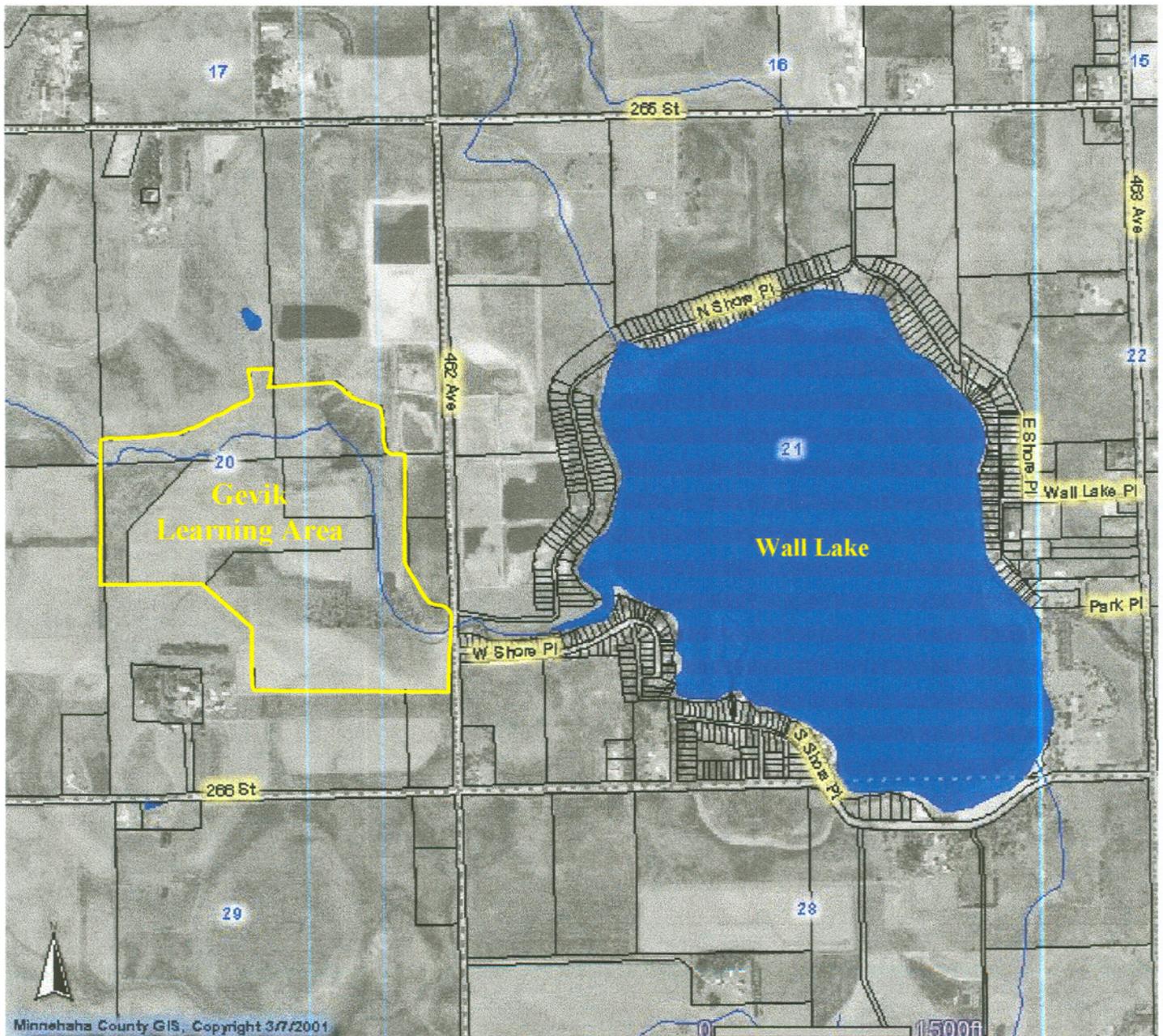




DEWEY C. GEVIK OUTDOOR CONSERVATION LEARNING AREA

"A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise."
Aldo Leopold (1886 – 1948)





MINNEHAHA CONSERVATION DISTRICT
2408 East Benson Road
Sioux Falls, South Dakota 57104
(605) 336-1527

**THE DEWEY C. GEVIK
OUTDOOR CONSERVATION LEARNING AREA**

MISSION STATEMENT

The Dewey C. Gevik Outdoor Conservation Learning Area will provide an interpretive educational experience to the public with an emphasis on conservation practices, their design, function and beneficial relationship to the environment. Through the information presented, individuals will reach a greater understanding and appreciation for wildlife, the environment, and the need for conservation of our natural resources for future generations.

