Minnehaha Conservation District

JAN 14 2003

1/09/04
Minnehaha Conservation District
2408 East Benson Road
Sioux Falls, SD 57104
336-1527

SD GF&P
Doug Backlund
523 E. Capitol
Joe Foss Building
Pierre, SD 57501

Doug:
I am sending you information on the Dewey C. Gevik Outdoor Conservation Learning Area in reference to our telephone conversation on 1/9/2004.

The Minnehaha Conservation District is committed to the development of the Learning Area and has recently purchased 20 additional acres allowing us to begin development of the trail system. The 100 acre restored wetland is an ideal location for an interpretive educational area given the close proximity to Sioux Falls and area communities. In addition to the land acquisition, the MCD has accomplished the following:

- Design and installation of a grassed waterway with a rock weir structure for sediment control.
- Native grass establishment throughout the area.
- Construction of a 150' x 60' gravel / asphalt parking lot area.
- 150' of crushed asphalt hiking trail.
- Septic tank installed for the restroom facility.
- Over 1.5 acres of tree plantings with fabric weed barrier.
- Removal of dead timber, barbed wire and fence posts.

The District is currently seeking funding for further development of the Learning Area and I greatly appreciate any advice or guidance offered.

Sincerely,

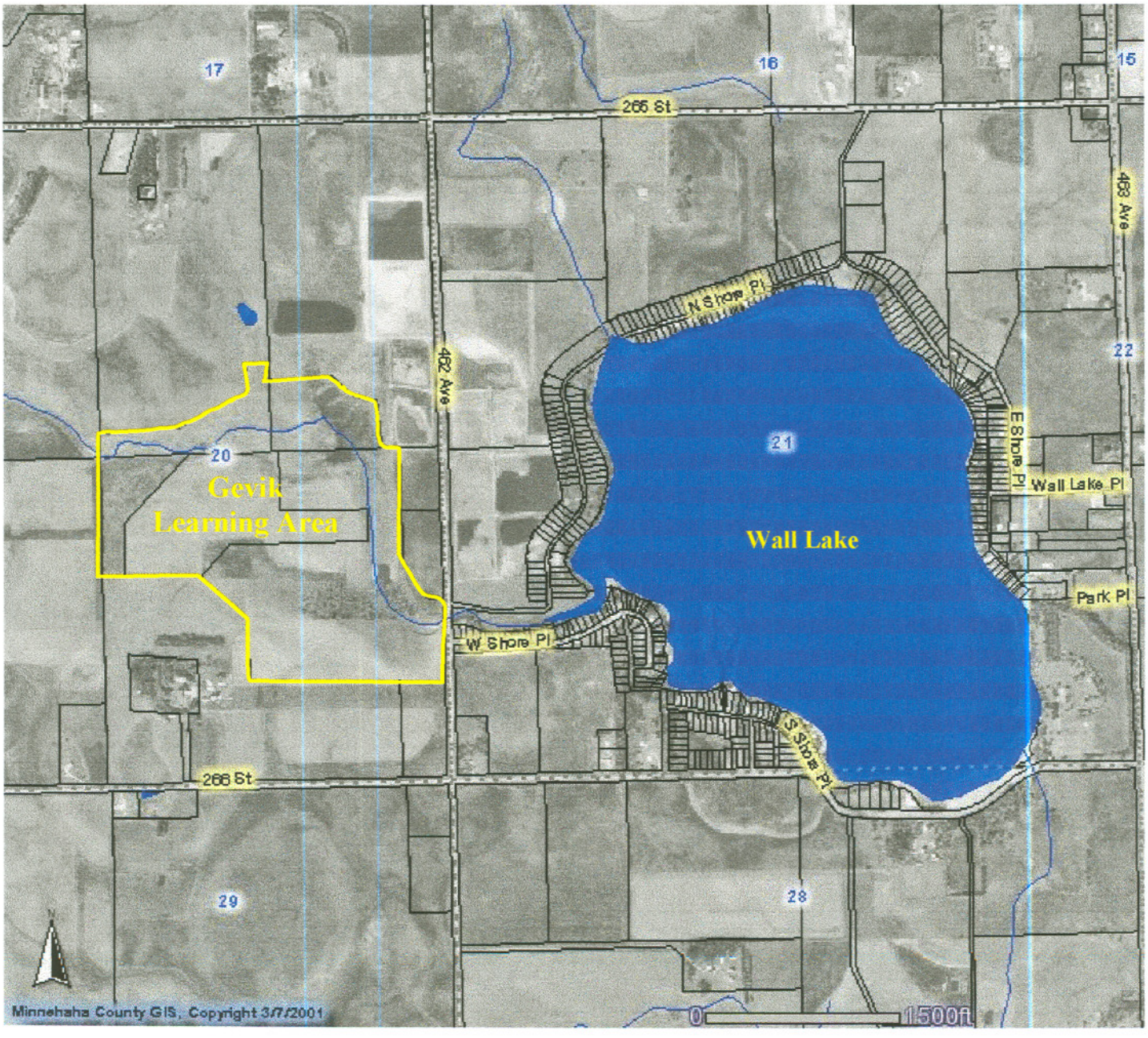
Gary Olson
Conservation Technician / Project Coordinator
Minnehaha Conservation District

