

WATER PERMIT NO. 1638-1

Name of Applicant: **Bureau of Land Management**

Address: **310 Roundup Street, Belle Fourche SD 57717**

Phone: **605 892-2526**

Amount of Water Claimed: **162.9 acre-feet**

Total Acres: **NA**

Source of Water Supply: **runoff**

Water to be used for: **recreational, fish & wildlife propagation and livestock** County: **Butte**

Type of Waste Disposal System: **NA**

Location: **about 30 miles north of Belle Fourche**

PRIORITY Date Received: **4-17-96**

Fee: **invoice sent 4-22-96**

Corrected Application Received: **5-28-96**

Period of Annual Use: **Jan 1 - December 31**

Remarks: **Proposed dam is being constructed in cooperation with Ducks Unlimited, Bureau of Reclamation and Bureau of Land Management**

Diversion Point: **E 1/2 NE 1/4 Sec 18-T13N-R3E**

Water Impounded: **NE 1/4 Sec 18 and SW 1/4 SE 1/4, SE 1/4 SW 1/4 Sec 7; all in T13N-R3E**

	7		8		9
	18		17		16

Depth of Well: **NA**

Well Driller: **NA**

Remarks:

Type of Map: **topo**

Prepared by: **Roger C. Smith, P.E.**

Reviewed and the Number Assigned on: **4-22-96**

By: **Karen Schlaak**

Notice of Hearing - date to intervene: _____

**SOUTH DAKOTA
WATER PERMIT NO. 1638-1**

Date of first receipt of application April 17, 1996.

Date of return to applicant for corrections, amendments or changes April 22, 1996.

Date of receipt of corrected application May 28, 1996.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 1638-1 to Bureau of Land Management, 310 Roundup St, Belle Fourche SD 57717 authorizing the construction of the water use system and the placing of water to beneficial use subject to the following limitations, conditions and qualifications:

1. Water Permit No. 1638-1 authorizes impoundment of 162.9 acre-feet of water from runoff by constructing a dam located in the E 1/2 NE 1/4 Section 18 with water impounded in the NE 1/4 Section 18 and the SW 1/4 SE 1/4, SE 1/4 SW 1/4 Section 7; all in T13N-R3E.
2. The water appropriated shall be used for the purpose of providing habitat for fish and wildlife production, recreational use and livestock watering and may not exceed the amount of water needed for beneficial use.
3. The water is to be used during the following described annual period: January 1 - December 31.
4. The date of approval of Permit No. 1638-1 is June 10, 1996.
5. The date from which applicant may claim right is April 17, 1996.
6. One-fifth of the construction is to be completed on or before December 10, 1998.
7. All construction is to be completed on or before June 10, 2001.
8. Water is to be put to beneficial use on or before June 10, 2005.
9. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

QUALIFICATIONS

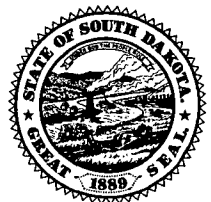
1. Water Permit No. 1638-1 authorizes a dam with storage capacity of 162.9 acre-feet of water and sufficient water annually to maintain the water level to the outlet elevation of 3,224 feet mean sea level.
2. Low flows as needed for downstream domestic use, including livestock water and prior water rights must be by-passed.

WATER MANAGEMENT BOARD

By: 
John Hatch, Chief Engineer
Water Rights Program
Department of Environment and Natural Resources

JUN 27 1996

date



Mail to: Water Rights Program Joe Foss Building 523 E. Capitol Pierre, SD 57501-3181 (605) 773-3352	(office use only)
	No. <u>1638-1</u> Hydrologic Unit <u>10130304</u>
	Basin <u>Moreau River</u>
	Newspaper <u>Belle Fourche Bee/Past, Belle Fourche, SD</u>



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

Check use(s) of water:

☐ Municipal	☐ Suburban Housing	☒ Recreational	☐ Institutional
☐ Rural Water System	☐ Commercial	☒ Fish & Wildlife	☐ Geothermal Heat
☐ Domestic (over 18 gpm)	☐ Industrial	☒ Other <u>Livestock</u>	

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

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

1. Name of Applicant BUREAU OF LAND MANAGEMENT Phone 605-892-2526
(check one) ☒ Owner ☐ Tenant/Leasee

Mailing Address 310 Roundup Street Belle Fourche State SD 57717
(Street, RR. or Box) (Zip Code)

2. Amount of water claimed _____ *CFS or _____ **GPM 162.9 ***AF
(*Cubic Feet per Second) (**Gallons per Minute) (***)Acre Feet - storage capacity of dam/dugout or annual use if applicable)

3. Source of water supply Runoff

4. Location of point of diversion (example - 3 wells in SW1/4 NE1/4 section 12-T104N-R51W)
E 1/2 NE 1/4 1/4, Section 18, Township 13 North, Range 3 East Water Impounded: NE 1/4
Sec. 18; SW 1/4 SE 1/4, SE 1/4 SW 1/4; Q11 T13N-R3E County Butte

5. County or counties where water will be used Butte

6. Annual period during which water is to be used Jan. 1 - Dec. 31

7. Give a description of the project. When available include any preliminary engineering report or other reports or information that will help explain the project. (Attach sheet if more space is needed)
This proposed dam is being constructed in cooperation with Ducks Unlimited, Bureau of Reclamation and Bureau of Land Management and is for livestock and waterfowl habitat. (See attached plans.)

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

STATE OF SOUTH DAKOTA)

SS

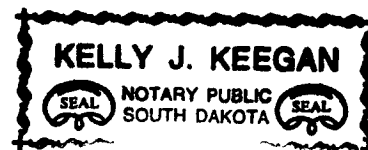
County of Butte

I, Bureau of Land Management, 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.

Signed Don Higer
Area Manager
Subscribed and sworn to before me this 4th day of April 19 96

My Commission Expires
September 19, 2003

Kelly J. Keegan
Notary Public



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 Thickness _____ Length of Gravel Pack _____
- e) Depth to Top of Water Bearing Material _____
- f) Depth to Water (ground surface to water level) _____
- g) Distance to nearest existing domestic well: _____
- On applicants property _____ On property owned by others _____

2. Wastewater Disposal System Information

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



3. Dugout Information

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

4. Water Storage Dams

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

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

Ducks Unlimited

b) Freeboard 5 feet

c) Crest Width 12 feet

Crest Length 1360 Feet

d) Height 20 feet

e) Primary Outlet Capacity _____

If pipe, diameter 72" cnp

f) Secondary Spillway Capacity _____

Spillway Width 300 ft.

g) X & Y Slope

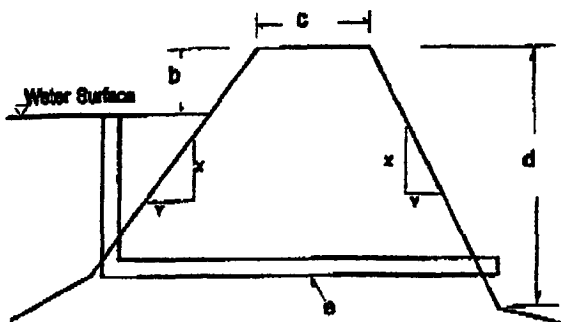
Upstream 3:1

Downstream 3:1

h) Surface Area of Impoundment 37.6 acres

i) Storage 162.9 Acre Feet

j) Drainage Area Above Dam 5200 Acres



RECEIPT

Division of Water Rights

414975

South Dakota Department of Environment and Natural Resources

Pierre, _____ May 28, 19 96

RECEIVED OF Bureau of Land Management, 310 Roundup Street, Belle Fourche, SD 57717

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

Fee for Application for Permit No. <u>1638-1</u> to Appropriate Water, to construct and to put water to beneficial use _____	225	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 Filing Extension Request _____		
Fee for _____		

(Any Other Work Provided by Law)	Total	225 00

By John Hatch 
Chief Engineer

Water Permit Application No. 1638-1
Bureau of Land Management

Ducks Unlimited Project
Battle Creek Impoundment

Top of Dam Elev. - 3229
P. Spillway Elev. - 3224
2nd Spillway Elev. - 3227
Bottom Elev. - 3209

Cat. 3 Low Hazard Dam

Height = 20 ft.

Normal Storage Capacity = 162.9
Intermediate Storage Capacity = 300.6
Maximum Storage Capacity = 350.0

Int. Storage x Eff Height = $300 \times 18 = 5400 > 3000 \therefore$ 50-year
Frequency - Min. Spillway Design

D.A. = 5200 acres = 8.13 mi²
Slope = 25'/mile
SI = 2.50

$$Q_{50} = 106 A^{.63} S^{.45} S_i^{-.69}$$

$$= 106 (8.13)^{.63} (25)^{.45} (2.50)^{-.69}$$

$$= 106 (3.74) (4.26) (0.53)$$

$$= \underline{900 \text{ cfs}}$$

$$Q_{100} = 132 A^{.65} S^{.46} S_i^{-.67}$$

$$= 132 (8.13)^{.65} (25)^{.46} (2.50)^{-.67}$$

$$= 132 (3.90) (4.40) (0.54)$$

$$= \underline{1220 \text{ cfs}}$$

Ducks Unlimited uses TR-20 to route Q_{100} peaks = 342 cfs thru the primary spillway (72" CMP riser w/ 48" CMP barrel) with no flow through the Secondary Spillway (300 ft. Earthcut) and Q_{100} peaks = 1155 cfs through both spillways with 1 foot of freeboard remaining.

Section 74:02:08:09

1. Topo Map - OK
2. Dam Axis Profile - OK
3. Max X-Section - OK
4. Area Capacity Data - OK
5. Outlet Drawings - OK
6. Spillway Rating Curve - OK
7. Spillway Details - OK
8. Specs. - STD DU - OK
9. EPP - N/A - OK

SCS Annual Yield

DA = 5200 Ac CN = 78

50% chance

$$0.25 \times 5200/12 = \underline{108 \text{ Ac-Ft.}}$$

80% chance

$$0.25 \times 5200/12 = \underline{35 \text{ Ac-Ft.}}$$

10% chance

$$1.25 \times 5200/12 = \underline{540 \text{ Ac-Ft.}}$$

DESIGN REPORT



PROJECT: BATTLE CREEK WETLAND CREATION
SD-182-01

LOCATIONS: NW¼ SECTION 18 TWP. 13N RGE. 3E
Meade County, South Dakota
Butte

MARSH DATA: Full Service Level (FSL) @ 3224.0 (MSL)
37.6 Surface Acres @ FSL
162.9 Acre-Feet Capacity @ FSL

PRIMARY SPILLWAY: 72" coated corrugated metal riser with fixed level control @ el. 3224.0 in conjunction with a 42" coated corrugated metal pipe; drawdown capabilities to el. 3217.0 via 6" gate valve.

EMERGENCY SPILLWAY: Excavated spillway having a crest length on centerline of approximately 100 feet and minimum bottom width of 300 feet at elevation 3227.0.

DAM: Earth fill to el. 3229.0; side slopes - 3:1; Upstream berm @ el. 3224.0; Compaction to 95% of standard proctor @ optimum moisture to +4% of optimum moisture..

CLASSIFICATION OF PROPOSED DAM: Based on the classification criteria outlined in Chapter 74:02:08 "Safety of Dams," it is recommended that the proposed dam be classified as a small, Category 3 dam. No loss of life and minimal economic loss is expected should failure occur. The product of the "maximum storage capacity" times the "effective height" is 4800. (350 x 16)

PRELIMINARY RISK ASSESSMENT:

The proposed impoundment would be constructed approximately 2.25 creek miles from the nearest downstream roadway crossing. The downstream structure is an improved county road containing a timber bridge with an approximate 100 foot opening. Available freeboard averages 10 feet. It appears the roadway has not been overtopped recently. Determining impacts to the roadway due to a clear weather breach of the proposed impoundment was not deemed necessary due to the distance downstream and the available hydraulic capacity of the bridge.

