



Le Sueur County, MN

Thursday, September 14, 2017

Regular session

Item 4

Le Sueur County SWCD (Applicant), B. Brockway (Owner)

Staff Contact: Kathy Brockway or Michelle Mettler

STAFF REPORT

GENERAL INFORMATION

APPLICANT: LE SUEUR COUNTY SOIL WATER CONSERVATION DISTRICT (SWCD)
OWNER: BRANDON BROCKWAY

911 ADDRESS: 18500 400TH St. Le Center MN 56057

PROJECT DESCRIPTION: Allow grading, excavating, and filling of approximately 15 cubic yards of material for a shoreland restoration project in a Special Protection "SP" District, on a Recreational Development "RD" lake, Lake Volney.

ZONING ORDINANCE SECTIONS: Sections 13.1, 18

ZONING DISTRICT PURPOSE: The intent of the Special Protection (SP) District is to guide the wise development and utilization of shorelands of public waters for the preservation of water quality, natural characteristics, economic values and the general health, safety and welfare of all public waters in the unincorporated areas of the County. Further, the purpose of this district is to manage areas unsuitable for development due to wet soils, steep slopes or large areas of exposed bedrock; and to manage areas of unique natural and biological characteristics in accordance with compatible uses.

GOALS AND POLICIES: The current Land Use Plan as adopted in 2007 makes reference to water quality.

Goal # 2: Le Sueur County should adopt and enforce land use goals and policies that conserve and restore its natural resources, bring protections to the ecological systems of the natural environment, and prevent the premature development of natural resource areas.

Policy: Utilize shorelands on Recreational Development Lakes (RD) for housing, but with a focus on development design that protects the resource.

Goal #3: Improve Water Quality in Le Sueur County.

Objective 1: The County will undertake actions to help protect groundwater as well as surface water features.

SITE INFORMATION

LOCATION: Government Lot 3, Section 31, Montgomery Township

ZONING: Special Protection "SP" District

GENERAL SITE DESCRIPTION: Existing recreational site south of existing home site.

ACCESS: Documentation from the Assistant County Hwy. Engineer as to approval of the existing entrance as a temporary construction entrance for the parcel. The plan as submitted is suitable for the Hwy. Department, as noted any dirt or debris carried onto County Road 136 shall be removed by the contractor.

EXISTING LAND USE WITHIN ¼ MILE:

| | | | |
|--------|------------------------------------|--------|-------------|
| North: | Ag | South: | Lake Volney |
| East: | Wetlands, Scattered home sites, Ag | West: | Ag |

TOWNSHIP BOARD NOTIFICATION

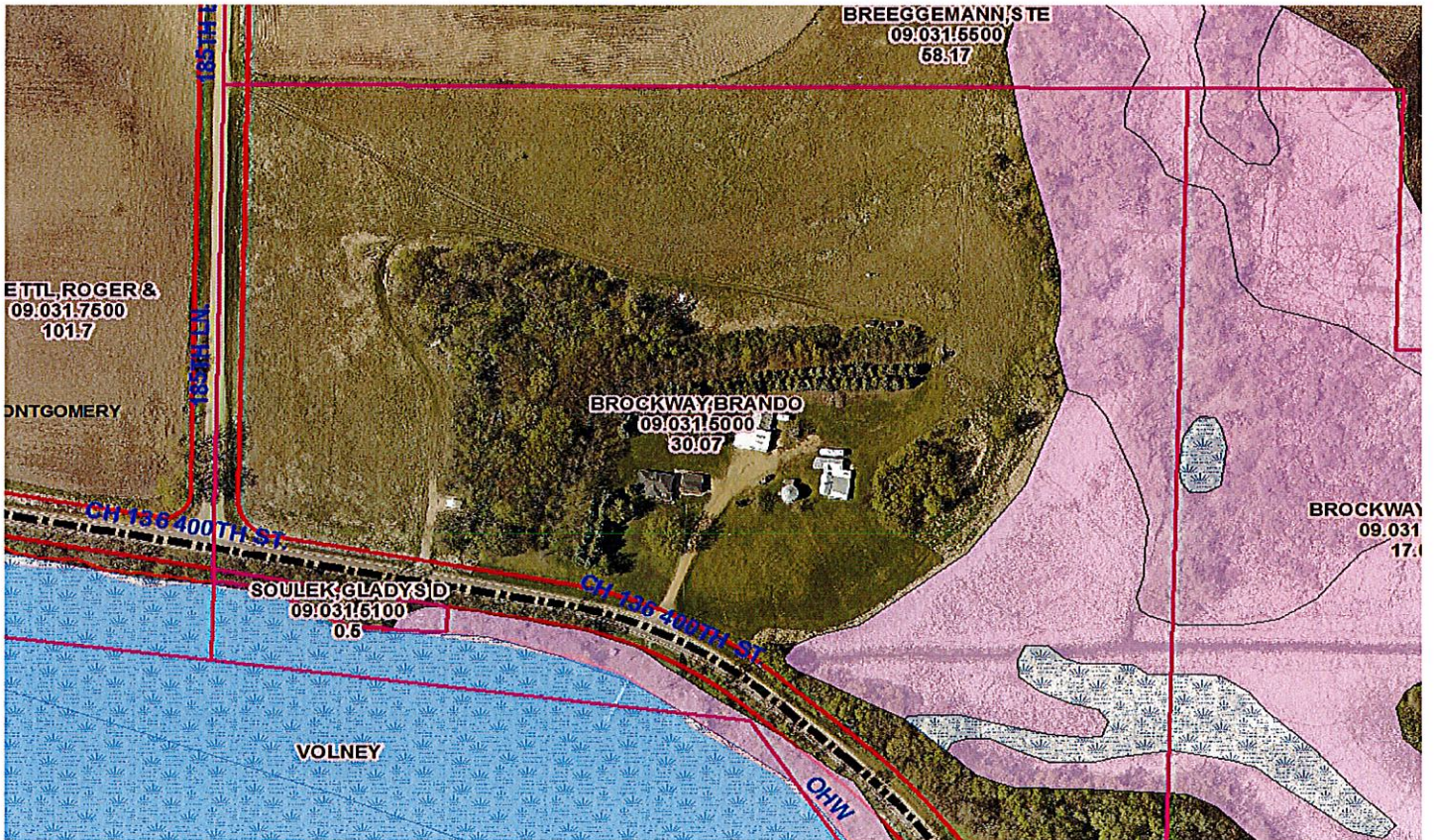
The applicant notified Sue Prehal, Montgomery Township Board member on August 11, 2017.

NATURAL RESOURCES INFORMATION

SHORELAND: The proposal is located within the Shoreland District.

WETLANDS: According to the National Wetlands Inventory, *Types 1 & 6* wetlands located in the quarter-quarter section where the project is proposed.

