

WATER PERMIT NO. 7408-3

Name of Applicant: **Roger Baumfalk**

Address: **40429 311th St, Avon SD 57315** Phone: **605 286-3596**

Amount of Water Claimed: **32 AF** Total Acres: **NA**

Source of Water Supply: **Choteau Creek and runoff**

Water to be used for: **irrigation** County: **Bon Homme**

Type of Waste Disposal System:

Location: **9 miles west of Springfield**

PRIORITY Date Received: **8-7-12**

Application/License Fee: **\$ 700**

Corrected Application Received: **8-29-12**

Period of Annual Use: **Jan 1 – Dec 31**

Remarks:

Diversion Point: **SE 1/4 NE 1/4 Sec 13-T93N-**
R62W

Water Impounded: **SE 1/4 NE 1/4 Sec 13-T93N-**
R62W

			13	5	

Depth of Well: **NA**

Well Driller:

Remarks:

Type of Map: **aerial**

Prepared by: **Mark Rohling NRCS**

Reviewed and the Number Assigned on: **8-29-12**

By: **Karen Schlaak**

Notice of Hearing - date to intervene: _____

FORM 2: Application for irrigation in South Dakota

(type or print)

Mail to: PMB 2020 DENR - Water Rights 523 E Capitol Ave Pierre, SD 57501-3182 ph. (605) 773-3352	No. <u>7408-3</u> (office use only)	Hydrologic Unit <u>10170101</u>
	Basin <u>Missouri River</u>	<u>605-589-3242</u>
	Newspaper <u>Tyndall Tribune P.O. Box 520</u>	<u>57066</u>
	<u>Press of Dakota 319 Walnut Yorkston 57078-605-665-7811</u>	

RECEIVED

AUG 07 2012

WATER RIGHTS
PROGRAM

Application For Permit To Appropriate Water For Irrigation

 Type of Application: ☒ New ☐ Vested Right ☐ Amendment/Correction to Permit No. _____

(Use predates Mar 2, 1955)

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

1. Name of Applicant Roger Baumfalk Phone 605-286-3596(check one) ☒ Owner ☐ Tenant/lessee
 Mailing Address 40429 311th St. Avon SD 57315
 (Address) (City) (State) (Zip Code)

 2. Amount of water claimed _____ *CFS or _____ **GPM 32 ***AF Total Acreage _____
 (*Cubic Feet per Second) (**Gallons per Minute) (***Acre Feet - storage capacity of dam/dugout or annual use if applicable)
3. Source of water supply Surface Water Runoff and Water Pumped from Choteau Creek (with water rights)4. Location of point of diversion (example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W) County Bon Homme
SE 1/4, NE 1/4 Sec. 13, T93N, R62W: Water impounded SE 1/4 NE 1/4 Sec 13 T93N R62W
5. County or counties where water will be used Bon Homme6. Annual period during which water is to be used Summer April - Oct. 31

7. List below each forty acre division, or lot, or fraction thereof and show number of acres to be irrigated in each.

(Attach sheet if more space is needed)

Land Description	Acres	Land Description	Acres

8. Give a description of the project. (Attach sheet if more space is needed)

An earthen dam will be constructed to store 32 Acre-feet of water. Water from Choteau Creek will be used to fill the reservoir. A water rights permit already exists to pump the water from the creek.

STATE OF SOUTH DAKOTA)

County of Bon Homme)

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

 I, Roger Baumfalk, 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 Roger I BaumfalkSubscribed and sworn to before me this 30th day of July 20 12
 ERNIE R. BURES
 Notary Public
 SEAL
 South Dakota

2010-01

Ernie R Bures
 Notary Public signature
My Commission Expires 10-15-2016

Supplemental Information

(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 applicant's 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) _____

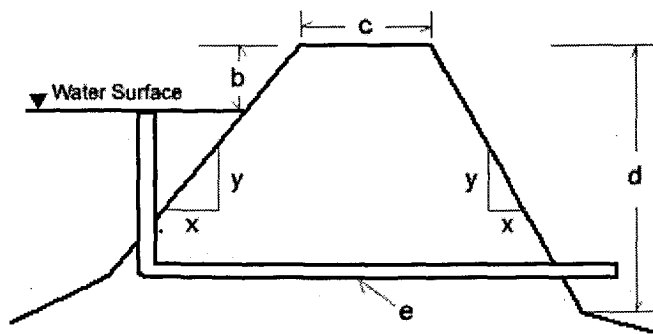
4. Water Storage Dams

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:

Natural Resources Conservation Service
1820 N. Kimball St.
Mitchell, SD 57301

- b) Freeboard 8.5
- c) Crest Width 15
Crest Length 291
- d) Height 25.6
- e) Primary Outlet Capacity 68.8 cfs
If pipe, diameter 24 inch
- f) Secondary Spillway Capacity NA
Spillway Width NA
- g) X & Y Slope (e.g. 3 to 1 is a typical slope)
Upstream 4
Downstream 4
- h) Surface Area of Impoundment 2.2
- i) Storage 32.6 Acres
- j) Drainage Area Above Dam 210.0 Acres



SOUTH DAKOTA
WATER PERMIT NO. 7408-3

Date of first receipt of application August 7, 2012.

Date of return to applicant for corrections, amendments or changes August 8, 2012.

Date of receipt of corrected application August 29, 2012.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 7408-3 to Roger Baumfalk, 40429 311th St, Avon SD 57315 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. 7408-3 authorizes impoundment of 32 acre-feet of water by constructing a dam located in the SE 1/4 NE 1/4 Section 13 with water impounded in the SE 1/4 NE 1/4 Section 13; all in T93N-R62W as a component of the irrigation system authorized by Water Permit No. 7056-3. Water Permit No. 7056-3 appropriates 1.33 cubic feet of water per second from Choteau Creek located in the NW 1/4 NE 1/4 Section 13-T93N-R62W to irrigate 141 acres located in the E 1/2 NW 1/4, E 1/2 SW 1/4, SW 1/4 SW 1/4 Section 18-T93N-R61W and the SW 1/4 NE 1/4 Section 13-T93N-R62W.
2. The water appropriated shall be used for the purpose of irrigation 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: April 1 – October 31 (irrigation) and January 1 – December 31 (storage dam).
4. The date of approval of Permit No. 7408-3 is October 9, 2012.
5. The date from which applicant may claim right is August 7, 2012.
6. One-fifth of the construction is to be completed on or before April 9, 2015.
7. All construction is to be completed on or before October 9, 2017.
8. Water is to be put to beneficial use on or before October 9, 2021.
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. 7408-3 authorizes an impoundment with a storage capacity of 32 acre feet of water and sufficient water annually to maintain the water level to the outlet elevation.
2. Low flows as needed for downstream domestic use, including livestock water and prior water rights must be by-passed.
3. Water may be diverted from Choteau Creek to the dam only during flow events that are obviously sufficient to meet downstream domestic uses, including livestock water and prior water rights. At no time may the entire creek flow be diverted. Pumping is allowed each year from April 1 – June 30 unless the Chief Engineer is contacted and grants written authorization to pump from the creek past June 30. Storage water in the dam may be pumped for the purpose of irrigating land authorized by Permit No. 7056-3 after June 30 of each year.

(continued)

Water Permit No. 7408-3

Roger Baumfalk

Page 2

4. This Permit is approved subject to the irrigation water use questionnaire being submitted each year. The Permit holder will need to distinguish on the irrigation questionnaire when stored water is being pumped for irrigation.

WATER MANAGEMENT BOARD

By: Garland Erbele

Garland Erbele, Chief Engineer

Water Rights Program

Department of Environment and Natural Resources

OCT 29 2012

date





United States Department of Agriculture
Farm Service Agency

PLSS: 13_93N_62W
Farm: 5144

Bon Homme County

1:7,748

December 29, 2011



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AUG 29 2012

WATER RIGHTS
SEAL

Wetland Determination Identifiers
 ● Restricted Use
 ▼ Limited Restrictions
 ■ Exempt from Conservation Compliance Provisions

Common Land Units
 Non Cropland

Disclaimer: Wetland identifiers do not represent the size, shape or specific determination of the area.
 Refer to your original determination (CPA-026 and attached maps) for exact wetland boundaries and determinations, or contact NRCS.

2010 Ortho-Photography - Not to Scale

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date 8/7, 20 12

RECEIVED OF Baumfalk Farms Roger L Baumfalk 40429 311th St Avon SD 57315

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

Fee for Application for Permit No. <u>7408-3</u> to Appropriate Water, to construct and to put water to beneficial use	50	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. _____		
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	50 00

No. **05520**

By Garland Edwards
Chief Engineer

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

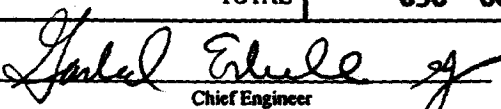
Date 8/29, 20 12

RECEIVED OF Roger Baumfalk 40429 311th St Avon SD 57315

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

Fee for Application for Permit No. <u>7408-3</u> to Appropriate Water, to construct and to put water to beneficial use	450	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>7408-3</u>	200	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	650 00

No. **05550**

By 
Chief Engineer

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WATER RIGHTS
PROGRAM

SD EForm - 0459LD V3

Mail to: PMB 2020
DENR - Water Rights Program
523 E Capitol Ave
Pierre, SD 57501-3182

ph. (605) 773-3352

LOCATION NOTICE
FOR DAM\DUGOUT

Location Notice No. (Office Use)

I, Roger Baumfalk, of _____, Name

40429 311th Street Avon SD 57315
Address City State Zip Code

(check one) ☒ owner, ☐ operator, of the following described land, do hereby 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 (check one) ☒ dam, ☐ ¹dugout for the purpose of impounding runoff waters for Irrigation Reservoir purposes.
(type of use - livestock, recreation, fish & wildlife, etc.)

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

(1) Date of:

(a) This notice July 19, 2012

(b) Proposed construction Summer 2012

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

SE1/4 NE1/4 Section 13-T93N-R62W

(describe to the nearest 40 acre subdivision, e.g. NE1/4SW1/4 section 10-T98N-R65W)

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

2017 feet SW of NE corner of Section 13 T93N-R62W, Bon Homme County, SD

(describe distance N.S.E.W. in feet from the section corner)

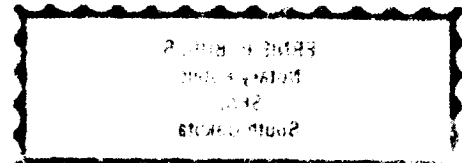
(4) County where dam\dugout is located Bon Homme

(5) Name of landowner Roger Baumfalk

(6) ²Acre feet of water claimed annually 11.4

¹ A location notice is required for a dugout only if the dugout captures surface runoff.

² If the storage of the proposed structure at the spillway crest or overflow elevation exceeds twenty five (25) acre feet, a water permit from the Water Management Board is required.



(7) Complete the following information for the proposed dam/dugout:
(Items to be completed for a dugout are marked with an asterisk '*')

*a) Dam/Dugout designed by NRCS
1820 N. Kimball Street, Suite 4
Mitchell, SD 57301

b) Freeboard 8.5 feet

c) Crest Width 15

Crest Length 291

d) Height 25.6

*Depth, if Dugout na

e) Outlet Dimensions

Pipe diameter 24 inch

Spillway width na

f) X & Y Slope: (e.g. 3 to 1 is a typical slope)

Upstream 4

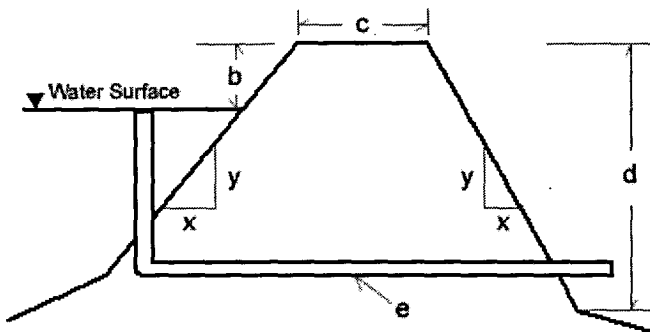
Downstream 4

*g) Water surface area 2.2

*h) Storage at spillway crest or overflow elevation
(acre feet) 32

i) Maximum storage to top of dam crest
(acre feet) 58.5

*j) Drainage area above dam/dugout
(acres) 210



Enclosed is fifty dollars (\$50.00). The Water Management Board is requested to file this copy of the Location Notice in their official records. The original Location Notice has been filed (do not record) with the Register of Deeds of Bon Homme County in accordance with SDCL 46-4-3.

Roger Baumfalk

(or)

Owner

Locator

STATE OF SOUTH DAKOTA)

COUNTY OF Bon Homme)

SS

I, Roger Baumfalk 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

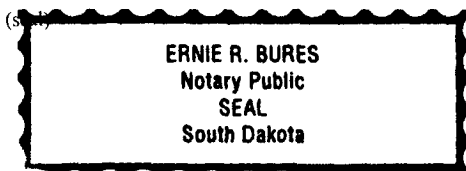
Roger Baumfalk

Subscribed and sworn to before me this 30th day of July, 20 12

Ernie R. Bures

Notary

My Commission Expires 10-15-2016



**Storm Water Pollution Prevention Plan
Roger Baumfalk Irrigation Reservoir**

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AUG 29 2012

**WATER RIGHTS
PROGRAM**

Construction of irrigation reservoir will expose approximately 1.1 acres of soil. The intended sequence of activities that will expose soil include the following: stripping of topsoil, excavation of pool area, stockpile soils while embankment is being built, and top dress cut areas before seeding.

During construction, hay bales or silt fence will be used as sediment control to prevent any soil from exiting the construction site. Exposed soil piles will be covered whenever possible. After construction, all slopes will be seeded to an intermediate, western, and slender wheatgrass mix.

The construction site is located in the NE $\frac{1}{4}$ of Sec. 13, T93N, R62W which is found in Bon Homme County. The site is 850 feet east of the main channel of Choteau Creek.

A site map showing the direction of any drainage, the slopes after grading, and the location of any storm water controls such as hay bales or silt fences is attached.

Inspection and maintenance schedule for storm water controls at the site will be conducted on a weekly basis. The hay bales will be visually inspected for gaps or holes, and if maintenance is required, it will be performed at this time.

**Storm Water Pollution Prevention Plan
Roger Baumfalk Irrigation Reservoir**

Project Name:

Roger Baumfalk Irrigation Reservoir

Project Type:

Construction of earth embankment and excavation of pool area

Project Location:

NE ¼ of Sec. 13, T93N, R62W in Bon Homme County, SD

Estimate of Project Size:

1.1 acres

Description of the Nature of the Activity:

Excavation and earth fill to construct dam, and pool area

Proposed Timetable and Construction Activities:

Earthwork is expected to begin 8/01/2012 and should be completed by 8/31/2012

Name of Receiving Waters:

Choteau Creek

Soil Type:

The soil type is mapped as an Ethan-Betts soil. Soil borings confirmed the Ethan soils are the dominant soil in the construction area along with Boyd and Sansarc soils, and they have a CL unified soil classification. The USDA texture is a loam/clay loam for this soil type.

Conservation Practices to be used:

1. Construction equipment movement will be limited to the construction area. All parking of equipment will be done on already excavated soil.
2. Hay bales or silt fences will be used to prevent soil from leaving the construction site.
3. All disturbed areas in the earth embankment will be seeded with a smooth brome grass, western, and slender wheatgrass mix.

Storm Water Discharges:

During construction storm water discharges should be small because hay bales or a silt fence will be placed to hold most of the discharge. After the project is completed, the flow to the downstream creek will decrease due to the earth embankment.

Inspections:

Inspections will be routinely performed by the owner for all of the disturbed areas that have not been fully stabilized. Inspections will be performed after every major runoff event.

Record Keeping:

A copy of this plan shall be kept at the construction site until all stabilization measures are completed. Copies of all reports and this plan shall be kept for a period of three years following completion of final stabilization.

Plan Updating:

If there is a change in design, construction, operation, or maintenance, which may impact the potential for pollutants to be discharged; or if this Storm Water Pollution Prevention Plan proves to be ineffective in controlling the discharge of pollutants, then this Plan must be amended.

Certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Signature: Roy L. Bapett

Title: _____



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
denr.sd.gov

August 8, 2012

Roger Baumfalk
40429 311th St
Avon SD 57315

Dear Mr. Baumfalk:

Thank you for submitting the *Application for a Permit to Appropriate Water* for the storage component to Water Permit No. 7056-3. In order to complete the application, the following is required.

- Please submit an aerial photo map showing the location of the storage dam. The map must be signed by one of the following: Registered Land Surveyor, Registered Professional Engineer or by any other government employee who normally prepares maps as a part of his assigned duties (i.e. local NRCS office).
- Plans and specifications for the dam will also be needed pursuant to Safety of Dams Rules Chapter 74:02:08. A written preliminary risk assessment of the downstream hazard potential needs to be provided. This assessment will aid in the determining the hazard classification for the proposed dam. The supplemental information Form 2A indicates the NRCS helped with the proposed dam design. Plans and specifications may already be completed.
- A location notice was submitted with the permit application. Since the proposed dam is greater than 25 acre-feet, the water permit is required and the location notice is not. The application/license fee for this permit will be \$700.00. We will apply the \$50.00 you have submitted towards the fee, with an additional \$650.00 required.

If you have any questions, please contact me.

Sincerely,

Karen Schlaak
Water Rights Program
605 773-3352
karen.schlaak@state.sd.us



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
denr.sd.gov

September 24, 2012

Roger Baumfalk
40429 311th St.
Avon, SD 57315

Dear Mr. Baumfalk:

We have reviewed the plans and specifications for your dam project located in the SE ¼ NE ¼ of Section 13-T93N-R62W, in Bon Homme County. The plans and specifications for the project 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. 7408-3 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 Baumfalk Dam will be classified as a small size Category 3, Low Hazard dam with a dam height of 28.5 feet and a normal storage capacity of 32 acre-feet and a maximum storage capacity of 58.5 acre-feet.

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

Sincerely,

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

c: Jared Gelderman

1*****
SITES XEQ 07/25/2012 WATER RESOURCE SITE ANALYSIS COMPUTER PROGRAM
VER 2005.1.04 (USER MANUAL - DATED DECEMBER 2005)
TIME 08:24:52

***** 80-80 LIST OF INPUT DATA *****

SITES 01/01/2005 0.328125 H5
SAVMOV 0 101
SAVMOV 101 1 1
* No emergency spillway
STRUCTURE
120 2.18 0 32.0
121 2.36 37.41
122 2.57 61.46
123 2.79 63.06
124 3.02 64.61
125 3.26 66.14
126 3.48 67.62
127 3.73 69.08
128.5 4.33 71.20
ENDTABLE
WSDATA 5A1 AC 76 210 .712
PDIRECT 5.2 5.20
POOLDATA ELEV 120.0 120 102.9 100.0
ASDATA 30D025 3 .04 3
BTMWIDTH FEET 350
GRAPHICS I
GO,DESIGN NL TYPE2 24 TYPE2378 24
SAVMOV 2 101 1
ENDJOB

1SITES XEQ 07/25/2012 ----- COMMENT PAGE -----
VER 2005.1.04 WSID =

No emergency spillway

***** MESSAGE - ALTERNATE STRUCTURE ID (S 1) BEING USED
SINCE USER DID NOT INPUT AN ID.

***** MESSAGE - ALTERNATE SUBWATERSHED ID (A) BEING USED SINCE
USER DID NOT INPUT AN ID.

***** MESSAGE - DRAINAGE AREA FROM WSDATA CONTROL BEING CONVERTED FROM
ACRES TO SQUARE MILES FOR COMPUTATION PURPOSES.

1SITES -----
XEQ 07/25/2012 WSID=
VER 2005.1.04 SUBW= A
TIME 08:24:52 SITE = S 1 PASS= 1 PART= 1

***** BASIC DATA *****
CLIMATE AREA - NOT DEFINED DESIGN CLASS A1 = LT 3000.

STORM DISTRIBUTION-PSH 24 HOUR TYPE II RAINFALL DISTRIBUTION

STORM DISTRIBUTION AUX. -24 HOUR TYPE II RAINFALL DISTRIBUTION

PRECIP. - P-PS,1-DAY	P-PS,10-DAY	P-SD	P-FB	
5.20	0.00	0.00	5.20	
WSDATA - CN	DA-SM	TC/L	-/H	QRF
76.00	0.33	0.71	0.00	0.00
SITEDATA- PERM POOL	CREST PS	FP SED	VALLEY FL	378?
120.00	120.00	0.00	100.00	YES
BASEFLOW	INITIAL EL	EXTRA VOL	SITE TYPE	
0.00	0.00	0.00	DESIGN	
PSDATA - NO. COND	COND L	DIA/W	-/H	
0.00	0.00	0.00	0.00	
PS N	KE	WEIR L	TW EL	
0.000	0.00	0.00	0.00	
2ND STG	ORF H	ORF L	START AUX.	
0.00	0.00	0.00	0.00	
ASCRESTS - AUX.1	AUX.2	AUX.3	AUX.4	AUX.5
0.00	0.00	0.00	0.00	0.00
AUX.DATA - REF.NO.	RETARDANCE	TIE STATION	INLET LENGTH	
30	D	0.00	0	
AUX.DATA - INLET N	SIDE SLOPE	EXIT N	EXIT SLOPE	ACTUAL AUX?
0.000	3.00	0.000	0.040	NO
BTM WIDTH - BW1	BW2	BW3	BW4	BW5
ft 350.00	0.00	0.00	0.00	0.00

***** NOTE - THIS IS ONLY A PRELIMINARY AUX. SPILLWAY RATING CURVE OF DISCHARGE/FT OF WIDTH AND DOES NOT INCLUDE SIDESLOPE CORRECTION OR A REVISED RATING USING THE ACTUAL AUX. SPILLWAY CONFIGURATION.

AUX. SPILLWAY ID CODE ...30D025	ELEVATION INCREMENT (FT)= 0.200
DISCHARGES-Q1	Q2
0.030	0.110
Q3	Q4
0.560	1.170
Q5	Q6
1.910	2.780
Q7	Q8
3.830	5.040
Q9	Q10
6.420	7.970
Q11	Q12
9.700	11.600

AUXILIARY SPILLWAY RATING BASED ON PRECOMPUTED SUBCRITICAL FLOW METHOD USING PROFILE NUMBER 30.

