



Le Sueur County, MN

Thursday, November 9, 2017

Regular session

Item 2

Ledvina

Staff Contact: Kathy Brockway or Michelle Mettler

STAFF REPORT

GENERAL INFORMATION

APPLICANT/OWNER: Derrick Ledvina Owner: Richard Ledvina

911 ADDRESS: 46437 Cape Horn Road, Cleveland MN 56017

PROJECT DESCRIPTION: Allow grading, excavating and filling of approximately 44 cubic yards of material in the shore impact zone, 76 cubic yards outside the shore impact zone, 40 cubic yards in the bluff, 80 cubic yards in the bluff impact zone; construct 2 retaining walls in the bluff for the construction of a septic system located in the bluff.

VARIANCE GRANTED 10-19-2017: To install a septic tank 0 feet from the dwelling, and within the bluff; install a septic drainfield 2 feet from the dwelling, 0 feet from the property line, 50 feet from the Ordinary High Water Level (OHWL)

ZONING ORDINANCE SECTIONS: 13.2, 18

DISTRICT PURPOSE:

The intent of the **Recreational Residential (RR) District** is to preserve areas which have natural characteristics suitable for both passive and active recreational usage. Also, it is the intent of this district to manage areas suitable for residential development of varying types, including permanent and seasonal housing. Some non-residential uses with minimal impacts on residential uses are allowed if properly managed under conditional use procedures.

GOALS AND POLICIES: The current Land Use Plan as adopted in 2007 references to bluff setbacks & 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 resources areas.
Objective 1:	The County should continue its preservation of significant bluff areas and river valleys through its use of Conservancy Zone.
Action 3:	Amend the County's Zoning controls to require all structures to meet a 30' setback from the top of a bluff.

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.
Action 2:	The County will take leadership in initiating a wastewater or septic replacement program.
Strategy #2:	Septic replacement program in areas with space to accommodate this type of improvement program.

DEFINITIONS:

Bluff - A topographic feature such as a hill, cliff, or embankment in which the slope rises at least fifteen (15) feet from the toe of the bluff to the top of the bluff and the grade of the slope from the toe of the bluff to the top of the bluff averages 18 percent or greater. The percent of the slope is defined as the change in elevation (rise) over a distance (run).

Bluff, Toe - The toe of the bluff shall be determined to be the lower end of the lowest ten (10) foot segment that exceeds eighteen (18) percent slope.

Bluff, Top - The top of the bluff shall be determined to the upper end of the highest ten (10) foot segment that exceeds eighteen (18) percent.

Bluff Impact Zone (BIZ) - Land located within 30 feet from the top or toe of a bluff.

Shore Impact Zone (SIZ) - Land located between the ordinary high water level of public waters and a line parallel to it at a setback of fifty (50) percent of the structure setback.

SITE INFORMATION

LOCATION: Lot 4, Cape Horn Subdivision, Section 1, Cleveland Township.

ZONING: Recreational Residential "RR"

GENERAL SITE DESCRIPTION: Shoreland, residential

ACCESS: Existing

EXISTING LAND USE WITHIN ¼ MILE:

North: Residential South: Residential
 East: Lake Jefferson West: Residential

TOWNSHIP BOARD NOTIFICATION

The applicant notified John Kluntz, Cleveland Township Board member on September 11, 2017.

NATURAL RESOURCES INFORMATION

SHORELAND: The proposal is located within the Shoreland District.

WETLANDS: According to the National Wetlands Inventory, No wetlands located in the quarter-quarter section where the project is proposed.

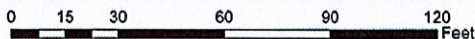
ATTACHMENTS

Application, Criteria Form, Narrative, Survey, Variance minutes, Erosion Control Plan, Letter from Joshua Mankowski, LSC Resource Specialist.

AERIAL PHOTO/SITE PLANS

LE SUEUR COUNTY ENVIRONMENTAL SERVICES

NAME: Richard Ledvina
 PID: 01-500-0030
 DATE: 08-04-17
 FIRM #: 27079C0270D
 F-Zone: X-Outside
 RFPE: na
 District: Recreational Residential

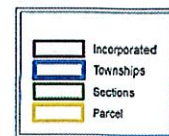


Map Disclaimer
 "Reasonable efforts have been made by the Le Sueur County GIS Department to verify that these maps accurately interpret the source data used in their preparation; however, a degree of error is inherent in all maps, and these maps may contain omissions and errors in scale, resolution, rectification, positional accuracy, development methodology, interpretation of source data, and other circumstances.
 *The maps are date specific and are intended for use only at the published scale.
 *These maps should not be used for navigational, engineering, legal, or any other site-specific use.