HYDROLOGY/HYDRAULICS:

HYDROLOGY - A hydrologic analysis of surface water runoff was performed using two methods. A peak discharge was determined from regression equations developed in WATER-RESOURCE INVESTIGATIONS REPORT 80-80 U.S. GEOLOGICAL SURVEY.

The SCS METHOD was used to determine the inflow hydrograph. The curve number used in the SCS METHOD was manipulated to create peak discharges similar to those developed from the regression equation. In this way credibility is established in the curve number choice. Other assumptions made in developing inflow hydrographs by SCS METHOD were:

Rain Duration = 1.00
Rain Table # = 1
Antecedent moisture condition = 2
Rainfall from SCS charts

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

PARAMETERS:

WATERSHED - 8.120 SQ MI

TIME OF CONCENTRATION - 6.0 HOURS

SCS CURVE #'S 5 YR-76 10 YR - 78 25 YR -79 100 YR - 83

EVENT	RAIN (IN)	RUNOFF (AC-FT)	PEAK INFLOW (CFS)	PEAK OUTFLOW (CFS)	MAX RESERVOIR ELEVATION	FREE- BOARD (FT)	FLOW IN E.S. (CFS)
5 YR	2.2	226	230	139	3225.97	3.36	0
10 YR	2.40	314	342	154	3226.95	2.39	0
25 YR	3	515	602	426	3227.67	1.66	210
100 YR	3.8	616	1155	1067	3228.34	0.99	230

The primary spillway capacity was calculated by comparing discharges developed by the weir flow formula and formulas for calculating head loss through corrugated metal pipe. The emergency spillway capacity was calculated using Technical Release No. 39 Hydraulics of Broad-Crested Spillways developed by the SCS. A "Spillway Rating Curve" is attached to this report.

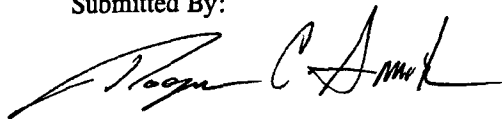
DROUGHT ANALYSIS: It is difficult to determine the frequency in which there will be adequate runoff to sustain the marsh through the brood-rearing period, a criteria important to project sponsors. Using SCS methods, the 80% and 50% annual runoff will generate 36 and 108 acre-feet respectively. The annual requirement assuming an evaporative loss of approximately 3 feet is 91 acre-feet.

SOIL INVESTIGATION: The geotechnical analysis and report was completed by Zeltinger Geotechnical Services. The report summarizes the investigation in detail. In general, the soil encountered is acceptable material for dam construction.

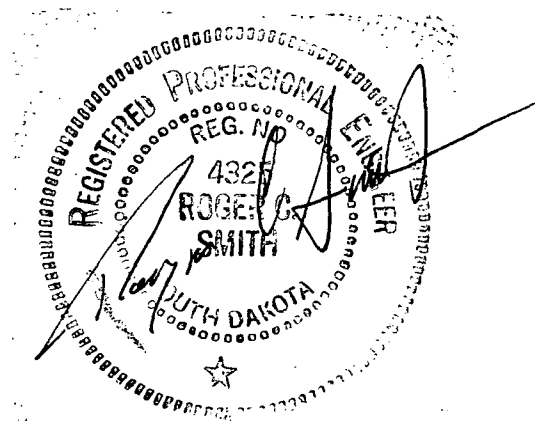
IMPACTS TO SURROUNDING PROPERTY: The planned construction and subsequent reservoir will be contained within BLM land. In years of little or no runoff the project may capture a majority of water yielded from the watershed.

Dated: December 15, 1995

Submitted By:

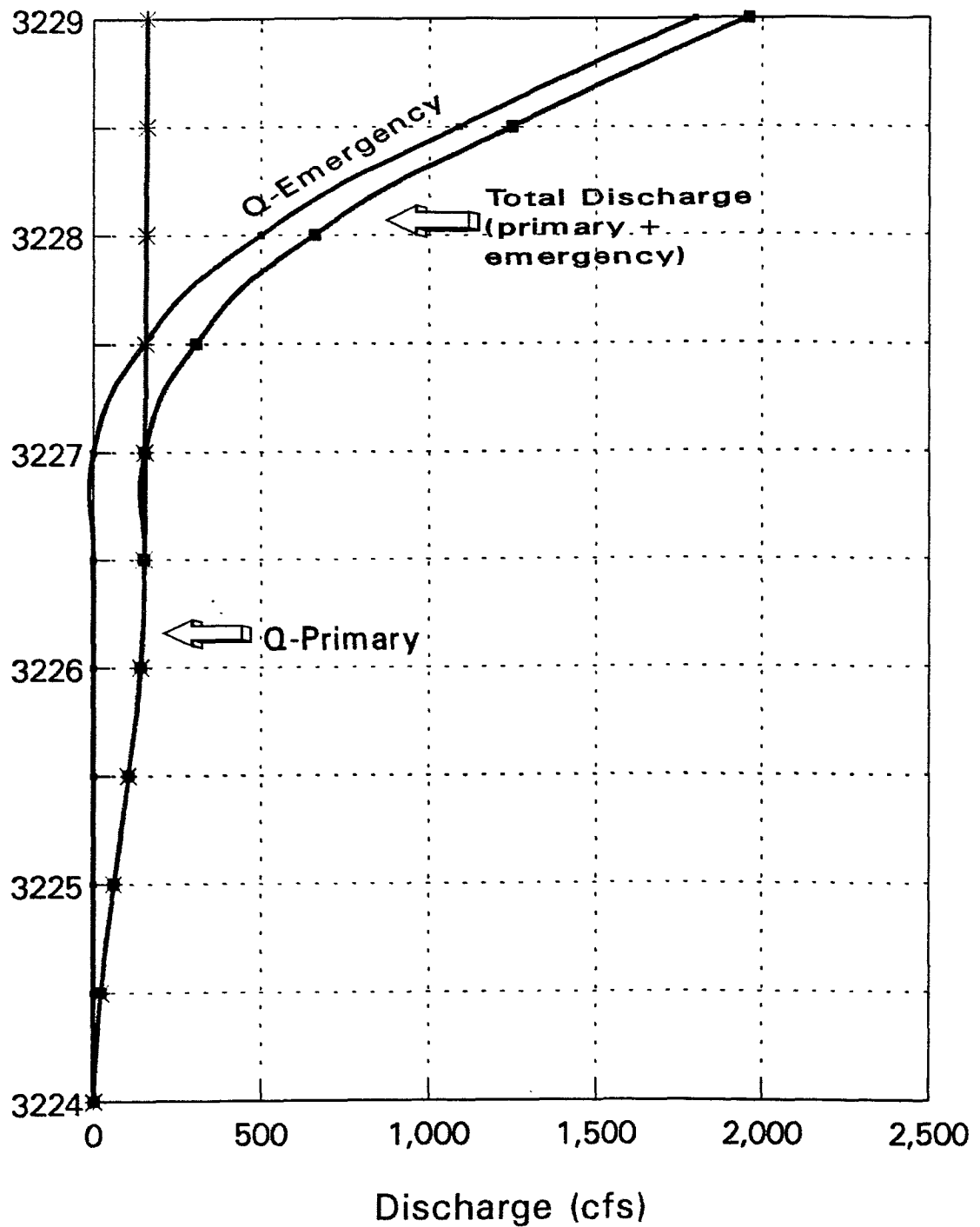


Roger Smith, P.E (PE-4325)
Regional Engineer
Ducks Unlimited
Great Plains Regional Office



Battle Creek Spillway Discharge Curve

Reservoir El.



* Q-Primary - Q-Emergency + Q-Total



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3181

* INVOICE *

Invoice No. 20211-28-04/22/96

Bernice Havelka
Bureau of Land Management
Dakotas District Office
2933 Third Ave. West
Dickinson, ND 58601

Water Permit Application fee for a challenge cost share project with Ducks Unlimited.

PLEASE PAY THIS AMOUNT:

\$225.00


CHERYL F. FROST
Secretary
Water Rights Program
(605) 773-3352

ORDER FOR SUPPLIES OR SERVICES

PAGE 1 OF 2 PAGES

IMPORTANT: Mark all packages and papers with contract and/or order numbers.

1. DATE OF ORDER 04/17/96	2. CONTRACT NO. (If any) INTERGOVERNMENTAL	3. ORDER NO. 1422-E030P960024	4. REQUISITION/REFERENCE NO. E030RQ960067
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5. ISSUING OFFICE (Address correspondence to) BUREAU OF LAND MANAGEMENT DAKOTAS DISTRICT OFFICE 2933 THIRD AVE WEST DICKINSON, ND 58601 (701) 225-9148	6. SHIP TO: (Consignee and address, ZIP Code) BUREAU OF LAND MANAGEMENT 2933 THIRD AVE WEST DICKINSON, ND 58601 (701) 225-9148 BEST METHOD SHIP VIA:
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7. TO: CONTRACTOR (Name, address and ZIP Code) DEPT. OF ENVIRONMENT & NATURAL RESOURCES WATER RIGHTS PROGRAM JOE FOSS BLDG, 523 EAST CAPITOL PIERRE, SD 57501-3181	8. TYPE OF ORDER ☐ A. PURCHASE — Reference your _____ Please furnish the following on the terms and conditions specified on both sides of this order and on the attached sheets, if any, including delivery as indicated. This purchase is negotiated under authority of: ☐ B. DELIVERY — Except for billing instructions on the reverse, this delivery order is subject to instructions contained on this side only of this form and is issued subject to the terms and conditions of the above-numbered contract.
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9. ACCOUNTING AND APPROPRIATION DATA MT-034-06-1110-04- -259Z \$225.00	10. REQUISITIONING OFFICE N3* BERDAN - SDRA
11. BUSINESS CLASSIFICATION (Check appropriate box(es)) ☒ SMALL ☐ OTHER THAN SMALL ☐ DIS-ADVANTAGED ☐ WOMEN-OWNED	12. F.O.B. POINT N/A
13. PLACE OF INSPECTION AND ACCEPTANCE N/A	14. GOVERNMENT B/L NO. N/A
15. DELIVER TO F.O.B. POINT ON OR BEFORE (Date) 05/01/96	16. DISCOUNT TERMS NET 30 DAYS

17. SCHEDULE (See reverse for Rejections)

ITEM NO. (A)	SUPPLIES OR SERVICES (B)	QUANTITY ORDERED (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)	QUANTITY ACCEPTED (G)
1.	WATER PERMIT APPLICATION FEE FOR A CHALLENGE COST SHARE PROJECT WITH DUCKS UNLIMITED. SEE ATTACHED ADDITIONAL TERMS AND CONDITIONS OF PURCHASE ORDER WHICH ARE INCORPORATED HEREIN. SEE ATTACHED AVAILABILITY OF FUNDS.	1	EA	225.00	225.00	

18. SHIPPING POINT BUREAU OF LAND MANAGEMENT, DAKOTAS DISTRICT OFFICE, 2933-3RD AVE WEST, DICKINSON, ND 58601	19. GROSS SHIPPING WEIGHT	20. INVOICE NO.	17(H). TOT. (Cont. pages) 225.00
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22. UNITED STATES OF AMERICA
BY (Signature)

Bernice Havelka

23. NAME (Typed) **BERNICE HAVELKA M1008**

TITLE: CONTRACTING/ORDERING OFFICER

52.252-2. CLAUSES INCORPORATED BY REFERENCE (Apr 84).—This contract incorporates the following clauses by reference with the same effect as if the clauses were set forth in full text. Upon request the Contracting Officer will make their full text available:

TER 1) CLASSES

- | | |
|----------|--|
| 52.203-1 | Officials Not to Benefit (Apr 84) |
| 52.203-3 | Gratuities (Apr 84) |
| 52.203-4 | Covenant Against Contingent Fees (Apr 84) |
| 52.212-9 | Variation in Quantity (Apr 84)
(In the preceding clause, the permissible variations are stated in the schedule) |
| 52.222-3 | Convict Labor (Apr 84) |
| 52.222-4 | Contract Work Hours and Safety Standards Act—
Overtime Compensation—General (Apr 84) |

- 52.222-26 Equal Opportunity (Apr 84)
- 52.222-36 MINNESOTA ACTION for Handicapped Workers (Apr 84)
- 52.222-40 Service Contract Act of 1965—Contracts of \$2500 or Less (Apr 84)
- 52.222-41 Service Contract Act of 1965 (Apr 84)
- 52.225-3 Buy American Act—Supplies (Apr 84)
- 52.232-1 DEPT. OF ENVIRONMENT & NATURAL RESOURCES Payments (Apr 84)
- 52.232-8 DISCOVERY OF REMOVED MINERALS (Apr 84) (With Alternate)
- 52.233-1 Disputes (Apr 84)
- 52.243-1 Changes — Fixed Price (Apr 84)
- 52.249-1 Termination for Convenience of the Government (Fixed Price) (Short Form) (Apr 84)

NOTE.—If desired, this order (or a copy thereof) may be used by the Contractor as the Contractor's invoice, instead of a separate invoice, provided the following statement, (signed and dated) is on (or attached to) the order: "Payment is requested in the amount of \$_____. No other invoice will be submitted." However, if the Contractor wishes to submit an invoice, the following information must be provided: contract number (if any), order number, item number(s), description of supplies or services, sizes, quantities, unit prices, and extended totals. Prepaid shipping costs will be indicated as a separate item on the invoice. Where shipping costs exceed \$10 (except for parcel post) the billing must be supported by a bill of lading or receipt. When several orders are invoiced to an ordering activity during the same billing period, consolidated periodic billings are encouraged.

Quantity in the "Quantity Accepted" column on the face of this order has been: ☐ inspected, ☐ accepted, ☐ received by me and conforms to contract. Items listed below have been rejected for the reasons indicated.

SHIPMENT NUMBER		PARTIAL		DATE RECEIVED	CHANGHONG CO., LIMITED	DATE
		FINAL			UNLIMITED	
TOTAL CONTAINERS		GROSS WEIGHT		RECEIVED AT	TITLE	

[illegible]

BUREAU OF LAND MANAGEMENT
MONTANA STATE OFFICE
ADDITIONAL TERMS AND CONDITIONS OF PURCHASE ORDER

THE FOLLOWING CHANGES ARE MADE TO THE CLAUSES ON OPTIONAL FORM 347 BACK (10-83):

1. Correct clause number 52.203-4 to read 52.203-5.
2. Delete clauses 52.222-40 and 52.222-41.
3. Delete the words (With Alternate I) after Clause 52.232-8, Discount for Prompt Payment and change the date from (Apr 84) to (Apr 89).
4. Add the words (With Alternate I) to the Clause 52.233-1, Disputes (DEC 91).
5. Change the date of Clause 52.222-4, from (Apr 84) to (Mar 86).
6. Change the date of Clause 52.243-1, from (Apr 84) to (Aug 87).

THE FOLLOWING CLAUSES APPLY TO THIS PURCHASE ORDER, ONLY IF CHECKED:(X)

52.252.2 CLAUSES INCORPORATED BY REFERENCE (JUNE 1988). This contract incorporates the following clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available:

- () 52.212-10 Delivery of Excess Quantities of \$100 or less (Sept 1989)
- () 52.223-05 Certification Regarding a Drug-Free Workplace (Jul 1990)
- () 52.223-06 Drug-Free Workplace (Jul 1990)
- () 52.232-23 Assignment of Claims (Jan 1986)
- () 52.232-25 Prompt Payment (Mar 1994)
- () 52.242-10 F.O.B. Origin - Government Bills of Lading or Prepaid Postage (Apr 1984)
- (X) 52.243-01 Changes--Fixed Price, Alternate I (Apr 1984)
- () 52.243-01 Changes--Fixed Price, Alternate II (Apr 1984)
- () 52.243-01 Changes--Fixed Price, Alternate III (Apr 1984)
- () 52.245-04 Government-Furnished Property (Short Form) (Apr 1984)
- () 52.247-29 F.O.B. Origin (Jun 1988)
- (X) 52.247-34 F.O.B. Destination (Apr 1984)
- () 52.247-35 F.O.B. Destination Within Consignee's Premises (Apr 1984)
- (X) 52.249-04 Termination for Convenience of the Government (Services) (Short Form)(Apr 1984)
- (X) 52.249-08 Default (Fixed Price Supply and Service) (Apr 1984)

CLAUSES IN FULL

- (X) 1. **FAR 52.213-02 INVOICES (APR 1984).** The Contractor's invoices must be submitted before payment can be made. The Contractor will be paid on the basis of the invoice, which must state (a) the starting and ending dates of the subscription delivery, and (b) either that orders have been placed in effect for the addresses required, or that the orders will be placed in effect upon receipt of payment.
- () 2. **FAR 52.213-03 NOTICE TO SUPPLIERS (APR 1984).** This is a firm order ONLY if your price does not exceed the maximum line item or total price in the Schedule. Submit invoices to the Contracting Officer. If you cannot perform in exact accordance with this order, WITHHOLD PERFORMANCE and notify the Contracting Officer immediately, giving your quotation.
- (X) 3. **FAR 52.232-18 AVAILABILITY OF FUNDS (APR 1984).** Funds are not presently available for performance under this contract beyond 4/24/96 the Government's obligation for performance of this contract beyond that date is contingent upon the availability of appropriated funds from which payment for contract purposes can be made. No legal liability on the part of the Government for any payment may arise for performance under this contract beyond 4/24/96, until funds are made available to the Contracting Officer for performance and until the Contractor receives notice of availability, to be confirmed in writing by the Contracting Officer.

ADDITIONAL CLAUSES

- (X) 1. **INTEREST ON OVERDUE PAYMENTS**
 - a. The Prompt Payment Act, Public Law 97-177 (96 Stat. 85, 31 USC 1801) is applicable to payments under this contract and requires the payment to contractors of interest on overdue payments and improperly taken discounts.
 - b. Determination of interest due will be made in accordance with the provisions of the Prompt Payment Act and Office of Management and Budget Circular A-125.
- (X) 2. **PAYMENT DUE DATE**
 - a. Payments under this contract will be due 30 calendar days after the later of:
 - 1. The date of actual receipt of a proper invoice in the office designated to receive the invoice, or
 - 2. The date the services are accepted by the government.
 - b. For the purpose of determining the due date for payment and for no other purpose, acceptance will be deemed to occur on the 5th calendar day after the date of receipt of services.
 - c. The date of the check issued in payment shall be considered to be the date payment is made.
- (X) 3. **INVOICE REQUIREMENTS.**

An original invoice shall be submitted to the government office designated in this procurement document to receive invoices. To constitute a proper invoice, the invoice must include the following information required in the NOTE on the back of OF 347, Order for Supplies or Services.
- () 4. **SHIPPING STATEMENT.**

Please ship prepaid Most Economical means and show shipping charges as a separate item on invoice. Freight charges exceeding \$25.00 must be supported by a Bill of Lading or a receipt.

() 5. SERVICE CONTRACT ACT (\$2500 or less).

Except to the extent that an exemption, variation, or tolerance would apply if this were a contract in excess of \$2500.00, the contractor and any subcontractor hereunder shall pay all of his employees engaged in performing work on the contract not less than the minimum wage specified under Section 6(a)(1) of the Fair Labor Standards Act of 1965, as amended, are contained in 29 CFR Part 4. (This is a revision of clause 52.222-40, on the back of OF 347).

() 6. SERVICE CONTRACT ACT OF 1965, AS AMENDED (MAY 1989) (Over \$2500.00).

Clause is attached (This is a revision of clause 52.222-41, on the back of OF 347).

() 7: VARIATION IN QUANTITY.

The permissible variations in quantity (allowed by Clause 52.212-09), Variation in Quantity (Apr 1984), shall be limited to:

_____ Percent increase.

_____ Percent decrease.

This increase or decrease shall apply to Items _____.

() 8. 52.204-3 TAXPAYER IDENTIFICATION (MAR 1994)

(a) Definitions.

"Common parent," as used in this solicitation provision, means an offeror that is a member of an affiliated group of corporations that files its Federal income tax returns on a consolidated basis.

"Corporate status," as used in this solicitation provision, means a designation as to whether the offeror is a corporate entity, an unincorporated entity (e.g., sole proprietorship or partnership), or a corporation providing medical and health care services.

"Taxpayer Identification Number (TIN)," as used in this solicitation provision, means the number required by the IRS to be used by the offeror in reporting income tax and other returns.

(b) The offeror is required to submit the information required in paragraphs (c) through (e) of this solicitation provision in order to comply with reporting requirements of 26 U.S.C. 6041, 6041A, and 6050M and implementing regulations issued by the Internal Revenue Service (IRS). If the resulting contract is subject to the reporting requirements described in FAR 4.903, the failure or refusal by the offeror to furnish the information may result in a 31 percent reduction of payments otherwise due under the contract.

(c) Taxpayer Identification Number (TIN).

() TIN: _____

() TIN has been applied for.

() TIN is not required because:

() Offeror is a nonresident alien, foreign corporation, or foreign partnership that does not have income effectively connected with the conduct of a trade or business in the U.S. and does not have an office or place of business or a fiscal paying agent in the U.S.;

() Offeror is an agency or instrumentality of a foreign government;

() Offeror is an agency or instrumentality of a state or local government;

() Other. State basis. _____

(d) Corporate Status.

() Corporation providing medical and health care services, or engaged in the billing and collecting of payments for such services;

() Other corporate entity;

() Not a corporate entity;

() Sole proprietorship;

() Partnership;

() Hospital or extended care facility described in 26 CFR 501(c)(3) that is exempt from taxation under 26 CFR 501(a).

(e) Common Parent.

() Offeror is not owned or controlled by a common parent as defined in paragraph (a) of this clause.

() Name and TIN of common parent:

Name _____

TIN _____

(End of Provision)

() 9. ELECTRONIC FUNDS TRANSFER PAYMENTS

Payment under this contract will be made by the Government by electronic funds transfer (through the Treasury Fedline Payment System (FEDLINE) or the Automated Clearing House (ACH)).

After award, but no later than 14 days before an invoice or contract financing request is submitted, the contractor shall designate a financial institution for receipt of electronic funds transfer payments (SF-3881), and shall submit this designation to the following address:

Bureau of Land Management
Service Center, SC-616
Denver Federal Center, Bldg. 50
P. O. Box 25047
Denver, CO 80225-0047

If a designation has been submitted to the Bureau of Land Management under a previous contract is is not necessary to complete another SF-3881 unless you are changing your designation of financial institution.

(End of Provision)

AVAILABILITY OF FUNDS UNDER A CONTINUING RESOLUTION

Funds are not presently available for performance under this contract beyond the date of any continuing resolution. The Government's obligation for performance of this contract beyond that date is contingent upon the availability of appropriated funds from which payment for contract purposes can be made. No legal liability on the part of the Government for any payment may arise for performance under this contract beyond that date until funds are made available to the Contracting Officer for performance and until the contractor receives notice of availability, to be confirmed in writing by the Contracting Officer.



