offer 50% cost share. In typical years, the LUG program receives approximately three times more in grant requests than available grant funds.
- Grant staff then review and rank eligible projects relative to eligibility and priorities for each LUG grant subprogram, as outlined in the LUG program guidance. The scoring reflects provisions outlined in s. 23.09 Wis. Stats., s. 30.277 Wis. Stats., and Ch. NR 51, Wis. Admin. Code. Coordination among grant staff across the state ensures consistency and fairness in application scoring.
- Final scores are used to generate the list of proposed grant awards.
- When approved by the Department, grant staff send tentative award letters to applicants whose projects are selected for funding.
- Grant staff then work with applicants on final project due diligence and execute grant agreements with project sponsors.
- Sponsors can then move forward with their project and submit a reimbursement request to the Department upon project completion. Development projects are eligible for up to a 50% advance payment.

Attachment: P&P_Dept_About WDNR Stewardship Grants

Clay Bluffs Cedar Gorge Nature Preserve

Lake Shore Road, Grafton, WI 53024



Attachment: P&P_Dept_CBCGNP Site Plan, WDNR STU 2.14.2024

0 250 500 1,000 Feet

N

Map Produced by Ozaukee County Planning

GRANT APPLICATION SUMMARY

Project Name: Habitat Restoration and Public Access Improvements at CBCGNP
Grant Name/Agency: WDNR Knowles-Nelson Stewardship Program **CFDA/State ID:**
Department: Planning & Parks **Exp Acct.** **Preparer:** Matt Aho
Total Project Amount: $1,000,000 **Grant Match Required:** 50% **Rev Acct.** **Approver:** Andrew Struck

Strategy: (Linkages to other planning efforts)
- Comprehensive Plan for Ozaukee County: 2035 (P.77, 176, 277, 278-284, 452, 456)
- Ozaukee County Land and Water Resource Management Plan (P. 49, 89)
- Park and Open Space Plan for Ozaukee County (P. 12, 18, 74, 99, 108)
- Ozaukee County Strategic Plan 2020-2024 (P. 11, 103, 143, 195)
- Draft Master Plan for Clay Bluffs Cedar Gorge Nature Preserve County Park

Project Scope and Expectations
- Wetland restoration
- Trail and boardwalk construction
- Native prairie restoration
- Forest restoration
- Public access and Nature Preserve improvements

Other Grants Supporting Project	Status	Amount
NFWF SOGL	Pending	$500,000
FFLM	Pending	$250,001
		$0
		$0

Project Partners:
- WDNR Stewardship
- NFWF SOGL, FFLM
- OWLT

Project Landowner Upon Completion:
- Ozaukee County

GRANT EXPENSE	
Operational Expense	**$**
Personnel & FB	$62,500
Supplies	$24,000
Capital Expense	**$**
Contractual	$163,499
TOTAL	**$249,999**
% PROJECT	**25%**

GRANT/PROJECT MATCH	
Operational Match	**$**
Other Grants	**$**
NFWF SOGL	$500,000
FFLM	$250,001
Donations	
TOTAL	**$750,001**
% MATCH	**75%**

GRANT SUPPORTED STAFF	
Positon	**$**
Director	
Program Manager	
Senior Planner	
Conservation Biologists	
Natural Res & GIS Tech	
TOTAL	

DEPARTMENT REVENUES	
Department	**$**
Personnel & FB	$62,500
Supplies	$24,000
Contractual (HWY)	$163,499
TOTAL	**$249,999**

Project Risks:	Comments
▪ Weather/site conditions	▪ Overall estimated costs without final E&D
▪ Contractor (HWY) availibility	▪ Serve as match for other grants
▪ Timelines	▪ Overall project costs ~ $1,000,000
▪ Pending grant match funding	

Major Milestones	Date
Grant Award	Jan-25
Engineering and Design Plans	Apr-25
Construction and Restoration	Dec-28

Duration:	3 years	Extension:	NA

Attachment: AS2024_NRC0307024_WDNRStewardship_CBCGNPImprovements_Grant Summary

RESOLUTION NO. (ID # 9940)

SUBMITTAL AND ACCEPTANCE OF A WISCONSIN DEPARTMENT OF NATURAL RESOURCES KNOWLES-NELSON STEWARDSHIP LOCAL ASSISTANCE GRANT FOR CAMPGROUND DEVELOPMENT AND A BATHROOM FACILITY AT HAWTHORNE HILLS COUNTY PARK

WHEREAS, Ozaukee County, through the Planning and Parks Department, is interested in continuing to maintain, acquire, insure, or develop lands for public outdoor recreation purposes; and

WHEREAS, financial aid is required to carry out the project; and

WHEREAS, the primary goal of the project is to fund County activities to develop a campground and construct a public bathroom facility at Hawthorne Hills County Park; and

WHEREAS, the Ozaukee County Board of Supervisors adopted the *Park and Open Space Plan for Ozaukee County: 2035* on June 1, 2011 (Resolution 11-14); and

WHEREAS, pursuant to Sections 59.69 and 66.1001(4)(b) of the Wisconsin Statutes, the Ozaukee County Board of Supervisors adopted the County comprehensive plan embodied in SEWRPC Community Assistance Planning Report No. 285, *A Multi-Jurisdictional Comprehensive Plan for Ozaukee County: 2035* on April 2, 2008 and subsequent Amendment 2009-01 on May 6, 2009 and Amendment 2013-01 on May 1, 2013, which included adoption of the *Park and Open Space Plan for Ozaukee County*; and

WHEREAS, the park and open space plan was to be prepared within the framework of the *Multi-jurisdictional Comprehensive Plan for Ozaukee County: 2035* and is based upon the recommended development pattern set forth in the County comprehensive plan and will refine and detail the park and open space-related recommendations of the County comprehensive plan; and

WHEREAS, the proposed project at Hawthorne Hills County Park is specifically recommended in *A Park and Open Space Plan for Ozaukee County: 2035* adopted by the Ozaukee County Board of Supervisors; and

WHEREAS, the maintenance, acquisition, insurance, and development of lands for public outdoor recreation, park development and use is consistent with *A Park and Open Space Plan for Ozaukee County* and *A Multi-jurisdictional Comprehensive Plan for Ozaukee County: 2035*; and

WHEREAS, the proposed project at Hawthorne Hills County Park is specifically recommended in the *County Strategic Plan 2020-2024*; and

WHEREAS, the public bathrooms at the Hawthorne Hills County Park multipurpose parks maintenance facility will serve the future Phase II campsite area currently used for the Sugar Maple Nature School; and

WHEREAS, an additional public bathroom facility is required for serving the Phase I campsite area per Wisconsin Administrative Code § ATCP 79.16 2023; and

WHEREAS, the WDNR Knowles-Nelson Stewardship Local Assistance grant will fund up to 50% of the total project cost with the required matching funding provided by pending

County Project Reserve (Capital) funding and in-kind Department staff time, travel, equipment and supplies; and

NOW, THEREFORE, BE IT RESOLVED, by the Ozaukee County Board of Supervisors that the Ozaukee County Planning and Parks Department has budgeted a sum sufficient to fully and satisfactorily complete the project and the Planning and Parks Director is authorized on behalf of Ozaukee County to sign and submit a Wisconsin Department of Natural Resources Knowles-Nelson Stewardship Local Assistance program funding grant application, sign a grant agreement between Ozaukee County and the WDNR, submit quarterly and/or final reports to the WDNR to satisfy the grant agreement, submit grant reimbursement requests to the WDNR along with necessary supporting documentation within 6 months of the project completion date, and sign and submit other required documentation and take necessary actions to initiate, direct, and complete the approved project within the provided funding timeline.

BE IT FURTHER RESOLVED that Ozaukee County will comply state or federal rules for the programs; may perform force account work; will maintain the completed project in an attractive, inviting and safe manner; will keep the project open to the general public during reasonable hours consistent with the type of facility; and will obtain from the State of Wisconsin Department of Natural Resources and/or the National Park Service approval in writing before any change is made in the use of the project site.

BE IT FURTHER RESOLVED, by the Ozaukee County Board of Supervisors that the County Clerk shall forward a copy of this resolution to the Wisconsin Department of Natural Resources.

Dated at Port Washington, Wisconsin, this 1st day of May, 2024.

SUMMARY: *Submittal and acceptance of a Wisconsin Department of Natural Resources Knowles-Nelson Local Assistance grant for campground development and construction of a bathroom facility at Hawthorne Hills County Park.*

VOTE REQUIRED: Majority

NATURAL RESOURCES COMMITTEE

NATURAL RESOURCES COMMITTEE

Natural Resources Committee

AGENDA INFORMATION SHEET

AGENDA DATE: **March 7, 2024**
DEPARTMENT: **Planning and Parks**
DIRECTOR: **Andrew Struck**
PREPARER: **Andrew Struck**

Agenda Summary Submittal and Acceptance of a Wisconsin Department of Natural Resources Knowles-Nelson Stewardship Local Assistance Grant for Campground Development and a Bathroom Facility at Hawthorne Hills County Park

BACKGROUND INFORMATION: The Ozaukee County - Planning and Parks Department (Department) proposes to submit a grant application to the Wisconsin Department of Natural Resources (WDNR) Knowles-Nelson Stewardship Local Assistance (Stewardship) grant program to support Phase I campsite development and construction of a public bathroom facility at Hawthorne Hills County Park in the Town of Saukville. Public bathrooms and showers in the upper level of the Hawthorne Hills County Park Multi-Purpose Maintenance Building will serve the Phase II campsite area currently used by the Sugar Maple Nature School (SMNS). Per Wisconsin Administrative Code § ATCP 79.16 2023, an additional bathroom facility is required to serve the Phase I campsite area currently under development. WDNR Stewardship funding would support the design and construction of the bathroom facility and pending County Project Reserve (Capital) funding and in-kind Department staff time, travel, equipment and supplies would support development of the Phase I campground area including water and electric service for RV sites, road paving and shouldering, and individual campsite development items. Electric and water service provision is also a requirement for SMNS development per the approved Memorandum of Agreement. This project is supported by the following County plans: the County Park and Open Space Plan <https://www.co.ozaukee.wi.us/DocumentCenter/View/729/Park-and-Open-Space-Plan-for-Ozaukee-County-3rd-Edition?bidId=> (pages 61, 67, 95, 116), as related to construction of a multipurpose building and additional facilities for camping and the County Strategic Plan 2020-2024 <https://www.co.ozaukee.wi.us/DocumentCenter/View/14493/Ozaukee-County-Strategic-Plan-2020-24> (page 14), where "Develop a campground & maintenance facility with bathrooms/showers at Hawthorne Hills County Park" is specifically referenced (III. C. 6).

ANALYSIS: Proposals to the WDNR Stewardship grant program are due May 1, 2024 and the grant request is $249,999. The required 1:1 matching funding will be provided by pending County Project Reserve (Capital) funding, which was unanimously approved by the Ozaukee County Natural Resources Committee at its February 8, 2024 meeting (Ayes: Holyoke, Matera, Schoessow; Excused: Jobs, Ross) ($225,000) and in-kind Department staff time, travel, equipment and supplies ($24,999) for a total project cost of $499,998.

FISCAL IMPACT: Balance Current Year: NONE

Next Year's Estimated Cost: $24,999 (Additional Program Revenue of $249,999)

FUNDING SOURCE: County Levy: Non-County Levy: X

Indicate source: Pending WDNR Knowles-Nelson Stewardship grant and County Project Reserve (Capital) funding and in-kind Department staff time, travel, equipment and supplies.

RECOMMENDED MOTION: Approve and recommend to the Ozaukee County Board of Supervisors the resolution for submittal and acceptance of a grant by the Planning and Parks Department to the Wisconsin Department of Natural Resources Knowles-Nelson Stewardship Local Assistance Program grant funds to fund County activities for campsite development and construction of a public bathroom facility at Hawthorne Hills County Park.

ATTACHMENTS:

- P&P_Dept_About WDNR Stewardship Grants (PDF)
- AS2024_NRC03072024_WDNR STU Hawthorne Hills Bathroom and Campground Development_Grant Application Summary_ATSFinal022224 (PDF)
- HH_Campground_2.29.2024 (2) (PDF)

Knowles-Nelson Stewardship Program Grants
Local units of government application process

Local units of government (LUGs) are eligible applications for four Stewardship grant programs administered by the DNR. Applicants are advised that grant awards will be subject to the availability of funds and any procedural changes that may result from the forthcoming state budget and Federal appropriations.

Knowles-Nelson Stewardship local assistance grant programs

- Aids for the Acquisition and Development of Local Parks (ADLP)
- Urban Green Space (UGS) grants
- Urban Rivers (UR) grants
- Acquisition of Development Rights (ADR)

The programs listed above are administered under the Local Assistance Stewardship Grant Program and share an application form. Nonprofit conservation organizations (NCOs) are eligible to apply to the Stewardship Local Assistance Grant Program for land acquisition projects. Local sponsors work with a DNR Regional Grant Specialist (RGS) to plan projects, follow program requirements and complete grant applications. The following is an overview of the Stewardship LUG grant process. Potential applicants are highly encouraged to contact their Regional Grant Specialist for further details regarding the grant process and application guidance.

- Applications for Stewardship LUG grants are accepted once a year. Stewardship LUG, LWCF, and RTP grants offer 50% cost share. In typical years, the LUG program receives approximately three times more in grant requests than available grant funds.
- Grant staff then review and rank eligible projects relative to eligibility and priorities for each LUG grant subprogram, as outlined in the LUG program guidance. The scoring reflects provisions outlined in s. 23.09 Wis. Stats., s. 30.277 Wis. Stats., and Ch. NR 51, Wis. Admin. Code. Coordination among grant staff across the state ensures consistency and fairness in application scoring.
- Final scores are used to generate the list of proposed grant awards.
- When approved by the Department, grant staff send tentative award letters to applicants whose projects are selected for funding.
- Grant staff then work with applicants on final project due diligence and execute grant agreements with project sponsors.
- Sponsors can then move forward with their project and submit a reimbursement request to the Department upon project completion. Development projects are eligible for up to a 50% advance payment.

Attachment: P&P_Dept_About WDNR Stewardship Grants

GRANT APPLICATION SUMMARY

Project Name: Campground Development & Bathroom Construction at Hawthorne Hills Park
Grant Name/Agency: WDNR Knowles-Nelson Stewardship **CFDA/State ID:**
Department: Planning & Parks **Exp Acct.** **Preparer:** Matt Aho
Total Project Amount: $499,998 **Grant Match Required:** 50% **Rev Acct.** **Approver:** Andrew Struck

Strategy: (Linkages to other planning efforts)
- POSP for Ozaukee County (P. 61, 67, 95, 116)
- Strategic Plan for Ozaukee County (P. 14, III.C.6.)

Project Scope and Expectations
- Construct public bathroom facility
- PH I campground develoment
- Water and electric provision for campgrounds and SMNS

Other Grants Supporting Project	Status	Amount
County Project Reserve	Pending	$225,000
		$0
		$0
		$0

Project Partners:
- WDNR

Project Landowner Upon Completion:
- Ozaukee County

GRANT EXPENSE	
Operational Expense	**$**
Capital Expense	**$**
Construction	$249,999
TOTAL	**$249,999**
% PROJECT	**50%**

GRANT/PROJECT MATCH	
Operational Match	**$**
Personnel & FB	$15,000
Travel	$500
Supplies	$4,499
Equipment	$5,000
Other Grants	**$**
County Project Reserve	$225,000
TOTAL	**$249,999**
% MATCH	**50%**

GRANT SUPPORTED STAFF	
Positon	**$**
TOTAL	**$0**

DEPARTMENT REVENUES	
Department	**$**
Construction	$249,999
TOTAL	**$249,999**

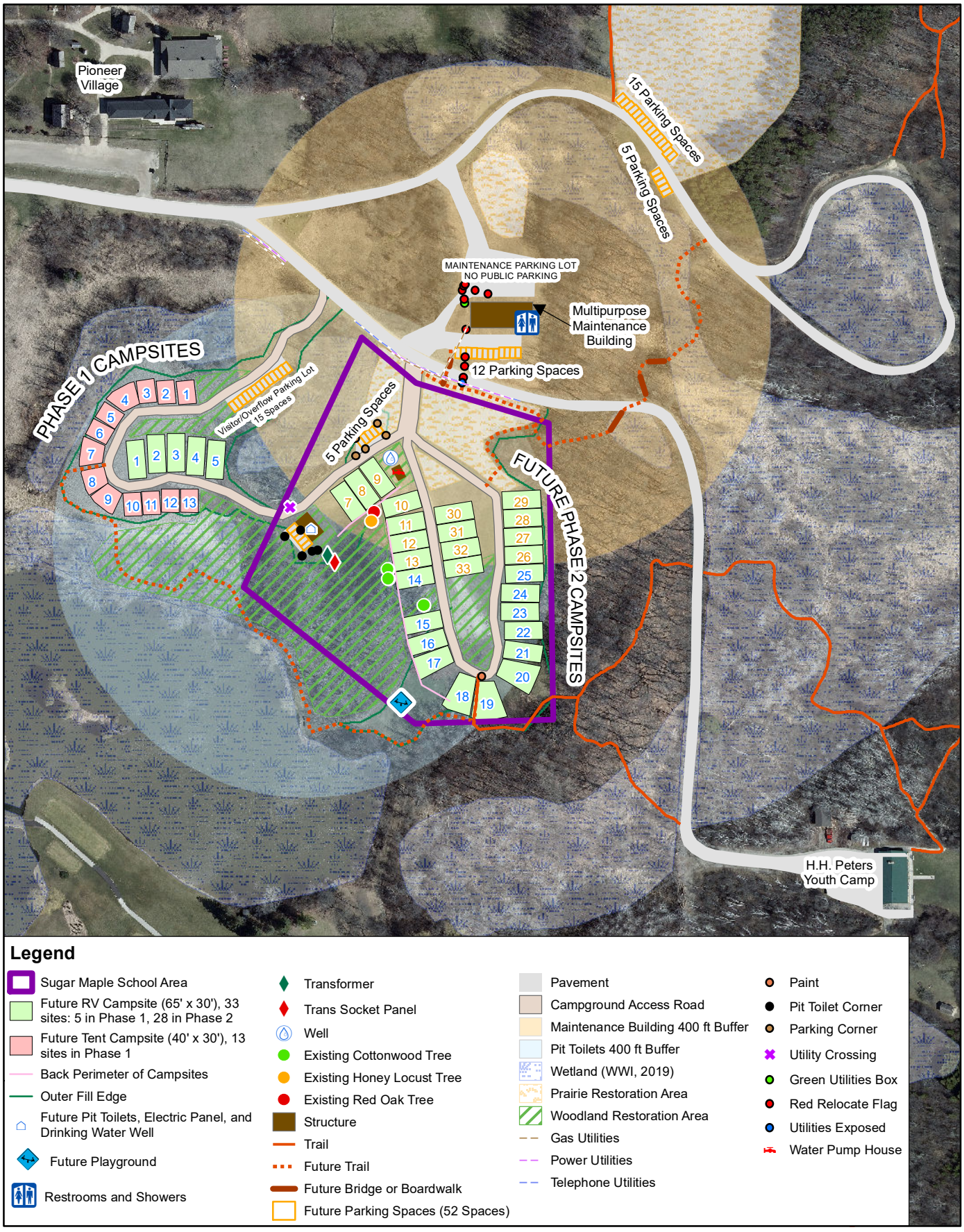
Project Risks:	Comments
▪ Estimated project costs without final E&D	▪ County Project Reserve supporting overall project
▪ Timelines	▪ Serve as match for other grants
	▪ Overall project costs ~ $499,999

Major Milestones	Date
Grant Award	Jan-25
Construction and Restoration	Dec-28

Duration: 3 yrs **Extension:** NA

Attachment: AS2024_NRC03072024_WDNR STU Hawthorne Hills Bathroom and Campground

Hawthorne Hills Park, Future Campground



N

0 125 250 500 Feet

Ozaukee County Pl
January, 2024

Attachment: HH_Campground_2.29.2024 (2) (P&PDept_SubmitAccept_WDNRStewardship_BathroomCampgroundDev_HHParkPhII)

Natural Resources Committee

AGENDA INFORMATION SHEET

AGENDA DATE: **March 7, 2024**
DEPARTMENT: **Planning and Parks**
DIRECTOR: **Andrew Struck**
PREPARER: **Andrew Struck**

Agenda Summary Submittal and Acceptance of US Fish and Wildlife Service – Joint Venture Grant for Acquiring (or portions of) Parcel ID's: (110500504001, 110500510001, 110250200100, 110251400700) Along County Highway Trunk W and the Milwaukee River in the Village of Saukville for Floodplain and Wetland Restoration and Addition to the Ozaukee County Park System per §§ 59.52(6)(a) AND 27.065(1)(a) Wisconsin Statutes as Part of the County Highway Trunk W Road Reconstruction and Restoration Project

