

WATER PERMIT NO. 6714-3

Name of Applicant: Richard Emmerich

Address: 37996 167th St, Redfield SD 57469

Phone:

Amount of Water Claimed: 36.50 AF

Total Acres: NA

Source of Water Supply: unnamed tributary to South Fork Snake Creek

Water to be used for: fish & wildlife propagation

County: Faulk

Type of Waste Disposal System:

Location: 16 miles east of Faulkton

PRIORITY

Date Received: 4-13-06

Application/License Fee: \$200

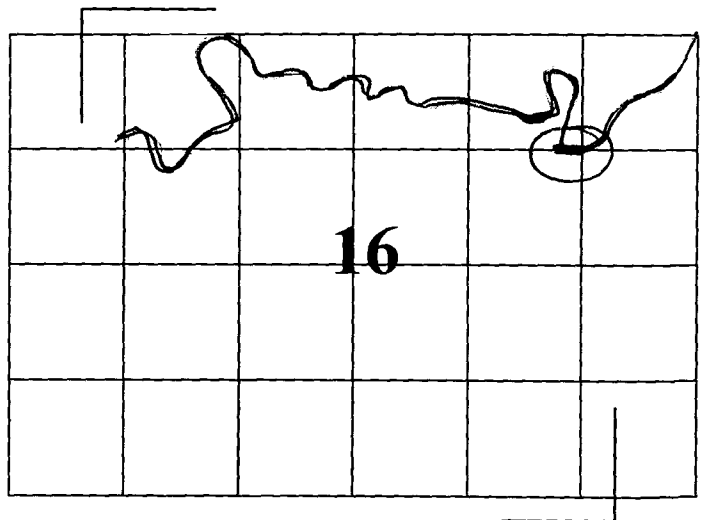
Corrected Application Received:

Period of Annual Use: January 1 – December 31

Remarks: reconstructing an existing dam

Diversion Point: E ½ NE ¼ Sec 16-T118N-R66W

Water Impounded: E ½ NE ¼ Sec 16-T118N-R66W



Depth of Well: NA

Well Driller:

Remarks:

Type of Map: topo

Prepared by: Roger Smith, PE

Reviewed and the Number Assigned on: 4-13-06

By: Karen Schlaak

Notice of Hearing - date to intervene: _____

Mail to: Water Rights Program Joe Foss Building 523 E. Capitol Pierre, SD 57501-3181 (605) 773-3352	No. <u>6714-3</u>	(office use only) Hydrologic Unit <u>10160009</u>
	Basin <u>James River</u>	
	Newspaper <u>Faulk Co Record Faulkton</u>	
	<u>605-598-6525</u>	<u>57438</u>

RECEIVED

APR 13 2006

WATER RIGHTS
PROGRAM

Application For Permit To Appropriate Water Within The State Of South Dakota

Check use(s) of water:

- | | | | |
|---|---|---|--|
| ☐ Municipal | ☐ Suburban Housing | ☐ Recreational | ☐ Institutional |
| ☐ Rural Water System | ☐ Commercial | ☒ Fish & Wildlife | ☐ Geothermal Heat |
| ☐ Domestic (over 18 gpm) | ☐ Industrial | ☐ Other _____ | |

Type of Application:
(check one)

- ☒ New ☐ Vested Right (Use predates Mar 2, 1955) ☐ Future Use Reservation
- ☐ Place to Beneficial Use Water Reserved by Future Use Permit No. _____
- ☐ Amendment/Correction to Permit No. _____

Description of amendment/correction: (i.e. change diversion point(s), add diversion point(s), change use, etc.)

1. Name of Applicant Richard Emmerich Phone 605-472-1071
(check one) ☒ Owner ☐ Tenant/lessee
- Mailing Address 37996 167th Street Redfield State SD 57469
(Street, RR, or Box and City) (Zip Code)
2. Amount of water claimed _____ *CFS or _____ **GPM 36.50 ***AF
(*Cubic Feet per Second) (**Gallons per Minute) (**Acre Feet - storage capacity of dam/dugout or annual use if applicable)
3. Source of water supply Unnamed tributary to the South Fork Snake Creek
4. Location of point of diversion (example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W) County Faulk
SE 1/4, NE 1/4, SECTION 16, TWP. 118 N RGE. 66W. Latitude 40° 02' 16" Longitude 98° 46' 47"
E 1/2 WATER impounded: E 1/2 NE 1/4 Sec 16 T118N R66W
5. County or counties where water will be used Faulk County
6. Annual period during which water is to be used 12 months Jan 1 - Dec 31
7. Give a description of the project. When available include any preliminary engineering report or other reports or information that will help explain the project. (Attach sheet if more space is needed)

The project consists of reconstructing an existing dam, installing a primary spillway, and excavating a new emergency spillway.

STATE OF SOUTH DAKOTA)

County of Spink SS

Attachments: Attach Form 2A if diversion is from a well or dugout, or if storage of water is proposed. Attach map and any other technical information. (see instructions)

I, Richard Emmerich, the applicant, certify that I have read this application, have examined the attached map and that the matters stated are true and that I intend, and am able to complete the necessary construction.

Applicant's signature Richard EmmerichSubscribed and sworn to before me this 4th day of April 2006

KATHY LUDWIG
SEAL NOTARY PUBLIC SEAL
SOUTH DAKOTA

Kathy Ludwig
Notary Public Signature my commission expires 7-20-2009

**SOUTH DAKOTA
WATER PERMIT NO. 6714-3**

Date of first receipt of application April 13, 2006.

Date of receipt of corrected application December 20, 2006.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 6714-3 to Richard Emmerich, 37996 167th St, Redfield SD 57469 authorizing the construction of the dam and the placing of water to beneficial use subject to the following limitations, conditions and qualifications:

1. Water Permit No. 6714-3 authorizes impoundment 36.50 acre-feet of water from an unnamed tributary of the South Fork Snake Creek by reconstructing a dam located in the E ½ NE ¼ Section 16 with water impounded in the E ½ NE ¼ Section 16; all in T118N-R66W.
2. The water appropriated shall be used for the purpose of fish and wildlife propagation and may not exceed the amount of water needed for beneficial use.
3. The water is to be used during the following described annual period: January 1 – December 31.
4. The date of approval of Permit No. 6714-3 is February 5, 2007.
5. The date from which applicant may claim right is December 20, 2006.
6. One-fifth of the construction is to be completed on or before August 5, 2009.
7. All construction is to be completed on or before February 5, 2012.
8. Water is to be put to beneficial use on or before February 5, 2016.
9. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

QUALIFICATIONS

1. Water Permit No. 6714-3 authorizes a dam with a storage capacity of 36.5 acre feet of water and sufficient water annually to maintain the water level to the outlet elevation of 1,351 feet mean sea level.
2. Low flows as needed for downstream domestic use, including livestock water and prior water rights must be by-passed.

WATER MANAGEMENT BOARD

By: Garland Erbele

Garland Erbele, Chief Engineer
Water Rights Program
Department of Environment and Natural Resources

APR 20 2007
date



(type or print in ink)

1. Well Information - Proposed Construction

- a) Drill Hole Diameter _____ Depth _____
- b) Casing Type _____ Diameter _____ Thickness _____
- c) Screen Type _____ Diameter _____ Thickness _____
- d) Gravel Pack _____ Length of Gravel Pack _____
- e) Depth to Top of Water Bearing Material _____
- f) Depth to Water (ground surface to water level) _____
- g) Distance to nearest existing domestic well:
- On applicants property _____ On property owned by others _____

2. Wastewater Disposal System Information

- a) Type of System (i.e. septic tank, drain field) _____
- b) System Capacity (gallons) _____ Year Constructed _____
- c) Connected to the City of _____ Sanitary System

3. Dugout Information

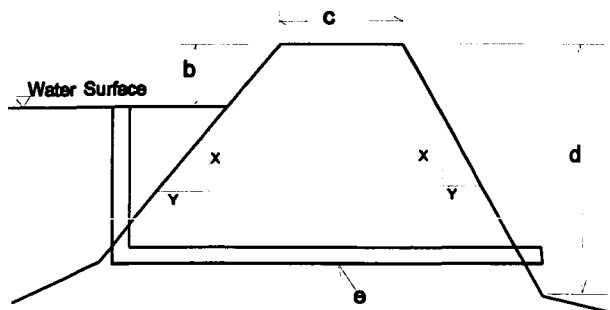
- a) Surface Dimensions _____ Depth _____
- b) Depth to water (ground surface to water level) _____

4. Water Storage Dams

If the proposed water use system contains one or more storage dams, please furnish the information requested below for each dam. The locations of the dams need to be shown on the map submitted with the application.

- a) If a private engineering firm or government agency was involved in the design of this dam, please give their name and address:

Ducks Unlimited
Roger Smith, P.E. Engineer
2525 River Road
Bismarck, ND 58503



- b) Freeboard _____ 4'
- c) Crest Width _____ 12'
- Crest Length _____ 560'
- d) Height _____ 11'
- e) Primary Outlet Capacity _____ 222 cfs
- If pipe, diameter _____ 48" CMP
- f) Secondary Spillway Capacity _____ 250 cfs
- Spillway Width _____ 50'
- g) X & Y Slope _____ 3:1
- Upstream _____ 3:1w/ 10'berm fsl
- Downstream _____ 3:1
- h) Surface Area of Impoundment _____ 25.5
- i) Storage _____ 36.5 _____ Acre Feet
- j) Drainage Area Above Dam _____ 2,483.4 _____ Acres





LOCATION NOTICE
FOR DAM/DUGOUT

Mail to: Water Rights Div.

DENR, Foss Bldg.
Pierre, SD 57501
(605) 773-3352

Faulk
COUNTY

Location Notice No.

74552

I, Troy Becker, of

HCR 1, Rockham, SD 57470

Address & Zip Code

Faulk

County

Troy Becker, of the following described land, do hereby
(owner or operator)

notify the Water Management Board of the State of South Dakota and all others concerned that I am exercising my right under SDCL 46-4, for construction of a dam/ditch plug for the purpose of impounding runoff waters for wildlife purposes.

The following data is presented in compliance with SDCL 46-4-3 and 46-4-4.

(1) Date of:

(a) This notice August 26, 1996

(b) Proposed construction fall 1996

(2) Legal description of the land upon which the dam/dugout is located:

T118N-R66W-NW 1/4 NW 1/4 Sec. 15

(describe to nearest 40 acre sub-division)

(3) Location of the dam/dugout from a section corner:

(see attached aerial photo)

(4) County Faulk

(5) The owner of the land Troy Becker

(6) Acre feet of water claimed annually 1.0

Notes: If the storage of the proposed structure at the spillway crest overflow elevation exceeds twenty five (25) acre feet, a water permit from the Water Management Board is required. A location notice is only required on a dugout, if the dugout captures surface runoff waters.

** Continue on next page **

(7) Complete the following information for the proposed dam/dugout:

*Items to be completed for a dugout

*a) Dam/Dugout designed by Sand Lake NWR
RR 1 Box 25 Columbia, SD 57433

b) Freeboard feet

d) Height 2.0 feet

*Depth, if Dugout 12 feet

c) Crest width 12 feet

e) Outlet Dimensions

Pipe dia. feet

Crest Length 100 feet

Spillway width feet

f) X & Y Slope:

Upstream 3:1

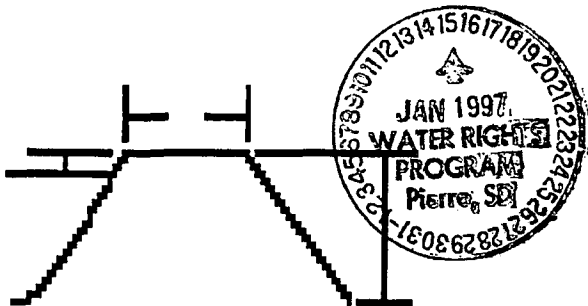
Downstream 3:1

*g) Water Surface Area 0.1 acres

*h) Storage at spillway crest or
overflow elevation (acre feet) 1.0

i) Maximum storage to top of dam.
(acre feet) 1.0

*j) Drainage area 40 acres



Enclosed herewith is ten dollars (\$10.00). The Water Management Board is requested to file this Location Notice in their official records. A copy of this Location Notice has been filed (do not record) with the Register of Deeds of Faulk County in accordance with SDCL 46-4-3.

Troy Becker

owner

STATE OF SOUTH DAKOTA)
COUNTY OF Faulk)

U.S.F.W.S.

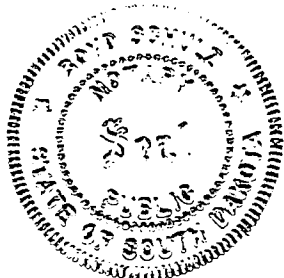
LOCATOR

I, Troy Becker the applicant, certify that I have read this Location Notice and that the matters stated in this notice are true and that I intend, and am able to start construction within sixty days after the filing of this notice

Signed Troy Becker

Subscribed and sworn before me this 5th day of September, 1998

(seal)