AERIAL PHOTO/SITE PLAN



CONSTRUCTION NOTES:

THE OWNER IS RESPONSIBLE FOR OBTAINING LAND RIGHTS AND LOCAL, STATE, AND FEDERAL PERMITS OR OTHER PERMISSION NECESSARY TO PERFORM AND MAINTAIN THE PRACTICE.
 BEFORE START OF CONSTRUCTION, THE OWNER OF ANY UTILITIES INVOLVED MUST BE NOTIFIED. THE EXCAVATOR IS RESPONSIBLE FOR GIVING NOTICE BY CALLING "TODAY'S STATE ONE-CALL" AT (800) 252-1105 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION.
 THE CONTRACTOR SHALL COORDINATE WITH THE OWNER TO LOCATE ANY PRIVATE UTILITIES THAT MAY BE IN THE VICINITY OF THE PROJECT. THE SOUTH CENTRAL TECHNICAL SERVICE AREA HAS NO REPRESENTATION OF THE EXISTENCE OR NON-EXISTENCE OF UTILITIES. THE ABSENCE OF UTILITIES ON DRAWINGS DOES NOT ASSURE THAT THERE ARE NO UTILITIES ON SITE.

A PRE-CONSTRUCTION CONFERENCE WITH THE OWNER, CONTRACTOR(S), OWNER REPRESENTATIVE, AND SOUTH CENTRAL T&E ENGINEER OR TECHNICIAN SHALL BE SCHEDULED ONE WEEK PRIOR TO START OF CONSTRUCTION. ANY WORK DONE BEFORE CONFERENCE WILL BE AT THE CONTRACTOR'S RISK AND WITHOUT REWARD.

MINNESOTA SPECIFICATIONS FOR CONSERVATION PRACTICES APPLY FOR ALL MATERIALS AND CONSTRUCTION WORK. THESE SPECIFICATIONS ARE PART OF THIS PLAN.

DAMAGES IN THE DISTURBED OR SPECIFIED AREAS MUST BE AUTHORIZED BY THE OWNER AND THE RESPONSIBLE ENGINEER.

PROTECT EXISTING STRUCTURES AND TREES FROM DAMAGE.

RESTORATION NOTES:

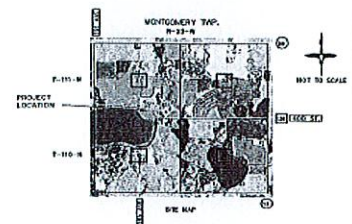
SEED DISTURBED AREAS WITH MINNESOTA STATE SEED MIX 10-131 (LOW MAINTENANCE TURF) AT A RATE OF 225 POUNDS PER ACRE.

PROTECT DISTURBED AREAS WITH EROSION CONTROL BARRIERS, MNDOT 3085 CATEGORY 2A.

| ESTIMATED QUANTITIES | | | | | | |
|----------------------|--|-----|------|-------------------------|--------------|--------|
| ITEM | ITEM DESCRIPTION | QTY | UNIT | MARK. SP. (SEE SHEET 2) | MINIMUM SIZE | NOTES |
| 1 | MURDERIZATION | 1 | L.S. | | | |
| 2 | FURNISH AND INSTALL GEOTEXTILE FABRIC (BRAND/TYPE, MAND. TYPE #3) (SEE SHEET 2 FOR DETAILS) | 350 | S.Y. | | 3/32 | |
| 3 | FURNISH AND INSTALL RRAP (BATCH CLASS #) (QUANTITY) (INCLUDE 10% O.P. ABOVE AND NOT O.P. BELOW O.P.) (SEE SHEET 2 FOR DETAILS) | 170 | TONS | | 3/8 | (A)(3) |
| 4 | SEED DISTURBED AREAS (APPROXIMATELY 5000 SQUARE FEET) | 1 | L.S. | | 100-B | |
| 5 | EROSION CONTROL BARRIERS, MNDOT CAT. 2A | 500 | S.Y. | | 100-B | 3085 |

NOTES:
 (A) THE OWNER MAY elect to install FIELD STONE AS REINFORCEMENT INSTEAD OF CLASS #1 RRAP. THE FIELD STONE SHALL MEET THE GRADATION LISTED ON SHEET 2.
 (B) EXCAVATION FOR RRAP INSTALLATION AND WHICH SLOPE GRADING IS INCIDENTAL.
 THE FOLLOWING SECTIONS FROM THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" (2010 EDITION) ARE REFERENCED IN THE PLANS:
 3001 RRAP MATERIALS
 3133 GEOTEXTILES
 3085 ROLLED EROSION CONTROL PRODUCTS

SHORELINE PROTECTION
 PREPARED FOR: AUG 08 2017
 BRANDON BROCKWAY
 AND THE
 LE SUEUR COUNTY
 SOIL & WATER
 CONSERVATION DISTRICT



| SHEET INDEX | |
|-------------|---------------------------|
| SHEET NO. | TITLE |
| 1 | COVER SHEET |
| 2 | CROSS SECTION & PLAN VIEW |

ENGINEERING DESIGN DATA
 BANK HEIGHT = 1.0 FT.
 BANK PROTECTION HEIGHT = 1.4 FT.