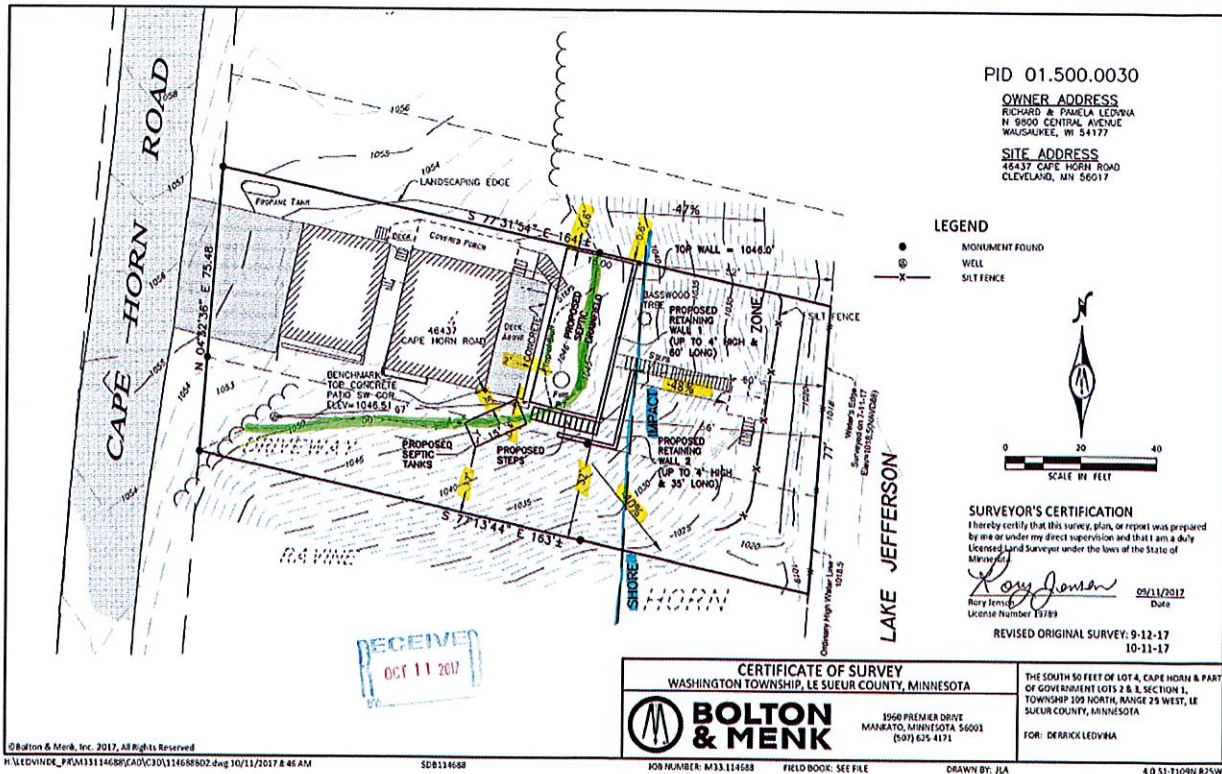
Coordinate System: NAD 1983 HARN Adj MN Le Sueur Feet

Photo dated April/May 2013

Created By: MRM



LE SUEUR COUNTY ENVIRONMENTAL SERVICES
 507-357-8538



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 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.

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 have been or are being provided.*
4. *Adequate measures have been or will be taken to provide sufficient off-street parking and loading space to serve the proposed use.*
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.*
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 Derrick Ledvina
Mailing Address 46437 Cape Horn Rd
City Cleveland State MN Zip 56017
Phone # 808-357-4276 Phone # Same

II. **Landowner:**
Name Richard Ledvina
Mailing Address 46437 Cape Horn Rd
City Cleveland State MN Zip 56017

Property Address "as above"
City _____ State _____ Zip _____
Phone # _____ Phone # _____

III. **Parcel Information:**
Parcel Number 01.500.0030 Parcel Acreage _____
Attach Full Legal Description (**NOT** abbreviated description from tax statement)
Township Cleveland Section 1
Subdivision Cape Horn Lot 4 Block 1

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

Cleveland Township notified on 09/11/17
(Township Name) (Date)
Board Member John Klentz 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.**



1

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

Shoreland- Outside Shore Impact Zone Cubic yards of material movement: 76 yards
 Within Shore Impact Zone Cubic yards of material movement: 44 yards
 Within Bluff Impact Zone Cubic yards of material movement: 80 yards
 Within Bluff Cubic yards of material movement: 40 yards
TOTAL cubic yards of material movement: _____

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. - *see attached sheet*
- b. Complete the following in relationship to the proposed Conditional Use Permit.

1. ENVIRONMENTAL IMPACT: _____
2. ADVERSE IMPACT ON SURROUNDING AREAS: _____
3. STORMWATER RUNOFF: _____
4. DOES ANY PART OF THE PROJECT EXTEND BELOW OHWL: NO
5. WETLAND IMPACT: 0 -> no impact
6. SLOPE STABILITY: _____
7. CERTIFICATE OF INSURANCE: _____
8. MEET ALL APPLICABLE COUNTY STATE & FEDERAL REGULATIONS:
(For example additional licensing and/or permitting) _____

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).

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

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



See attached sheet

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.

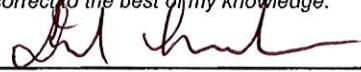
Action by the County Board shall be a majority vote of its members.

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.

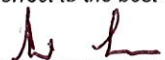


Applicant signature

10/05/17

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

10-05-17

Date

RECEIVED
OCT 09 2017
BY: _____

LE SUEUR COUNTY CONDITIONAL USE PERMIT CRITERIA

Conditional Use Permit #: 17404

Applicant: DERRICK LEDVINA

Land Owner: RICHARD LEDVINA

Conditional Use Permit Request: TO ALLOW GRADING, EXCAVATING, AND FILLING OF APPROXIMATELY 44 CY IN THE SIZ; 76 CY OUTSIDE THE SIZ, 40 CY IN THE BLUFF, 80 CYS IN THE BIZ; CONSTRUCT 2 RETAINING WALLS IN THE BLUFF FOR A SEPITC SYSTEM LOCATED WITH THE BLUFF.