A BRIEF HISTORY OF THE WALL LAKE RESTORATION

Wall Lake and the surrounding watershed is considered to be one of the most extensive lake restoration projects completed in South Dakota. Dredging of the lake took place from 1989 through the fall of 1992, yielding more than 1.6 million cubic yards of sediment from 90% of the lake basin. The sediment from the lake basin was pumped into 18 separate holding ponds that were constructed north and northwest of the lake. The area designated for the sediment holding ponds underwent reclamation activities in the fall of 1995, and is currently productive cropland.

A sanitary system was a prerequisite to any restoration work at the lake, and in 1991 construction began. At the time of construction, 68 lake area residents, one commercial property, the Girl Scout Camp and beach facilities were included in the sewer system. Through cooperation of the lake area residents, construction of the sewer system was completed in 1992.

In addition to dredging the lake, high priority was given to the establishment of Best Management Practices (BMP's) within the 3,808-acre watershed. Within the watershed, 55% of the area is cropland, and to prevent sediment and nutrients from entering the lake, land owners and operators installed and adopted a variety of BMP's that included:

- Crop Residue Management
- No-till / Ridge-till Farming
- Permanent Vegetative Cover
- Tree Plantings
- Terracing
- Grassed Waterways
- Earthen Dams
- Contour Farming

Through previous Agricultural Nonpoint Pollution Source (AGNPS) modeling and soil sampling, those priority areas in need of BMP's were identified.

The Minnehaha Conservation District restored a wetland area on the west side of Wall Lake which was dedicated as the Dewey C. Gevik Outdoor Conservation Learning Area. The Learning Area is 100 acres in size and includes native grass plantings, shelterbelt and wildlife tree plantings, bird nesting houses and a grassed waterway with a rock weir structure to stop sediment from entering the wetland. Future plans have been made to construct a trail system including interpretive signing, observation areas and other features that highlight conservation practices on the land.

Through the hard work, cooperation, and dedication of area residents, contributing organizations and agencies, the Wall Lake Restoration Project serves as a model for future restoration activities throughout the state.

THE POST ASSESSMENT

The estimated population within a 65-mile radius of the small 215-acre lake is 300,000 with heavy public recreational use year round. Before any dredging or restoration activities, Wall Lake was considered hypereutrophic (excess nutrients) and non-supporting of its designated uses. Decaying algae and other aquatic vegetation caused odor problems and impaired fishing, swimming, and beach use.

The Wall Lake Post Assessment will be a comparative analysis of previous and present watershed conditions as a result of the Wall Lake Dredging Project, Best Management Practices, and restoration activities implemented through 1995. Water quality testing will begin in September, 2001 with samples from two centrally located inlake sites and four tributary / outlet monitoring sites. Samples will be collected nine months throughout the year and during two spring runoff and storm events. Water samples have always been taken at the swimming beach on a weekly basis in the past by Minnehaha County to monitor water quality for recreation.

An evaluation of BMP's implemented before 1995 will be taken to record their location, present status, and effectiveness. Through the use of land-use simulation computer models such as AGNPS, we can evaluate the potential impact of agricultural land uses on the water quality within the watershed and identify critical areas in need of conservation practices to reduce nutrient and / or sediment loads to the lake. Information pertaining to improvement of water quality as a result of restoration activities conducted within a watershed is lacking and needs to be documented for future projects. Results from all water quality monitoring efforts will be documented in a final project report.

An informational meeting will be held for the general public and local governmental agencies in order to present information on the results of the Wall Lake Post Assessment. This meeting will also provide an opportunity for local agricultural producers and residents in the Wall Lake area to voice any concerns, ask questions and get involved with the conservation and preservation of our natural resources.