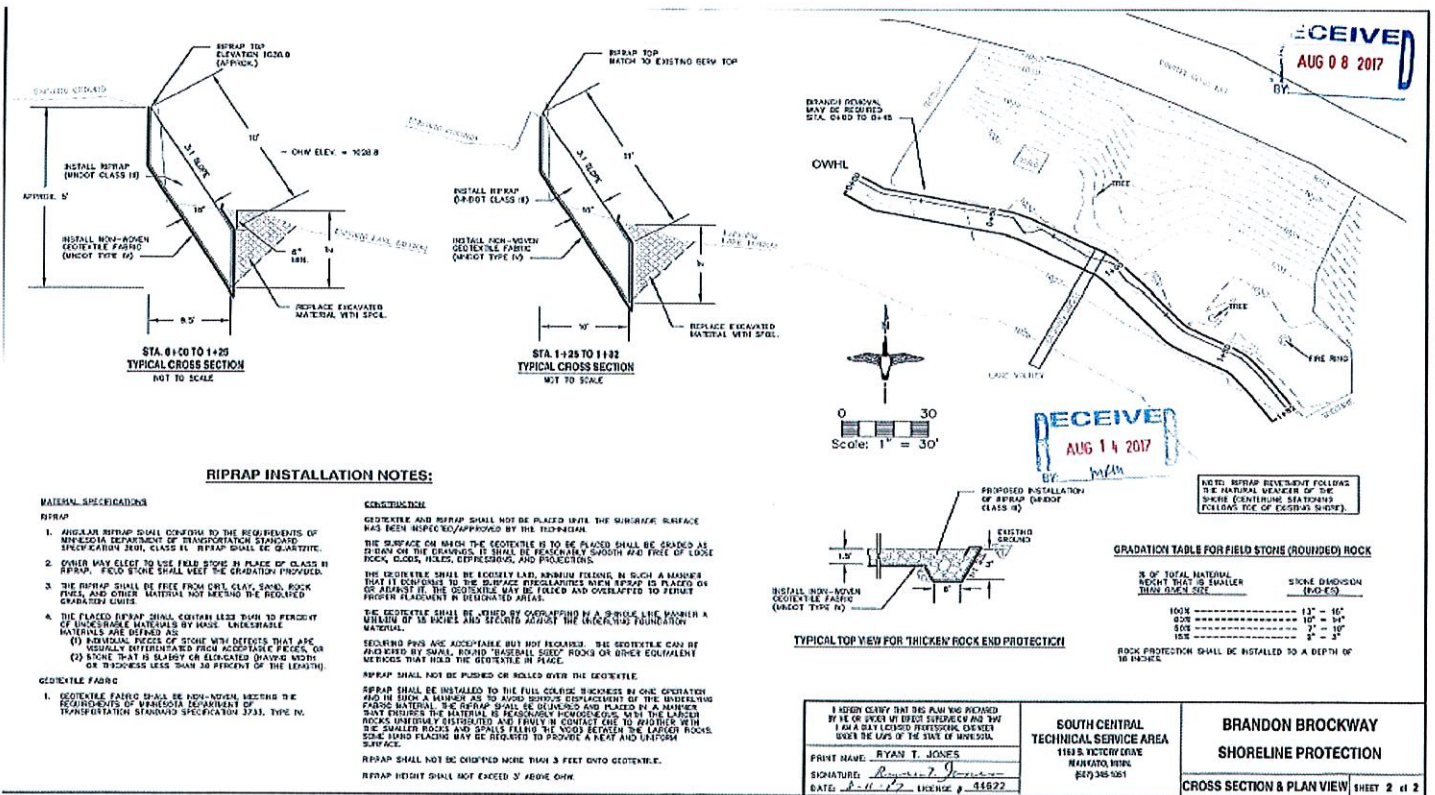
CONSTRUCTION CERTIFICATION STATEMENT

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A duly licensed PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

| DATE | SUPPLY | DESIGN | GPS |
|---------|---------|--------|------|
| 8/14/17 | 8/14/17 | 8/17 | 8/17 |
| 8/14/17 | 8/17 | 8/17 | 8/17 |
| 8/14/17 | 8/17 | 8/17 | 8/17 |

SOUTH CENTRAL
 TECHNICAL SERVICE AREA
 1100 & VICTORY DRIVE
 WAKARUSA, IOWA
 (502) 345-1051

| | | |
|--|-------------------|--------------|
| Sec. 31 | T. 111 N. | R. 23 W. |
| BRANDON BROCKWAY SHORELINE PROTECTION | | |
| COVER SHEET | | |
| Drawn: LE SUEUR | Trans: MONTGOMERY | Sheet 1 of 2 |



ATTACHMENTS

Application, Criteria Form, Narrative, Survey, Plans

PLANNING AND ZONING COMMISSION CONSIDERATIONS

The Planning Commission and staff shall consider possible adverse effects of the proposed conditional use and what additional requirements may be necessary to reduce such adverse effects. Its judgment shall be based upon the following factors to include, but not limited to:

1. Relationship of Use to County plans.
2. The geographical area involved.
3. Whether such use will negatively affect surrounding properties in the area in which it is proposed.
4. The character of the surrounding area.
5. The demonstrated need for such use.
6. Whether the proposed use would cause odors, dust, flies, vermin, smoke, gas, noise, or vibration or would impose hazards to life or property in the neighborhood.
7. Whether such use would inherently lead to or encourage disturbing influences in the neighborhood.
8. Whether stored equipment or materials would be screened and whether there would be continuous operation within the visible range of surrounding residences.
9. Abatement of Environmental Hazards as regulated in this Ordinance
10. Other factors impacting the public health, safety and welfare.

PLANNING AND ZONING COMMISSION CONDITIONS

The Planning Commission shall recommend such conditions relating to the granting of said Conditional Use Permit, as they deem necessary to carry out the intent and purpose of this Ordinance or recommend that the request be denied. Such recommendation shall be in writing. The conditions may include, but are not limited to the following:

1. Increasing the required lot size or yard dimension.
2. Limiting the height, size, or location of the structures.
3. Controlling the location, size, and number of vehicle access points.
4. Increasing the street width.
5. Increasing the number of required off-street parking space.
6. Limiting the number, size, location, or lighting of signs.
7. Requiring diking, fencing, screening, landscaping or other facilities to protect adjacent or nearby property.
8. Designating sites for open space.

Shoreland District. The following additional evaluation criteria and conditions apply within the Shoreland Districts of the County.

1. **Evaluation criteria.** A thorough evaluation of the water body and the topographic, vegetation, and soils conditions on the site must be made to ensure:
 - a. The prevention of soil erosion or other possible pollution of public waters, both during and after construction.
 - b. The visibility of structures and other facilities as viewed from public waters is limited.
 - c. The site is adequate for water supply and on-site sewage treatment.
 - d. The types, uses, and numbers of watercraft that the project will generate are compatible in relation to the suitability of public waters to safely accommodate this watercraft.

2. **Conditions attached to Conditional Use Permits in Shoreland Districts.** The Board of County Commissioners, upon consideration of the criteria listed above and the purposes of this Ordinance, shall attach such conditions to the issuance of the conditional use permits as it deems necessary to fulfill the purposes of this Ordinance. Such conditions may include, but are not limited to, the following:
 - a. Increased setbacks from the ordinary high water level.
 - b. Limitations on the natural vegetation to be removed or the requirement that additional vegetation be planted.
 - c. Special provisions for the location, design, and use of structures, sewage treatment system, watercraft, launching and docking areas, and vehicle parking areas.

| |
|--|
| PLANNING AND ZONING COMMISSION FINDINGS |
|--|

Based on the information submitted by the applicant, contained in this report, and as required by the Le Sueur County Zoning Ordinance, the following findings have been developed for this request:

(Please circle one for each item: Agree, Disagree, Not Applicable.)

1. *The conditional use will not be injurious to the use and enjoyment of other property in the immediate vicinity for the purposes already permitted, nor substantially diminishes and impairs property values within the immediate vicinity.*
2. *The establishment of the conditional use will not impede the normal and orderly development and improvement of surrounding vacant property for uses predominant in the area.*
3. *Adequate utilities, access roads, drainage and other facilities are being provided.*
4. *Adequate measures will be taken to provide sufficient off-street parking and loading space to serve the proposed use.*
5. *Adequate measures will be taken to prevent and control offensive odor, fumes, dust, noise and vibration, so that none of these will constitute a nuisance, and to control lighted signs and other lights in such a manner that no disturbance to neighboring properties will result.*
6. *Is the Conditional Use Permit consistent with and supported by the statement of purposes, policies, goals and objectives in the Ordinance?*
7. *Is the Conditional Use Permit consistent with the Comprehensive Land Use Plan?*

Recommend (circle one) approval / denial / table / of Conditional Use Permit.

Le Sueur County

Conditional Use Application-Grading, Excavating & Filling

Activities that involve topographic alterations in all districts shall conform to the standards in Section 18 of the Le Sueur County Zoning Ordinance. Activities within a shoreland district shall conform to the standards in Section 13 of the Le Sueur County Zoning Ordinance.