BACKGROUND INFORMATION: The Ozaukee County - Planning and Parks Department (Department) in conjunction with the Ozaukee County Highway Department proposes to submit a grant application to the US Fish and Wildlife Service (USFWS) Joint Venture (JV) grant program to support a County-sponsored fish and wildlife habitat improvement project in conjunction with a road (CTH W) reconstruction and improvement project. Specifically, the Department is partnering with the Ozaukee County Highway Department to engineer and design a holistic, long-term solution to improve County Trunk Highway W (CTH W) and alleviate flooding of the active roadway in the Village of Saukville, while improving floodplain connectivity for aquatic organism passage into the riparian floodplains, wetlands and historic Milwaukee River oxbow. Engineering and design is ongoing for a new roadway that allows for floodplain reconnection and functional fish and wildlife habitat connectivity by allowing substantial floodwater to pass under the new roadway, while improving the road infrastructure by decreasing flooding occurrence. Acquisition of properties adjacent to the County Trunk Highway W right of way and project area is required for completion of the project plans and for floodplain, wetland and habitat restoration. The Department is coordinating with the Village of Saukville on a property transfer to the County for a 3.4-acre parcel owned by the Village in the project area (ID 110500504000). Four (4) parcels (ID's 110500504001, 110500510001, 110250200100, 110251400700) containing approximately 28 acres and in the floodway of the Milwaukee River have been identified for acquisition and wetland floodplain, and habitat restoration. Combined, these five parcels contain approximately 31.5 total acres, 28 acres of wetlands, 27.6 acres of regulatory floodway and 31.5 acres (entire area) of 100-year floodplain with a BFE (base flood elevation - studied), thereby, significantly limiting development potential on the parcels (including dry land access to the parcels from CTH W). Secured WDNR Stewardship Local Assistance and Milwaukee Metropolitan Sewerage District (MMSD) / USFWS / North American Wetlands Conservation Act (NAWCA) grant funding has already supported the acquisition of two parcels in the project area, and secured USFWS Fish Passage grant funding is supporting habitat restoration of project parcels. USFWS JV funding and matching MMSD / USFWS / NAWCA funding would support acquisition and restoration of these four parcels (or portions of the parcels) for implementation of project plans. This project is supported by the following County plans: the County Park and Open Space Plan <https://www.co.ozaukee.wi.us/645/Park-Open-Space

<file:///\\OZCTY06\PRLM\NOAA_FISHPASSAGE\ELU_NRC\Support%20Docs\Drafts\2021\9.2.21\WDNR%20SWM%20-%20LM%20Tribs_Not%20Submitting\Park%20and%20Open%20Space%20Plan%20%3chttps:\www.co.ozaukee.wi.us\645\Park-Open-Space>> (pages 12, 15, 29, 38, 82, 84, 94, 99, 106-108, 115) related to acquisition of lands along the Milwaukee River Recreation Corridor, areas of groundwater recharge potential and aquatic fragmentation and habitat restoration, the Comprehensive Plan for Ozaukee County: 2035 <http://www.sewrpc.org/SEWRPCFiles/Publications/CAPR/capr-285-comp-plan-for-ozaukee-co.pdf> (pages 100, 101, 144, 271, 273, 276, 404) related to aquatic fragmentation, habitat restoration, protection and preservation of environmental corridors, and widening of portions of CTH W, the draft Land and Water Resource Management Plan for Ozaukee County 2021-2030 https://www.sewrpc.org/SEWRPCFiles/Environment/LandWaterResourceManagementPla/capr-338-OZ-County-Land-and-Water-Resource-Management-Draft.pdf (pages 22, 136, 243 - 247) relating to identification and removal of fish passage impediments and use of the Fish and Wildlife GIS Tool to prioritize aquatic connectivity and habitat restoration and preservation projects, the County Strategic Plan 2020-2024 <https://www.co.ozaukee.wi.us/DocumentCenter/View/14493/Ozaukee-County-Strategic-Plan-2020-24> (pages 9, 13) related to the provide a safe and efficient transportation system for all (II. B. 5) and enhance quality of life assets strategic goals, and the County Board endorsed Regional Water Quality Management Plan Update (pages 271, 273, 276) related to protection of floodplains and groundwater recharge areas. This project is also supported by the Great Lakes Restoration Initiative Action Plan III <https://www.epa.gov/sites/production/files/2019-10/documents/glri-action-plan-3-201910-30pp.pdf> (pages 6, 21-24). This project is also consistent with the Highway Department's identified transportation improvements to CTH W and existing WisDOT LRIP funding and is also supported by SEWRPC and several regional plans. The project is also supported by the Village of Saukville per the adopted resolution.

ANALYSIS: Proposals to the USFWS JV grant program are due March 18, 2024. Total funding requested under this grant is $300,000. The Ozaukee County Natural Resources Committee unanimously approved submittal and acceptance of the WDNR Stewardship Local Assistance grant at its March 3, 2022 meeting (Ayes: Jobs, Holyoke, Minkel-Dumit, Ross) and the Ozaukee County Board of Supervisors approved Resolution 21-75 at its April 6, 2022 meeting (Ayes - 20, Nays - 0, Absent - 5) supporting acquisition of two of the four parcels for acquisition under this USFWS JV grant request and project scope. A non-federal match requirement of 25% of the federal request is required, which would be provided by a pending MMSD / USFWS / NAWCA grant ($75,000) for a total project cost of $375,000.

FISCAL IMPACT: Balance Current Year: None (Additional Program Revenue of $300,000)

Next Year's Estimated Cost: None

FUNDING SOURCE: County Levy: Non-County Levy: X

Indicate source: Pending USFWS JV and MMSD / USFWS / NAWCA grants

RECOMMENDED MOTION: Approve and recommend to the Ozaukee County Board of Supervisors the submittal, acceptance, and implementation of a US Fish and Wildlife Service - Joint Venture Grant by the Planning and Parks Department for acquiring (or portions of) Parcel ID's: (110500504001, 110500510001, 110250200100, 110251400700) along County Highway

Trunk W and the Milwaukee River in the Village of Saukville for floodplain, wetland and habitat restoration and addition to the Ozaukee County Park System per §§ 59.52(6)(a) AND 27.065(1)(a) Wisconsin Statutes as part of the County Highway Trunk W Road Reconstruction and Restoration Project.

ATTACHMENTS:

- P&P_Dept_About GLRI JV Grants (PDF)
- P&P_Dept_GLRIJV_ProjectArea_2.22.24 (PDF)
- AS2024_NRC03072024_USFWS JV_CTH W Acquisition_Grant Application Summary_ATSFinal022224(PDF)

NATURAL RESOURCES COMMITTEE

UPPER MISSISSIPPI / GREAT LAKES JOINT VENTURE

Great Lakes Restoration Initiative – Great Lakes Watershed Habitat and Species Restoration Initiative

Building on the work of the Great Lakes Interagency Task Force and the associated Great Lakes Regional Strategy, The Great Lakes Restoration Initiative (GLRI) was started in 2009. The overarching objective of GLRI is to protect and restore ecosystems associated with the largest complex of freshwater lakes on earth – the Great Lakes. The current GLRI Action Plan outlines this strategy from 2020-2024.

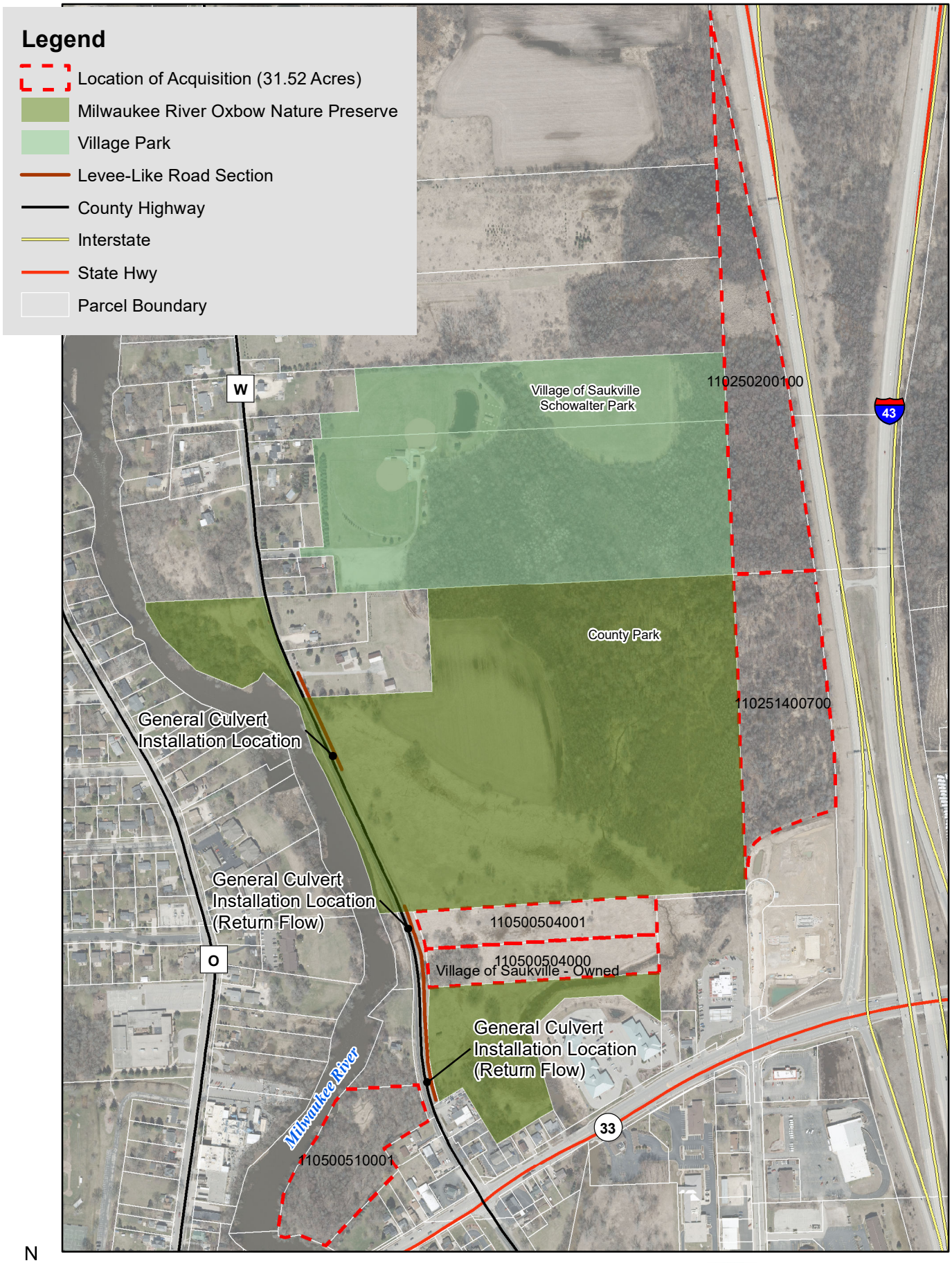
Funding is distributed by the Environmental Protection Agency to the U.S. Fish and Wildlife Service (FWS), in order to facilitate implementation of GLRI objectives. Projects undertaken by the FWS through GLRI are addressing a wide variety of issues associated with Great Lakes ecosystem health through both research and on-the-ground implementation.

FWS GLRI funds are distributed to the Upper Mississippi / Great Lakes JV and the Atlantic Coast JV through the Great Lakes Watershed Habitat and Species Restoration Initiative. The goal of this initiative is to protect and restore migratory bird habitat within Great Lakes watersheds through a competitive, partnership-based grants program.

The FY2024 Notice of Funding Opportunity is now open for applications! Download this NOFO, and/or search for Opportunity Number F24AS00232 at Grants.gov or GrantSolutions.gov. Please note that you must apply through GrantSolutions.gov (not Grants.gov) for your application to be accepted. Due date for applications into GrantSolutions is March 18th, 2024.

Attachment: P&P_Dept_About GLRI JV Grants (P&PDept_SubmitAccept_USFWS_JVGrant_AcquisitionCTHWProjectArea_CountyPark)

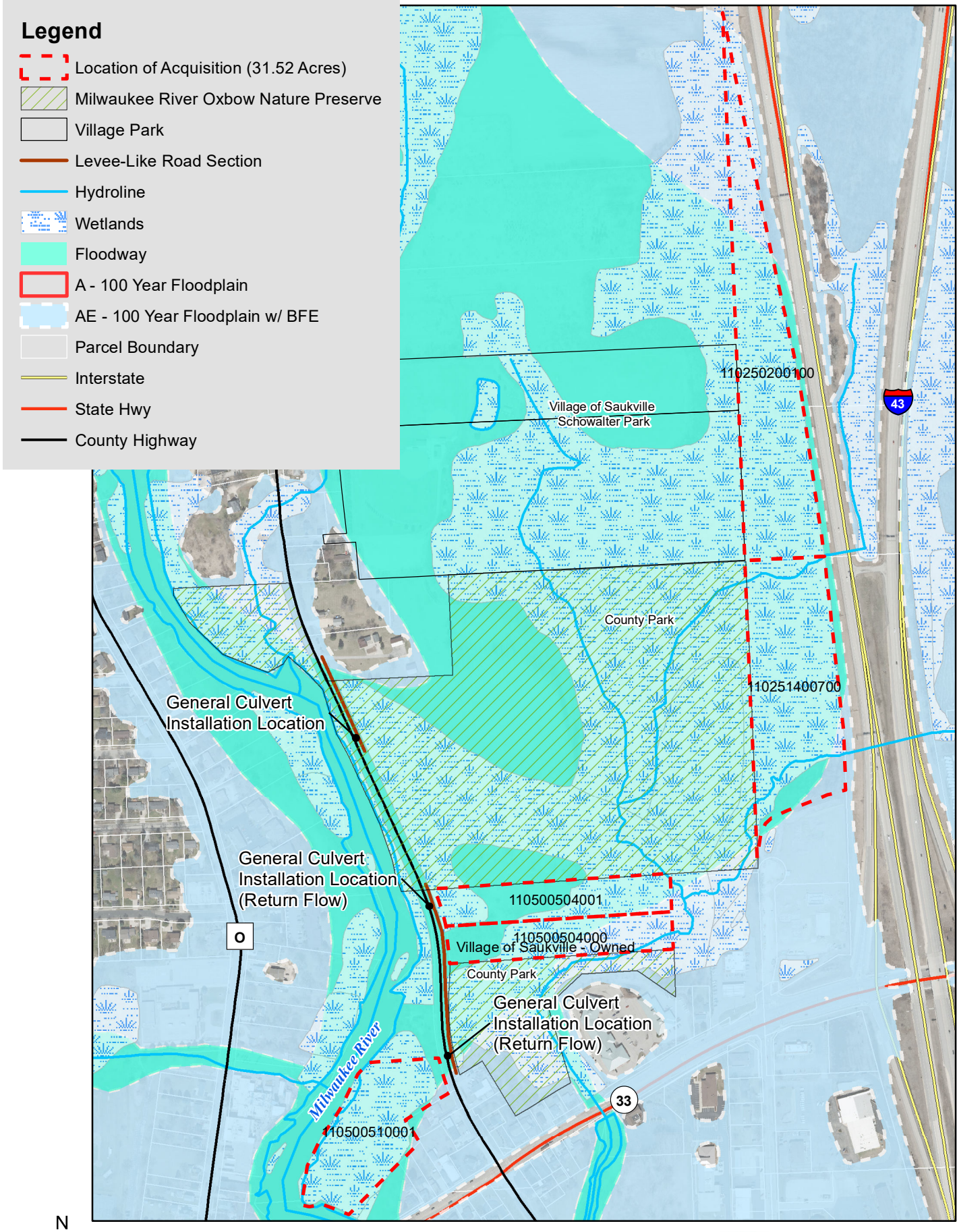
Reconnecting the Milwaukee River to Historic Oxbow - Village of Saukville, Wisconsin Proposed Acquisition Project, Phase II



Map Produced By:
Ozaukee County
February, 2024

Attachment: P&P_Dept_GLRIJV_ProjectArea_2.22.24 (P&PDept_SubmitAccept_USFWS_JVGrant_AcquisitionCTHWProjectArea_CountyPark)

Reconnecting the Milwaukee River to Historic Oxbow - Village of Saukville, Wisconsin Proposed Acquisition Project Wetland and Floodplain



Map Produced By:
Ozaukee County
February, 2024

Attachment: P&P_Dept_GLRIJV_ProjectArea_2.22.24 (P&PDept_SubmitAccept_USFWS_JVGrant_AcquisitionCTHWProjectArea_CountyPark)

GRANT APPLICATION SUMMARY

Project Name: Acquisition of Park Lands for Wetland Floodplain Restoration along CTH W
Grant Name/Agency: USFWS JV **CFDA/State ID:**
Department: Planning & Parks **Exp Acct.** **Preparer:** Matt Aho
Total Project Amount: $375,000 **Grant Match Required:** 20% **Rev Acct.** **Approver:** Andrew Struck

Strategy: (Linkages to other planning efforts)
- Regional Water Quality Management Plan Update (P. 271, 273 276)
- POSP for Ozaukee County (P. 12, 15, 29, 38, 82, 84, 94, 99, 106-108, 115)
- Comprehensive Plan for Ozaukee County: 2035 (P.100, 101, 144, 271, 273, 276)
- Strategic Plan: Transportation System & Enhance Quality of Life Assets Goals (P. 9, 13)
- Ozaukee County Land and Water Resource Management Plan (P. 22, 136, 243 - 247)

Project Scope and Expectations
- Reconnect Milwaukee River to historic floodplain, wetlands and oxbow
- Alleviate flooding of CTH W, improve road infrastructure and safety
- Park land acquisition for right of way, wetland, floodplain and habitat restoration
- Improve and enhance riparian habitat and wetlands
- Increase fish and wildlife habitat - spawning area

Other Grants Supporting Project	Status	Amount
MMSD Greenseams/DU/NAWCA	Pending	$75,000
		$0
		$0
		$0

Project Partners:
- USFWS
- WisDOT
- MMSD, WDNR, DU
- Private Landowners

Project Landowner Upon Completion:
- Ozaukee County

GRANT EXPENSE	
Operational Expense	**$**
Capital Expense	**$**
Land Acquisition	$300,000
TOTAL	**$300,000**
% PROJECT	**80%**

GRANT/PROJECT MATCH	
Operational Match	**$**
Other Grants	**$**
MMSD Greenseams/DU/N	$75,000
TOTAL	**$75,000**
% MATCH	**20%**

GRANT SUPPORTED STAFF	
Positon	**$**
Director	
Program Manager	
Conservation Biologists	
Senior Planner	
Natural Res & GIS Tech	
TOTAL	**$0**

DEPARTMENT REVENUES	
Department	**$**
Land Acquisition	$300,000
TOTAL	**$300,000**

Project Risks:	Comments
▪ Landowner coordination	▪ Joint project with Highway Department
▪ Timelines	▪ WisDOT LRIP funds supporting overall project
▪ Land acquisition appraisal and negotiations	▪ Serve as match for other grants
	▪ Overall project costs ~ $375,000
	▪ Addition to County Park System

Major Milestones			Date
Proposal due			Mar-24
Grant award			May-24
Landowner Coordination / Acquisition			Sep-24
Construction and Restoration			May-25
Duration:	2 yrs	**Extension:**	NA

Attachment: AS2024_NRC03072024_USFWS JV_CTH W Acquisition_Grant Application

RESOLUTION NO. (ID # 9945)

SUBMITTAL AND ACCEPTANCE OF OUTDOOR RECREATION TRAIL AIDS - COUNTY SNOWMOBILE TRAIL AIDS FUNDING THROUGH THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES

WHEREAS, Ozaukee County, through the Planning and Parks Department, is interested in continuing to maintain, acquire, insure, and/or develop lands for public outdoor recreation purposes such as snowmobile trail use as described in the application; and

WHEREAS, said public snowmobile trails are eligible for funding under Section 23.09 (26) of the Wisconsin State Statutes through the Wisconsin Department of Natural Resources Outdoor Motorized Recreation Trail Aids - County Snowmobile Trail Aids Program and a grant agreement is requested to carry out the project; and

WHEREAS, the maintenance, acquisition, insurance, and development of lands for public snowmobile trail use is consistent with *A Park and Open Space Plan for Ozaukee County* and *A Multi-jurisdictional Comprehensive Plan for Ozaukee County: 2035*;

WHEREAS, the WDNR Outdoor Motorized Recreation Trail Aids - County Snowmobile Trail Aids Program will provide up to $34,140 based on the currently approved snowmobile trail mileage.

NOW, THEREFORE, BE IT RESOLVED, by the Ozaukee County Board of Supervisors that the Ozaukee County Planning and Parks Department has budgeted a sum sufficient to fully and satisfactorily complete the project and the Planning and Parks Director is authorized on behalf of Ozaukee County to sign and submit a Wisconsin Department of Natural Resources Outdoor Recreation Trail Aids grant application under Section 23.09 (26) for financial assistance that may be available for such eligible maintenance costs, attests to the validity and veracity of the statements and representations contained in the grant application, sign a grant agreement between Ozaukee County and the WDNR, submit quarterly and/or final reports to the WDNR to satisfy the grant agreement, submit grant reimbursement requests to the WDNR along with necessary supporting documentation within 6 months of the project completion date, and sign and submit other required documentation and take necessary actions to initiate, direct, and complete the approved project within the provided funding timeline.

BE IT FURTHER RESOLVED that Ozaukee County will comply state and federal rules for the programs; may perform force account work; will maintain the completed project in an attractive, inviting and safe manner; will keep the project open to the general public during reasonable hours consistent with the type of facility; and will obtain from the State of Wisconsin Department of Natural Resources approval in writing before any change is made in the use of the project site.

BE IT FURTHER RESOLVED, by the Ozaukee County Board of Supervisors that the County Clerk shall forward a copy of this resolution to the Wisconsin Department of Natural Resources.

Dated at Port Washington, Wisconsin, this 20th day of March 2024.

SUMMARY: *Submittal and acceptance of a Wisconsin Department of Natural Resources Outdoor Motorized Recreation Trail Aids - County Snowmobile Trail Aids Program grant for 2024-2025*

trail maintenance funding.