1SITES -----

XEQ 07/25/2012	WSID=
VER 2005.1.04	SUBW= A
TIME 08:24:52	PART= 2
SITE = S 1	PASS= 1

PERM POOL	120.00 FT	32.0 ACFT	2.18 AC	0.0 CFS
CREST PS	120.00 FT	32.0 ACFT	2.18 AC	0.0 CFS
SED ACCUM	120.00 FT	32.0 ACFT	2.18 AC	0.0 CFS
START ELEV	120.00 FT	32.0 ACFT	2.18 AC	0.0 CFS
NRCS-PSH	D= 24.00 HR	P= 5.20 IN	Q= 2.70 IN	DA= 0.33 SM
	TC= 0.71 HR	CN= 76.00	VOL= 47.3 ACFT	

PEAK = 396.8 CFS, AT 12.3 HRS.

ROUTED RESULT - HYD TYPE	EMAX	VOL-MAX	AMAX	QMAX
NRCS-PSH	126.95 FT	52.3 ACFT	3.72 AC	69.0 CFS

PS STORAGE 20.3 ACFT, BETWEEN AUX. CREST AND SED. ACCUM ELEVATIONS.

DRAWDOWN (DDT) TEST 120.00 FT 32.0 ACFT 0.00 CFS
CONTROL IS 0.000 DETENTION STORAGE

DRAWDOWN TIME = 0.64 DAYS, TO 0.0 CFS (LIMIT = 10.00 DAYS)

RATING TABLE DEVELOPED, SITE = S 1:
WITH PS GIVEN AND ASRATING FOR AUX.
AUX. RATING FROM ASFILE PROFILE NO. 30.

RATING TABLE NUMBER 1

	ELEV. FEET	Q-TOTAL CFS	Q-PS CFS	Q-AUX. CFS	VOLUME AC-FT	AREA ACRE
1	120.00	0.00	0.00	0.00	32.00	2.18
2	121.00	37.41	37.41	0.00	34.27	2.36
3	122.00	61.46	61.46	0.00	36.74	2.57
4	123.00	63.06	63.06	0.00	39.42	2.79
5	124.00	64.61	64.61	0.00	42.32	3.02
6	125.00	66.14	66.14	0.00	45.46	3.26
7	126.00	67.62	67.62	0.00	48.83	3.48
8	127.00	69.08	69.08	0.00	52.43	3.73
9	128.50	71.20	71.20	0.00	58.48	4.33

1SITES

XEQ 07/25/2012
VER 2005.1.04
TIME 08:24:52

SITE = S 1

PASS= 1

WSID=
SUBW= A
PART= 3

AUX. CREST 126.95 FT 52.3 ACFT 3.72 AC 69.0 CFS

PS STORAGE 20.3 ACFT, BETWEEN AUX. CREST AND SED. ACCUM ELEVATIONS.

START ELEV 120.00 FT 32.0 ACFT 2.18 AC 0.0 CFS

EFFECTIVE HEIGHT(H)= 24.1 FEET, PRODUCT= 1257. (H * STORAGE AT CREST AUX.).

INPUT DESIGN CLASS = A1 = LT 3000. PRODUCT.

NRCS-FBH D= 24.00 HR P= 5.20 IN Q= 2.70 IN DA= 0.33 SM
TC= 0.71 HR CN= 76.00 VOL= 47.3 ACFT

PEAK = 396.8 CFS, AT 12.3 HRS.

RATING TABLE DEVELOPED, SITE = S 1:
WITH PS GIVEN AND ASRATING FOR AUX.
AUX. RATING FROM ASFILE PROFILE NO. 30.

RATING TABLE NUMBER 2

	ELEV. FEET	Q-TOTAL CFS	Q-PS CFS	Q-AUX. CFS	VOLUME AC-FT	AREA ACRE
1	120.00	0.00	0.00	0.00	32.00	2.18
2	120.58	21.67	21.67	0.00	33.29	2.28
3	121.16	41.23	41.23	0.00	34.65	2.39
4	121.74	55.16	55.16	0.00	36.07	2.51
5	122.32	61.97	61.97	0.00	37.56	2.64
6	122.90	62.89	62.89	0.00	39.13	2.77
7	123.48	63.80	63.80	0.00	40.77	2.90
8	124.06	64.69	64.69	0.00	42.49	3.03
9	124.63	65.58	65.58	0.00	44.29	3.17
10	125.21	66.46	66.46	0.00	46.16	3.31
11	125.79	67.31	67.31	0.00	48.12	3.43
12	126.37	68.16	68.16	0.00	50.14	3.57
13	126.95	69.01	69.01	0.00	52.26	3.72
14	127.03	73.19	69.12	4.07	52.55	3.74
15	127.11	77.37	69.23	8.14	52.84	3.77
16	127.25	93.16	69.43	23.73	53.37	3.83
17	127.42	159.22	69.67	89.55	54.02	3.90
18	127.73	454.34	70.11	384.24	55.25	4.02
19	128.11	993.27	70.65	922.62	56.83	4.18
20	128.50	1746.90	71.20	1675.70	58.48	4.33

DRAWDOWN USING FREEBOARD STORM FOLLOWS, STARTING AT ELEVATION 126.95 FT.

DRAWDOWN (DDT) TEST 120.00 FT 32.0 ACFT 0.00 CFS
CONTROL IS 0.000 DETENTION STORAGE

DRAWDOWN TIME = 0.63 DAYS, TO 0.0 CFS (LIMIT = 10.00 DAYS)

ROUTED RESULTS	BTM WIDTH FT	MAX ELEV FT	VOL-MAX ACFT	AREA-MAX AC	AUX.-HP FT	VOL-AUX. ACFT
NRCS-FBH	350.0	126.95	52.3	3.7	0.00	0.0

^^^^ NOTE -- ACTUAL Hp OF 0.00 RAISED TO MEET MIN. 378 CRITERIA.

PEAK - CFS	Q-PS	Q-AUX.	Q-TOT.
DISCHARGE =	69.0	0.1	69.1

	CRITICAL DEPTH FT	CRITICAL VELOCITY FT/SEC	CRITICAL SLOPE-Sc FT/FT	25% OF Q Sc FT/FT
AUXILIARY				

SPILLWAY --- 0.00 0.27 0.000 0.000

AUXILIARY SPILLWAY DURATION FLOW = 0.1 HOURS
ATTACK, OE/B = 0.0 ACFT/FT

***** NOTE - RETARDANCE EQUATION LIMITS WERE EXCEEDED.
VR LIMITS ARE 0.3 AND 20.0, COMPUTED VR = 0.0003.
COMPUTATION CONTINUED.

***** ERROR(27) - EXIT CHANNEL SLOPE OR BOTTOM WIDTH OUT OF RANGE, EXIT
CHANNEL DEPTH 0.00 SHOULD BE LESS THAN HP - PASS STOPPED.

Inflow Hyd 1 PSH-Peak = 69.01 CFS at 13.51 hrs., Location Point
Inflow Hyd 1 FBH-Peak = 69.10 CFS at 13.51 hrs., Location Point
HYDOUT 1

1SITES....JOB NO. 1 COMPLETE.

0 SUBWATERSHED(S) ANALYZED.

1 STRUCTURE(S) ANALYZED.

2 HYDROGRAPHS ROUTED AT LOWEST SITE.

0 TRIALS TO OBTAIN BOTTOM WIDTH FOR SPECIFIED STRESS OR VELOCITY.

SITES....COMPUTATIONS COMPLETE

>>>	SITE ID	SUBWS ID	SUBWS DA (SQ MI)	CURVE NO.	TC (HRS)	TOTAL DA (SQ MI)	TYPE DESIGN	STRUC CLASS	<<<
	-----	-----	-----	-----	-----	-----	-----	-----	
	S 1	A	0.33	76.	0.71	0.33	378-R	A1	
PASS NO.	DIA./ WIDTH (IN/FT)	AUX.CREST ELEV (FT)	BTM. WIDTH (FT)	MAX. HP (FT)	MAX. ELEV (FT)	EMB. VOL. (CY)	INTEGR.* DIST. (FT)	EXIT* VEL. (FT/SEC)	TYPE HYD
	-----	-----	-----	-----	-----	-----	-----	-----	-----
1	0.0	126.95	350.00	ERROR(27) - EXIT S OR BW OUT OF RANGE					NRCS-FBH

* INTEGRITY DIST. AND EXIT VEL. VALUES ARE BASED ON THE ROUTED
HYDROGRAPH SHOWN UNDER TYPE HYD.

SITES.....SUMMARY TABLE 1 COMPLETED.

NRCS SITES VERSION 2005.1.04 ,01/01/2005
FILES

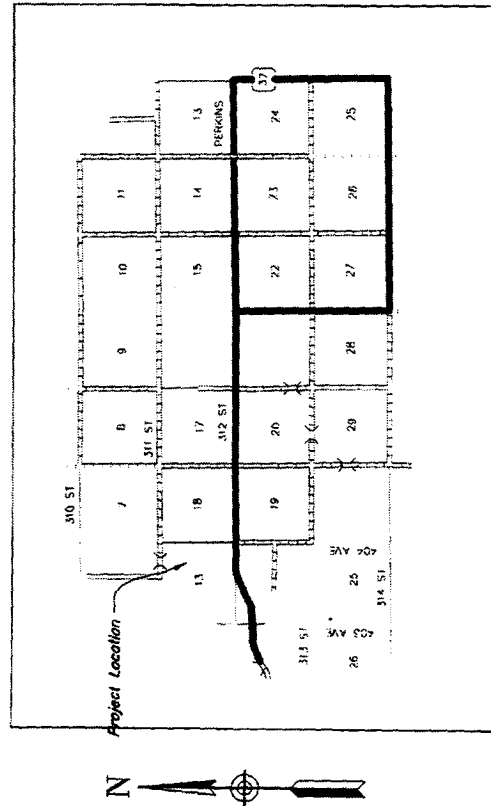
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RECEIVED
AUG 29 2012
WATER RIGHTS
PROGRAM

PRODUCER: ROGER BAUMFALK 436 IRRIGATION RESERVOIR
NE 1/4, SEC 13, T 93N, R 62W
BON HOMME COUNTY, SOUTH DAKOTA



LOCATION MAP

GENERAL NOTES

1. If cultural resources are discovered during construction, discontinue construction and notify the local Natural Resources Conservation Service office.
2. The landowner is responsible for complying with all federal, state, and local laws.

CONSTRUCTION NOTES

1. Clear and grub the entire area within the work limits.
2. All borrow material must not contain frozen material, sod, roots, or other perishable material, or rock larger than eight inches in diameter as described in SD Construction Specification SD-75.
3. Any shale or sand that is exposed during borrow operations shall be immediately backfilled with 2 feet of clay material.
4. 6 inches topsoil will be incorporated into the earthfill neat line & grade surface and meet SD Construction Specification SD-75.
5. All areas top-dressed with topsoil and disturbed during construction will be seeded according to SD Construction Specification SD-28.
6. To protect PVC pipe from ultraviolet light, portions of pipe that will be permanently exposed to sunlight must be primed with PVC solvent and painted with two coats high quality exterior latex paint.

NO EXCAVATOR MAY BEGIN ANY EXCAVATION WITHOUT FIRST NOTIFYING THE ONE-CALL NOTIFICATION CENTER OF THE PROPOSED EXCAVATION AT 1-800-781-7474.

TABLE OF QUANTITIES			
ITEM	UNIT	QUANTITY	"AS-BUILT" QUANTITY
Earthfill Class S - Embankment (Includes 5% Settlement)	Cu. Yd.	20154	
Earthfill Class S - Core Trench	Cu. Yd.	768	
Earthfill Class S - Stripping	Cu. Yd.	888	
Total Earthfill	Cu. Yd.	21,808	
Seeding	Acres	1.1	
Principal Spillway Pipe			
24" Dia. DR18 PVC Pipe	Lin. Ft.	100	
24" Dia. DR25 PVC Pipe	Lin. Ft.	65	
48" Dia. Concrete Riser and Base	Each	1	
Trash Rack and Baffle	Each	1	
Drainage Diaphragm	Each	1	
Timber Pipe Support	Each	1	
Drawdown Intake	Each	1	
Drawdown Valve	Each	1	
8" PVC DR 18 (Drawdown Pipe)	Lin. Ft.	320	

SD CONSTRUCTION AND MATERIAL SPECIFICATIONS

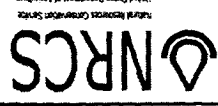
- SD-4 Stripping
- SD-5 Excavation
- SD-7S Earthfill - Class S
- SD-8 Rock Riprap And Bedding
- SD-10 Salvaging And Spreading Topsoil
- SD-12B Concrete For Minor Structures
- SD-13 Steel Reinforcement
- SD-14 Wood And Steel Structures
- SD-28 Seeding
- SD-55 Plastic Pipe
- SD-59 Geotextile
- SD-592 For A Full Text Version See http://www.sd.usdo.gov/technical/SD_Engineering.html

STATEMENT OF COMPLIANCE

Construction (was) (was not) completed in accordance with approved construction plans and specifications.

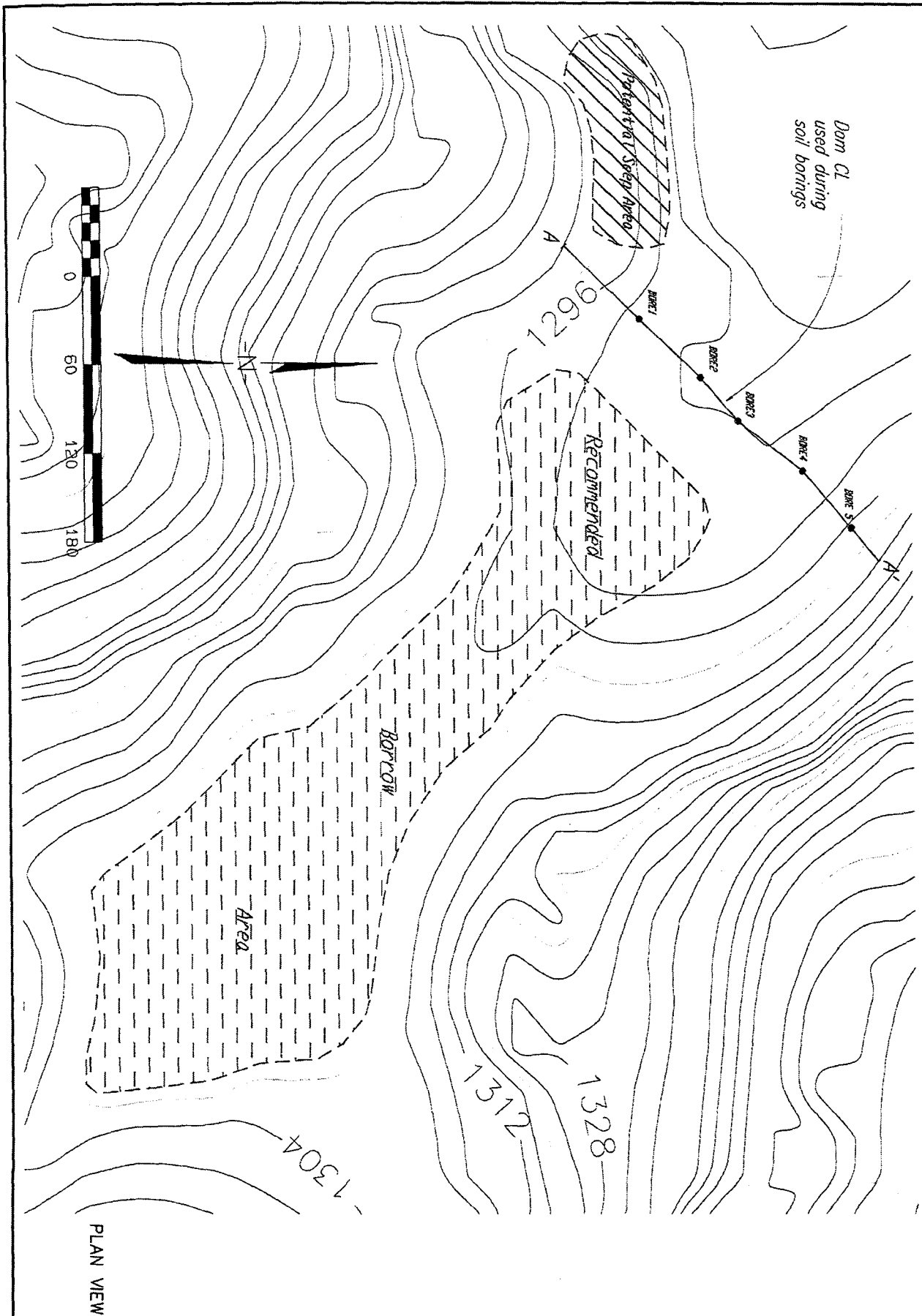
JAA _____ Date _____

PRODUCER: ROGER BAUMFALK
436 IRRIGATION RESERVOIR
COVER SHEET
NE 1/4, Sec 13, T 93N, R 62W
BON HOMME COUNTY, SOUTH DAKOTA



File No. BAUMFALK.dwg
Drawing No. _____
8/16/12 1:47 PM
Sheet 1 of 1.3

Designed: J. Gelferman 8/14/12
Drawn: J. Gelferman 8/15/12
Checked: J. Gelferman 8/17/12
Approved: J. Gelferman 8/17/12



PLAN VIEW

7/16/2012 3:04 PM
Sheet 4 of 13

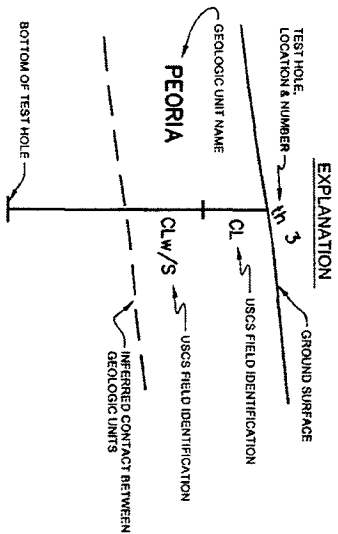
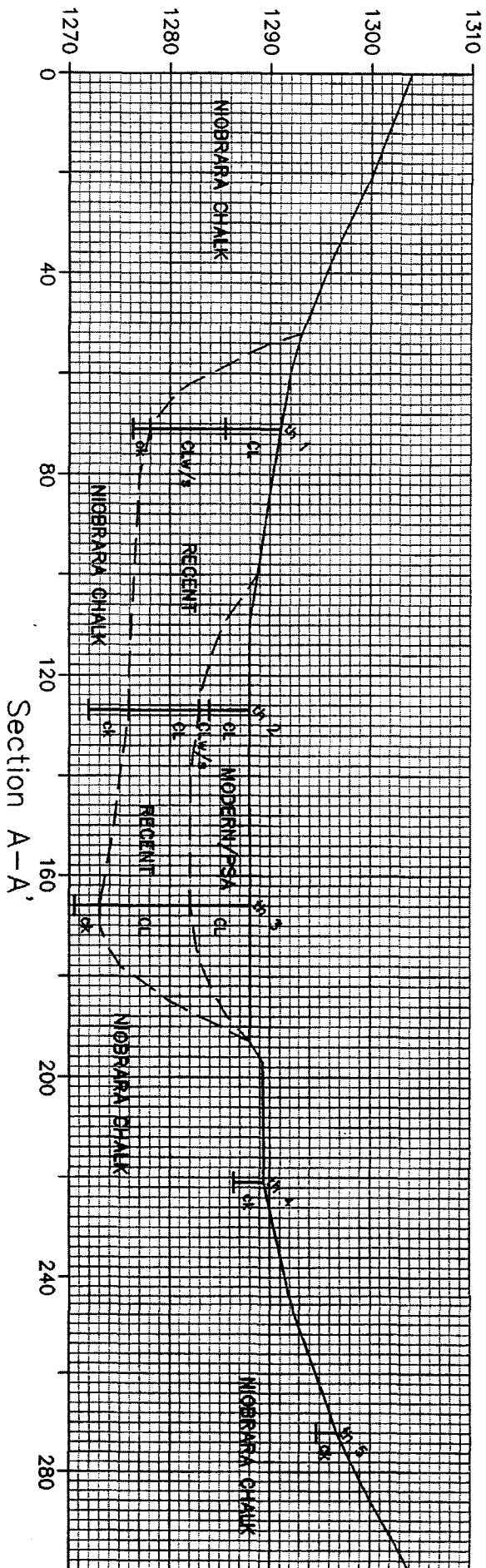
Drawing No.
13



USDA - NRCS
State Office Engineering Staff
200 Fourth Street SW
Huron, South Dakota 57350

PRODUCER
SECTION T. R.
COUNTY
CONSERVATION DISTRICT

Date	
Designed	
Drawn	
Checked	
Approved	

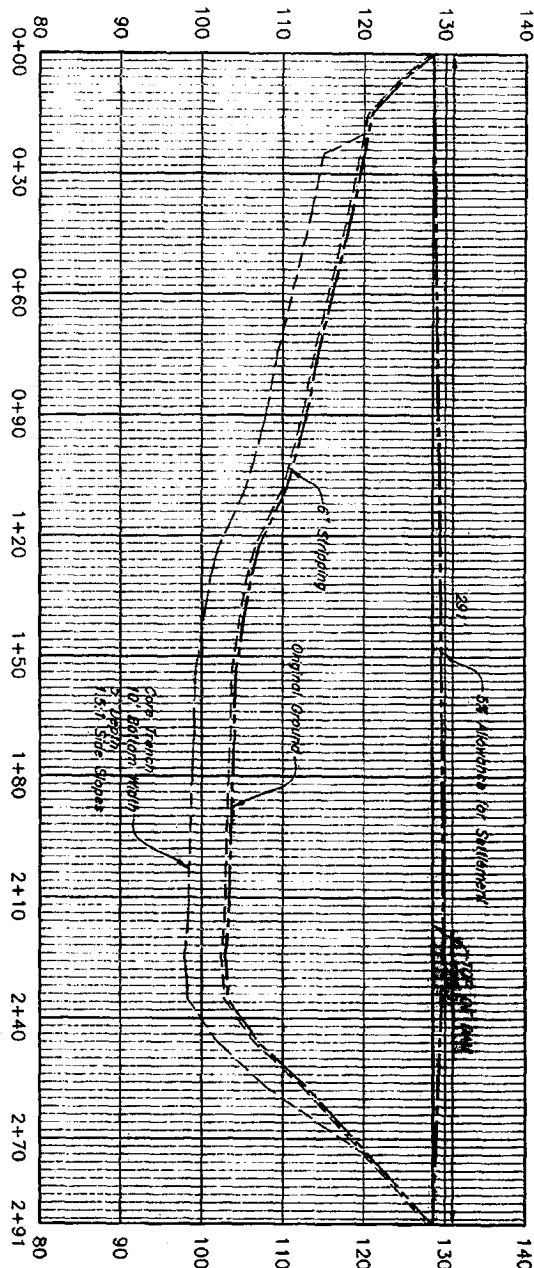


Baumfalk Irrigation Structure Bon Homme County, SD

Designed	MTM	Date	6/12	CAD Dwg.
Drawn	RXS	Date	6/12	Design Class
Checked				
Approved				
Sheet	5	of	13	