In addition any activities in any type wetland shall be evaluated in accordance with the Wetland Conservation Act (WCA) regulations, as administered by the Le Sueur County Soil & Water Conservation District (SWCD).

I. Applicant:

Name Le Sueur Co SWCD
Mailing Address 181 W. Minnesota St
City Le Center State MN Zip 56057
Phone # 507-357-4879 Phone # _____

II. Landowner:

Name Brandon Breakley
Mailing Address 18500 400th St
City Le Center State MN Zip 56057

Property Address 18500 400th St
City Le Center State MN Zip 56057
Phone # _____ Phone # _____

III. Parcel Information:

Parcel Number 09.031.5000 Parcel Acreage 30.07
Attach Full Legal Description (**NOT** abbreviated description from tax statement)
Township Montgomery, Ill Section 31
Subdivision _____ Lot _____ Block _____

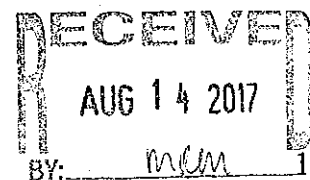
IV. Township Notification: Township must be notified of proposed use prior to application.

Montgomery Township notified on 8/11/17
(Township Name) (Date)

Board Member Sue Prehal regarding the proposed use.
(Name)

V. Quantities and Submittal Formats:

- One (1) reproducible 8.5" x 11" copy of the request and all other supporting documents.
- Twenty Three (23) copies must be submitted, if any documents are in color, an aerial, or larger than 8.5" x 11" in size.
- Electronic version of any supporting documents *if available*.
- Additional copies may be requested as deemed necessary by the Department.
- Application must be made in person** by the applicant and/or landowner no later than 12 P.M. on the date of application deadline.
- Appointment is necessary.**
- Applications will not be accepted by mail.**



VI. Fees: Must be paid at the time of application.

Conditional Use Permit \$ 750 After-The-Fact fee is doubled.
 Filing Fee \$ 46 ✓

Additional Fees:

Special Meeting \$ 2,000
 After-The-Fact Penalty \$ 1,500 OR 10% of improvement, whichever is greater

VII. Type of Request: Grading, Excavating or Filling.

Non-Shoreland
 Within Bluff Impact Zone
 Within Bluff
 Cubic yards of material movement: _____
 Cubic yards of material movement: _____
 Cubic yards of material movement: _____
TOTAL cubic yards of material movement: _____

Shoreland- Outside Shore Impact Zone
 Within Shore Impact Zone
 Within Bluff Impact Zone
 Within Bluff
 Cubic yards of material movement: 0
 Cubic yards of material movement: 15
 Cubic yards of material movement: 0
 Cubic yards of material movement: 0
TOTAL cubic yards of material movement: 15

Assurance security shall be required for projects that are >1500 cubic yards.

VIII. Description of Request:

a. A full description of request with detailed information including what operations are to occur and what general types of equipment may be used in the operation must be attached.

b. Complete the following in relationship to the proposed Conditional Use Permit.

1. ENVIRONMENTAL IMPACT: See Attached
2. ADVERSE IMPACT ON SURROUNDING AREAS: see Attached
3. STORMWATER RUNOFF: See Attached
4. DOES ANY PART OF THE PROJECT EXTEND BELOW OHWL: Yes
5. WETLAND IMPACT: None
6. SLOPE STABILITY: NA
7. CERTIFICATE OF INSURANCE: NA
8. MEET ALL APPLICABLE COUNTY STATE & FEDERAL REGULATIONS:
 (For example additional licensing and/or permitting) NA

IX. Site Plan: Shall include but not limited to the following:

- **Parcels < 5 AC =** 2-foot contours depicting existing and proposed topography.
- **Parcels 5-20 AC =** 5-foot contours depicting existing and proposed topography.
- **Parcels >20 AC =** 10-foot contours depicting existing and proposed topography.
- Location of grading, excavating, and/or filling sites.
- Location of areas for obtaining fill or disposing of excavated materials.
- Tree inventory of all trees, indicating trees to be cut or removed.
 (Caliper of 6 inches or greater measured 4.5 feet from ground level).

RECEIVED
 AUG 14 2017
 BY: mm

- | | | | |
|--------------------------------------|-----------|-----------------------|----------------------------|
| ● North point | ● Lake | ● Existing Structures | ● Septic system |
| ● Setbacks | ● River | ● Proposed Structures | ● Well |
| ● Property Lines | ● Wetland | ● Lot Dimensions | ● Access (size & location) |
| ● Road Right-Of-Way | ● Stream | ● Ponds | ● Easements |
| ● Landscape, screening and buffering | | | ● Drainage |

● Site plan & As-Built must be completed by a surveyor or professional engineer.

X. Restoration Plan: Shall include but not limited to the following:

- Areas of restoration shall include the application of a minimum of 4 inches of topsoil or similar material that will support plant growth. *(Must be included in cubic yards calculation of material.)*
- Reseeded areas indicated with type of vegetation. *(Shall meet minimum standards by the SWCD)*
- Tree replacement plan. *(Areas located within the Bluff Impact Zone, Bluff, Shoreland & Conservancy Distircts)*
 - Root zone of existing trees shall be preserved and protected during development.
 - Replace one tree for every tree that is removed.
 - Replacement trees shall have a minimum caliper of 2 inches at 4.5 feet from ground level.

XI. Attachments: Shall include but not limited to:

- a. **Description of Request**-See Part VIII for full details and requirements.
- b. **Site Plan**-See Part IX for full details and requirements.
- c. **Full Legal Description**-Not abbreviated description from tax statement.
- d. **Access approval**-Attach approval in writing from proper road authority.
- e. **Township Notification**-See Part IV for details and requirements.
- f. **Septic System Compliance Inspection**
- g. **Erosion Control Plan**-Attach completed and signed plan including map.
- h. **Restoration Plan**-See Part X for full details and requirements.
- i. **Approved Stormwater Pollution Prevention Plan**
-Must meet NPDES requirements and prepared by a licensed professional engineer.

XII. Procedure:

The Planning & Zoning Commission shall hold a public hearing on the proposed Conditional Use Permit at a scheduled Planning and Zoning Commission meeting.

The Planning and Zoning Commission is an advisory board to the County Board of Commissioners and will make a recommendation to the County Board.

The Department shall report the finings and recommendations of the Planning Commission to the County Board for final decision.

Action by the County Board shall be a majority vote of its members.


The Department shall notify the applicant and/or landowner in writing of the County Board decision.

A certified copy of the Conditional Use Permit shall be filed with the Le Sueur County Recorder by the Department.




XIII. Signatures:

I hereby certify with my signature that all data contained herein as well as all supporting data are true and correct to the best of my knowledge.


Applicant signature

8-18-17
Date

I hereby certify with my signature that all data contained herein as well as all supporting data are true and correct to the best of my knowledge.