Enclosures

Minnehaha Conservation District

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 it's 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 began 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 publics understanding of importance of a watershed / wetlands / water quality

II) OBJECTIVES

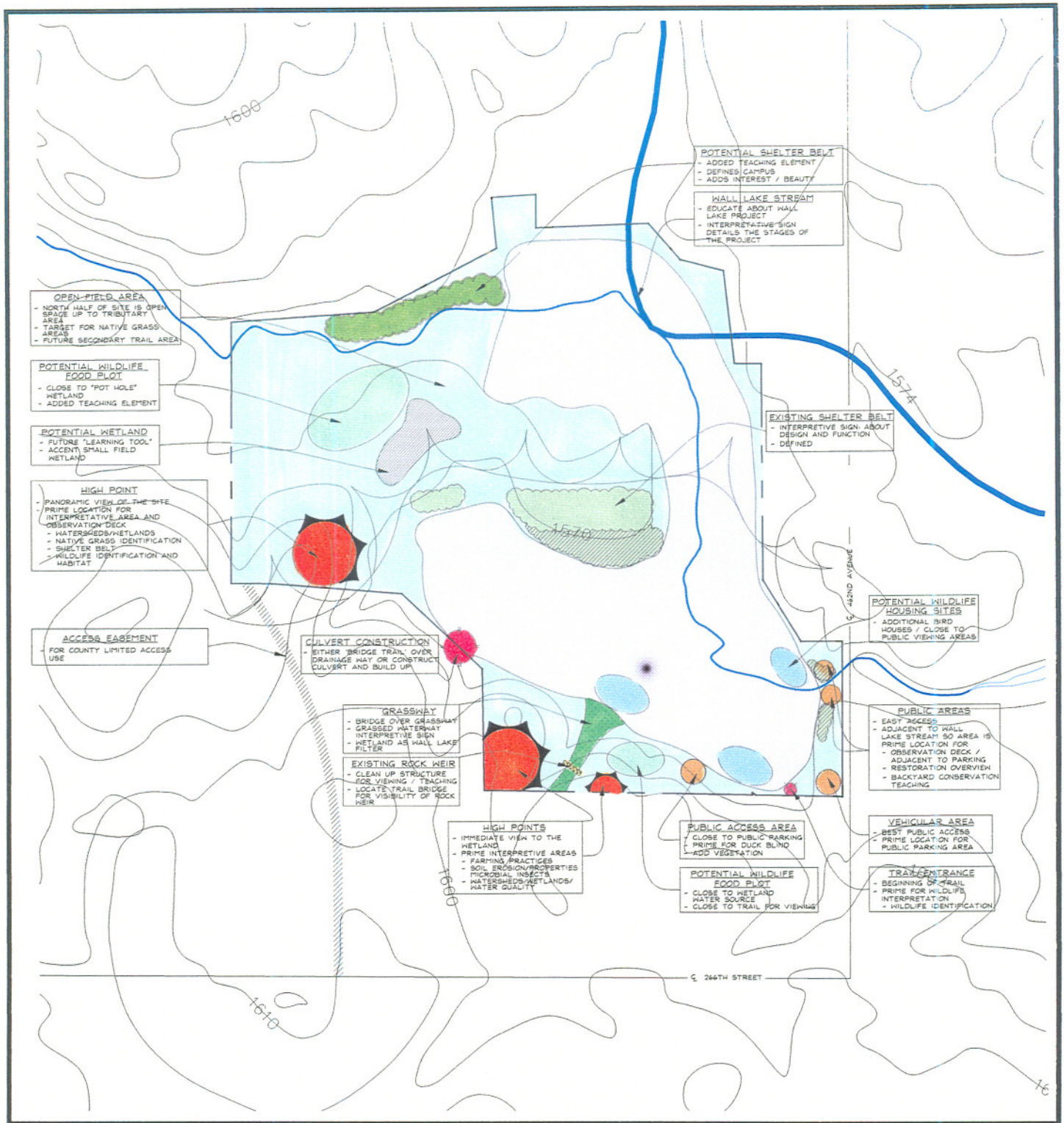
A) Establishment / Construction of Best Management Practices
    1) Grassed waterway with rock weir structure
        a) Constructed summer 2001
        b) Signing: Waterway design and function, grasses used, weir structure design and function.
    2) Terraces
        a) Construction of terraces
        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.