Scale: Horizontal 1"=30'; Vertical 1"=15'

Dam CL PROFILE



PROFILE OF DAM

File No.
Baumfalk.dwg
Drawing No.
8/16/12 1:47 PM
Sheet 6 of 13



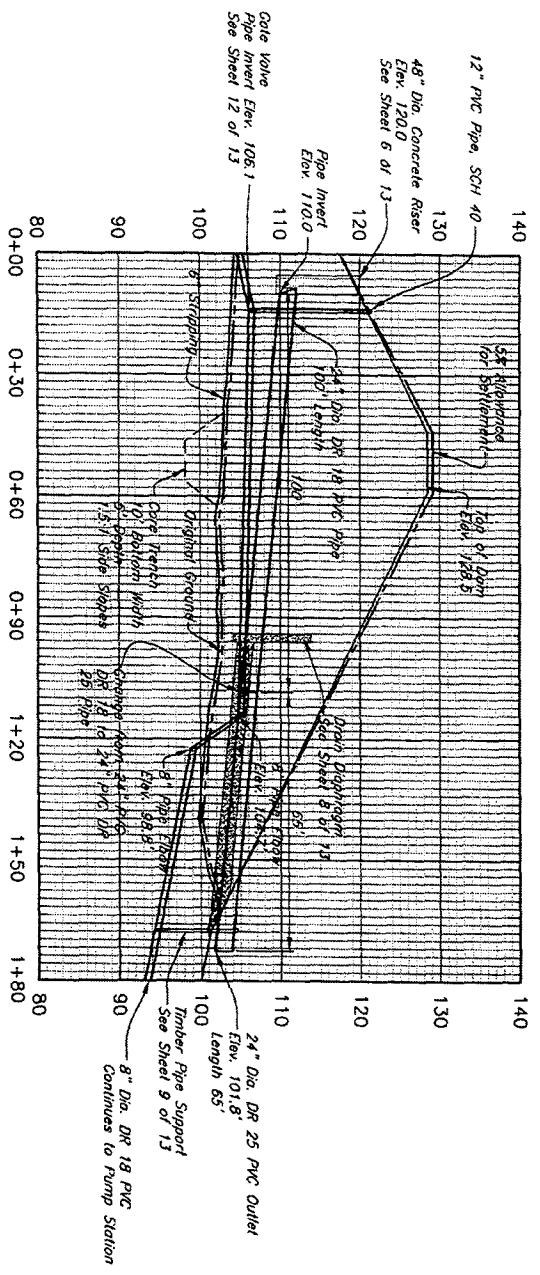
PRODUCER: ROGER BAUMFALK
436 IRRIGATION RESERVOIR
PROFILE OF DAM

NE 1/4, Sec 13, T 93N, R 62W

Bon Homme County, South Dakota

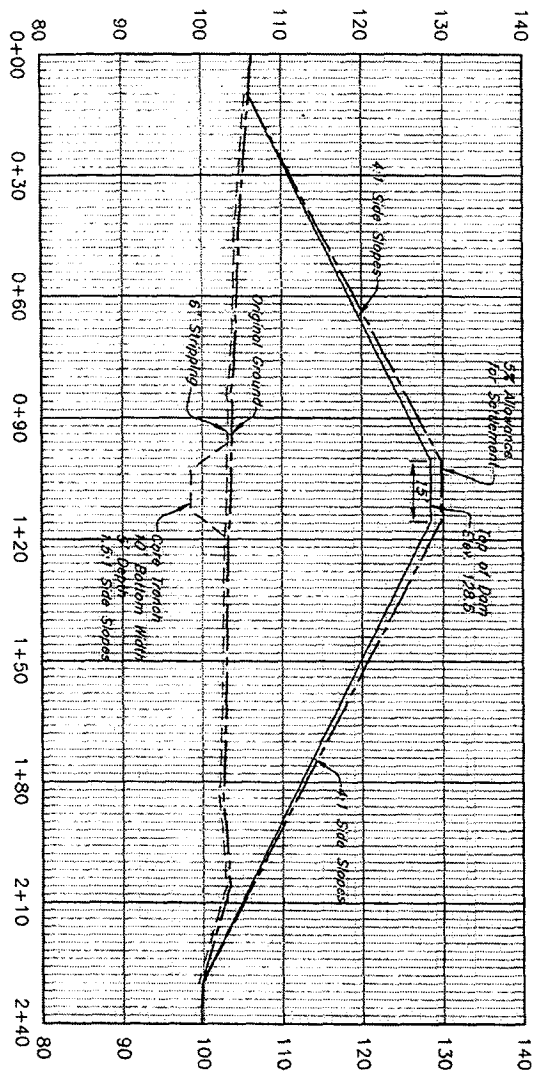
Designed	J. Gelderman	Date	8/14/12
Drawn	J. Gelderman	Date	8/15/12
Checked			
Approved			

Scale: Horizontal 1"=30'; Vertical 1"=15'



PRINCIPAL SPILLWAY PROFILE

Scale: Horizontal 1"=30'; Vertical 1"=15'



MAXIMUM CROSS-SECTION DAM PROFILE

TRENCH SAFETY NOTES

1. All trench work shall comply with the Occupational Safety and Health Administration (OSHA) regulations.
2. Any trench over four (4) feet deep shall have a means of egress from the trench by a ladder, ramp, or other means of egress, and
3. Any trench over five (5) feet deep shall be protected from cave-ins by a shoring, benching, or shoring protection system. Benches must be constructed so the overall slope meets the slope required by OSHA regulations.

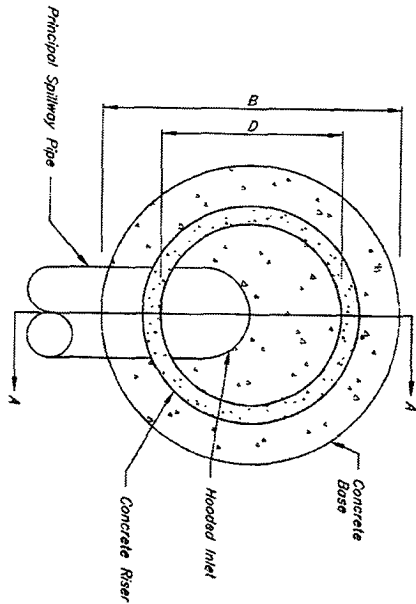


PRODUCER: ROGER BAUMFALK
436 IRRIGATION RESERVOIR
PROFILE OF PRINCIPAL SPILLWAY AND MAXIMUM CROSS-SECTION

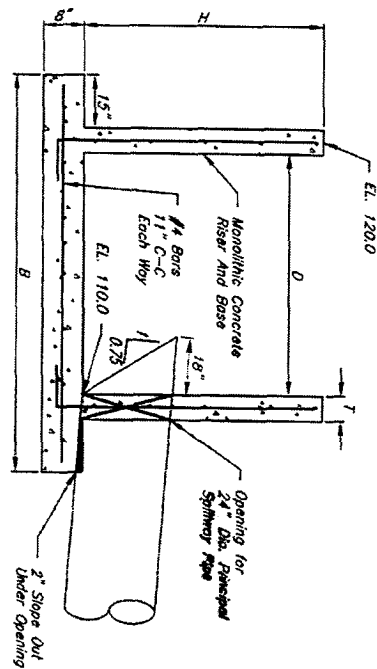
NE 1/4, Sec. 13, T 93N, R 62W Bon Homme County, South Dakota

Designed	J. Gelderman	Date	8/14/12
Drawn	J. Gelderman		8/15/12
Checked	DB		8/17/12
Approved	D. Edwards		8/17/12

File No.
Drawing No.
8/16/12 1:47 PM
Sheet 2 of 13



PLAN VIEW PRECAST RISER AND BASE



SECTION VIEW A-A

CONSTRUCTION NOTES

1. The riser and base is precast reinforced concrete and is manufactured according to ASTM C478 Standard Specification for Precast Reinforced Concrete Monolithic Sections.
2. Provide a watertight joint between the precast concrete riser and the principal spillway pipe barrel.
3. Contact NRCS prior to installation for other options for the construction of the riser if a precast monolithic riser and base is not used.

REQUIRED PRECAST RISER AND BASE DIMENSIONS

(D) RISER DIAMETER	(H) RISER HEIGHT	(T) WALL THICKNESS	(B) BASE DIAMETER	BASE THICKNESS	PIPE DIAMETER	PIPE MATERIAL
48"	10'	5"	78"	8"	24"	SUR 18 PVC

PRECAST CONCRETE RISER AND HOODED INLET COMBINATION



PRODUCER: ROGER BAUMFALK
436 IRRIGATION RESERVOIR
PRECAST CONCRETE RISER AND HOODED INLET COMBINATION

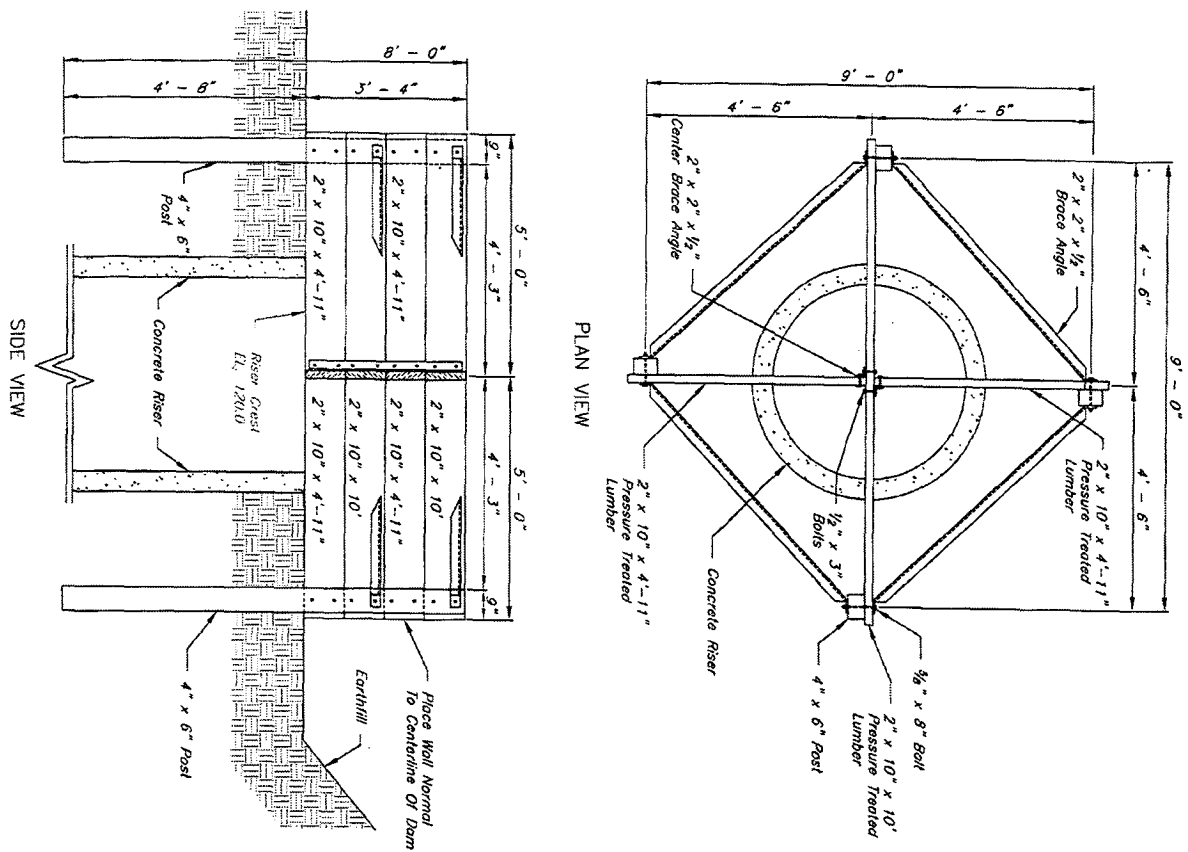
NE 1/4, Sec 13, T 93N, R 62W

Bon Homme County, South Dakota

Designed	J. Gelderman	Date	8/14/12
Drawn	J. Gelderman		8/15/12
Checked	JDS		8/17/12
Approved	D. Edwards		8/17/12

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Drawing No.

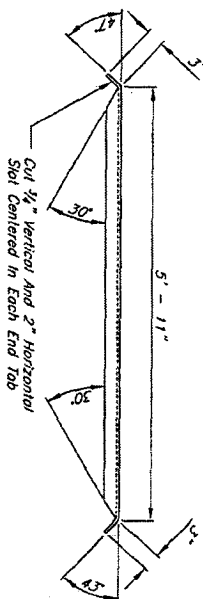
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Sheet 8 of 13



PLAN VIEW

SIDE VIEW

PLAN VIEW OF BRACE ANGLE



TRASH RACK AND BAFFLE FOR RISER DIA. 36" TO 60"
JOB PLAN NO. 6.4 (10/2011)

CONSTRUCTION NOTES

1. Bolt 4" x 6" posts and 2" x 10" lumber together using two 3/8" x 8" bolts. Do not place bolts closer than 1 1/2" from edge of board.
2. For center brace angles drill eight, 3/16" holes, 5/8" from outer edge of each leg of each angle and centered 5 1/4" apart along the leg.
3. Attach brace angles to top bolt on top of 2" x 10" board and to top bolt on next to bottom bottom board.
4. All nuts, bolts, and washers shall be galvanized.

TABLE OF QUANTITIES

ITEM	LENGTH OR SIZE	UNIT	QUANTITY
4" x 6" Pressure Treated Post	8 Ft	Each	4
2" x 10" Pressure Treated Lumber	10 Ft	Each	4
2" x 10" Pressure Treated Lumber	4' - 11"	Each	8
2" x 2" x 1/2" Steel Angle	6' - 5"	Each	8
2" x 2" x 1/2" Steel Angle	3' - 2"	Each	2
Steel Bolt (with nut and 2 washers)	3/8" x 8"	Each	32
Steel Bolt (with nut and 2 washers)	1/2" x 3"	Each	32

Summary of Design and Dimensions

DESIGN DATA	
H = 14.7 Feet	Hd = 37.25 Feet
X = 5.0 Feet	D = 24 Inches
R = 1.5 Feet	Y = 6.0 Feet
C = 1.5 Feet	Aggregate Gradation #1
Embankment	
Benchtop (Z1) = 4.0 Pipe Slope (S) 0.0500 Ft./Ft.	
DIMENSIONS	
W = 12.0 Feet (Total Width of Drain Diaphragm)	
T = 9.5 Feet (Total Height of Drain Diaphragm)	
L = 2 Feet (Thickness of Single Filter)	

ESTIMATED QUANTITIES

Drain Filter Material 35.7 Cubic Yards
 Geotextile 28.7 Square Yards
 Rock Riprap 9.3 Cubic Yards

PRODUCER Roger Baumfalk
 SECTION 13 T. 93N R. 62W
 Bon Homme COUNTY
 CONSERVATION DISTRICT

Designed JMG 07/25/12
 Drawn JMG 07/25/12
 Checked JMG 8/17/12
 Approved JMG 8/17/12

PROFILE ALONG & OF CONDUIT

(Not to Scale)

SECTION OF RIPRAP

Perpendicular to Slope

ASTM #23 FINE CONCRETE AGGREGATE GRADATION					
SIZE	PERCENT PASSING	PERCENT SAMPLER	WEIGHT RANGE (LBS.)	AVERAGE CUBIC DIMENSION	
3/8" IN.	100	100	50 lb.	10"	
#4	95-100	50-80	30 lb.	7"	
#8	80-100	15-30	10 lb.	5"	
#16	50-85	0-15	3 lb.	3"	
#30	25-60				
#50	2-30				
#100	0-10				

ASTM #23 FINE CONCRETE AGGREGATE GRADATION					
SIZE	PERCENT PASSING	PERCENT SAMPLER	WEIGHT RANGE (LBS.)	AVERAGE CUBIC DIMENSION	
3/8" IN.	100	100	50 lb.	10"	
#4	95-100	50-80	30 lb.	7"	
#8	80-100	15-30	10 lb.	5"	
#16	50-85	0-15	3 lb.	3"	
#30	25-60				
#50	2-30				
#100	0-10				

ASTM C-493
 FINE CONCRETE
 AGGREGATE GRADATION

CONSTRUCTION NOTES

- The Drainage Diaphragm and envelope will be installed by placing Drain Filter Material in maximum 15 inch thick uncompacted lifts. Each lift will be saturated uniformly with approximately 1.2 gallons of water per cubic foot of loose Drain Filter Material prior to compaction. Each lift will then be compacted by a minimum of two passes of a hand-directed wheeled compactor over the entire lift surface. No compaction of the drain envelope above the pipe liner will be required. The maximum height of top of the riprap onto the geotextile in the pipe outlet area shall be 3 feet.

MATERIAL NOTES

- The Geotextile shall conform to the Class 1 requirements specified in Table 2 for Nonwoven Geotextiles in Material Specification SD-592.

DRAINAGE DIAPHRAGM DETAILS

SECTION A-A

(Not to Scale)

SECTION B-B

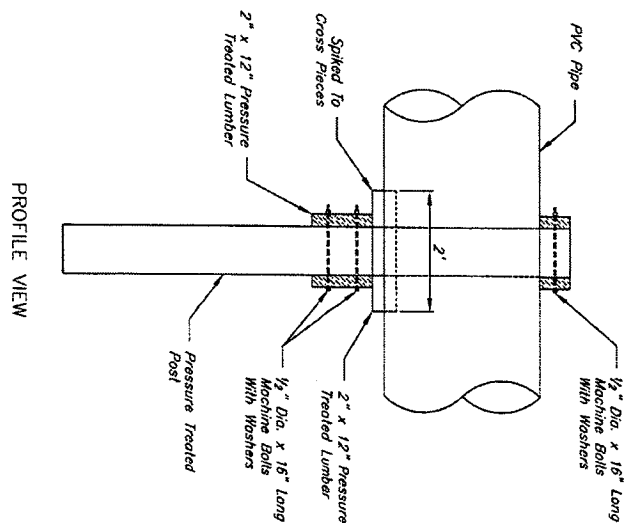
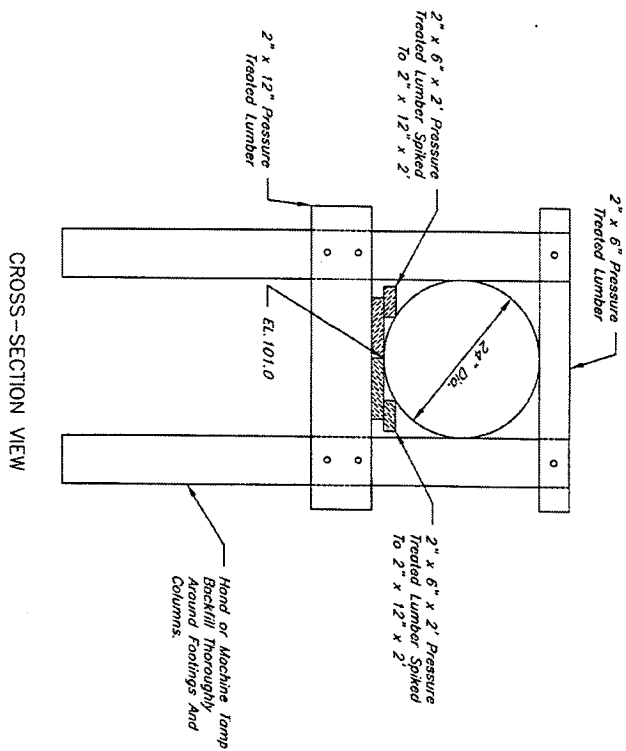
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JOB PLAN 3.8 (07/2009)

DATE	REVISIONS
07/25/12	1.0
08/17/12	1.1



USDA - NRCS
 State Office Engineering Staff
 200 Fourth Street SW
 Huron, South Dakota 57350



CROSS-SECTION VIEW

PROFILE VIEW

TABLE OF QUANTITIES

ITEM	LENGTH	UNIT	QUANTITY
8" Dia. Pressure Treated Post **	10 Ft	Each	2
2" x 12" Pressure Treated Lumber	4 Ft	Each	2
2" x 6" Pressure Treated Lumber	4 Ft	Each	2
2" x 12" Pressure Treated Lumber	2 Ft	Each	2
2" x 6" Pressure Treated Lumber	2 Ft	Each	2
1/2" Dia. Machine Bolts With Nuts	14 In.	Each	6
1/2" Dia. Washers		Each	12

TIMBER PIPE SUPPORT
JOB PLAN NO. 4.0 (10/2011)



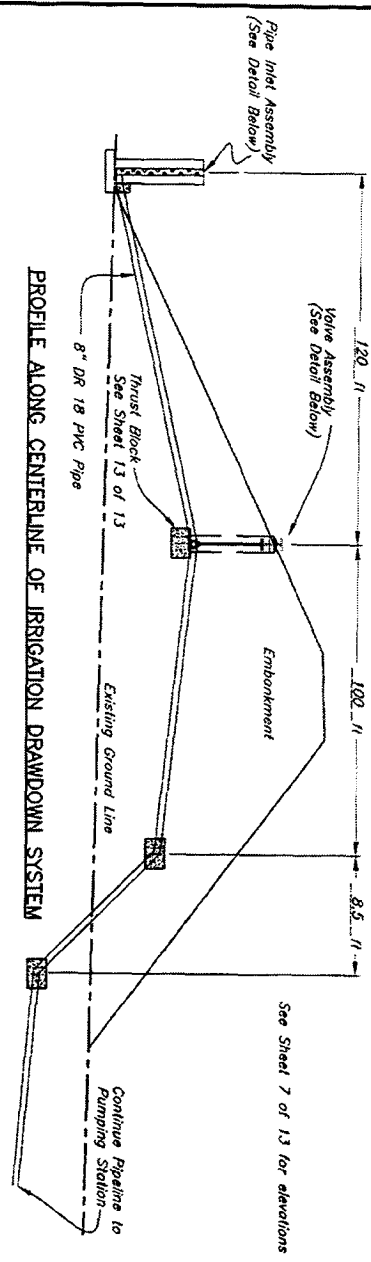
PRODUCER: ROGER BAUMFALK
436 IRRIGATION RESERVOIR
TIMBER PIPE SUPPORT FOR PVC PIPE

