



Please note the meeting will be held 7:00pm, Wednesday, December 19, 2018 in the County Board Room at the Carver County Government Center, 602 East 4th Street, Chaska, MN.

# LOWER MINNESOTA RIVER WATERSHED DISTRICT

## Executive Summary for Action

Lower Minnesota River Watershed District Board of Managers Meeting  
Wednesday, December 19, 2018

### Agenda Item

#### Item 7. E. - LMRWD Projects

#### Prepared By

Linda Loomis, Administrator

#### Summary

- i. **Eden Prairie Area #3 Stabilization**  
No new information since last update.
- ii. **Riley Creek Cooperative project/Lower Riley Creek restoration**  
No new information since last update.
- iii. **Seminary Fen ravine stabilization project**  
No new information since last update.
- iv. **East Chaska Creek (Carver County Watershed Based Funding)**  
It was reported in the November meeting packet that staff had completed a field inspection of the project area to assess current conditions. An update of the 2016 feasibility has been prepared and is attached for Board review. Staff has been in touch with the city of Chaska and is working to set up a meeting to review the feasibility report findings with the city. LMRWD submitted this project as the Carver County project for funding under the Metro-area Watershed Based Funding Pilot Program. The amount of grant money dedicated to this program is \$25,472. East Chaska Creek is impaired for aquatic life, fecal coliform and turbidity. This project should help address the turbidity.
- v. **Schroeder Acres Park (Scott County Watershed Based Funding)**  
No new information since last update.
- vi. **Shakopee Downtown BMO Retrofit (Scott County Watershed Based Funding)**  
No new information since last update.
- vii. **PLOC (Prior Lake Outlet Channel) Restoration (Scott County Watershed Based Funding)**  
No new information since last update.
- viii. **Dakota County Fen Gap Analysis and Conceptual Model (Dakota County Watershed Based Funding)**  
Staff is working with MCES (Metropolitan Council Environmental Services) to determine whether or not MCES can assist on this project. Staff is not planning substantial work on this project until the agreement between the LMRWD and the Dakota County SWCD. Once the agreement is in place, staff will set up a meeting with the DNR.
- ix. **Hennepin County Chloride Project (Hennepin County Watershed Based Funding)**  
The Grant agreement has been executed for this project. Hennepin County and RPBCWD (Riley Purgatory Bluff Creek Watershed District) are managing this project, the LMRWD is a partner, as the District has agreed to allocate its

portion of the Hennepin County Metro-area Watershed Based Funding Pilot Program to this project.

Freshwater Society and Fortin Consulting have been consulted. Freshwater Water will be developing a Scope of Work for the project with technical assistance from Fortin. The stakeholders plan to meet to review the Scope of Work once it has been received.

Freshwater plans to hold a focus group at the Annual Road Salt Symposium on February 7th. The focus group will target commercial applicators and building managers.

The Scope of Work will capture the following elements:

- Outreach/recruitment for focus groups
- Logistics of focus groups (including producing communication materials, e.g. blurbs for newsletters)
- Facilitating Focus Groups
- Create/promote/collect data via online survey tool (and/or ipad survey)
- Capture and combine data from various sources
- Analyze data
- Report and Presentation on audience needs and barriers
- Recommend strategies to address those needs and barriers – in the form of an action-oriented and time-bound workplan

**x. Vegetation Management Plan**

This project has been placed on hold temporarily while staff works on developing a system for tracking projects within the LMRWD.

**xi. Sustainable Lake Management Plan - Trout Lakes**

No new information since last update.

**xii. Geomorphic Assessment of Trout Streams**

In the November meeting packet, it was reported that staff had discussions with the University of Minnesota Bioproducts and Biosystems Engineering Department (BBE) to provide services to the LMRWD, to assist with the geomorphic assessment of trout streams within the District. Staff has determined that services provided by BBE are best managed by Young Environmental Consulting Group, LLC, technical consultant for the LMRWD. The agreement between the LMRWD and Young Environmental states that subcontractors must be approved by the Board. A request from Young Environmental is attached for Board to consideration.