Property Owner signature

7/11/17
Date

Request: **GRADING, EXCAVATING & FILLING**

- Non-Shoreland**
 - Within Bluff Impact Zone
 - Within Bluff
- Cubic yards of material movement: _____
Cubic yards of material movement: _____
Cubic yards of material movement: _____

TOTAL cubic yards of material movement: _____

- Shoreland - Outside Shore Impact Zone**
 - Within Shore Impact Zone
 - Within Bluff Impact Zone
 - Within Bluff
- Cubic yards of material movement: 15
Cubic yards of material movement: _____
Cubic yards of material movement: _____
Cubic yards of material movement: _____

TOTAL cubic yards of material movement: 15

Pre-App Date 8-14-17 Lake Classification RP Feedlot 500' 1000' N
Meeting Date 9-14-17 Lake Volney Wetland Type 1-2 3-8 N
60 Day 10-13-17 FEMA Panel # 27079C0 300 D Water courses Y N
Zoning District SP Flood Zone X-outside Bluff Y N

- Request Description
 - Site Plan
 - Full Legal
 - Ordinance
 - Access Approval -Temporary
 - Erosion Control Plan
 - Other _____
 - Septic
 - Meeting
 - Fee \$ 796
 - Penalty \$ _____
- Comp Insp / Design
Reg / ATF / Spec
750 - In-kind
46 - Fifty%
- NEW COC 8-30-13*

Application Complete Michelle R. Mitchell _____ 17285
Planning & Zoning Department Signature Date Permit #

LE SUEUR COUNTY CONDITIONAL USE PERMIT CRITERIA

Conditional Use Permit #: 17285

Applicant: LE SUEUR COUNTY SWCD

Land Owner: BRANDON BROCKWAY

Conditional Use Permit Request: TO ALLOW GRADING, EXCAVATING AND FILLING OF APPROXIMATELY 15 CUBIC YARDS OF MATERIAL IN A SHORE IMPACT ZONE FOR A SHORELAND RESTORATION PROJECT.

1. The conditional use will not be injurious to the use and enjoyment of other property in the immediate vicinity for the purposes already permitted, nor substantially diminishes and impairs property values within the immediate vicinity.

| AI | Don Rk | Don Ry | Jeanne | Doug | Shirley | Pam | TOTAL |
|----|--------|--------|--------|------|---------|-----|-------|
| | | | | | | | |

Explain _____

2. The establishment of the conditional use will not impede the normal and orderly development and improvement of surrounding vacant property for uses predominant in the area.

| AI | Don Rk | Don Ry | Jeanne | Doug | Shirley | Pam | TOTAL |
|----|--------|--------|--------|------|---------|-----|-------|
| | | | | | | | |

Explain _____

3. Adequate utilities, access roads, drainage and other facilities have been or are being provided.

| AI | Don Rk | Don Ry | Jeanne | Doug | Shirley | Pam | TOTAL |
|----|--------|--------|--------|------|---------|-----|-------|
| | | | | | | | |

Explain _____

4. Adequate measures have been or will be taken to provide sufficient off-street parking and loading space to service the proposed use.

| AI | Don Rk | Don Ry | Jeanne | Doug | Shirley | Pam | TOTAL |
|----|--------|--------|--------|------|---------|-----|-------|
| | | | | | | | |

Explain _____

5. Adequate measures have been or will be taken to prevent and control offensive odor, fumes, dust, noise and vibration, so that none of these will constitute a nuisance, and to control lighted signs and other lights in such a manner that no disturbance to neighboring properties will result.

| AI | Don Rk | Don Ry | Jeanne | Doug | Shirley | Pam | TOTAL |
|----|--------|--------|--------|------|---------|-----|-------|
| | | | | | | | |

Explain _____

6. The conditional use is consistent with and supported by the statement of purposes, policies, goals and objectives in the Ordinance.

| AI | Don Rk | Don Ry | Jeanne | Doug | Shirley | Pam | TOTAL |
|----|--------|--------|--------|------|---------|-----|-------|
| | | | | | | | |

Explain _____

7. The conditional use is consistent with the Comprehensive Land Use Plan.

| AI | Don Rk | Don Ry | Jeanne | Doug | Shirley | Pam | TOTAL |
|----|--------|--------|--------|------|---------|-----|-------|
| | | | | | | | |

Explain _____

If all answers are "YES" by a majority of the Planning Commission, the criteria for granting of the Conditional Use Permit request have been met. The Conditional Use Permit will meet the goals of safety, health and the general welfare of the public.

Date: _____ APPROVED _____ DENIED _____ PZ Chairperson _____

COUNTY BOARD MEETING DATE _____

Project Description:

This project is engineered to protect a rapidly eroding shoreline on Lake Volney. Work will be done to follow the natural meandering of the shoreline. We plan to use Class III Quartzite as the riprap. Dimensions of the riprap will be 182' long, 18" deep, and between 10-11' in width total with varying width above the OHWL not to exceed 3'. Erosion control blanket will be placed under the riprap and riprap will be installed in accordance to Le Sueur County Ordinance. The disturbed area will then be seeded. Erosion control blanket will be utilized on site to ensure protection from erosion and the area will be reseeded to provide continued protection.

1. Environmental Impacts: This project will ensure for the continued protection of an eroding shoreline. There will be some temporary, incidental impacts during construction such as bare soil and disturbing settled sediment within the project boundary, but these will be minimal and short term.
2. Adverse Impact on surrounding areas: Completion of this project will not cause any adverse impact to the surrounding properties.
3. Stormwater Runoff: This project will not cause any stormwater runoff impacts. Erosion controls will be in place on site while work is being done and disturbed areas will received erosion control measures and will be seeded once work is completed.

Restoration Plan:

Upon completion of the project soil stability will be ensured through the use of erosion control blanket and vegetated cover (seeding will be completed once site work is complete).



CONSTRUCTION NOTES:

THE OWNER IS RESPONSIBLE FOR OBTAINING LAND RIGHTS AND LOCAL, STATE, AND FEDERAL PERMITS OR OTHER PERMISSION NECESSARY TO PERFORM AND MAINTAIN THE PRACTICE.

BEFORE START OF CONSTRUCTION, THE OWNER OF ANY UTILITIES INVOLVED MUST BE NOTIFIED. THE EXCAVATOR IS RESPONSIBLE FOR GIVING NOTICE BY CALLING "GOPHER STATE ONE-CALL" AT (800) 252-1166 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION.

THE CONTRACTOR SHALL COORDINATE WITH THE OWNER TO LOCATE ANY PRIVATE UTILITIES THAT MAY BE IN THE VICINITY OF THE PROJECT. THE SOUTH CENTRAL TECHNICAL SERVICE AREA MAKES NO REPRESENTATION OF THE EXISTENCE OR NON-EXISTENCE OF UTILITIES. THE ABSENCE OF UTILITIES ON DRAWINGS DOES NOT ASSURE THAT THERE ARE NO UTILITIES ON SITE.