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3181

May 16, 1996

Roger Smith, P.E.
Regional Engineer
Ducks Unlimited, Inc.
3502 Franklin Ave.
Bismarck, ND 58501-0761

Dear Mr. Smith:

We have reviewed the plans and specifications for the Battle Creek Impoundment located in the NE 1/4 of Section 18-T13N-R3E, in Butte County. The plans and specifications as submitted are approved. Approval of the plans and specifications does not authorize construction of the project. Construction of the project may not begin until Water Permit Application No. 1638-1 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 the Bureau of Land Management, 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 Battle Creek Dam will be classified as a small size Category 3, Low Hazard dam with a dam height of 20 feet and a normal storage capacity of 162.9 and a maximum storage capacity of 350 acre-feet.

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

Sincerely,

Gale N. Selken, P.E.
Natural Resources Engineer IV
for John Hatch, Chief Engineer
Water Rights Program
(605) 773-3352

c: Tom Steger, Area Manager, Bureau of Land Management

REPORT ON
WATER PERMIT APPLICATION NO. 1638-1
Bureau of Land Management
April 30, 1996

Water Permit Application No. 1638-1 has been filed by the Bureau of Land Management to impound 162.9 acre-feet of water from runoff by constructing a dam. The dam will be located in the E 1/2 NE 1/4 of Section 18-T13N-R3E across the upper reaches of Battle Creek, in Butte County. The application proposes to authorize impoundment of water sufficient to maintain water at the outlet elevation of 3224 feet mean sea level and the water will be used for recreational use, livestock watering, and to provide habitat for fish and wildlife propagation.

Discussion:

The Battle Creek Dam will be classified as a Category 3, Low Hazard dam. It has been designed by Ducks Unlimited, Inc. and the plans and specifications have been reviewed will be approved; however, construction of the dam can not begin until Water Permit Application No. 1638-1 is approved.

The Battle Creek Dam will be 20 feet high with a normal storage capacity of 162.9 acre-feet with a reservoir level at the spillway elevation, and a maximum storage capacity of 350 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 50 year frequency event.

The Battle Creek Dam is designed to have an 72 inch diameter CMP riser with a 48 inch diameter CMP barrel with 5.0 feet of available head as the primary spillway and a 300 foot wide earthcut emergency spillway with 2.0 feet of available head. The dam will have a drainage area of 5200 acres (8.13 square miles). Ducks Unlimited uses the Soil Conservation Service TR-20 model to route a 10-year frequency event peak of 342 cfs through the primary spillway with no flow through the secondary spillway. A 100-year frequency event peak of 1155 cfs is routed through both spillways with 0.99 feet of freeboard remaining.

The annual yield for this drainage area with a 50 percent chance of occurrence, or 1 out of 2 years, is expected to be 108 acre-feet. The annual yield with a 80 percent chance of occurrence, or 8 out of 10 years, is expected to be 35 acre-feet. The annual yield with a 10 percent chance, or 1 out of 10 years, is expected to be 540 acre-feet.

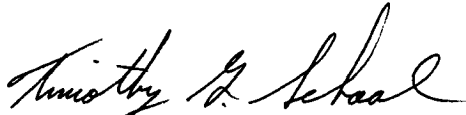
page 2

Water Permit Application No. 1638-1

The Battle Creek Impoundment will be located in the NE 1/4 of Section 18-T13N-R3E across the upper reaches of Battle Creek about 20 miles upstream of the confluence of Battle Creek with the South Fork of the Moreau River. There are no other Water Permits/Rights located on Battle Creek between the dam and the Moreau River.

Conclusions:

1. Water Permit Application No. 1638-1 should be approved since unappropriated water is available and approval should not have any adverse effect on existing Water Permits/Rights.
2. If approved, the low flow bypass requirement for downstream domestic use should be a qualification on Water Permit Application No. 1638-1.



Timothy G. Schaal, P.E.

Natural Resources Engineer III

Approved by:



Gale N. Selken, P.E.

Natural Resources Engineer IV

**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 1638-1, Bureau of Land Management**

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. 1638-1, Bureau of Land Manage, 310 Roundup Street, Belle Fourche, SD 57717.

The Chief Engineer is recommending APPROVAL of Application No. 1638-1 because 1) there is reasonable probability that there is unappropriated water available for the applicant's proposed use, 2) the proposed diversion has been developed without unlawful impairment of existing rights, 3) the proposed use is a beneficial use and 4) in the public interest with the following qualifications:

1. Water Permit No. 1638-1 authorizes a dam with storage capacity of 162.9 acre feet of water and sufficient water annually to maintain the water level to the outlet elevation of 3,224 feet mean sea level.
2. Low flows as needed for downstream domestic use, including livestock water and prior water rights must be by-passed.

See report on application for additional information.



JOHN HATCH, Chief Engineer
May 15, 1996



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3181

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

May 16, 1996

Tom Steger, Area Manager
Bureau of Land Management
310 Roundup Street
Belle Fourche, SD 57717

Dear Mr. Steger:

Water Permit Application No. 1638-1 for recreational, fish and wildlife propagation and livestock use has been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice of hearing has been sent to the Publisher of the Belle Fourche Bee/Post printed at Belle Fourche, SD (Ph # (605) 892-2528). For your information, a copy of the notice, the recommendation of the Chief Engineer and a report on the application are enclosed. Please review the notice prior to publication and notify this office, if you have any corrections or questions.

Be sure to contact the above newspaper to authorize publication of your Notice of Hearing and to arrange for payment. Early contact with the paper can eliminate delays. The publisher has been instructed to publish your notice once each week for two consecutive weeks with the last publication to occur twenty days before the board meeting. The newspaper has 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.



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3181

May 16, 1996

Belle Fourche Bee/Post
Box 400
Belle Fourche, SD 57717-0400

ATTENTION: Legal Department

Enclosed is a Notice of Hearing on Application No. 1638-1 to be published twice. Please publish the first notice on May 22, 1996, with the second publication 7 days later.

The APPLICANT MUST VERIFY TO YOU THAT THE NOTICE IS TO BE PUBLISHED, before you make the first publication. Please BILL the APPLICANT for the cost of publication. The APPLICANT is Bureau of Land Management, %Tom Steger, Area Manager, 310 Roundup Street, Belle Fourche, SD 57717 (Ph # (605) 892-2526).

A copy of BOTH publications must be SENT to the WATER RIGHTS PROGRAM. IMMEDIATELY return the FIRST publication with the FIRST Transmittal form on the bottom of this page. The first copy is needed to check the publication for errors so any corrections can be made in the second publication. Publication errors can invalidate the public notice and cause the applicant costly delays.

Please be sure the SECOND publication is returned IMMEDIATELY with the enclosed Proof of Publication form. DO NOT WAIT until the end of the month or the billing cycle. No action may be taken on the permit application until proof of publication has been received.

Sincerely,

Eric Gronlund
Natural Resources Engineer
605 773-3352

enclosures

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

FIRST TRANSMITTAL NOTICE

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

No. _____

Date _____

We are in receipt of your letter of _____ enclosing Notice of Hearing to Appropriate Water by Application No. _____ which was first published in our issue of _____. ENCLOSED IS A COPY OF THIS FIRST PUBLICATION.

Name

Newspaper

Instruction to Newspaper - Publish first Notice on May 22, 1996, with the second publication 7 days later. The applicant is responsible for payment.

NOTICE OF APPLICATION NO. 1638-1 to Appropriate Water

Notice is given that the Bureau of Land Management, 310 Roundup Street, Belle Fourche, SD 57717 has filed an application for a water permit to impound 162.9 acre-feet of water from runoff by constructing a dam located in the E 1/2 NE 1/4 Section 18 with water impounded in the NE 1/4 Section 18 and the SW 1/4 SE 1/4, SE 1/4 SW 1/4 Section 7; all in T13N-R3E. This application proposes to authorize impoundment of water sufficient to maintain water at the outlet elevation of 3,224 feet mean sea level and is to be used to provide habitat for fish and wildlife production, recreational use and livestock watering.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 1638-1 because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. In accordance with SDCL 46-2A-23, the chief engineer will act on the application, as recommended, unless a petition is filed opposing the application or the applicant files a petition contesting the chief engineer's recommendation. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled and the Water Management Board will consider the application. Notice of the hearing will be given to the applicant and any person filing a petition.

Any person interested in opposing or supporting this application or recommendation must file a written petition with BOTH the applicant and chief engineer. The applicant must file a petition if contesting the chief engineer's recommendation. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501 (605 773-3352)" and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by June 10, 1996.

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. Nettie H. Myers, Secretary, Department of Environment and Natural Resources.



AFFIDAVIT OF PUBLICATION

STATE OF SOUTH DAKOTA
COUNTY OF BUTTE

Faye D. Pate, being duly sworn, says: That the **Belle Fourche Post**, is and, during all the times hereinafter mentioned, was a legal newspaper as defined in SDCL 17-2-2, as amended, published at Belle Fourche, Butte County, South Dakota, by Allison Publishing, Inc.; that affiant is and, during all of said times, was employed as an accountant by the publisher of such newspaper and has personal knowledge of the facts stated in this affidavit; that the notice, order or advertisement, a printed copy of which is attached, was published in said newspaper for successive issues, bearing the following dates:

<u>May 22</u>	<u>199 6</u>	<u>199</u>
<u>May 29</u>	<u>199 6</u>	<u>199</u>
<u>199</u>	<u>199</u>	<u>199</u>
<u>199</u>	<u>199</u>	<u>199</u>
<u>199</u>	<u>199</u>	<u>199</u>

that the full amount of the fee charged for publishing the same, to-wit, the sum of \$ 67.50, inures solely to the benefit of the publisher of said newspaper; that no agreement or understanding for the division of the fee has been made with any person, and that no part of the fee has been agreed to be paid to any other person.

Faye D. Pate

Subscribed and sworn to before me this

29 day of May, 199 6

Malinda S. Griffin

Notary Public, South Dakota

Malinda S. Griffin
Notary Public
My Commission Expires July 8, 2002



NOTICE OF APPLICATION NO. 1638-1 to Appropriate Water

Notice is given that the Bureau of Land Management, 310 Roundup Street, Belle Fourche, SD 57717, has filed an application for a water permit to impound 162.9 acre-feet of water from runoff by constructing a dam located in the E1/2NE1/4 Section 18 with water impounded in the NE1/4 SECTION 18 AND THE SW1/4SE1/4, SE1/4 SW1/4 SECTION 7; ALL IN T13N-R3E. This application proposes to authorize impoundment of water sufficient to maintain water at the outlet elevation of 3,224 feet mean sea level and is to be used to provide habitat for fish and wildlife production, recreational use and livestock watering.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 1638-1 because 1) unappropriated water is available, 2) existing right will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. In accordance with SDCL 46-2A-23, the chief engineer will act on the application, as recommended unless a petition is filed opposing the application or the applicant files a petition contesting the chief engineer's recommendation. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled and the Water Management Board will consider the application. Notice of the hearing will be given to the applicant and any person filing a petition.

Any person interested in opposing or supporting this application or recommendation must file a written petition with BOTH the applicant and chief engineer. The applicant must file a petition if contesting the chief engineer's recommendation. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E. Capitol, Pierre SD 57501 (605 773-3352)" and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by June 10, 1996.

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.

Nettie H. Myers, Secretary

Department of Environment and Natural Resources.



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3181

JUN 27 1996

Tom Steger, Area Manager
Bureau of Land Management
310 Roundup St.
Belle Fourche, SD 57717

Dear Mr. Steger:

Enclosed is Water Permit No. 1638-1 authorizing construction of your water diversion system and beneficial use of the water, not exceeding the limits as specified in the Water Permit.

Also enclosed is Form 10, Notice of Completion of Works and Application of Water to Beneficial Use, which you are to complete and submit to the Chief Engineer when you have completed the system and/or have put the water to beneficial use. An inspection can then be scheduled so that the Water License may be issued, thus completing your acquisition of a Water Right.