VOTE REQUIRED: Majority

NATURAL RESOURCES COMMITTEE

Natural Resources Committee

AGENDA INFORMATION SHEET

AGENDA DATE: **March 7, 2024**
DEPARTMENT: **Planning and Parks**
DIRECTOR: **Andrew Struck**
PREPARER: **Andrew Struck**

Agenda Summary Submittal and Acceptance of Outdoor Recreation Trail Aids - County Snowmobile Trail Aids Funding Through the Wisconsin Department of Natural Resources

BACKGROUND INFORMATION: Ozaukee County, in conjunction with the Ozaukee County Snowmobile Clubs, proposes to submit an application for funding through Wisconsin Department of Natural Resources (WDNR) Outdoor Motorized Recreation Trail Aids program for snowmobile trail maintenance funds. Each year the Ozaukee County Planning and Parks Department applies to the WDNR to fund the operation and maintenance of the Ozaukee County snowmobile trails through the various snowmobile trail clubs in the County. The County serves as the administrator of the grant funds and provides reimbursement to each of the Ozaukee County snowmobile clubs for eligible maintenance activities for their snowmobile trails (per WDNR approved mileage). The Ozaukee County Planning and Parks Department may receive funds for administering the grant and is responsible for filing reimbursements with the WDNR. These grant proposals are consistent and complementary with past Trail Aids collaborative applications.

ANALYSIS: The Planning and Parks Department has applied for and received WDNR grant funding for snowmobile trail maintenance for many years. The trail maintenance grant funds are based on the amount of WDNR approved snowmobile trail miles maintained by the snowmobile clubs in the County. The funding request for trail maintenance is $34,140, based on the current approved mileage (113.8 miles). The County provides in-kind and reimbursable management, administration and distribution of the trail maintenance funds. Actual expenses for the snowmobile trail maintenance grant is equal to the revenue in a given snowmobile season. The County is eligible for a pre-payment of 50% of the reimbursable grant. See also the attached required resolution for application and acceptance of Outdoor Recreation Aids from the WDNR.

FISCAL IMPACT:

Balance Current Year: NONE ($17,070 in revenue and in-kind and reimbursable staff time)

Next Year's Estimated Cost: NONE ($17,070 in revenue and in-kind and reimbursable staff time)

FUNDING SOURCE: County Levy: Non-County Levy: X

Indicate source: WDNR Outdoor Motorized Recreation Trail Aids Funding -

Snowmobile Trail Aid and In-kind staff time

RECOMMENDED MOTION: Approve and recommend to the Ozaukee County Board of Supervisors the resolution for submittal and acceptance of a grant by the Planning and Parks Department to the Wisconsin Department of Natural Resources Outdoor Motorized Recreation Trail Aids grant funding program for 2024-2025 Snowmobile Trail Maintenance funding.

ATTACHMENTS:

- P&P_Dept_Ozaukee Snowmobile Trail Map - 2023 (PDF)
- Grant Application Summary_04062023_WDNR Snowmobile Maintenance Aids_ATSFinal022924 (PDF)



OZAUKEE COUNTY
Planning and Parks Department
121 West Main Street P.O. Box 994
Port Washington, WI 53074
phone (262) 2386237
fax (262) 2386269
FACEBOOK.COM/OZAUKEECOUNTYPLANNINGPARKS
WWW.CO.OZAUKEE.WI.US/540/PLANNING-PARKS

PLANNING AND PARKS DEPARTMENT MISSION

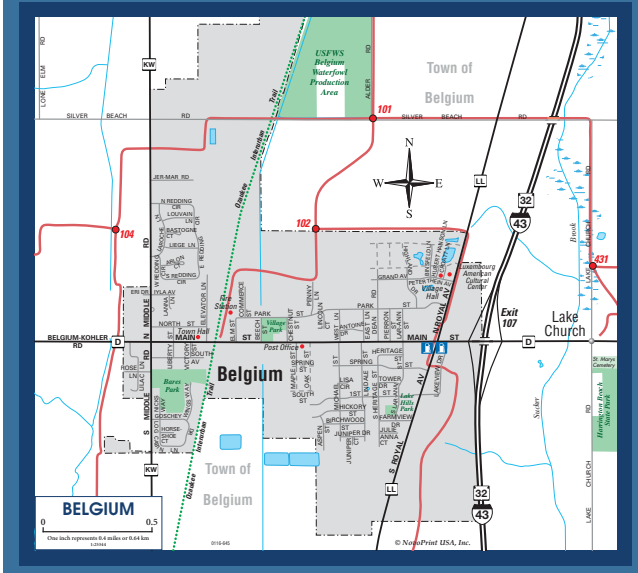
To provide an organized framework for Ozaukee County residents and visitors of Ozaukee County to appreciate and enjoy the natural and cultural resources, local ecology, recreational experiences, well planned sustainable growth and improved quality of life in Ozaukee County through the preservation, protection and restoration of natural resources, increased awareness and education, stewardship, comprehensive planning and the acquisition, development, enhancement and operation of large scale, intergovernmental including multi-purpose, maintained golf courses, multiuse trails and parks.

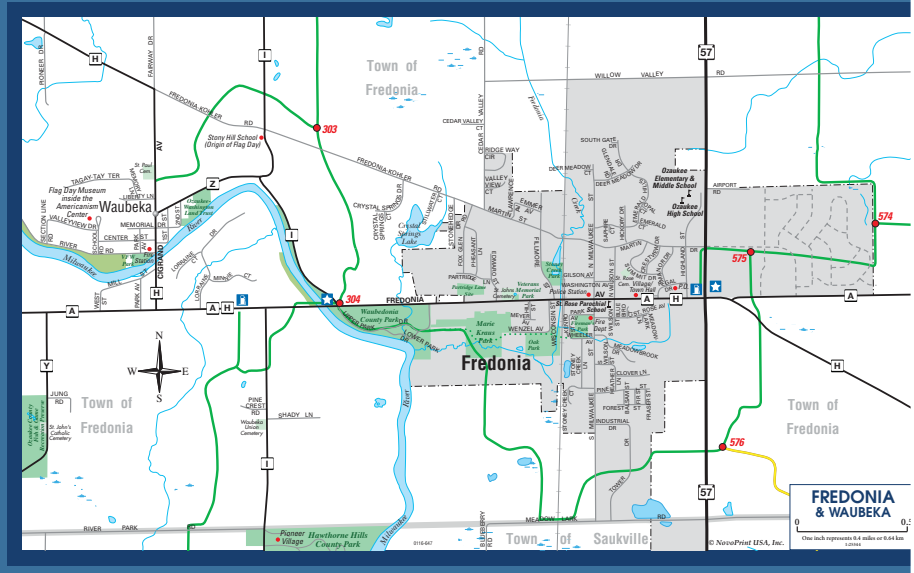
OZAUKEE COUNTY



OZAUKEE COUNTY SNOWMOBILE CLUBS
24 HOUR SNOW PHONE
(262) 284-8259

*Ozaukee County Snowmobile Trails are closed when the temperature is above freezing (32°F or 0°C) and the minimum snow depth on trails drops below six to eight inches. 1Wisconsin.





WISCONSIN OZAUKEE INTERURBAN TRAIL

In cooperation with we energies

⚠ WARNING ⚠
SNOWMOBILES PROHIBITED
Not For Motorized Vehicles
www.interurbantrail.us

OZAUKEE COUNTY SNOWMOBILE CLUBS

FREDONIA SCHNEE KATZEN SC
County Representatives:
Sean Keller ..... (262) 692-6273
Jeff Sass ..... (262) 692-3241
www.schneekatzensc.com
Meeting Location/Date/Time:
Waubeka Firehouse / 3rd Wed. / 7:00 pm
Dues: $25.00 per family

MONTICELLO SNO-MOBILE CLUB
County Representatives:
Randy Kison ..... (262) 707-9328
Jeff Kaul ..... (414) 940-5890
www.monticellosnomobileclub.org
Meeting Location/Date/Time:
Circle 8 / 2nd Thurs. / 7:30 pm
Dues: $40 non-working
$25.00 working

OZAUKEE SNO DRIFTERS
County Representatives:
Jim Crigleon ..... (262) 366-1844
Doug Wacker ..... (414) 217-0626
Meeting Location/Date/Time:
Road House / 1st Wed. / 8:00 pm
Dues: $30.00 per family

SNOW RUNNERS LTD
County Representatives:
Jeff St. Peter ..... (414) 614-3217
Jeff Clasen ..... (414) 828-5265
www.snowrunnersltd.net
Meeting Location/Date/Time:
Belgium Legion Hall
1st Sun. / 7:00 pm
Dues: $25.00 per family

VILLAGE SNO SEEKERS
County Representatives:
Bill Dickmann Jr. ..... (262) 844-7169
John Franzee ..... (262) 483-3745
Meeting Location/Date/Time:
Railroad Station / 2nd Thurs. / 7:30 pm
Dues: $25.00 per family

ASSOCIATION OF WISCONSIN SNOWMOBILE CLUBS
DeForest, WI
(608) 846-5530
(608) 846-5534 fax
www.awsc.org
Date Published January 2016

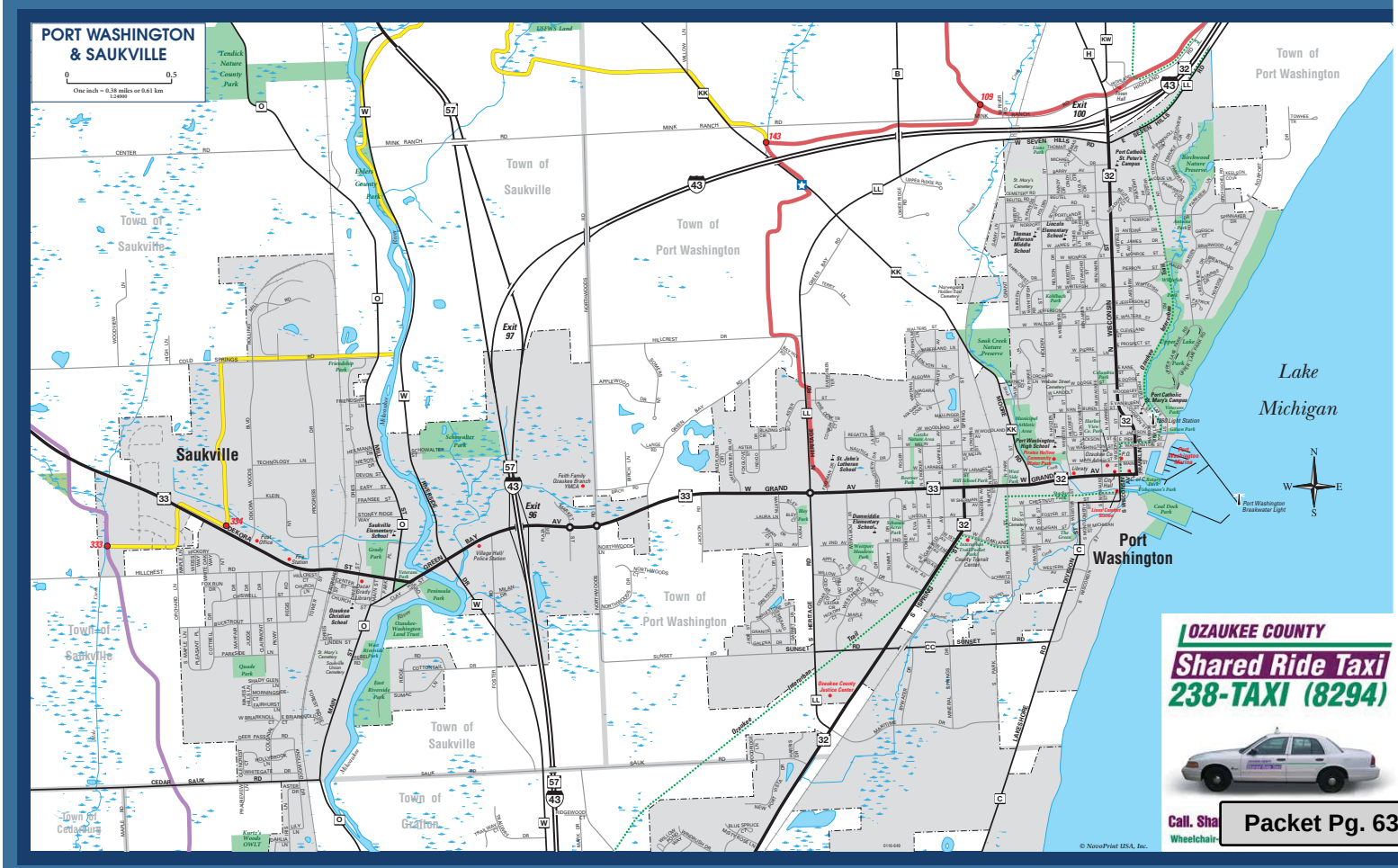
OZAUKEE COUNTY SNOWMOBILE ASSOCIATIO

COUNTY SNOW PHONE RECORDING ON TRAIL OPENINGS AND CLOSINGS: (262) 284-

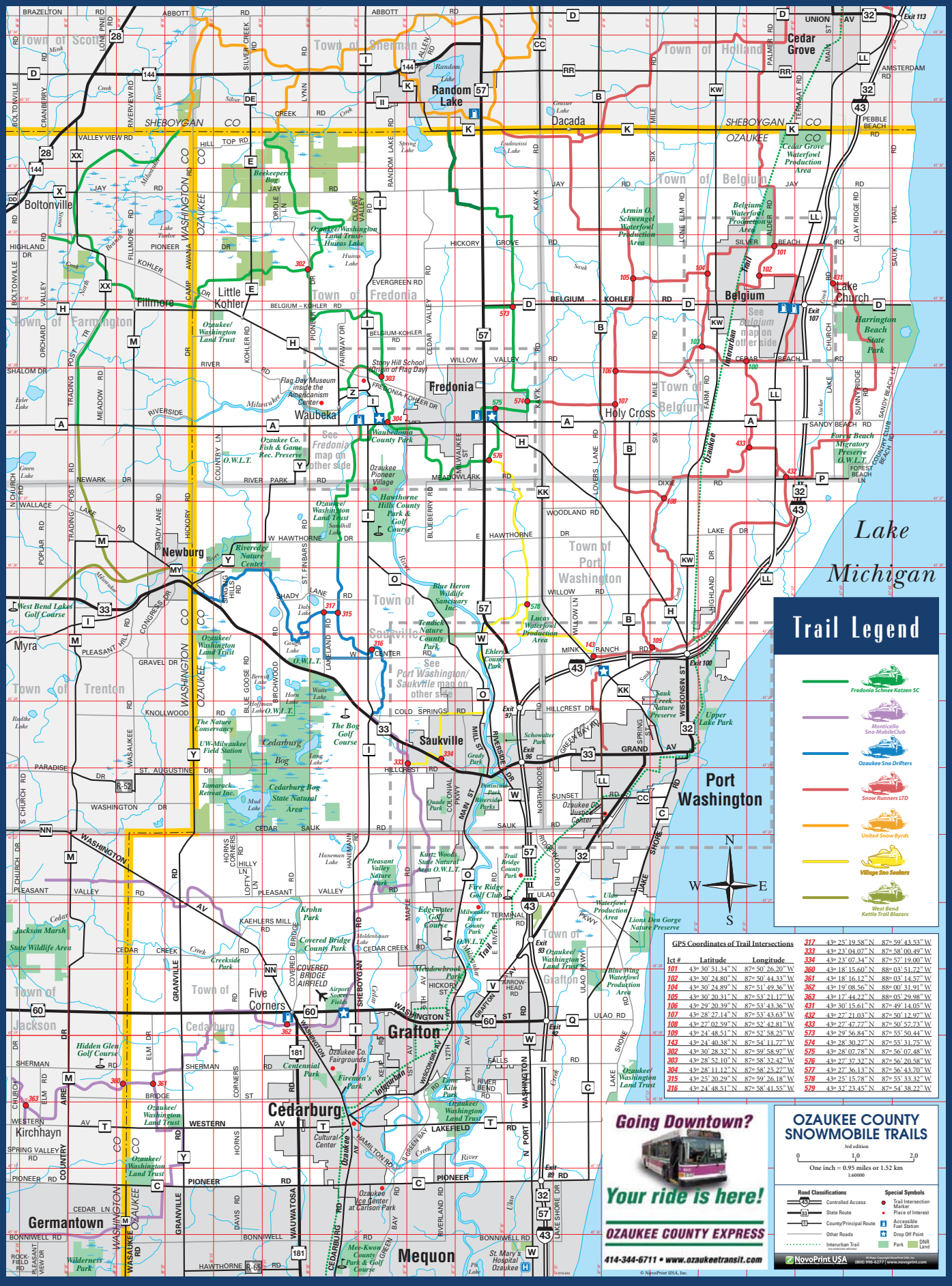
PRESIDENT
Jeff Clasen ..... (414) 828-5265
SECRETARIAT/TREASURER
Jim Schoen ..... (262) 254-2894
TRAIL COORDINATOR
Jeff St. Peter ..... (414) 614-3217
AWSC DIRECTOR
Wally Thill ..... (262) 692-9165

COUNTY REPRESENTATIVE
Jeff Sass ..... (262) 692
AREA 1 EAST OF HWY 57
John Franzee ..... (262) 284
AREA 2 WEST OF HWY 57
Gene Graff ..... (262) 689
AREA 3 SOUTH OF HWY 33
Randy Kison ..... (262) 677

County Association Snowmobile meetings: Railroad Station, 2nd Monday of the Month, 7:00 PM, September thro



Attachment: P&P_Dept_Ozaukee Snowmobile Trail Map - 2023 (P&PDept_SubmitAccept_WDNR_OutdoorRecAids-SnowmobileTrails)



GPS Coordinates of Trail Intersections

Jct #	Latitude	Longitude
101	43° 30' 51.34" N	87° 50' 26.20" W
102	43° 30' 24.80" N	87° 50' 44.33" W
104	43° 30' 24.89" N	87° 51' 49.36" W
105	43° 30' 20.31" N	87° 53' 21.17" W
106	43° 29' 20.39" N	87° 53' 43.36" W
107	43° 28' 27.14" N	87° 53' 43.63" W
108	43° 27' 02.59" N	87° 52' 42.81" W
109	43° 24' 48.51" N	87° 52' 58.25" W
143	43° 24' 40.38" N	87° 54' 11.77" W
302	43° 30' 28.32" N	87° 59' 58.97" W
303	43° 28' 52.10" N	87° 58' 32.42" W
304	43° 28' 11.12" N	87° 58' 25.27" W
315	43° 25' 20.29" N	87° 59' 26.18" W
316	43° 24' 48.51" N	87° 58' 41.55" W
317	43° 25' 19.58" N	87° 59' 43.53" W
333	43° 23' 04.07" N	87° 58' 00.49" W
334	43° 23' 07.34" N	87° 57' 19.00" W
360	43° 18' 15.60" N	88° 03' 51.72" W
361	43° 18' 16.12" N	88° 03' 14.57" W
362	43° 19' 08.56" N	88° 00' 31.91" W
363	43° 17' 44.22" N	88° 05' 29.98" W
431	43° 30' 15.61" N	87° 49' 14.05" W
432	43° 27' 21.03" N	87° 50' 12.97" W
433	43° 27' 47.77" N	87° 50' 57.73" W
573	43° 29' 56.84" N	87° 55' 50.44" W
574	43° 28' 30.27" N	87° 55' 31.75" W
575	43° 28' 07.78" N	87° 56' 07.48" W
576	43° 27' 37.32" N	87° 56' 20.58" W
577	43° 27' 36.13" N	87° 56' 43.70" W
578	43° 25' 15.78" N	87° 55' 33.32" W
579	43° 32' 23.45" N	87° 54' 38.22" W

Attachment: P&P_Dept_Ozaukee Snowmobile Trail Map - 2023 (P&PDept_SubmitAccept_WDNR_OutdoorRecAids-SnowmobileTrails)

GRANT APPLICATION SUMMARY

Project Name: WDNR Snowmobile Trail Aids Maintenance Funding 2023-2024
Grant Name/Agency: WDNR OMRT **CFDA/State ID:**
Department: Planning & Parks **Exp Acct.** **Preparer:** Matt Aho
Total Project Amount: $34,140 **Grant Match Required:** 0% **Rev Acct.** **Approver:** Andrew Struck

Strategy: (Linkages to other planning efforts)
- Comprehensive Plan for Ozaukee County: 2035 (P. 511)
- POSP for Ozaukee County (P. 54, 55, 99, 247)

Project Scope and Expectations
- Operation and maintenance of Oz Co Snowmobile Trails
- County serves as grant funding administrator
- County provides reimbursement to each county Snowmobile Club
- Actual expenses equals the revenue in a given snowmobile season
- Staff may receive funds for administering the grant

Other Grants Supporting Project	Status	Amount
NA		$0
		$0
		$0
		$0

Project Partners:
- Ozaukee County Snowmobile Clubs

Project Landowner Upon Completion:
- Ozaukee County

GRANT EXPENSE	
Operational Expense	**$**
Salaries/Fringe Benefits	$600
Capital Expense	**$**
Snowmobile Clubs	$33,540
TOTAL	**$34,140**
% PROJECT	**98%**

GRANT/PROJECT MATCH	
Operational Match	**$**
Salaries/Fringe Benefits	$600
Other Grants	**$**
TOTAL	**$600**
% MATCH	**2%**

GRANT SUPPORTED STAFF	
Positon	**$**
TOTAL	

DEPARTMENT REVENUES	
Department	**$**
Salaries/Fringe Benefits	$600
TOTAL	**$600**

Project Risks:	Comments
	▪ County eligible for 50% pre-payment

Major Milestones	Date
Initial payments to snowmobile clubs	Nov-23
Final payments to snowmobile clubs	Nov-24

Duration: 12 months **Extension:** NA

Attachment: Grant Application Summary_04062023_WDNR Snowmobile Maintenance

RESOLUTION NO. (ID # 9946)

WE ENERGIES UNDERGROUND EASEMENT FOR ELECTRICAL SERVICE AT HAWTHORNE HILLS COUNTY PARK

WHEREAS, electrical service to the new campground and Sugar Maple Nature School area at Hawthorne Hills County Park is required; and

WHEREAS, the proposed electric work will include underground service to the area south of the new multi-purpose maintenance building; and

WHEREAS, the proposed underground electric service requires a We Energies easement across Hawthorne Hills County Park from the park road south into the campsite and Sugar Maple Nature School area;

WHEREAS, the easement area is described as strips of land 12 feet in width being a part of the Northwest ¼ of Section 3, Township 11 North, Range 21 East, Town of Saukville, Ozaukee County, Wisconsin; and

WHEREAS, the purpose of this easement is to construct, install, operate, maintain repair, replace and extend underground utility facilities, conduit and cables, electric pad-mounted transformers, concrete slabs, power pedestals, riser equipment, terminals and markers, together with all necessary and appurtenant equipment under and above ground, as deemed necessary by Grantee, for the transmission and distribution of electric energy, signals, television and telecommunications services. Trees, bushes, branches and roots may be trimmed or removed so as not to interfere with Grantee's use of the easement area; and

WHEREAS, the proposed easement and easement conditions will not interfere with any Hawthorne Hills County Park operations or maintenance and is consistent with the Master Plan for Hawthorne Hills County Park.