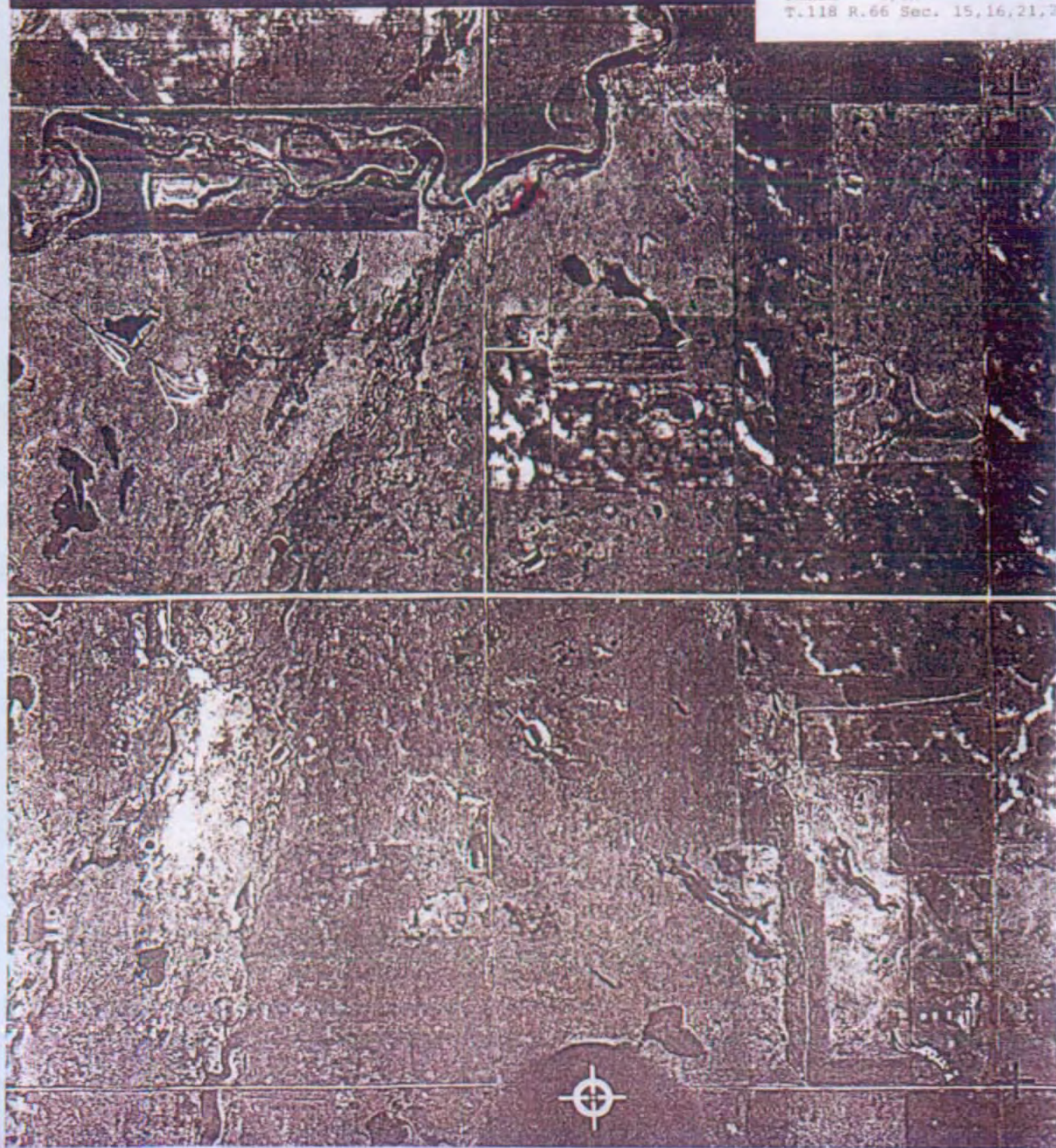
My Commission Expires
May 15th, 2000

Boyd Schulz
notary public

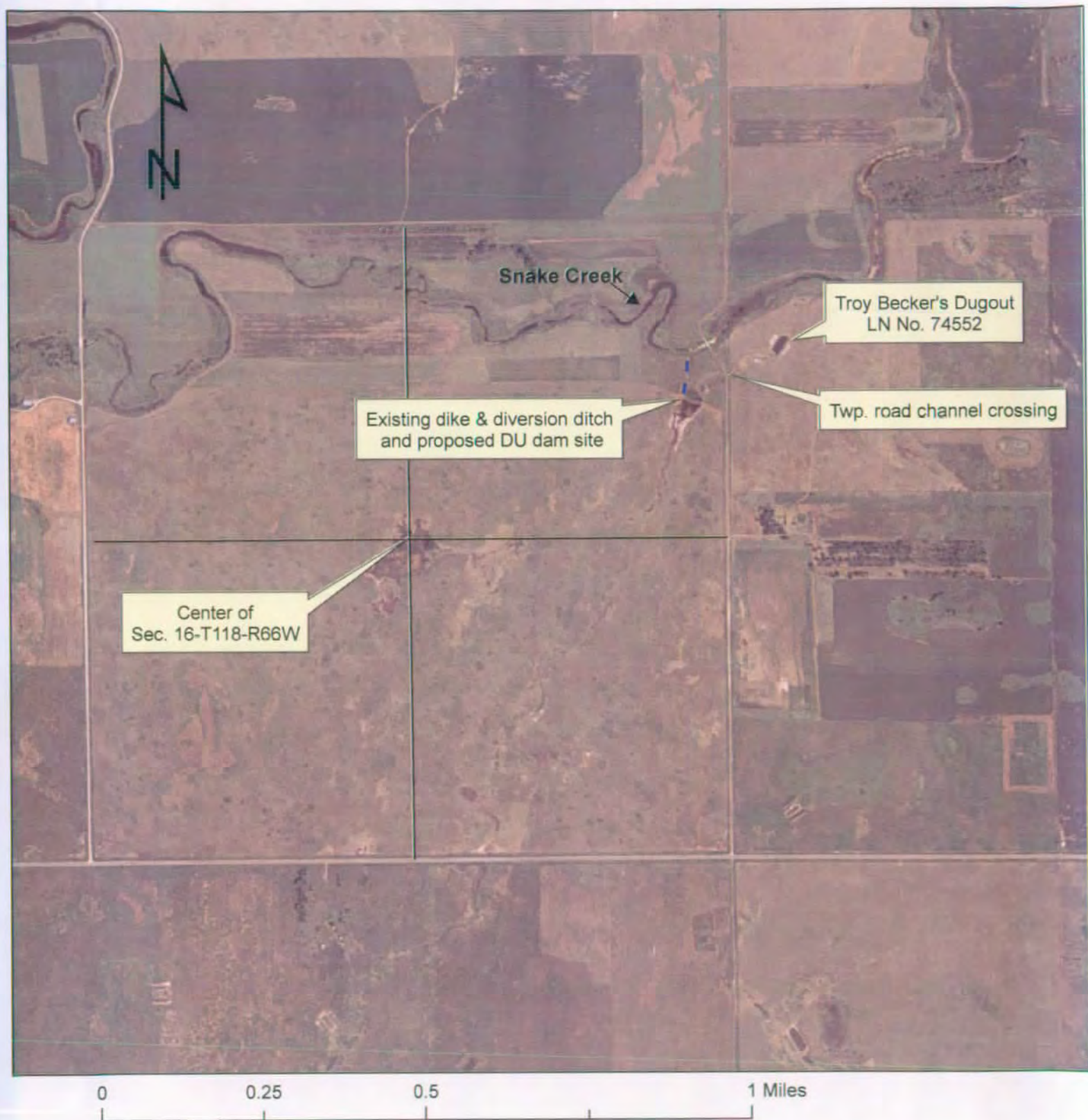
This Document Prepared By Boyd Schulz, US Fish and Wildlife Service,
RR 1 Box 25, Columbia, SD 57433



Faulk 4/82 16
T.118 R.66 Sec. 15,16,21,2



Water Permit Application No. 6714-3
File doc map



Timothy G. Schaal

Timothy G. Schaal, P.E.
Natural Resources Engineering Specialist
DENR Water Rights Program

9/28/06

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date April 13, 20 06

RECEIVED OF Richard Emmerich, 37996 167th Street, Redfield SD 57469

The following amount in fees for services rendered as provided for by law:

Fee for Application for Permit No. <u>6714-3</u> to Appropriate Water, to construct and to put water to beneficial use	150	00
Fee for Application for Permit No. _____ to Appropriate Water for Future use		
Fee to retain Future Use Permit No. _____ after period of seven years.		
Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water License No. <u>6714-3</u>	50	00
Fee for Filing Transfer Form _____		
Fee for _____		
Fee for Issuing New Well Driller's License No. _____ for C.Y. _____		
Fee for Renewal of Well Driller's License No. _____ for C.Y. _____		
Fee for Issuing Well Pump Installer's License No. _____ for C.Y. _____		
Fee for Renewal of Well Pump Installer's License No. _____ for C.Y. _____		
(Any Other Work Provided by Law)	TOTAL	200.00

No.

02398

By Darlene Eide
Chief Engineer gm

Water Permit Application No 674-3 Modified P&S
 Richard Emmersich Reviewer 1/3/07

Top of Dam Elev. - 1355
 2nd Spillway Elev. - 1353
 P. Spillway Elev. - 1351
 D/S Emb. Toe Elev. - 1344 } Ht. = 11 ft.

Cat. 3-Low Hazard Dam

Normal Storage Capacity - 36.5 A.-Ft
 Int. Storage Capacity - 136
 Max Storage Capacity - 353

Int. Cap. x Eff Ht = $136 \times 9 = 1224 < 3000 \therefore$ 25 year
Minimum Spillway Design

From USGS WRI 98-4055 "Tech. for Est. Peak-Flows ... in SO"
 $DA = 2483 A = 3.88 m^2$ $P_{II} = 0.8$
 Region B

$$Q_{25} = 148 CA^{.584} P_{II}^{.730}$$

$$= 148 (3.88)^{.584} (0.8)^{.730}$$

$$= 148 (2.2074) (0.8497)$$

$$= \underline{278 \text{ cfs}}$$

$$Q_{100} = 275 CA^{.625} P_{II}^{.742}$$

$$= 275 (3.88)^{.625} (0.8)^{.742}$$

$$= 275 (2.3336) (0.8474)$$

$$= \underline{544 \text{ cfs}}$$

2nd Spillway Capacity

$$Q = CLH^{3/2}$$

$$C = 2.6$$

$$L = 50$$

$$H = 2$$

$$= 2.6 (50) (2)^{1.5}$$

$$= \underline{370 \text{ cfs}}$$

$$Q = CLH^{3/2}$$

$$C = 2.6$$

$$L = 60$$

$$H = 2$$

$$= 2.6 (60) (2)^{1.5}$$

$$= \underline{442 \text{ cfs}}$$

NRCS Annual Yield

$$DA = 2483 \quad CN = 68 \quad ISD = 2$$

Section 74:02:08:09

1. Topo Map - OK
2. Dam Axis Profile - OK
3. Dam Max X-Sec. - OK
4. Area - Capacity - OK
5. Outlet Details - OK
6. Spillway Rating - OK
7. Spillway Details - OK
8. Specs - std. DU - OK
9. EPP - N/A Cat. 3 - OK

$$80\% \text{ chance} = 0.06$$

$$0.06 \times 2483^{1/2} = 12 \text{ A.-Ft}$$

$$50\% \text{ chance} = 0.17$$

$$0.17 \times 2483^{1/2} = 35 \text{ A.-Ft}$$

$$10\% \text{ chance} = 1.1$$

$$1.1 \times 2483^{1/2} = 228 \text{ A.-Ft.}$$

DESIGN REPORT

For

**DICK EMMERICH
WETLAND RESTORATION**

FAULK COUNTY, SD (SD-0391-01)

February 8, 2006



Ducks Unlimited, Inc.
2525 River Road
Bismarck, ND 58501

PROJECT: Dick Emmerich Wetland Restoration
SD -391-01

LOCATIONS: SE¼, NE¼, SECTION 16, TWP. 118 N RGE. 66W
Latitude 40° 02' 16" Longitude 98° 46' 47"
Faulk County, South Dakota

MARSH DATA: Full Service Level (FSL) @ 1351.0
25.5 Surface Acres @ FSL
36.5 Acre-Feet Capacity @ FSL
Maximum Depth – 4.3'

PROJECT DATA: Top of Dam - elevation 1355.0 (Top of compacted fill add 4" for topsoil)
Primary Spillway - elevation 1351.0
Emergency Spillway - elevation 1353.0 (Top of finished grade) (136 Ac-Ft)
Upstream Berm – 10' wide @ elevation 1355.0 (1351 ?)
Side Slopes - 3 (horizontal): 1 (vertical)

CLASSIFICATION: Based on the classification criteria outlined in Chapter 74:02:08 "Safety of Dams," it is recommended that the proposed reconstructed dam be classified as a small, Category 3 dam. No loss of life and minimal economic loss is expected should failure occur. The product of the "maximum storage capacity" times the "effective height" is 2224. (353 acre-feet x 6.3')

PRELIMINARY RISK ASSESSMENT: The proposed dam reconstruction is planned on an unnamed tributary just above it's confluence with the South Fork Snake Creek. There are no structures between the dam reconstruction and the South Fork Snake Creek. A Bridge exists immediately downstream of where flows from the project will enter the main creek.

PROPOSED PROJECT: The project consists of reconstructing an existing dam, installing a primary spillway, and excavating a new emergency spillway. The full history of the dam has not been obtained. The exiting dam did not contain a primary spillway, outletting through an excavated channel directly into the South Fork Snake Creek. Some attempt has been made to block flows through the excavated channel, creating a small marsh upstream of the restriction. The top of the existing embankment (shown here) is between 1349-1349.5. Reconstruction will include the installation of a riser/ barrel type primary spillway with a separate water control structure providing variable level drawdown capabilities. The new emergency spillway will be constructed on the right (east) abutment. The existing fill will be stripped of topsoil and become part of the upstream berm. New material will be placed immediately downstream of the reconstructed berm and comprise the main dam. Embankment material will be compacted to 95% (Standard Proctor) and at – 1% to +3% of optimum moisture. The dam will be constructed having a top width of 12'. All slopes will be constructed to a 3:1 slope.



PRIMARY SPILLWAY: The structure will have a fixed level water control capability at elevation 1351.0. Variable level water control will be provided by a separate structure having the capability of retaining water at 4" increments between elevations 1351.0 and 1344.0. The structure will have a riser that will act as a circular weir and be 72" in diameter and made of 12 gage corrugated metal pipe. The outlet barrel will be a 48", 12 gage corrugated metal pipe at a 0% slope at elevation 1344.0. All corrugated metal pipe will be coated with a 10-mil polymeric film laminate both inside and outside. A protected plunge pool will be located at the discharge end of the outlet pipe.

EMERGENCY SPILLWAY: The emergency spillway will be excavated having a 50' bottom width and 3:1 slopes. The top of the finished spillway grade, after replacing 4" of topsoil, will be 1353.0 or 2 feet above the crests of the primary spillway. The length of the level crest at the spillway centerline is 132' feet. The new emergency spillway will outlet onto a well-vegetated slope. Flows exiting the emergency spillway will enter South Fork Snake Creek directly. It is believed that events generating sufficient runoff to use the spillway, will also create flows within the South Fork Snake Creek high enough to prevent bank erosion, as emergency spillway flow enter the River. The situation creates a minor risk of head cutting and will be watched. Rock Riprap and or a geotextile may be needed where the outlet channel enters the river if the spillway carries flow while the riverbank is exposed.

HYDROLOGY / HYDRAULICS: A hydrologic analysis of surface water runoff was performed using two methods. A peak discharge was determined from regression equations developed in WATER-RESOURCE INVESTIGATIONS REPORT 80-80 USGS. HydroCAD software using the TR-20 method was used to determine the inflow hydrograph and route the runoff events through the primary and emergency spillways. Peak inflows developed by the regression equations yielded much lower peak inflows than those developed by HydroCAD. Inflows developed by the more conservative HydroCAD model were used for design purposes. Other assumptions made in developing inflow hydrographs by the TR-20 METHOD were:

Rain Duration = 24 hours

Rain Table # = Type I 24 hr Rainfall

Antecedent moisture condition = 2

Inflow hydrographs developed from the TR-20 METHOD were routed through the primary and emergency spillways. This yielded outflow hydrographs revealing peak discharges at maximum reservoir elevations corresponding to various runoff events. The following table is a summary of that printout:

PARAMETERS:

WATERSHED – 3.88 SQ MI

TIME OF CONCENTRATION – 1.67 HOURS

CURVE # – 68

<u>Event</u>	<u>Curve #</u>	<u>Peak Inflow</u>	<u>Primary</u>	<u>Emergency</u>	<u>Peak Discharge</u>	<u>Maximum WSP</u>
5 yr	68	237	100.9	0	100.9	1352.46
10 yr	68	380	131.6	0	131.6	1352.87
25 yr	68	587	156.8	10	166.8	1353.32
100 yr	68	1037	181.3	88.1	270	1354.13

*Soil Infiltration Index values used in Regression Equations is 3.

**Calculated from top of compacted fill, excluding topsoil.

***A spillway-rating curve for the primary and emergency spillways is contained within this report.

The primary spillway capacity was calculated by comparing discharges developed by the weir flow formula and formulas for calculating head loss through corrugated metal pipe. The emergency spillway capacity was estimated from FLOWCOMP, a computer-aided hydraulic program analyzing gradually varied flow profiles in prismatic open channels using the standard step method.