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 _____

Board of Adjustment minutes October 19, 2017

ITEM #3: DERRICK LEDVINA, CLEVELAND, MN, (APPLICANT); RICHARD LEDVINA, WAUSAUKE, WI, (OWNER): Request that the County grant a Variance from the Le Sueur County Zoning Ordinance to allow the applicant to install a septic tank 0 feet from the dwelling, and within the bluff; install a septic drainfield 4 feet from the dwelling, 0 feet from the property line, 50 feet from the Ordinary High Water Level (OHWL) and within the bluff in a Recreational Residential "RR" District on a Recreational Development "RD" lake, Lake Jefferson . Property is located at Lot 4, Cape Horn Subdivision, Section 1, Cleveland Township. **VARIANCE IS FOR STUCTURE, BLUFF, PROPERTY LINE & OHWL SETBACKS.**

Wayne James, James Brothers Construction, representing the applicant was present for application. Township: No comments. DNR: No comments. Letters submitted: Joshua Mankowski, LSC Resource Specialist (see file).

Discussion was held regarding: hired a new surveyor, changed location, neither option is the greatest, but this option is better, concerns with bluff stabilization, will go into more detail when applying for the Conditional Use Permit, working with an engineer, required to go through the conditional use permit process, well location, holding tank option, year round home, road restrictions, lots were meant for seasonal use, small lot, how to access the property, type of wall construction, block suppliers speculations, Joshua Mankowski commented on this variance but didn't comment on the last one, variance granted in August still valid, which is the best option.

Motion was made by Jim Mladek to approve the application. Seconded by Jeanne Doheny, understands where Fritz Cummins is coming from, but feels this is a better option than the previous request. Motion approved. Motion carried 2-1.

**LE SUEUR COUNTY ENVIRONMENTAL SERVICES
88 SOUTH PARK AVE.
LE CENTER, MINNESOTA 56057-1600**

Phone (507) 357-8540 (direct line)

Fax (507) 357-8541

Date: 10/26/2017

To: Le Sueur County Planning and Zoning Commission

From: Joshua Mankowski, Environmental Resources Specialist

Applicant:

Derrick Ledvina

Property owner:

Richard Ledvina

Property:

01.500.0030

Description:

Request for a Conditional Use Permit to allow Grading, Excavating, and Filling of approximately 44 cubic yards in the Shore Impact Zone, 76 cubic yards outside the Shore Impact Zone, 40 cubic yards in the Bluff, 80 cubic yards in the Bluff Impact Zone, construct two retaining walls In the Bluff for a septic system located within the Bluff.

Recommendation:

It would be my recommendation to deny this application for the following reasons.

1. Retaining wall would not be able of have drain tile to provide for proper drainage, a leading reason why retaining walls fail. The drain tile would not be an option because this would allow untreated effluent from the system to drain directly to the lake.
2. There is a definite risk of hydraulic loading on the walls and the bluff. With all the rain the County received in 2016, we saw a number of bluffs sluff into the lake for no other apparent reason then hydraulic loading. This permit would allow for a drainfield to be installed in a bluff, supported by retaining walls.
3. If there was a failure of the bluff or the retaining wall, the hazardous material will be deposited in the lake.
4. Water doesn't just have vertical flow. Any possible horizontal flow of untreated effluent could seep out of the bluff into the lake.
5. There is an alternative option to installing a drainfield in the bluff, a holding tank. This is not an option favored by the applicant of the homeowner, but it is a fully viable option.

If you decide to grant approval:

1. If you do decide you want to approve this application, table the application until the applicant can obtain an engineering certificate to ensure that the design is sound and that wall and bluff stability will be maintained.

Sincerely,



Joshua Mankowski
Le Sueur County
Environmental Resources Specialist

VIII. Description of request

a.) I am applying for a conditional use permit (CUP) for placement of a pressurized septic system at the property of 46437 Cape Horn Rd. Cleveland, MN 56017. The variance application for the septic system plan was approved in October 2017. The CUP is required for the following reasons. 1. Septic system partially placed in a bluff 2. Two-4ft tall retaining walls built into the bluff (for extra septic system stability) 3. Partial re-routing of current stairwell around retaining walls 4. Grading/excavation/fill (GEF) within the bluff.

The pressurized septic system will be placed on top of the bluff (where this is no slope) which is currently a flat partial backyard for the property free of vegetation/trees. Additionally, the pressurized system will extend slightly onto the bluff (where this a slight slope). The slope angle in this area is only 3%. Where the pressurized system extends into the bluff, two-tiered retaining walls will be built to support the system and drain field. The first wall will measure 4' x 60' to support the septic system in bluff impact zone. This wall will be backfilled with tile rock. Specifically, the wall will consist of 12-18" of tile rock with 2' of fill over that and 12" of black dirt on top of the fill. Specific measurements for BIZ (also see sheet attached) = 12 yards tile rock, haul in 42 yards washed sand, 18 yards of fill dirt. Excavate 8 yards out of dirt for wall and use on site for septic placement. Total BIZ movement=80 cubic yards. Within bluff, 40 cubic yards of dirt will be moved to support septic system placement.