NOW, THEREFORE, BE IT RESOLVED, that the Ozaukee County Board of Supervisors grants and warrants to Wisconsin Electric Power Company, a Wisconsin corporation doing business as We Energies, a permanent easement upon, within, beneath, over, and across County-owned land at Hawthorne Hills County Park for electrical service and authorizes the Ozaukee County Clerk to sign and execute this easement.

Dated at Port Washington, Wisconsin, this 20th day of March 2024.

SUMMARY: Review and approval of a We Energies permanent easement at Hawthorne Hills County Park in the Town of Saukville for provision of electrical service.

VOTE REQUIRED: Majority

NATURAL RESOURCES COMMITTEE

NATURAL RESOURCES COMMITTEE

Natural Resources Committee

AGENDA INFORMATION SHEET

AGENDA DATE: **March 7, 2024**
DEPARTMENT: **Planning and Parks**
DIRECTOR: **Andrew Struck**
PREPARER: **Andrew Struck**

Agenda Summary WE Energies Underground Easement for Electrical Service at Hawthorne Hills County Park

BACKGROUND INFORMATION: The Ozaukee County Planning and Parks Department is coordinating with We Energies on provision of electrical service at Hawthorne Hills County Park in conjunction with the construction of the new campgrounds and site development for Sugar Maple Nature School use. The proposed electric work will include underground service from the park road near the new multi-purpose maintenance building to the south into the campground and school use area. This proposed underground service will require a We Energies easement.

ANALYSIS: An underground easement is required for this service, which is attached. Department staff is working with We Energies to formalize a final legal exhibit to accompany the recorded easement. Execution of this easement is contingent upon Ozaukee County Corporation Counsel review and approval of form and content. The legal description of the easement will be finalized upon final land survey.

FISCAL IMPACT: NONE

FUNDING SOURCE:

Indicate source: N/A, Overall project funded by secured WDNR Stewardship grant

RECOMMENDED MOTION: Approve and recommend to the Ozaukee County Board of Supervisors the resolution for a We Energies underground easement at Hawthorne Hills County Park for required electric service for the new campground and Sugar Maple Nature School.

ATTACHMENTS:

- P&P_Dept_WeEnergies Easement_HHCP (PDF)
- P&P_Dept_Ozaukee County Hawthorne Hills Easement Map (PDF)

DISTRIBUTION EASEMENT

Document Number

WR NO. **4920062** IO NO. **5478**

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, **OZAUKEE COUNTY,** hereinafter referred to as "Grantor", owner of land, hereby grants and warrants to **WISCONSIN ELECTRIC POWER COMPANY, a Wisconsin corporation doing business as We Energies,** hereinafter referred to as "Grantee", a permanent easement upon, within, beneath, over and across a part of Grantor's land hereinafter referred to as "easement area".

The easement area is described as strips of land 12 feet in width being a part of the **Northwest ¼ of Section 3**, Township 11 North, Range 21 East, Town of Saukville, Ozaukee County, Wisconsin.

The location of the easement area with respect to Grantor's land is as shown on the attached drawing, marked Exhibit "A", and made a part of this document.

RETURN TO:
We Energies
PROPERTY RIGHTS & INFORMATION GROUP
231 W. MICHIGAN STREET, ROOM P129
PO BOX 2046
MILWAUKEE, WI 53201-2046

08-003-05-000.00
(Parcel Identification Number)

1. **Purpose:** The purpose of this easement is to construct, install, operate, maintain repair, replace and extend underground utility facilities, conduit and cables, electric pad-mounted transformers, concrete slabs, power pedestals, riser equipment, terminals and markers, together with all necessary and appurtenant equipment under and above ground, as deemed necessary by Grantee, for the transmission and distribution of electric energy, signals, television and telecommunications services. Trees, bushes, branches and roots may be trimmed or removed so as not to interfere with Grantee's use of the easement area.

2. **Access:** Grantee or its agents shall have the right to enter and use Grantor's land with full right of ingress and egress over and across the easement area and adjacent lands of Grantor from existing infrastructure (public roadway) for the for the purpose of exercising its rights in the easement area, contingent upon prior written Grantor approval, which shall not be unreasonably withheld.

3. **Buildings or Other Structures:** Grantor agrees that no structures will be erected in the easement area or in such close proximity to Grantee's facilities as to create a violation of all applicable State of Wisconsin electric and gas codes or any amendments thereto.

4. **Elevation:** Grantor agrees that the elevation of the ground surface existing as of the date of the initial installation of Grantee's facilities within the easement area will not be altered by more than 4 inches without the written consent of Grantee.

5. **Restoration:** Grantee agrees to restore or cause to have restored Grantor's land, as nearly as is reasonably possible, to the condition existing prior to such entry by Grantee or its agents. This restoration, however, does not apply to the initial installation of said facilities or any trees, bushes, branches or roots which may interfere with Grantee's use of the easement area.

6. **Exercise of Rights:** It is agreed that the complete exercise of the rights herein conveyed may be gradual and not fully exercised until some time in the future, and that none of the rights herein granted shall be lost by non-use.

7. **Binding on Future Parties:** This grant of easement shall be binding upon and inure to the benefit of the heirs, successors and assigns of all parties hereto.

8. **Easement Review**: Grantor acknowledges receipt of materials which describe Grantor's rights and options in the easement negotiation process and furthermore acknowledges that Grantor has had at least 5 days to review this easement document *or* voluntarily waives the five day review period.

Attachment: P&P_Dept_WeEnergies Easement_HHCP (P&PDept_WeEnergiesUndergroundElectricalEasement_HawthorneHillsPark)

Grantor:

OZAUKEE COUNTY

By: _____

(Print name and title):_____

By _____

(Print name and title): _____

Personally came before me in _____ County, Wisconsin on _____, 2024,

the above named _____, the _____

and _____, the _____

of OZAUKEE COUNTY pursuant to a Resolution adopted by the County Board on _____

as Resolution No. _____.

_____

Notary Public Signature, State of Wisconsin

_____

Notary Public Name (Typed or Printed)

(NOTARY STAMP/SEAL) My commission expires _____

This instrument was drafted by Douglas J. Hartmann on behalf of Wisconsin Electric Power Company, PO Box 2046, Milwaukee, Wisconsin 53201-2046.

Attachment: P&P_Dept_WeEnergies Easement_HHCP (P&PDept_WeEnergiesUndergroundElectricalEasement_HawthorneHillsPark)



Attachment: P&P_Dept_Ozaukee County Hawthorne Hills Easement Map

Natural Resources Committee

AGENDA INFORMATION SHEET

AGENDA DATE: **March 7, 2024**
DEPARTMENT: **Planning and Parks**
DIRECTOR: **Andrew Struck**
PREPARER: **Andrew Struck**

Agenda Summary Adaptive Golf Equipment at the Ozaukee County Golf Courses

BACKGROUND INFORMATION: The Ozaukee County - Planning and Parks Department (Department) has received public inquiries on the provision and use of adaptive golf equipment at the Ozaukee County Golf Courses. Specifically, the use of adaptive golf carts to increase accessibility for persons with disabilities. Department staff including the Golf Course Superintendent, ProShop and Operations Supervisor / Golf Professional and Program Manager have researched adaptive golf car options, pricing, availability of funding, safety considerations, user experiences in other golf courses, and other considerations:

- Legal obligations: The Ozaukee County Corporation Counsel has reviewed ADA United States Access Board guidance for accessible golf courses and noted that adaptive golf carts are outside the jurisdiction of ADA standards, as the carts (a moveable element) are not considered part of the "built" environment (e.g., buildings and facilities). The attached "Summary of Accessible Guidelines" recommendations include accessible golf cart routes, minimized course barriers, adequate space in teeing grounds and putting greens and weather shelters to accommodate adaptive golf carts. Current golf course conditions largely meet these recommendations.

- Adaptive golf cart types: Several types of adaptive golf carts are available to address various disability needs including a single-user cart with hand controls and a rotating seat lift to position oneself into a partial stance from which a golf club can be swung (<https://solorider.com/>) or a compact, power wheelchair style car with hand controls and hydraulic systems that can bring the individual to a full standing position with support braces and standing platforms (<https://vertacat.com/>).

- Cost: Costs range significantly depending on cart type, accessories, and options (e.g., high performance 90-minute charger). A recent quote from VertaCat indicated a $29,300 starting price for a single unit. Most regional golf courses that offer adaptive cars rent them at the same rate as a typical golf cart.

- Funding: Department staff researched over twenty financing resource websites. The majority of grants and financing options found are limited to direct support to individuals with demonstrable disabilities. However, some grants are available to non-profit organizations that may support adaptive golf cart purchase including: Christopher & Dana Reeve Foundation (<https://www.christopherreeve.org/todays-care/get-support/grants-for-non-profits/direct-effect-quality-of-life-grants/>) which offers grants ranging from $5,000 to $24,999, Craig H Neilson Foundation (<https://chnfoundation.org/wp-content/uploads/2023/11/COI-2024-Application-

Guide_FINAL-11.9.23-clean.pdf>), which offers grants ranging from $25,000 - $200,000, the Triumph Foundation (<https://triumph-foundation.org/outreach/grants-and-equipment/>) which offers grant awards up to $2,000 and the AARP Livable Communities Community Challenge (<https://www.aarp.org/livable-communities/community-challenge/info-2024/2024-challenge.html>), which offers grants ranging from $500 to $50,000.

- Safety considerations: Staff have identified potential safety and liability issues associated with adaptive car use in uneven terrain and around sand traps and water hazards. In addition, liability of staff assisting disabled persons getting into and out of the adaptive carts.

- Pace of play: Most adaptive golf carts operate at speeds less than a typical golf cart, but faster than a walking pace. Discussions with other golf courses in the region indicated pace of play impacts have not been a significant issue.

- Damage to course: Adaptive golf cars are designed to have minimal impacts to turf; however, there is concern about damage to greens and tee box areas associated with car orientation adjustments. Discussions with other golf courses in the region indicated they have experienced minor damage from adaptive carts in these areas.

- Maintenance: Adaptive golf carts are specialized equipment that may require outside assistance for maintenance and repairs including the associated costs.

- Equipment storage: The adaptive golf carts and associated equipment will require additional storage areas and charging station areas not currently available, so this would be an additional cost.

- Transportation and logistics: Concerns with transporting specialized equipment and associated staff time between the two golf courses (if only one cart is purchased). Reservations would need to be made several days in advance to accommodate transportation and logistics.

- Regional use examples: Department staff have identified similar adaptive golf cart use at City of Madison, WI and Milwaukee County golf courses and have spoken with their staff. In Madison, an adaptive cart was purchased in the early 2000's. City of Madison staff noted that the cart was not reserved for the past several years, but had not experienced significant issues with damage to courses or impacts to pace of play. Milwaukee County has offered two adaptive golf carts for several years, which are reserved frequently. Milwaukee County staff noted minor concerns with course damage and transportation logistics concerns. They also mentioned that most adaptive cart users are avid golfers that understand golf course conditions and typically avoid sand traps, areas with significant elevation change or uneven terrain, and water hazards. They noted that Milwaukee County staff has assisted disabled persons on occasion with getting into and out of vehicles and the golf carts, but the majority of the time the disabled person(s) are assisted by other people in their party.

- Shared use: Potential requests to use adaptive golf carts or purchase similar carts for use in other locations in the County Park system.

- Supporting organizations: Organizations that may support fundraising efforts or facilitate outings or events for disabled persons include Wisconsin PGA HOPE Chapter (<https://wisconsin.pga.com/pga-hope/>), Midwestern Amputee Golf Association (<http://www.mwaga.org/>), Wisconsin Amputee Golf Association (<https://www.facebook.com/WIAmputeeGolfAssoc/>), U.S. Adaptive Golf Alliance (<https://www.usaga.org/>) and Stand Up and Play Foundation (non-profit partner with Vertacat) (<https://standupandplayfoundation.org/>).

ANALYSIS: Department staff is continuing to research these considerations and coordinate on public access opportunities with the PGA, WI State Golf Association, and non-profit groups that may facilitate public access equipment and / or golf outings (e.g., similar to organizations that facility hunting or fishing trips for disabled individuals). There are no restrictions on the use of privately owned golf carts at the Ozaukee County Golf Courses.

ATTACHMENTS:

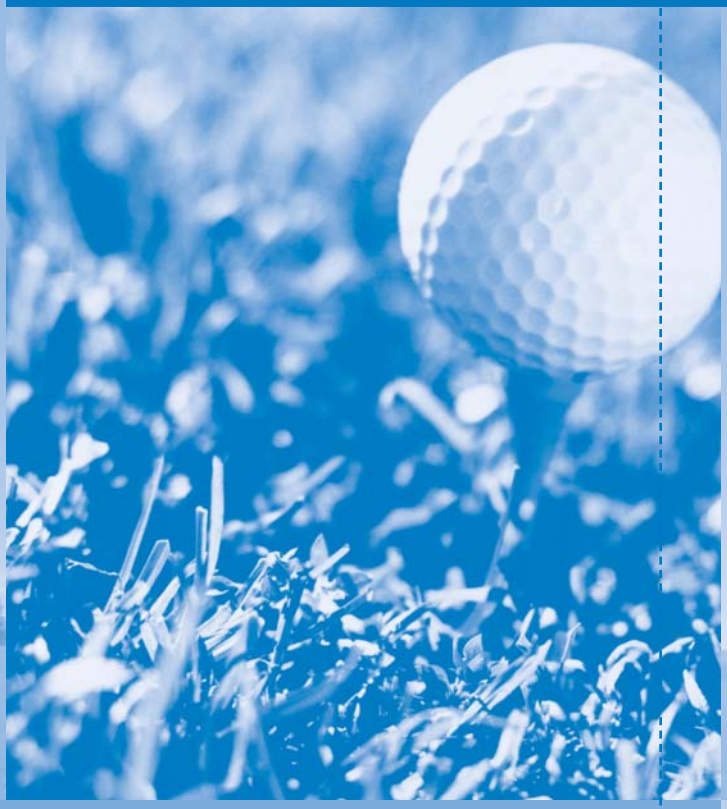
- P&P_Department_Summary of Accessible Guidelines (PDF)

NATURAL RESOURCES COMMITTEE

UNITED STATES ACCESS BOARD

amusement rides boating facilities fishing piers & platforms golf courses miniature golf sports facilities swimming po spa

accessible golf courses



a summary of accessibility guidelines
for recreation facilities

JUNE 2003

A FEDERAL AGENCY COMMITTED TO ACCESSIBLE DESIG

Attachment: P&P_Department_Summary of Accessible Guidelines (P&PDept_AdaptiveGolfEquipment_CountyGolfCourses)

Attachment: P&P_Department_Summary of Accessible Guidelines (P&PDept_AdaptiveGolfEquipment_CountyGolfCourses)

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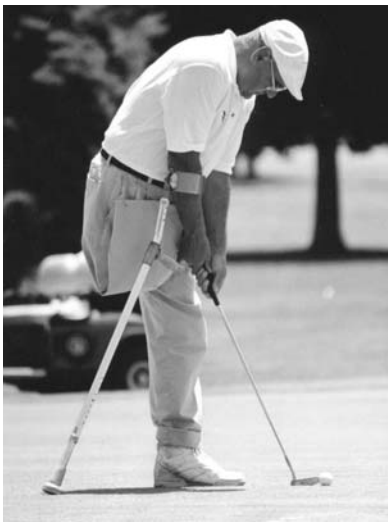
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This information has been developed and reviewed in accordance with the Access Board's information quality guidelines (www.access-board.gov/infoquality.htm).

Attachment: P&P_Department_Summary of Accessible Guidelines (P&PDept_AdaptiveGolfEquipment_CountyGolfCourses)

Accessibility Guidelines for Recreation Facilities



EASTERN AMPUTEE GOLF ASSOCIATION

Introduction

The Americans with Disabilities Act (ADA) is a comprehensive civil rights law that prohibits discrimination on the basis of disability. The ADA requires that newly constructed and altered state and local government facilities, places of public accommodation, and commercial facilities be readily accessible to, and usable by, individuals with disabilities. The ADA Accessibility Guidelines (ADAAG) is the standard applied to buildings and facilities. Recreational facilities, including golf courses, are among the facilities required to comply with the ADA.

The Access Board issued accessibility guidelines for newly constructed and altered recreation facilities in 2002. The recreation facility guidelines are a supplement to ADAAG. As a supplement, they must be used in conjunction with ADAAG. References to ADAAG are mentioned throughout this summary. Copies of ADAAG and the recreation facility accessibility guidelines can be obtained through the Board's website at www.access-board.gov or by calling 1-800-872-2253 or 1-800-993-2822 (TTY). Once these guidelines are adopted by the Department of Justice (DOJ), all newly designed, constructed and altered recreation facilities covered by the ADA will be required to comply.

accessible golf courses

The recreation facility guidelines cover the following facilities and elements:

- Amusement rides
- Boating facilities
- Fishing piers and platforms
- Miniature golf courses
- Golf courses
- Exercise equipment
- Bowling lanes
- Shooting facilities
- Swimming pools, wading pools, and spas

This guide is intended to help designers and operators in using the accessibility guidelines for golf courses. These guidelines establish minimum accessibility requirements for newly designed or newly constructed and altered golf courses. This guide is not a collection of golf course designs. Rather, it provides specifications for elements within a golf course to create a general level of usability for individuals with disabilities. Emphasis is placed on ensuring that individuals with disabilities are generally able to access the golf course and use a variety of elements. Designers and operators are encouraged to exceed the guidelines where possible to provide increased accessibility and opportunities. Incorporating accessibility into the design of a golf course should begin early in the planning process with careful consideration to the layout of the course, golf car paths, and other circulation paths.



SOLORIDER

The recreation facility guidelines were developed with significant public participation. In 1993, the Access Board established an advisory committee of 27 members to recommend accessibility guidelines for recreation facilities. The Recreation Access Advisory Committee represented the following groups and associations:

Attachment: P&P_Department_Summary of Accessible Guidelines (P&PDept_AdaptiveGolfEquipment_CountyGolfCourses)

Attachment: P&P_Department_Summary of Accessible Guidelines (P&PDept_AdaptiveGolfEquipment_CountyGolfCourses)

- American Ski Federation
- American Society for Testing and Materials (Public Playground Safety Committee)
- American Society of Landscape Architects
- Beneficial Designs
- City and County of San Francisco, California, Department of Public Works
- Disabled American Veterans
- Environmental Access
- Golf Course Superintendents Association of America
- Hawaii Disability and Communication Access Board
- International Association of Amusement Parks and Attractions
- Katherine McGuinness and Associates



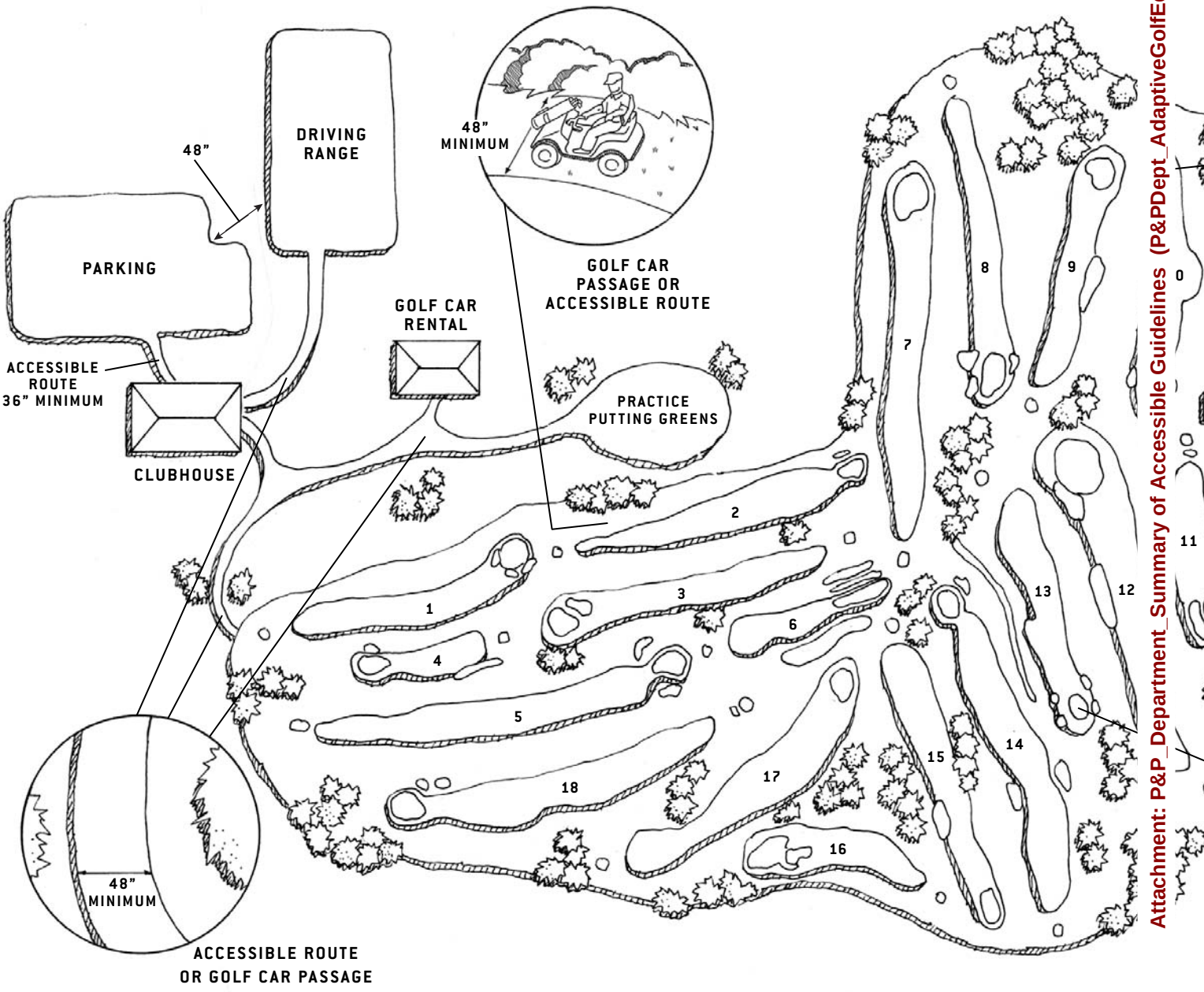
EASTERN AMPUTEE GOLF ASSOCIATION

- Lehman, Smith, and Wiseman Associates
- Michigan Department of Natural Resources
- National Council on Independent Living
- National Park Service
- National Recreation and Park Association
- New Jersey Department of Community Affairs
- Outdoor Amusement Business Association
- Paralyzed Veterans of America
- Professional Golfer's Association
- Self Help for Hard of Hearing People
- States Organization for Boating Access
- Universal Studios
- U.S. Army Corps of Engineers
- U.S. Forest Service
- Y.M.C.A. of the U.S.A.
- Walt Disney Imagineering

The public was given an opportunity to comment on the recommended accessibility guidelines, and the Access Board made changes to the recommended guidelines based on the public comments. A notice of proposed rulemaking (NPRM) was published in the Federal Register in July 1999, followed by a five-month public comment period. Further input from the public was sought in July 2000 when the Access Board published a draft final rule soliciting comment. A final rule was published in September 2002.