DROUGHT ANALYSIS: The frequency in which there will be adequate runoff was not an important criteria to project sponsors. Using NRCS methods, the 80% and 50% annual runoff will generate 19 and 52 acre-feet respectively (using isogram map #2 and curve number 72). The annual requirement assuming an evaporative loss of approximately 3.0 feet is 33 acre-feet. Annual dry cycles are considered to be beneficial to waterfowl habitat.

SOIL INVESTIGATION: As of this writing a soil investigation has not been completed, and is not planned. A preliminary investigation determined that suitable quantities of acceptable material are likely. It is anticipated that bag samples will be taken for the purpose of conducting proctor tests. Compacted fill specifications will be used during construction. Moisture /density tests will be taken during construction at the discretion of the engineer. Compaction specifications require that material be placed at 95% (standard proctor) and at +3% to -1% of optimum moisture content.

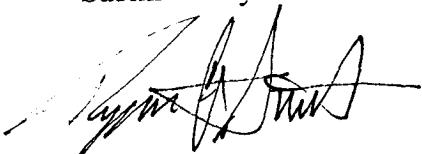
IMPACTS TO SURROUNDING PROPERTY: The planned construction and subsequent reservoir at the full service level will be contained within land owned Richard Emmerich. Faulk County Hwy 10, the east-west county roadway immediately upstream contains two 30"x42" arch pipe. The invert elevations of the pipe are 1351.2 and 1351.7. The minimum elevation of the top of the roadway is 1655.60. Maximum discharge from the two structures before the roadway is overtopped is approximately 80 cfs. There is evidence that the roadway does overtop during high runoff events.

A Memorandum of Agreement exists between Mr. Emmerich, The SD Department of Game, Fish & Parks, and the Faulk County Highway Department. The terms and conditions as specified in the MOA and included with the Water Appropriation Permit. The project will in no way create a managed water elevation (primary spillway) that would place water outside of the natural drainage channel on highway ROW. During runoff events, when the primary and or the emergency spillways are utilized, water will temporarily be placed outside the natural drainage and have potential to place water on the Hwy 10 grade. The toe of the roadway some distance from the two structures is generally between 1351.6 - 1352.0. The predicted water surface elevation during the 100-year event is 1354.13. The maximum discharge from the 2 highway structures given a tailwater elevation equal to the 100-year event is approximately 70 cfs.

Land south and upstream of Hwy 10 is not owned by Mr. Emmerich. Approximately 12 acres of private land will be inundated at the predicted 100-year water surface profile (1354.13). The maximum water elevation that could be reached due to the construction of the dam is the top of dam elevation, 1355.0. The USGS quad shows that 42 acres would be impacted at elevation 1355.0. Land in both quarters within the north half of section 21 and the NW $\frac{1}{4}$, SW $\frac{1}{4}$, Section 21 lies below elevation 1355.0.

Dated: February 8, 2006

Submitted By:



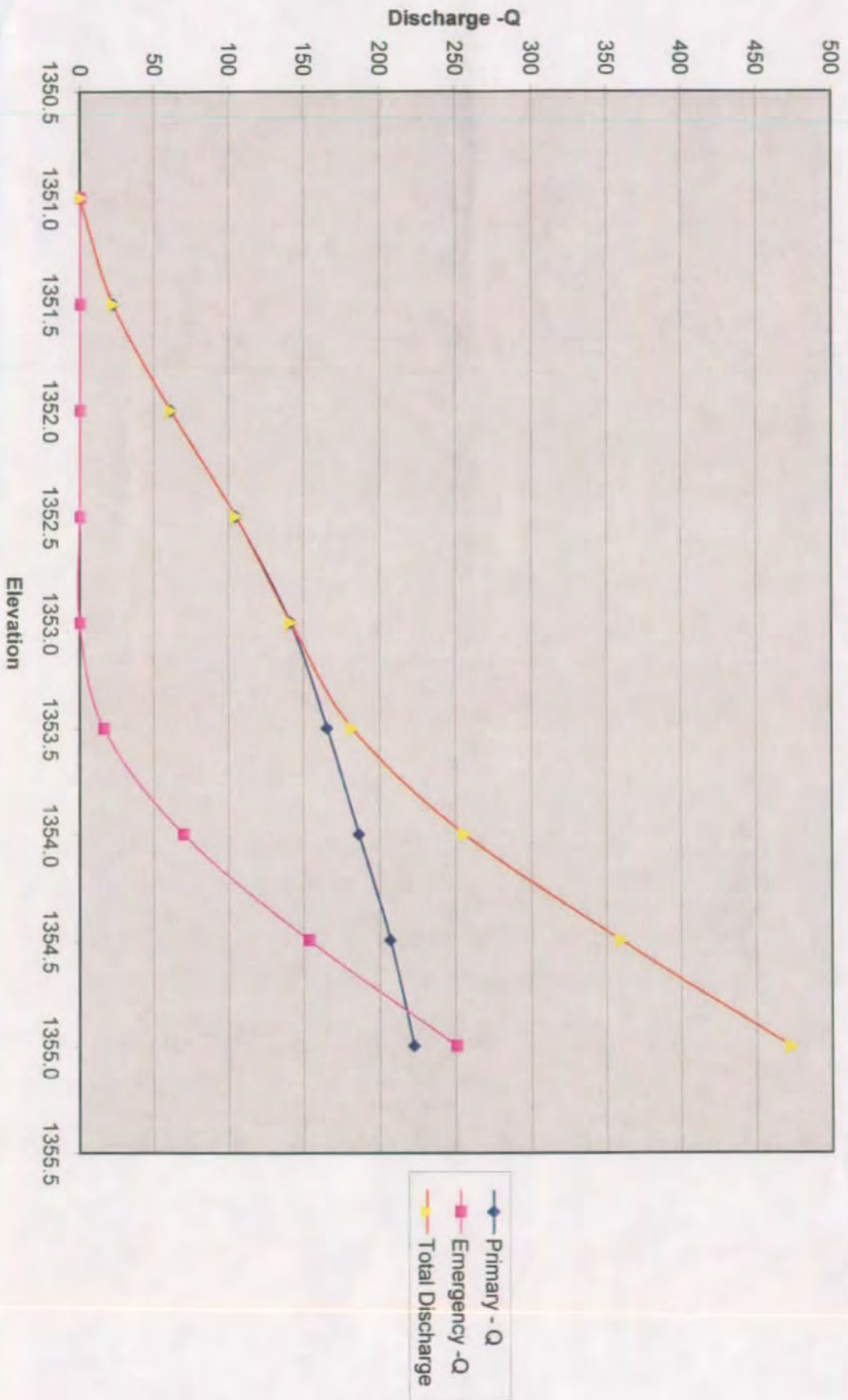
Roger Smith, P.E (#-4325)

Regional Engineer

Ducks Unlimited

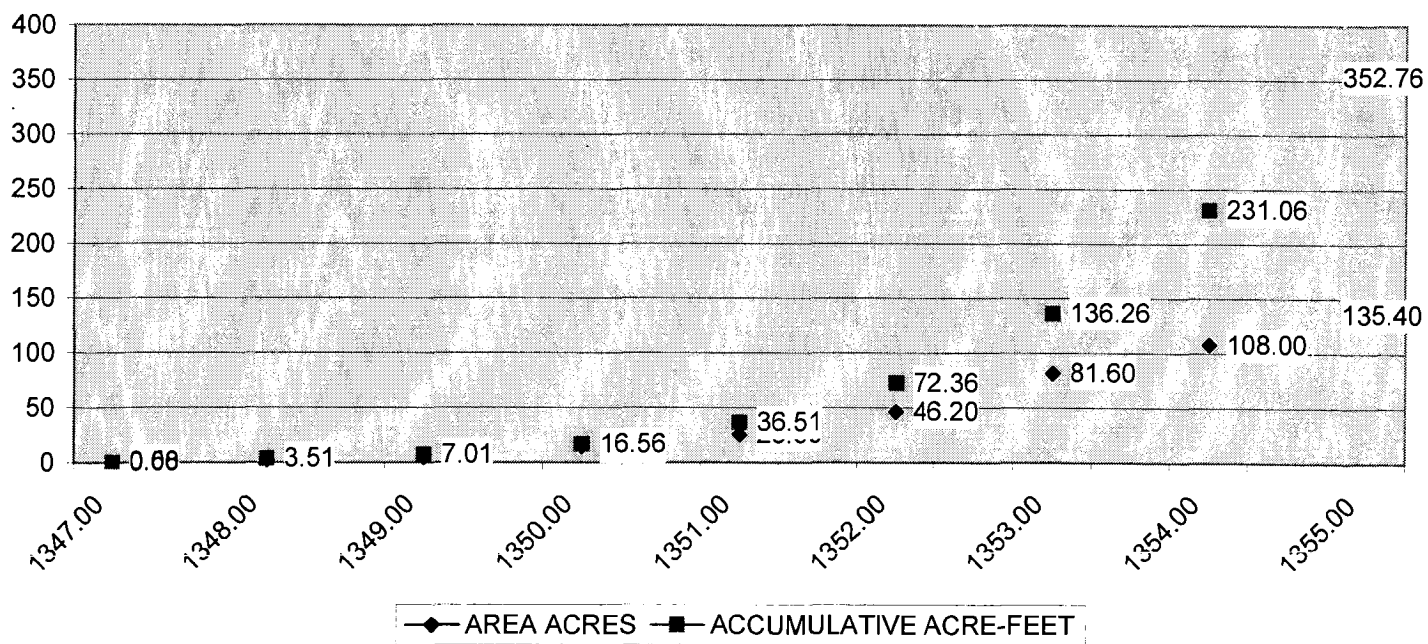
Great Plains Regional Office

Structure Rating Curve



ELEV	AREA ACRES	ACRE-FEET	ACCUMULATIVE ACRE-FEET	
1347.00	0.58		0.00	
		1.46		
1348.00	2.33		3.51	
		3.51		
1349.00	4.68		7.01	
		9.55		
1350.00	14.41		16.56	
		19.96		
1351.00	25.50		36.51	FSL
		35.85		
1352.00	46.20		72.36	
		63.90		
1353.00	81.60		136.26	ES
		94.80		
1354.00	108.00		231.06	
		121.70		
1355.00	135.40		352.76	Top of dam

Emmerich Area Capacity





GREAT PLAINS REGIONAL OFFICE

2525 River Road
Bismarck, ND 58503-9011
(701) 355-3500 Fax (701) 355-3575
www.ducks.org

Eric Gronlund, Water Rights
Joe Foss Building
523 E. Capitol
Pierre, SD 57501

RECEIVED

FEB 14 2006

WATER RIGHTS
PROGRAM

RE: Emmerich Wetland

Eric:

You are all receiving the construction plans, design report, and an Application for Permit to Appropriate Water.

Mr. Emmerich will have to sign the Application for Permit to Appropriate Water, have it notarized and return it to the DENR with the appropriate fee. In this case the permit application fee will be \$200 made payable to the Water Rights Program, DENR. The DENR will need the signed application and fee prior to processing.

Chad, you need to secure the flood easement with the upstream (south) landowner(s). The top of dam elevation is 1355.0, requiring that easements be made to that elevation. The USGS quad shows that 42 acres would be impacted at elevation 1355.0. Land in both quarters within the north half of section 21 and the NW¼, SW¼, Section 21 lies below elevation 1355.0. The predicted water surface elevation created by the dam during the 100-year event is 1354.13, inundating approximately 12 acres of land south of the roadway.

By way of this mailing the DENR is receiving the 2 copies of the construction plans, design report, unsigned Application for Permit to Appropriate Water, an 8½"x11" location map, and a copy of the Memorandum of Agreement (MOA) with the SD GF&P, Faulk County Hwy Department and Mr. Emmerich.

If you have any questions regarding the construction plans, design reports, or other technical questions, please contact me.

Sincerely,

Roger Smith, P.E.
Director of Conservation Services
Ducks Unlimited, Inc.

Enclosures

Cc: Chad Switzer, Tim Olson, Richard Emmerich

MEMORANDUM OF AGREEMENT

This Memorandum of Agreement is entered into on this the 28th day of April, 2005. between Richard Emmerich (Landowner), the South Dakota Department of Game, Fish & Parks (Project Partner) and the Faulk County Highway Department of Faulk County, South Dakota.

I. PURPOSE

The purpose of this agreement is for a wetland creation project funded in part by the South Dakota Department of Game, Fish & Parks on land currently owned by Richard Emmerich, 37996 167th Street, Redfield, SD 57469. The wetland development project will be constructed in the NE ¼ of Section 16, Township 118 North, Range 66 West in Faulk County (see attached aerial photo). This habitat project will provide necessary habitat for breeding waterfowl and benefit other wetland/grassland wildlife species.

II. TERMS & CONDITIONS

The construction of this identified wetland project shall in no way create a managed water elevation (principal spillway) that would place water outside of the natural drainage channel that crosses through culverts found under Faulk County Highway 10, which is a paved road managed by Faulk County Highway Department of Faulk County, South Dakota.

The Faulk County Highway Department understands that the emergency spillway and top of dam elevations for this wetland project does place water outside of the natural drainage channel and has the potential to place water against the grade of Faulk County Highway 10 for a short period of time given a rare, but high runoff event into this created wetland.

Should an instance arise where the construction of this created wetland causes an increase in the water level which threatens the structural integrity of Faulk County Highway 10, the Faulk County Highway Department reserves the right to have embankment structure removed at the landowner's cost.

Be assured that the Faulk County Highway Department will take no action on or in regards to the created wetland if no threat exists.

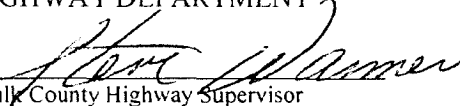
The undersigned parties hereby agree to the terms and conditions specified above.

SOUTH DAKOTA DEPARTMENT
OF GAME, FISH & PARKS


SDGFP Habitat Biologist

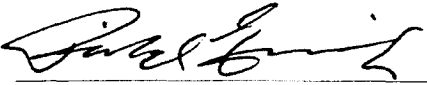
Date: 6/8/05

FAULK COUNTY
HIGHWAY DEPARTMENT


Faulk County Highway Supervisor

Date: 6/6/05

RICHARD EMMERICH


Landowner

Date: 6-05-05

File No. 6714-3

Water Rights Division -DENR
Conversation or File Documentation

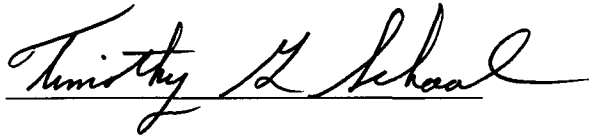
NAME OF PERSON OR FILE: Richard Emmerich

ADDRESS: 37996 167th St., Redfield, SD 57469 COUNTY: Faulk

DATE: June 21, 2006 TELEPHONE: XXXXXXX

RE: Required Flood Easements

I talked to Tim Olson from GF&P today about Water Permit No. 6714-3 for Richard Emmerich and the fact that we are past our 60 day period for preparing the application report. The reason for this is we are still waiting for the upstream flood easements which GF&P/Ducks Unlimited were going to provide. Mr. Olson indicated they are still working on the upstream easements and actually had some of the property change ownership so that has delayed the process.

A handwritten signature in cursive script, reading "Timothy G. Schaal", written over a horizontal line.