For the second wall, which will measure 4'x35', SIZ=6 cubic yards tile rock, haul in 2 cubic yards of black dirt for flower bed, haul in 22 cubic yards of fill, move 14 yards of dirt already on-site. Total SIZ cubic yards of movement=44 cubic yards. Total cubic yards of material movement outside SIZ=76 cubic yards. The total movement of overall material will = 120 cubic yards. Overall, there will be no fill removed from the site. As previously stated walls will serve as flower beds once construction is complete. Due to the placement of the retaining walls, the existing stairwell leading from the top of the bluff to the shoreline (wood steps) will be slightly re-routed around the wall to the south side of the bluff. No significant vegetation impact will occur with the re-routing of a small section of the steps/stairwell. Finally, the following equipment will be utilized to bring in/remove fill for the project: Track equipment to prevent compaction on site and track skid loader and mini excavator will also be utilized.

b.)

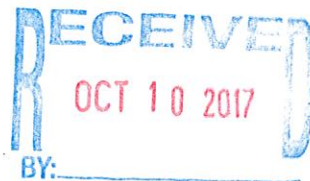
1. Little to no significant environmental impact will occur to surrounding areas. A few small trees (dead) will be removed for the septic system and retaining wall(s) placement, however flowers will be planted within the walls to replace removed vegetation. Some ferns/weeds will be affected as well to create a path down the bluff for machinery to enter the property and perform GEF, however grass will be re-planted in such areas. Weeds will regrow naturally as well. No impact will occur to



surrounding areas of the property.

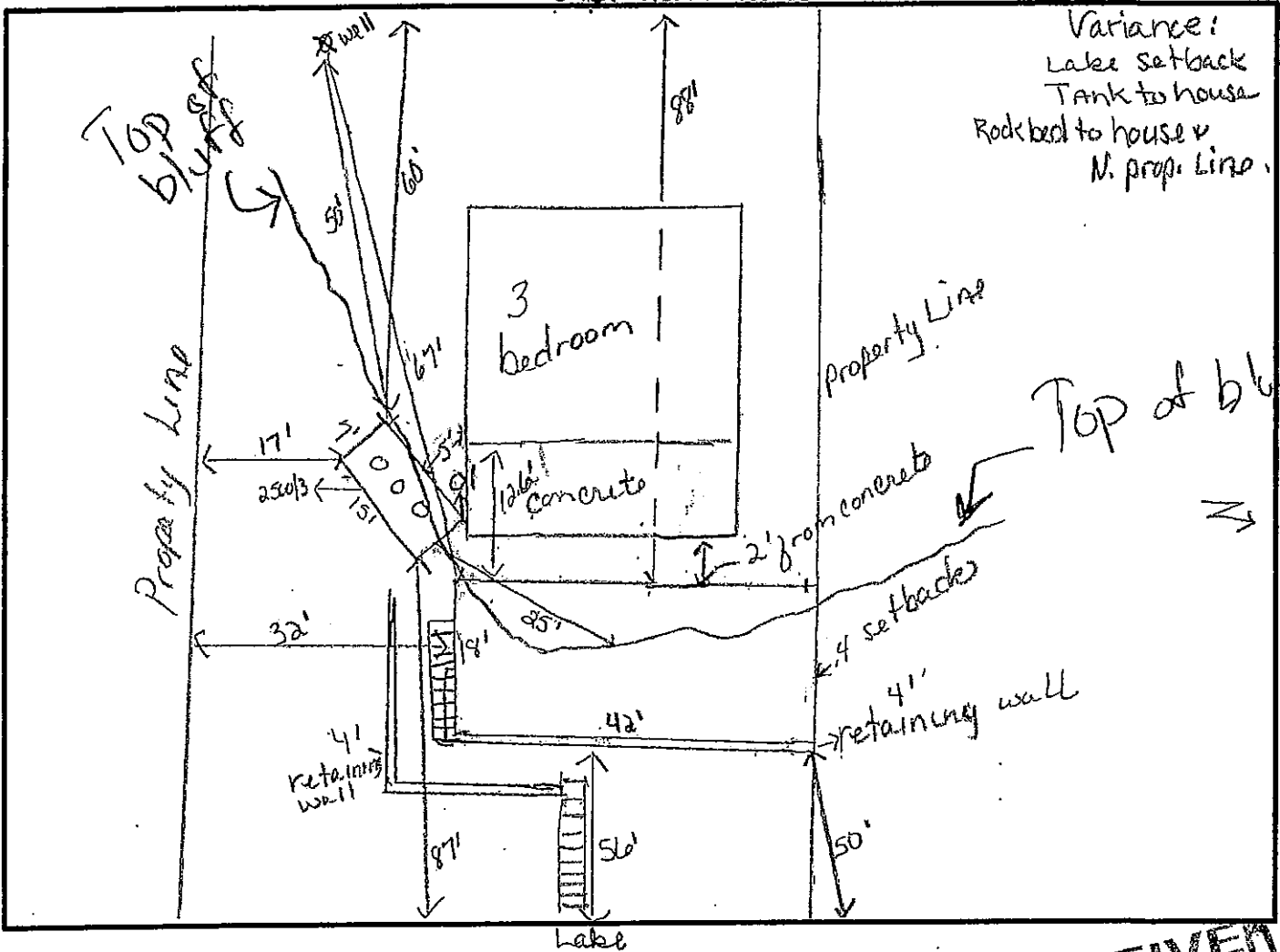
2. See b) 1. Above
3. Storm water run-off will be slowed down by the retaining wall and flower bed placement, and septic system install. Additionally, silt-fencing and wood chips will also be placed in the area of septic placement. Currently, dirt/sand occupies the backyard where the septic and retaining walls will be constructed. Grass and flowers will be planted in this area once the septic system is installed, thereby further reducing any potential of soil erosion from occurring.
4. No/Not applicable
5. No/Not applicable
6. The septic system will be placed on a flat area on top of the bluff. A portion of septic system/drain field will extend slightly into the bluff where there is a minimal slope (only 3%). Due to the minimal slope gradient, extra stability will be created by the use of a tiered retaining wall system consisting of two-4ft tall walls. Furthermore, the septic will be built against a large existing tree, however the system will be stable on its own (the tree is just a bonus for extra stability). As stated above, silt fencing, wood chips, and plants will also be used to prevent erosion in this area.