CONSERVATION LEARNING AREA GOALS AND OBJECTIVES

I) GOALS

- A) Increase public awareness of conservation practices and techniques
- B) Educate public about various tree, shrub and grass species.
- C) Educate public on wildlife species present in wetland
- D) Provide information on Wall Lake restoration activities
- E) Increase public's understanding of importance of a watershed / wetlands / water quality

II) OBJECTIVES

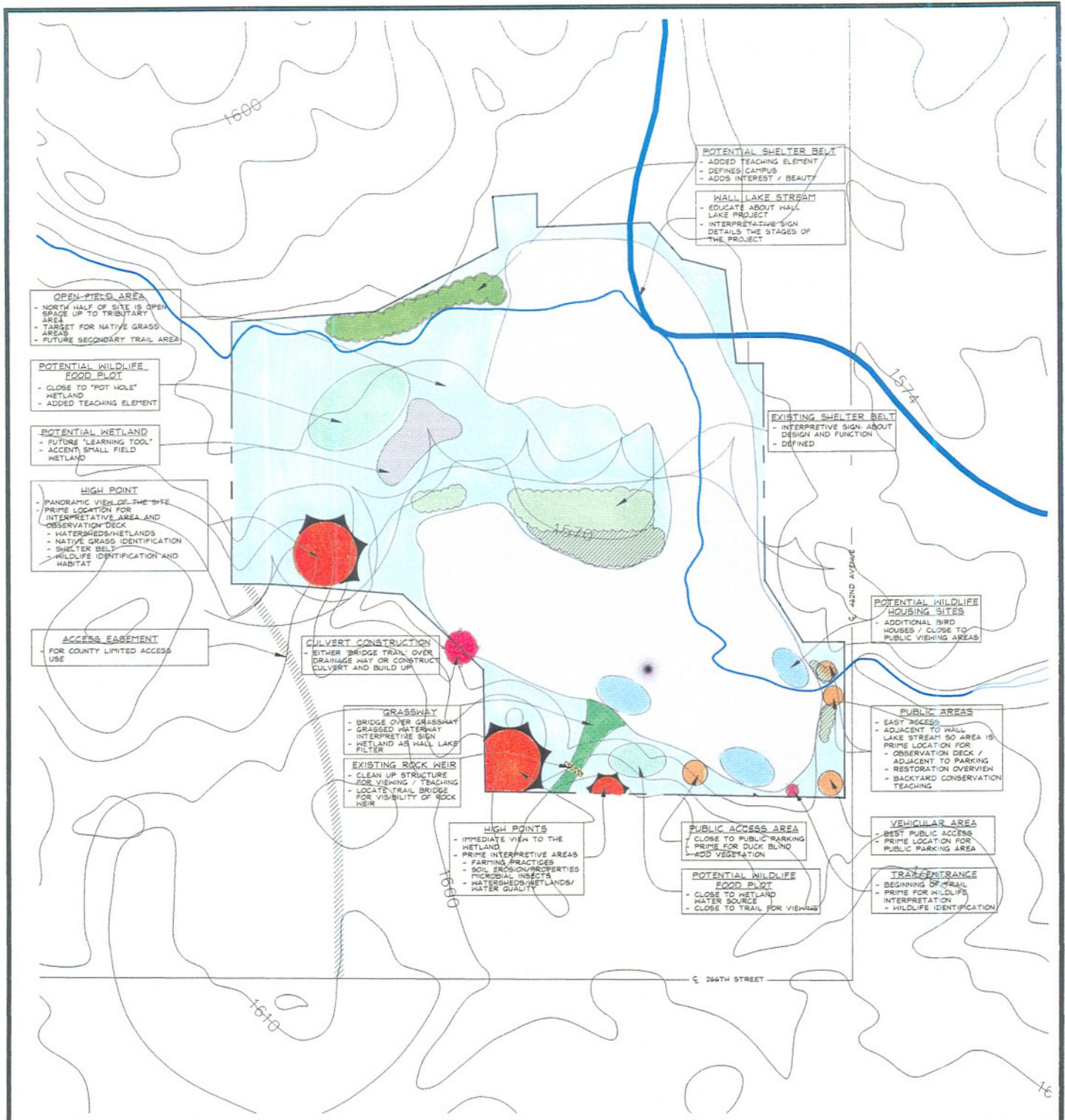
- A) Establishment / Construction of Best Management Practices
 - 1) Grassed waterway with rock weir structure
 - a) Constructed summer 2001
 - b) Signing: Waterway design and function, grasses used, weir structure design and function.
 - 2) Terraces
 - a) Construction of terraces
 - b) Signing: Design and function
 - 3) Shelterbelt plantings
 - a) Constructed summer 1999
 - b) Signing: Shelterbelt design and function
 - 4) Additional interpretive information
 - a) Highlight different farming practices used and why
 - 1) Contour farming
 - 2) No-till / Ridge-till farming
 - 3) Feedlot location / waste management programs / designs
 - 4) Buffer strips / Riparian zones
 - b) Soil
 - 1) Soil erosion
 - 2) Microbial insects
 - 3) Soil properties
 - c) Backyard Conservation Activities
 - 1) Tree Planting
 - 2) Wildlife Habitat
 - 3) Composting
 - 4) Mulching
 - 5) Water Conservation