Timothy G. Schaal, P.E.
Natural Resources Engineering Specialist
Water Rights Program

Water Rights Division -DENR
Conversation or File Documentation

NAME OF PERSON OR FILE: Richard Emmerich

ADDRESS: 37996 167th St. Redfield, SD 57469 COUNTY: Faulk

DATE: September 28, 2006 TELEPHONE: XXXXXXX

RE: Meeting with Ducks Unlimited (DU), GF&P, and Pioneer Township Board

I met yesterday with Mr. Emmerich; Roger Smith from DU; Chad Switzer from GF&P; members from the Faulk County Highway Dept.; and members from the Pioneer Township Board including Troy Becker, the Twp. Board clerk and downstream neighbor of Mr. Emmerich. There were two issues discussed regarding Mr. Emmerich's Water Permit Application No. 6714-3 and DU's design plans.

One issue was the current design location of the secondary spillway and how it discharges onto the Township road ditch and right-of-way. After looking at the dam site, Mr. Smith from DU agreed that the location of the secondary spillway could be moved over to the other side of the dam (left abutment area) and it would discharge directly into the South Fork of Snake Creek.

The other issue was the fact that Mr. Becker has a dugout located in the NW ¼ NW ¼ of Sec. 15-T118N-R66W about 250 to 300 yards downstream of the proposed DU project. Location Notice No. 74552 was filed on August 26, 1996 for this dugout. A long time ago, no one really knew when, the original channel was diked and diverted into Snake Creek, presumably to protect the township road. The township road currently does not have a culvert, but at one time it did. Mr. Becker would like to see some flow directed into his dugout. Roger Smith from DU explained the reasons for keeping the primary spillway structure in the existing diversion ditch, but also said they could change the design to move the agri-drain low level structure so it discharges into the original channel. The township will need to install a new culvert through the road and Mr. Emmerich donated a section of 24 inch culvert that is currently on site and will not be needed after the DU project is completed.

The solution to these two issues seemed to satisfy everyone. I told them we will continue to process Water Permit Application No. 6714-3 after we receive the new design plans from DU.

See attached File doc map.



Timothy G. Schaal, P.E.
Natural Resources Engineering Specialist
Water Rights Program

Document prepared by:
Chad T. Switzer, Habitat Biologist
SD Department of Game, Fish & Parks
P.O. Box 915
Huron, SD 57350
(605) 353-6699

\$ 24.00
FEE
INDEX
NUMERICAL
COMPARED
SEAL
TRANSF.

STATE OF SOUTH DAKOTA
COUNTY OF FAULK

} SS

Filed for record this 21st day of September
A.D. 2006 at 8:25 o'clock A.M. and
recorded in book II of Misc.
Page 218
Sally Snow
Register of Deeds Deputy



AGREEMENT AND GRANT OF EASEMENTS

This AGREEMENT AND GRANT OF EASEMENTS is made by and between Michael C. Hagan, 535 Primrose Way, Louisville, Kentucky 40206, hereafter referred to as GRANTOR, and Richard Emmerich, 37996 167th Street, Redfield, South Dakota 57469, hereafter referred to as GRANTEE.

Consideration for this agreement is \$1.00 and other valuable consideration, receipt of which is acknowledged by GRANTOR. In consideration thereof the parties agree as follows:

GRANTOR is the owner in fee of real property situated in Faulk County, South Dakota and described as: N ½ of Section 21, Township 118 North, Range 66 West, which property is hereafter referred to as PROPERTY.

Due to an approved wetland creation project by the GRANTEE, in cooperation with the South Dakota Department of Game, Fish & Parks and Ducks Unlimited, Inc., on GRANTEE'S downstream property in the SE ¼, NE ¼ of Section 16, Township 118 North, Range 66 West and need for additional easements to facilitate said project, GRANTOR grants and conveys to the GRANTEE additional rights and easements on GRANTOR'S PROPERTY as provided herein.

GRANTOR grants and conveys to GRANTEE the right to temporarily flood certain portions of GRANTOR'S PROPERTY as described above in perpetuity. Temporary flooding of PROPERTY during rare and extreme runoff events will extend to an elevation of approximately 1355.0 feet mean seal level (approximately 42.0 surface acres of PROPERTY), the same elevation as top of dam, and just outside the natural drainage channel to approximately 1353.0 feet mean seal level (approximately 12.0 surface acres of PROPERTY), the same elevation as the emergency spillway of the wetland creation project. Elevation of the normal dam pool is at approximately 1351.0 feet mean sea level and will not impound water on GRANTOR'S PROPERTY (PLEASE SEE ATTACHED AERIAL PHOTO).

GRANTOR, for the consideration stated herein, for himself or for his heirs, successors, and assigns, expressly waives and releases GRANTEE and its assigns or representatives from any and all claims they may have for damages which may have occurred or which in the future may occur by reason of construction or maintenance of any of the facilities and structures contemplated by the wetland creation project and as permitted by this agreement by reason of flooding, overflow, or the depositing of material resulting from said flooding or overflow.

The covenants, agreements, and obligations herein contained shall extend to, bind and inure to the benefit of the parties hereto and their respective personal representatives, heirs, successors and assigns.

IN WITNESS WHEREOF, the GRANTOR and the GRANTEE have executed this Agreement as of the day affixed to this Agreement.

GRANTOR

Michael C. Hagan
MICHAEL C. HAGAN

executed this 9th day of September 2006.

STATE OF KENTUCKY

COUNTY OF Jefferson)SS
)

On this the 15 day of Sept, 2006, before me, the undersigned officer, personally appeared Michael C. Hagan, known to me or satisfactorily proven to be the person whose name is subscribed to the within instrument and acknowledged that he executed the same for the purposes therein contained.

In WITNESS WHEREOF, I hereunto set my hand and official seal.

(NOTARY SEAL)

P. V. ...
Notary Public, Kentucky
Commission Expires: 9-29-09

GRANTEE

Richard Emmerich
RICHARD EMMERICH

executed this 11 day of September, 2006.

STATE OF SOUTH DAKOTA

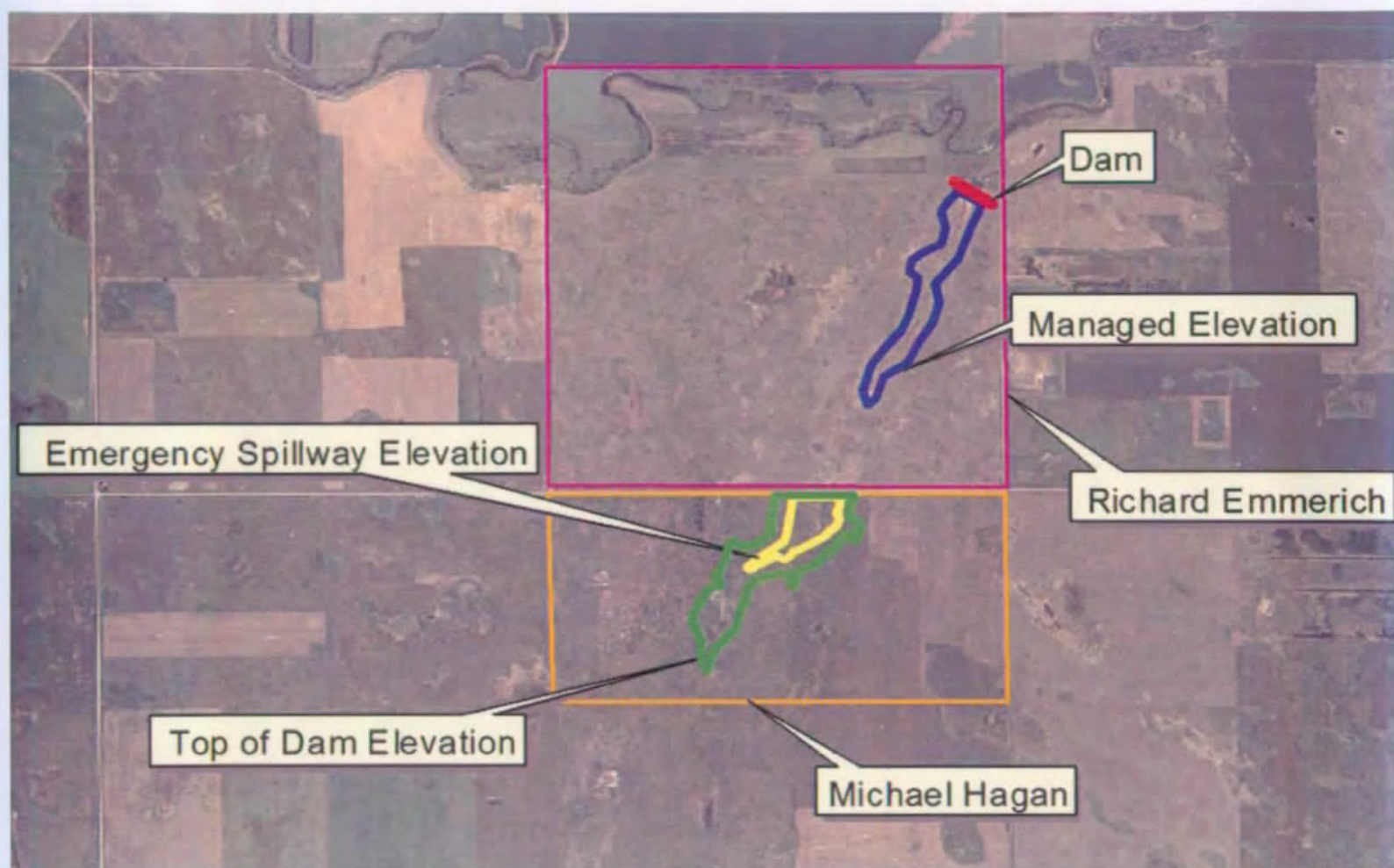
COUNTY OF Spink)SS
)

On this the 11th day of September, 2006, before me, the undersigned officer, personally appeared Richard Emmerich, known to me or satisfactorily proven to be the person whose name is subscribed to the within instrument and acknowledged that he executed the same for the purposes therein contained.

In WITNESS WHEREOF, I hereunto set my hand and official seal.

(NOTARY SEAL)

R. J. ...
Notary Public, South Dakota
Commission Expires: 8-30-2010



September 21, 2006

South Dakota Department of Game, Fish & Parks

In Account With

**Faulk County
Register of Deeds**

**P.O. Box 309
Faulkton, S.D. 57438
Ph.# 605-598-6228**

09/21/2006	B9801 / Recording fee	\$ 24.00
	Total Amount Due Within 10 Days:	\$ 24.00
	THANK YOU !!!	

P.O. Box 915
Huron, S.D. 57350



GREAT PLAINS REGIONAL OFFICE
2525 River Road
Bismarck, ND 58503-9011
(701) 355-3500 Fax (701) 355-3575
www.ducks.org

December 15, 2006

RECEIVED
DEC 20 2006
WATER RIGHTS
PROGRAM

Chad Switzer
SD Game, Fish & Parks
PO Box 915 (UPS: 895 3rd St SW)
Huron, SD 57350

Tim Olson
SD Game, Fish & Parks
523 East Capitol Avenue
Pierre, SD 57501

Richard Emmerich
37996 167 St.
Redfield, SD 57469

✓ Eric Gronlund
Water Rights
Joe Foss Building
523 E Capitol
Pierre, SD 57501

RE: Emmerich Wetland

You are all receiving the modified construction plans and design report. Modifications were necessary by agreement with the local Township Board to move the emergency spillway and drawdown structure. The original Application for Permit to Appropriate Water did not change.

If you have any questions regarding the construction plans, design reports, or other technical questions, please contact me.

Sincerely,

Roger Smith, P.E.
Director of Conservation Services
Ducks Unlimited, Inc.



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
www.state.sd.us/denr

January 12, 2007

Richard Emmerich
37996 167th St.
Redfield, SD 57469

Dear Mr. Emmerich:

We have reviewed the modified plans and specifications for your dam project located in the NE ¼ of Sec. 16-T118N-R66W, in Faulk County. The modified plans indicate a change in location of the secondary spillway by moving it over to the left (west) abutment area and moving the agri-drain outlet structure to the center of the embankment, where it will discharge into the original creek channel. The Township Board will also install a culvert through the downstream road that crosses the original creek channel. The plans and specifications for the construction of your dam are approved. Approval of the plans and specifications does not authorize construction of the dam. The construction of the dam may not begin until Water Permit No. 6714-3 is approved.

Our review was to determine compliance with the requirements of the Water Management Board Safety of Dams Rules, Chapter 74:02:08. Approval of these plans and specifications does not release you, as owner of the dam, from the responsibility for operating and maintaining the dam in good repair to ensure the safety of the dam.

The Emmerich Dam will be classified as a small size Category 3, Low Hazard dam with a dam height of 11 ft. and a normal storage capacity of 36.5 acre-feet and a maximum storage capacity of 353 acre-feet.

If you have any questions, please feel free to contact us.

Sincerely,

Timothy G. Schaal, P.E.
Natural Resources Engineering Specialist
for Garland Erbele, Chief Engineer
Water Rights Program
(605) 773-3352

c: Roger Smith, Ducks Unlimited
Tim Olson, GF&P, Pierre
Chad Switzer, GF&P, Huron



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
www.state.sd.us/denr

January 12, 2007

Chad Switzer
SD Department of Game, Fish and Parks
PO Box 915
Huron SD 57350

Dear Chad:

Please find enclosed a copy of the report, recommendation and public notice for Water Permit Application No. 6714-3 filed by Mr. Emmerich. This information was also sent to the applicant for his review. Mr. Emmerich will need to contact the Faulk Co. Record to authorize publication of the notice.

If you have any questions, please contact Tim Schaal or myself at (605) 773-3352.

Sincerely,

Eric Gronlund
Water Rights Program, DENR
605 773-3352
eric.gronlund@state.sd.us

enclosure



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
www.state.sd.us/denr

January 12, 2007

Troy Becker
16533 368th Avenue
Rockham SD 57470

Dear Mr. Becker:

Please find enclosed a copy of the report, recommendation and public notice for Water Permit Application No. 6714-3 filed by Mr. Emmerich. The notice is scheduled to be published in the Faulk Co. Record on January 17 and 24, 2007.

This information is being sent to you because of the interest you expressed in the application. If you have any questions, please contact Tim Schaal or myself at (605) 773-3352.

Sincerely,

Eric Gronlund
Water Rights Program, DENR
605 773-3352
eric.gronlund@state.sd.us

enclosure



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
www.state.sd.us/denr

**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 6714-3, Richard Emmerich**

Pursuant to SDCL 46-2A-2, the following is the recommendation of the Chief Engineer, Water Rights Program, Department of Environment and Natural Resources concerning Water Permit Application No. 6714-3, Richard Emmerich, 37996 167th Street, Redfield SD 57469.

The Chief Engineer is recommending APPROVAL of Application No. 6714-3 because 1) there is reasonable probability that there is unappropriated water available for the applicant's proposed use, 2) the proposed diversion can be developed without unlawful impairment of existing rights, 3) the proposed use is a beneficial use and 4) it is in the public interest with the following qualifications:

1. Water Permit No. 6714-3 authorizes a dam with a storage capacity of 36.5 acre feet of water and sufficient water annually to maintain the water level to the outlet elevation of 1,351 feet mean sea level.
2. Low flows as needed for downstream domestic use, including livestock water and prior water rights must be by-passed.