NE 1/4, Sec 13, T 93N, R 62W

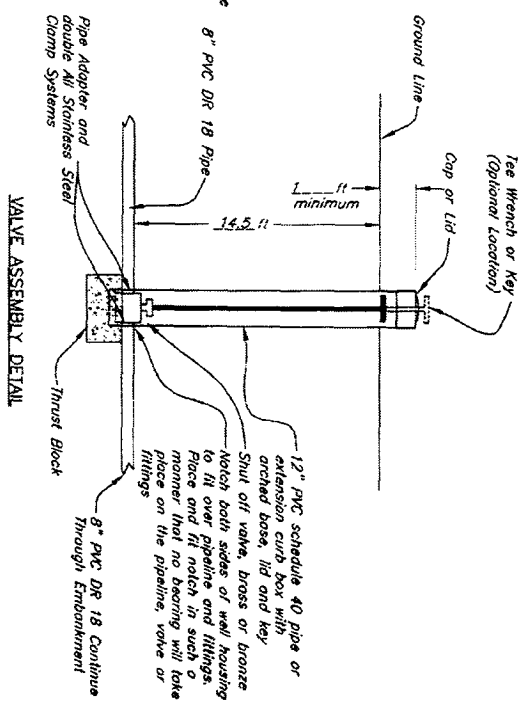
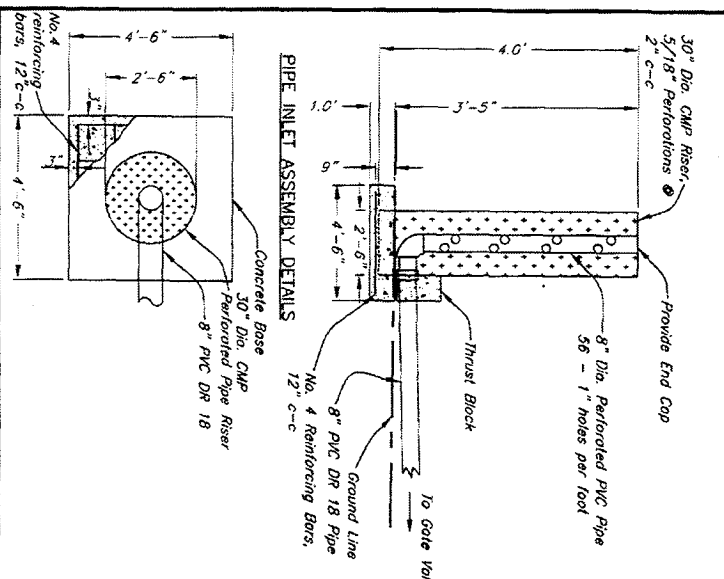
Bon Homme County, South Dakota

Designed J. Gelderman 8/14/12
Drawn J. Gelderman 8/15/12
Checked D. Edwards 8/17/12
Approved D. Edwards 8/17/12

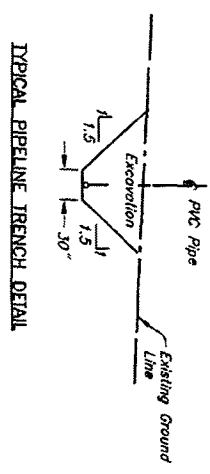
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Drawing No.
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Sheet 11 of 13



AMWA C900: Nominal Dia.: 8"	Maximum Allowable Pipe Cover 25 ft
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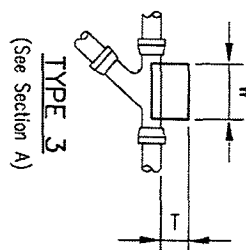
IRRIGATION DRAWDOWN SYSTEM
NOT TO SCALE



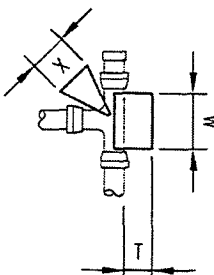
- NOTES—
1. A minimum 6 feet of pipeline cover shall be maintained throughout the downstream side of the pipeline installation.
 2. The top of the CMP riser shall be underwater before the pond's water starts to freeze.
 3. Pipeline installation location will be as shown on the construction plans (Plan View).
 4. Locate the inlet assembly near the deepest part of the pool area.
 5. Earth fill adjacent to the pipe shall be hand tamped under the embankment.
 6. Prior to backfilling, the irrigation drawdown system shall be approved by NRCS.

BILL OF MATERIALS			
Item	No.	Unit	
1 Concrete (Class 3000)	0.8	Cu. Yd.	
2 Reinforcing Steel (No. 4 Bars - 40 Lin. Ft.)	27	LB.	
3 Corrugated Metal Pipe Riser, 30" Dia., 16 Gauge, Perforated	4	Lin. Ft.	
4 12" Dia., SCH 40 PVC Pipe, w/fit	15.5	Lin. Ft.	
5 Gate Valve and Appurtenances	1	Each	
6 8" PVC DR18 Pipe (AMWA C900)*	320	Lin. Ft.	
7 Thrust Block	4	Each	

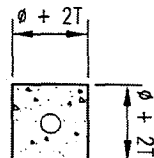
* Linear feet only includes pipe underneath embankment.



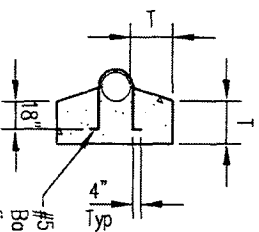
TYPE 3
(See Section A)



TYPE 6
(See Section A)



TYPE 8
(See Section B)



SECTION C

-#5 Or #6 Epoxy Coated Or Galvanized Bars Bent To Conform To Fitting And Embedded In Concrete.

[illegible]

- NOTES:
1. All thrust blocks shall be constructed using 3000 psi concrete cast in place.
 2. All thrust blocks shall be formed against a solid hard excavated trench wall undamaged by mechanical equipment.
 3. Cover all fittings with plastic sheeting (5 mil minimum thickness) prior to pouring concrete. Core shall be taken that the joint, including bolts, will remain accessible.

Water Permit Application No. 7408-3

Roger Baumfalk

Cat. 3 - Low Hazard Dam

Top of Dam Elev. - 128.5
 P. Spillway Elev. - 120.0
 O/S Emb Toe Elev. - 100.0 } Hh = 28.5

Normal Storage Capacity - 32 Ac-Ft
 Max. Storage Capacity - 58.5

Max Capacity $\times$ Hh = $58.5 \times 28.5 = 1667 < 3000 \therefore$ 25 year
Minimum Spillway Design

From USGS WRI 98-4055 "Tech. for Est Peak-Flows ... in SO"
 Region B DA = 210 Ac = 0.33 mi.² PII = 1.0

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

$$= 148 (0.33)^{.584} (1)^{.730}$$

$$= 148 (.5234) (1)$$

$$= \underline{77 cfs}$$

$$Q_{50} = 206 DA^{.606} P_{II}^{.728}$$

$$= 206 (0.33)^{.606} (1)^{.728}$$

$$= 206 (.5108) (1)$$

$$= \underline{105 cfs}$$

Spillway Capacity

$$Q = C_d A_o \sqrt{2g h}$$

$$h = 18.5$$

$$C_d = .80$$

$$= 0.8 (3.14) \sqrt{2(32.2)(18.5)} A = 3.14$$

$$= \underline{87 cfs}$$

Section 74:02:08:09

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

NRCs Annual Yield
 DA = 210 CN = 76 ISO = 3

80% chance = 0.26
 $0.26 \times 210/12 = \underline{4.5 \text{ Ac-Ft}}$

50% chance = 0.65
 $0.65 \times 210/12 = \underline{11 \text{ Ac-Ft}}$

10% chance = 2.8
 $2.8 \times 210/12 = \underline{49 \text{ Ac-Ft}}$



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
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PIERRE, SOUTH DAKOTA 57501-3182
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**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 7408-3, Roger Baumfalk**

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. 7408-3, Roger Baumfalk, 40429 311th Street, Avon SD 57315

The Chief Engineer is recommending APPROVAL of Application No. 7408-3 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. 7408-3 authorizes an impoundment with a storage capacity of 32 acre feet of water and sufficient water annually to maintain the water level to the outlet elevation.
2. Low flows as needed for downstream domestic use, including livestock water and prior water rights must be by-passed.
3. Water may be diverted from Choteau Creek to the dam only during flow events that are obviously sufficient to meet downstream domestic uses, including livestock water and prior water rights. At no time may the entire creek flow be diverted. Pumping is allowed each year from April 1 – June 30 unless the Chief Engineer is contacted and grants written authorization to pump from the creek past June 30. Storage water in the dam may be pumped for the purpose of irrigating land authorized by Permit No. 7056-3 after June 30 of each year.
4. This Permit is approved subject to the irrigation water use questionnaire being submitted each year. The Permit holder will need to distinguish on the irrigation questionnaire when stored water is being pumped for irrigation.

See report on application for additional information.

Garland Erbele, Chief Engineer
September 17, 2012

REPORT ON
WATER PERMIT APPLICATION No. 7408-3
Roger Baumfalk
September 6, 2012

Water Permit Application No. 7408-3 has been filed by Roger Baumfalk to impound 32 acre-feet of water by constructing a dam located in the SE $\frac{1}{4}$ NE $\frac{1}{4}$ of Section 13-T93N-R62W, in Bon Homme County. The dam will serve as a component of the irrigation system authorized by Water Permit No. 7056-3. Water Permit Application No. 7408-3 seeks authorization for the dam and to also pump water from Choteau Creek into the dam at the rate authorized by Water Permit No. 7056-3 to maintain water to the outlet elevation.

Discussion:

The dam will be classified as a small size, Category 3, Low Hazard dam. The dam has been designed by the Natural Resources Conservation Service (NRCS). The plans and specifications have been reviewed and will be approved; however, construction of the dam can not begin until Water Permit Application No. 7408-3 is approved.

The dam will be 28.5 feet high with a normal storage capacity of 32 acre-feet with a reservoir level at the primary spillway elevation, and a maximum storage capacity of 58.5 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 210 acres or 0.33 square miles. The dam is designed to have a 48 inch diameter concrete riser with a 24 inch diameter PVC barrel with 8.5 feet of freeboard as the primary spillway. A 25 year frequency event produces a peak runoff of approximately 77 cfs and a 50 year frequency event produces a peak runoff of approximately 105 cfs. The primary spillway will have a capacity of approximately 90 cfs.

The annual yield for this drainage area with an 80 percent chance of occurrence, or 8 out of 10 years is 4.5 acre-feet; and a 50 percent chance of occurrence, or 1 out of 2 years, is 11 acre-feet; and the annual yield with a 10 percent chance, or 1 out of 10 years, is expected to be 49 acre-feet.

The Baumfalk Dam will be located in the NE $\frac{1}{4}$ of Section 13-T63N-R62W on an unnamed tributary to Choteau Creek, about one-eighth of a mile above the confluence of the unnamed tributary and Choteau Creek; and about 3 miles upstream of the confluence of Choteau Creek and the Missouri River. There are two existing Water Permits/Rights located on Choteau Creek below the proposed dam and diversion point, Water Permit No. 2648-3 and Water Right No. 3004-3. The two existing Water Permits/Rights resulted in the following qualification placed on Water Permit No. 7056-3, and it should also be a qualification on Water Permit Application No. 7408-3.

“Water may be diverted from Choteau Creek only during flow events obviously sufficient to meet the downstream domestic uses, including livestock water and prior water rights. At no time may the entire creek flow be diverted. Pumping is allowed each year from April 1 – June 30 unless the Chief Engineer is contacted and grants written authorization to pump past June 30.”

Page 2

Application No. 7408-3

September 6, 2012

Conclusions:

1. Water Permit Application No. 7408-3 has been filed by Roger Baumfalk to impound 32 acre-feet of water by constructing a dam located in the SE $\frac{1}{4}$ NE $\frac{1}{4}$ of Section 13-T93N-R62W. The dam will serve as a component of the irrigation system authorized by Water Permit No. 7056-3.
2. There are two existing Water Permits/Rights located on Choteau Creek below the proposed dam and diversion point, Water Permit No. 2648-3 and Water Right No. 3004-3.
3. If approved, Water Permit No. 7408-3 should contain the following qualification "Water may be diverted from Choteau Creek only during flow events obviously sufficient to meet the downstream domestic uses, including livestock water and prior water rights. At no time may the entire creek flow be diverted. Pumping is allowed each year from April 1 – June 30 unless the Chief Engineer is contacted and grants written authorization to pump past June 30."

for 
Timothy G. Schaal, P.E.
Natural Resources Engineer IV

Affidavit of Publication

RECEIVED

State of South Dakota }
County of Bon Homme } SS

OCT - 1 2012

WATER RIGHTS
PROGRAM

Rebecca Tuez Being first duly sworn says that the **Tyndall Tribune & Register** is a legal weekly newspaper for publication of legal and other official notices as required by Chapter 298 of the Session Laws of South Dakota, 1939; that it has bona fide paid circulation of more than two hundred copies weekly; that it is published in English language in the City of Tyndall, Bon Homme County, South Dakota, and has been admitted to the United States mail under second class mailing privilege for more than one year prior to the first publication of the notice herein mentioned, and that it is printed in an office maintained at the place of publication at Tyndall, South Dakota, and that deponent is the publisher in charge of the advertising department of said newspaper; that the advertisement headed

DEAR Notice of Application

#9408-3

85 @ 37.2

a printed copy of which is hereto attached, was printed and published in said newspaper for one successive weeks, upon the following dates:

Sept. 26, 2012	20
20	20
20	20
20	20

That the full amount of the fee charged for the publication of said notice, 31.62, inures to the benefit of the publisher of said newspaper, that no agreement or understanding for the division thereof has been made with any other person, and that no part has been agreed to be paid to any person whomsoever.

Subscribed and sworn to before me this
26th day of Sept. 2012
Peggy Schermer
Notary Public
South Dakota
Notary Public, South Dakota

Expires: 10-24-2015

NOTICE OF APPLICATION

NO. 7408.3 to Appropriate Water

Notice is given that Roger Baumfalk, 40429 311st Street, Avon, SD 57315 has filed an application for a water permit to impound 32 acre-feet of water by constructing a dam located in the SE1/4 NE1/4 Section 13 with water impounded in the SE1/4 NE1/4 Section 13; all in T93N-R62W as a component of the irrigation system authorized by Water Permit No. 7056-3. Water permit No. 7056-3 appropriates 1.33 cubic feet of water per second from Choteau Creek located in the NW1/4 NE1/4 Section 13, T93N, R62 to irrigate 141 acres located in the E1/2 NW1/4, E1/2 SW1/4, SW1/4 SW1/4 Section 18, T93N, R61W and the SW1/4 NE1/4 Section 13, T93N, R62W. The existing permit limits pumping from Choteau Creek to April 1- June 30 unless written authorization to pump past June 30 is granted. The applicant seeks authorization for this dam and to pump water from Choteau Creek at the rate authorized by Permit No. 7056-3 to maintain water to the outlet elevation. Then past June 30 of each calendar year water from the dam may be used for irrigation of the authorized land when diversions are no longer allowed from Choteau Creek.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 7408-3 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 this 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 this 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 October 9, 2012.

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

Published once at an approximate cost of \$31.62

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OCT - 1 2012

WATER RIGHTS
PROGRAM

AFFIDAVIT OF PUBLICATION

YANKTON DAILY PRESS AND DAKOTAN

Department of Environment and Natural Resources
PMB 2020 - Joe Foss Building
523 East Capitol
Pierre, SD 57501-3182

STATE OF SOUTH DAKOTA
COUNTY OF YANKTON

KELLY HERTZ BEING FIRST DULY SWORN ON OATH DEF
AND SAYS THAT HE IS THE MANAGING EDITOR OF, YANKTON
MEDIA INC, A CORPORATION, THE PRINTER AND THE PUBLISHER OF THE
YANKTON DAILY PRESS AND DAKOTAN, A LEGAL DAILY NEWSPAPER
PUBLISHED AND CIRCULATED IN THE CITY OF YANKTON, SAID COUNTY
AND STATE, AND ONE OF THE OFFICIAL NEWSPAPERS OF THE SAID
COUNTY OF FACTS STATED IN THIS AFFIDAVIT; THAT THE ANNEXED
Notice of Application No. 7408-3

TAKEN FROM THE PAPER, IN WHICH IT WAS LAST PUBLISHED IN THE
NEWSPAPER ON THE 26th DAY OF September 2012
THAT THE FULL AMOUNT OF THE FEE CHARGED FOR THE PUBLICATION
OF SAID **NOTICE** TO WIT \$34.10 ENSURES TO THE
BENEFITS OF THE PUBLISHER OF SAID NEWSPAPER AND THAT NO
AGREEMENT AND UNDERSTANDING FOR THE DIVISION THEREOF HAS
BEEN MADE WITH ANY OTHER PERSON, AND THAT NO PART THEREOF
HAS BEEN AGREED TO BE PAID TO ANY PERSON WHOMSOEVER.

PUBLISHED ON: 9/26/2012

FILED ON: 9/26/2012

SUBSCRIBED AND SWORN TO BEFORE ME THIS 26th DAY OF September 2012

NOTARY PUBLIC, SOUTH DAKOTA

MY COMMISSION EXPIRES 8/19/2015

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.

Published once at the total approximate cost of \$34.10.

Notice is given that Roger Baumfalk, 40429 311th St, Avon SD 57315 has filed an application for a water permit to impound 32 acre-feet of water by constructing a dam located in the SE 1/4 NE 1/4 Section 13 with water impounded in the SE 1/4 NE 1/4 Section 13; all in T93N-R62W as a component of the irrigation system authorized by Water Permit No. 7056-3. Water Permit No. 7056-3 appropriates 1.33 cubic feet of water per second from Choteau Creek located in the NW 1/4 NE 1/4 Section 13-T93N-R62W to irrigate 141 acres located in the E 1/2 NW 1/4, E 1/2 SW 1/4, SW 1/4 SW 1/4 Section 18-T93N-R61W and the SW 1/4 NE 1/4 Section 13-T93N-R62W. The existing permit limits pumping from Choteau Creek to April 1 - June 30 unless written authorization to pump past June 30 is granted. The applicant seeks authorization for this dam and to pump water from Choteau Creek at the rate authorized by Permit No. 7056-3 to maintain water to the outlet elevation. Then past June 30 of each calendar year water from the dam may be used for irrigation of the authorized land when diversions are no longer allowed from Choteau Creek.

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**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
denr.sd.gov

September 18, 2012

Tyndall Tribune & Register
PO Box 520
Tyndall SD57066

ATTENTION: Legal Public Notice

Enclosed is a Notice on Application No. 7408-3 to Appropriate Water. Please publish the notice once on September 26, 2012. 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 and arrange for payment. **Please BILL the APPLICANT for the cost of publication.** The APPLICANT is Roger Baumfalk, 40429 311th St., Avon SD 57315 (Ph # 605-286-3596).

Please send the Water Rights Program an affidavit or the enclosed Proof of Publication form immediately.

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



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
denr.sd.gov

September 18, 2012

Press & Dakotan
319 Walnut
Yankton SD 57078

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Natural Resources Engineer
605 773-3352

enclosures



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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PIERRE, SOUTH DAKOTA 57501-3182
denr.sd.gov

NOTE: TO BE SURE OF PUBLICATION ON
THE CORRECT DATE, CONTACT
THE NEWSPAPER(S) RIGHT AWAY.

September 18, 2012

Roger Baumfalk
40429 311th St
Avon SD 57315

Dear Mr. Baumfalk:

Water Permit Application No. 7408-3 for irrigation use has been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice has been sent to the Tyndall Tribune and Register printed at Tyndall SD (Ph # 605-589-3242) and the Press & Dakotan printed at Yankton SD (Ph # 605-665-7811). You will need to contact the newspaper(s) and authorize publication of this notice. For your information, a copy of the notice, the recommendation of the Chief Engineer and 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(s) to authorize publication of your Notice and to arrange for payment. Early contact with the paper(s) can eliminate delays. Upon receiving authorization from you, the publisher has been instructed to publish your notice. 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 the Notice on September 26, 2012. The applicant is responsible for payment. The text of the notice can be e-mailed to your paper by contacting Karen Schlaak at (605) 773-3352 or email: Karen.schlaak@state.sd.us.

NOTICE OF APPLICATION NO. 7408-3 to Appropriate Water

Notice is given that Roger Baumfalk, 40429 311th St, Avon SD 57315 has filed an application for a water permit to impound 32 acre-feet of water by constructing a dam located in the SE 1/4 NE 1/4 Section 13 with water impounded in the SE 1/4 NE 1/4 Section 13; all in T93N-R62W as a component of the irrigation system authorized by Water Permit No. 7056-3. Water Permit No. 7056-3 appropriates 1.33 cubic feet of water per second from Choteau Creek located in the NW 1/4 NE 1/4 Section 13, T93N, R62W to irrigate 141 acres located in the E 1/2 NW 1/4, E 1/2 SW 1/4, SW 1/4 SW 1/4 Section 18, T93N, R61W and the SW 1/4 NE 1/4 Section 13, T93N, R62W. The existing permit limits pumping from Choteau Creek to April 1 – June 30 unless written authorization to pump past June 30 is granted. The applicant seeks authorization for this dam and to pump water from Choteau Creek at the rate authorized by Permit No. 7056-3 to maintain water to the outlet elevation. Then past June 30 of each calendar year water from the dam may be used for irrigation of the authorized land when diversions are no longer allowed from Choteau Creek.

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Published once at the total approximate cost of _____.



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
denr.sd.gov

OCT 29 2012

Roger Baumfalk
40429 311th St
Avon SD 57315

Dear Mr. Baumfalk:

Enclosed is Water Permit No. 7408-3 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.

