

Riley Purgatory Bluff Creek Watershed District Permit Application Review

Permit No: 2022-051

Considered at Board of Managers Meeting: July 13, 2022

Received complete: June 27, 2022

Applicant: Maria Awes

Consultant: Natural Environments Corp, George Whipple

Project: Shoreline Stabilization – The applicant proposes restoring 32 feet of Lotus Lake shoreline and installing 23 feet of sand blanket along the shoreline.

Location: 581 Fox Hill Dr., Chanhassen, MN

Reviewer: Scott Sobiech, PE, Barr Engineering

Proposed Board Action

Manager _____ moved and Manager _____ seconded adoption of the following resolution based on the permit report that follows and the presentation of the matter at the July 13, 2022 meeting of the managers. Resolved that the application for Permit 2022-051 is approved, subject to the conditions and stipulations set forth in the Recommendations section of the attached report;

Resolved that on determination by the RPBCWD administrator that the conditions of approval have been met, the RPBCWD president or administrator is authorized and directed to sign and deliver Permit 2022-051 to the applicant on behalf of RPBCWD.

Upon vote, the resolution were adopted, _____ [VOTE TALLY].

Rule Conformance Summary

Rule	Issue	Conforms to RBPCWD Rules?	Comments
B	Floodplain Management and Drainage Alterations	Yes	
C	Erosion Prevention and Sediment Control	See Comment	See Rule Specific Permit Condition C1 related to identification of the contractor responsible for erosion control.
F	Shoreline and Streambank Stabilization	Yes	
L	Permit Fee	See Comment	See Rule Specific Permit Condition L1 replenishing the deposit as needed. As of June 28, 2022 the amount due is \$575.
M	Financial Assurance	See Comment	The financial assurance is calculated at \$6,697

Project Background

The project is located on a single-family home property at 581 Fox Hill Dr. in Chanhassen, riparian to Lotus Lake. The proposed project includes restoring 32 feet of Lotus Lake shoreline and installing 23 feet of sand blanket along the shoreline. The applicant also proposes installation of steps, boulder walls, an aggregate patio, and numerous landscape plantings above the ordinary high water level at other locations on the site. The project site information is summarized below:

Description	Area
Total Site Area	2.38 acres
Length of Shoreline impacted	55 feet
New (Increase) in Site Impervious Area	113 ft ²
Disturbed impervious surface	0
Total Disturbed Area	3600 ft ²

The following materials were reviewed in support of the permit request:

1. Permit application received June 17, 2022; incomplete notice was sent on June 24, 2022; materials submitted to complete application on June 27, 2022.
2. Construction drawing set (3 sheet) dated June 8, 2022 (revised June 27, 2022)
3. Erosion Intensity Worksheet received June 27, 2022

Rule Specific Permit Conditions

Rule B: Floodplain Management and Drainage Alterations

Because the project will involve land-disturbing activities below the 100-year flood elevation of Lotus Lake (897.4 msl) to restore 32 feet of the shoreline and install a sand blanket along 23 feet of shoreline, the project must conform to the requirements in the RPBCWD Floodplain Management and Drainage Alteration rule (Rule B, Subsection 2.1).

Rule B, Subsections 3.1 and 3.4 are not relevant because no buildings will be constructed or reconstructed as part of the project, and no impervious surface will be created or re-created within 50 feet of a watercourse. Placement of fill below the 100-year flood elevation (897.4 msl) is prohibited unless fully compensatory flood storage at or below the same elevation and within the floodplain of the same water basin is provided (Rule B, Subsection 3.2). Because the plan view and cross section information provided on the drawing shows proposed excavation and installation of stabilization measures will be below the existing ground level, the proposed project will result in an estimated net increase in flood storage below the 100-year flood elevation of 36 cubic feet and the project conforms to Rule B, Subsection 3.2. Because the applicant has demonstrated and the engineer concurs that the

project will preserve the existing 100-year flood level, the project will not alter surface flows, complying with subsection 3.3. The information on the plan sheet includes a note indicating that activities must be conducted to minimize the potential transfer of aquatic invasive species conforming to Rule B, Subsection 3.6.

The RPBCWD Engineer concurs that the proposed project conforms to the floodplain management and drainage alteration requirements of Rule B.

Rule C: Erosion and Sediment Control

Because the project will alter more than 50 cubic yards of earth, the project must conform to the requirements in the RPBCWD Erosion and Sediment Control rule (Rule C, Subsection 2.1).