See report on application for additional information.

Garland Erbele, Chief Engineer
January 11, 2007

REPORT ON
WATER PERMIT APPLICATION No. 6714-3
Richard Emmerich
January 4, 2007

Water Permit Application No. 6714-3 has been filed by Richard Emmerich to impound 36.5 acre-feet of water by reconstructing a dam located in the E $\frac{1}{2}$ NE $\frac{1}{4}$ of Section 16-T118N-R66W, in Faulk County. The application also requests impoundment of sufficient water to maintain water at the outlet elevation. The water will be used for fish and wildlife production.

Discussion:

The dam will be classified as a small size, Category 3, Low Hazard dam. Ducks Unlimited, Inc. has designed the dam. The plans and specifications have been reviewed and will be approved; however, construction of the dam can not begin until Water Permit Application No. 6714-3 is approved.

The dam will be 11 feet high with a normal storage capacity of 36.5 acre-feet with a reservoir level at the primary spillway elevation, and a maximum storage capacity of 353 acre-feet with a reservoir level at the top of dam elevation. A dam of this size and hazard classification is required to have a minimum spillway design capable of passing a 25-year frequency event.

The dam has a drainage area of 2483 acres or 3.88 square miles. The dam is designed to have a 72 inch diameter CMP drop inlet structure with a 48 inch barrel as the primary spillway and a 60 foot wide earthcut spillway. A 25 year frequency event produces a peak runoff of approximately 278 cfs and a 100 year frequency event produces a peak runoff of approximately 544 cfs. The earthcut secondary spillway will have a capacity of approximately 442 cfs.

The annual yield for this drainage area with an 80 percent chance of occurrence, or 8 out of 10 years, is expected to be 12 acre-feet. The annual yield with a 50 percent chance of occurrence, or 1 out of 2 years, is expected to be 35 acre-feet and the annual yield with a 10 percent chance, or 1 out of 10 years, is expected to be 228 acre-feet.

The Emmerich Dam will be located in the E $\frac{1}{2}$ NE $\frac{1}{4}$ of Section 16-T118N-R66W on an unnamed tributary to the South Fork of Snake Creek about 0.25 miles upstream of the confluence of the unnamed tributary and the South Fork of Snake Creek. Some time ago, the existing dam was constructed and the unnamed tributary was diverted into Snake Creek at this site, cutting off the 0.25 miles of original creek channel. Location Notice No. 74552 was filed on August 26, 1996 by Troy Becker for storage of 1.0 acre-foot of water in a dugout located in the original channel about 250 to 300 yards downstream of the existing dam. There are no other existing Water Rights/Permits or Location Notices located on the unnamed tributary between the proposed dam and Snake Creek.

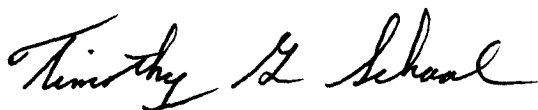
On September 28, 2006, a meeting was held on site with Mr. Emmerich; Ducks Unlimited, Inc.; the Department of Game, Fish & Parks; the Pioneer Township Board; Faulk County Highway Department; Mr. Becker; and DENR. At this meeting it was agreed upon to have Ducks Unlimited redesign the proposed dam. The original plans developed by Ducks Unlimited, Inc. had the primary spillway and low level agri-drain structure diverting into the bypass channel. The original plans also had the secondary spillway located near the right (east) abutment and discharging into the adjacent Township road ditch. The modified plans indicate a change in location of the secondary spillway by moving it over to the Left (west) abutment area and moving the agri-drain outlet structure to the center of the

embankment, where it will discharge into the original creek channel. The Township Board will also install a culvert through the downstream road that crosses the original creek channel.

The proposed dam will impound water on Mr. Emmerich's property at the primary spillway elevation of 1351 feet mean sea level. However, large runoff events will temporarily store water on adjacent property to the south. Portions of the N ½ of Section 21-T118N-R66W will be temporarily flooded during large runoff events. On September 21, 2006, an Agreement and Grant of Easements between Mr. Emmerich and the upstream property owner was filed with the Faulk County Register of Deeds to allow for this temporary flooding. On June 6, 2005 a Memorandum of Agreement was signed between Mr. Emmerich and the Faulk County Highway Department to allow this temporary flooding to occur adjacent to and under the Faulk County Highway 10 road grade, which is located between the two property owners.

Conclusions:

1. Water Permit Application No. 6714-3 should be approved since unappropriated water is available and approval should not have any adverse effect on existing Water Permits/Rights.
2. If approved, the low flow bypass requirement for downstream domestic use should be a qualification on Water Permit Application No. 6714-3.
3. The necessary flood easements/agreements are included with the application.



Timothy G. Schaal, P.E.

Natural Resources Engineering Specialist

Form 8

RECEIVED

JAN 26 2007

WATER RIGHTS
PROGRAM

PROOF OF PUBLICATION

STATE OF SOUTH DAKOTA)
County of Faulk) SS

I, James B. Moritz

certify that the attached printed Notice was
taken

from the Faulk County Record

printed and published in Faulkton

County of Faulk and

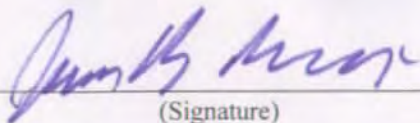
state of South Dakota. The notice was
published

in the newspaper on the following two dates:

Wednesday, January 17, 2007

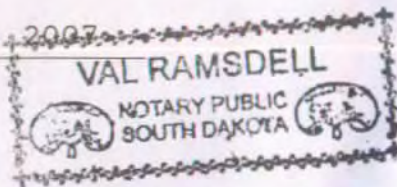
Wednesday, January 24, 2007

Cost of Printing \$42.97


(Signature)

Publisher
(Title)

Thursday, January 25, 2007
(Date Signed)



My Commission Expires
Jan. 17, 2011

No. 9, Jan. 17 & 24, 2007

**NOTICE OF
APPLICATION NO.
6714-3 to Appropriate
Water**

Notice is given that Richard Emmerich, 37996 167th St, Redfield, SD 57469 has filed an application for a water permit to impound 36.50 acre-feet of water from an unnamed tributary of the South Fork Snake Creek by reconstructing a dam located in the E 1/2 NE 1/4 Section 16 with water impounded in the E 1/2 NE 1/4 Section 16; all in T118N-R66W. This application requests impoundment of sufficient water to maintain water to the outlet elevation of 1351.0 feet mean sea level. The water is for fish and wildlife propagation use.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 6714-3 because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. In accordance with SDCL 46-2A-23, the Chief Engineer will act on the application, as recommended, unless a petition is filed opposing the application or the applicant files a petition contesting the Chief Engineer's recommendation. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled and the Water Management Board will consider the application. Notice of the hearing will be given to the applicant and any person filing a petition.

Any person interested in opposing or supporting this application or recommendation must file a written petition with BOTH the applicant and Chief Engineer. The applicant must file a petition if contesting the Chief Engineer's recommendation. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501 (605 773-3352)" and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by February 5, 2007.

The petition may be informal, but must include a statement describing the petitioner's interest in the application, the petitioner's reasons for opposing or supporting the application, and the signature and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained. Contact Eric Gronlund at the above Water Rights Program address to request copies of information pertaining to this application. Steven M. Pirner, Secretary, Department of Environment and Natural Resources.



January 12, 2007

Faulk Co Record
PO Box 68
Faulkton SD 57438-0068

ATTENTION: Legal Public Notice

Enclosed is a Notice on Application No. 6714-3 to Appropriate Water to be published twice. Please publish the first notice on January 17, 2007 with the second publication 7 days later. The text of the notice can be e-mailed to your paper by contacting Karen Schlaak at (605) 773-3352.

The applicant must verify to you that the notice is to be published, before you make the first publication. **Please BILL the APPLICANT for the cost of publication.** The APPLICANT is Richard Emmerich, 37996 167th St, Redfield SD (Ph # 605-472-1071).

Please send the Water Rights Program the first publication immediately. The publication is checked for accuracy so any corrections can be made in the second publication. You may use the form below or fax a copy of the first publication. Any fax should be sent to the attention of Karen Schlaak at (605) 773-4068. Publication errors can invalidate the public notice.

After the second publication, **please send us an affidavit or use the enclosed Proof of Publication form.** The applicant pays the cost of publication, but the Water Rights Program records require an affidavit or Proof of Publication. Delays in receiving the affidavit can be costly to the applicant.

Sincerely,


Eric Gronlund
Natural Resources Engineer
605 773-3352

enclosures

-----CUT HERE-----

No. 6714-3

TO: Eric Gronlund
Water Rights Program
Joe Foss Building
Pierre SD 57501-3181

Date _____

We are in receipt of your letter of January 12, 2007 enclosing Notice to Appropriate Water by Application No. 6714-3 which was first published in our issue of _____. **ENCLOSED IS A COPY OF THIS FIRST PUBLICATION.**

Name

Newspaper



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182

www.state.sd.us/denr

**NOTE: TO BE SURE OF PUBLICATION ON
THE CORRECT DATES, CONTACT
THE NEWSPAPER RIGHT AWAY.**

January 12, 2007

Richard Emmerich
37996 167th Street
Redfield SD 57469

Dear Mr. Emmerich:

Water Permit Application No. 6714-3 for fish & wildlife propagation use has been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice has been sent to the Publisher of the Faulk Co Record printed at Faulkton, SD (Ph # 605-598-6525). You will need to contact the newspaper and authorize publication of this notice. For your information, a copy of the notice, the recommendation of the Chief Engineer and a report on the application are enclosed. Please review the notice prior to publication and notify this office, if you have any corrections or questions.

Be sure to contact the above newspaper to authorize publication of your Notice and to arrange for payment. Early contact with the paper can eliminate delays. Upon receiving authorization, the publisher has been instructed to publish your notice once each week for two consecutive weeks. The newspaper has also been instructed to send us the Proof of Publication. We must receive Proof of Publication before action can be taken on the application.

Sincerely,

Eric Gronlund
Natural Resources Engineer
(605) 773-3352

enclosures

NOTE: If you plan to contest any part of the Chief Engineer's recommendation, you must file a petition pursuant to the procedures outlined in the attached notice of hearing. The Water Management Board will then consider your concerns during a hearing on the application.

Instruction to Newspaper - Publish first Notice on January 17, 2007 with the second publication 7 days later. The applicant is responsible for payment.

NOTICE OF APPLICATION NO. 6714-3 to Appropriate Water

Notice is given that Richard Emmerich, 37996 167th St, Redfield SD 57469 has filed an application for a water permit to impound 36.50 acre-feet of water from an unnamed tributary of the South Fork Snake Creek by reconstructing a dam located in the E ½ NE ¼ Section 16 with water impounded in the E ½ NE ¼ Section 16; all in T118N-R66W. This application requests impoundment of sufficient water to maintain water to the outlet elevation of 1351.0 feet mean sea level. The water is for fish and wildlife propagation use.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 6714-3 because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. In accordance with SDCL 46-2A-23, the Chief Engineer will act on the application, as recommended, unless a petition is filed opposing the application or the applicant files a petition contesting the Chief Engineer's recommendation. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled and the Water Management Board will consider the application. Notice of the hearing will be given to the applicant and any person filing a petition.

Any person interested in opposing or supporting this application or recommendation must file a written petition with BOTH the applicant and Chief Engineer. The applicant must file a petition if contesting the Chief Engineer's recommendation. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501 (605 773-3352)" and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by February 5, 2007.

The petition may be informal, but must include a statement describing the petitioner's interest in the application, the petitioner's reasons for opposing or supporting the application, and the signature and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained. Contact Eric Gronlund at the above Water Rights Program address to request copies of information pertaining to this application. Steven M. Pirner, Secretary, Department of Environment and Natural Resources.



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
www.state.sd.us/denr

APR 20 2007

Richard Emmerich
37996 167th St
Redfield SD 57469

Dear Mr. Emmerich:

Enclosed is Water Permit No. 6714-3 authorizing construction of your water diversion system and beneficial use of the water, not exceeding the limits as specified in the Water Permit.

Form 10, *Notice of Completion of Works and Application of Water to Beneficial Use*, is enclosed. Please return this completed form after you have finished the system and have put the water to beneficial use. An investigation can then be scheduled so the water license may be issued, thus completing the acquisition of a water right.

An informational sheet *Common Water Right Questions?* is also enclosed. This sheet is intended to answer some of the questions associated with obtaining and keeping a water right.

Sincerely,

Garland Erbele, Chief Engineer
Water Rights Program
(605) 773-3352

enclosures

Permit No. 6714-3
James River - Water District

Report Of Examination Of Works And/Or Application of Water To Beneficial Use

TO: Chief Engineer, Water Rights Program, DENR, Foss Bldg., Pierre, SD 57501

I have this day, **December 4, 2008**, made a thorough examination of the water use system constructed by **Richard Emmerich** of **37996 167th Street, Redfield, SD 57469** holder of Permit No. **6714-3**, bearing the priority of **December 20, 2006** authorizing the storage of **36.5** acre-feet of the waters of **unnamed tributary to South Fork Snake Creek (runoff)** for **fish & wildlife propagation** purposes, in **Faulk** County.

I have to report on the conditions of the same as follows:

A. Works used to divert the water:

An 11 ft. high earthen dam with a normal storage capacity of 36.5 acre-feet of water

B. Works used to transport water to place of use:

N/A

C. Works used to apply water to beneficial use:

An 11 ft. high earthen dam with a normal storage capacity of 36.5 acre-feet of water

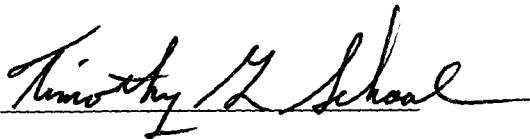
The system is in the following condition **good**. The point of diversion is located **1500 ft. south & 200 ft. west of the NE corner of Sec. 16-T118N-R66W (E ½ NE ¼), (Lat. 45.037878 & Long. -98.778948)**. The works are capable of storing **36.5** acre-feet of water which is to be used for **fish & wildlife propagation**. Water has been put to beneficial use to the maximum extent as follows:

An 11 ft. high earthen dam with a normal storage capacity of 36.5 acre-feet of water

and the license should be issued for **36.5** acre-feet of storage.

Applicable permit qualifications have been complied with: Yes **X**

Exceptions to compliance are: **none** Date Report Completed: **February 9, 2009**



Timothy G. Schaal, P.E.
Natural Resources Engineering Specialist
DENR, Water Rights Program

REPORT ON INSPECTION OF PERMIT NO. 6714-3

DATE OF INSPECTION: **December 4, 2008**

NAME & ADDRESS OF PERMIT HOLDER: **Richard Emmerich, 37996 167th Street,**
Redfield, SD 57469

DIVERSION POINT LEGAL LOCATION: **1500 ft. south & 200 ft. west of the NE corner of Sec. 16-**
T118N-R66W (E ½ NE ¼), (Lat. 45.037878 & Long. -98.778948).