- B) Construction of interpretive areas
 - 1) Native grass plantings
 - a) Native grass planting throughout area
 - b) Construction of native grass plots identifying specific species / characteristics
 - c) Signing: Identify native grasses
 - 2) Additional tree plantings
 - a) Signing: Identify tree species / characteristics
 - 3) Construction of interpretive trail throughout area (handicap accessible)
 - 4) Construction of parking lot

- C) Wildlife identification
 - 1) Construction of duck blinds
 - 2) Construction and install additional bird houses
 - 3) Signing: Identification of wetland wildlife
 - 4) Establish wildlife food plots

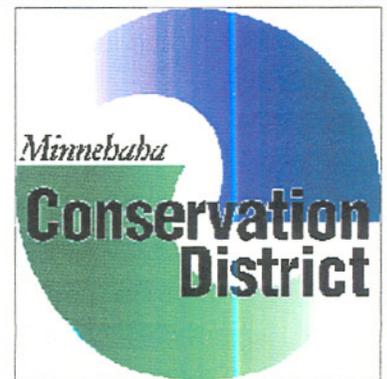
- D) Inform public
 - 1) Overview and history of restoration activities taken place
 - a) Dredging activities
 - b) BMP's installed

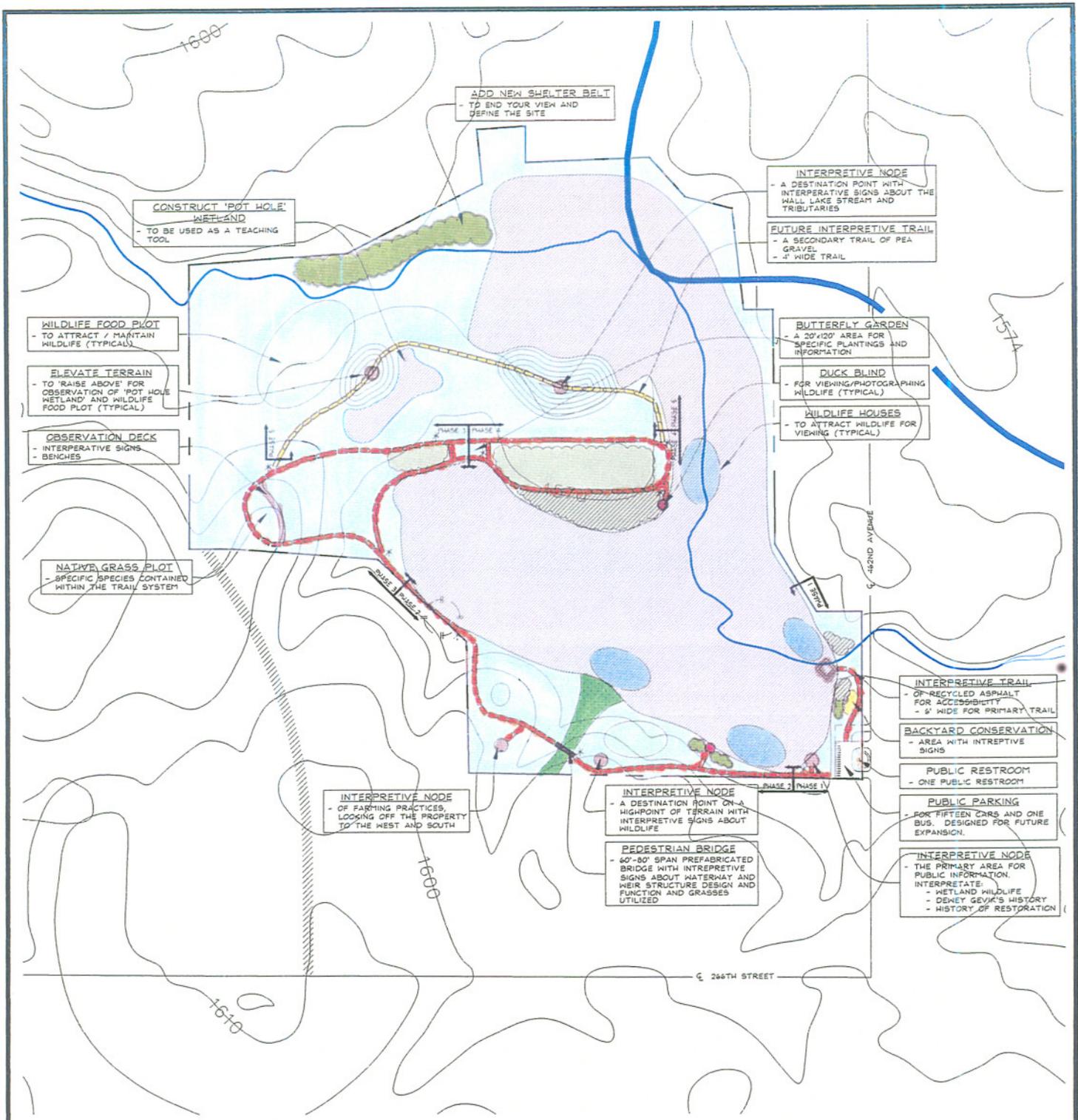
- E) Provide information on watersheds / wetlands and how they relate to water quality
 - 1) Construction of observation deck
 - 2) Signing: Microbial activity and biodiversity in a watershed – how insects and fish are related to water quality.