"Whenever a door is closed to anyone because of a disability, we must work to open it....Whenever any barrier stands between you and the full rights and dignity of citizenship, we must work to remove it, in the name of simple decency and justice.

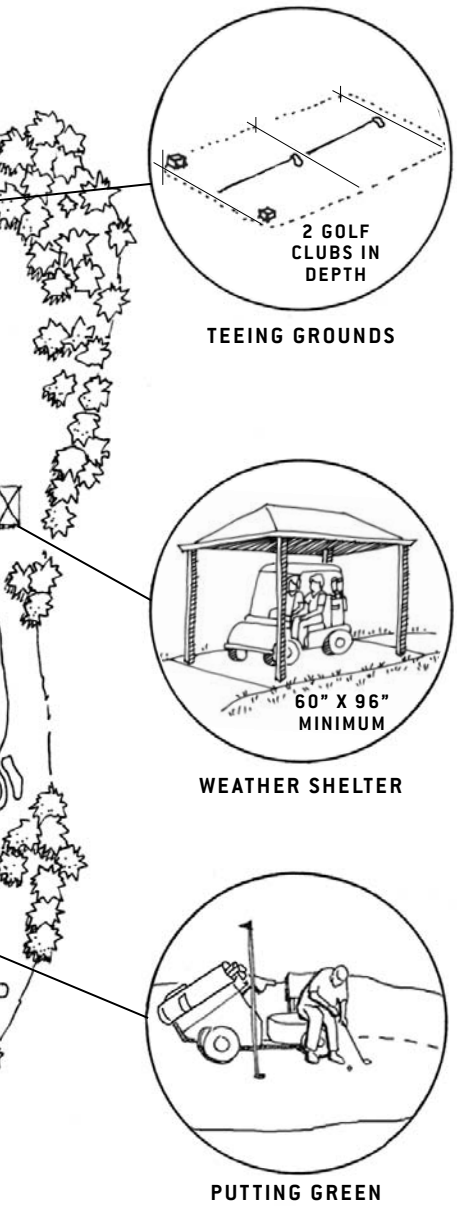
ACCESSIBLE ROUTE OR GOLF CAR PASSAGE CONNECTING ELEMENTS



Attachment: P&P_Department_Summary of Accessible Guidelines (P&PDept_AdaptiveGolfEquipment_CountyGolfCourses)

The promise of the ADA...has enabled people with disabilities to enjoy much greater access to a wide range of affordable travel, recreational opportunities and life-enriching services."

President George W. Bush, New Freedom Initiative, February 1, 2001



Golf Courses

The recreation facility guidelines described in this guide focus on newly designed or newly constructed and altered golf courses and driving ranges. Other provisions contained in ADAAG address elements commonly found at a golf course, such as accessible vehicle parking spaces, exterior accessible routes, and toilet and bathing facilities. ADAAG addresses only the built environment (structures and grounds). The guidelines do not address operational issues. Questions regarding operational issues should be directed to the Department of Justice, 1-800-514-0301 or 1-800-514-0383 (TTY).

Accessible Routes

Accessible routes are continuous, unobstructed paths connecting all accessible elements and spaces of a building or facility on golf courses. The accessible route must comply with ADAAG provisions for location, width (minimum of 36 inches), passing space, head room, surface, slope (maximum of 1:12 or 8.33%), changes in level, doors, egress, and areas of rescue assistance, unless modified by specific provisions outlined in this guide.

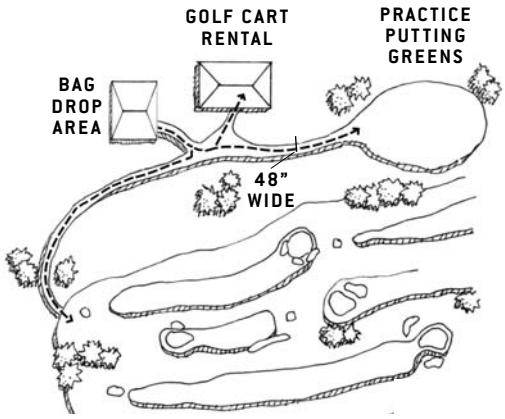
Alternative Golf Car Passage

Providing an accessible route that complies with ADAAG may be impractical throughout a golf course for several reasons.

Attachment: P&P_Department_Summary of Accessible Guidelines (P&PDept_AdaptiveGolfEquipment_CountyGolfCourses)



GOLF CAR PASSAGE
OR ACCESSIBLE ROUTE



ACCESSIBLE ROUTE OR
GOLF CAR PASSAGE

First, the route of play for a golfer is dependent on where the ball lands and is therefore unpredictable. The guidelines assume that on many courses, golfers use a golf car to move throughout the course.

Second, requiring an accessible route throughout a course could alter the slopes within some courses and alter the nature of the sport by eliminating some of the challenge of the game. Therefore, a golf car passage may be substituted for an accessible route *within* the boundary of a golf course. A golf car passage is a continuous passage on which a motorized golf car can operate. While a golf car passage must be usable by golf cars, it does not necessarily need to have a prepared surface and may be part of a golf car path. The golf car passage could be located on areas such as fairways, greens, and teeing surfaces. A golf car passage can be substituted for all or part of the accessible route connecting elements within the boundary of the course and must be a minimum of 48 inches in width.

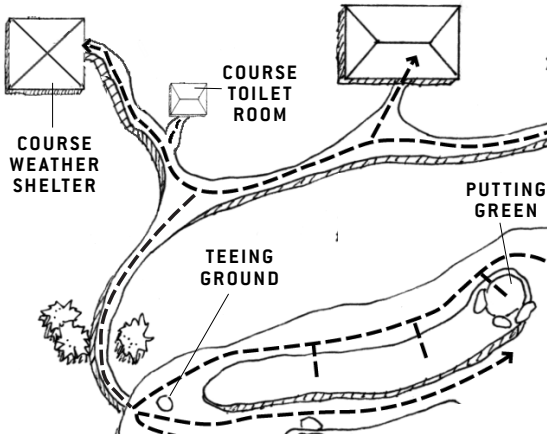
A golf car passage may also be substituted for an accessible route *outside* the boundary of the golf course when connecting certain elements. This is limited to the golf car rental area, bag drop areas, practice putting greens, accessible practice teeing grounds, course toilet rooms, and course weather shelters.

Accessible Route Guidelines

Where an accessible route is used, the golf course guidelines modify ADAAG's accessible route provisions. They increase

Attachment: P&P_Department_Summary of Accessible Guidelines (P&PDept_AdaptiveGolfEquipment_CountyGolfCourses)

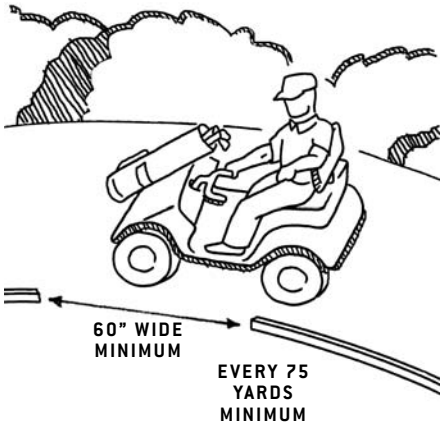
the minimum width for an accessible route from 36 inches to 48 inches. If an accessible route is provided instead of a golf car passage, it must connect accessible elements and spaces located within the boundary of a golf course. The 48-inch minimum width for the accessible route is necessary to ensure passage of a golf car on the accessible route. This is important where the accessible route is used to connect the golf car rental area, bag drop areas, practice putting greens, accessible practice teeing grounds, course toilet rooms, and course weather shelters. These are areas outside the boundary of the golf course, but are areas where an individual using an adapted golf car may travel. Where handrails are provided along an accessible route, the guidelines increase the minimum width of the route to 60 inches to accommodate the passage of a golf car.



GOLF CAR PASSAGE OR ACCESSIBLE ROUTE ON FAIRWAY

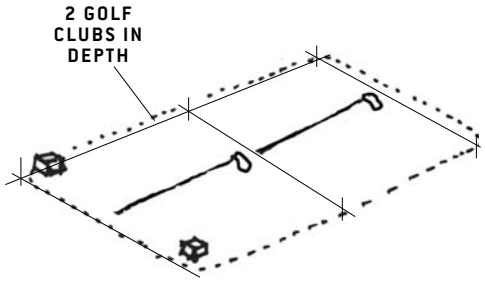
Course Barriers

Curbing or other man-made barriers often line golf car paths to restrict golf cars from entering certain portions of the course or to reduce erosion. Where man-made barriers are provided that prevent golf cars from entering a fairway, openings at least 60 inches wide at intervals not exceeding 75 yards must be provided. These dispersed openings will provide access to the course at reasonable intervals, enabling a golfer using a golf car to play the game without extended travel distances and time requirements.



COURSE BARRIERS

Attachment: P&P_Department_Summary of Accessible Guidelines (P&PDept_AdaptiveGolfEquipment_CountyGolfCourses)

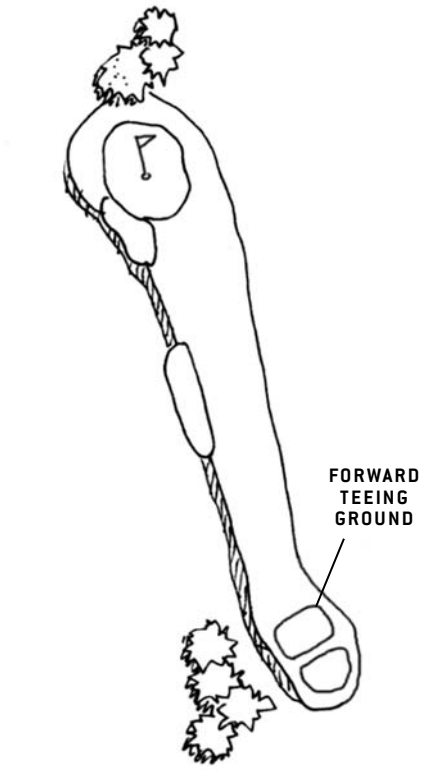


TEEING GROUND

Teeing Grounds

The "teeing ground" is the starting place for a hole of golf. A rectangular area usually two club-lengths in depth, the teeing ground's borders are defined by the outside limits of two "tee-markers." The design and construction of new teeing grounds or the alteration of an existing teeing area must allow golf cars to enter and exit within these limits.

- Forward Teeing Ground—The forward teeing ground for each hole must be connected by either an accessible route or a golf car passage. Existing courses do not have to provide access to the forward teeing ground in alterations, if terrain makes compliance infeasible.
- Multiple Teeing Grounds—If one or two teeing grounds are provided for a hole, only the forward teeing ground must be accessible either by an accessible route or a golf car passage. If three or more teeing grounds are provided for a hole, two teeing grounds must be accessible. This will allow persons with disabilities to play from different tees appropriate to their skill level, while providing flexibility to course operators and designers.

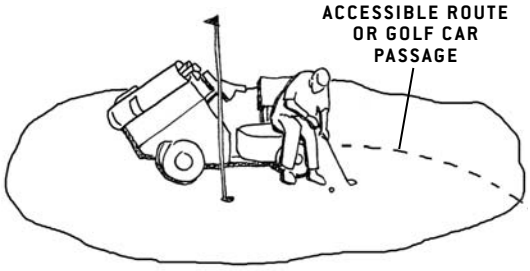


MULTIPLE
TEEING GROUNDS

Attachment: P&P_Department_Summary of Accessible Guidelines (P&PDept_AdaptiveGolfEquipment_CountyGolfCourses)

Putting Greens

Each putting green must be designed and constructed so that a golf car can enter and exit the green. The green must be connected by a golf car passage so that a golf car can reach the green.



PUTTING GREEN

Weather Shelters

Course weather shelters must be designed and constructed to allow a golf car to enter and exit, and have a clear floor or ground space of 60 inches by 96 inches minimum. This space will allow a golf car to be driven directly into a weather shelter.



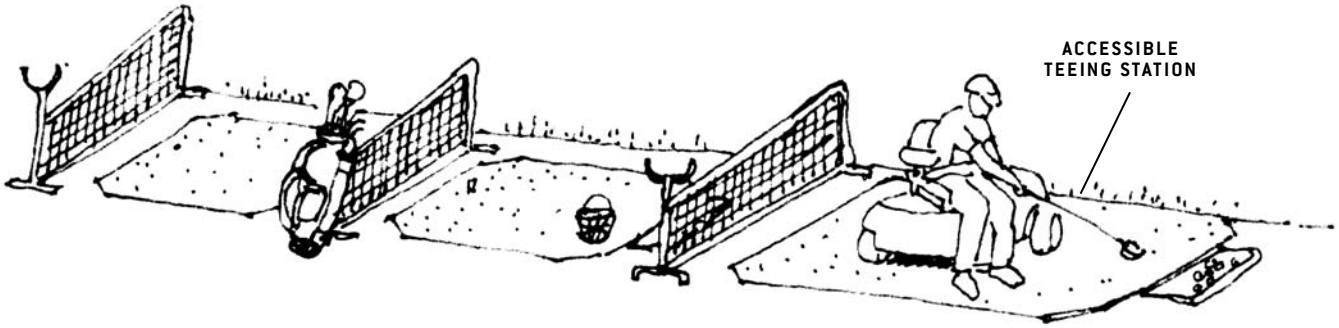
WEATHER SHELTER

Driving Ranges

Both stand-alone driving ranges and driving ranges adjacent to a golf course that provide teeing stations or practice teeing grounds must comply with the following:

- Accessible Routes—An accessible route or a golf car passage must connect accessible teeing stations with accessible parking spaces. The accessible route must be a minimum of 48 inches wide. If handrails are provided, the accessible route must be a minimum of 60 inches wide. This will allow a person who plays golf from a golf car to practice driving a golf ball from the same position and stance used when playing the game.

Attachment: P&P_Department_Summary of Accessible Guidelines (P&PDept_AdaptiveGolfEquipment_CountyGolfCourses)



TEEING STATION

- Teeing Stations—If teeing stations or practice teeing grounds are provided, at least five percent, but not less than one, of the practice teeing grounds must be accessible and provide space for a golf car to enter and exit.

Single Rider Adaptive Golf Cars



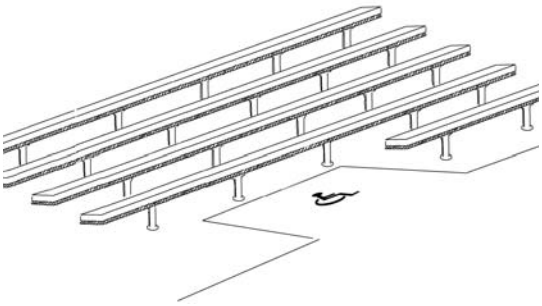
SOLORIDER

In recent years, single rider adaptive golf cars have been used to increase access for persons with disabilities on golf courses. Questions have arisen concerning their use. The Access Board develops and maintains accessibility guidelines for the built environment. It is outside the jurisdiction of the Access Board to address operational issues such as the use of these cars. Operators should contact the Department of Justice at 1-800-514-0301 or 1-800-514-0383 (TTY) regarding issues relating to the use and operation of adaptive golf cars.

Attachment: P&P_Department_Summary of Accessible Guidelines (P&PDept_AdaptiveGolfEquipment_CountyGolfCourses)

Temporary Facilities

ADAAG also requires temporary facilities such as bleachers for tournaments, assembly seating areas, portable toilet facilities, concessions, and all other available amenities to provide access. Access to temporary facilities on a golf course may be achieved through either an accessible route or golf car passage. Facilities hosting tournaments or competitions must comply with all the other requirements of the ADA, including the general obligation to provide an equal opportunity to individuals with disabilities to enjoy the services provided.



ACCESSIBLE BLEACHERS

More Information

You can obtain copies of the recreation facility guidelines, which include golf courses, and further technical assistance from the U.S. Access Board at **www.access-board.gov**, **1-800-872-2253**, or **1-800-993-2822** (**TTY**).

Attachment: P&P_Department_Summary of Accessible Guidelines (P&PDept_AdaptiveGolfEquipment_CountyGolfCourses)

United States Access Board

1331 F Street, NW, Suite 1000
Washington, DC 20004-1111

voice (800) 872-2253
tty (800) 993-2822

www.access-board.gov

Attachment: P&P_Department_Summary of Accessible Guidelines (P&PDept_AdaptiveGolfEquipment_CountyGolfCourses)

Natural Resources Committee

AGENDA INFORMATION SHEET

AGENDA DATE: **March 7, 2024**
DEPARTMENT: **Planning and Parks**
DIRECTOR: **Andrew Struck**
PREPARER: **Andrew Struck**

Agenda Summary Proposals and Contract for Emergency Fire Suppression Fire Pump Controller Replacement at MeeKwon Golf Course

ATTACHMENTS:

- MeeKwon Park Golf Course Fire Pump Controller Replacment Design Build Fire Protection Quote (PDF)
- MeeKwon Park Golf Course Fire Pump Controller Replacement FPSolutionsLLC 2-2024 (PDF)

NATURAL RESOURCES COMMITTEE

From

Design Build Fire Protection

17055 West Victor Road
New Berlin WI 53151
www.designbuildfire.com

Quote No.	**2030047**
Type	Repair
Prepared By	Jim Nurkala
Created On	02/12/2024
Valid Until	03/31/2024

Quote For

Ozaukee County

Mee-Kwon Park Golf Cours
6333 West Bonniwell Road
Mequon WI 53097
(262) 242-1310

Description of Work

Scope: Install one (1) new TornaTech fire pump controller

- Installation of new across the line fire pump controller
- Removal/Demolition of old fire pump controller after power has been disconnected.
- Includes initial startup service to program controller.
- Includes one (1) performance test after controller has had initial start up service.

General Conditions:

- This proposal is based on normal working hours, M-F, 7:00am-3:30pm.
- This proposal includes all necessary design, preparation, fabrication, delivery to site, installation, and material required to complete this scope of work, within a reasonable distance of this work area.

Exclusions:

- Overtime
- Any other work not mentioned above

Services to be completed

Fire Pump

Replace Fire Pump Controller with an new one.

Parts, labor, and fees	Quantity	Unit Price	Tota
Fire Pump Controller Replacement	1	$14,850.00	$14,850.0
		GRAND TOTAL	**$14,850.0**

Terms and Conditions

IMPORTANT TERMS ON THE FOLLOWING DOCUMENT: This document contains important information regarding the terms and conditions of servic performed by Design Build Fire Protection of Wisconsin Inc. This includes limitations of liability, contractual limitation in which you may bring a claim, disclaimers of warranty, and any other terms that may impact Customer's rights. By signing below, Customer's Authorized Representative acknowledges and warrants that they have read, understood, and agreed to be bound by these conditions.

WAIVER OF SUBROGATION

In case of any claim or loss, Customer agrees that it is responsible to maintain, and has sufficient insurance coverage to cover any potential claim or los Customer further agrees to look to its property and/or general liability insurance carrier for reimbursement. Customer and Company mutually agree to release one another from any and all claims with respect to any loss covered by(or which should have been covered) the insurance coverages which were required and/or recommended that may be applicable to any property where Company performs services and/or provides materials for Company. For purposes of this Section, all deductibles shall be considered insured losses. They further mutually agreed that their respective insurance companies shall have no right of subrogation against the other on account thereof.