The drawing prepared by Natural Environments Corp includes installation of floating silt curtain, installation of a construction entrance, placement of a minimum of 6 inches of topsoil, and decompaction of areas compacted during construction. To conform to the RPBCWD Rule C requirements the following revisions are needed:

- C1. The Applicant must provide the name and contact information of the general contractor (i.e., specific individual) responsible for erosion and sediment control at the site. RPBCWD must be notified if the responsible party changes during the permit term.

Rule F: Shoreline and Streambank Stabilization

Because the proposed project will restore 32 feet Lotus Lake shoreline and install a sand blanket along 23 feet of shoreline, the project must conform to the requirements in the RPBCWD Shoreline and Streambank Stabilization rule (Rule F, Subsection 2). The proposed work falls within the scope of Minnesota Department of Natural Resources General Permit #2015-1192, and RPBCWD's approval of the relevant work as meeting its applicable rules will constitute approval under the state Work in Waters rules.

Because the applicant is proposing improvements to restore the natural shoreline the proposed work conforms with Rule F, subsection 3.1 The Applicant provided a completed erosion intensity scoresheet which indicates that the total erosion intensity score (EIW) for the site is 51. RPBCWD engineer's review of the scoresheet revealed a couple discrepancies between the selected score and the application of the associated guidance materials for aquatic vegetation and shore orientation. Adjusting these scores results in an erosion intensity score of 47, thus indicating a low erosion intensity classification, which supports the need to complete the project using natural vegetation and bioengineering stabilization methods (Rule F, Subsection 3.2a). The design plans, which are certified by a registered landscape architect, call for bioengineering methods (coir logs) and native vegetation to be used in the shoreline erosion protection in accordance with the criteria in paragraph 3.3ai.

Because the proposed slope shown on the design plan is 3:1 (horizontal to vertical) or flatter waterward of the ordinary high water level, the project conforms to Rule F, Subsection 3.3.a.ii. Design plans also

indicate proposed restoration will follow the configuration of the existing shoreline and only encroach horizontally from the existing shoreline the minimal amount need to install the propose 8-inch coir rolls for restoration. As a result, the proposed project conforms to Rule F, Subsection 3.3.a.iii. The applicant developed the design based on site erosion intensity using RPBCWD erosion intensity scoresheet which accounts for fetch, prevailing wind direction and soils at the site, thus conforming to Rule F, Subsection 3.3.a.iv.

Because the sand blanket section detail on sheet L200 combined with plan view on sheet L100 indicate the proposed sand blanket will be six inches thick, 23 feet width, not extend waterward of the OHW more than 10 feet, and calls for the installation of sand, the conforms with Rule F, subsection3.3d.

The RPBCWD Engineer finds that the proposed project conforms to the applicable design criteria in Rule F.

Rule L: Permit Fee Deposit:

The RPBCWD permit fee schedule adopted in February 2020 requires permit applicants to deposit \$200 for land-disturbing activities on single family home lots to be held in escrow and applied to cover the \$10 permit-processing fee and reimburse RPBCWD for permit review and inspection-related costs and when a permit application is approved, the deposit must be replenished to the applicable deposit amount by the applicant before the permit will be issued to cover actual costs incurred to monitor compliance with permit conditions and the RPBCWD Rules. Subsequently, if the costs of review, administration, inspections and closeout-related or other regulatory activities exceed the fee deposit amount, the applicant will be required to replenish the deposit to the original amount or such lesser amount as the RPBCWD administrator deems sufficient within 30 days of receiving notice that such deposit is due. The administrator will close out the relevant application or permit and revoke prior approvals, if any, if the permit-fee deposit is not timely replenished

- L1. The applicant must replenish the permit fee deposit to the original amount due before the permit will be issued. As of June 28, 2022 the amount due is \$575.

Rule M: Financial Assurance:

Rules C: Floating silt curtain & erosion log: 55 L.F. x \$2.50/L.F. =	\$138
Rock Entrance: 1.0 x \$250 =	\$250
Restoration: 0.08 acres x \$2,500/acre =	\$200
Rule F: Shoreline or Streambank Stabilization: 55 L.F. x \$100/L.F. =	\$5,500
Contingency (10%)	<u>\$608</u>
Total Financial Assurance.....	\$6,696

Applicable General Requirements:

1. The RPBCWD Administrator and Engineer shall be notified at least three days prior to commencement of work.
2. Construction shall be consistent with the plans and specifications approved by the District as a part of the permitting process. The date of the approved plans and specifications is listed on the permit.
3. Construction must be consistent with the plans, specifications, and models that were submitted by the applicant that were the basis of permit approval. The date(s) of the approved plans, specifications, and modeling are listed on the permit. The grant of the permit does not in any way relieve the permittee, its engineer, or other professional consultants of responsibility for the permitted work.
4. The grant of the permit does not relieve the permittee of any responsibility to obtain approval of any other regulatory body with authority, except as may be provided under Minnesota Department of Natural Resources General Permit 2015-1192, compliance with which, including payment of any applicable fee, is entirely the responsibility of the permittee.
5. The issuance of this permit does not convey any rights to either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations.
6. In all cases where the doing by the permittee of anything authorized by this permit involves the taking, using or damaging of any property, rights or interests of any other person or persons, or of any publicly owned lands or improvements or interests, the permittee, before proceeding therewith, must acquire all necessary property rights and interest.
7. RPBCWD's determination to issue this permit was made in reliance on the information provided by the applicant. Any substantive change in the work affecting the nature and extent of applicability of RPBCWD regulatory requirements or substantive changes in the methods or means of compliance with RPBCWD regulatory requirements must be the subject of an application for a permit modification to the RPBCWD.
8. If the conditions herein are met and the permit is issued by RPBCWD, the applicant, by accepting the permit, grants access to the site of the work at all reasonable times during and after construction to authorized representatives of the RPBCWD for inspection of the work.

Findings

1. The proposed project includes the information necessary, plan sheets and erosion control plan for review.
2. The proposed project conforms to Rules B and F. The proposed project will conform to Rule C if the Rule Specific Permit Conditions listed above are met.
3. Under Minnesota Department of Natural Resources General Permit 2015-1192 (attached to this report), approval of work under RPBCWD rule F constitutes approval under applicable DNR work in waters rules. Compliance with conditions in the general permit and payment of applicable

fees, if any, are necessary to benefit from general permit approval and are the responsibility of the applicants.