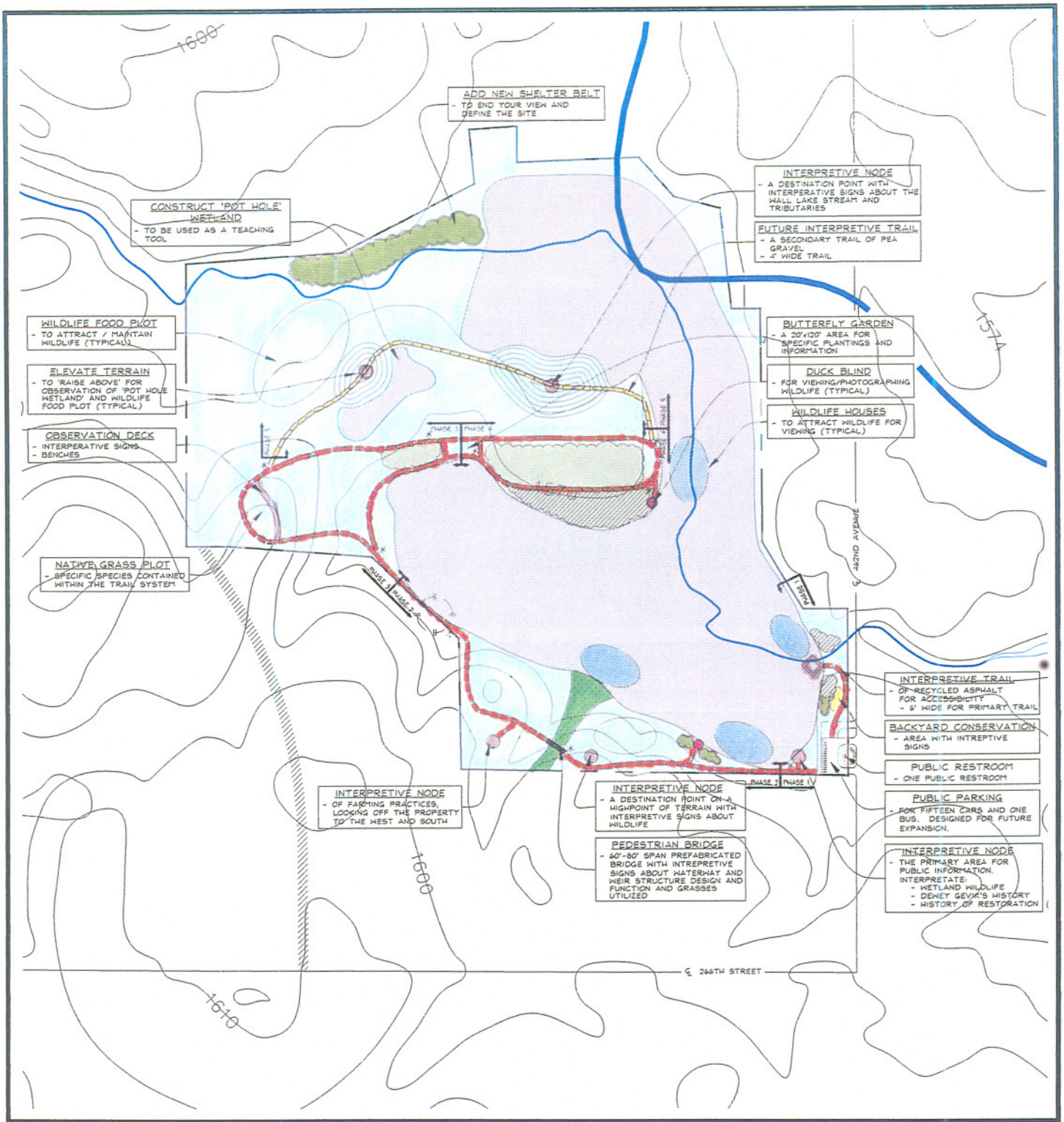


Dewey Gevik Outdoor Conservation Learning Area

Site Analysis

LANDSCAPE CONCEPTS
DESIGN • PLANNING • ANALYSIS

Minnehaha Conservation District



Dewey Gevik Outdoor Conservation Learning Area

Master Plan

LANDSCAPE CONCEPTS
DESIGN • PLANNING • ANALYSIS

Minnehaha Conservation District

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
Data: 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
Data: Six feet wide No edging (in ground) 3" recycle asphalt Positive cross slope		
Wetland Observation Deck: 1,800 sq. ft. surface area		$ 29,900
Data: 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
Data: 113 sq. ft. of area Surface is 'board stamped' concrete Includes 3 – 24" x 36" interpretive signs		
Trail Entrance:		$ 1,550
Data: Consists of 1 trail marker, 1 concrete bollard to restrict access And 1 recycle trash center		
Subtotal		$ 51,435
Minnehaha Conservation District Allowances:		
Tree plantings	$ 1,000	
Backyard Conservation Area Items	$ 3,000	
Relocation of park identity sign	$ 500	
Subtotal for Allowances	$ 4,500	