A PRE-CONSTRUCTION CONFERENCE WITH THE OWNER, CONTRACTOR(S), SWCD REPRESENTATIVE, AND SOUTH CENTRAL TSA ENGINEER OR TECHNICIAN SHALL BE SCHEDULED ONE WEEK PRIOR TO START OF CONSTRUCTION. ANY WORK DONE BEFORE CONFERENCE WILL JEOPARDIZE PROJECT APPROVAL AND FUNDING.

MINNESOTA SPECIFICATIONS FOR CONSERVATION PRACTICES APPLY FOR ALL MATERIALS AND CONSTRUCTION WORK. THESE SPECIFICATIONS ARE PART OF THIS PLAN.

CHANGES IN THE DRAWINGS OR SPECIFICATIONS MUST BE AUTHORIZED BY THE OWNER AND THE RESPONSIBLE ENGINEER.

PROTECT EXISTING STRUCTURES AND TREES FROM DAMAGE.

RESTORATION NOTES:

SEED DISTURBED AREAS WITH MINNESOTA STATE SEED MIX 25-131 (LOW MAINTENANCE TURF) AT A RATE OF 220 POUNDS PER ACRE.

PROTECT DISTURBED AREAS WITH EROSION CONTROL BLANKET, MNDOT 3885 CATEGORY 2A.

SHORELINE PROTECTION

AUG 08 2017

PREPARED FOR

BRANDON BROCKWAY

AND THE

**LE SUEUR COUNTY
SOIL & WATER
CONSERVATION DISTRICT**

| ESTIMATED QUANTITIES | | | | | | |
|----------------------|---|-------|------|--------------|----------------|--------|
| ITEM | ITEM DESCRIPTION | QJAN. | UNIT | CONST. SPEC. | MATERIAL SPEC. | NOTES |
| 1 | MOBILIZATION | 1 | L.S. | | | |
| 2 | FURNISH AND INSTALL GEOTEXTILE FABRIC (NONWOVEN, MNDOT TYPE IV) (see sheets 2 for details) | 350 | S.Y. | SEE SHEET 2 | 3733 | |
| 3 | FURNISH AND INSTALL RIPRAP (MNDOT CLASS III) (QUARTZITE) (Includes: 15 c.y. above ohw and 107 c.y. below ohw) (see sheet 2 for details) | 170 | TONS | SEE SHEET 2 | 3601 | (A)(B) |
| 4 | SEED DISTURBED AREAS (approximately 5000 square feet) | 1 | L.S. | MN-6 | | |
| 5 | EROSION CONTROL BLANKET, MNDOT CAT. 2A | 560 | S.Y. | MN-6 | 3885 | |

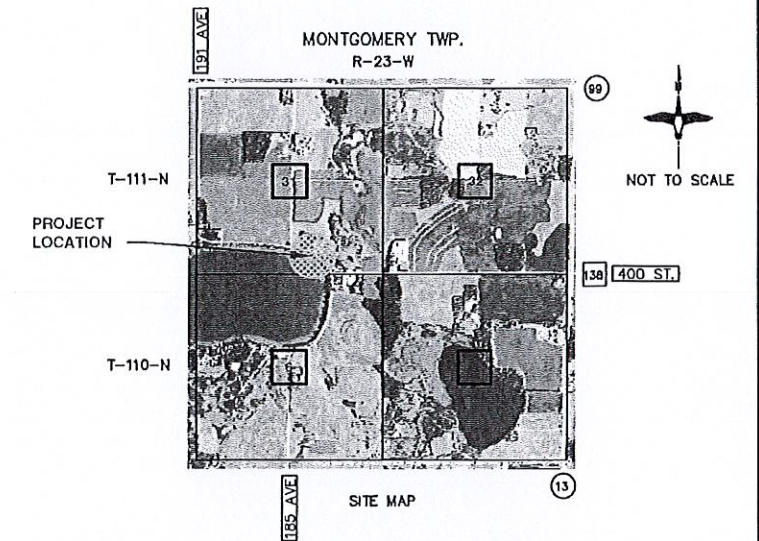
NOTES:

(A) THE OWNER MAY ELECT TO INSTALL FIELD STONE AS REVETMENT INSTEAD OF CLASS III RIPRAP. THE FIELD STONE SHALL MEET THE GRADATION LISTED ON SHEET 2.

(B) EXCAVATION FOR RIPRAP INSTALLATION AND MINOR SLOPE GRADING IS INCIDENTAL.

THE FOLLOWING SECTIONS FROM THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" (2016 EDITION) ARE REFERENCED IN THE PLANS:

- 3601 RIPRAP MATERIALS
- 3733 GEOTEXTILES
- 3885 ROLLED EROSION CONTROL PRODUCTS



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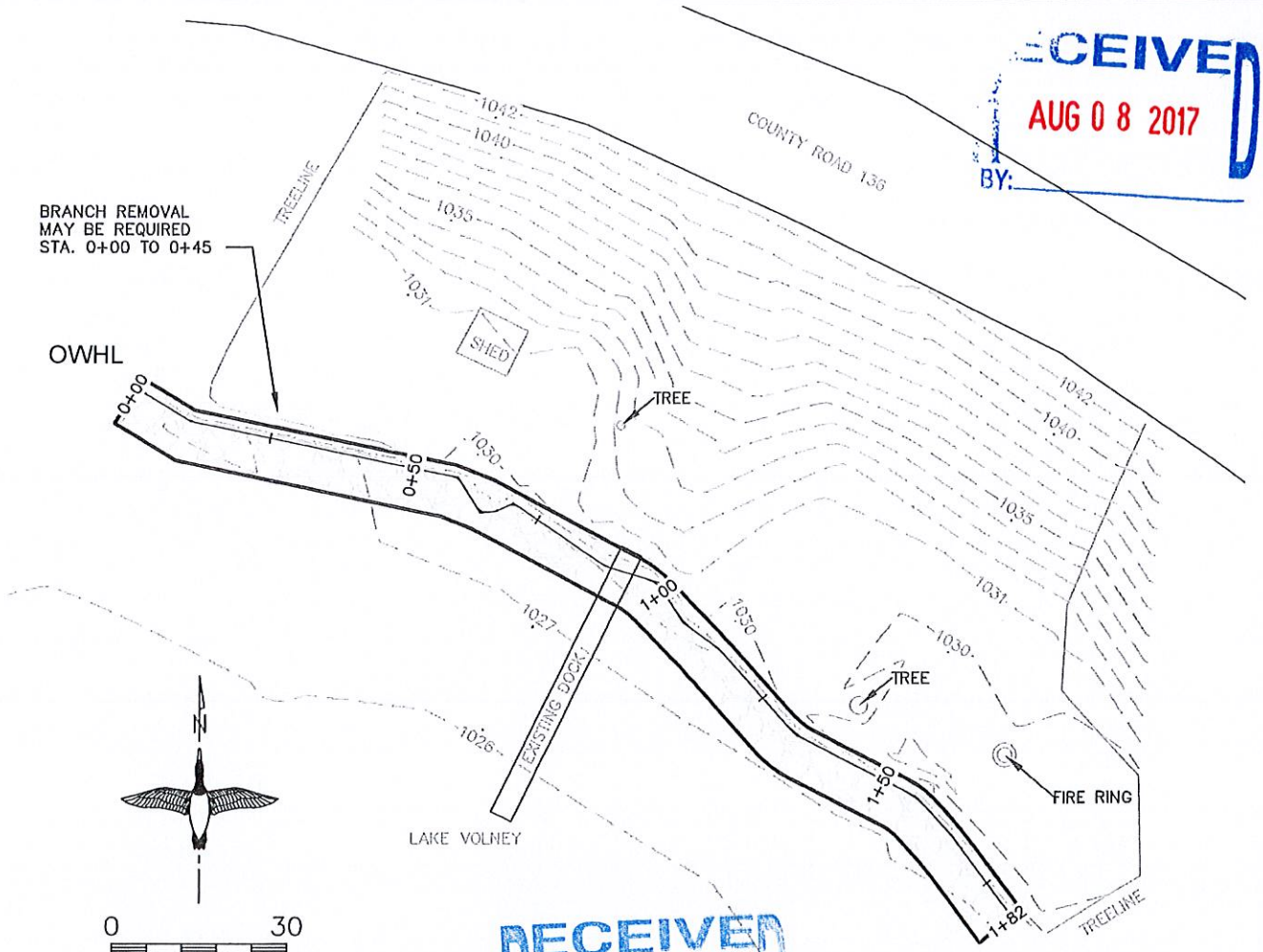
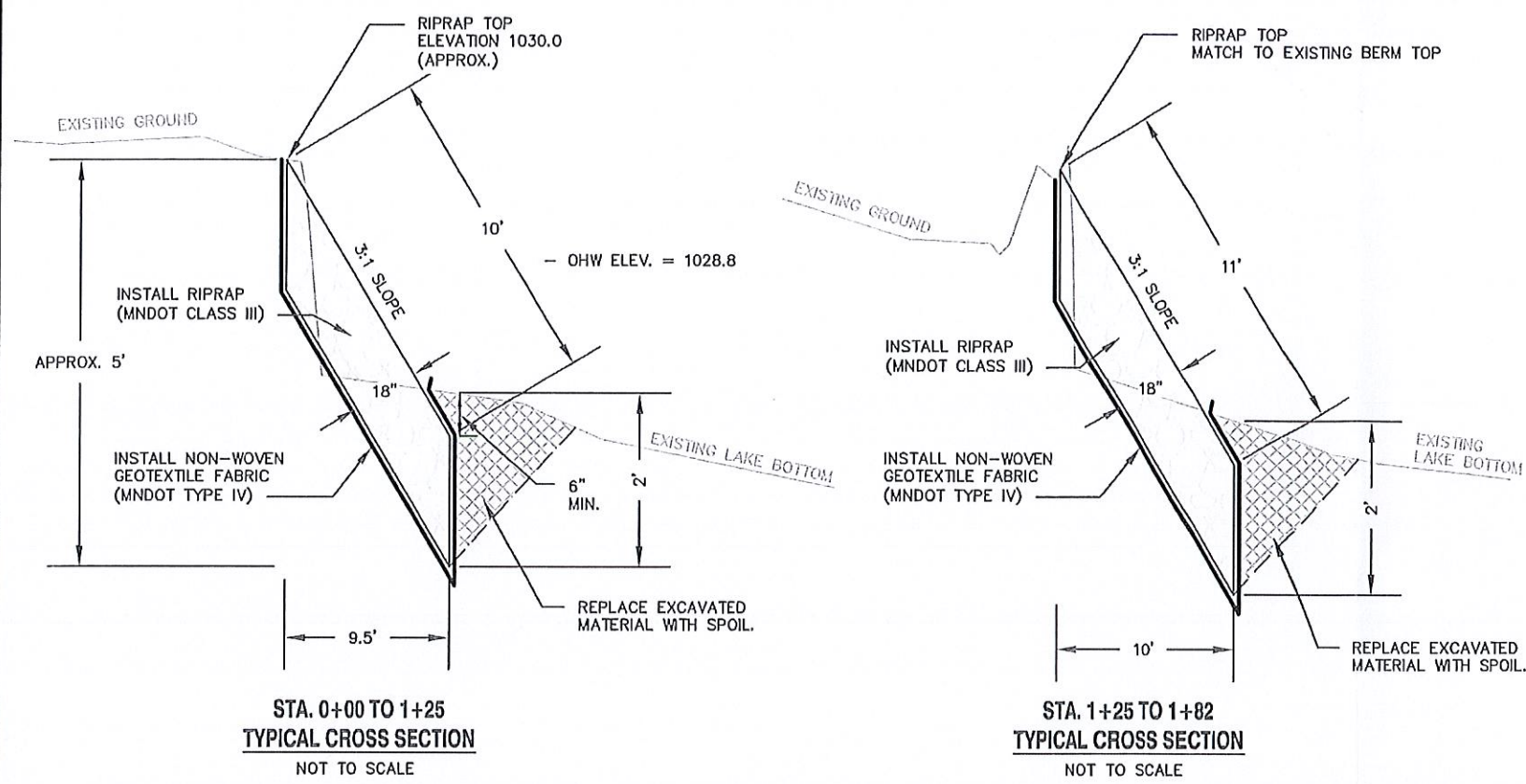
SHEET INDEX

| SHEET NO. | TITLE |
|-----------|---------------------------|
| 1 | COVER SHEET |
| 2 | CROSS SECTION & PLAN VIEW |

ENGINEERING DESIGN DATA
BANK HEIGHT = 1.5 FT
WAVE PROTECTION HEIGHT = 1.4 FT

| | | | | | | | | |
|--|---|---|--|---|---|---|--|---------------------|
| <p>CONSTRUCTION CERTIFICATION STATEMENT</p> <p>I HEREBY CERTIFY THAT A FINAL INSPECTION OF THIS PROJECT HAS BEEN PERFORMED AND THAT THE WORK COMPLETED IS IN ACCORDANCE WITH THE PLAN AND SPECIFICATIONS. ANY CHANGES TO THE PLANS AND SPECIFICATIONS ARE SO NOTED.</p> | <p>I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.</p> <p>PRINT NAME: <u>RYAN T. JONES</u></p> <p>SIGNATURE: <i>Ryan T. Jones</i></p> <p>DATE: <u>8-4-17</u> LICENSE # <u>44622</u></p> | <p>SURVEY</p> <p>Surveyed Date: HHB, RTJ 5/10/17</p> <p>Drawn Date: HHB 5/12/17</p> <p>Checked Date: RTJ 6/21/17</p> | <p>DESIGN</p> <p>Designed Date: RTJ 5/17</p> <p>Drawn Date: HHB 6/17</p> <p>Checked Date: RTJ 6/21/17</p> | <p>GPS</p> <p>UNITS: INTERNATIONAL FEET</p> <p>COORDINATE SYSTEM: UTM 15 NORTH</p> <p>DATUM: NAD1983 (CONUS)</p> <p>GEOID: GEOID03 (CONUS)</p> | <p>SOUTH CENTRAL TECHNICAL SERVICE AREA</p> <p>1160 S. VICTORY DRIVE MANKATO, MINN. (507) 345-1051</p> | <p>BRANDON BROCKWAY</p> <p>SHORELINE PROTECTION</p> <p>COVER SHEET</p> | <p>Sec. 31 T. 111 N. R. 23 W.</p> <p>County: LE SUEUR</p> <p>Township: MONTGOMERY</p> <p>Near: LE CENTER</p> | <p>SHEET 1 of 2</p> |
| | | <p>SIGNATURE: _____</p> <p>DATE: _____</p> | | | | | | |