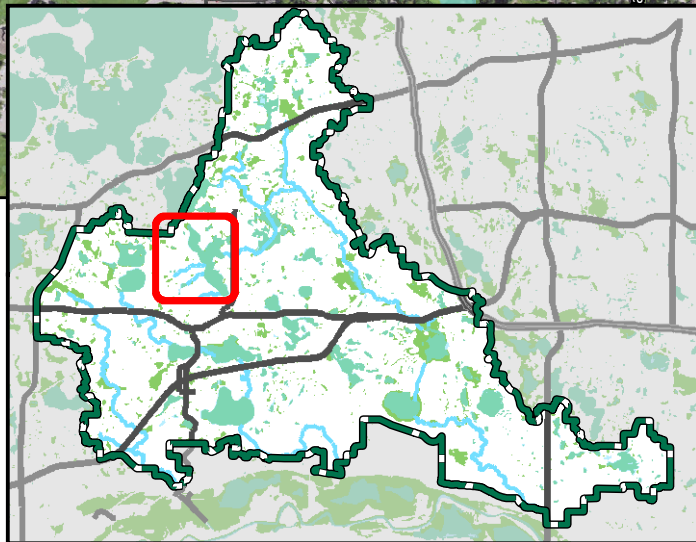
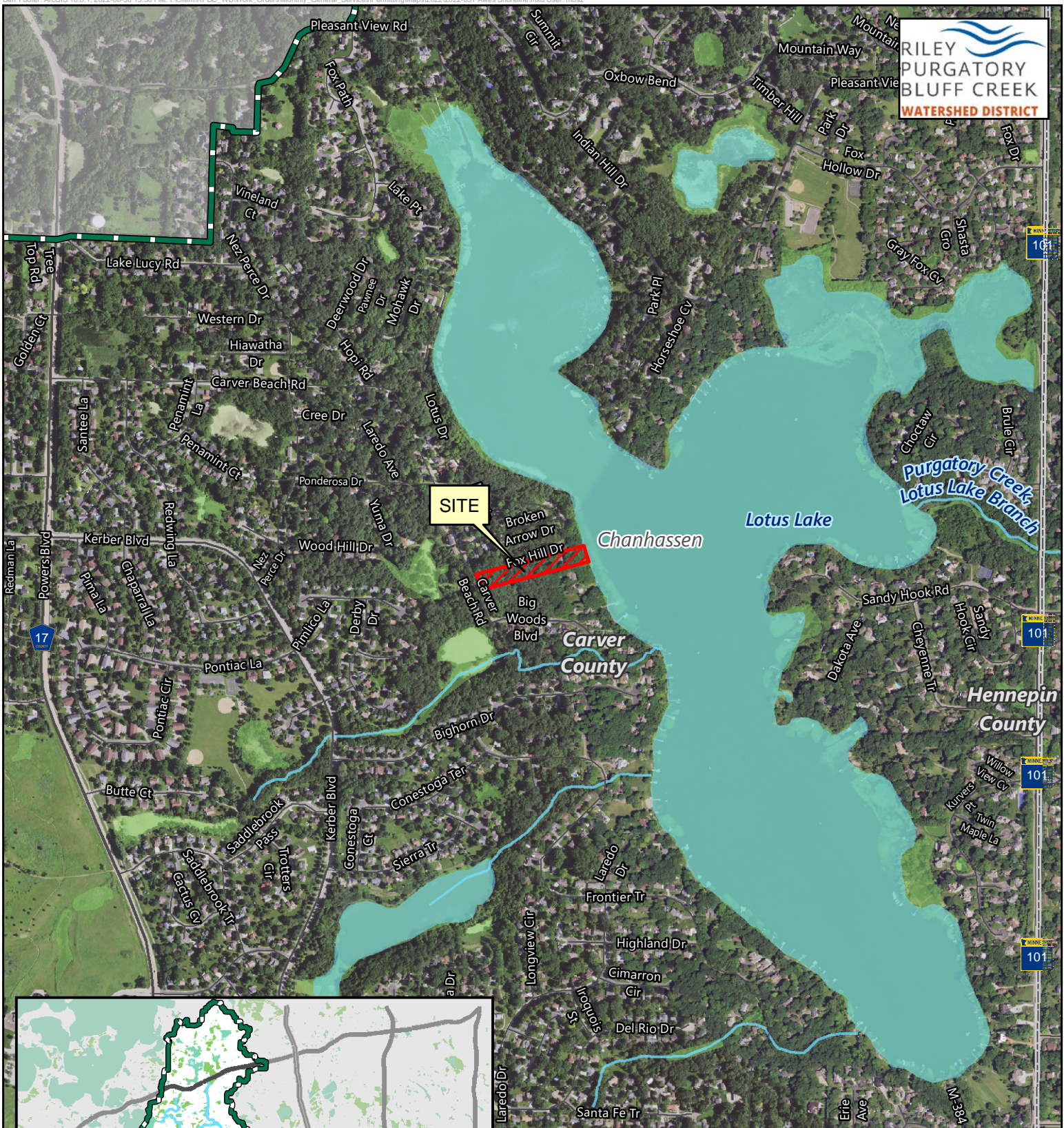
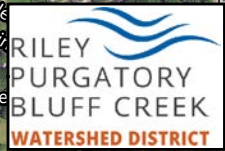
Recommendation:

Approval of the permit contingent upon:

1. The applicant must provide the name and contact information of the individual responsible for erosion prevention and sediment control at the site. RPBCWD must be notified if the responsible party changes during the permit term.
2. The applicant must provide the permit fee deposit to the original amount due before the permit will be issued. As of June 28, 2022 the amount due is \$575.
3. Receipt of a financial assurance in the amount of \$6,696.

By accepting the permit, when issued, the applicant agrees to the following stipulations:

1. Continued compliance with General Requirements.



Permit Location Map



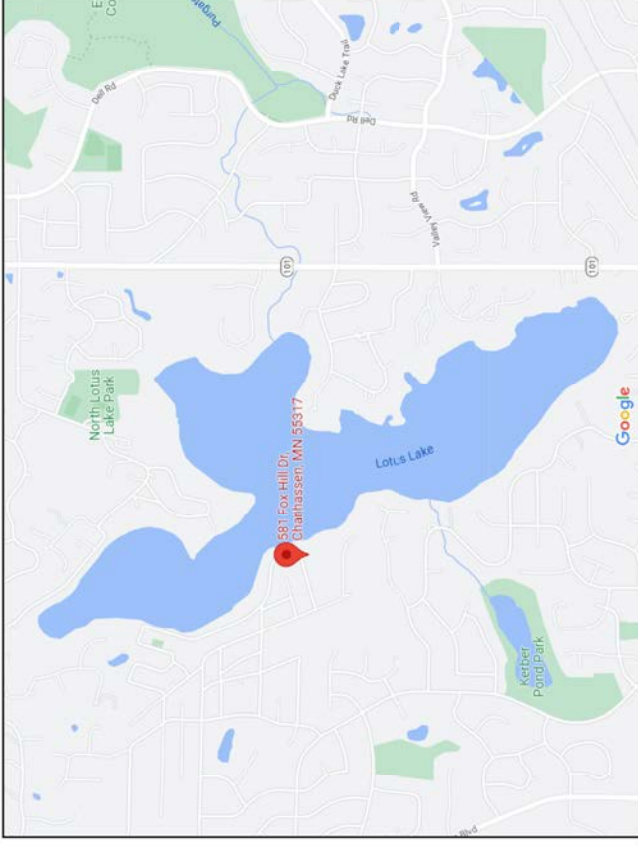
Feet



AWES SHORELINE
Permit 2022-051
Riley Purgatory Bluff Creek
Watershed District

RPBCW PERMIT SUBMITTAL

LOCATION:



EXISTING CONDITIONS:



SHEET INDEX

SHEET NUMBER	SHEET NAME
G000	COVER SHEET
L100	SHORELINE AND PLANTING PLAN
L200	EROSION CONTROL PLAN
L300	SITE STATIONING PLAN

DESIGNER:
PROJECT NAME:
PROJECT NUMBER:
DATE:
DRAWN BY:
CHECKED BY:
SCALE:

COVER SHEET

G000

AWES RESIDENCE
581 FOX HILL DR
CHAMASSON, MN 55317
RPBCW PERMIT SUBMITTAL



PROJECT LOCATION:
3243 UNIVERSITY AVE
MINNEAPOLIS, MN 55412
www.pebl.com



DESIGNER:
PROJECT NAME:
PROJECT NUMBER:
DATE:
DRAWN BY:
CHECKED BY:
SCALE:

NO.	DATE	DESCRIPTION
1	08/27/2022	ISSUE FOR PERMIT
2	09/12/2022	ISSUE FOR PERMIT
3	09/12/2022	ISSUE FOR PERMIT
4	09/12/2022	ISSUE FOR PERMIT
5	09/12/2022	ISSUE FOR PERMIT
6	09/12/2022	ISSUE FOR PERMIT
7	09/12/2022	ISSUE FOR PERMIT
8	09/12/2022	ISSUE FOR PERMIT
9	09/12/2022	ISSUE FOR PERMIT
10	09/12/2022	ISSUE FOR PERMIT

DESIGNER:
PROJECT NAME:
PROJECT NUMBER:
DATE:
DRAWN BY:
CHECKED BY:
SCALE:

COVER SHEET

G000

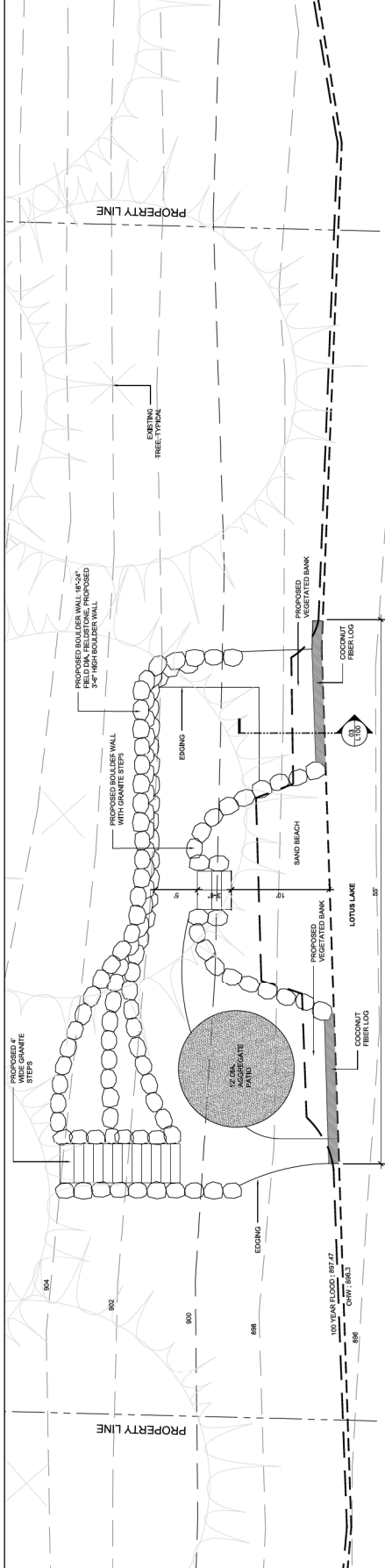


Issued for the project as indicated in project name. This is not a license to practice. License number is shown below the name of the licensee.