Restoration Plan: As noted above, minimal impact to the construction area will occur. Where there is impact, as noted above in the description of request and VIII part b, grass, flowers, wood chips and wood fiber blankets will be placed in the area of construction to restore the natural aspects of the area. If the requirement is to replace already dead trees with new trees, then new trees will be planted for the possible few that will be removed.



Property Owner: Derick Ledvina
Property Address: 46437 Cape Horn Road, Cleveland, MN 56017
Parcel Number: 01.500.0030

Cape Horn Road



Variance:
Lake setback
Tank to house
Rock bed to house v.
N. prop. line.

I hereby certify as a State of Minnesota Licensed Septic Contractor that the subsurface sewage treatment system diagrammed above was designed/installed in accordance with all applicable requirements of MN Rules Chapters 7080 &/or 7081 and the LeSueur County Zoning Ordinance. The drawing is accurate as of the date at the bottom of this form for the site identified at the top of this form. No determination of the future hydraulic performance can be made due to future water usage over the life of the system.

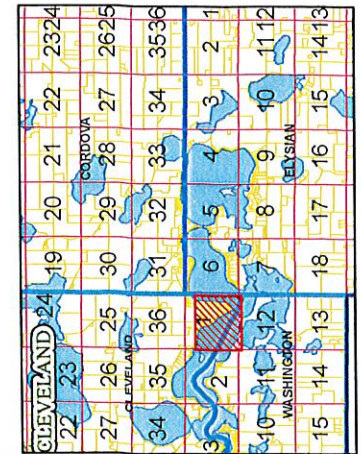
RECEIVED
SEP 26 2017
BY: _____

Septic Designer Signature: *Wayne O'Connell*
Septic Designer Company: James Brothers Construction, Inc.
License Number: 73 Certification Number: 855 Date: 9/14/17

Septic Installer Signature: _____
Septic Installer Company: James Brothers Construction, Inc.
License Number: 73 Certification Number: _____ Date: _____

LE SUEUR COUNTY ENVIRONMENTAL SERVICES

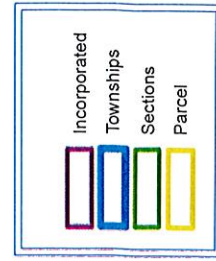
NAME: Richard Ledvina
 PID: 01.500.0030
 DATE: 08-04-17
 FIRM #: 27079C0270D
 F-Zone: X-Outside
 RFPE: na
 District: Recreational
Residential



Map Disclaimer

Reasonable efforts have been made by the Le Sueur County GIS Department to verify that these maps accurately interpret the source data used in their preparation; however, a degree of error is inherent in all maps, and these maps may contain omissions and errors in scale, resolution, rectification, positional accuracy, development methodology, interpretation of source data, and other circumstances.

*The maps are date specific and are intended for use only at the published scale.
 *These maps should not be used for navigational, engineering, legal, or any other site-specific use.