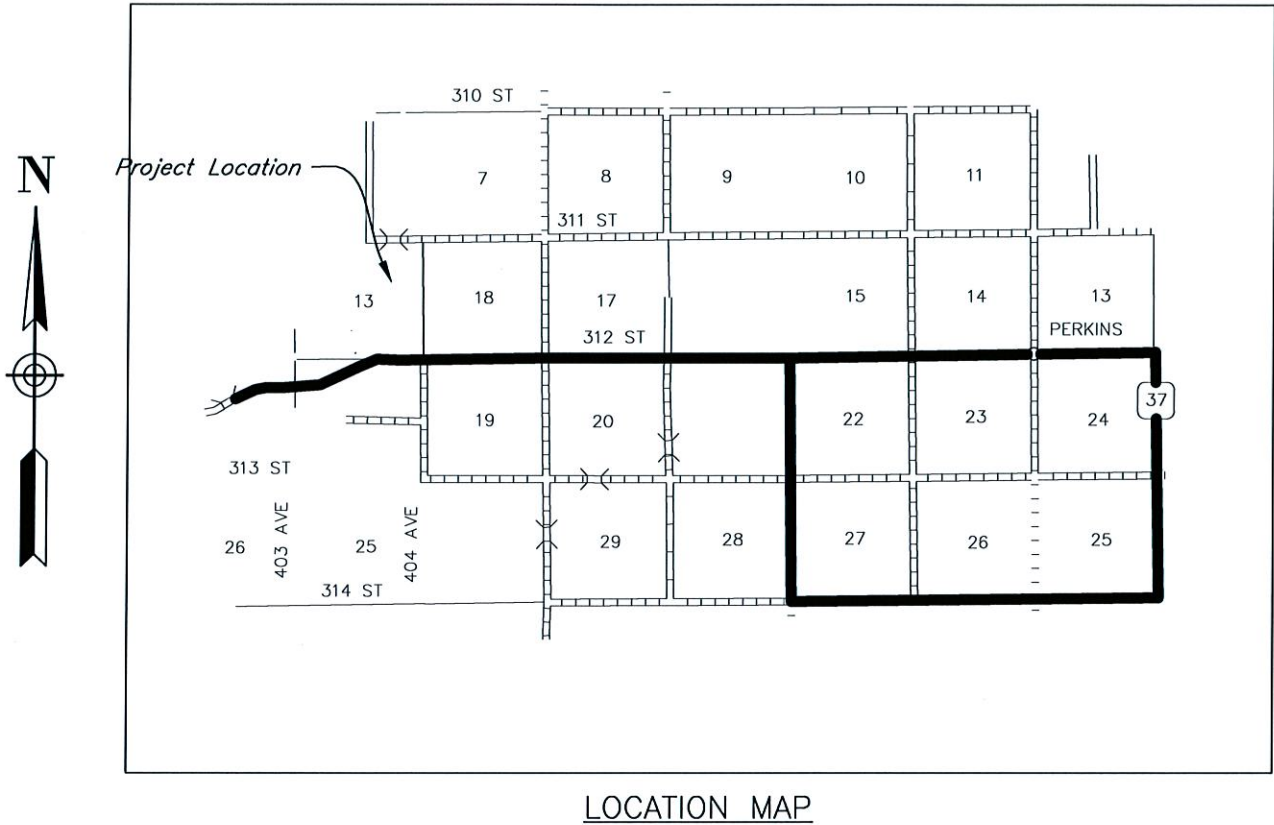
An informational sheet *Common Water Right Questions?* is also enclosed. This sheet is intended to answer some of the questions associated with obtaining and keeping a water right.

Sincerely,

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

enclosures

PRODUCER: ROGER BAUMFALK 436 IRRIGATION RESERVOIR
NE 1/4, SEC 13, T 93N, R 62W
BON HOMME COUNTY, SOUTH DAKOTA



LOCATION MAP

GENERAL NOTES

1. If cultural resources are discovered during construction, discontinue construction and notify the local Natural Resources Conservation Service office.
2. The landowner is responsible for complying with all federal, state, and local laws.

CONSTRUCTION NOTES

1. Clear and grub the entire area within the work limits.
2. All borrow material must not contain frozen material, sod, roots, or other perishable material, or rock larger than eight inches in diameter as described in SD Construction Specification SD-75.
3. Any shale or sand that is exposed during borrow operations shall be immediately backfilled with 2 feet of clay material.
4. 6 inches topsoil will be incorporated into the earthfill neat line & grade surface and meet SD Construction Specification SD-75
5. All areas top-dressed with topsoil and disturbed during construction will be seeded according to SD Construction Specification SD-28.
6. To protect PVC pipe from ultraviolet light, portions of pipe that will be permanently exposed to sunlight must be primed with PVC solvent and painted with two coats high quality exterior latex paint.

NO EXCAVATOR MAY BEGIN ANY EXCAVATION WITHOUT FIRST
NOTIFYING THE ONE-CALL NOTIFICATION CENTER OF THE
PROPOSED EXCAVATION AT 1-800-781-7474.

TABLE OF QUANTITIES			
ITEM	UNIT	QUANTITY	"AS-BUILT" QUANTITY
Earthfill Class S – Embankment (Includes 5% Settlement)	Cu. Yd.	20154	21437
Earthfill Class S – Core Trench	Cu. Yd.	766	766
Earthfill Class S – Stripping	Cu. Yd.	888	1149
Earthfill Class S – Lined Side of Pond	Cu. Yd.		1000
Total Earthfill	Cu. Yd.	21,808	24352
Seeding	Acre	1.1	1.4
Principal Spillway Pipe			
24" Dia. DR18 PVC Pipe	Lin. Ft.	100	100
24" Dia. DR25 PVC Pipe	Lin. Ft.	65	60
48" Dia. Concrete Riser and Base	Each	1	1
Trash Rack and Baffle	Each	1	1
Drainage Diaphragm	Each	1	1
Timber Pipe Support	Each	1	1
Drawdown Intake	Each	1	1
Drawdown Valve	Each	1	1
8" PVC DR 18 (Drawdown Pipe)	Lin. Ft.	320	275

SD CONSTRUCTION AND
MATERIAL SPECIFICATIONS

SD-4 Stripping
SD-5 Excavation
SD-75 Earthfill – Class S
SD-8 Rock Riprap And Bedding
SD-10 Salvaging And Spreading Topsoil
SD-12B Concrete For Minor Structures
SD-13 Steel Reinforcement
SD-14 Wood And Steel Structures
SD-28 Seeding
SD-55 Plastic Pipe
SD-592 Geotextile
For A Full Text Version See
http://www.sd.usda.gov/technical/SD_Engineering.html

STATEMENT OF COMPLIANCE

Construction (was) (was not)
completed in accordance with
approved construction plans and
specifications.

James Gelderman 12/3/12
JAA Date

NRCS HAZARD CLASS A
NRCS JOB CLASS IV

INDEX OF DRAWINGS

1. Cover Sheet
2. Plan View and Design Data
3. Detail Plan View
4. Borrow Plan View
5. Soil Borings
6. Profile of Dam and Auxiliary Spillway
and Cross-Section of Auxiliary Spillway
7. Profile of Principal Spillway and
Maximum Cross-Section of Dam
8. Precast Concrete Riser Detail
9. Trash Rack and Baffle Detail
10. Drainage Diaphragm Detail
11. Timber Pipe Support Detail
12. Irrigation Drawdown Detail
13. Thrust Block Detail

Designed *J. Gelderman* 8/14/12
Drawn *J. Gelderman* 8/15/12
Checked _____
Approved _____

PRODUCER: ROGER BAUMFALK
436 IRRIGATION RESERVOIR
COVER SHEET

Natural Resources Conservation Service
United States Department of Agriculture

File No.
Baumfalkasbuiltliner.dwg

Drawing No.
—

12/3/12 9:39 AM
Sheet 1 of 13

NE 1/4, Sec 13, T 93N, R 62W
Bon Homme County, South Dakota

HYDRAULIC DATA		
Drainage Area	210	Acres
Annual Runoff Yield (50% Chance)	11.4	Ac. Ft
Time of Concentration	.712	Hours
Runoff Curve Number	76	
Principal Spillway, 50 Year - 24 Hour Rainfall	5.2	Inches
Auxiliary Spillway, ___Year - 24 Hour Rainfall	NA	Inches
Peak Runoff 50 Year - 24 Hour Rainfall	380	CFS
Principal Spillway Discharge	69.0	CFS
Peak Runoff ___Year - 24 Hour Rainfall	NA	CFS
Auxiliary Spillway Discharge	NA	CFS

STRUCTURE DATA		
Estimated 15 Year Sediment Yield	0.9	Ac. Ft
Length of Top of Dam	291	Feet
Water Depth to Crest of Principal Spillway	14.4	Feet
Height of Downstream Toe to Top of Dam	28.7	Feet
Effective Height	24.1	Feet
Product of Storage X Effective Height	1257	

POOL DATA			
	ELEV.	AREA (ac.)	STORAGE (ac.-ft.)
Crest of Principal Spillway	120.0	2.2	32
Crest of Auxiliary Spillway	NA	NA	NA
Top of Dam	128.5	4.3	58.5

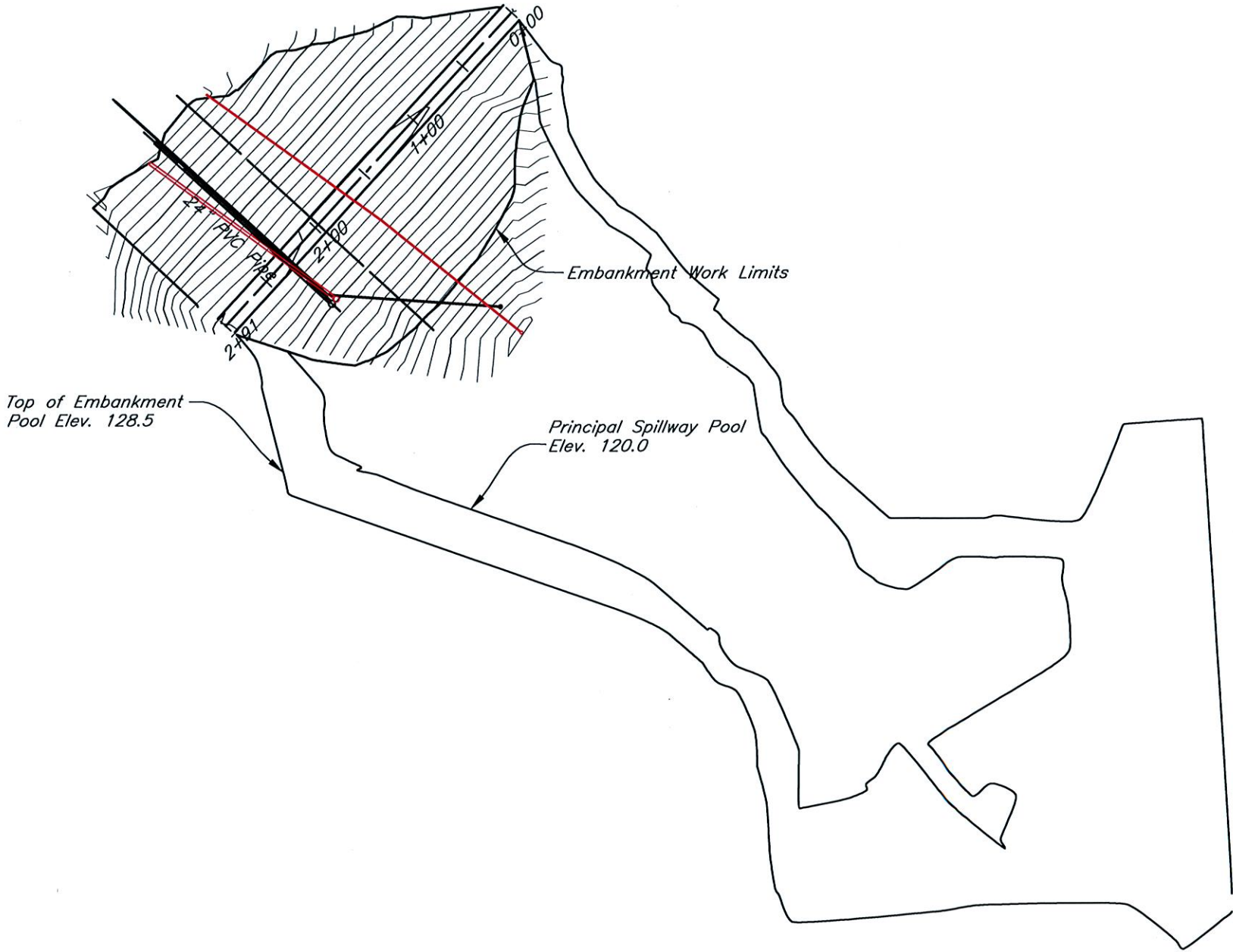
BENCHMARK POINTS TABLE					
NO.	ID	ELEVATION	NORTHING	EASTING	BENCHMARK DESCRIPTION
1	CP1	100.00	10,000.00	10,000.00	Top of 1/2" rebar located near south east corner of old shed. The shed is located west of planned reservoir.
4	CP2	98.37	10017.54	9912.69	Top of 1/2" rebar located near south side of rubber tire tank.
5	CP3	88.04	9848.24	9210.63	Top of 1/2" rebar located next to the south east corner of center pivot concrete pad.

NO EXCAVATOR MAY BEGIN ANY EXCAVATION WITHOUT FIRST NOTIFYING THE ONE-CALL NOTIFICATION CENTER OF THE PROPOSED EXCAVATION AT 1-800-781-7474.

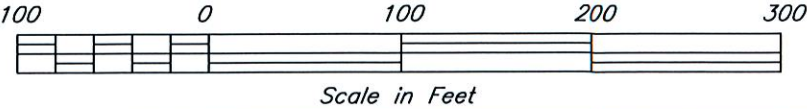


4
98.37
cp2

1
100.00
cp1



PLAN VIEW



Date
 Designed J. Gelderman 8/14/12
 Drawn J. Gelderman 8/15/12
 Checked SEE ORIGINAL DESIGN
 Approved SEE ORIGINAL DESIGN

PRODUCER: ROGER BAUMFALK
 436 IRRIGATION RESERVOIR
 PLAN VIEW AND DESIGN DATA

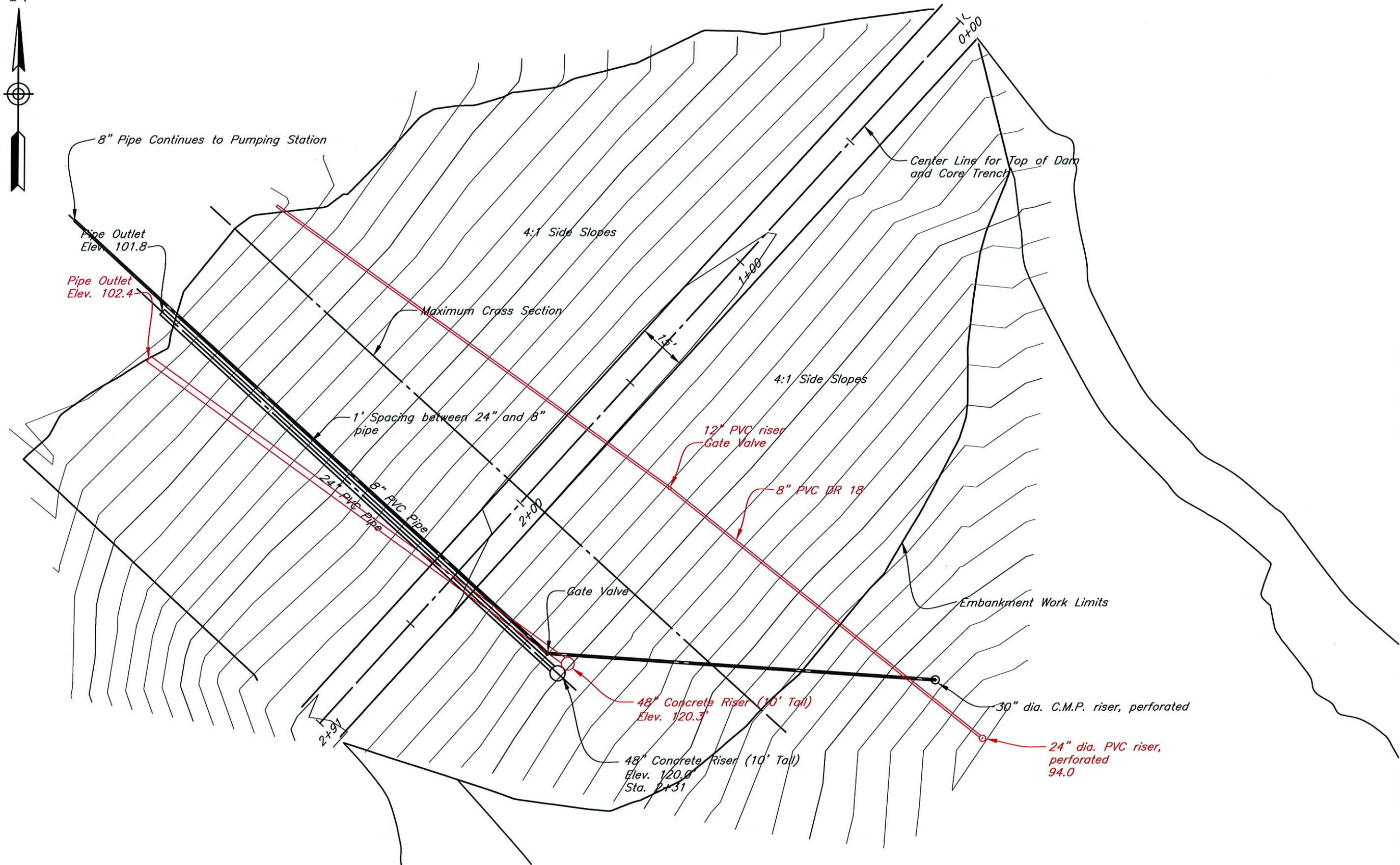
NRCS
 Natural Resources Conservation Service
 United States Department of Agriculture

File No.
 Baumfalksbuilt.dwg

Drawing No.
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9/28/12 1:44 PM
 Sheet 2 of 13

NE 1/4, Sec 13, T 93N, R 62W Bon Homme County, South Dakota



PLAN VIEW

NO EXCAVATOR MAY BEGIN ANY EXCAVATION WITHOUT FIRST NOTIFYING THE ONE-CALL NOTIFICATION CENTER OF THE PROPOSED EXCAVATION AT 1-800-781-7474.



Date
Designed J. Gelderman 8/14/12
Drawn J. Gelderman 8/15/12
Checked SEE ORIGINAL PLANS
Approved SEE ORIGINAL PLANS

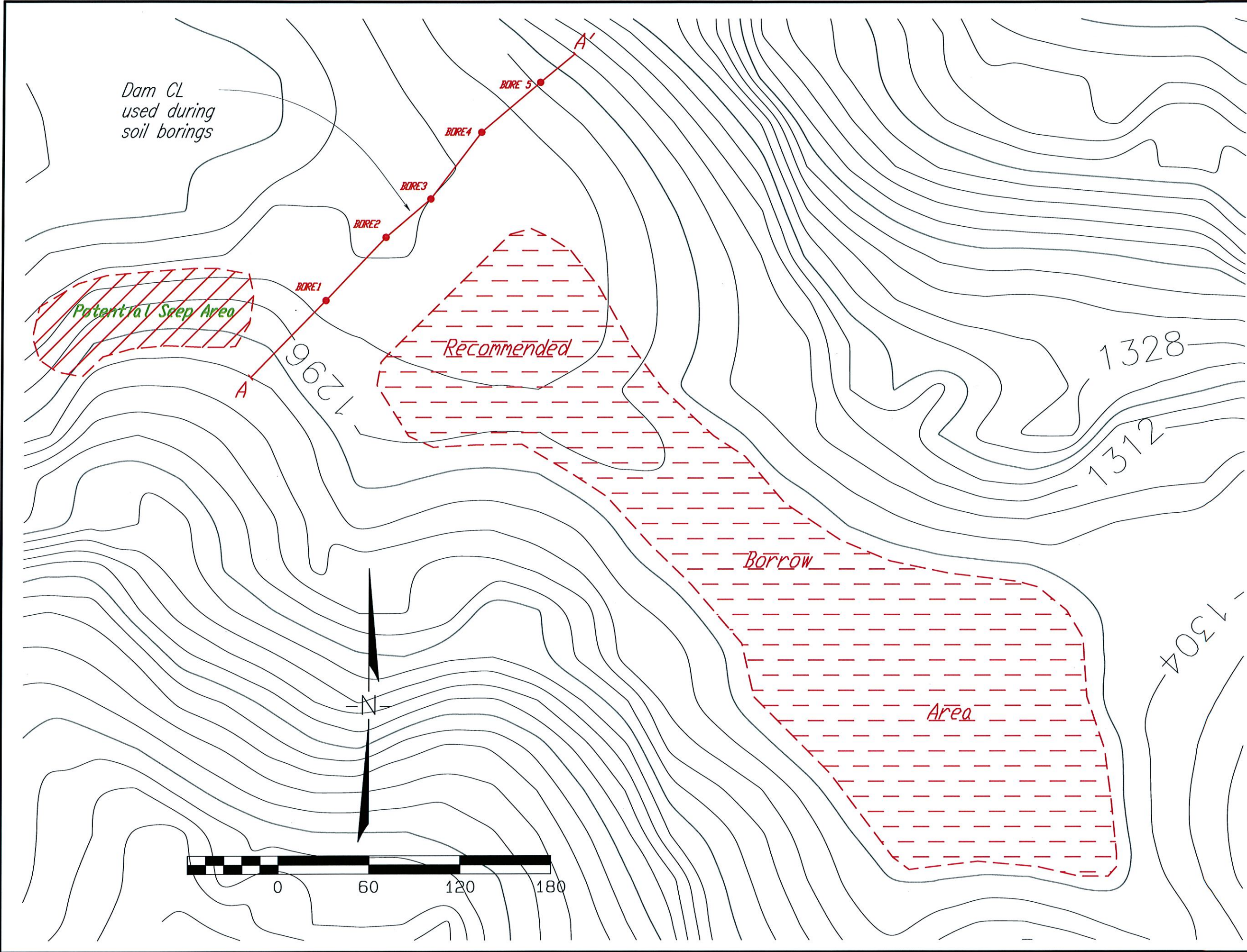
PRODUCER: ROGER BAUMFALK
436 IRRIGATION RESERVOIR
PLAN VIEW



File No.
Baumfalkasbuilts.dwg

Drawing No.
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9/28/12 1:44 PM
Sheet 3 of 13