Contingency 10%		$ 5,143
TOTAL FOR PHASE ONE (w/o allowances)		**$ 56,578**

Phase 2: ***Extension of primary trail up to and including the culvert crossing area.***

Pedestrian Bridge: 80' span		$ 28,000
Data: 6' wide Milled extruded aluminum Wood polymer composite decking		
Primary Trail: 1,720 lin. ft.		$ 2,480
Data: Six feet wide No edging (in ground) 3" recycle asphalt Positive cross slope		
Interpretive Nodes: Two - 6' diameter area plaza		$ 3,720
Data: 113 sq. ft. of area per plaza Surface is 'board stamped' concrete Includes 3 – 24" x 36" interpretive signs per plaza		
Trail Markers: Three		$ 3,450
Data: Consists of 1 trail marker, Plastic lumber with signs and distance, And 1 recycle trash center_		
Subtotal		$ 37,650
Minnehaha Conservation District Allowances:		
New plantings	$ 1,000	
Two tier duck blind	$ 750	
Culvert crossing	$ 500	
Wildlife food plot	$ 300	
Wildlife housing	$ 200	
Subtotal of Allowances	$ 2,750	
Contingency 10%		$ 3,765
TOTAL FOR PHASE TWO(w/o allowances)		**$ 41,410**

Phase 3: ***Development of the primary trail through the first loop of the trail.***