Coordinate System: NAD 1983 HARN Adj MN Le Sueur Feet

Photo dated April/May 2013

Created By: MRM

LE SUEUR COUNTY
 ENVIRONMENTAL SERVICES
 507-357-8538

PID 01.500.0030

OWNER ADDRESS
RICHARD & PAMELA LEDVINA
N 9800 CENTRAL AVENUE
WAUSAUKEE, WI 54177

SITE ADDRESS
46437 CAPE HORN ROAD
CLEVELAND, MN 56017

LEGEND

- MONUMENT FOUND
- ⊙ WELL
- X— SILT FENCE



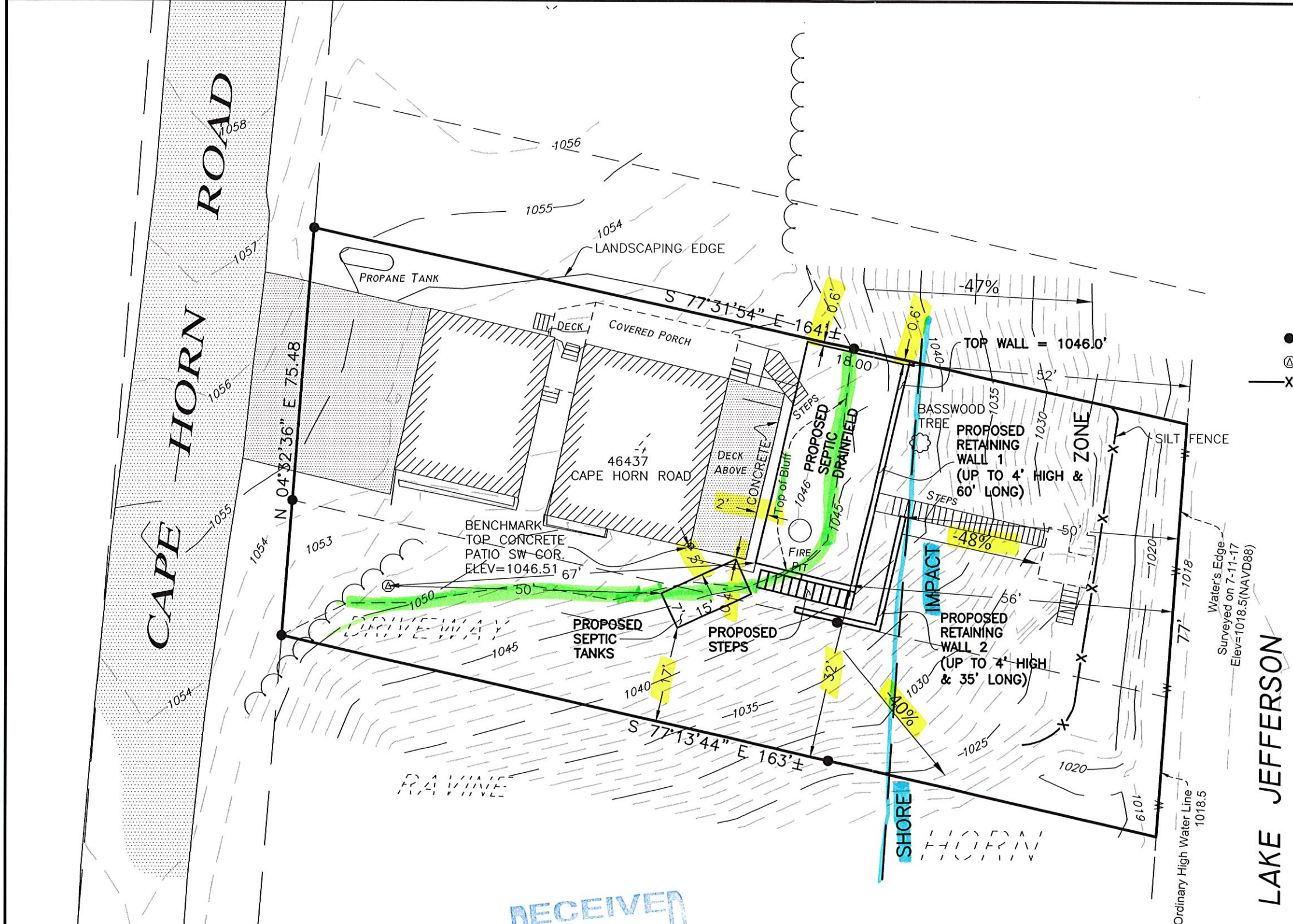
SURVEYOR'S CERTIFICATION

I hereby certify that this survey, plan, or report was prepared by me or under my direct supervision and that I am a duly Licensed Land Surveyor under the laws of the State of Minnesota.

Rory Jensen
Rory Jensen
License Number 19789

09/11/2017
Date

REVISED ORIGINAL SURVEY: 9-12-17
10-11-17



RECEIVED
OCT 11 2017
BY: _____

CERTIFICATE OF SURVEY WASHINGTON TOWNSHIP, LE SUEUR COUNTY, MINNESOTA		THE SOUTH 50 FEET OF LOT 4, CAPE HORN & PART OF GOVERNMENT LOTS 2 & 3, SECTION 1, TOWNSHIP 109 NORTH, RANGE 25 WEST, LE SUEUR COUNTY, MINNESOTA
 BOLTON & MENK 1960 PREMIER DRIVE MANKATO, MINNESOTA 56001 (507) 625-4171		
FOR: DERRICK LEDVINA		

LE SUEUR COUNTY ENVIRONMENTAL SERVICES
88 SOUTH PARK AVE.
LE CENTER, MINNESOTA 56057-1620
(507) 357-2251
FAX (507) 357-8541

Erosion and Sediment Control Plan

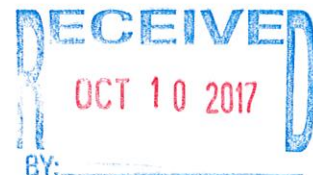
Goal: To control erosion and prevent sediment and other pollutants from entering the lakes, streams, wetlands, and storm drain systems during construction.