DAM INFORMATION:

- 1) Height to crest **11** feet
- 2) Height to primary spillway **7** feet
- 3) Height to secondary spillway **9** feet
- 4) Crest width **12** feet
- 5) Crest length **560** feet
- 6) Spillway length **XXX** feet
- 7) Spillway width **50** feet
- 8) Approx. storage (Normal) **36.5** acre-feet
- 9) Approx. storage (Maximum) **353** acre-feet
- 10) Date constructed: **2007**

PERMIT QUALIFICATIONS AND REGULATIONS:

- 1) Soil and water permit lands agree with lands being irrigated and lands listed on permit **N/A**
- 2) Special qualifications to permit being abided by **yes**
- 3) All structures, wells and lands on map **no**
- 4) Irrigation Questionnaires checked to determine if permit owner started irrigation by the end of construction period **N/A**

Water Permit Application No. 6714-3



Timothy G. Schaal
Timothy G. Schaal, P.E.
Natural Resources Engineering Specialist
DENR, Water Rights Program

2/9/09



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
PMB 2020
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3182
www.state.sd.us/denr

MAR 05 2003

6714-3

Richard Emmerich
37996 167th St
Redfield SD 57469

Dear Mr. Emmerich:

Enclosed is your Water License No. 6714-3. Included with the license is a map prepared by the staff engineer who conducted the inspection. Water License No. 6714-3 is the final document which completes the process of obtaining a water right.

As long as you use the water beneficially, as stated in the Water License, State Water Laws provide that you have a continuing right to use the water.

Sincerely,

A handwritten signature in cursive script that reads "Garland Erbele".

Garland Erbele, Chief Engineer
Water Rights Program
(605) 773-3352

enclosures

STATE OF SOUTH DAKOTA

WATER LICENSE NO. 6714-3

(1) Richard Emmerich, 37996 167th St, Redfield SD 57469 made Application No. 6714-3, April 13, 2006 for a water permit to impound 36.5 acre feet of water from an unnamed tributary of South Fork Snake Creek in a storage dam located in Faulk County, South Dakota for fish and wildlife propagation. Permit No. 6714-3 with a priority date of December 20, 2006 was approved February 5, 2007 and issued to the applicant for diversion of water with construction of the storage dam to be completed on or before February 5, 2012 and for the application to beneficial use of said water on or before February 5, 2016.

(2) It is certified that the permit holder has complied with the provisions of South Dakota State Law relating to completion of the project and is entitled to impound 36.5 acre feet of water for beneficial use. The location of the storage dam (spillway) is:

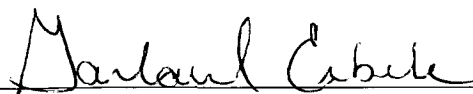
- 1,500 feet south and 200 feet west of the NE corner of Section 16, T118N, R66W (E ½ NE ¼)
Water is impounded in the E ½ NE ¼ Section 16, T118N, R66W.

(3) The permit holder has complied with the provisions of South Dakota State Law relating to the application of water to beneficial use.

(4) Pursuant to South Dakota Water Law 46-5-30.1 Richard Emmerich, 37996 167th St, Redfield SD 57469 the holder and/or owner of Water Right No. 6714-3 is issued a license to appropriate water, the right to impound 36.5 acre feet of water in a storage dam from an unnamed tributary of South Fork Snake Creek with a priority date of December 20, 2006 from the location specified in (2) of this license for fish and wildlife propagation.

This license is subject to South Dakota Water Law, any limitations or conditions listed in Water Right No. 6714-3 and subject to the following qualifications:

- Water Right No. 6714-3 authorizes a dam with a storage capacity of 36.5 acre feet of water and sufficient water annually to maintain the water level to the outlet elevation of 1,351 feet mean sea level.
- Low flows as needed for downstream domestic use, including livestock water and prior water rights must be bypassed.



Garland Erbele, Chief Engineer
Water Rights Program
Department of Environment and Natural Resources

MAR 05 2008

date





DUCKS UNLIMITED

SPECIFICATIONS

- 101 GENERAL CONDITIONS
- 102 SUPPLEMENTAL CONDITIONS
- 201 MOBILIZATION
- 202 SITE PREPARATION
- 203 EXCAVATION
- 204 EMBANKMENT CONSTRUCTION
- 205 WATER
- 206 WATER CONTROL STRUCTURE INSTALLATION
- 206A WATER CONTROL STRUCTURE AND CULVERT APPURTENANCES
- 207 CULVERT INSTALLATION
- 209 RIPRAP PLACEMENT
- 307 REMOVAL OF EXISTING CULVERTS

PLAN INDEX

- 1 PROJECT LOCATION MAPS
- 2 PROJECT TOPOGRAPHY
- 3 EMBANKMENT PLAN & PROFILE
- 4 WATER CONTROL STRUCTURE - PLAN & PROFILE
- 5 WATER CONTROL STRUCTURE - DETAILS

ESTIMATED QUANTITIES

MOBILIZATION	1 L.S.
SITE PREPARATION	
MAIN EMBANKMENT	915 C.Y.-P
RETAINMENT DIKE	121 C.Y.-S
TOTAL	1,036 C.Y.-P
EMBANKMENT CONSTRUCTION	
MAIN EMBANKMENT	4,273 C.Y.-S
RETAINMENT DIKE	488 C.Y.-S
TOTAL	4,761 C.Y.-S
WATER	80 M-GAL.**
WATER CONTROL STRUCTURE	
72" CMP RISER 8 L.F.	1 EA.
INLINE DRAWDOWN STRUCTURE 6 L.F.	1 EA.
CULVERT INSTALLATION	
48" CMP	57 L.F.
12" PVC	20 L.F.
RIPRAP PLACEMENT	54 C.Y.-P
CULVERT REMOVAL	1 EA.

* INCLUDES 15% SHRINKAGE FACTOR.

** PAYMENT WILL BE BASED ON ACUTAL AMOUNT USED.

DUCKS UNLIMITED

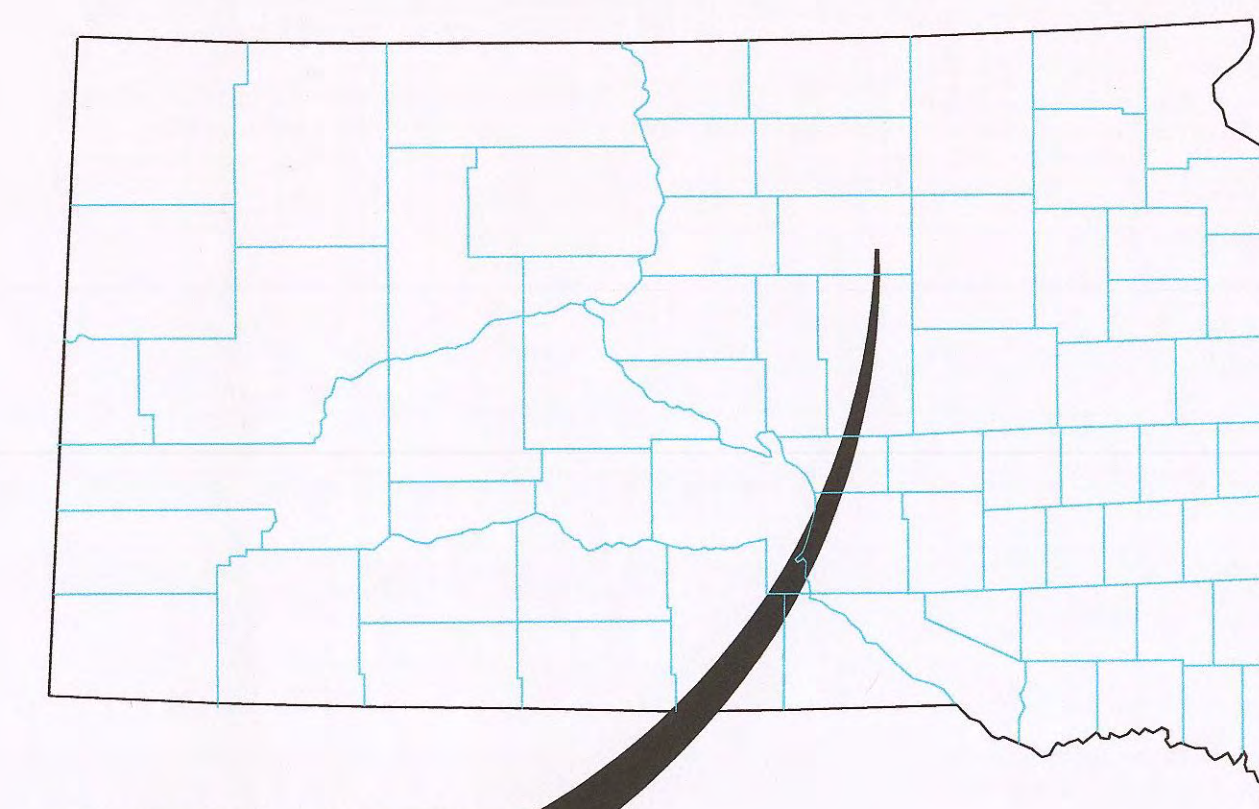
PROJECT

DICK EMMRICH WETLAND

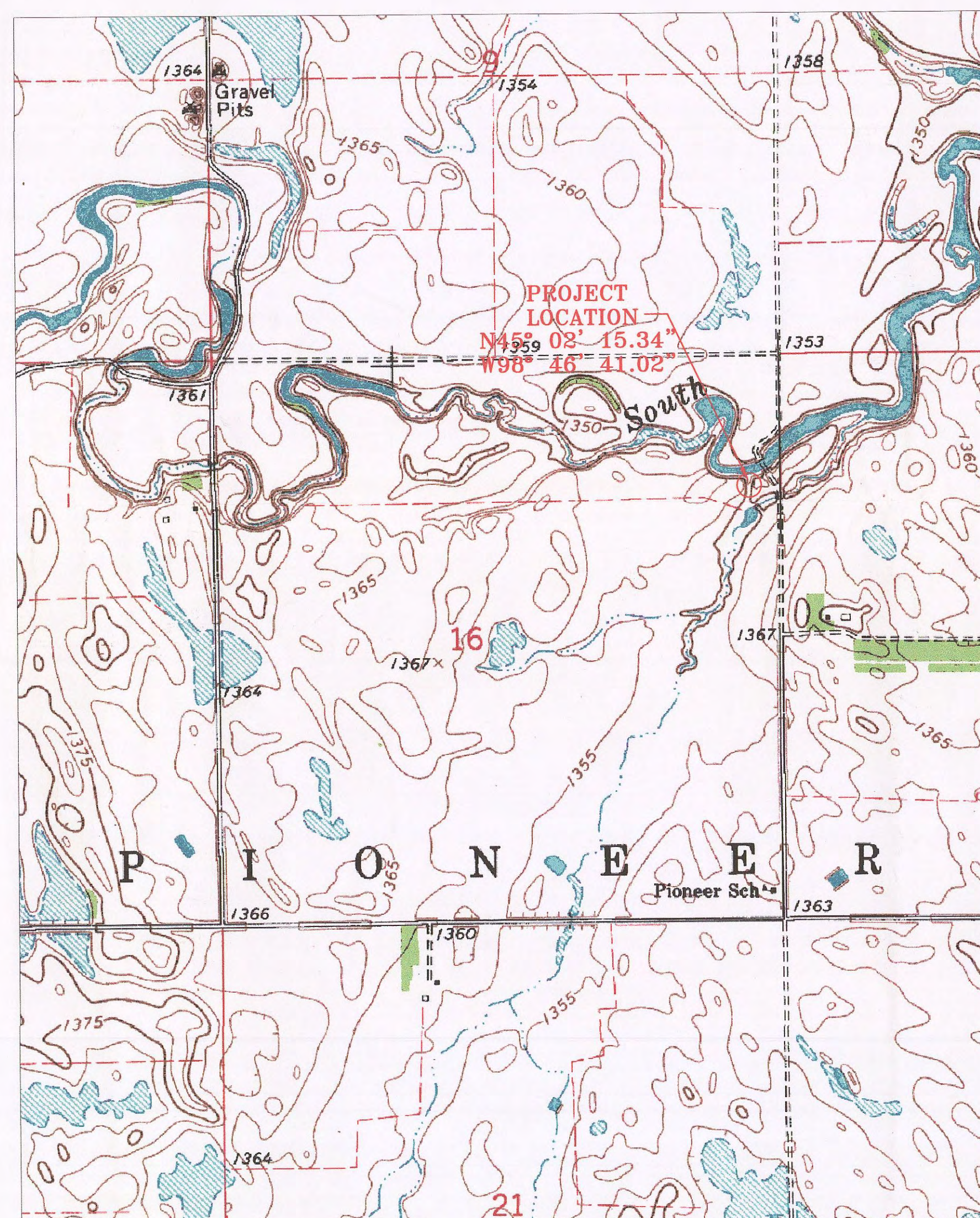
SECTION 16, T118N, R66W
FAULK COUNTY, SOUTH DAKOTA