Dewey Gevik Outdoor Conservation Learning Area

Site Analysis





Dewey Gevik Outdoor Conservation Learning Area

Master Plan





**Dewey Gevik Outdoor Conservation Learning Area
Master Plan Cost Estimate
January 30, 2003**

**Phase 1: Development of the public areas up to and including
the trail entrance and the wetland observation deck.**

Parking Lot: 65' x 143'	\$ 17,255
<u>Data:</u> 15 car and one bus lot	
3" asphalt on 6" of gravel	
Two access driveways	
No curb/gutter; +15 parking stops	
Primary Trail: 610 lin. ft.	\$ 880
<u>Data:</u> Six feet wide	
No edging (in ground)	
3" recycle asphalt	
Positive cross slope	
Wetland	
Observation Deck: 1,800 sq. ft. surface area	\$ 29,900
<u>Data:</u> Recycle lumber decking	
On concrete piers	
Includes 10 interpretive signs	
Includes 6 – 6' benches	
Includes 1 – recycle trash center	
Interpretive Node: 6' diameter area plaza	\$ 1,850
<u>Data:</u> 113 sq. ft. of area	
Surface is 'board stamped' concrete	
Includes 3 – 24" x 36" interpretive signs	
Trail Entrance:	<u>\$ 1,550</u>
<u>Data:</u> Consists of 1 trail marker,	
1 concrete bollard to restrict access	
And 1 recycle trash center	
Subtotal	\$ 51,435
<u>Minnehaha Conservation District Allowances:</u>	
Tree plantings	\$ 1,000
Backyard Conservation Area Items	\$ 3,000
Relocation of park identity sign	<u>\$ 500</u>
Subtotal for Allowances	\$ 4,500
Contingency 10%	<u>\$ 5,143</u>
TOTAL FOR PHASE ONE (w/o allowances)	\$ 56,578