Very truly yours,

JOHN HATCH, Chief Engineer
Water Rights Program
605 773-3352

enclosures

PLEASE NOTE: Certain changes may be made to your water permit usually without affecting the priority date. The location of a point of diversion may be changed or additional points of diversion may be approved if the water source remains unchanged; no additional water is appropriated; and, if irrigating, no additional land is irrigated. The change may be allowed without application or publication, if the Water Rights Program is contacted and the chief engineer makes a finding that the change does not increase the potential for interference with existing diversions.

A new water permit application is required to change water sources, increase the permitted diversion rate, or increase the irrigated acreage. If the application is approved, the water permit will receive a new priority date.



NOTICE OF COMPLETION OF WORKS AND APPLICATION OF WATER TO BENEFICIAL USE

Date 06-2-97

TO: Water Rights Program, DENR
523 E. Capitol
Pierre, SD 57501-3181

FROM: BUREAU OF LAND MANAGEMENT 310 ROUNDUP
(name) (address)

BELLE FOURCHE SD 57717 605-892-2526
(city) (state) (zip) (phone)

I have completed the construction of the water diversion system and I have put the water to beneficial use to the maximum extent it is going to be used. I have not exceeded the amounts specified in Water Permit No. 1638-1.

Water Permit No. 1638-1 states that the diversion system is to be constructed by JUNE 10, 2001, and that the water is put to beneficial use by
(date)

JUNE 10, 2005
(date)

The diversion system was completed on 10-01-96
(date)

Applying the water to beneficial use was completed on 04-01-97
(date)

You may schedule an inspection so that the Water License may be issued.

Tom Steyer
(signature)



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3181
www.state.sd.us/denr

March 15, 2000

1638-1
1671-1

Bureau of Land Management
%Tom Steger, Area Manager
310 Roundup Street
Belle Fourche, SD 57717

Dear Mr. Steger:

The investigation of your water use systems was conducted on August 31, 1999, by Timothy G. Schaal, staff engineer. The investigation included the extent of application of water to beneficial use, as developed under Water Permit Nos. 1638-1 and 1671-1. Your final water right documents, the Water Licenses, can now be issued.

Statutes require that we charge a \$50.00 fee per license (\$100.00 total) for the investigation and issuance of the Water Licenses. Upon receipt of the \$50.00 fee per license (\$100.00 total) from you, we will begin processing your Water Licenses. If you require an Invoice from our office prior to issuing a check or money order, please contact me and I will send you one.

**Please remit fee to:
Department of Environment & Natural Resources
Water Rights Program
523 E. Capitol
Pierre, SD 57501-3181**

Sincerely,

Cheryl F. Frost
Secretary
Water Rights Program
(605) 773-3352

NOTE: On check or money order, please specify your permit number. This will insure proper handling of the fee.

RECEIPT

Water Rights Program

South Dakota Department of Environment and Natural Resources

No 416431

Pierre, March 21, 2000

RECEIVED OF NancyMM. Rime (Bureau of Land Management), 310 Roundup St., Belle Fourche, SD 5771
the following amount in fees for services rendered as provided for by law:

Fee for Application for Permit No. _____ to Appropriate Water, to construct and to put water to beneficial use _____		
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>1638-1</u>	50	00
Fee for Filing Transfer Form _____		
Fee for Filing Extension Request _____		
Fee for _____		

(Any Other Work Provided by Law)	Total	50 00

By Harland Ellis
Chief Engineer

Permit No. 1638-1
Moreau River - Water District

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

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

I have this day, August 31, 1999, made a thorough examination of the water use system constructed by Bureau of Land Management of 310 Roundup Street, Belle Fourche, SD 57717 holder of Permit No. 1638-1, bearing the priority of April 17, 1996 authorizing the storage of 162.9 acre-feet of the waters of runoff for recreation, fish & wildlife and livestock use purposes, in Butte County.

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

- A. Works used to divert the water:
20 foot high earth dam with 162.9 ac-ft storage capacity
- B. Works used to transport water to place of use:
N/A
- C. Works used to apply water to beneficial use:
20 foot high earth dam with 162.9 ac-ft storage capacity

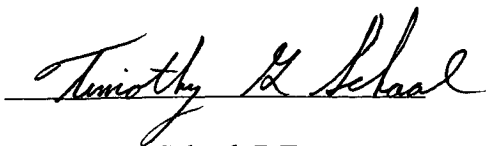
The system is in the following condition **Good**. The point of diversion is located 1320 ft. south & 900 ft. west of the NE corner of Sec. 18-T13N-R3E (E 1/2 NE 1/4). The works are capable of storing 162.9 acre-feet of water which is to be used for recreation, fish & wildlife and livestock use. Water has been put to beneficial use to the maximum extent as follows:

20 foot high earth dam with 162.9 ac-ft storage capacity

and the license should be issued for 162.9 acre-feet of storage.

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

Exceptions to compliance are: none Date Report Completed: March 13, 2000



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

REPORT ON INSPECTION OF PERMIT NO. 1638-1

Other permit(s) associated with the project: XXXX

DATE OF INSPECTION: August 31, 1999

NAME & ADDRESS OF INSPECTION CONTACT/ Roger Smith, P.E., Ducks Unlimited

RELATIONSHIP TO PERMIT HOLDER, IF APPLICABLE: designer

NAME & ADDRESS OF PERMIT HOLDER: Bureau of Land Management, 310 Roundup Street,
Belle Fourche, SD 57717

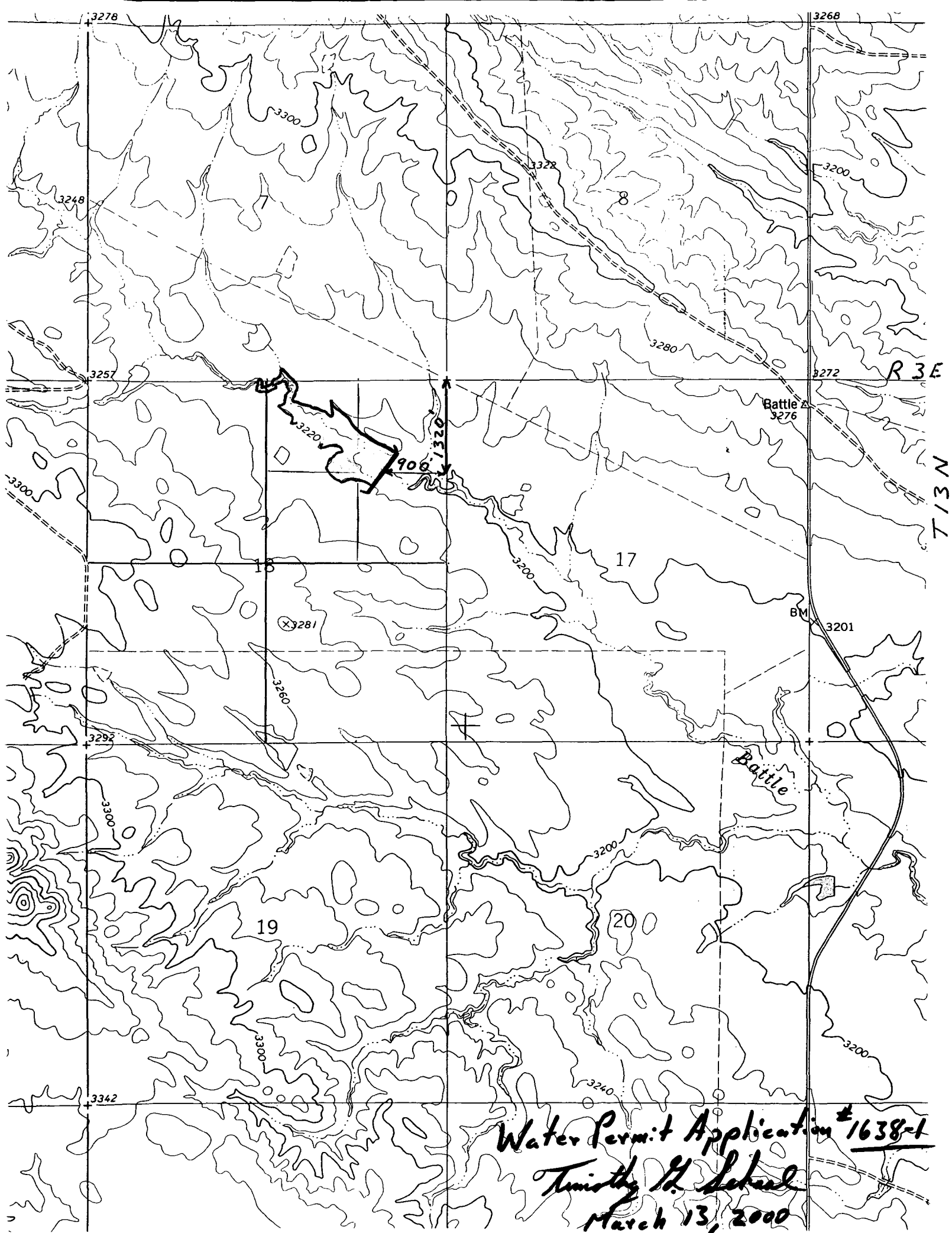
DIVERSION POINT LEGAL LOCATION: 1320 feet south & 900 feet west of the NE corner of
Section 18-T13N-R3E (E1/2 NE 1/4).

DAM INFORMATION:

- 1) Height to crest 20 feet
- 2) Height to primary spillway 15 feet
- 3) Height to secondary spillway 18 feet
- 4) Crest width 12 feet
- 5) Crest length 1360 feet
- 6) Spillway length XXX feet
- 7) Spillway width 300 feet
- 8) Approx. storage (Normal) 162.9 acre-feet
- 9) Approx. storage (Maximum) 350 acre-feet
- 10) Date constructed: 1996

PERMIT QUALIFICATIONS AND REGULATIONS:

- 1) Soil and water permit lands agree with lands being irrigated and lands listed on permit N/A
- 2) Special qualifications to permit being abided by yes
- 3) All structures, wells and lands on map yes
- 4) Irrigation Questionnaires checked to determine if permit owner started irrigation by the end of construction period N/A



STATE OF SOUTH DAKOTA

WATER LICENSE NO. 1638-1

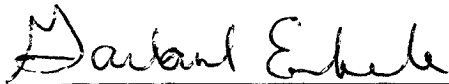
(1) Bureau of Land Management, 310 Roundup Street, Belle Fourche SD 57717 made Application No. 1638-1, April 17, 1996 for a water permit to impound 162.9 acre-feet of water from runoff, Butte County, South Dakota for fish & wildlife propagation, recreation and livestock watering purposes. Permit No. 1638-1, with a priority date of April 17, 1996 was approved June 10, 1996 and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before June 10, 2001 and for the application to beneficial use of said water on or before June 10, 2005.

The permit holder submitted a *Notice of Completion of Works and Application of Water to Beneficial Use* on June 5, 1997. The *Notice* stated the diversion system was completed on October 1, 1996 and the water placed to beneficial use on April 1, 1997.

(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 storage dam and is entitled to impound 162.9 acre-feet of water for beneficial use with sufficient water annually to maintain the water level to the outlet elevation of 3,224.0 feet mean sea level. The location of the storage dam is 1,320 feet south and 900 feet west of the northeast corner of Section 18-T13N-R3E (E ½ NE ¼).

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

(4) Pursuant to South Dakota Water Law 46-5-30.1 Bureau of Land Management, 310 Roundup Street, Belle Fourche SD 57717 the holder and/or owner of Water Right No. 1638-1 is issued a license to appropriate water, the right to impound 162.9 acre-feet of water from runoff with sufficient water annually to maintain the water level to the outlet elevation of 3,224.0 feet mean sea level with a priority date of April 17, 1996 from the location specified in (2) of this license for fish & wildlife propagation, recreation and livestock watering. This license is subject to any limitations or qualifications listed in Water Right No. 1638-1 and subject to South Dakota State Law.