IN COOPERATION WITH

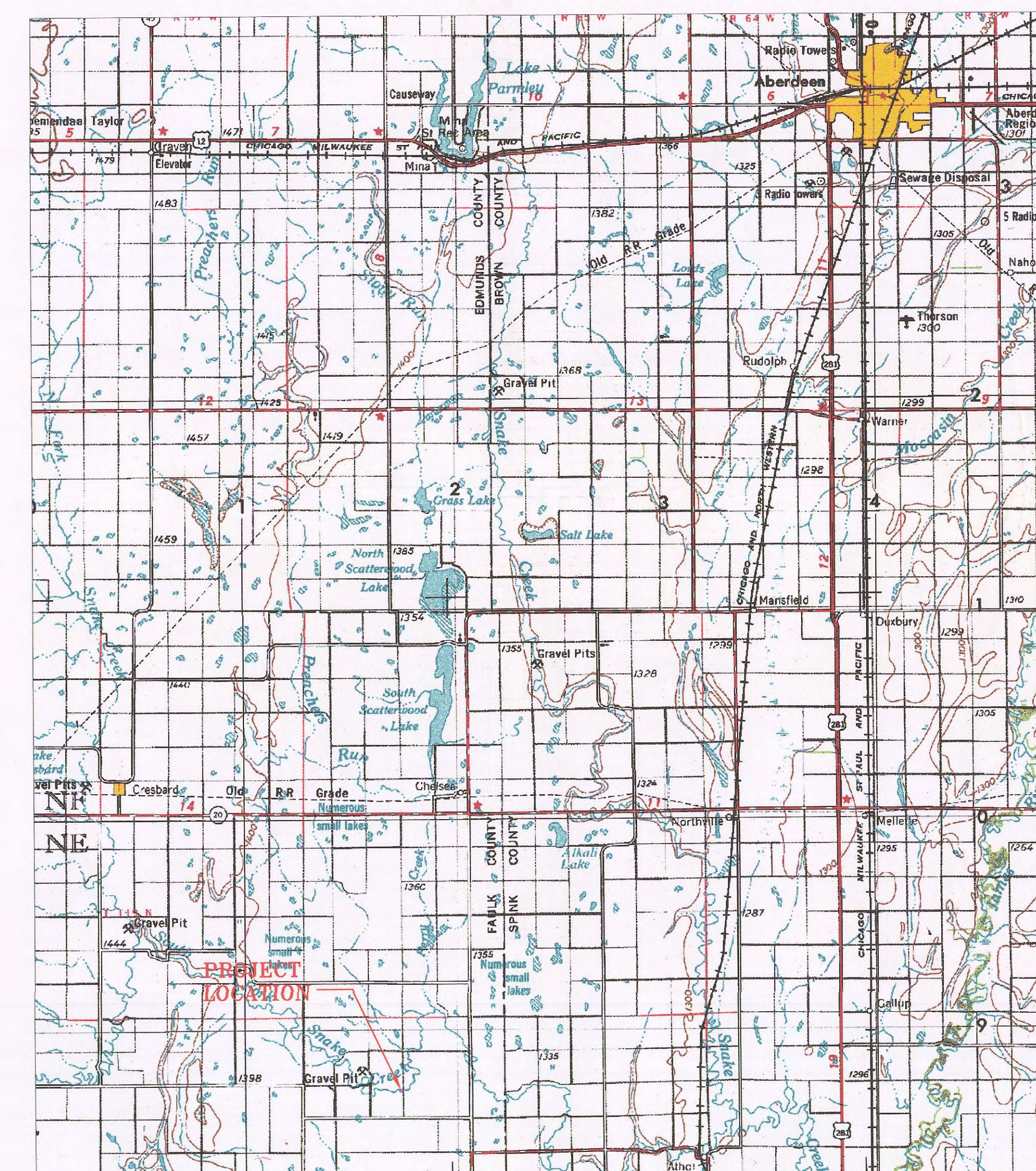
SOUTH DAKOTA GAME, FISH, AND PARKS



PROJECT LOCATION



VICINITY MAP
NO SCALE

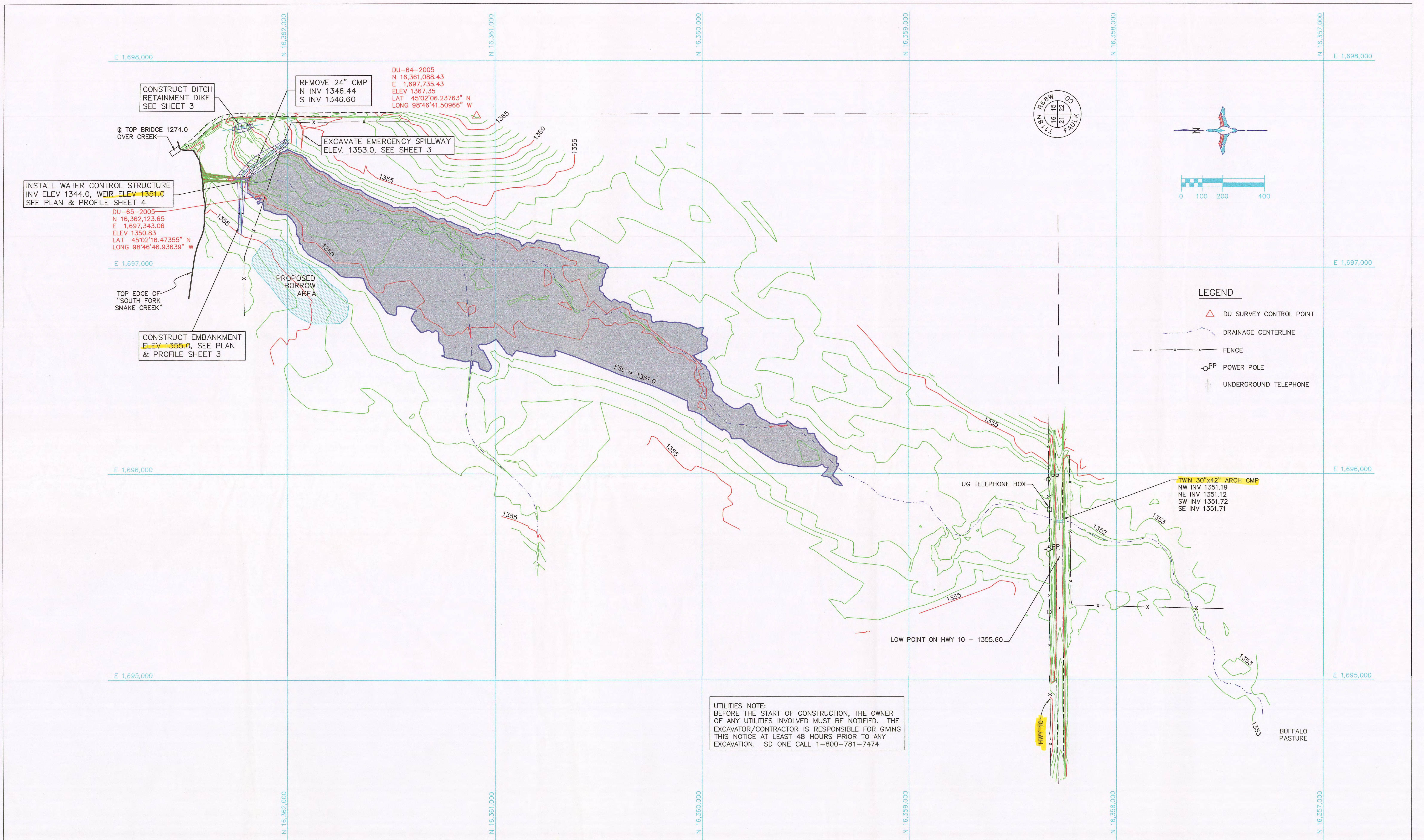


LOCATION MAP
NO SCALE

AGENCY CONTACT: CHAD SWITZER
SD GAME, FISH & PARKS
605-353-7145
LANDOWNER CONTACT: DAN SOVINSKI
LAND MANAGER
605-472-1071