Attachment: MeeKwon Park Golf Course Fire Pump Controller Replacment Design Build Fire Protection Quote

INDEMNIFICATION

Customer agrees to indemnify, hold harmless, defend, and release the Company from liability and shall reimburse the Company for any liabilities, damages, losses or expenses (including but not limited to reasonable attorneys' fees, expert fees, costs and litigation costs), injuries, claims, suits, judgments, and causes of action incurred by the Company in connection with any claims, suits, judgments and causes of action which relate to the produc or services the Company provides. This indemnity includes claims brought by any third party, including, without limitation, Customer's insurance company whether the claim arises under contract, warranty, tort, or any other theory of liability.

WARRANTY DISCLAIMER

Except as provided in any specific warranty paragraphs, Company makes no warranty of any kind, express or implied, including but not limited to, any warranty of merchantability or warranty of fitness for a particular purpose.

CUSTOMER RESPONSIBILITIES

Customer shall be responsible for maintaining adequate heat throughout the facility to prevent freezing or damage to the existing fire sprinkler system. Th customer understands and expressly acknowledges that fire protection systems are susceptible to damage by water intrusion, ice, or other conditions inside the piping that the Company cannot detect upon inspection. In the event that water, ice, or other conditions occur which render the fire protection system inoperable or damaged, Company expressly disclaims any responsibility for such conditions, and assumes no responsibility to investigate the cause, source or extent of such condition. Customer acknowledges this warning and acknowledges that under NFPA and other applicable codes and regulations, it is the responsibility of the customer to maintain its fire protection system, including but not limited to ensuring proper drainage. Failure to properly maintain or drain such systems may lead to breaks or other conditions that may render the fire protection system inoperable, or that damage to the system may result in injury, damage to property and loss of use.

INTENT OF INSPECTION

This inspection/testing is not intended to be a code review, complete system or code compliance evaluation

CONTRACTUAL LIMITATION PERIOD

Customer expressly agrees that any claim, lawsuit, or cause of action, whether in contract, tort or other legal theory, relating in any way and/or arising out Company's services and/ or materials provided to Customer, its subsidiaries and/or its insurers, must be filed no more than one(1) year from the date the alleged damage(s) occurs, that is the subject of the claim, lawsuit and/or cause of action. Customer expressly waives any statutory and/common-law limitation period to the contrary.

LAW AND JURISDICTION

This Agreement will be governed by, construed, and enforced in accordance with the laws of the State of applicable to agreements made and to be performed entirely within such state, without regard to such state's conflict of laws rules. Company and Customer agree that any action brought by any party shall be brought and resolved exclusively by the state and federal courts located in Waukesha County, Wisconsin and the courts to which an appeal there from may be taken, provided that any party shall have the right, to the extent permitted by applicable law, to proceed against any other party or its property in any other location to the extent necessary for the enforcing party to enforce a judgment or other court order or arbitral award. Each of the parties hereby consents to the jurisdiction of such courts and waives all questions of jurisdiction and venue. The parties agree that either or both of them may file a copy of this Section with any court as written evidence of the knowing, voluntary and bargained Agreement between the parties irrevocably to waive any objections to venue or to convenience of forum. Legal process in any proceeding maybe served on any party anywhere in the world.

SEVERABILITY

If any provision of this Agreement is held illegal or unenforceable in a judicial proceeding, such provision shall be severed and shall be in operative, and th remainder of this Agreement shall remain operative and binding on the Parties.

INTEGRATION

This Agreement supersedes all prior agreements between the parties with respect to its subject matter and constitutes (along with the documents referred to in this Agreement) a complete and exclusive statement of the terms of the agreement between the parties with respect to its subject matter.

By my signature below, I authorize work to begin and agree to pay the Grand Total according to the terms and conditions of this agreement.

Name: _____ Date: _____

Signature: _____

Attachment: MeeKwon Park Golf Course Fire Pump Controller Replacment Design Build Fire Protection Quote

FPSOLUTIONS LLC

February 22, 2024

Attn: John Stahl

RE: Fire Sprinkler System Recommendations
Mee Kwon Golf Course
6333 W Bonniwell Rd
Mequon, WI 53097

Dear John,

We are pleased to offer the following pricing based on our site visit.

Scope

- Replace the existing fire pump controller with a new Tornatech GAP-208-30-3-60 Across the Line Fire Pump Controller. (Technical Data Submittal Document sheet attached)
    - There is an existing added relay in the existing controller to ring a bell outside with a dialer which is against the code. The City of Mequon electrical inspector needs to be consulted to find out if the new fire pump controller can be installed and leave this device as is or if the device needs to be moved.
- Start up, programing, and fire pump performance test after installation of fire pump controller.

Clarifications

Inclusions

- Material
- Labor (normal business hours)
- Tax
- Net 15 Payment Terms

Exclusions

- Drywall Removal or Repair
- As-built Drawings
- Permit
- Electrical Wiring
- Disposal of current controller
- Any Work on Anti-Freeze Systems

Assumptions

- All work on Anti-freeze fire sprinkler systems is excluded from this proposal.
- Control valves operate properly so the system can be drained.
- Work can be performed in an efficient manner and there are not unreasonable ground obstructions or other disruptions that adversely affect our work.
- The existing fitting(s) and piping can be reused.
- Customer's authorized representative acknowledges and warrants that they have read, understood, and agreed to be bound by FPS general terms and conditions dated 1/20/17. http://fpswis.com/terms/
- Due to fluctuating material costs this proposal is valid for 30 days.

P (262) 229-2250 F (414) 301-7501 A 2000 Pewaukee Rd, Ste R, Waukesha, WI 53188 W www.fpswis.com

Attachment: MeeKwon Park Golf Course Fire Pump Controller Replacement FPSolutionsLLC 2-2024

Price

- The price for the work noted above is **$15,957.**

Please call or email me with questions, 262-229-2250, ex 4 or scott@fpswis.com.

Sincerely,



Scott Schilz
Sales Representative

Authorization:

_____
Signature & Date

_____
Print Name

Attachment: MeeKwon Park Golf Course Fire Pump Controller Replacement FPSolutionsLLC 2-2024

Natural Resources Committee

AGENDA INFORMATION SHEET

AGENDA DATE: **March 7, 2024**
DEPARTMENT: **Planning and Parks**
DIRECTOR: **Andrew Struck**
PREPARER: **Andrew Struck**

Agenda Summary Update on Hawthorne Hills County Park Multipurpose Maintenance Building Construction and Change Orders

ATTACHMENTS:

- P&P_Dept_Hawthorne Hills Multipurpose Parks Building Change Order Summary 2.23.24 (PDF)

NATURAL RESOURCES COMMITTEE

Hawthorne Hills County Park Multi-Purpose Maintenance Building February 2024 Change Order Summary			
Contractor	**Debit**	**Credit**	**Comments**
Absolute Construction / J Miller Electric	$ 550.30		Relocate exhaust fan circuit
Absolute Construction / J Miller Electric	$ 1,483.83		Provide and install two new egress and exit light fixtures in bathrooms per electrical inspection
Totals	$ 2,034.13	$ -	

Attachment: P&P_Dept_Hawthorne Hills Multipurpose Parks Building Change Order Summary 2.23.24

Natural Resources Committee

AGENDA INFORMATION SHEET

AGENDA DATE: **March 7, 2024**
DEPARTMENT: **Planning and Parks**
DIRECTOR: **Andrew Struck**
PREPARER: **Andrew Struck**

Agenda Summary Planning & Parks Department Management and Financial Reports

ATTACHMENTS:

- P&PDEPT_MGMTREPORT_NRC030724_FEB2024_FINAL_ATS022324 (PDF)
- 1) CommRpt2024 January 2024 (PDF)
- 2) Summary of Parks Revenue January 2024 (PDF)
- Wisconsin Counties - March 2024 Edition (PDF)
- Ozaukee News Graphic Article, 2.22.24, World Atlas names Cedarburg one of the best towns in northern U.S. to visit (PDF)
- Ozaukee Press Article, 2.15.24, Common green space accessible to all (PDF)
- Ozaukee Press Article, 2.15.24, County golf courses set records for play, revenue (PDF)
- Ozaukee Press Article, 2.15.24, County makes case for marine sanctuary headquarters in Port (PDF)

NATURAL RESOURCES COMMITTEE

GOLF COURSES

GOLF COURSES — MEE-KWON PARK AND HAWTHORNE HILLS

- February (thru Feb 19th) revenue and rounds: $1,119.65 and 0 rounds (2024) and $712.66 and 0 rounds (2023) for both MKGC & HHGC. Summary of **2023** total revenue (YTD) $2,906,459.98 and 81,621 rounds ($35.61/person) and 2022 total revenue (YTD) $2,518,867.86 and 73,736 rounds ($34.16/person). MKGC 4/3/23—11/21/23 and HHGC 4/7/23—11/17/23.
- New Concessionaire contract signed. Mee-Kwon Park Golf Course's 50th Year Anniversary on August 1, 2024
- Both courses will offer the PGA Jr. League. This program will offer a team concept in five duo matches, four 90 min clinics, team shirts/hats and end of the year party. Details about this nationwide program available at *www.pgajrleague.com*
- GC Maintenance staff and contractors have continued work on ash tree/invasive species removals and tree planting under the USFS & NFWF SOGL grants. Tree planting & ash tree removals will continue in 2024. GC Maintenance is making improvements to the men's bathroom at MKGC and the kitchen at HHGC.

ECOLOGICAL DIVISION

BIRD CONSERVATION / BIRD CITY WISCONSIN

Ozaukee County was awarded "High Flyer" status for its Bird City Wisconsin (BCW) renewal in 2023. The "High Flyer" status is the highest level of achievement under BCW and Ozaukee County was the first County in the State to achieve "High Flyer" status and is one of only 34 communities to accomplish this highest level out of 80 BCW communities in WI. Continued maintenance and monitoring of nest boxes (Kestrel, Bluebird, Wood duck) including 11 new bluebird boxes at Tendick, 9 new bluebird boxes at Virmond and several new Wood duck boxes at LMRFWP and HH Park. Received additional bluebird boxes from WGLBBO for installation at the LMRFWP. Coordinated w/ UW student on Kestrel Box research/monitoring and WGLBBO for Oakland Green.

FISH PASSAGE PROGRAM

Aquatic Connectivity Projects: Coordination with landowners, local municipalities, County Highway Dept (HWY), and contractors (youth conservation corps) for completion of planned construction and site restoration work, including grant-funded materials acquisition and Federal, State and local permitting. Contract management and site visits for finalizing engineering and design work for culvert replacements or remediation work on Tendick Creek in the T Saukville, Sucker Brook Creek in T Port Washington, and Silver Beach Creek in the T Belgium.

Habitat Improvement Projects: Ongoing project planning and Quality Assurance Project Plan (QAPP) development w/ WDNR & Milwaukee County for aquatic habitat inventories, assessments, & engineering and design support (including an RFP for E&D) for aquatic habitat restoration activities on the Little Menomonee River in Milwaukee County. Continued restoration (e.g. Prairie planting at Oakland Green Park) and plan reviews for restoration work on Tendick Creek. Coordinated with HWY, the Village of Saukville, funding partners and landowners for land acquisitions and planning for habitat restoration in conjunction with the CTH W rehabilitation project in the Village of Saukville. Finalized restoration activities and grant and permit closeout at the stormwater wetland restorations at Mee-Kwon County Park & GC w/ HWY, Conservation Corps Teams & consultant (M2 Engineering). Ongoing Lake Sturgeon habitat assessment work in coordination with WDNR and UW-Milwaukee. On-going planning with partners for Sucker Creek restoration work. Completed topographic survey & coordinated w/ consultant (Inter-Fluve) on ongoing habitat enhancements at Ulao Creek. Coordinated with USACOE on use of Ulao Creek Nature Preserve County Park & Ulao Creek for the Wisconsin Stream Quantification Tool (WISQT) development. Coordination w/ City of Port Washington on planned habitat improvements on Mineral Springs Creek & Sauk Creek. Engineering & design RFP development and project planning for Virmond Park stormwater wetland & CBCGNP restoration projects. Finalized design & engineering plans for culvert replacements and stream & wetland restoration work on Tendick Creek in Tendick Park.

Environmental Monitoring: Continued analysis & reporting of fish, avian, wildlife, and water quality sampling data per QAPPs. Supplies and materials acquisition and project planning for implementation of 2024 monitoring activities. Water quality sampling analysis for the Little Menomonee River/Creek and Ulao & Mole Creeks. Coordinate w/ SEWRPC for flow monitoring on Sucker Creek. Continued water quality monitoring analysis as part of WDNR AOC LMR & SW Grants. Ongoing monitoring/analysis of the underwater "fish cam" at MT Fishway. Continued larval & backpack electrofishing fish monitoring data analysis and reporting on project streams. QAPP development for upcoming 2024 projects (e.g. Sucker Creek impediment remediations).

Education and Outreach Activities: On-going website and social media development and refinement of multiple education/outreach materials and updates on construction and restoration projects. Temporary signage at construction and restoration projects. Development of temporary and permanent education signage for multiple projects including Mineral Springs Creek w/ LMBO, Lake Michigan public access, wetland restorations, chimney swift tower at Virmond County Park & Tendick Nature Park wetland and prairie restoration. Research of applicable bluff safety signage, brochures and ordinances. Website updates.

Reporting and Other Activities: On-going grant (financial & technical) reporting for USFWS, USFS, NOAA/WCMP, NFWF SOGL, WDNR (Stewardship, SWM, CCA, OGW), SEWISC & FFLM. Submitted multiple grant applications. QAPP & NEPA submittals & approvals for federal & state funded projects. Coordinated w/ AmeriCorps NCCC, WisCorps, & MCSC on 2024 work. Coordinated w/GLE regarding the GIS Fish & Wildlife Habitat Tool contracts. Coordinated w/ partners (MMSD, Riverkeeper, SEWRPC) on water quality monitoring. Coordinated w/ WGLBBO, CPort Washington, We-Energies, HWY & WDNR regarding stream corridor restoration on Mineral Springs Creek. Coordinated w/ LNRP, OCWC, consultants, & landowners on stream & habitat restoration planning for Sucker Creek in Towns of Port Washington & Belgium. Coord. w/ WDNR MR AOC & Lamp Coordinators. Coordinated w/ Finance on project accounting system, grant reporting/reimbursements & annual audit. Completed multiple federal & state grant reimbursement requests. Mtgs for the AOC MAIT (2/13), Fish & Wildlife Tech Team (2/14), & Project Managers (2/7). Coordinate w/ Hwy, landowners & consultant on CTH W Project. Coordinated w/ Interfluve, raSmith & Fish Creek Restoration consultants on FP & habitat restoration projects. Coordinated w/ WDNR Fisheries on grant funding for current & future projects. Coordinate w/ WGLBBO Re: MSC restoration & educational signage. Coord w/UW Madison Landscape Architecture student on Capstone Project for HH Park campground. WI Lakes & Rivers Partnership Mtg (2/6). Presented at NFWF CRF / NOAA Webinar on MSC Project (2/8). Attend CALM Network Presentation (2/14). Virtual Mtgs w/ Sugar Maple Nature School Re: Development (2/19). Coord w/ HWY on 2024 Parks & Ecological Division projects (2/19). Coordinated w/ partners (UW–Madison Geoscience Dept, WI Geologic & Natural History Survey, US Geological Survey) on coastal bluff erosion & groundwater monitoring well issues (2/20). Presented on MSC stream restoration at Upper Midwest Stream Restoration Symposium (2/26 – 3/1).

INVASIVE SPECIES MANAGEMENT

Continued removal of ash trees, invasive shrubs and herbaceous spp. at County Parks and Restoration Areas including Tendick, Covered Bridge, Lion's Den Gorge, Mee-Kwon, Hawthorne Hills, River Oaks, Ulao Creek NP & Virmond Parks under SEWISC CWMA Grants. Continued work on private foundation grants for invasive species management and native tree planting in the County Park System. Continued planning for ROW Invasive Species Treatment and coordinated w/ HWY on implementation. Coordinated on 2 USFS grants w/ Partners (HH Park & Coastal Parks Project Areas) for tree planting / bidding.

DEPARTMENT ADMINISTRATION

- Attended NRC (2/8), County Board (2/7, 2/21). Required Computer Security Training (2/2). Coord. Staff Annual Reviews.
- Managing staff teleworking/remote working and parks & golf course operations. Worked on metric reporting & website statistics.

PLANNING & PARKS DEPARTMENT

CURRENT PROJECTS & REPORT UPDATES

FEBRUARY 2024



MISSION STATEMENT

To provide opportunities for Ozaukee County residents and visitors of Ozaukee County to appreciate and enjoy the natural and cultural resources, local ecology, recreational experiences, well planned sustainable growth and improved quality of life in Ozaukee County through the preservation, restoration and management of natural resources, increased awareness and education, stewardship, promotion of tourism, comprehensive planning, and the acquisition, development, enhancement and operation of large scale, intergovernmental recreational opportunities including exceptionally well-maintained golf courses, multi-use trails and parks.

https://www.co.ozaukee.wi.us/540/Planning-Parks

Ozaukee County Administration Center
121 W. Main Street, Box 994
Port Washington, WI 53074-0994
Phone: 262-284-8257

Attachment: P&PDEPT_MGMTREPORT_NRC030724_FEB2024_FINAL_ATS022324

Ozaukee County Planning and Parks

PLANNING DIVISION

Comprehensive Planning

- Reviewed local government amendments to County Comprehensive Plan (e.g. Towns of Grafton, Port Washington, Belgium, Cedarburg & Saukville, Villages of Grafton, Belgium & Newburg & Cities of Port Washington & Mequon). Coordinated w/ SEWRPC on County Comp Plan amendment regarding local governments.
- Coordinated w/ Town of Saukville (consultant) and Town & Village of Belgium on amending their local comprehensive plan, planned land use map and County Comprehensive Plan. Explored options w/ SEWRPC.
- Began to review the GIS mapping for the proposed local government amendments to the County Comprehensive Plan (e.g. planned land use map). Follow-up w/ SEWRPC staff regarding level of effort for updates.
- Continued to staff the Comprehensive Planning Board meetings (regular schedule—every other month). Meeting agendas and minutes at https://www.co.ozaukee.wi.us/2107/Comprehensive-Plan-Board

Land Division / Plat Review / Zoning

- Discussed/reviewed preliminary/final land divisions with landowner(s) in the Towns of Grafton, Port Washington, Saukville & Cedarburg. Generated GIS maps including: zoning, land use, soils, floodplain, wetlands, etc.
- Provided review for proposed projects under the County-owned lands zoning ordinance including Mee-Kwon Park—communications tower, Pinnacle property—communications tower, Highway properties—nonmetallic mining, LMRFWP— public access and Advocates of Ozaukee—building expansion.

Park and Open Space Plan - Park & Natural Areas Preservation/Conservation Planning

- Reviewed prioritization and implementation recommendations in the adopted *Park and Open Space Plan for Ozaukee County: 2035 (POSP)* as approved by County Board on June 1, 2011. Coordinated with SEWRPC staff regarding the update to the POSP, inventory data, mapping, chapters and survey data (on-site surveys). Analyzing on-site Park User surveys. Coordinate the Comprehensive Planning Board - POSP Chapters.
- Discussed recommendations of the POSP with residents, WDNR, MMSD/Conservation Fund, OWLT, WWA, ROTB, FOCB, USFWS and Ozaukee Treasures Network, particularly with regard to identified Natural Areas and proposed County parks and trail systems. Continued discussions with interested citizens regarding developing a mountain bike park & natural area acquisitions (CTH W-VSaukville, OIT-TGrafton, Town of Saukville Properties, Waubedonia-TFredonia, LDGNP/CBCGNP Project Area—TGrafton)
- Coordinated with the Conservation Fund/MMSD on the expanded Greenseams Program (CTH W project). Coordinated w/ USFWS, WDNR, Ducks Unlimited, Conservation Fund/MMSD on fish passage projects.
- Coordinated/attended meetings with partners (e.g. FOCB (), WDNR (2/15), MMSD/TCF(2/2), OWLT, OCWC, BCW (2/23), LNRP, DU, OTN, WGBBLO, WAC) to discuss natural area preservation/restoration.
- Revising final drafts of three County Park Master Plans including Virmond, Lion's Den Gorge Nature Preserve (LDGNP) and Clay Bluffs Cedar Gorge Nature Preserve (CBCGNP). Updating all Park Master Plan (GIS) maps w/ Staff. Follow-up on the CBCGNP overall master planning and future restoration. Summarized POSP Public Information Mtgs and prepared draft Chapters including County Project Areas.
- Coordinated with WDNR staff on Stewardship grant requirements (2/15).

Farmland Preservation Plan and Working Lands Initiative

- County Board formally adopted the *Farmland Preservation Plan for Ozaukee County: 2035 (FPP)* on July 3, 2013 as a stand alone plan. The County Board adopted the Comprehensive Plan Amendment 2013-02 (incorporation of FPP & POSP) on 12/4/13. Received $30,000 DATCP FPP Grant and certification extension. Coordinated (w/ SWWT & MMSD and other partners) on implementation of the Cedar, Pigeon, Mole and Ulao Watershed 9 Key Element Plan per FPP (e.g. Tendick Creek floodplain and wetland restoration).
- Coordinated with the Town of Belgium on a revision to the County FPP per a zoning/land use change.