Dam CL
used during
soil borings

Potential Seep Area

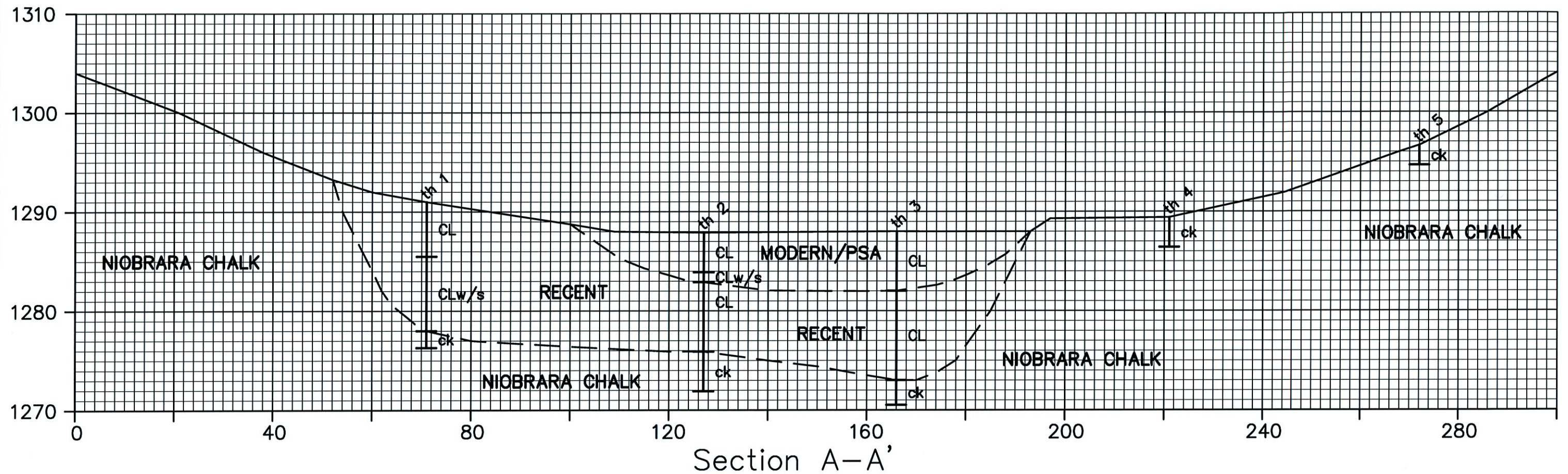
Recommended

Borrow

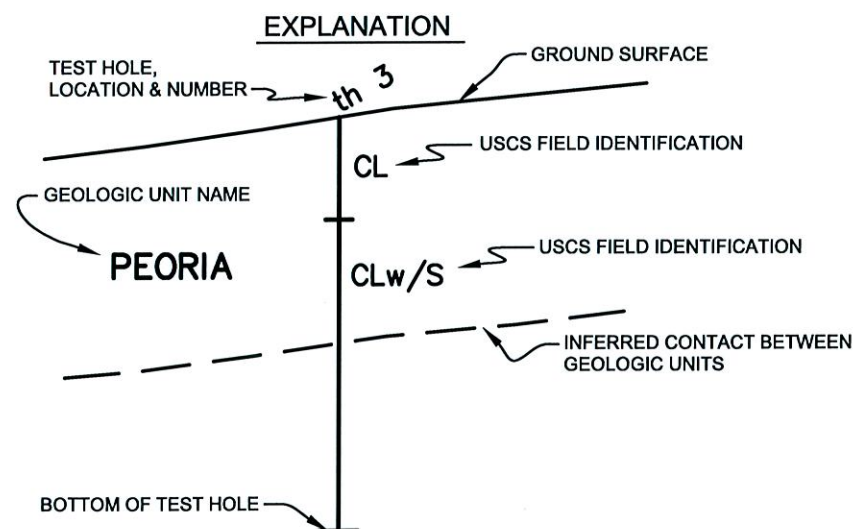
Area

PLAN VIEW

 Natural Resources Conservation Service United States Department of Agriculture	File Name:	
	Drawing No.	
	7/6/2012 3:40PM	
	Sheet 4 of 13	
USDA - NRCS State Office Engineering Staff 200 Fourth Street SW Huron, South Dakota 57350	PRODUCER	R. Baumfalk
	SECTION	T. R.
 Natural Resources Conservation Service United States Department of Agriculture	DESIGNED	J. Gelderman
	DRAWN	M. McCawley
	CHECKED	SEE ORIGINAL PLANS
	APPROVED	SEE ORIGINAL PLANS



NO GROUND WATER WAS ENCOUNTERED,
NOR DID ANY APPEAR WITHIN 9 DAYS



Baumfalk Irrigation Structure

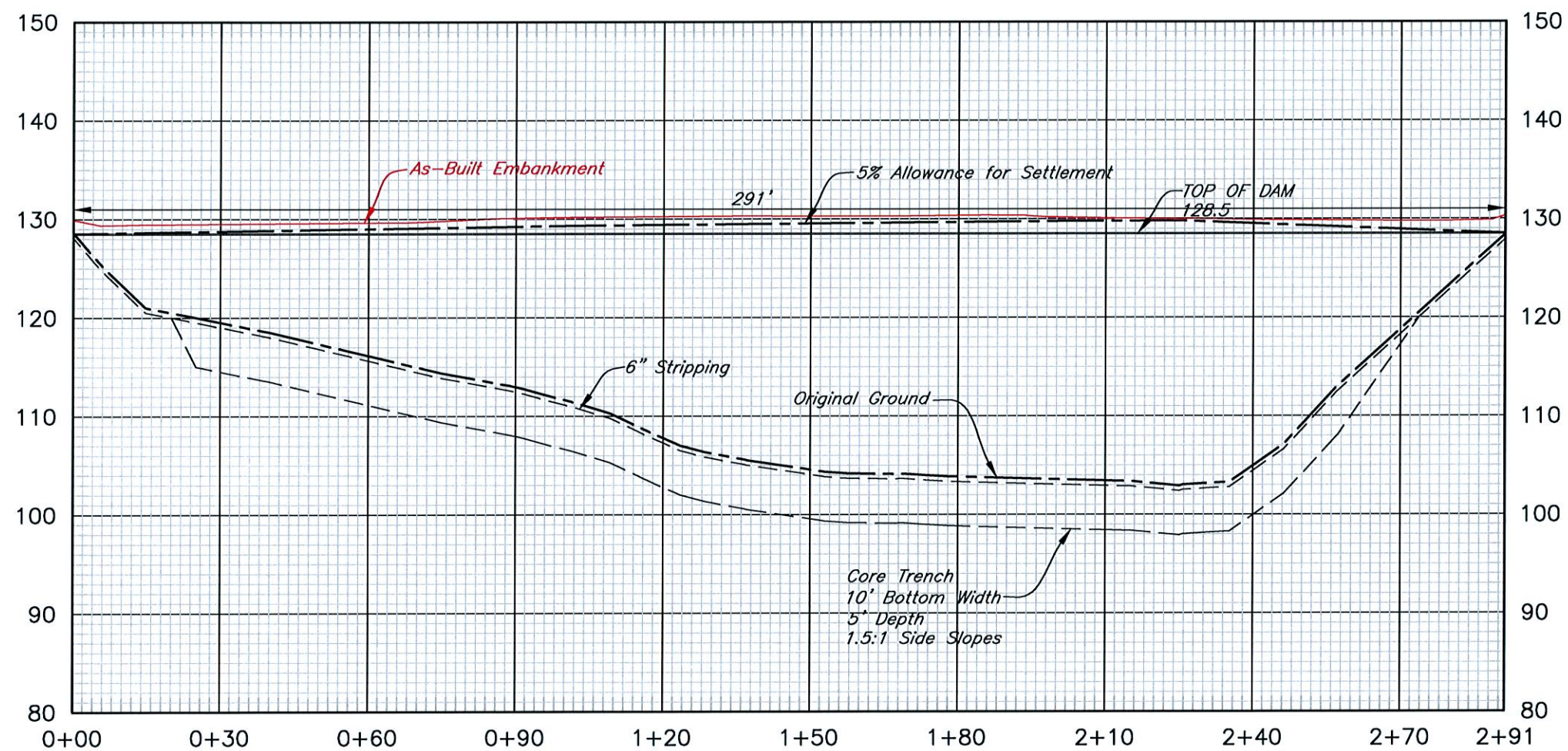
Bon Homme County, SD

Designed MTM Date 6/12
 Drawn RXS Date 6/12
 Checked SEE ORIGINAL PLANS
 Approved SEE ORIGINAL PLANS

CAD Dwg.

Design Class:

Sheet 5 of 13



Dam CL PROFILE

Scale: Horizontal 1"=30'; Vertical 1"=15'

PROFILE OF DAM

Designed J. Gelderman 8/14/12
 Drawn J. Gelderman 8/15/12
 Checked SEE ORIGINAL PLANS
 Approved SEE ORIGINAL PLANS

PRODUCER: ROGER BAUMFALK
 436 IRRIGATION RESERVOIR
 PROFILE OF DAM

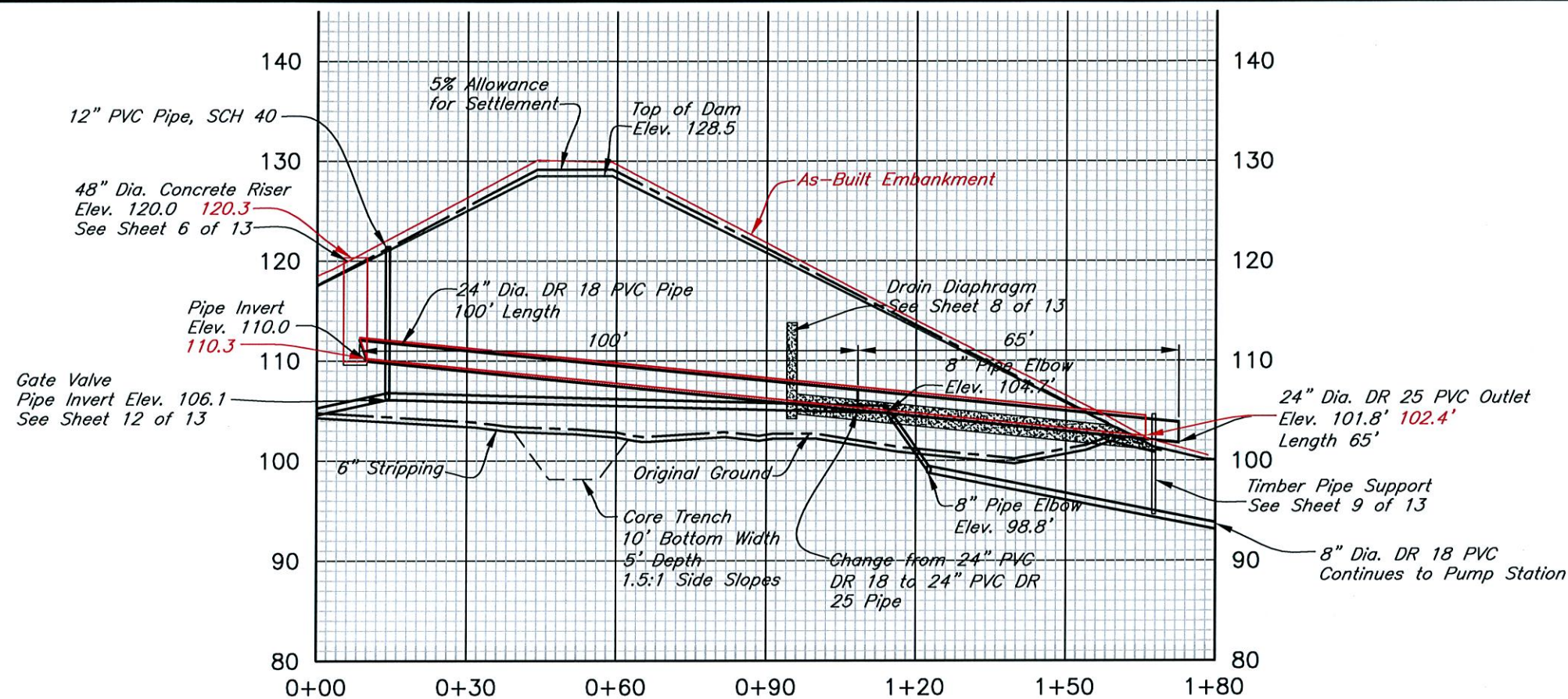
NE 1/4, Sec 13, T 93N, R 62W Bon Homme County, South Dakota



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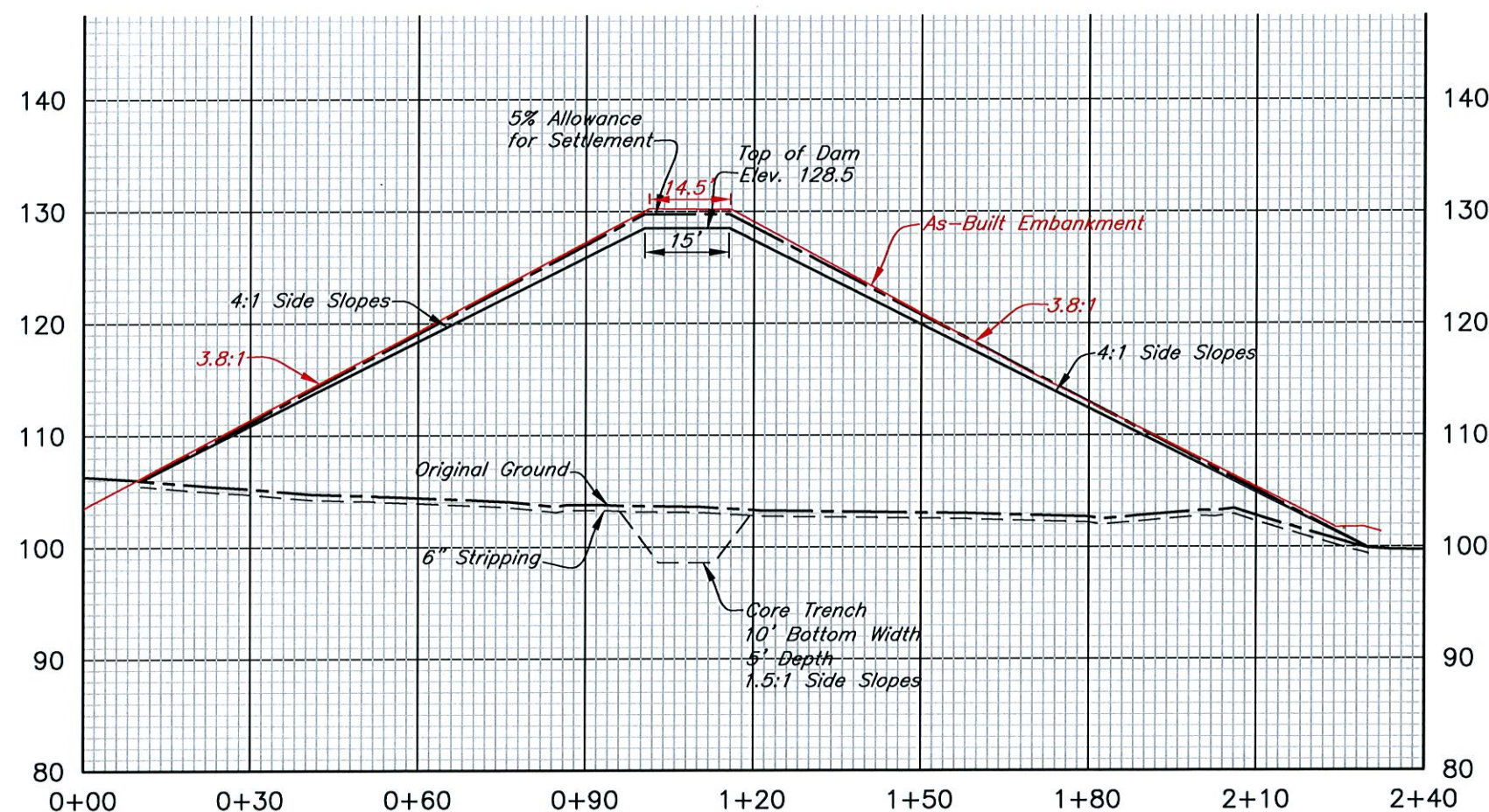
Drawing No.

9/28/12 1:44 PM
 Sheet 6 of 13



Scale: Horizontal 1"=30'; Vertical 1"=15'

PRINCIPAL SPILLWAY PROFILE



Scale: Horizontal 1"=30'; Vertical 1"=15'

MAXIMUM CROSS-SECTION DAM PROFILE

TRENCH SAFETY NOTES

1. All trench work shall comply with the Occupational Safety and Health Administration (OSHA) regulations.
2. Any trench over four (4) feet deep shall have a means of egress from the trench by a ladder, ramp, or other means of egress; and
3. Any trench over five (5) feet deep shall be protected from cave-ins by a sloping, benching or shoring protection system. Benches must be constructed so the overall slope meets the slope required by OSHA regulations.

Date 8/14/12
Designed J. Gelderman
Drawn J. Gelderman
Checked SEE ORIGINAL PLANS
Approved SEE ORIGINAL PLANS

PRODUCER: ROGER BAUMFALK
436 IRRIGATION RESERVOIR
PROFILE OF PRINCIPAL SPILLWAY AND MAXIMUM CROSS-SECTION

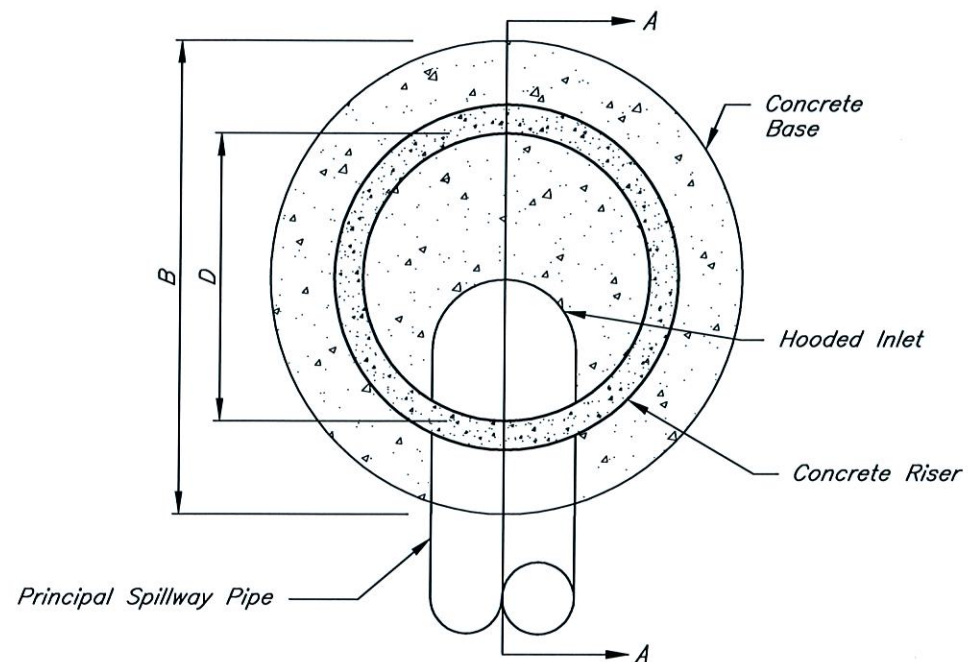
NE 1/4, Sec 13, T 93N, R 62W Bon Homme County, South Dakota



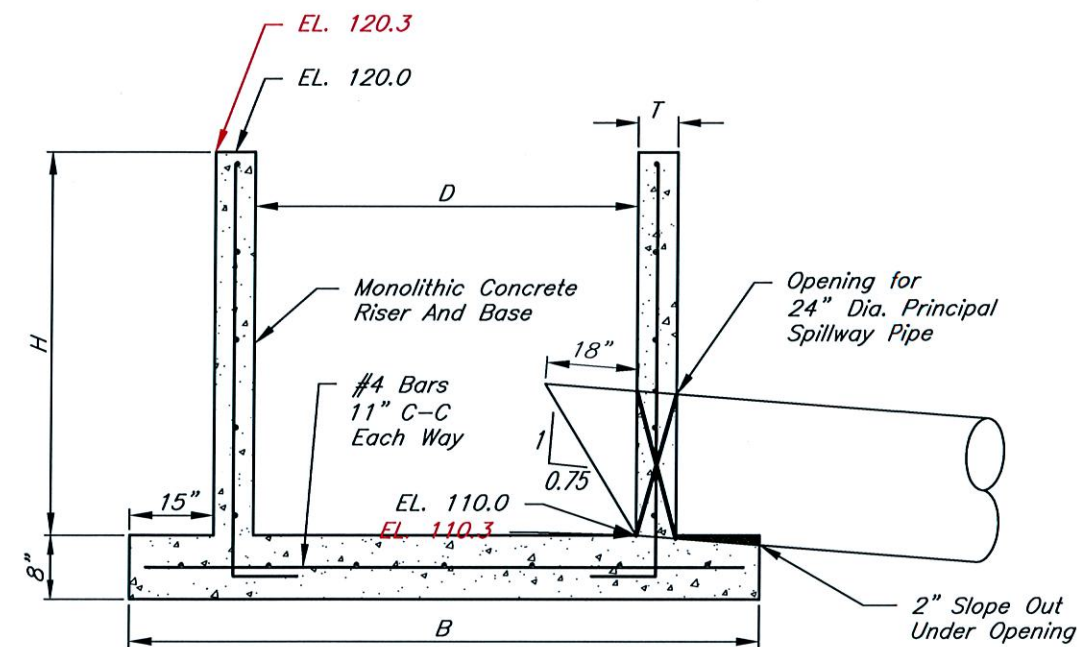
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Sheet 7 of 13



PLAN VIEW PRECAST RISER AND BASE



SECTION VIEW A-A

CONSTRUCTION NOTES

1. The riser and base is precast reinforced concrete and is manufactured according to ASTM C478 Standard Specification For Precast Reinforced Concrete Manhole Sections.
2. Provide a watertight joint between the precast concrete riser and the principal spillway pipe barrel.
3. Contact NRCS prior to installation for other options for the construction of the riser if a precast monolithic riser and base is not used.