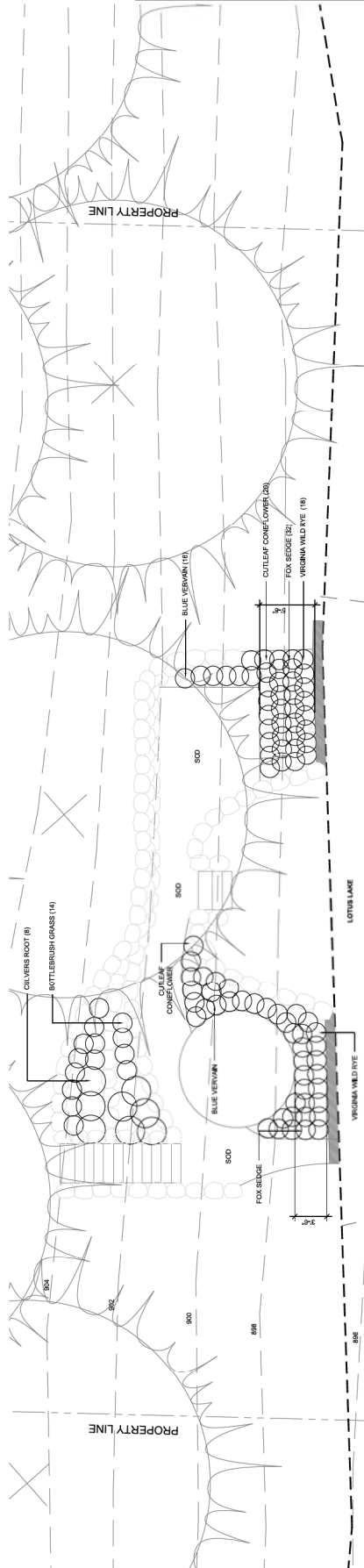
PROJECT NAME	AWES RESIDENCE
PROJECT NUMBER	2024-001
DATE	08/27/2024
CHECKED BY	JANET BLASE
DATE CHECKED	08/27/2024
PROJECT NUMBER	2024-001
DATE	08/27/2024
CHECKED BY	JANET BLASE
DATE CHECKED	08/27/2024

SHORELINE AND PLANTING PLAN

L100



01 SHORELINE PLAN
 Scale: 3/16" = 1'-0"

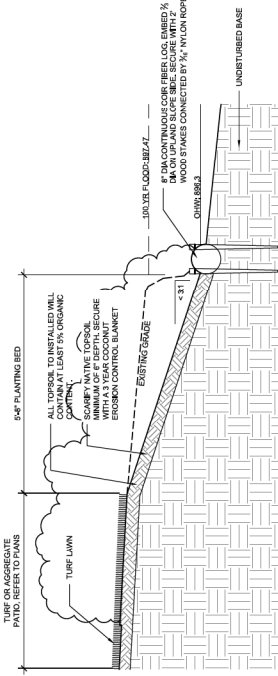


02 PLANTING PLAN
 Scale: 3/16" = 1'-0"

PLANTING NOTES

- INSTALL 3 YEAR COCONUT EROSION CONTROL BLANKET ON ALL DISTURBED PLANTING BEDS
- ALL VEGETATED BANK SLOPES TO BE LESS THAN 3:1 HORIZONTAL TO VERTICAL DISTANCE

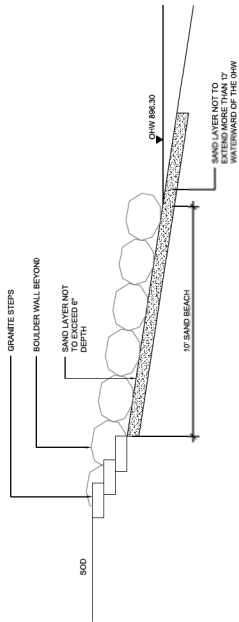
PLANT SCHEDULE	COMMON NAME	LATIN NAME	SIZE	QUANTITY	SPACING
PERENNIALS					
	RED TOP KNOTFLOWER	<i>Red-top knotflower</i>	2" DIA. 18"	10	18" O.C.
	BLUE VERVAIN	<i>Verbena hastata</i>	2" DIA. 18"	16	18" O.C.
	CULVERS ROOT	<i>Veronica spicata</i>	2" DIA. 8"	8	18" O.C.
SOOS					
	SOO		625 SF		
GRASSES					
	LOTUS LAKE	<i>Lotus lake</i>	2" DIA. 18"	10	18" O.C.
	BOTTLE BRUSH GRASS	<i>Erigeron annuus</i>	2" DIA. 14"	14	18" O.C.
	FOX SEDGE	<i>Carex lasiocarpa</i>	2" DIA. 18"	32	18" O.C.