Geographic Information Systems (GIS) / Land Information

- Continued development of the GIS Fish & Wildlife Habitat Model and Ecological Prioritization GIS Tools with partners (NACPRO Award 2021). Reviewed Preservation/Restoration output maps with partners and coordinated with staff/partners/consultant on next steps for the GIS Tools. Follow-up w/ WDNR AOC Program to demonstrate the GIS Fish & Wildlife Habitat and Ecological Prioritization Tools. Continued work on Fisheries component of the GIS Tools. Worked w/ consultant on SLCI reports for LMRFWP (NACo Award 2023).
- Prepared several GIS databases and maps for the Planning, Parks and Trails and Ecological Divisions regarding: land divisions, zoning, tree plantings, natural areas, Trail/ROTB, streams/Impediments, wetland/riparian restorations, stormwater, water quality, fish & wildlife monitoring, invasive species, and restorations.
- Coordinated w/ LIO on GIS databases (ROW Invasive), JEM Grant (GIS Storybook OIT), & legal descriptions.
- Coordination w/ SEWRPC and LWMD on an update to the County Shoreland (& Floodplain) Zoning Maps.

Floodplain, Stormwater Management, Bluff Erosion and Construction Site Erosion Control

- Developed/reviewed erosion control, floodplain and stormwater management plans, permits and implementation for various Fish Passage Program (e.g. MSC, Sucker & Tendick Creeks), Parks (e.g. Virmond stormwater wetlands, HH Park Multipurpose Maintenance Bldg) & Ozaukee Interurban Trail projects with USACOE, WDNR, LWMD, consultants, & municipalities (e.g. Town of Saukville, City of Mequon).
- Coordinate w/ WCMP State Coastal Hazards WG regarding Virmond Park, LDGNP and other research projects. Coordinated with UW Sea Grant/WGNHS on outreach for Lake Michigan water levels and bluff erosion/climate change, Virmond public access and a guide to native vegetation for coastal bluffs. Coordinated on WCMP Coastal Resilience Project (e.g. predicting bluff erosion and water study—Virmond Park, Master Plans—CBCGNP, Virmond, LDGNP) and attend the WCMP CALM Network presentation ().

Strategic Planning and Economic Development Planning

- Coordinated w/ Chambers of Commerce, State & County Tourism on a State Tourism Joint Effort Marketing (JEM) grant for promoting the Ozaukee Interurban Trail. Continued to report on the Department goals, objectives, metrics (websites) for the County Strategic Plan.

Non-metallic Mining Planning

- Coordinated w/ the Highway Dept on the implementation of the restoration plan (e.g. tree estab Hetzel Pit / Bee-Keeper Bog to comply with the WDNR permit. Coordinated with the Highway Dept for restora tion / reclamation activities at the Saukville properties (Guenther, Lakeland and Opitz Pits) and coordinated w/ multi-Department staff, HWY and the Town of Saukville for future land use at these properties ().

Regional Technical Review & Planning Assistance (SEWRPC, MMSD, WisDOT, etc.)

- Coordinated w/ SEWRPC Regional Land Use & Transportation & Natural Areas Advisory Cmte mtgs.
- Coordinated w/ SWWT & OCWC on 9-Key Element Plans-Ulao, Mole, Pigeon, Cedar & Fredonia.
- Coordinated w/ WisDOT & Consultants on STH 60 (), 167, 181 & I-43 reconstruction projects.

PARKS, RECREATON, NATURAL AREAS AND CULTURE DIVISION

Parks, Natural Areas, Recreation and Culture Implementation

- Implementation of 2024 park projects (e.g. boardwalks and bridges) & approved Capital Improvement Projec (CIP) for the County parks (e.g., Maintenance Bldg., LDGNP Platform). Coordinated w/ Highway Dept on ot Park (e.g., HH Park grading), Fish Passage (Sucker & MS Creeks) and Ozaukee Interurban Trail (e.g., tree/l removal, signage) projects and CTH ROW Invasives. Planning / coordinate / meet w/ Highway Re: 2024 Pr (Park, Ecological/FP) & CTH W E&D, reconstruction, restoration, land acquisitions and funding ().
- Coordinated w/ Eagle Scouts for current and future service projects at various County Parks and the Interurt Trail (e.g. Fencing/Portable Bathroom Shelter—LMRFWP County Park, Invasives—HH Park, Etc.).
- Coordinated/continued intensive invasive species removal (e.g. herbaceous & woody shrubs), ash tree remc and 2024 tree plantings at Lion's Den Gorge Nature Preserve, CBCGNP, Virmond, Mee-Kwon, Hawthorne H LMRFWP, Waubedonia, Covered Bridge, Ulao Creek NP and Tendick Nature Parks, Coastal & HH Park Prc Areas (USFS grants) & both Golf Courses under private foundation, USFS GLRI and USFS CWMA grants. Continued inventory of invasive species, tree plantings and ash trees in the County Parks & restorations.
- Coordinated w/ several recreational organizations regarding the Mee-Kwon County Park master plan. Work on signage/maps/trail marking for the pedestrian trail network. Working on NRF grant to improve trail syster
- Coordinated with the Parks staff on the remodeling and repair of the Shady Lane, Mee-Kwon, Waubedonia a Virmond Park Houses (doors, roofs, floors, paint), out buildings (e.g. woodshop) and yard (e.g., invasives, tr and the new HH Park Multipurpose Maintenance Building.
- Coordinated w/ Ozaukee Treasures Network (OTN) Steering Cmte., a collaboration of organizations working the implementation of the *Park and Open Space Plan for Ozaukee County*. Coordinated w/ Ozaukee Count Watershed Coalition (OCWC) regarding Sucker Creek. Discussed development of Friends Group.
- Managed prairie restoration areas at Tendick Nature Park, LMRFWP, Covered Bridge, Virmond County Parl Oakland Green Park/MSC, MK Park Wetlands and HH Park Multipurpose Maintenance Building. Grant repo ing: WDNR CCA, We Energies, DU NAWCA and NFWF SOGL.
- Worked on the new CBCGNP, Ulao, Covered Bridge & River Oaks County Parks additions regarding survey restoration, tree removal (e.g. ash), invasive species removals, signage, trails, maintenance and tree plantin
- Coordinated with Partners regarding the Clay Bluffs Cedar Gorge Nature Preserve. Continued discussions v partners (OWLT, WDNR, WCMP, USFS & USFWS) Re: Habitat Restoration.
- Coordinated w/ WCMP Coastal Hazards Work Group, WDNR, contractor, City and WCMP staff for public ac to Lake Michigan (e.g. stairway) at Virmond Park. Received 2023 NACPRO Park & Rec Facility—Class I Av
- Coordinated w/ Parks Division staff on multiple items (e.g. reservations, signage, benches, gates, ash trees, Park Maint. Bldg.), scheduling w/ Corps Groups (AmeriCorps () & WisCorps ()).
- Coordinated w/ Architect (Kueny) and Contractors for Hawthorne Hills Multipurpose Maintenance Bldg. ().
- Coordinated w/ Highway and Grafton & Mequon FDs regarding access/parking at LDGNP and Virmond Park
- Coordinated w/ contractors on LDGNP Pier, Park Entrance Gates and Cameras & Virmond Stairway.

Coordination with Cultural, Tourism & Recreation Groups

- Coordinated/Mtg w/ Ozaukee County Tourism Council (OCTC) Board and Exec Mtgs (2/5). Continued work Tourism & Trail websites, maps & events. Continued to assist w/ OCTC Treasurer duties Re: 2024 budget. Coordination w/ OCHS Re: OCHS Caretaker, agreement, tree planting, well monitoring, Wi-Fi & 2024 event

TRAILS DIVISION

Trails Development & Facilitation—Ozaukee Interurban Trail/Snowmobile Trails

- Coordination w/ the Ozaukee Interurban Trail (OIT) Advisory Council including: safety, user counts, Trail we Trail maintenance/drainage/culverts, bike racks, benches, trees, maintenance items for the Trail (e.g. tree re als), RTC grant-Port Washington Trail Improvement Project—design & engineering, Coordinate w/ Route of Badger (ROTB) on Regional Quarterly Mtg.(), coordination w/ communities (Mequon, Cedarburg, Port Wash ton) & professionals on OIT improvements. Development of Trail gateway signage. Coordinated w/ WisDO trail extension in the Grafton/Cedarburg along STH 60 (). Follow-up on contracts, WisDOT TAP grants.
- Coordinated with We Energies on several occasions on development of trailside facilities in several location along the Trail (e.g. repair stations, signage, bike racks, benches, trees) and safety and electrical improvem
- Continued to conduct Trail user counts and analyze correlations with other survey data. Maintained the cou
- Coordinated w/ the Ozaukee Snowmobile Clubs on the existing and new (2023-24) Trail Maintenance and T Bridge Grants under the WDNR Trail Recreational Aids Grants. Coordinated and managed the SNARS dat and GIS mapping for snowmobile trail maintenance with the Clubs and sent out payments to Clubs.
- Coordination w/ City of Mequon, City of Port, City of Cedarburg, and Village of Thiensville staff regarding tra facilities, safety and trail connections for the OIT. Coordinated w/ Milwaukee County Re: OIT connections & mgmt.
- Coordinated w/ Washington Co. & ROTB regarding planning for trail connections of the OIT to Eisenbahn Trail and criteria for trail network. Coord. w/ T Grafton, C Cedarburg, V Grafton & T Ceda
- Follow-up Re: Trail paving of county-managed portion of OIT and WisDOT TAP gran engineering and design consultant. Coordinated w/ WisDOT on OIT Projects ().

Attachment: P&PDEPT_MGMTREPORT_NRC030724_FEB2024_FINAL_ATS022324

Ozaukee County Committee Report
General Fund Park Commission
For the One Month Ending Wednesday, January 31, 2024
Profit and Loss Statement ACTUAL TO AMENDED BUDGET

	Current Month Actual	2024 YTD Actual	2024 Amended Budget	Budget Balance	% Budget YTD
Revenues					
Intergovernmental Revenues	-	-	$34,140	$34,140	0.00%
Public Charges for Services	$2,813	$2,813	$75,125	$72,312	3.74%
Interest Revenue	$12	$12	-	($12)	0.00%
Other Revenue	-	-	$125,900	$125,900	0.00%
Total Revenues	$2,825	$2,825	$235,165	$232,340	1.20%
Expenditures					
Salaries	$23,721	$23,721	$648,043	$624,322	3.66%
Fringe Benefits	$16,806	$16,806	$205,808	$189,002	8.17%
Travel/Training	-	-	$7,750	$7,750	0.00%
Supplies	$4,484	$4,484	$140,900	$136,416	3.18%
Purchased Services	$13,743	$13,743	$263,400	$249,657	5.22%
Interdepartment Charges	-	-	$176,944	$176,944	0.00%
Other Expenses	$1,826	$1,826	$18,942	$17,116	9.64%
Total Operating Expenditures	$60,580	$60,580	$1,461,787	$1,401,207	4.14%
Capital Outlay					
Total Expenditures	$60,580	$60,580	$1,461,787	$1,401,207	4.14%
Other Finance (Sources)	-	-	($85,000)	($85,000)	0.00%
Net Other Financing Sources/Uses	-	-	($85,000)	($85,000)	0.00%
Net Increase (Decrease)	($57,755)	($57,755)	($1,141,622)	($1,083,867)	5.06%

E q u i t y:

Attachment: 1) CommRpt2024 January 2024 (P&PDept_Management&FinancialReports)

Ozaukee County Committee Report
Special Revenue Fund Parks Projects
For the One Month Ending Wednesday, January 31, 2024
Profit and Loss Statement ACTUAL TO AMENDED BUDGET

	Current Month Actual	2024 YTD Actual	2024 Amended Budget	Budget Balance	% Budget YTD
Revenues					
Intergovernmental Revenues	-	-	$299,275	$299,275	0.00%
Other Revenue	-	-	$5,000	$5,000	0.00%
Total Revenues	-	-	$304,275	$304,275	0.00%
Expenditures					
Salaries	$2,474	$2,474	$102,348	$99,874	2.42%
Fringe Benefits	$1,627	$1,627	$26,394	$24,767	6.16%
Supplies	$1,798	$1,798	-	($1,798)	0.00%
Purchased Services	-	-	$5,000	$5,000	0.00%
Total Operating Expenditures	$5,899	$5,899	$133,742	$127,843	4.41%
Capital Outlay					
Buildings & Land	$10,000	$10,000	$200,000	$190,000	5.00%
Total Capital Outlay	$10,000	$10,000	$200,000	$190,000	5.00%
Total Expenditures	$15,899	$15,899	$333,742	$317,843	4.76%
Net Increase (Decrease)	($15,899)	($15,899)	($29,467)	($13,568)	53.96%

E q u i t y:

Attachment: 1) CommRpt2024 January 2024 (P&PDept_Management&FinancialReports)

Ozaukee County Committee Report
Special Revenue Fund Ozaukee Water Projects
For the One Month Ending Wednesday, January 31, 2024
Profit and Loss Statement ACTUAL TO AMENDED BUDGET

	Current Month Actual	2024 YTD Actual	2024 Amended Budget	Budget Balance	% Budget YTD
Revenues					
Other Revenue	-	-	$326,455	$326,455	0.00%
Total Revenues	-	-	$326,455	$326,455	0.00%
Expenditures					
Salaries	$6,755	$6,755	$215,219	$208,464	3.14%
Fringe Benefits	$6,504	$6,504	$81,769	$75,265	7.95%
Total Operating Expenditures	$13,259	$13,259	$296,988	$283,729	4.46%
Capital Outlay					
Total Expenditures	$13,259	$13,259	$296,988	$283,729	4.46%
Net Increase (Decrease)	($13,259)	($13,259)	$29,467	$42,726	-45.00%

E q u i t y:

Attachment: 1) CommRpt2024 January 2024 (P&PDept_Management&FinancialReports)

Ozaukee County Committee Report
Enterprise Fund Golf Courses
For the One Month Ending Wednesday, January 31, 2024
Profit and Loss Statement ACTUAL TO AMENDED BUDGET

	Current Month Actual	2024 YTD Actual	2024 Amended Budget	Budget Balance	% Budget YTD
Revenues					
Public Charges for Services	-	-	$2,179,800	$2,179,800	0.00%
Other Revenue	-	-	$12,800	$12,800	0.00%
Total Revenues	-	-	$2,192,600	$2,192,600	0.00%
Expenditures					
Salaries	$22,557	$22,557	$825,658	$803,101	2.73%
Fringe Benefits	$28,521	$28,521	$263,555	$235,034	10.82%
Travel/Training	-	-	$12,650	$12,650	0.00%
Supplies	$5,410	$5,410	$348,050	$342,640	1.55%
Purchased Services	$1,600	$1,600	$188,350	$186,750	0.85%
Interdepartment Charges	-	-	$59,198	$59,198	0.00%
Depreciation	$24,949	$24,949	$305,350	$280,401	8.17%
Other Expenses	-	-	$103,789	$103,789	0.00%
Total Operating Expenditures	$83,037	$83,037	$2,106,600	$2,023,563	3.94%
Capital Outlay					
Equipment & Furniture	-	-	$370,000	$370,000	0.00%
Buildings & Land	$1,650	$1,650	$1,140,000	$1,138,350	0.14%
Contra	-	-	($1,510,000)	($1,510,000)	0.00%
Total Capital Outlay	$1,650	$1,650	-	($1,650)	0.00%
Total Expenditures	$84,687	$84,687	$2,106,600	$2,021,913	4.02%
Other Finance Uses	-	-	$86,000	$86,000	0.00%
Net Other Financing Sources/Uses	-	-	$86,000	$86,000	0.00%
Net Increase (Decrease)	($84,687)	($84,687)	-	$84,687	0.00%

E q u i t y:

Attachment: 1) CommRpt2024 January 2024 (P&PDept_Management&FinancialReports)



OZAUKEE COUNTY PLANNING & PARKS

Parks Division

Summary of Parks Revenue

January 2024

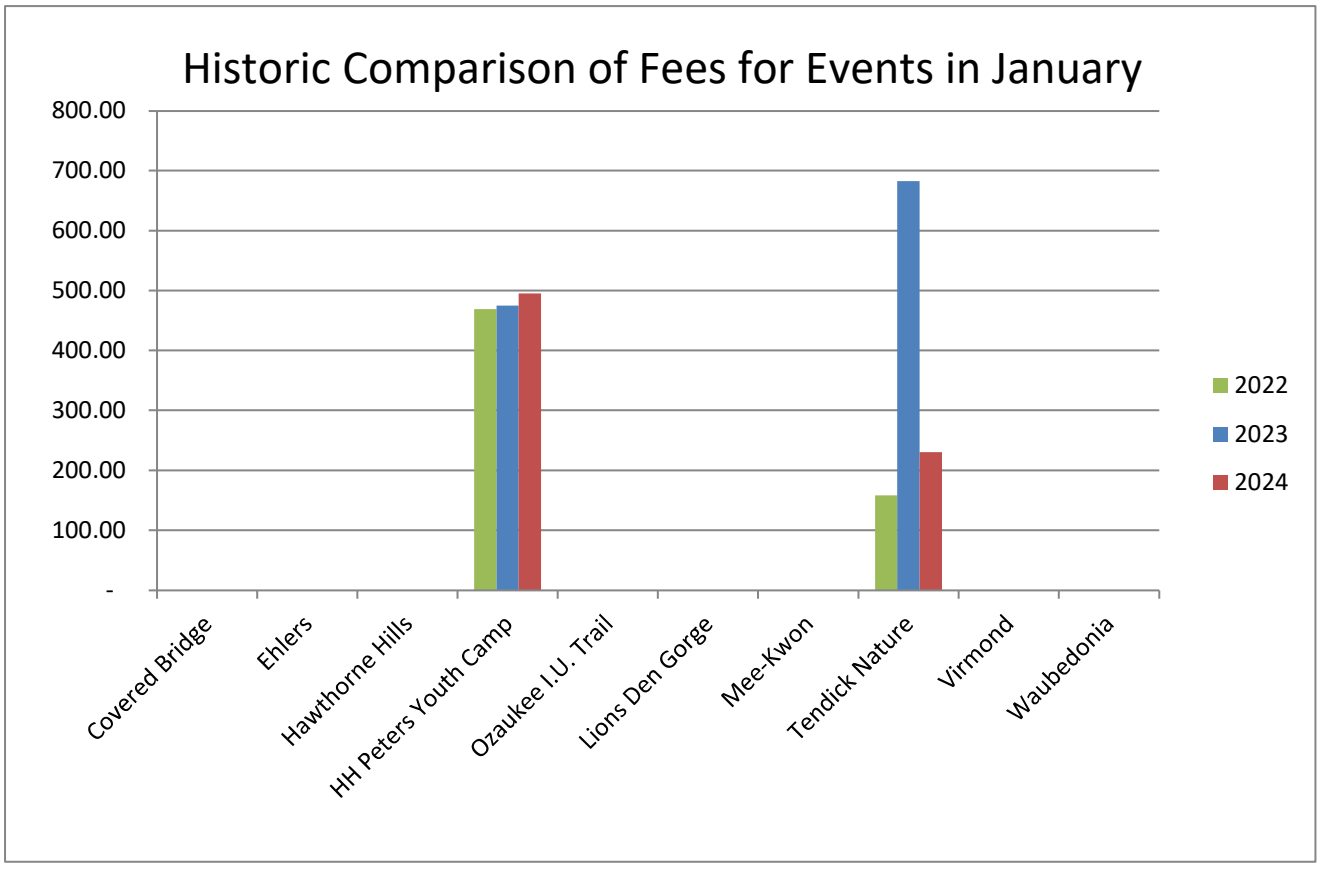
Location	Fees for Events in January 2024 Cur Month	Fees for Events in January 2024 YTD	Revenue Collected During January 2024 Cur Month	Revenue Collected During January 2024 YTD
Covered Bridge	-	-	285.00	285.00
Ehlers	-	-	-	-
Hawthorne Hills	-	-	-	-
HH Peters Youth Camp	495.00	495.00	(6.05)	(6.05)
Ozaukee I.U. Trail	-	-	-	-
Lions Den Gorge	-	-	210.00	210.00
Mee-Kwon	-	-	-	-
Tendick Nature	230.03	230.03	285.00	285.00
Virmond	-	-	130.00	130.00
Waubedonia	-	-	1,908.93	1,908.93
Totals:	725.02	725.02	2,812.88	2,812.88

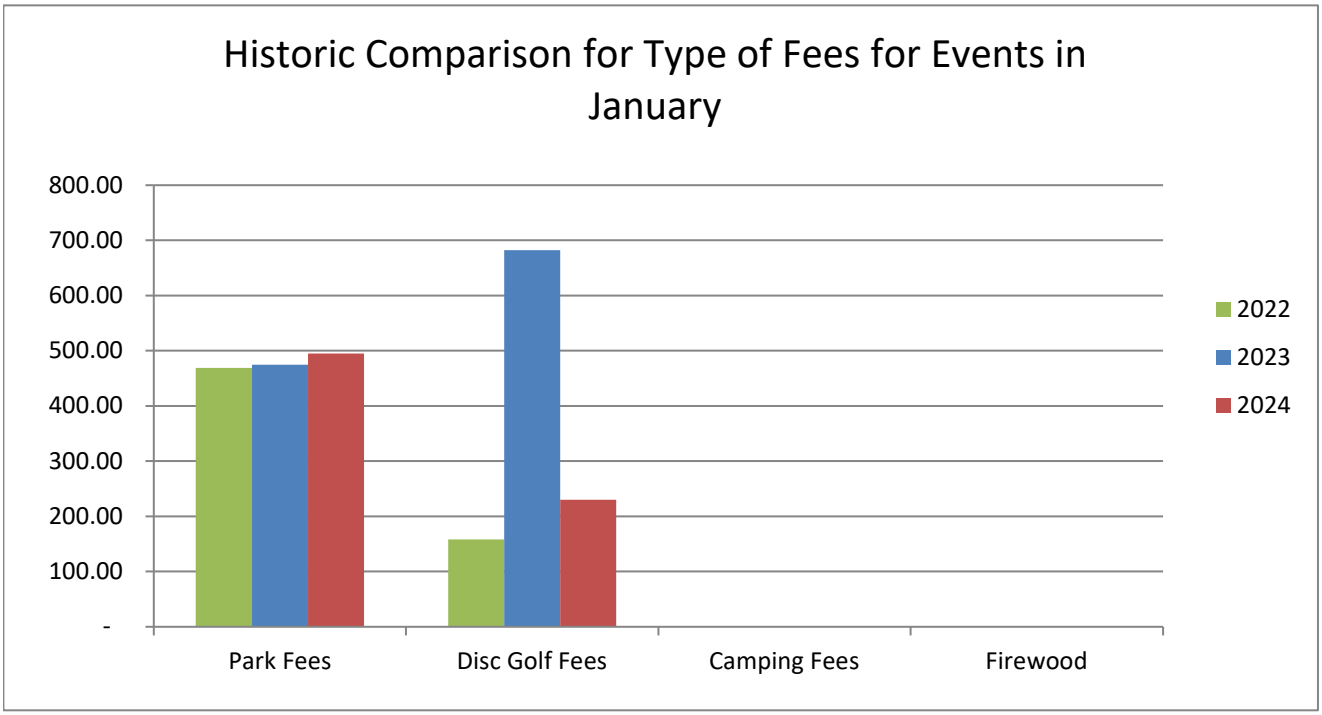
Historic Comparison

Location	Fees for Events in January 2022	2023	2024
Covered Bridge	-	-	-
Ehlers	-	-	-
Hawthorne Hills	-	-	-
HH Peters Youth Camp	469.19	474.94	495.00
Ozaukee I.U. Trail	-	-	-
Lions Den Gorge	-	-	-
Mee-Kwon	-	-	-
Tendick Nature	158.29	682.49	230.03
Virmond	-	-	-
Waubedonia	-	-	-
Total:	627.48	1,157.43	725.02

Fee Type	2022	2023	2024
Park Fees	469.19	474.94	495.00
Disc Golf Fees	158.29	682.49	230.03
Camping Fees	-	-	-
Firewood	-	-	-
Total:	627.48	1,157.43	725.02

Attachment: 2) Summary of Parks Revenue January 2024 (P&PDept_Management&FinancialReports)





Attachment: 2) Summary of Parks Revenue January 2024 (P&PDept_Management&FinancialReports)



WISCONSIN Counties

MARCH 2024

DISCOVERING OUR NATURAL TREASURES

Explore County Parks and Forests

ALSO: Legislative Conference Highlights | Securing Grant Funding for Counties

Attachment: Wisconsin Counties - March 2024 Edition (P&PDept_Management&FinancialReports)

DISCOVERING OUR NATURAL TREASURES

Explore County Parks and Forests

Wisconsin is a beautiful state in which to live, work and play.