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RIPRAP INSTALLATION NOTES:

MATERIAL SPECIFICATIONS

- RIPRAP**
- ANGULAR RIPRAP SHALL CONFORM TO THE REQUIREMENTS OF MINNESOTA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATION 3601, CLASS III. RIPRAP SHALL BE QUARTZITE.
 - OWNER MAY ELECT TO USE FIELD STONE IN PLACE OF CLASS III RIPRAP. FIELD STONE SHALL MEET THE GRADATION PROVIDED.
 - THE RIPRAP SHALL BE FREE FROM DIRT, CLAY, SAND, ROCK FINES, AND OTHER MATERIAL NOT MEETING THE REQUIRED GRADATION LIMITS.
 - THE PLACED RIPRAP SHALL CONTAIN LESS THAN 10 PERCENT OF UNDESIRABLE MATERIALS BY MASS. UNDESIRABLE MATERIALS ARE DEFINED AS:
 - INDIVIDUAL PIECES OF STONE WITH DEFECTS THAT ARE VISUALLY DIFFERENTIATED FROM ACCEPTABLE PIECES, OR
 - STONE THAT IS SLABBY OR ELONGATED (HAVING WIDTH OR THICKNESS LESS THAN 30 PERCENT OF THE LENGTH).
- GEOTEXTILE FABRIC**
- GEOTEXTILE FABRIC SHALL BE NON-WOVEN, MEETING THE REQUIREMENTS OF MINNESOTA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATION 3733, TYPE IV.

CONSTRUCTION

GEOTEXTILE AND RIPRAP SHALL NOT BE PLACED UNTIL THE SUBGRADE SURFACE HAS BEEN INSPECTED/APPROVED BY THE TECHNICIAN.

THE SURFACE ON WHICH THE GEOTEXTILE IS TO BE PLACED SHALL BE GRADED AS SHOWN ON THE DRAWINGS. IT SHALL BE REASONABLY SMOOTH AND FREE OF LOOSE ROCK, CLODS, HOLES, DEPRESSIONS, AND PROJECTIONS.

THE GEOTEXTILE SHALL BE LOOSELY LAID, MINIMUM FOLDING, IN SUCH A MANNER THAT IT CONFORMS TO THE SURFACE IRREGULARITIES WHEN RIPRAP IS PLACED ON OR AGAINST IT. THE GEOTEXTILE MAY BE FOLDED AND OVERLAPPED TO PERMIT PROPER PLACEMENT IN DESIGNATED AREAS.

THE GEOTEXTILE SHALL BE JOINED BY OVERLAPPING IN A SHINGLE LIKE MANNER A MINIMUM OF 18 INCHES AND SECURED AGAINST THE UNDERLYING FOUNDATION MATERIAL.

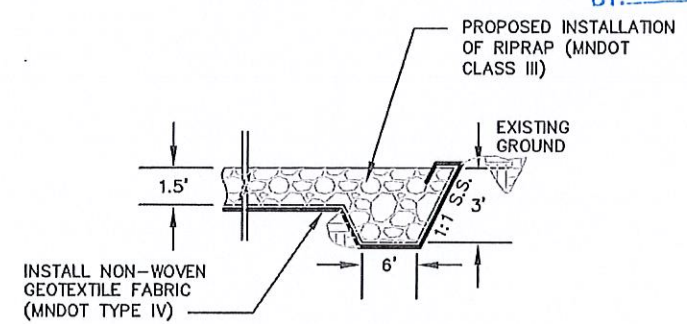
SECURING PINS ARE ACCEPTABLE BUT NOT REQUIRED. THE GEOTEXTILE CAN BE ANCHORED BY SMALL, ROUND "BASEBALL SIZED" ROCKS OR OTHER EQUIVALENT METHODS THAT HOLD THE GEOTEXTILE IN PLACE.

RIPRAP SHALL NOT BE PUSHED OR ROLLED OVER THE GEOTEXTILE.

RIPRAP SHALL BE INSTALLED TO THE FULL COURSE THICKNESS IN ONE OPERATION AND IN SUCH A MANNER AS TO AVOID SERIOUS DISPLACEMENT OF THE UNDERLYING FABRIC MATERIAL. THE RIPRAP SHALL BE DELIVERED AND PLACED IN A MANNER THAT ENSURES THE MATERIAL IS REASONABLY HOMOGENEOUS, WITH THE LARGER ROCKS UNIFORMLY DISTRIBUTED AND FIRMLY IN CONTACT ONE TO ANOTHER WITH THE SMALLER ROCKS AND SPALLS FILLING THE VOIDS BETWEEN THE LARGER ROCKS. SOME HAND PLACING MAY BE REQUIRED TO PROVIDE A NEAT AND UNIFORM SURFACE.

RIPRAP SHALL NOT BE DROPPED MORE THAN 3 FEET ONTO GEOTEXTILE.

RIPRAP HEIGHT SHALL NOT EXCEED 3' ABOVE OHW.



TYPICAL TOP VIEW FOR 'THICKEN' ROCK END PROTECTION

NOTE: RIPRAP REVETMENT FOLLOWS THE NATURAL MEANDER OF THE SHORE (CENTERLINE STATIONING FOLLOWS TOE OF EXISTING SHORE).

GRADATION TABLE FOR FIELD STONE (ROUNDED) ROCK

| % OF TOTAL MATERIAL WEIGHT THAT IS SMALLER THAN GIVEN SIZE | STONE DIMENSION (INCHES) |
|--|--------------------------|
| 100% | 13" - 16" |
| 85% | 10" - 14" |
| 50% | 7" - 10" |
| 15% | 2" - 3" |

ROCK PROTECTION SHALL BE INSTALLED TO A DEPTH OF 18 INCHES.

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

PRINT NAME: RYAN T. JONES
SIGNATURE: *Ryan T. Jones*
DATE: 8-4-17 LICENSE # 44622

SOUTH CENTRAL TECHNICAL SERVICE AREA
1160 S. VICTORY DRIVE
MANKATO, MINN.
(507) 345-1051

BRANDON BROCKWAY
SHORELINE PROTECTION

CROSS SECTION & PLAN VIEW SHEET 2 of 2