Parking Lot Expansion: 65' x 66'	$ 10,085
Data: 7 additional cars and 1 additional bus space 3" asphalt on 6" of gravel Two access driveways (one driveway is relocated) No curb/gutter; +7 additional parking stops	
Prefabricated ADA Rest Room Unit: 10' x 10'	$ 8,000
Data: A prefabricated unisex unit	
Primary Trail: 2,550 lin. ft.	$ 3,670
Data: Six feet wide No edging (in ground) 3" recycle asphalt Positive cross slope	

Highpoint			
Observation Deck: 770 sq. ft. surface area			$ 11,615
Data:	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			$ 2,300
Data:	Consists of two locations,		
	Plastic lumber with signs and distance,		
	And 1 recycle trash center per location		
Subtotal			$ 35,670
Minnehaha Conservation District Allowances:			
	Native Grasses	$ 800	
Subtotal of Allowances		$ 800	
Contingency 10%			$ 3,567
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
Data:	Six feet wide		
	No edging (in ground)		
	3" recycle asphalt		
	Positive cross slope		
Trail Markers: Two			$ 2,300
Data:	Consists of two locations,		
	Plastic lumber with signs and distance,		
	And 1 recycle trash center per location		
Subtotal			$ 5,190
Minnehaha Conservation District Allowances:			
	Duck blind	$ 750	
	Wildlife housing	$ 300	
Subtotal of Allowances		$ 1,050	
Contingency 10%			$ 519
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,

Gary Olson
Project Coordinator / Conservation Technician
Minnehaha Conservation District

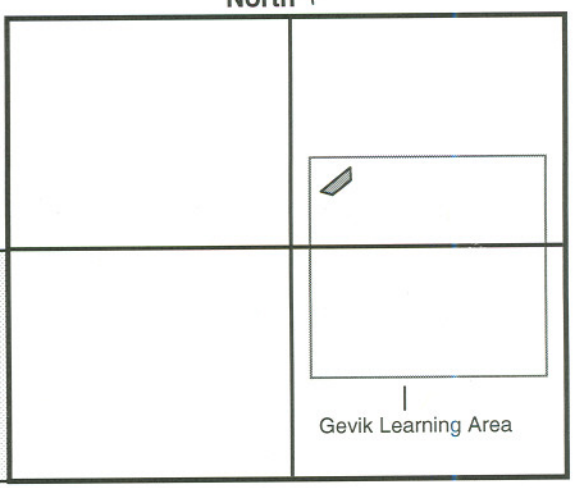
Conservation Tree Planting Plan

Cooperator: Gevik IKE's
Address: 5000 E. Oakview Pl
City: Sioux Falls
State: SD
Zip: 57110
Tax Rate: NA
Site Addr: Gevik Learning Area - Wall Lake

Home Number: 332-9527
Work Number:
Alt. Number:

Section 20
Twp 101
Range 51

Plan Number: M048084



Type Planting: Wildlife Shelterbelt
Program: NA
Practice Number: NA
Cover: Grasses
Suitability Group: EaB-IIe3-IIIe8
Method: Machine

Plan Date: 1-15-04
Revised:
Confirmed: 3/22/04
By: Gary Olson

Comments:

PLANTING INFORMATION

Site No.	Spacing ISO	Spacing Row	Row No.	Species from North or West	PLANNED Approximate Sp. in Row	Length of Rows Feet	Length of Rows Rods	No. of Plants	Seedling Source	APPLIED Measurements Length Feet	Measurements Length Rods	Total No. of Plants	Actual # Dead	Survival %
				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										
	Width			**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

Additional Services
Fabric 239.4 *Rod Rows*
Roto Mow _____ *Acres*
Site Prep. _____ *Roundup Strips*
Cultivation _____ *Acres*

Additional Services
Fabric 282.9 *Rod Rows*
Treflan _____ *Acres*
Site Prep. _____ *Roundup Str*
Cultivation _____ *Acres*

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	95.00	285.00T
		Tax exempt	0.00%	0.00
			TOTAL	$285.00

Please pay from this invioce

1½% (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.