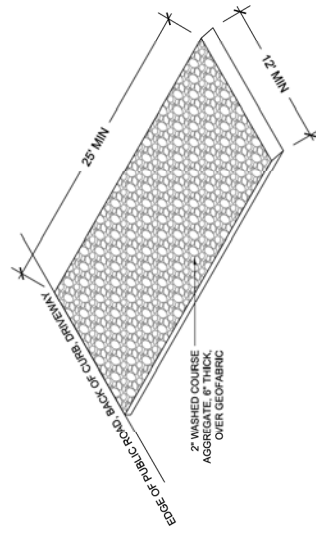
03 TYPICAL VEGETATED BANK SECTION
 Scale: 3/16" = 1'-0"

NOTES

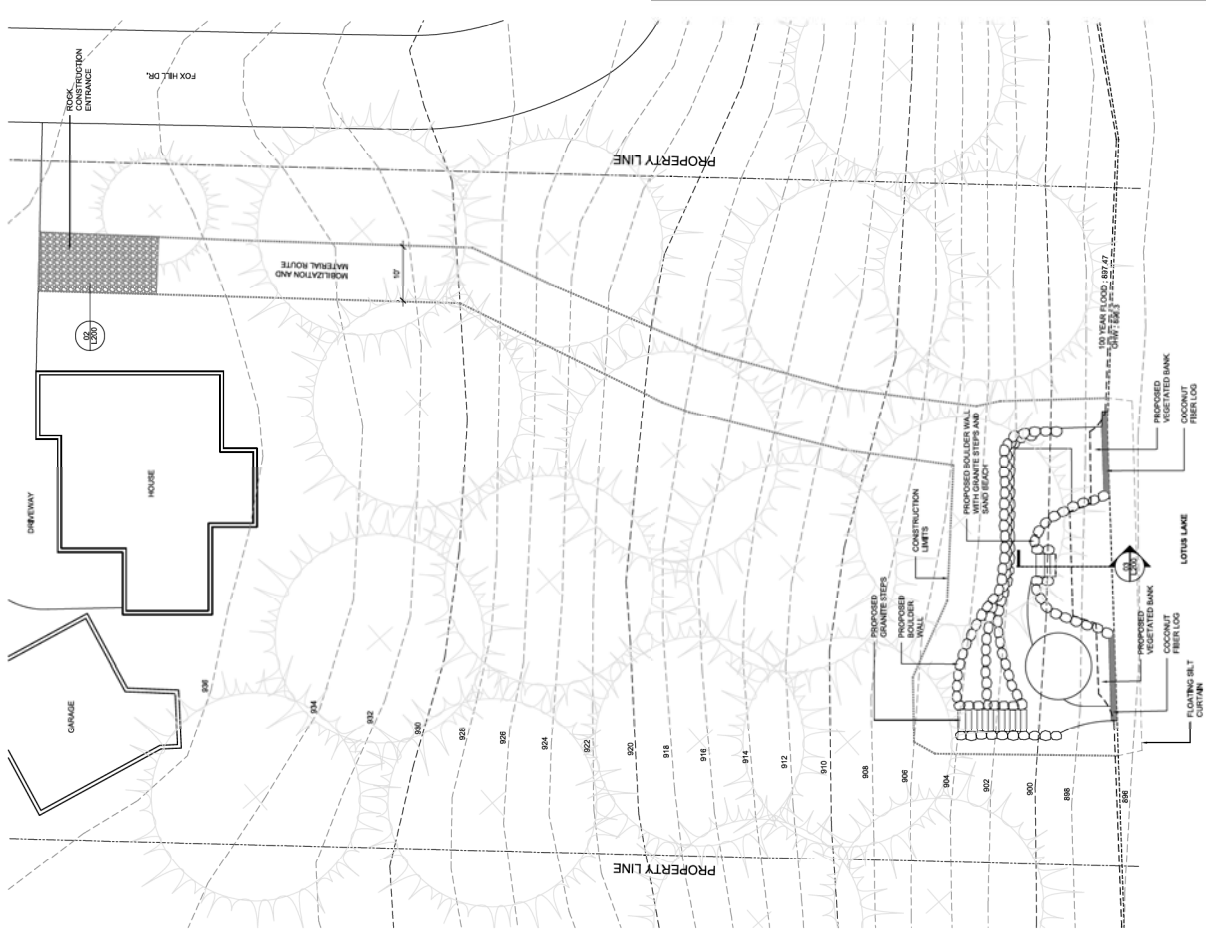
- NATURAL TOPOGRAPHY AND SOIL CONDITIONS TO BE PROTECTED, INCLUDING RETENTION ON SITE OF NATIVE TOPSOIL TO THE GREATEST EXTENT POSSIBLE
- HYDRAULIC MULCHING AS SPECIFIED BY THE DISTRICT MUST BE USED ON ALL DISTURBED AREAS TO BE STABILIZED WITHIN 7 CALENDAR DAYS AFTER LAND-DISTURBING WORK HAS TEMPORARILY OR PERMANENTLY CEASED ON A PROPERTY THAT DRAINS TO AN IMPAIRED WATER, WITHIN 14 DAYS
- THE PERMITTEE MUST, AT A MINIMUM, INSPECT, MAINTAIN AND REPAIR ALL DISTURBED SURFACES AND ALL EROSION AID SEDIMENT CONTROL FACILITIES AND SOIL STABILIZATION MEASURES EVERY DAY WORK IS PERFORMED ON THE SITE. STOP WORK IMMEDIATELY IF ANY SIGNIFICANT ACTIVITY HAS CEASED. THEREAFTER, THE PERMITTEE MUST PERFORM THESE RESPONSIBILITIES AT LEAST WEEKLY UNTIL VEGETATIVE COVER IS ESTABLISHED. THE PERMITTEE WILL MAINTAIN A LOG OF ACTIVITIES UNDER THIS SECTION FOR INSPECTION BY THE DISTRICT ON REQUEST.
- THE PERMITTEE SHALL BE RESPONSIBLE FOR THE IDENTIFICATION, PREVENTION AND REMEDIATION OF AQUATIC INVASIVE SPECIES (E.G. ZEBRA MUSSELS, EURASIAN MILFOIL ETC.) TO THE MAXIMUM EXTENT POSSIBLE.
- ALL EXISTING FIELDSTONE RUBBLE TO REMAIN IN PLACE.
- ALL EXISTING FENCE LINE TO REMAIN IN PLACE.
- PREVENTION AND SEDIMENT CONTROL DURING CONSTRUCTION
- OR 87 POUNDS PER CUBIC FOOT IN THE UPPER 12 INCHES OF SOIL. IN ADDITION, UTILITIES, TREE ROOTS AND OTHER EXISTING VEGETATION MUST BE DETECTED UNTIL FINAL RE-VEGETATION OR OTHER STABILIZATION OF ALL DISTURBED AREAS TO BE STABILIZED WITHIN 7 CALENDAR DAYS AFTER LAND-DISTURBING WORK HAS TEMPORARILY OR PERMANENTLY CEASED ON A PROPERTY THAT DRAINS TO AN IMPAIRED WATER, WITHIN 14 DAYS
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- ALL EXISTING FIELDSTONE RUBBLE TO REMAIN IN PLACE.
- ALL EXISTING FENCE LINE TO REMAIN IN PLACE.
- PREVENTION AND SEDIMENT CONTROL DURING CONSTRUCTION