**xiii. Spring Creek Cost Share**

Staff has been working with a home owner in the city of Carver for a few years to address erosion of her property caused by Spring Creek. As development continues upland, storm water is increasing the flashiness of the Creek. This has caused significant erosion of the property located at 112 5th Street West, Carver. LMRWD has been working with Carver County Soil & Water Conservation to determine ways to restore some of what has been lost to erosion and protect the current stream bank. A plan set and cost estimate is attached for Board review. This project may be appropriate for a cost share. The next step is to present the plan to the city of Carver for participation as a partner in the project.

**Attachments**

- [East Chaska Creek Assessment, dated December 10, 2018](#)
- Request for the University of Minnesota - Bioproducts and Biosystems Engineering Department to subcontract services on LMRWD Projects
- 112 5th Street West, Carver, MN - plan set & cost estimate

**Recommended Action**

Motion to approve BBE as subcontractor

## TECHNICAL MEMORANDUM

**TO:** Board of Managers  
Lower Minnesota River Watershed District

**FROM:** Della Schall Young, PMP, CPESC  
Young Environmental Consulting Group, LLC

**CC:** Linda Loomis, Administrator  
Lower Minnesota River Watershed District

**DATE:** December 12, 2018

**RE:** Request for the University of Minnesota - Bioproducts and Biosystems  
Engineering Department to subcontract services on LMRWD Projects

---

Young Environmental Consulting Group, LLC (Young Environmental) respectfully requests permission to subcontract with the Bioproducts and Biosystems Engineering (BBE) Department at the University of Minnesota. As part of the executed contract between Young Environmental and Lower Minnesota River Watershed District (District), we are only authorized to subcontract services from Burns & McDonnell Engineering Company and Barr Engineering Co.

As we review the current list of projects, it is increasingly clear that we could use the expertise of individuals at the University of Minnesota. The Geomorphic Assessment of Trout Streams project is one where we could use the combined assistance of Barr and the University of Minnesota, specifically with Professors John Nieber, Joe Magner, and their students. Professor Nieber has done extensive work with hydrologic processes, assessing impacts of land use on hydrology and evaluating water quality of groundwater, streams, lakes, and wetlands. He is highly proficient in field experimentation, data synthesis, and modeling. Professor Magner works predominately on watershed assessment, management and policy, impaired waters, and pollutant management. His research spans many hydrologic topics, including trout stream assessments. Both professors belong to the BBE Department and regularly collaborate on field projects with state agencies, watershed management organizations, and private companies.

In accordance with our contract, Young Environmental is requesting permission to subcontract with the Bioproducts and Biosystems Engineering Department at the University of Minnesota.

Deb Hartley  
112 5th St. W  
Carver, MN 55315

Provided By:



CO.CARVER.MN.US/SWCD

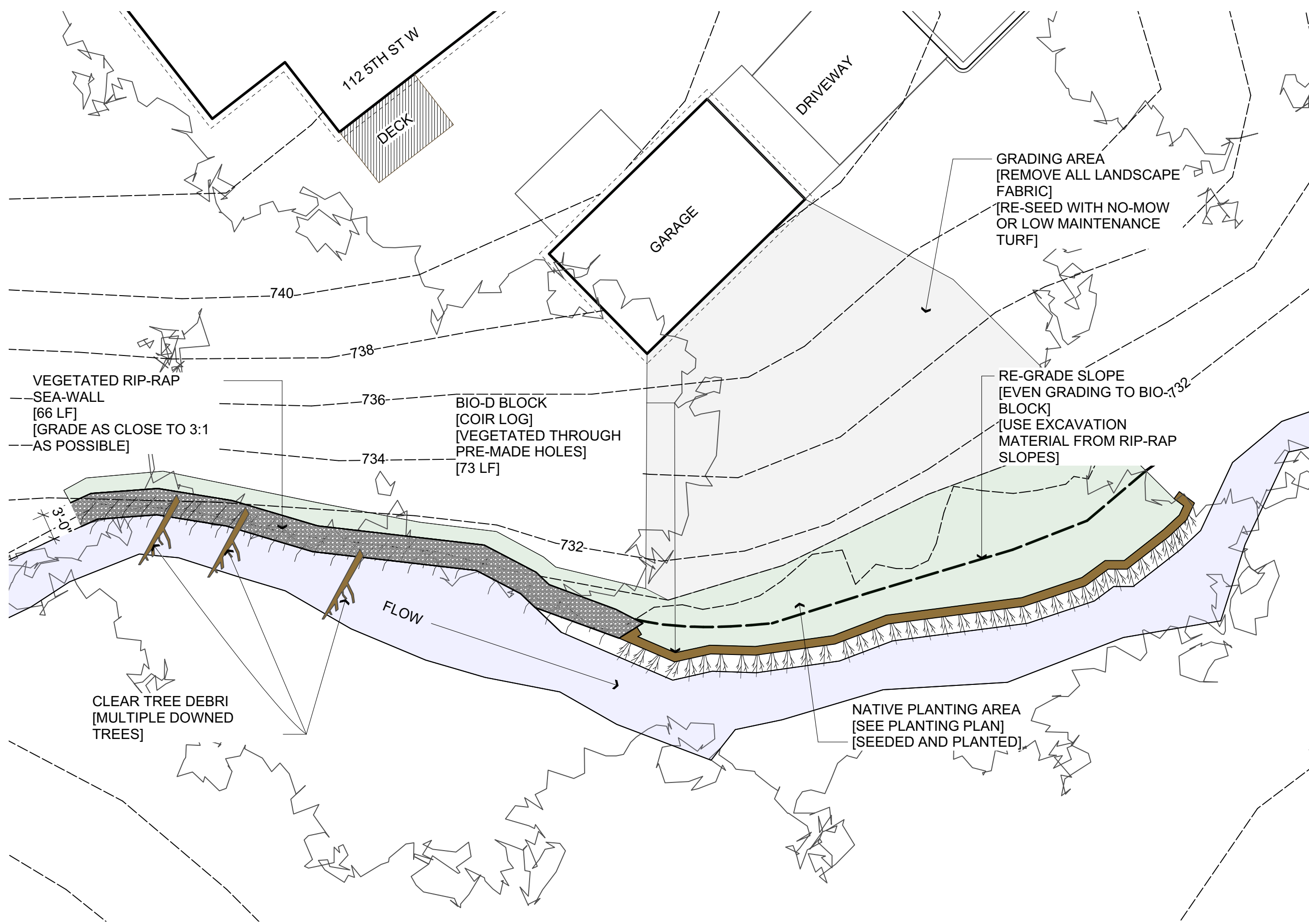
DESIGNER: SETH RISTOW

DATE: 11/08/18  
REVISION:  
REVISION:

NOTES:

- CALL GOPHER 1 PRIOR TO DIGGING
- KILL EXISTING NON-NATIVE VEGETATION AT LEAST 1 WEEK PRIOR TO PLANTING
- CONTACT SETH RISTOW WITH QUESTIONS (952) 466-5264
- USE COIR LOGS AS NEEDED
- PLANTS NEED TO BE WATERED REGULARLY DURING FIRST YEAR

SCALE: 3/32"=1'



Deb Hartley  
112 5th St. W  
Carver, MN 55315

Provided By:



CO.CARVER.MN.US/SWCD

DESIGNER: SETH RISTOW

DATE: 11/08/18  
REVISION:  
REVISION:

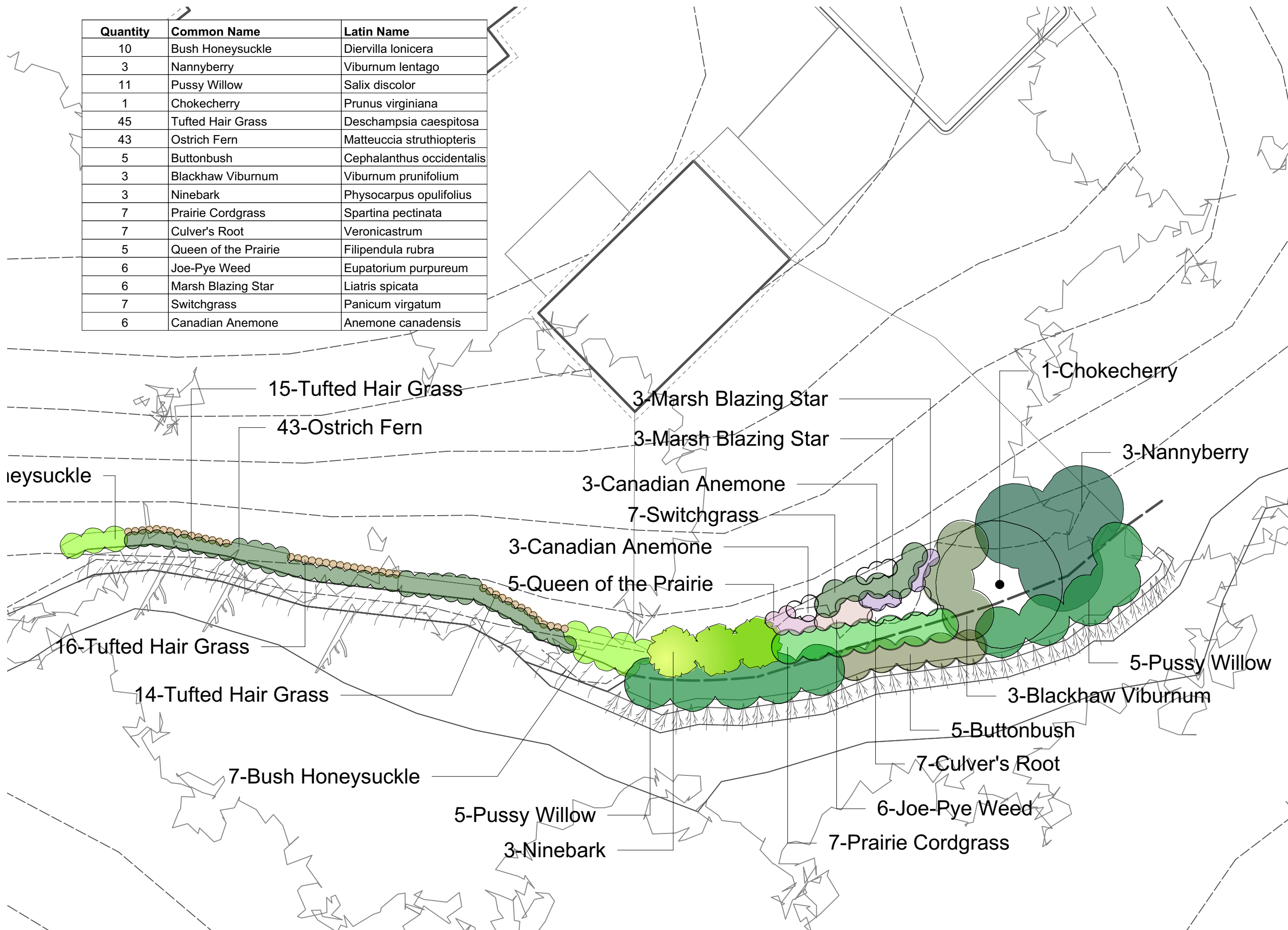
NOTES:

- CALL GOPHER 1 PRIOR TO DIGGING
- KILL EXISTING NON-NATIVE VEGETATION AT LEAST 1 WEEK PRIOR TO PLANTING
- CONTACT SETH RISTOW WITH QUESTIONS (952) 466-5264
- USE COIR LOGS AS NEEDED
- PLANTS NEED TO BE WATERED REGULARLY DURING FIRST YEAR