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

APR 10 2000

date





**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3181
www.state.sd.us/denr

APR 10 2000

1638-1
1671-1

Bureau of Land Management
%Tom Steger, Area Manager
310 Roundup Street
Belle Fourche, SD 57717

Dear Mr. Steger:

Enclosed are Water License Nos. 1638-1 and 1671-1 and Receipt Nos. 416431 and 416432 for \$50.00 each which was assessed for an investigation and issuance of the licenses. Water License Nos. 1638-1 and 1671-1 are the final documents which completes the process of obtaining a water right.

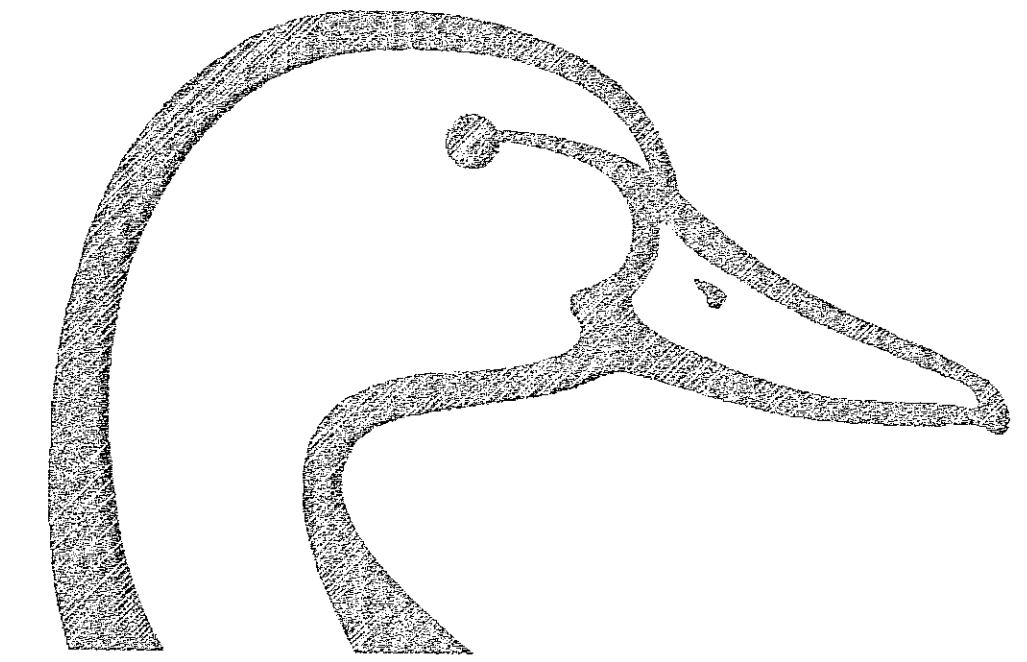
As long as you use the water beneficially, as stated in the Water Licenses, State Water Laws provide that you have a continuing right to use the water.

Sincerely,

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

ks
enclosures

DUCKS UNLIMITED

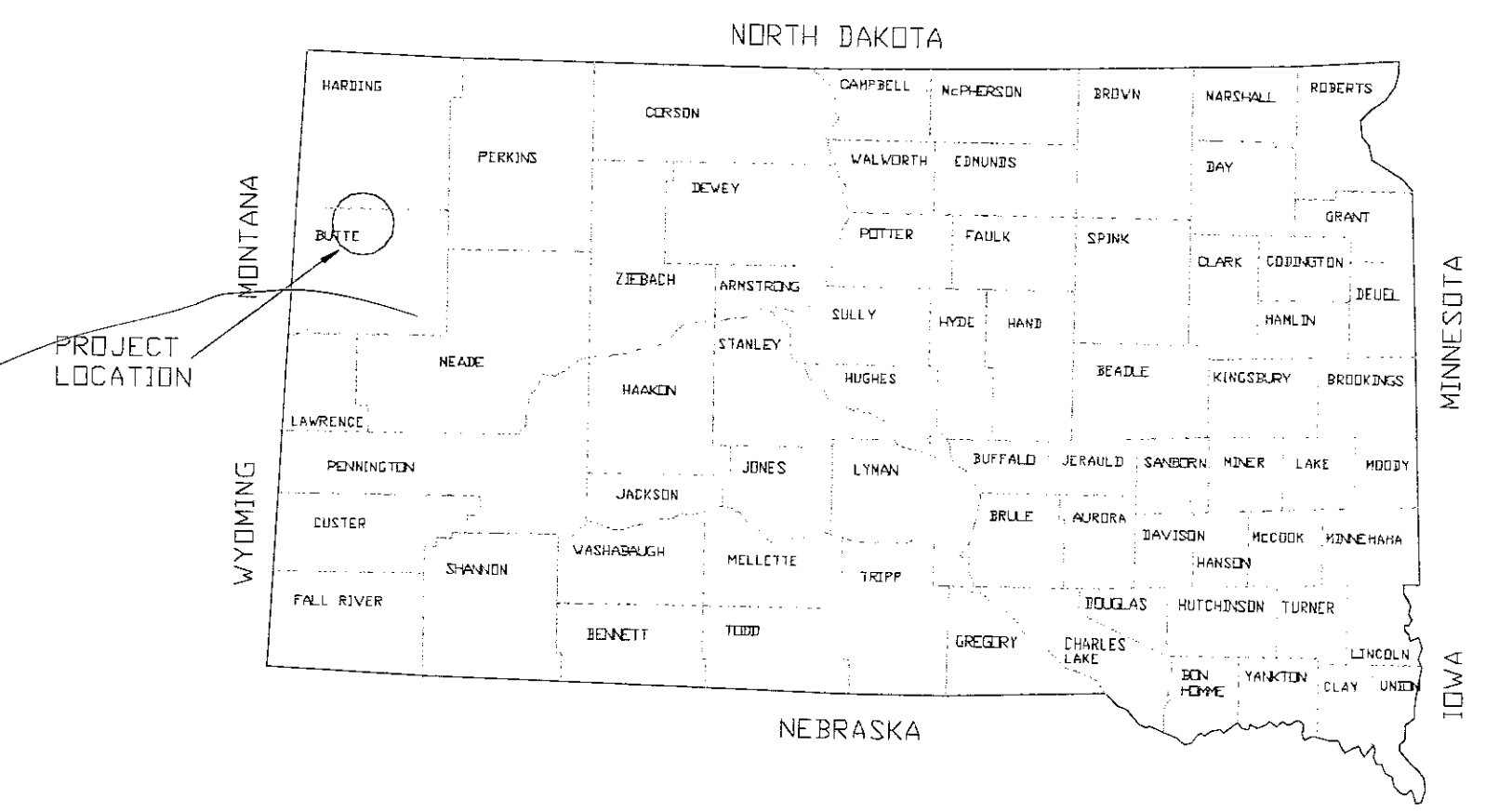


DUCKS UNLIMITED

PROJECT

BATTLE CREEK IMPOUNDMENT

SECTIONS 7 & 18, T 13 N, R 3 E
BUTTE COUNTY, SOUTH DAKOTA



SPECIFICATIONS

GENERAL CONDITIONS	101
MOBILIZATION	201
SITE PREPARATION	202
EXCAVATION	203
EMBANKMENT CONSTRUCTION	204
WATER	205
WATER CONTROL	
STRUCTURE INSTALLATION	206
WATER CONTROL STRUCTURE	
& CULVERT APPURTENANCES	206A
CULVERT INSTALLATION	207
CAST-IN-PLACE	
REINFORCED CONCRETE	208
RIPRAP PLACEMENT	209

PLAN INDEX

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PROJECT TOPOGRAPHY	2
SITE PLAN, PROFILES & X-SECTIONS	3
STRUCTURE PLAN & PROFILES	4
STRUCTURE DETAILS	5
SOILS INFORMATION	6

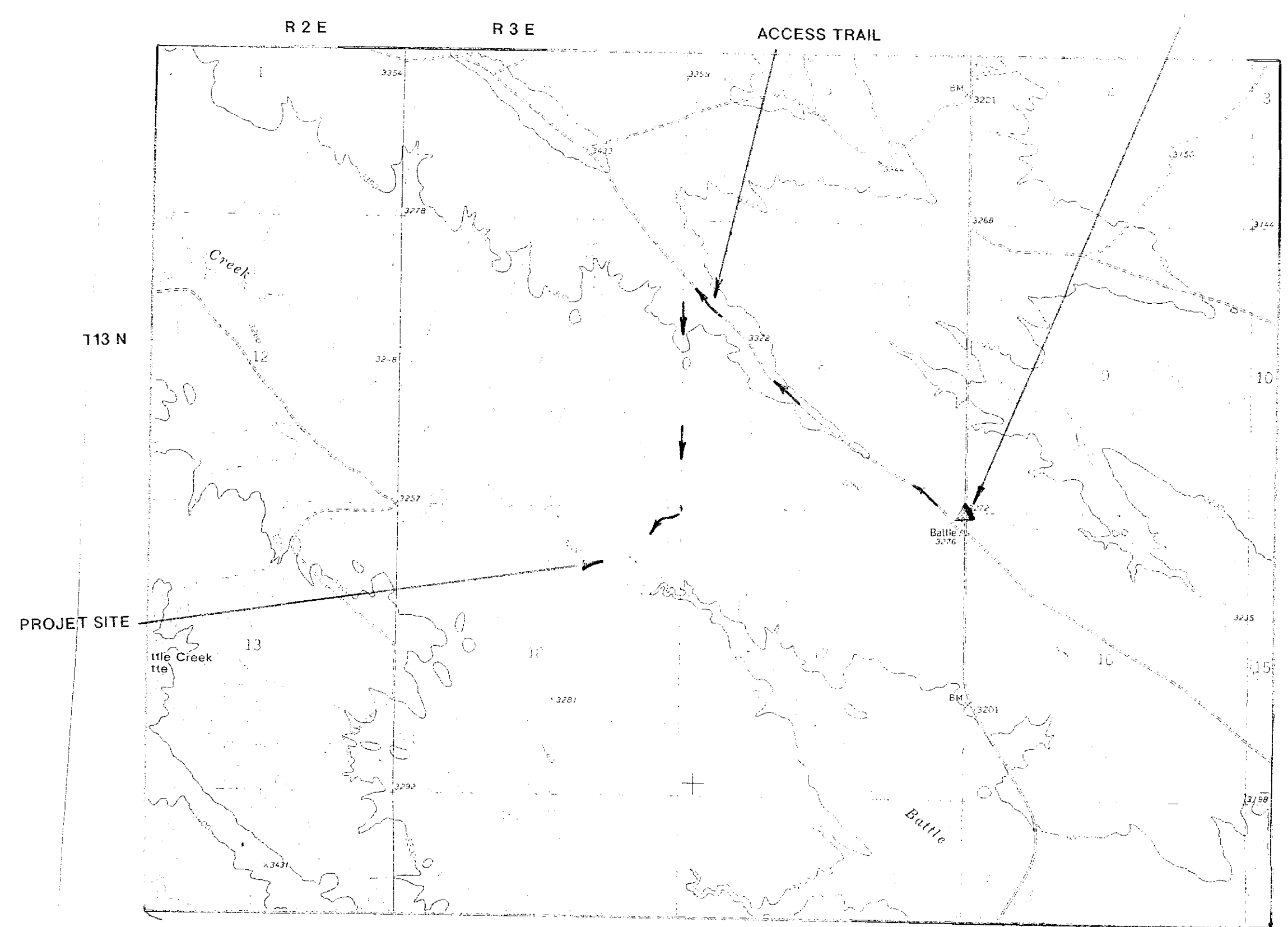
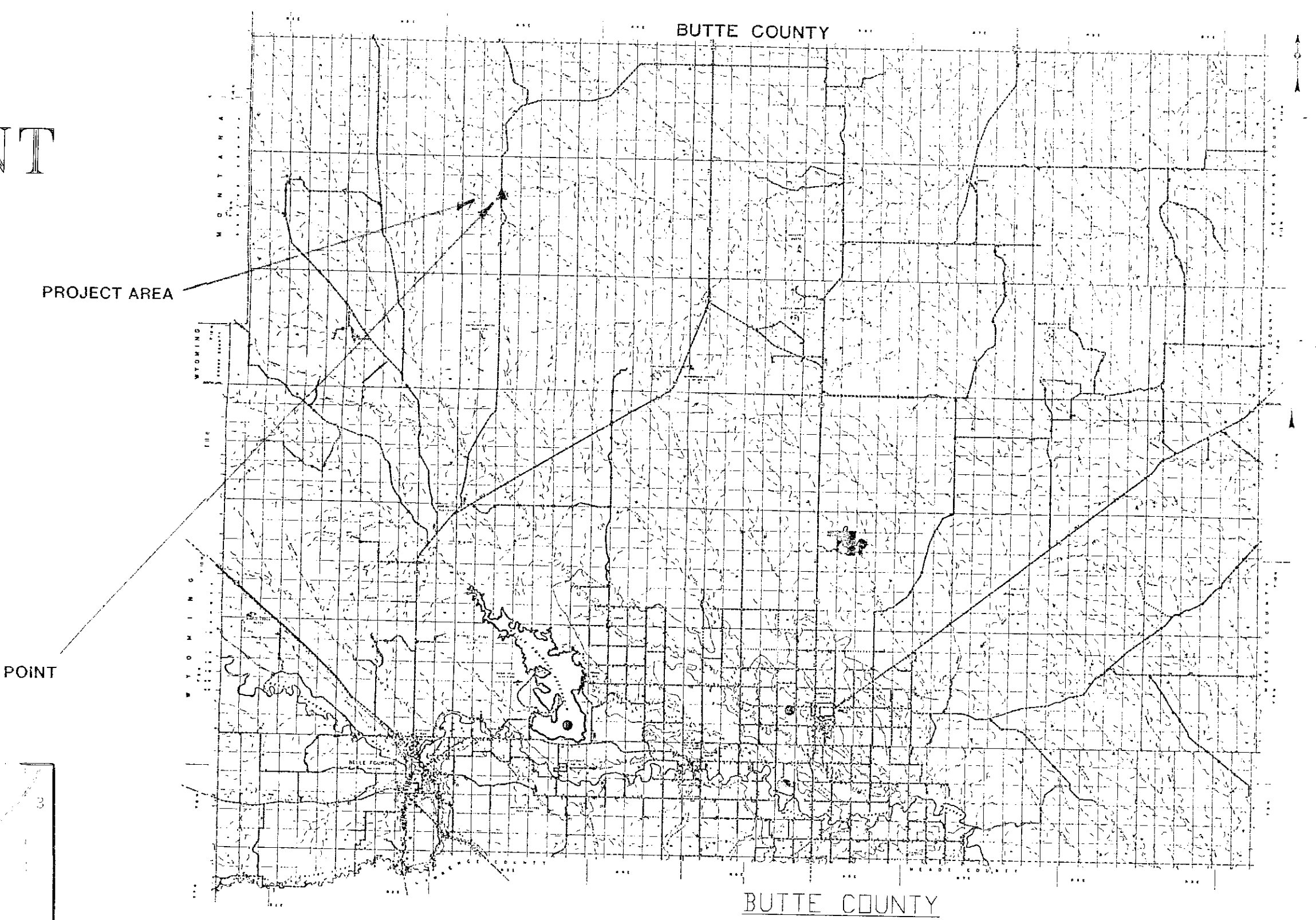
QUANTITIES