03 PROPOSED SAND BLANKET CROSS SECTION
Scale: 1"=1'-0"



02 TEMPORARY CONSTRUCTION ENTRANCE DETAIL
Scale: 1"=1'-0"



01 EROSION CONTROL PLAN
Scale: 3/32"=1'-0"

AWES RESIDENCE
581 FOX HILL DR
CHANHASSEN, MN 55317
RPMC PERMIT SUBMITTAL



pebl.
PROJECT NUMBER: 2024-001
DATE: 08/27/2024
PROJECT NAME: AWES RESIDENCE
PROJECT ADDRESS: 581 FOX HILL DR, CHANHASSEN, MN 55317
PROJECT OWNER: AWES RESIDENCE
PROJECT CONTACT: [REDACTED]
PROJECT PHONE: [REDACTED]
PROJECT EMAIL: [REDACTED]
PROJECT WEBSITE: [REDACTED]



AWES RESIDENCE
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18	08/27/2024	ISSUE FOR PERMIT
19	08/27/2024	ISSUE FOR PERMIT
20	08/27/2024	ISSUE FOR PERMIT

AWES RESIDENCE
581 FOX HILL DR
CHANHASSEN, MN 55317
RPMC PERMIT SUBMITTAL

EROSION CONTROL PLAN
SHEET NUMBER: L200