Property Owner: Richard Ledvina PID: _____
Mailing Address: 46437 Cape Horn Rd Cleveland, MN 56017
Property Address: As above
Phone: (808) 357-4276 Mobile/Cell: ()

Responsible party for Implementation/Inspection: James Bos, Construction
Address: PO Box 59
Phone: (507) 267-4789 Mobile/Cell: (507) 380-6323

Erosion & Sediment Control Measures

1. Maintain existing vegetation whenever possible and minimize the area of disturbance. Retain and protect trees to enhance future landscaping efforts and to reduce raindrop impact. (Vegetation is the best and most cost-effective erosion control practice).
2. Install all erosion and sediment control practices prior to any soil disturbing activities, when applicable.
3. Phase construction activities to minimize the areas disturbed at one time. This will also allow completed areas to be stabilized and re-vegetated before disturbing adjacent sites.
4. Maintain and protect all natural waterways. Retain at least a 20-foot wide strip of natural vegetation along all waterways to filter out sediment and other pollutants.
5. Minimize the use of impermeable surfaces such as roofs, driveways, parking lots and roads. The Environmental Resources staff must approve all storm water runoff plans.
6. Use rock rip-rap at both the outlet and inlet ends of culverts to prevent scour erosion.
7. Limit construction equipment to designated areas to control soil compaction.
8. Install silt fence on the down-slope perimeter of all disturbed areas according to the attached installation instructions. Sensitive areas such as wetlands, drainage swales and shoreland areas should also be protected with silt fence.
9. Install straw bale checks or rock check dams in areas of concentrated flow .
10. Cover any stockpiled topsoil with plastic or other impervious covering. Use stockpiled topsoil as earthen berms to serve as temporary sediment basins.



11. Mulch all disturbed areas at the rate of one 50-pound bale of straw per 500 square feet. On slopes 4:1 or steeper use the following erosion control blankets that have been pinned to the slope according to the manufacturer's instructions:

2:1 slopes or steeper	Straw/Coconut Blanket or High Velocity Wood Blanket
3:1 slopes or steeper	Wood or Straw Blanket with net on both sides
4:1 slopes or steeper	Wood or Straw Mulch blanket with net on one side
Flat areas	Straw Mulch w/disc anchoring

12. Seed all disturbed areas within seven days of final grading and temporary seed/mulch all areas that will be left inactive for more than seven days. Do not seed later than September 1st. Areas that need to be seeded after this date should be dormant seeded in late October or early November. See the attached instruction sheet for recommended mixtures and rates. The use of native plant materials, including trees and shrubs, is encouraged. Native species will provide good vegetative cover that is adapted to our soils and climate.

13. Apply fertilizer according to soil test recommendations.

14. Install water bars on access roads to prevent concentrated water from flowing down the road and eroding gravel.

15. Attach a site map showing the location of all erosion control practices, property lines, roads, lakes, watercourses, wetlands, on-site systems and building locations.

Note: To reduce mud transported onto paved roads, a rock construction entrance may be required. This will require a six-inch layer of 1-2 inch diameter washed rock a minimum of 50 feet in length.

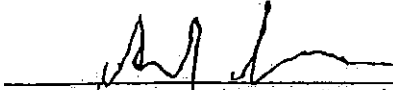
Inspection and Maintenance

16. Inspect the construction site every 7 days and within 24 hours after every rain event to ensure the practices are working properly (i.e. silt fences, water bars).

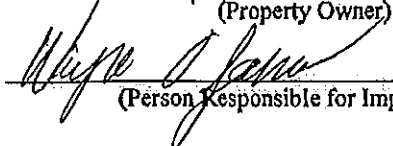
17. Clean out the silt fences when they are 1/3 full of sediment or replace with functional silt fences within 24 hours.

18. Clean out sediment basins on a regular basis to maintain capacity.

I agree to install, inspect and maintain the above practices to accomplish the goal of preventing erosion.



(Property Owner)

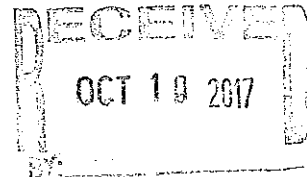


(Person Responsible for Implementation)

10/10/17
(Date)

10/10/17
(Date)

If you have any questions, please contact Environmental Services, at 507-357-8538.



Bluffs and Steep Slopes

Bluffs and steep slopes are topographic features of special concern in shoreland areas due to their fragile and sensitive natures. With respect to regulation by the Shoreland Management Program, topographic features lying wholly or partly within the shoreland area and having the following characteristics are defined and regulated as **bluffs**:

- The slope rises at least 25 feet above the ordinary high-water level of the water body;
- The grade of the slope from the toe of the bluff to a point 25 feet or more above the ordinary high water level averages 30 percent or greater; and
- The slope must drain toward the water.

An area with an average slope of less than 18 percent over a distance of 50 feet or more is not considered part of the bluff.



Figures 1 and 2. The pictures above and below show the potential for sedimentation in surface water when vegetation has been removed from a slope.



Importance of Protecting Bluffs and Steep Slopes

Erosion associated with bluffs and steep slopes is a natural process, but even the simplest activities can accelerate erosion and threaten slope stability. People walking on the hillside or even the family dog running up and down the slope can create a bare soil path that concentrates water running down the slope and initiates cutting. Gully erosion can cut deeply into steep slopes during a single rainfall. Tons of soil can

Steep slopes are defined as land where agricultural activity or development is not recommended or considered poorly suited because of slope steepness and the site's soil characteristics. Where site-specific information is unavailable, steep slopes are defined as lands having average slopes of between 12 percent and 18 percent over a distance of 50 feet or more.