MOBILIZATION	1 L.S.
SITE PREPARATION	3076 C.Y.-P
EXCAVATION	
EMERGENCY SPILLWAY	INC.
STRUCTURE INSTALLATION	INC.
OUTLET CHANNEL	INC.
EMBANKMENT	29,033 C.Y.-S*
WATER	290 M-GAL.**
WATER CONTROL	
STRUCTURE INSTALLATION	1 L.S.
APPURTENANCES	1 INC.
CULVERT INSTALLATION	
42"Ø CMP	87 L.F.
6"Ø PVC	22 L.F.
RIPRAP - CLASS I	6 C.Y.-P
RIPRAP - CLASS II	60 C.Y.-P

*NO SHRINKAGE FACTOR ADDED
**BASED ON 10 GAL./C.Y., HOWEVER, SEE SPEC. 205

PROJECT

BUREAU OF LAND MANAGEMENT



VICINITY MAP
SCALE: 1"=2000'

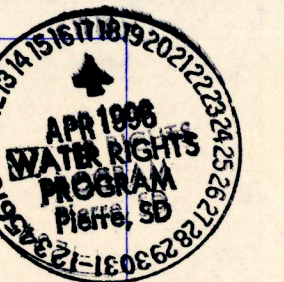
Handwritten signature and date: 11/15/95

PROJECT SIGNING	

AGENCY CONTACT:
ERIC LUSE - RANGE MGMT. SPECIALIST
BUREAU OF LAND MANAGEMENT
SOUTH DAKOTA RESOURCE AREA
310 ROUNDUP ST.
BELLE FOURCHE, SD 57717
(605) 892-3281

	PROJECT NO. SD-0182-001	DESIGNED BY: R.C.S.
	BATTLE CREEK IMPOUNDMENT	
	DRAWN BY: B	
PROJECT VICINITY MAP		CHECKED BY: B.R.K.
DATE: 12-17-95		APPROVED BY: <i>[Signature]</i> P.E.

1638-1



DUCKS UNLIMITED

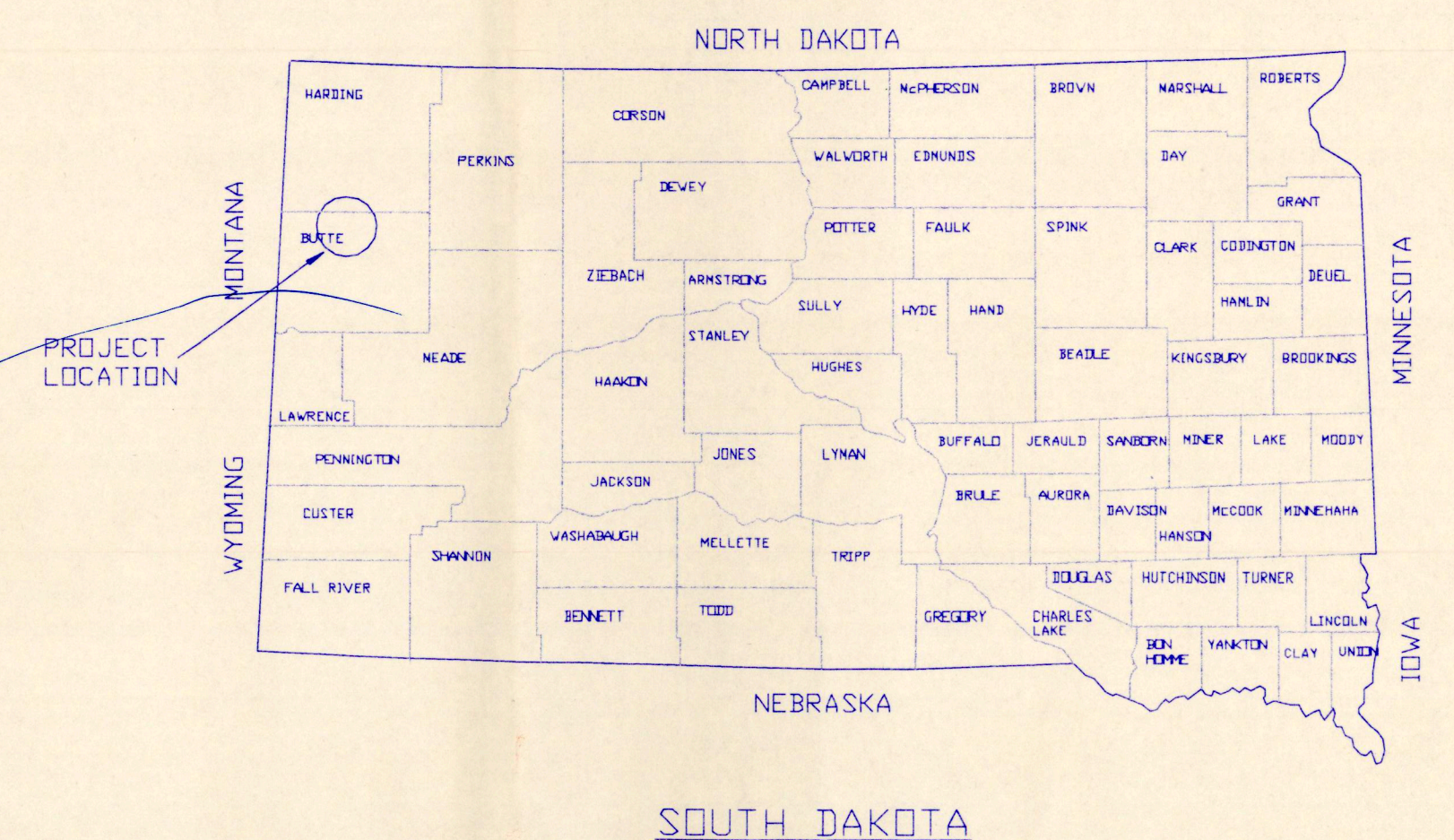
PROJECT

BATTLE CREEK IMPOUNDMENT

SECTIONS 7 & 18, T 13 N, R 3 E
BUTTE COUNTY, SOUTH DAKOTA



DUCKS UNLIMITED



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MOBILIZATION	201
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STRUCTURE DETAILS	5
SOILS INFORMATION	6