SCALE: 3/32"=1'



Quantity	Common Name	Latin Name
10	Bush Honeysuckle	Diervilla lonicera
3	Nannyberry	Viburnum lentago
11	Pussy Willow	Salix discolor
1	Chokecherry	Prunus virginiana
45	Tufted Hair Grass	Deschampsia caespitosa
43	Ostrich Fern	Matteuccia struthiopteris
5	Buttonbush	Cephalanthus occidentalis
3	Blackhaw Viburnum	Viburnum prunifolium
3	Ninebark	Physocarpus opulifolius
7	Prairie Cordgrass	Spartina pectinata
7	Culver's Root	Veronicastrum
5	Queen of the Prairie	Filipendula rubra
6	Joe-Pye Weed	Eupatorium purpureum
6	Marsh Blazing Star	Liatris spicata
7	Switchgrass	Panicum virgatum
6	Canadian Anemone	Anemone canadensis





## CARVER SWCD MATERIAL & COST ESTIMATE

Hartley LF: 140  
SF: NA  
 Streambank Stabilization Date: 21-Nov-18

### Materials: Streambank Stabilization

Item	Qty	Unit	Unit Cost	Amount	Potential Source
Twice-Shredded Hardwood Mulch (3" depth)	8.0	cu-yd	\$ 30.00	\$ 240.00	Hedberg, Frador, Local Supplier
Non-Woven Geotextile (Geotex 401, Mirfani 140N, or equal)	200	sq-ft	\$ 0.07	\$ 14.00	Brock White, (651) 647-0950
C125BN (6.5' x 108.5')	1,390	sq-ft	\$ 0.22	\$ 305.80	Brock White, (651) 647-0950
Bio D Block 12 (10')	8	each	\$ 126.00	\$ 1,008.00	Rolanka
Wood Stakes (2" x 4" x 48" - hardwood)	40	each	\$ 1.00	\$ 40.00	Brock White, (651) 647-0950
Aggregate: Buff Limestone (18"-24")	15.0	Tons	\$ 30.00	\$ 450.00	Hedberg, Frador, Local Supplier
Materials Subtotal				\$ 2,057.80	

### Plants: Streambank Stabilization

Item	Qty	Unit	Unit Cost	Amount	Potential Source
Native Plant: Plug	132	each	\$ 2.00	\$ 264.00	Native Plant Supplier
Native Shrub: 1 Gallon	36	each	\$ 15.00	\$ 540.00	Native Plant Supplier
Native Seed (Moist Meadow) 1/4LB	1.00	each	\$ 125.00	\$ 125.00	Native Plant Supplier
No Mow Seed	2.00	lb	\$ 7.00	\$ 14.00	Native Plant Supplier
Plants Subtotal				\$ 943.00	

### Labor: Streambank Stabiliza

Mobilization	1.00	job	\$ 250.00	\$ 250.00	Landscape/Excavation Contractor
Deliveries (Mulch, Plants, Rock, Soil, etc)	2	job	\$ 150.00	\$ 300.00	Suppliers/Contractors
Disposal	1.00	job	\$ 500.00	\$ 500.00	Landscape/Excavation Contractor
Grading ( <u>Tracked Equipment Only</u> - no wheeled vehicles in excavation area)	5	hrs	\$ 85.00	\$ 425.00	Landscape/Excavation Contractor
Material Installation (4 person crew/ 10hr day)	4.50	job	\$ 2,500.00	\$ 11,250.00	Landscape/Excavation Contractor
Subtotal				\$ 12,725.00	

### Project Total: Raingarden #4

Materials Estimate:	\$ 2,057.80
Plants Estimate:	\$ 943.00
Labor Estimate:	\$ 12,725.00
Project Estimate:	\$ 15,725.80
:-10%	\$ 14,153.22
:+10%	\$ 17,298.38