From the tip of the Apostle Islands, through the rolling hills of the Driftless Area, to the sandy beaches of Lake Michigan, Wisconsin holds its own in scenic beauty.

To celebrate these landscapes and their importance to our state's economy and quality of life, this issue of Wisconsin Counties explores our state's diverse and vibrant county parks and forests.

Whether you're an avid hiker seeking an outdoor adventure, a nature enthusiast eager to spot elusive wildlife, or a family yearning for idyllic picnic spots and swimming holes, a county park or forest is waiting for you to explore.

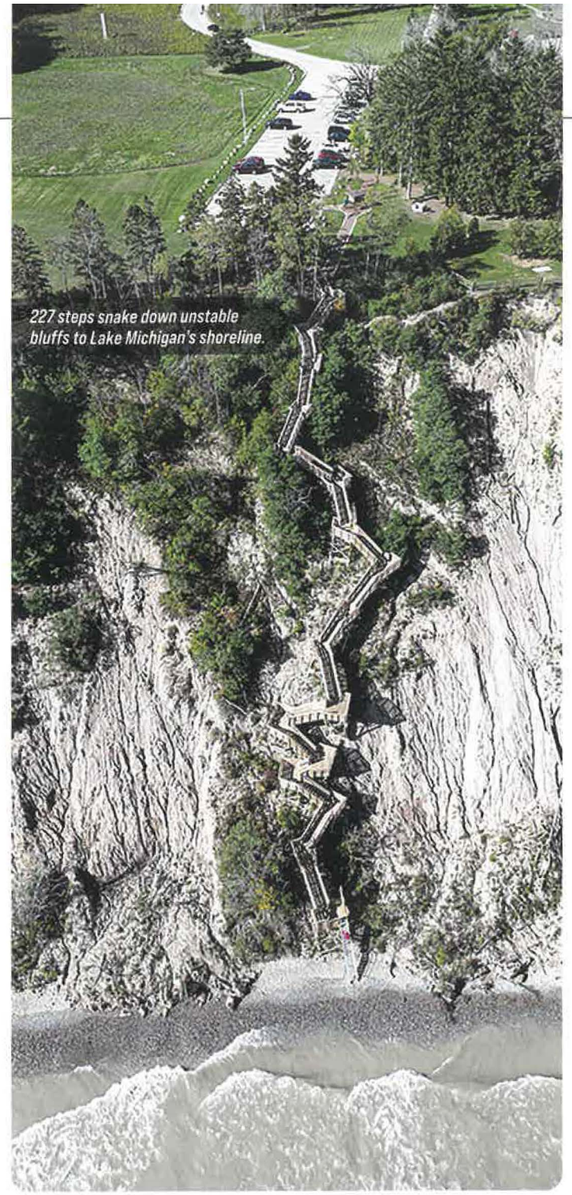
Journey with us as we venture into county parks and forests across the state, marveling at their natural beauty while observing the behind-the-scenes work that goes into maintaining these diverse landscapes as recreational havens and key components to the state's conservation efforts.

Attachment: Wisconsin Counties - March 2024 Edition (P&PDept_Management&FinancialReports)

Ozaukee County Opens Safe Passage to Lake Michigan

and Leads the Way for Shoreline Access Projects

by Andrew Struck, Planning and Parks Director, Ozaukee County



227 steps snake down unstable bluffs to Lake Michigan's shoreline.

A new, innovative public access staircase at Ozaukee County's Virmond Park in Mequon is providing a unique gateway to the National Lake Michigan Water Trail.

Virmond County Park is a 63-acre coastal haven, boasting 1,350 feet of Lake Michigan coastline. However, its unstable clay seepage bluffs reach heights of 130 to 140 feet, restricting public access to the lake and leading to informal trails that damage the sensitive wetlands and put visitors at risk.

Traditional engineering strategies using fixed structures have proven ineffective on these unstable bluffs and contributed to erosion, prompting the Ozaukee County Planning and Parks Department to embark in 2016 on finding a low-impact, ecologically sensitive solution that would minimize the need for emergency bluff rescues. The resulting "floating" stairway, which opened in August 2023, now offers approximately 700 daily park users a safe passage to Lake Michigan.

Considered a pilot project, the patented-designed stairway featuring 227 steps serves as a case study in designing and constructing public access structures in places along the Lake Michigan shoreline with similar conditions.

Beyond enhancing public access, the construction of the stairway prioritized the preservation of the unique, clay seepage bluff and minimized the disturbance of the soils, groundwater, and surface water.



A ribbon cutting officially opened the floating stairway to the public in August 2023.

The innovative design adheres to international safety standards, featuring adjustable stairway sections mounted on surface-bearing "sleds" secured by steel cables and helical anchors set back from the edge at the top of the bluff. Importantly, the structure can "float" over unstable soils without fixed footings or pilings, minimizing its impact on the bluff. The sections are connected by a patented aluminum hinge, accommodating vertical slope changes and adjustments in response to erosion and Lake Michigan water levels.

Importantly, the structure can "float" over unstable soils without fixed footings or pilings, **minimizing its impact on the bluff.**

The project involved meticulous planning, with a professional engineer-stamped design evolving over three years. Construction occurred in phases, primarily during the winter months to ensure suitable conditions that safeguarded both the ecologically sensitive bluff and the construction team. The work was guided by a comprehensive surface and groundwater study that was conducted for Virmond County Park and supported by a 2021 grant from the Wisconsin Coastal Management Program.

The project's success has garnered recognition, including the 2023 National Association of County Park and Recreation Officials award in the Park & Recreation Facility — Class I category.



Looking ahead, the parks department is actively working to manage invasive vegetation, including species such as the black locust tree, and revegetate the bluffs with native prairie and coastal woodlands to stabilize the bluffs and enhance the habitat for migrating birds and pollinators along the Lake Michigan flyway.

A welcome kiosk now greets visitors while an engraved brick paver pathway allows contributors to leave a lasting mark and be recognized for supporting the county's efforts. The county reached its initial fundraising goal of $30,000 but is continuing to sell pavers and seek contributions to cover the added costs associated with designing and installing the unique stairway. *(To learn more, visit ozaukeecounty.gov/2716/Donations-Gifts.)*

Supported by federal and state grants, private donations, and collaboration with key partners, this project stands as a testament to innovative problem-solving, environmental stewardship, and community engagement. The "floating" staircase at Virmond County Park not only connects people to Lake Michigan but also sets a precedent for future public access projects along the unstable bluffs of the Great Lakes. ■

Andrew Struck is the planning and parks director for Ozaukee County.

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Attachment: Wisconsin Counties - March 2024 Edition (P&PDept_Management&FinancialReports)

Packet Pg. 675

OZAUKEE COUNTY

NEWS GRAPHIC

A Trusted News Source Since 1883

$2 Thursday, February 22, 2024 gmtoday

World Atlas names Cedarburg one of the best towns in northern U.S. to visit

CEDARBURG — Cedarburg has found itself on yet another list touting its myriad amenities and activities and encouraging people to see it for themselves.

This time it is the World Atlas, which named Cedarburg to its "8 Best Towns In The Northern United States To Visit In 2024."

According to the piece, the northern states of Washington, Montana, North Dakota, Wisconsin, Pennsylvania, Oregon, Indiana and Maine all contain a variety of small towns that feature historical buildings and monuments, as well as natural beauty and escapes into nature.

The article said that the towns' proximity to the Canadian border means visitors will experience cooler temperatures than their southern counterparts, but that shouldn't stop people from checking these communities out. "Simply bundle up and enjoy," they advised.

While the piece did not appear to rank the communities, it did list Cedarburg at the top:

"Cedarburg, Wisconsin, is where outdoor lovers can access the Ozaukee Interurban Trail and its 30 miles of paved roadway covering former railway beds, offering a free, family-friendly excursion in the fresh air. For some indoor adventure focused on arts and culture, learn about the region's history by visiting the Cedarburg History Museum, located in historic downtown Cedarburg. Make the Cedarburg Cultural Center part of your agenda as well, as it celebrates its community through cultural events and exhibits that highlight the local talent and heritage of Cedarburg and surrounding areas. Round out your experience in Cedarburg by capping it off with a visit to the Cedarburg Art Museum to enjoy original works of art by early and contemporary Wisconsin artists."

Other towns that made the list are Gig Harbor, Wash; Westchester, Pa.; Rugby, N.D.; Kalispell, Mont.; Astoria, Ore.; Madison, Ind.; Freeport, Maine.

Attachment: Ozaukee News Graphic Article, 2.22.24, World Atlas names Cedarburg one of the best towns in northern U.S. to visit

PUBLISHED IN PORT WASHINGTON

Ozaukee PRESS

Southeast Wisconsin's Largest Independent Community Weekly

Three sections | Thursday, February 15, 2024 | $2

EDITORIAL

Common green space accessible to all

A few years ago, a Port Washington alderman observed that the city owned a large amount of land devoted to parks and suggested that some of it should be sold so it could be put on the tax roll.

The alderman was defeated in the next election.

He was among several Common Council members who pushed for the sale of a city-owned lot overlooking the harbor for the controversial Blues Factory development, and that was likely the primary cause of his ouster, but his parallel stance on parks surely sealed the deal for voters.

Every poll, survey or study on the subject, nationally and in Wisconsin, has shown that an overwhelming majority of Americans support public space for recreation and appreciation of nature.

The people get it. Some of their representatives in government, in the thrall of the notion that land exists mainly to be developed to support business and the economy and generate taxes, don't.

The Wisconsin Legislature's Joint Finance Committee is a case in point. It has repeatedly blocked grants approved by the Department of Natural Resources for nature preserves and parks on land coveted by developers, including the funding intended for the Clay Bluffs Cedar Gorge Nature Preserve in the Town of Grafton. An anonymous developer was poised to buy the land until Gov. Tony Earl stepped in to save the preserve with surplus Covid relief money.

Wisconsin is steeped in the conservation ethic, thanks to the likes of John Muir, Aldo Leopold and Gaylord Nelson, but it also has a historical association with the man who is considered the father of the nation's public park system, Frederick Olmsted.

Olmsted was most famed for designing New York's Central Park, but later in his career he designed Lake Park, a 138-acre green space sanctuary in the heart of Milwaukee with a mile of Lake Michigan shore. The city's Riverside and Washington parks also have the Olmsted pedigree.

Surveys have shown that people appreciate parks most as a benefit to human health and happiness, and also support them for their impact on conservation and the economic benefit they bring to their communities.

No wonder people like living in Ozaukee County. It's a park paradise.

Parks under the aegis of the Ozaukee County Planning and Parks Department are remarkable for their diversity. The 32 parks range from preserves of virtually untouched nature to the manicured greens and fairways of two public golf courses.

All told, parks cover several thousand acres of land in the county. Much of that protected green space is found in the urban parks of cities and villages.

In Port Washington that includes a number of small neighborhood parks and a sprawling assembly of lakefront parks that offer the breathtaking views and beach stairway of Upper Lake Park on the north bluff, along with the close-to-the-water ambience of Veterans, Rotary, Fisherman's and Coal Dock parks. The parks are connected by a 1.2-mile harbor walk and bring to mind Olmsted's description of his Milwaukee legacy as a "grand necklace of parks."

A bright gem in Port's lake park necklace, Rotary Park, stands out for its intimacy with Lake Michigan. On a man-made peninsula jutting into the harbor, it's a place for boat watching and fishing and quiet contemplation of the maritime environment.

Impressive urban parks can be found in other Ozaukee communities. Grafton's Lime Kiln Park is an exceptional example, a 28-acre preserve with a river running through it between high, wooded, natural banks free of man-made clutter. In summer, when the Milwaukee River flows at a sedate pace in the manner of the Mississippi, it's not hard to conjure an image of Huck Finn drifting downstream past the park on his raft.

Frederick Olmsted was a gifted landscape architect, but he is also cited in American history as a powerful advocate for the principle that common green space must be equally accessible to all citizens and protected from private encroachment.

Ozaukee County is living up to that ideal

Attachment: Ozaukee Press Article, 2.15.24, Common green space accessible to all (P&PDept_Management&FinancialReports)

PUBLISHED IN PORT WASHINGTON

Ozaukee PRESS

Southeast Wisconsin's Largest Independent Community Weekly

Three sections | Thursday, February 15, 2024 | $2

County golf courses set records for play, revenu

By DAN BENSON
Ozaukee Press staff

■ *Official credits weather that allowed rounds into December, quicker play due to individual cart ridership*

As expected, the two Ozaukee County-owned golf courses set records in both the number of rounds played in 2023 and gross revenue generated.

The 2023 golf season produced 81,621 rounds of golf, up from 74,000 in 2022, and more than $2.9 million in gross revenue, up from $2.51 million.

Record monthly revenue was recorded at both Mee-Kwon and Hawthorne Hills golf courses in May, June, July, August, and September, county Planning and Parks Director Andrew Struck told members of the Natural Resources Committee last week.

Contributing to what Struck in December called an "incredible" year were 13 more golf days in 2023 than in 2022, thanks to warmer weather that extended into December and an increase in individual golf cart ridership, which quickened the pace of play.

"Individual cart ridership has been a real bonus to us," Struck said.

Also contributing, he said, were a 9% increase in the sale of discount cards, from 4,980 in 2022 to 5,409 in 2023, and a 10% increase in green fees.

The golf courses are a county "enterprise fund," meaning any "profit" raised goes back into the courses for maintenance or to make improvements so they are not supported by the property tax levy.

Business at both golf courses has been robust in recent years, regularly setting records.

Contributing to that is the practice of most employers to still allow their staff to work from home providing greater flexibility to play the county courses, Struck said.

Supervisors said the courses offer quality golf at affordable prices.

"The quality of golf is amazing," Supr. Tony Matera said.

Despite the record year, Struck proposed raising fees in 2024, including a $2 increase in green fees, in response to rising wages and other expenses and the need to build a rainy day fund for future capital investments, such as irrigation systems.

He said the increase in fees will still keep the county courses "in the middle" compared to other area courses.

Matera suggested keeping it affordable, especially as seniors are one of the courses "main drivers."

"I can support incrementally small increases, instead of toeing the line and then seeing a big jump," he said.

The committee approved increasing

In other action, the committee awar contract to FC Ventures LLC of Ceda to operate the restaurants at both cours

Instead of the county being paid a centage of the profits, FC Ventures wi the county a flat fee of $20,000.

Last year, the county contracted CDG Sport and Hospitality Group to ate concessions at both courses on a year contract.

Struck said CDG contributed to tl cord year because the firm provide proved service over previous years.

But Struck told committee member the partnership had "dissolved" due t agreements among the ownership grou

One of the CDG partners is a pri with FC Ventures, he said, and has a pool of workers among students at Conc University Wisconsin in Mequon.

Attachment: Ozaukee Press Article, 2.15.24, County golf courses set records for play, revenue (P&PDept_Management&FinancialReports)

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County makes case for marine sanctuary headquarters in Por

By DAN BENSON
Ozaukee Press staff

■ *Deep-water harbor, Coal Dock Park make city best choice for hub of federal shipwreck preserve, officials say*

Local officials said last week they believe Port Washington has some significant advantages over Sheboygan and Manitowoc to be the location of a multi-million dollar research center for a federal shipwreck sanctuary along the western shore of Lake Michigan.

The Wisconsin Shipwreck Coast National Marine Sanctuary, created in 2021 and operated by the National Oceanic and Atmospheric Administration, or NOAA, spans four counties, covering 962 square miles, from Port Washington north to Two Rivers and includes 36 "nationally significant historic shipwrecks" and about 60 suspected wrecks, according to a facility study published last July.

The sanctuary will require a "NOAA presence" in Port, Sheboygan, Manitowoc and Two Rivers, to include infrastructure, research, education and outreach facilities.

While no money has been allocated, the facilities study calls for spending $380,500 to improve the lighthouse and 1860 light station museum, including improving the stairway to the bluff overlooking the harbor, and $380,000 for improving the Port Washington Historical Society's Resource Center downtown, including facilitating educational programs.

In all the study calls for spending more than $12 million.

The biggest piece is $8.33 million fo sanctuary marine research and adminis tive center, which would attract researcl from around the country.

The location of the center has yet to determined.

Ozaukee County officials last week s they think Port Washington has a good s at landing the center.

"We think there are some real str advantages" for putting the center Port, county Planning and Parks Direc Andrew Struck told members of the Nat

See **Sanctuary** *on page 4B*

Attachment: Ozaukee Press Article, 2.15.24, County makes case for marine sanctuary headquarters in Port

Sanctuary: *Hosting center would be a coup for Port*

FROM PAGE 1B

Resources Committee, who voted unanimously to continue supporting the development of the sanctuary.

Those include Port's harbor being the deepest of the four communities and more suitable for research vessels.

Another advantage is that Coal Dock Park is undeveloped and suitable as a building site.

Finally, Struck said, since most of the traffic to the sanctuary would come from the south, including from the Milwaukee and Chicago airports, Port Washington would be ideal as the gateway to the sanctuary.

Struck said the research center would likely be a campus that would include housing for visiting researchers.

"There will be a real need for housing the researchers on site," he said, which also makes Port's proximity to Milwaukee attractive.

Committee member Tony Matera, a former member of Port's Plan Commission and the city's Coal Dock Park Restoration Committee, agreed that Port's harbor, vacant land and proximity to Milwaukee all work in its favor.

He said Port has other advantages as well, including the nearness of Port's downtown to the lakefront.

"I think it fits our downtown charm, we've embraced our shipwreck history. I think it would be great," he said.

The facilities study had high praise for Port's facilities. The Historical Society's Resource Center, for instance is "highly visible" and "provides an excellent opportunity to engage both residents and visitors."

A "connected visitor experience" exists by improving a pathway and staircase between the resource center, lighthouse and Light Station Museum.

"In this way, each location is both a standalone asset and part of a broader experience that would be of interest to residents, visitors, educators, and students," the facilities study says.

"This arrangement lends itself nicely to formal and informal educational programming, as well as branding and marketing. Port Washington's rich maritime heritage and culture, shipwrecks and national heritage, research and exploration, and Lake Michigan conservation are all thematic areas that could be presented within this connected experience."

Capturing the center would be a major coup, officials said.

"It would mean a significant investment" in whatever community the center is placed, Struck said.

"The county should covet this," County Administrator Jason Dzwinel told the committee. "Anything we can do to show we're a willing partner will be good."

"This is exciting," Matera said. "It will be a national attraction. Port's already on the map but it will be another investment in our community. It will be an economic boon."

A 15-member advisory council, whose members are drawn from the local communities in Kewaunee, Manitowoc, Ozaukee and Sheboygan counties, is providing advice and recommendations on management of the sanctuary as well as its location.

Attachment: Ozaukee Press Article, 2.15.24, County makes case for marine sanctuary headquarters in Port