REQUIRED PRECAST RISER AND BASE DIMENSIONS

(D) RISER DIAMETER	(H) RISER HEIGHT	(T) WALL THICKNESS	(B) BASE DIAMETER	BASE THICKNESS	PIPE DIAMETER	PIPE MATERIAL
48"	10'	5"	79"	8"	24"	SDR 18 PVC

Date 8/14/12
 Designed J. Gelderman
 Drawn J. Gelderman
 Checked SEE ORIGINAL PLANS
 Approved SEE ORIGINAL PLANS

PRODUCER: ROGER BAUMFALK
 436 IRRIGATION RESERVOIR
 PRECAST CONCRETE RISER AND HOODED INLET COMBINATION

NE 1/4, Sec 13, T 93N, R 62W
 Bon Homme County, South Dakota

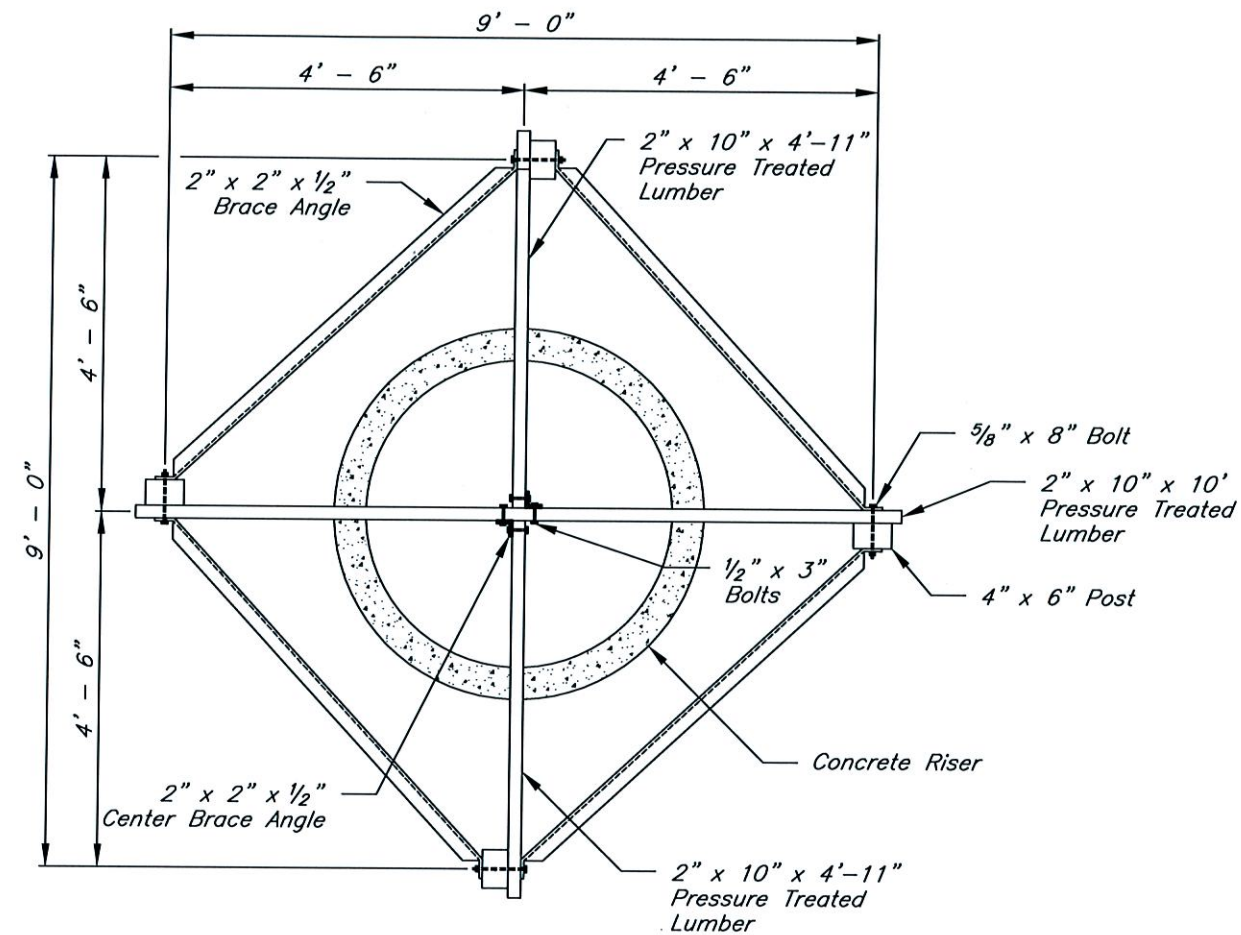


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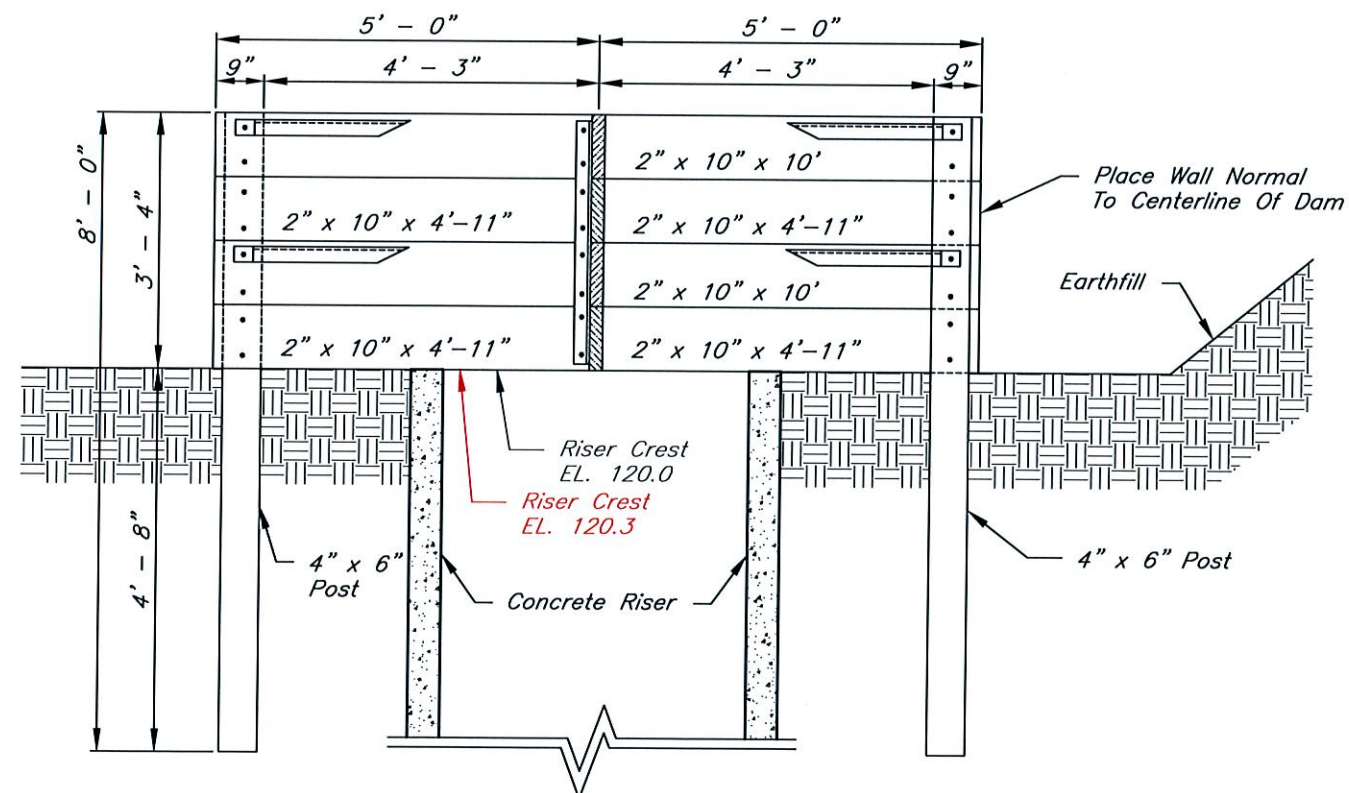
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 Sheet 8 of 13

PRECAST CONCRETE RISER AND HOODED INLET COMBINATION



PLAN VIEW

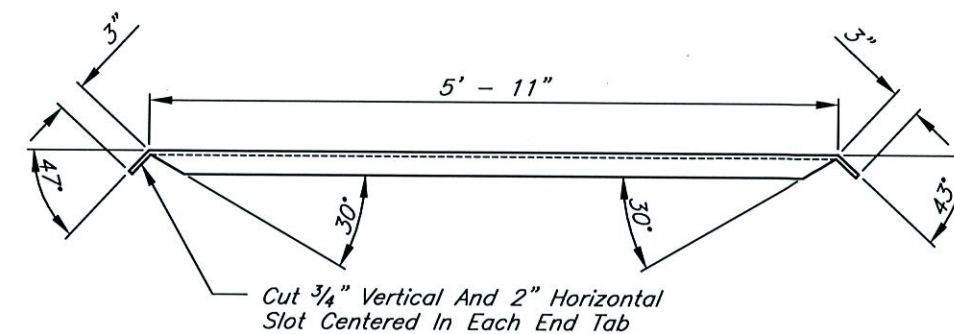


SIDE VIEW

TABLE OF QUANTITIES			
ITEM	LENGTH OR SIZE	UNIT	QUANTITY
4" X 6" Pressure Treated Post	8 Ft	Each	4
2" X 10" Pressure Treated Lumber	10 Ft	Each	4
2" X 10" Pressure Treated Lumber	4' - 11"	Each	8
2" X 2" X 1/4" Steel Angle	6' - 5"	Each	8
2" X 2" X 1/4" Steel Angle	3' - 2"	Each	2
Steel Bolt (with nut and 2 washers)	5/8" X 8"	Each	32
Steel Bolt (with nut and 2 washers)	1/2" X 3"	Each	32

CONSTRUCTION NOTES

1. Bolt 4" x 6" posts and 2" x 10" lumber together using two 5/8" x 8" bolts. Do not place bolts closer than 1 1/2" from edge of board.
2. For center brace angles drill eight, 9/16" holes, 5/8" from outer edge of each leg of each angle and centered 5 1/4" apart along the leg.
3. Attach brace angles to top bolt on top of 2" x 10" board and to top bolt on next to bottom bottom board.
4. All nuts, bolts, and washers shall be galvanized.



PLAN VIEW OF BRACE ANGLE

TRASH RACK AND BAFFLE FOR RISER DIA. 36" TO 60"
JOB PLAN NO. 6.4 (10/2011)

Date 8/14/12
 Designed J. Gelderman
 Drawn J. Gelderman
 Checked SEE ORIGINAL PLANS
 Approved SEE ORIGINAL PLANS

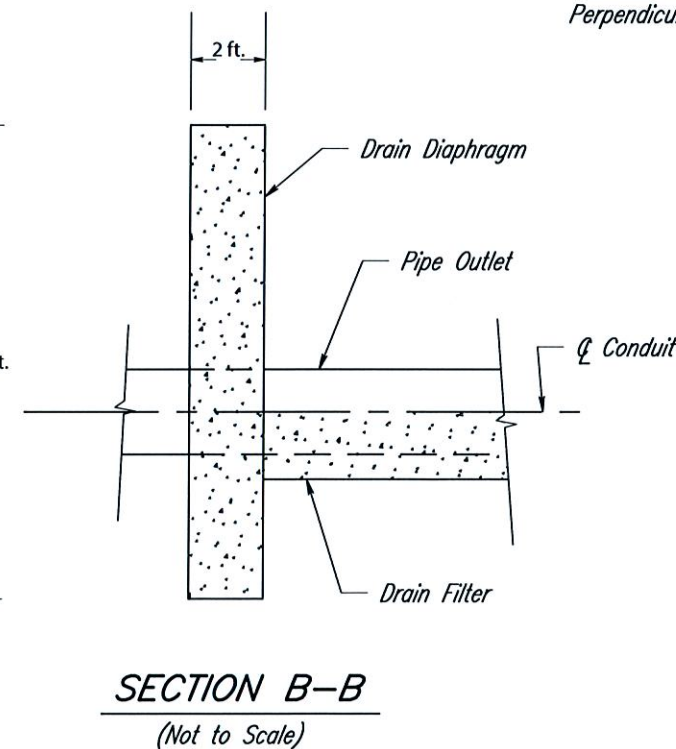
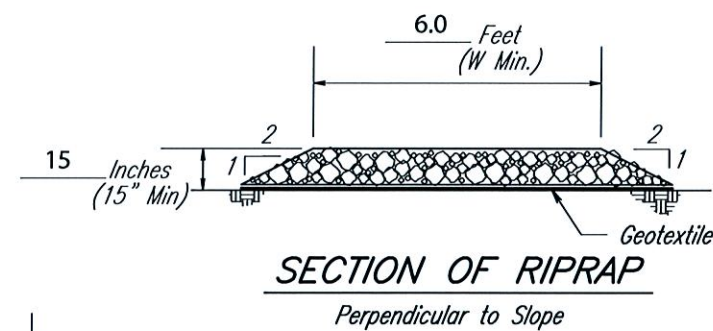
PRODUCER: ROGER BAUMFALK
 436 IRRIGATION RESERVOIR
 TRASH RACK AND BAFFLE FOR RISER DIA. 36" TO 60"

NRCS
 Natural Resources Conservation Service
 United States Department of Agriculture

File No. Baumfalksbuilt.dwg

Drawing No. -

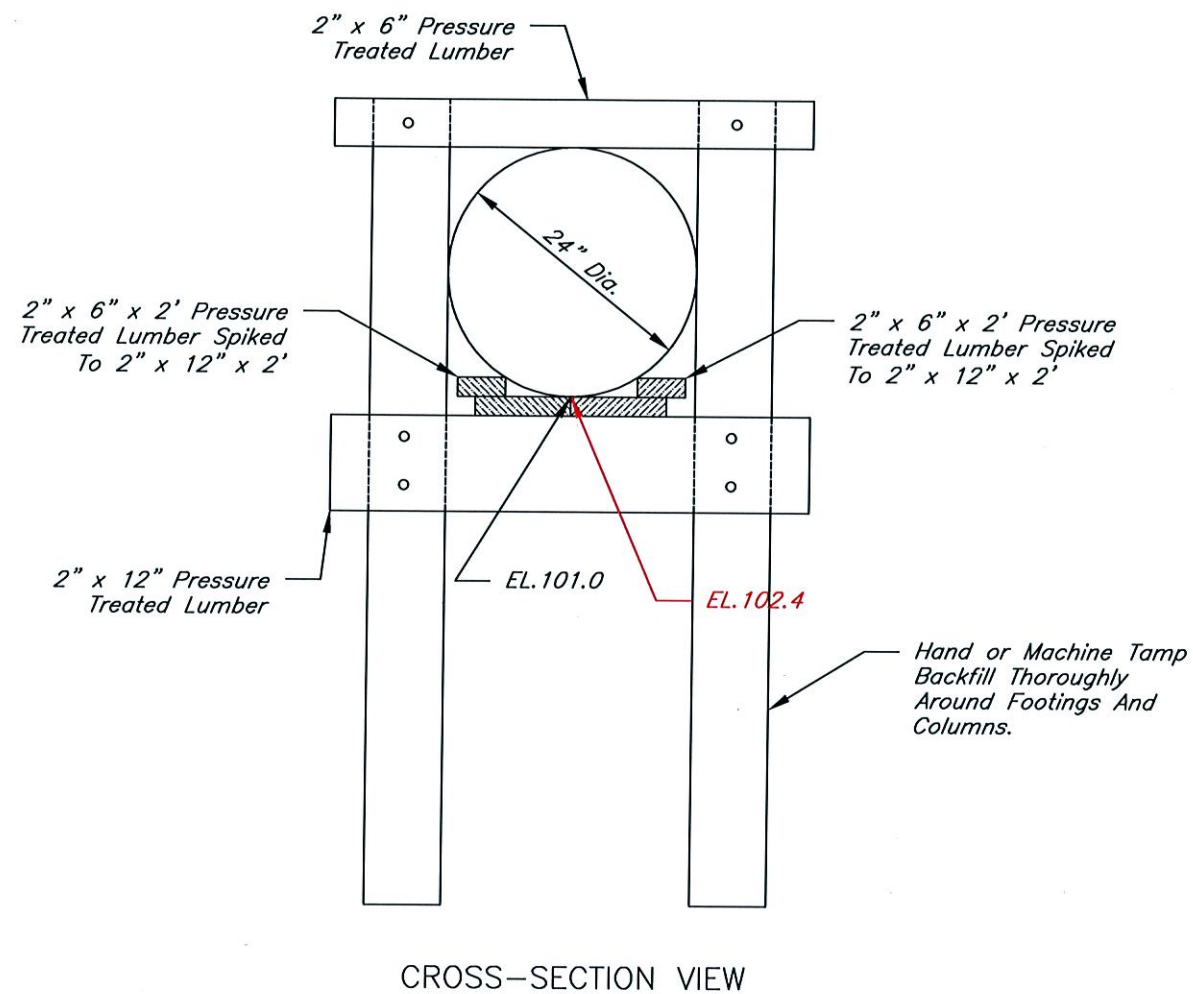
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 Sheet 9 of 13



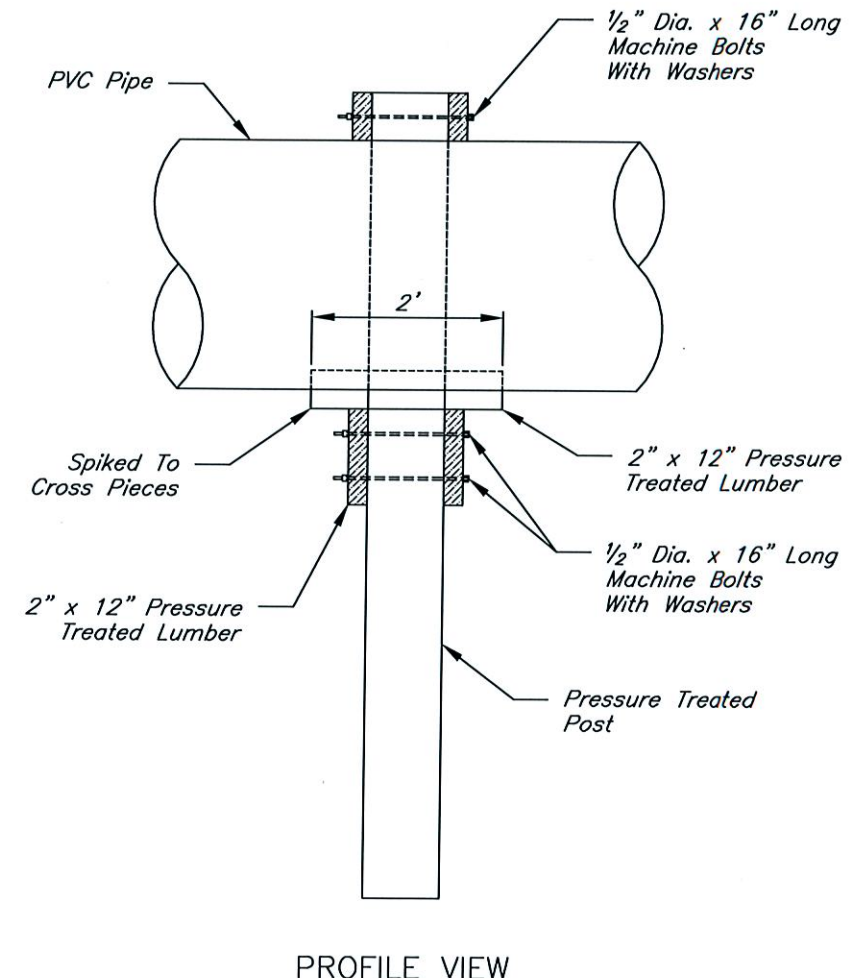
ROCK RIPRAP GRADATION		
PERCENT SMALLER	WEIGHT RANGE (LBS.)	AVERAGE CUBIC DIMENSION
100	50 lb.	10"
50-80	30 lb.	7"
15-50	10 lb.	5"
0-15	3 lb.	3"

REVISIONS		
DATE	APPROVED	TITLE
07/31/2009	Jay B. Cobb	State Conservation Engineer

File Name:
JobPlan_Drainage Diaphragm\71617_09\4.ppt
Drawing No.
7/21/2009 2:23PM
Sheet 10 of 13



CROSS-SECTION VIEW



PROFILE VIEW

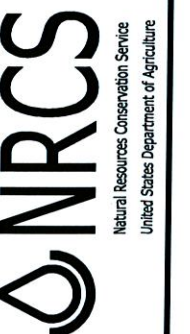
TABLE OF QUANTITIES			
ITEM	LENGTH	UNIT	QUANTITY
8" Dia. Pressure Treated Post **	10 Ft	Each	2
2" X 12" Pressure Treated Lumber	4 Ft	Each	2
2" X 6" Pressure Treated Lumber	4 Ft	Each	2
2" X 12" Pressure Treated Lumber	2 Ft	Each	2
2" X 6" Pressure Treated Lumber	2 Ft	Each	2
1/2" Dia. Machine Bolts With Nuts	14 In.	Each	6
1/2" Dia. Washers		Each	12

TIMBER PIPE SUPPORT
JOB PLAN NO. 4.0 (10/2011)

Designed J. Gelderman 8/14/12
Drawn J. Gelderman 8/15/12
Checked SEE ORIGINAL PLANS
Approved SEE ORIGINAL PLANS

PRODUCER: ROGER BAUMFALK
436 IRRIGATION RESERVOIR
TIMBER PIPE SUPPORT FOR PVC PIPE

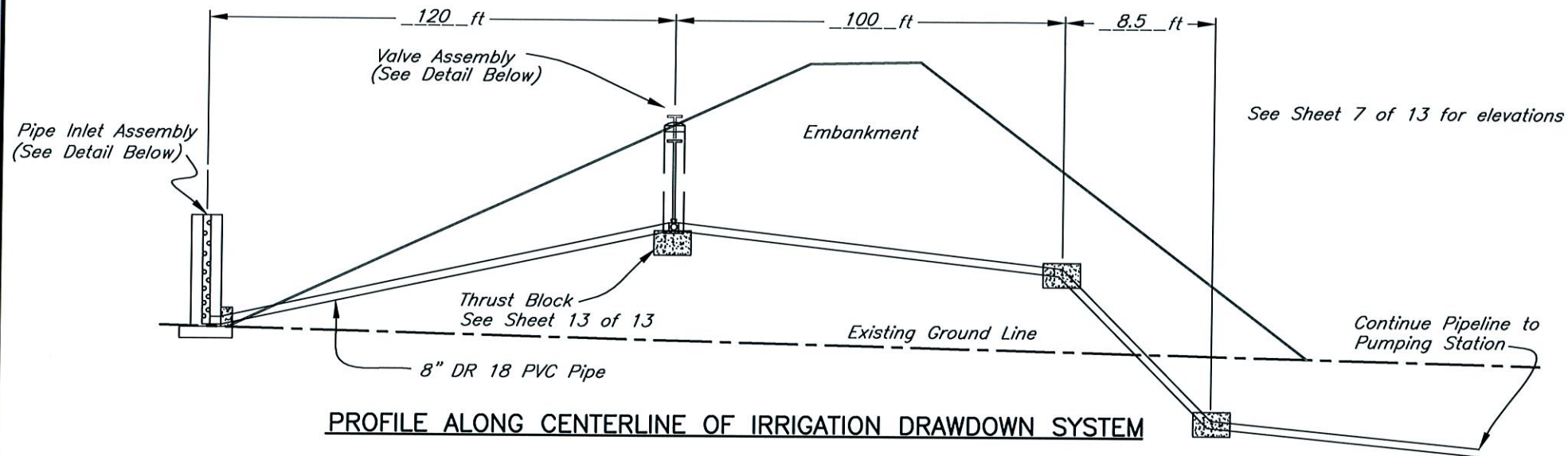
NE 1/4, Sec 13, T 93N, R 62W Bon Homme County, South Dakota