 DUCKS UNLIMITED INC. GREAT PLAINS REGIONAL OFFICE DATE: 2-06-2006	PROJECT NO. SD391-1 DICK EMMRICH WETLAND LOCATION & VICINITY MAPS APPROVED BY: [Signature] SHEET NO. 1 OF 5	DESIGNED BY: RCS DRAWN BY: DAK SURVEYED BY: GLJ CHECKED BY: BRK APPROVED BY: [Signature]
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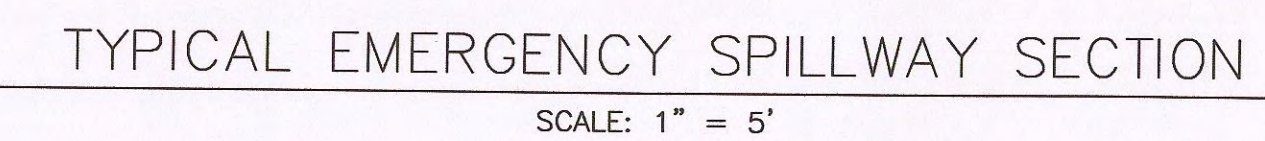
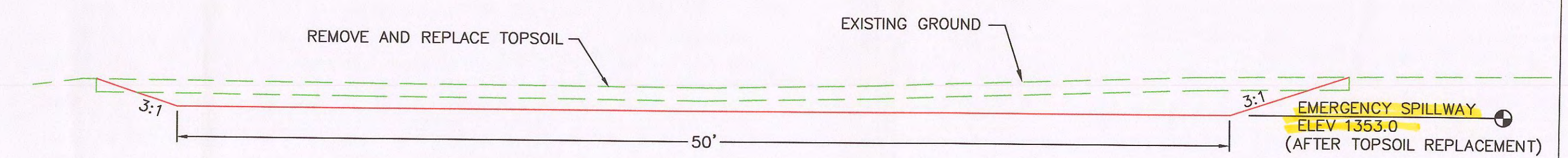
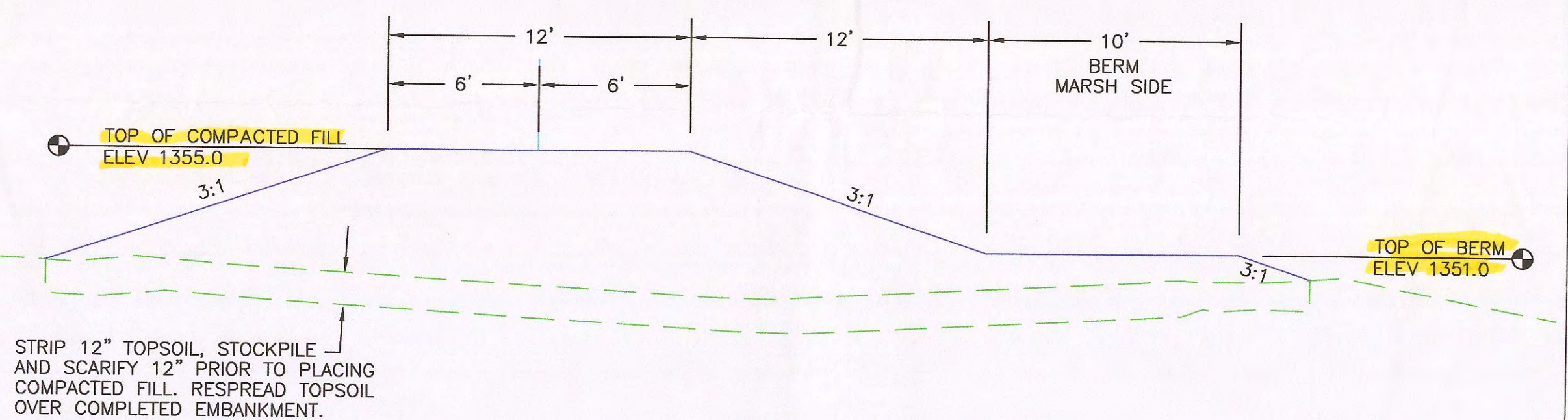
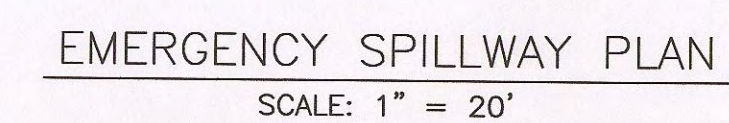
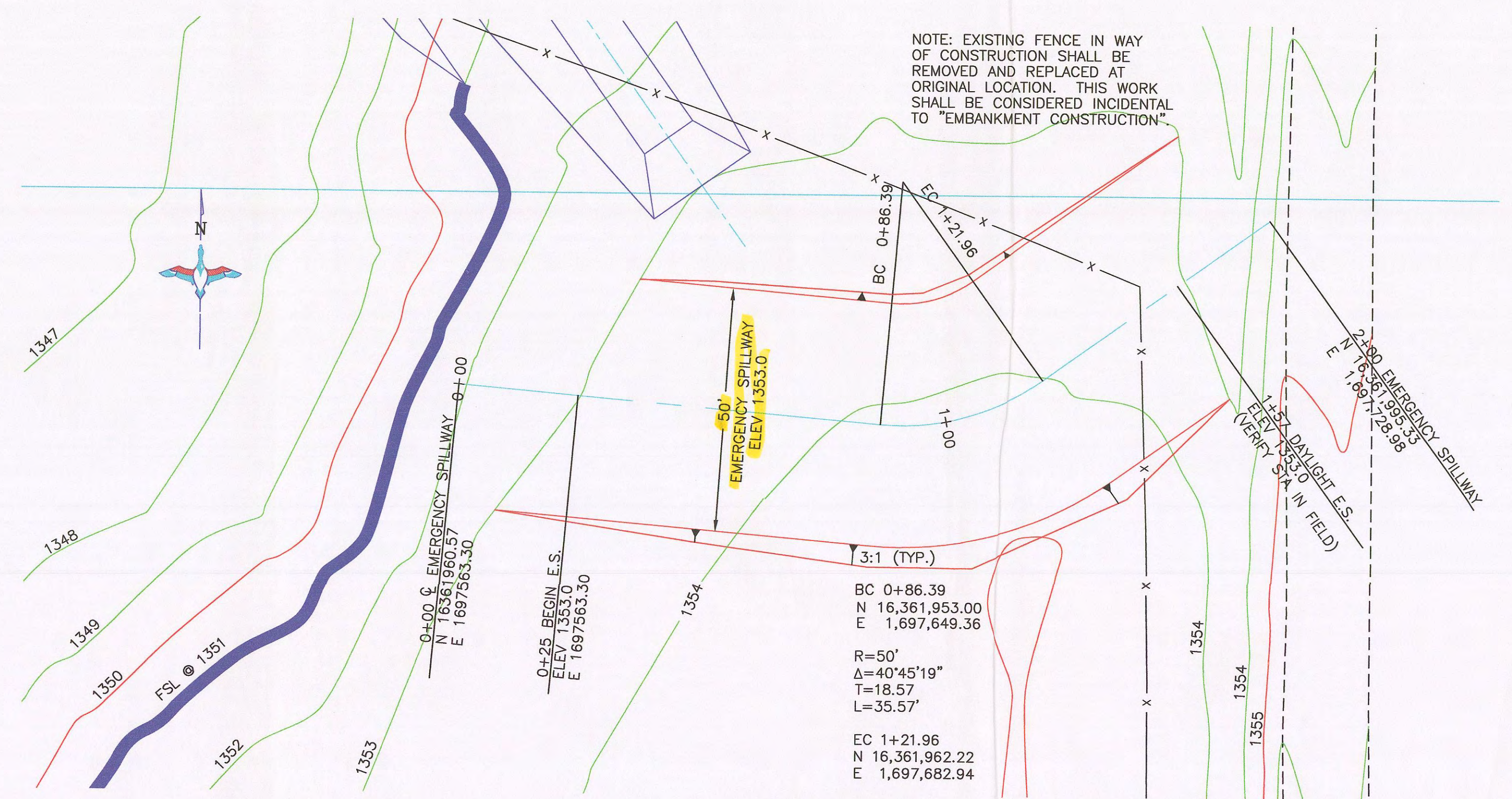
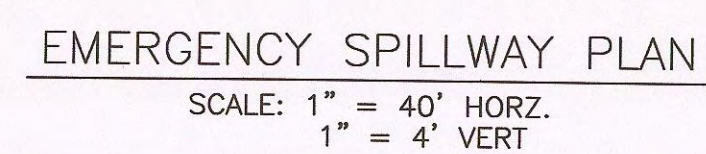
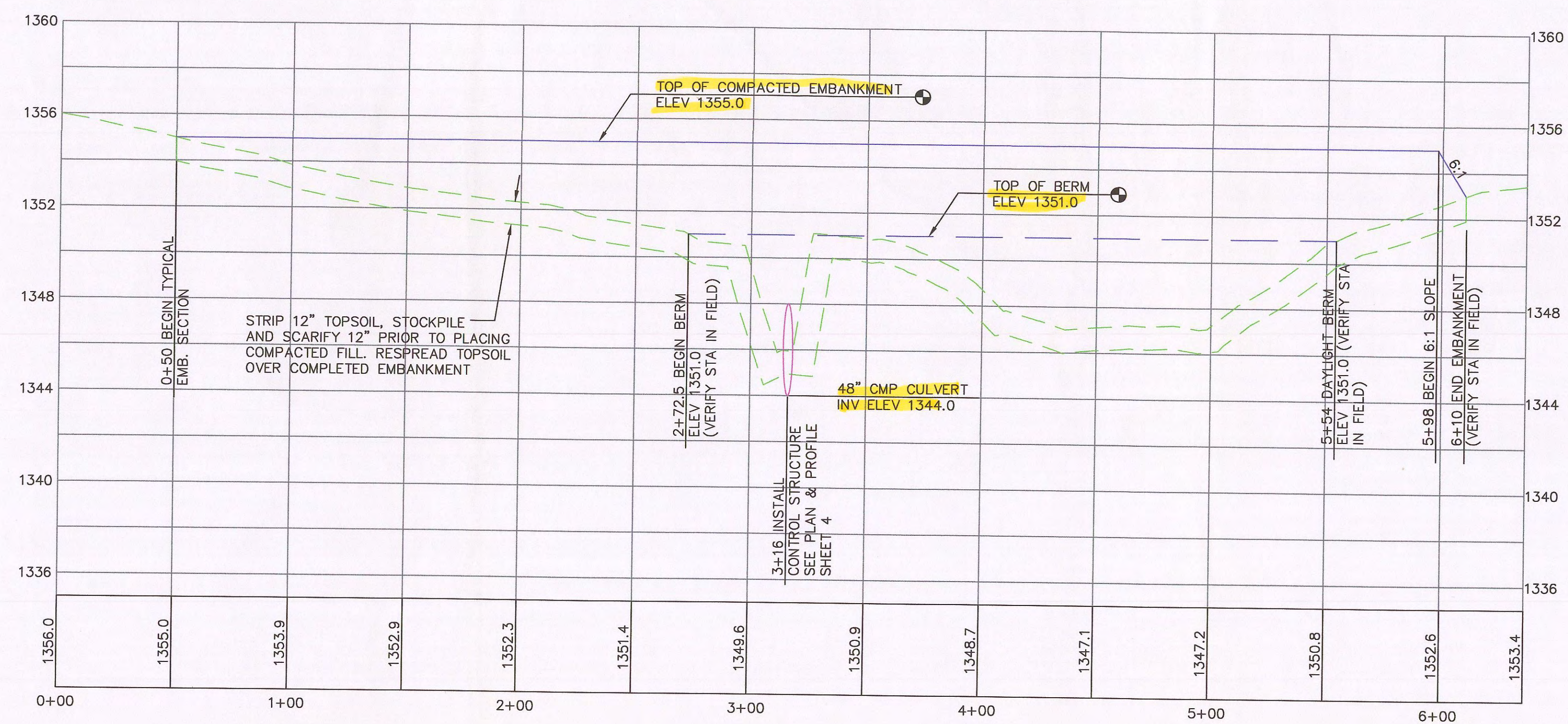
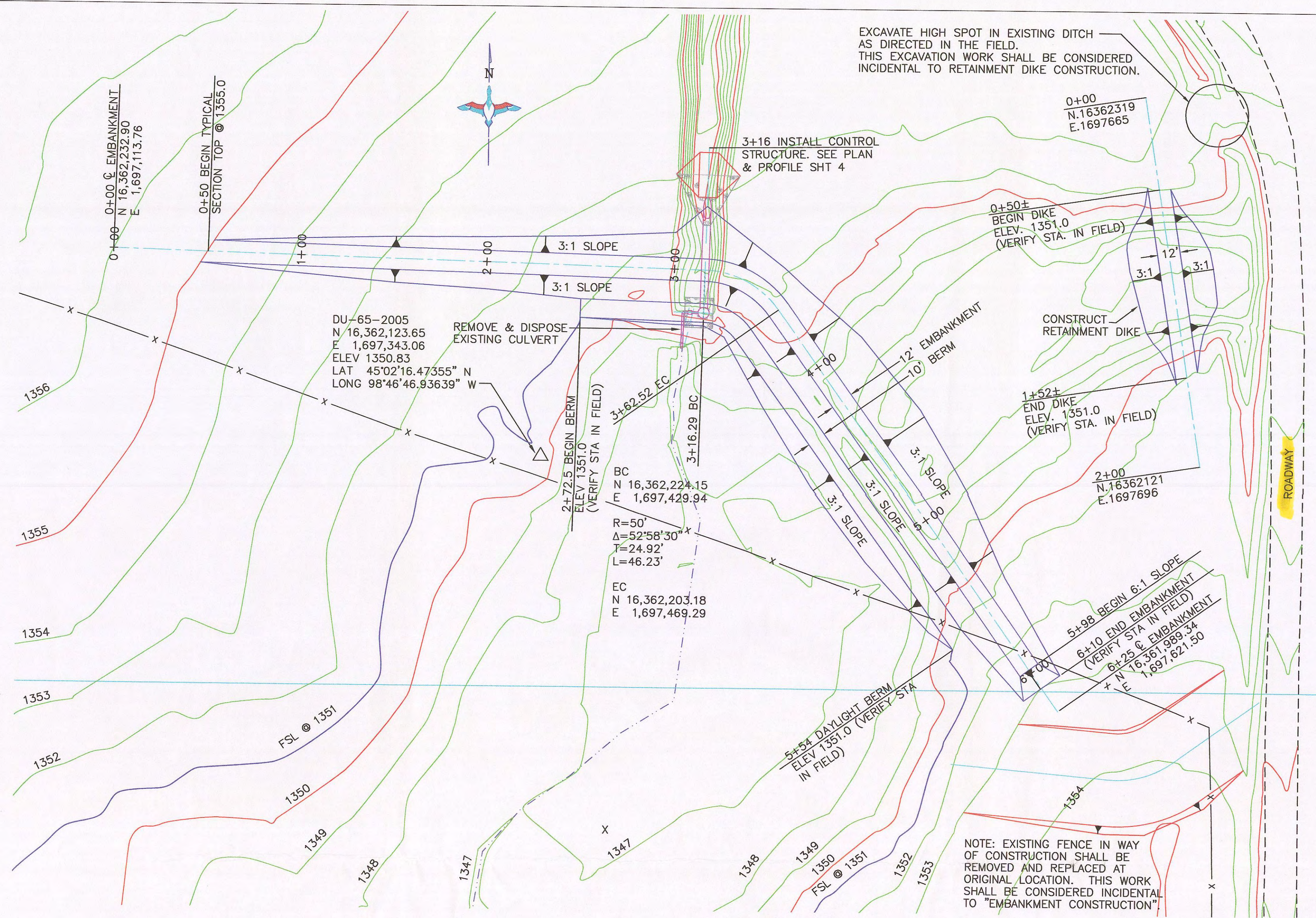
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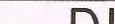
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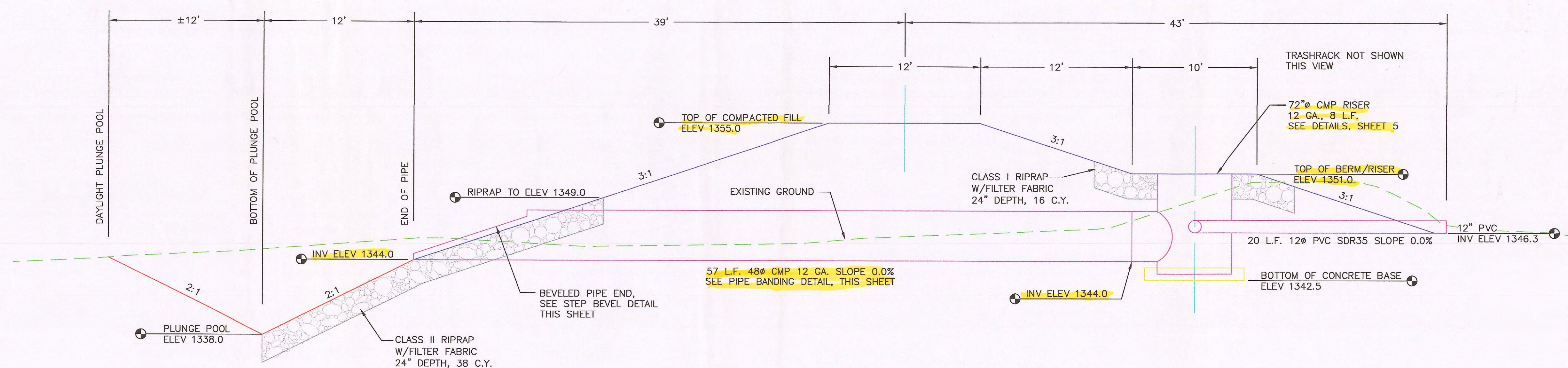
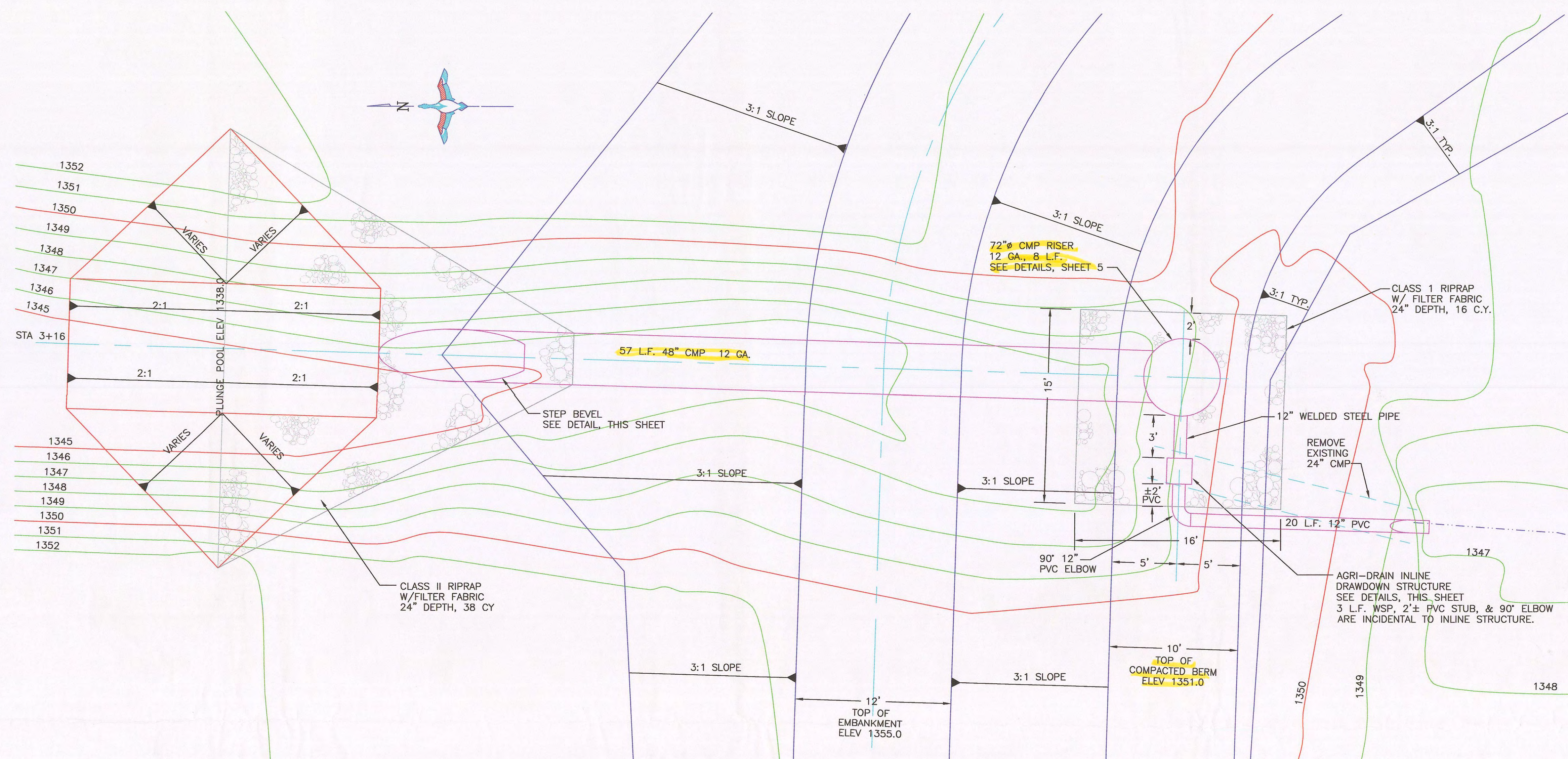
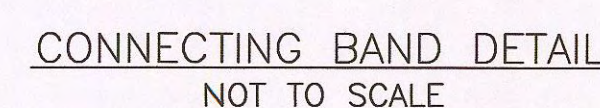
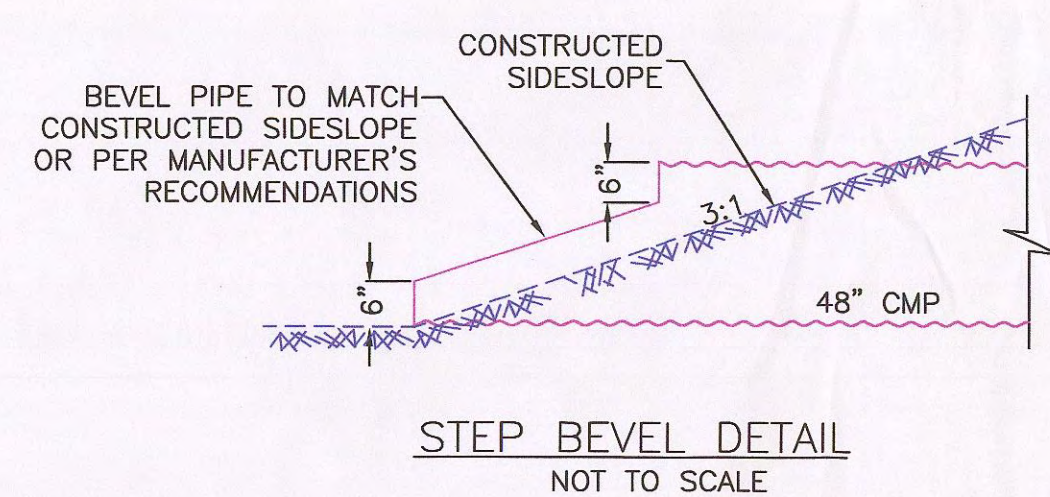
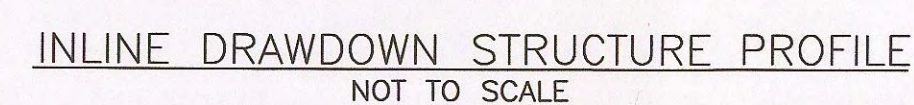
HORIZONTAL AND VERTICAL CONTROL- Coordinates are autonomous UTM Zone 14 coordinates in US feet [NAD 83 (1996)]. They were established from the WGS84 Ellipsoid with information from Trimble R8 receivers on September 13, 2005. The vertical datum is also autonomous and was established from the Geoid 03 CONUS from the same receivers.

DUCKS UNLIMITED INC. GREAT PLAINS REGIONAL OFFICE		PROJECT NO. SD391-1 DICK EMMRICH WETLAND	DESIGNED BY: RCS DRAWN BY: DAK TSP SURVEYED BY: GLJ CHECKED BY: BRK
DATE: 2-06-2006	SHEET NO. 2 OF 5	APPROVED BY:	APPROVED BY:



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 DUCKS UNLIMITED INC.	PROJECT NO. SD391-1		K:\SD\SD391-1-Emmrich\Sheet3.dwg		
	DICK EMMRICH WETLAND		DESIGNED BY: RCS		
	EMBANKMENT PLAN & PROFILE		DRAWN BY: DAK TSP		
GREAT PLAINS REGIONAL OFFICE		CHECKED BY: CLJ		SURVEYED BY: BRK	
DATE:	SHEET NO.	APPROVED BY:	APPROVED BY:		
2-06-2006	3 OF 5				



WATER CONTROL STRUCTURE - C PROFILE