Highpoint		
Observation Deck: 770 sq. ft. surface area		\$ 11,615
<u>Data:</u> Concrete plaza with 'board stamped' finish		
Includes 11 – 24"x36" interpretive signs		
Includes 6 – 6' backless benches		
Includes 2 – recycle trash center		
Trail Markers: Two		<u>\$ 2,300</u>
<u>Data:</u> Consists of two locations,		
Plastic lumber with signs and distance,		
And 1 recycle trash center per location		
Subtotal		\$ 35,670
 <u>Minnehaha Conservation District Allowances:</u>		
Native Grasses	<u>\$ 800</u>	
Subtotal of Allowances	<u>\$ 800</u>	
Contingency 10%		<u>\$ 3,567</u>
TOTAL FOR PHASE THREE(w/o allowances)		\$ 39,237

Phase 4: *Development of the remaining primary trail and the duck blind area.*

Primary Trail: 2,000 lin. ft.		\$ 2,890
<u>Data:</u> Six feet wide		
No edging (in ground)		
3" recycle asphalt		
Positive cross slope		
Trail Markers: Two		<u>\$ 2,300</u>
<u>Data:</u> Consists of two locations,		
Plastic lumber with signs and distance,		
And 1 recycle trash center per location		
Subtotal		\$ 5,190
 <u>Minnehaha Conservation District Allowances:</u>		
Duck blind	<u>\$ 750</u>	
Wildlife housing	<u>\$ 300</u>	
Subtotal of Allowances	<u>\$ 1,050</u>	
Contingency 10%		<u>\$ 519</u>
TOTAL FOR PHASE FOUR(w/o allowances)		\$ 5,709



Minnehaha Conservation District
DEWEY C. GEVIK OUTDOOR CONSERVATION LEARNING AREA

Doug Backlund
SD Game, Fish and Parks
523 E. Capitol
Joe Foss Building
Pierre, SD 57501-3182

December 2, 2004

Mr. Backlund,

This letter is to inform you of the progress made at the Dewey C. Gevik Outdoor Conservation Learning Area under the Wildlife Diversity Small Grants Program sponsored by the Izaak Walton League of Sioux Falls.

In reference to the timeline established in the grant application, trail construction can be considered behind schedule. The Minnehaha Conservation District has needed to legally survey the south west corner of the Learning area in order to establish property boundaries for the trail to continue. Trail construction has again started and excavation is finished. Once the trail is completed the construction of the wildlife observation blinds and food plot can be established.

The shelterbelt planting was completed on schedule and fabric weed barrier applied. A survival check was done in October averaging 97% survival of species planted. Native grass has been allowed to grow within the planting in order to provide winter protection for the seedlings.

If you have any concerns or questions please contact the Minnehaha Conservation District at (605)336-1527.

Sincerely,

A handwritten signature in blue ink, appearing to read "Gary Olson", is written over a blue circular stamp.

Gary Olson
Project Coordinator / Conservation Technician
Minnehaha Conservation District

Conservation Tree Planting Plan

Cooperator: Gevik IKE's

Home Number: 332-9527

Plan Number: M048084

Address: 5000 E. Oakview Pl

Work Number:

North ↑

City: Sioux Falls

State: SD

Zip: 57110

Tax Rate: NA

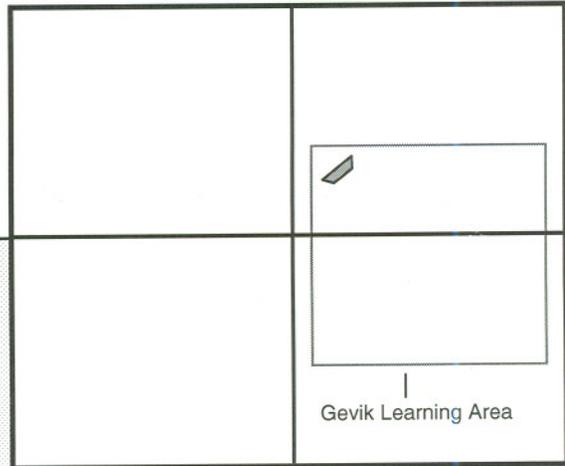
Site Addr: Gevik Learning Area - Wall Lake

Alt. Number:

Section 20

Twp 101

Range 51



Type Planting: Wildlife Shelterbelt

Program: NA

Plan Date: 1-15-04

Practice Number: NA

Revised:

Cover: Grasses

Confirmed: 3/22/04

Suitability Group: EaB-Ile3-Ille8

Method: Machine

By: Gary Olson

Comments:

PLANTING INFORMATION				PLANNED					APPLIED					
Site No.	Spacing		Row No.	Species from North or West	Sp. in Row	Approximate Length of Rows		No. of Plants	Seedling Source	Measurements Length		Total No. of Plants	Actual # Dead	Survival %
	ISO	Row				Feet	Rods			Feet	Rods			
				Slough										
	14		1	Laural Leaf Willow	8	700	42.4	88	L5B07/L5B12	712	43.2	89	3	97%
		14	2	Chokecherry	8	740	44.8	93	D1B06	752	45.6	94	5	95%
		14	3	Amur Maple	8	785	47.6	98	N3B07/N4B01	768	46.5	96	8	92%
		14	4	Plum	8	800	48.5	100	R3B02	792	48.0	99	2	98%
		14	5	Gray Dogwood	6	840	50.9	140	G4B05	804	48.7	134	0	100%
		14	6	Black Chokeberry	4	870	52.7	218	G5B08	840	50.9	210	3	99%
	14			Field										
Totals					Acres	Shrubs	Trees	Plants	Acres	Shrubs	Trees	Plants	Total Dead	AVG.
	28	70			1.8	103.6	183.3	736	1.8	99.6	183.3	722	21	97%

Date Planted: 5/27/2004
 Planted By: HS,SS,JW
 Fabric Date: 6/15/2004
 Installed By: BS +8
 Survival: 7/21/2004
 # of Rolls: 6.2

<p style="text-align: center;">Additional Services</p> <p style="text-align: center;">Fabric <u>239.4</u> Rod Rows</p> <p style="text-align: center;">Roto Mow _____ Acres</p> <p style="text-align: center;">Site Prep. _____ Roundup Strips</p> <p style="text-align: center;">Cultivation _____ Acres</p>	<p style="text-align: center;">Additional Services</p> <p style="text-align: center;">Fabric <u>282.9</u> Rod Rows</p> <p style="text-align: center;">Treflan _____ Acres</p> <p style="text-align: center;">Site Prep. _____ Roundup Str.</p> <p style="text-align: center;">Cultivation _____ Acres</p>
---	--



Minnehaha Conservation District

2408 E. Benson Road
 Sioux Falls, SD 57104
 Phone (605) 336-1527

BILL TO

Izaak Walton League
 5000 E. Oakview Pl.
 Sioux Falls, SD 57110

DATE INVOICE #
 6/29/2004 8084

ITEM	DESCRIPTION	QTY	RATE	AMOUNT
8' Spacing	Laurel Leaf Willow	89	0.50	44.50
8' Spacing	Chokecherry	94	0.50	47.00
8' Spacing	Amur Maple	96	0.50	48.00
8' Spacing	Native Plum	99	0.50	49.50
6' Spacing	Gray Dogwood	134	0.50	67.00
4 Spacing	Black Chokeberry	210	0.50	105.00
	Subtotal for Tree Planting			361.00
Fabric Instal	Machine Fabric Installation	282.9	3.36511	951.99
	Subtotal Fabric Installation			951.99

DUE UPON RECEIPT

Total \$1,312.99

Method of Payment:

VISA Master Card
 Diner's Club Check or Money Order Enclosed

Card No.

Exp. Date ___/___/___

 Your Signature



HAGEN ROCK & GRAVEL CO.
 P.O. Box 88510
 SIOUX FALLS, SD 57109-8510

(605) 332-5275

invoice

DATE INVOICE NO.

10/31/2004 2045381

BILL TO:

Minnehaha Conservation Dist
 2408 E Bensen Rd
 Sioux Falls SD 57104

SHIP TO:

1 W Wall Lake Corner

P.O. NUMBER	TERMS	REP	SHIP	VIA	F.O.B.	PROJECT
			10/27/2004			

QUANTITY	ITEM CODE	DESCRIPTION	PRICE EACH	AMOUNT
3	2-5"	10/27 loads 2-5" rock Tax exempt	95.00 0.00%	285.00T 0.00
Please pay from this invoice			TOTAL	\$285.00

1 1/2 % (18% Annual) added to all past due invoices



Completed 1,000 ft. crushed asphalt trail. South to West.



Excavation of trail system North.



Excavation of trail system North and West.



Gravel fill in SW corner. Crushed asphalt trail will continue to the North and West.