During the development of the 1989 shoreland standards, the Department of Natural Resources recognized that bluffs and steep slopes were sensitive areas and, therefore, developed performance standards to mitigate impacts that could result from activities on these areas.

Protection of Shoreland Areas

Managing bluffs and slopes effectively requires local government controls. These include zoning for compatible land uses, implementing appropriate bluff setbacks for structures, and requiring modern erosion control and stormwater management measures that are necessary to preserve the integrity of steep slopes and bluffs and provide for the public safety. These preventative measures also preserve property values; minimize the visual impact of artificial features; and preserve native vegetation that stabilizes slopes, protects water quality, and provides habitat for wildlife.

flow rapidly into a lake or river below a steep slope. Property values and water quality can drop quickly from such impacts. In siting a house location, many property owners target the edge of a bluff since it can provide a striking view of a lake or stream. In that location, the weight of the home and runoff from the roof and driveway put more pressure on the steep slopes. This can lead to sudden slope failure. Property owners should also think about the amount of useable yard space before the slope drops off to the water. Removing natural vegetation, reshaping the slope to create level areas, terracing with retaining walls, and many other activities can destabilize the delicate balance that undisturbed soil and native vegetation provide.

Bluff Impact Zone

The bluff impact zone is defined as the bluff and the land located within 20 feet of the top of the bluff and is considered to be the area most susceptible to degradation from activity. All structural development is excluded from this zone except for stairways, lifts, and landings. There should be little if any shoreland alteration needed or allowed. Native vegetation and undisturbed slopes help to avoid erosion and slumping.

Bluffs and steep slopes are sensitive resources that are susceptible to damage if not properly managed. Impacts can be measured in both physical and aesthetic terms. Physically, development can dramatically affect a previously stable slope with increased weight on the slope, increased runoff from impervious surfaces, and saturation from septic systems. Aesthetically, development on bluff tops can affect the natural character of this unique topographical feature. Setbacks from bluffs are needed in order to protect the bluff from adverse impacts of development, construction encroachment, and other activities. A bluff impact zone should be established for preservation and management of critical vegetation and soils. All structural development would be excluded from this zone except for essential stairways, lifts, and landings. Consequently, a well-managed bluff impact zone can minimize or prevent future erosion problems.

Stormwater Management Issues

The importance of managing site drainage and precipitation runoff from natural and impervious surfaces cannot be overstated. The landowner, developer, and the contractors must plan for and manage runoff where bluffs or steep slopes are nearby. Developing a lake lot generates great amounts of runoff from the increase in impervious surfaces. Directing excess water to a lake or river may be a big mistake because water that flows over bluffs or steep slopes will cause erosion problems. Designing the site so infiltration is promoted and runoff is directed away from the steep areas is crucial to protecting our lakeshores. Restoration of failed bluffs and steep slopes can be extremely expensive; often the repaired hillside is not as stable, so recurrent erosion becomes more likely.

Alterations to Vegetation and Topography

Local governments must control alterations to vegetation and topography since negligent decisions concerning soil and vegetation management will adversely affect natural resources, especially in bluff areas. Only where grading and filling are absolutely essential should local permits be issued. Many communities do not permit walkout home construction or "daylighting" structures in the shoreland setback zone or in the bluff impact zone.

Additionally, intensive vegetation clearing is not allowed in shore and bluff impact zones or in steep slope areas. Limited clearing of trees and shrubs or cutting, pruning, or trimming vegetation is allowed to accommodate the placement of stairways, picnic areas, access paths, beach and watercraft access areas, or water-oriented accessory structures. Pruning is also allowed to provide a view to the water from the home; in this circumstance, property owners should wait until their homes are built so they can look out their windows and see where views may be too obstructed.

Vegetation is important to bluff and steep slope stability in several ways:

- Vegetation directly removes water from the soil layers.
- Root systems, especially those of native vegetation, hold soil in place.
- Vegetation softens the impact of raindrops, which otherwise can jar loose soil particles.
- Vegetation slows runoff, filters suspended sediments, and encourages infiltration.
- Vegetation consumes nutrients in runoff water or in the soil profile, which would otherwise degrade the shoreland water quality.

Performance standards should be specified as a condition of permits allowing vegetation alterations in the bluff impact zone and on steep slopes.

Permits are not needed for the grading or filling of the topography in shore and bluff impact zones and on steep slopes that involve less than 10 cubic yards of material. Projects involving more than 10 cubic yards need permits.

Recommendations

The Department of Natural Resources strongly discourages any alteration of bluff and steep slope areas. This declaration is due to the sensitivity of these areas and the potential cumulative impacts on lakes, rivers, and streams from unnecessary or poorly planned and designed land alterations. Preserving natural, dense, and deep-rooted vegetation and preventing grading and site drainage activities that would destabilize these areas are important goals in properly protecting and managing these areas for the benefit of the property owner and our irreplaceable water resources. The purpose of a progressive shoreland management ordinance is to protect the beauty and value of the resources for all current and future residents. The desires of individuals to alter these highly sensitive areas need to be placed below the broader public need to protect the bluffs, steep slopes, and waters for present and future generations when requests will lead to direct or cumulative harm of the resource.