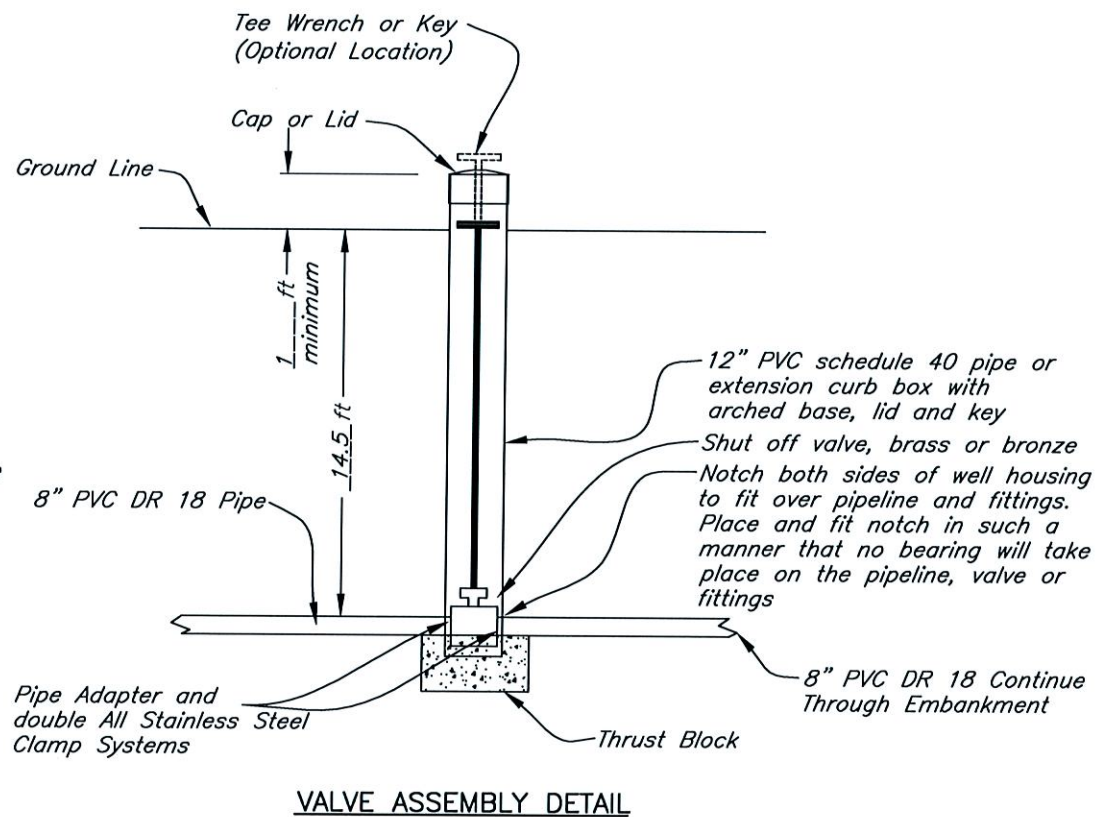
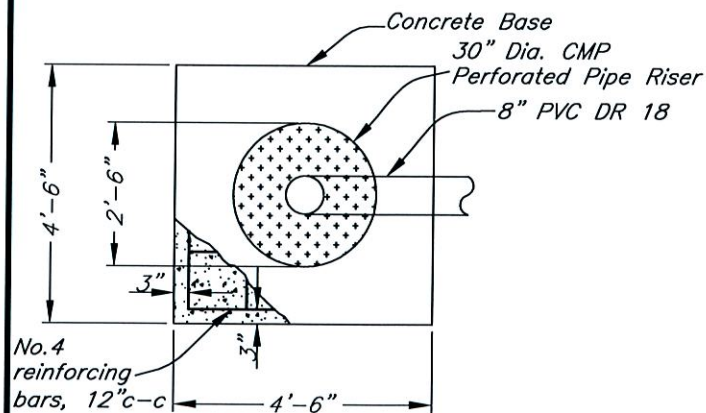
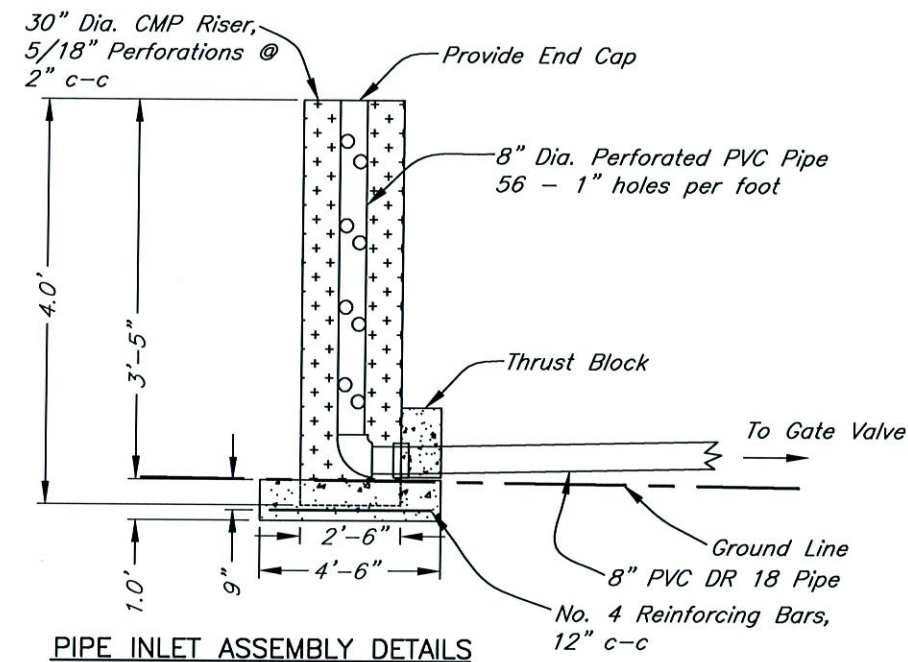
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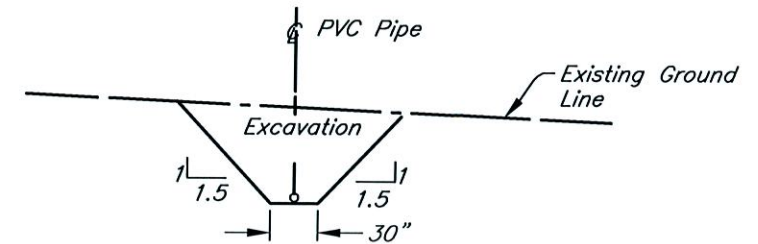
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Sheet 11 of 13



AWWA C900; Nominal Dia.: 8"	Maximum Allowable Pipe Cover
DR 18	25 ft



IRRIGATION DRAWDOWN SYSTEM
NOT TO SCALE



TYPICAL PIPELINE TRENCH DETAIL

—NOTES—

1. A minimum 6 feet of pipeline cover shall be maintained throughout the downstream side of the pipeline installation.
2. The top of the CMP riser shall be underwater before the pond's water starts to freeze.
3. Pipeline installation location will be as shown on the construction plans (Plan View).
4. Locate the inlet assembly near the deepest part of the pool area.
5. Earth fill adjacent to the pipe shall be hand tamped under the embankment.
6. Prior to backfilling, the irrigation drawdown system shall be approved by NRCS.

BILL OF MATERIALS			
	Item	No.	Unit
1	Concrete (Class 3000)	0.8	Cu. Yd.
2	Reinforcing Steel (No. 4 Bars -40 Lin.ft)	27	LB.
3	Corrugated Metal Pipe Riser, 30" Dia. 16 Gauge, Perforated	4	Lin. Ft.
4	12" Dia., SCH 40 PVC Pipe, w/lid	15.5	Lin. Ft.
5	Gate Valve and Appurtenances	1	Each
6	8" PVC DR18 Pipe (AWWA C900)*	320	Lin. Ft.
7	Thrust Block	4	Each

* Linear feet only includes pipe underneath embankment.

Date 8/14/12
 Designed J. Gelderman
 Drawn J. Gelderman
 Checked SEE ORIGINAL PLANS
 Approved SEE ORIGINAL PLANS

PRODUCER: ROGER BAUMFALK
 436 IRRIGATION RESERVOIR
 IRRIGATION DRAWDOWN DETAIL

NRCS
 Natural Resources Conservation Service
 United States Department of Agriculture

File No.
 Baumfalksbuilt.dwg
 Drawing No.
 9/28/12 1:44 PM
 Sheet 12 of 13

NE 1/4, Sec. 13, T. 93N, R. 62W Bon Homme County, South Dakota



**Report of Examination of Works and/or Application of Water to Beneficial Use
For Permit Nos. 7056-3 and 7408-3**

I have this day, April 17, 2020, made a thorough examination of the water use systems constructed by Roger Baumfalk, 40429 311th St., Avon, SD 57315, holder of Permit No. 7056-3, bearing the priority of August 14, 2008 authorizing the diversion of 1.33 cu. ft. per second of the waters of surface water (Choteau Creek) for irrigation purposes, in Bon Homme County, and holder of Permit No. 7408-3, bearing the priority of August 7, 2012 authorizing the diversion of 0.00 cu. ft. per second of the waters of surface water (Choteau Creek and runoff) for irrigation purposes, in Bon Homme County.

Inspection contact: Roger Baumfalk, Owner

A. Works used to divert the water to the dam (Water Right No. 7408-3):

Pump:

- 1) Make: Berkeley
- 2) Model: B4EPBM
- 3) Capacity: 600 GPM

Motor:

- 1) Make: Marathon
- 2) Model No.: LVC 365TTFS762AU W
- 3) Horsepower rating: 75 HP

Dam:

- 1) Height to crest (spillway, no auxiliary spillway): 28.7 feet from downstream toe.
- 2) Height to outlet pipe: 19.0 feet from downstream toe.
- 3) Riser Pipe Size: 10 ft. of 48-inch concrete pipe
- 4) Outlet Pipe: 165 feet of 24-inch PVC pipe
- 5) Crest width 15 feet
- 6) Crest length 291 feet
- 7) Approx. storage to outlet pipe: 32 ac-ft.
- 8) Approx. storage to crest: 58.5 ac-ft.
- 9) Date constructed: 2015, as-builts dated 12/3/2012 from NRCS

This is an earth fill embankment utilizing a 15-foot wide top trapezoidal dam. The end of the discharge pipe is armored with rock riprap. The water impounded in the reservoir is put to beneficial use in-place.

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

- | | | | |
|--------------------------------|---------------------|--------------------------|------------------------------|
| Pipe from Choteau Creek to Dam | 1) Type: <u>PVC</u> | 2) Size: <u>8</u> inches | 3) Length: <u>950</u> feet |
| Pipe from Dam to Pivots | 1) Type: <u>PVC</u> | 2) Size: <u>8</u> inches | 3) Length: <u>6,500</u> feet |

C. Works used to apply water to beneficial use (irrigation system):

West Center Pivot

- 1) Make: Zimmatic
- 2) Overall length: 440 feet
- 3) Number of towers: 3
- 4) End gun: Yes
- 5) Capacity: 600 GPM

Chemigation Equipment:

- 1) Does chemigate: No

Northeast Center Pivot

- 1) Make: Olson
- 2) Overall length: 1,252 feet
- 3) Number of towers: 8



- 4) End gun: Yes
5) Capacity: 600 GPM

Chemigation Equipment:
1) Does chemigate: No

D. Compliance with Permit Requirements:

- 1) Permit qualifications being abided by: No
2) Irrigation Questionnaires checked to determine if permit owner started irrigation by the end of construction period: Yes
3) Exceptions to compliance are: none

E. Condition and Location:

1. The system is in good condition with the point(s) of diversion located as follows:
Choteau Creek Intake: 1,280 feet south and 1,550 feet west of the northeast corner of Section 13-T93N-R62W (Latitude 42.87654, Longitude -98.11494 – NW1/4NE1/4):
Dam and Reservoir: 1,820 feet south and 940 feet west of the northeast corner of Section 13-T93N-R62W (Latitude 42.87524, Longitude -98.11291 – SE1/4NE1/4).
2. The works are capable of diverting and conveying to the place of use 1.33 cu. ft. per second of water which is to be used for irrigation purposes. Water has been put to beneficial use to the maximum extent as follows:

Section 18-T93N-R61W
NE1/4NW1/4 31 acres
SE1/4NW1/4 32 acres

Section 13-T93N-R62W
SW1/4NE1/4 16 acres

comprising a total of 78 acres of land and the license should be issued for 1.11 cfs (statutory limit).

3. All structures, wells and lands on map: Yes

F. Comments or other permit(s) associated with the project: Water Permit No. 7056-3 appropriates 1.33 cubic feet of water per second from Choteau Creek to be used for irrigating 141 acres of land. Water Permit No. 7408-3 authorizes the impoundment of 32 acre-feet of water by constructing a dam. The water from Choteau Creek is pumped directly to the center pivots or into the reservoir behind the dam from April 1 through June 30 each year when necessary, and then the water from the dam is used for irrigation when needed after June 30. The two permits are intertwined and could be considered for combining into one license. Also, the west center pivot originally irrigated a full circle of property. However, in 2019 a flood eroded the stream bank and the pivot no longer makes a full circle.



Keith DeJong
Water Rights Inspector
DENR, Water Rights Program

Date report completed: April 28, 2020

WATER RIGHTS PROGRAM -- FILE DOCUMENTATION

NAME & ADDRESS: Alex Kocer, 620 E HWY 46, Wagner SD 57380

DATE: 04/19/2024

TELEPHONE: 605.491.3860

RE: Property ownership and absence of irrigation

COMMENTS:

Keith Dejong made an inspection of Permit No. 7408-3 & 7056-3 on April 17, 2020. At the time of inspection, it was found that the acres authorized for irrigation in the SW ¼ Sec18, T93N, R61W, were sold off and the pivot was removed.

Prior to licensing the permits as developed, contact needed to be made with the new owner of the SW ¼ to ensure there was no interest in the irrigation permits.

On Friday, April 19, 2024, I was able to get in contact with Alex Kocer, owner of the SW ¼ Sec18, T93N, R61W. I explained that Mr. Baumfalk had a permit for irrigation of those acres that we were looking to license but that it was our intention to leave the SW ¼ off the license.

Alex was agreeable, saying he had no interest in irrigation at this time. I did however tell him that this would have no bearing on his ability to apply for an irrigation permit in the future and invited him to call me if he ever decided to pursue irrigation.

The Water Rights Program will now proceed with licensing of the irrigation project developed under Permit Nos. 7408-3 & 7056-3.



Amanda Dewell
Water Rights Program



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 E CAPITOL AVE
PIERRE SD 57501-3182
danr.sd.gov

APR 29 2024

7056-3
7408-3

Roger Baumfalk
40429 311th St
Avon SD 57315

Dear Mr. Baumfalk:

Enclosed is Water License No. 7408-3. This is the final water right document completing your process of obtaining a Water Right. Included with your license is a map prepared by the staff engineer who conducted the field investigation.

So 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,

Eric Gronlund, Chief Engineer
Water Rights Program
(605) 773-3352

NOTES: The application portions of Permit No. 7056-3 have been incorporated into Water Right No. 7408-3.

The investigation found your irrigation system is capable of diverting 1.33 cubic feet of water per second (cfs) which is equivalent to approximately 600 gallons per minute. The statutory limit is 1 cfs per 70 irrigated acres. For 78 acres, the statutory limit is 1.11 cfs, equivalent to 500 gpm. Diversion of water under this water license is limited to 1.11 cfs.

enclosures

**STATE OF SOUTH DAKOTA
WATER LICENSE NO. 7408-3**

(1) Roger Baumfalk, 40429 311th St, Avon SD 57315, made Application No. 7056-3, April 14, 2008, for a water permit to divert 1.33 cubic feet of water per second from Choteau Creek, Bon Homme County, South Dakota for irrigation purposes. Permit No. 7056-3, with a priority date of August 14, 2008, was approved November 17, 2008, and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before November 17, 2013, and for the application to beneficial use of water on or before November 17, 2017.

Mr. Baumfalk made Application No. 7408-3, August 7, 2012, for a water permit to divert from Choteau Creek to impound 32 acre-feet of water in a dam, to be used for the irrigation system authorized under Permit No. 7056-3. Permit No. 7408-3, with a priority date of August 7, 2012, was approved October 9, 2012, and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before October 9, 2017, and for the application to beneficial use of water on or before October 9, 2021.

The applicable portions of Permit No. 7056-3 have been incorporated into Water Right No. 7408-3.

(2) It is certified that the permit holder has complied with the provisions of South Dakota State Law relating to completion of the construction of the water supply system and is entitled to divert 1.11 cubic feet of water per second for beneficial use. The locations of the diversion points are:

- Choteau Creek Intake: 1,280 ft S & 1,550 ft W of the NE ¼ Section 13, T93N, R62W (NW ¼ NE ¼) (Latitude 42.87654 & Longitude -98.11494)
- Dam & Reservoir: 1,820 ft S & 940 ft W of the NE ¼ Section 13, T93N, R62W (SW ¼ NE ¼) (Latitude 42.87524 & Longitude -98.11291)

(3) The amount of appropriation may not exceed 2 acre-feet annually for each acre of land to which water is actually and beneficially applied for irrigation. The water is to be used during the following described annual period: April 1 – October 31 (irrigation) & January 1 – December 31 (storage dam).

(4) The permit holder has complied with the provisions of South Dakota State Law relating to the application of water to beneficial use to irrigate to following land:

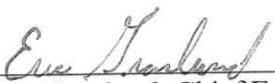
Section 18, T93N, R61W	Section 13, T93N, R62W
NE ¼ NW ¼ - 31 acres	SW ¼ NE ¼ - 15 acres
SE ¼ NW ¼ - 32 acres	
TOTAL: 78 acres	

(5) Pursuant to South Dakota Water Law 46-5-30.1 Roger Baumfalk, the holder and/or owner of Water Right No. 7408-3 is issued a license to appropriate water, the right to use 1.11 cubic feet of water per second from Choteau Creek & the storage dam, with priority dates of August 14, 2008 (for diversion from Choteau Creek) and August 7, 2012 (storage dam), specified in (2) of this license for irrigation purposes.

continued

This license is subject to South Dakota Water Law, any limitations or conditions listed in Water Right No. 7408-3 and subject to the following qualifications:

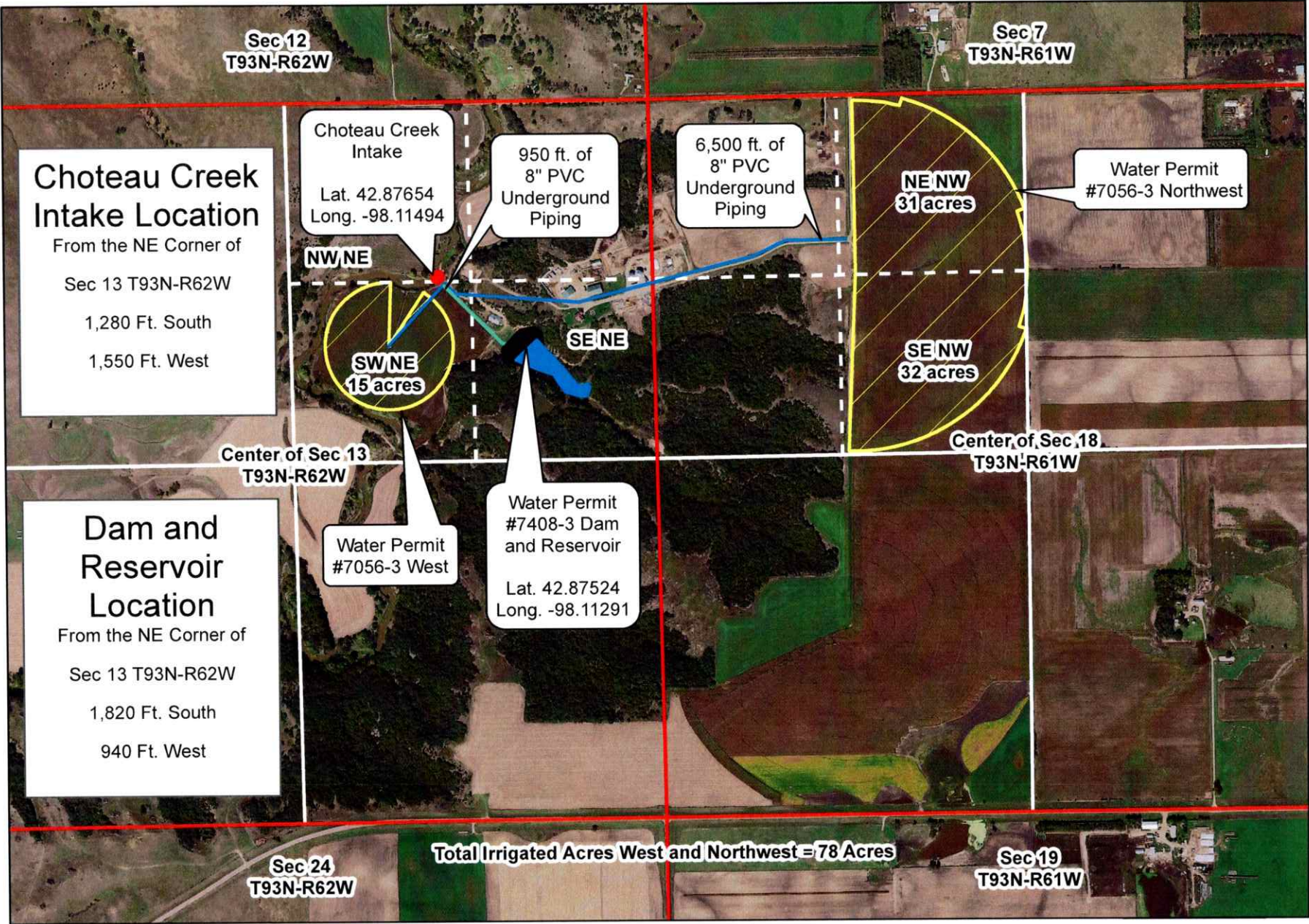
1. Water Right No. 7408-3 authorizes an impoundment with a storage capacity of 32 acre-feet of water and sufficient water annually to maintain the water level to the outlet elevation.
2. Low flows as needed for downstream domestic use, including livestock water and prior water rights must be bypassed.
3. Water may be diverted from Choteau Creek to the dam only during flow events that are obviously sufficient to meet downstream domestic uses, including livestock water and prior water rights. At no time, may the entire creek flow be diverted. Pumping is allowed each year from April 1 – June 30 unless the Chief Engineer is contacted and grants written authorization to pump from the creek past June 30. Storage water from the dam may be pumped for the purpose of irrigating land authorized by Permit No. 7056-3 after June 30 of each year. *(The applicable portions of Permit No. 7056-3 have been incorporated into this water right. Irrigation of land is now authorized by Water Right No. 7408-3.)*
4. This Water Right is approved subject to the irrigation water use questionnaire being submitted each year. The water right holder will need to distinguish on the irrigation questionnaire when the stored water is being pumped for irrigation.


Eric Gronlund, Chief Engineer
Water Rights Program
Department of Agriculture and Natural Resources

APR 29 2024
date



Water Right Nos. 7056-3 and 7408-3



Keith DeJong
Keith DeJong, PE
Staff Engineer
April 28, 2020