QUANTITIES

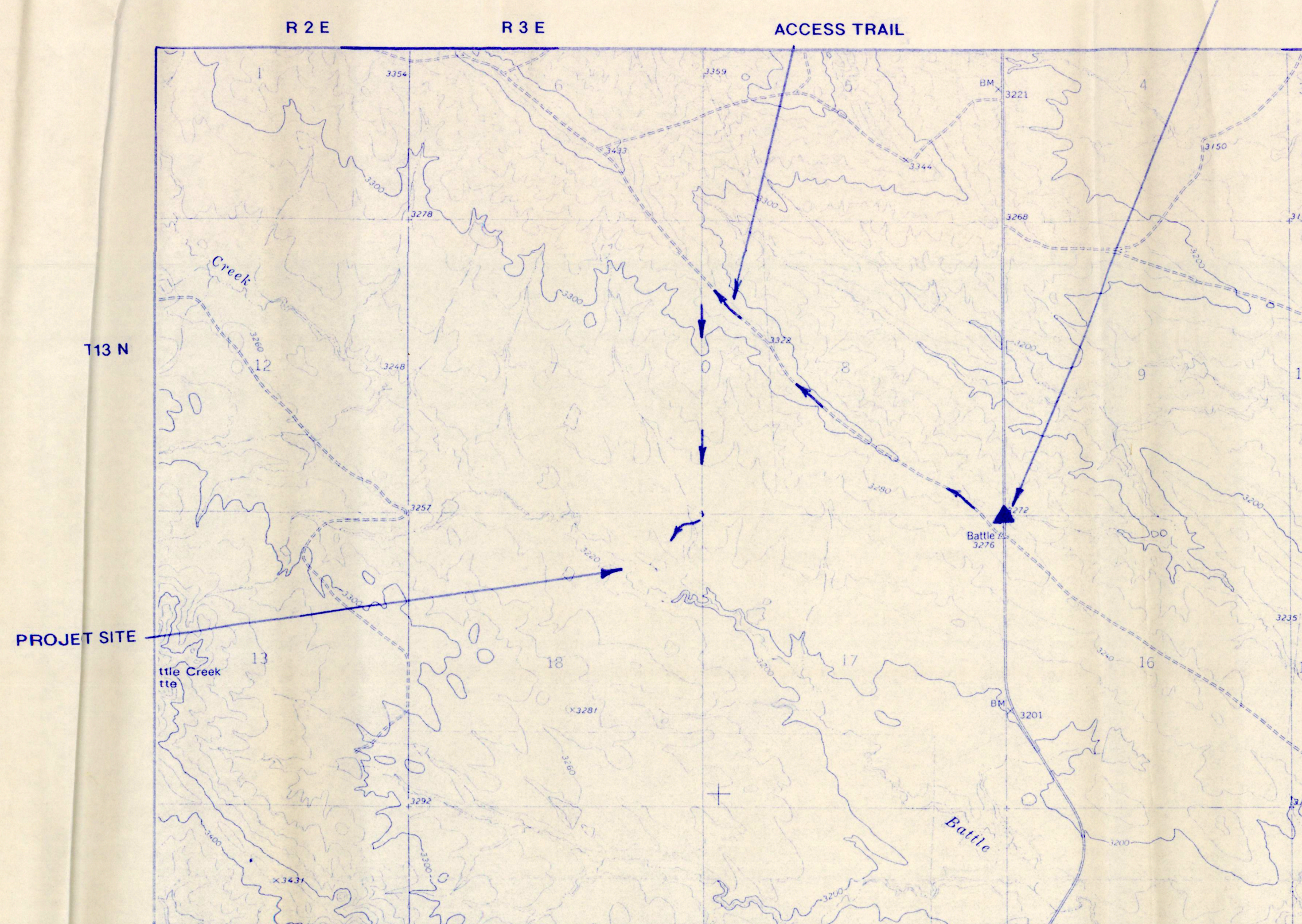
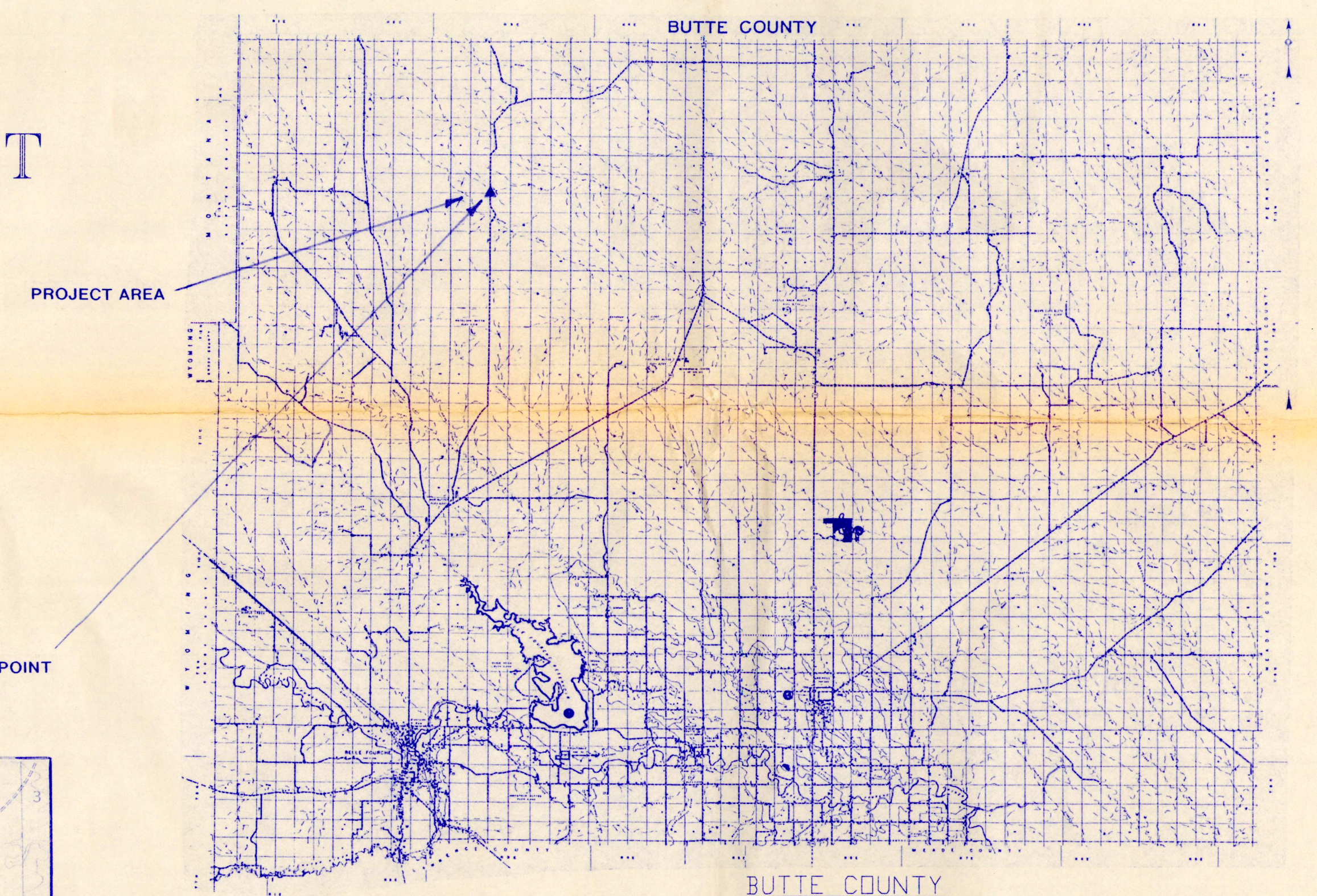
MOBILIZATION	1 L.S.
SITE PREPARATION	3076 C.Y.-P
EXCAVATION	
EMERGENCY SPILLWAY	INC.
STRUCTURE INSTALLATION	INC.
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42"Ø CMP	87 L.F.
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*NO SHRINKAGE FACTOR ADDED

**BASED ON 10 GAL./C.Y., HOWEVER, SEE SPEC. 205

PROJECT

BUREAU OF LAND MANAGEMENT



VICINITY MAP
SCALE: 1"=2000'

Signature #4535

PROJECT SIGNING

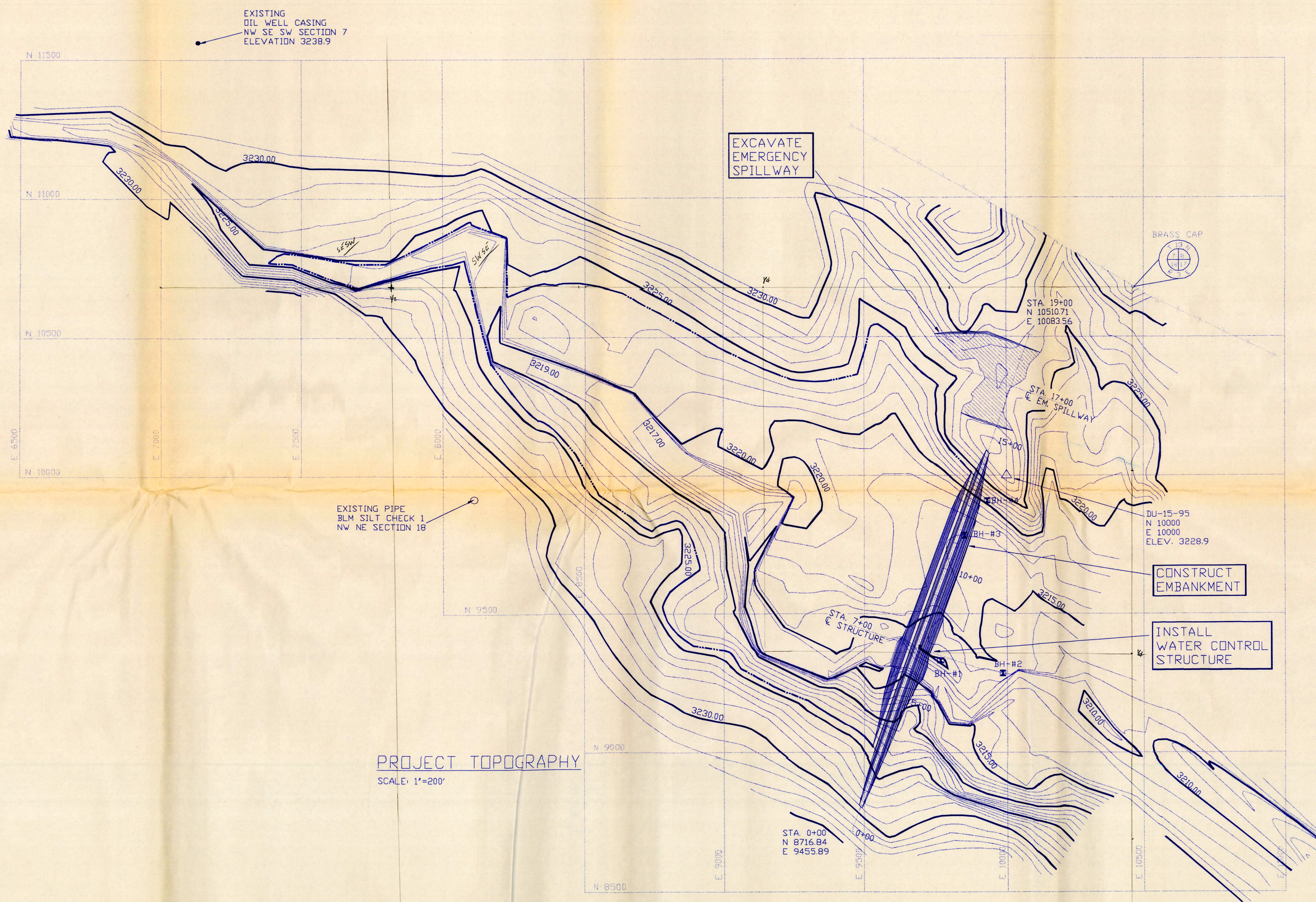
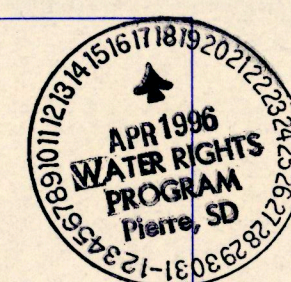
SIGN 'A' 24"X36" SIGN 'B' 11"X14"

SIGN 'A' AND SIGN 'B' WILL BE PROVIDED BY DUCKS UNLIMITED AND DELIVERED TO THE DISSEMINATING AGENCY. THE AGENCY IS RESPONSIBLE FOR INSTALLING THE SIGNAGE AT THE LOCATION DESIGNATED ON THE PLANS.

AGENCY CONTACT:
ERIC LUSE - RANGE MGMT. SPECIALIST
BUREAU OF LAND MANAGEMENT
SOUTH DAKOTA RESOURCE AREA
310 ROUNDUP ST.
BELLE FOURCHE, SD 57717
(605) 892-3281

DUCKS UNLIMITED INC. GREAT PLAINS REGIONAL OFFICE DATE: 12-17-95	PROJECT NO. SD-0182-001	DESIGNED BY: R.C.S.
	BATTLE CREEK IMPOUNDMENT	
	DRAWN BY: B	
	SURVEYED BY:	
	CHECKED BY: B.R.K.	
	APPROVED BY: <i>Signature</i> P.E.	

1638-1



AREA-CAPACITY DATA

ELEVATION	AREA (ACRES)	ACCUMULATIVE VOLUME (ACRE-Feet)
3211.0	0	0
3212.0	0.2	0.1
3213.0	0.4	0.4
3214.0	1.3	1.3
3215.0	2.4	3.1
3216.0	4.6	6.6
3217.0	7.4	12.6
3218.0	10.5	21.6
3219.0	14.7	34.2
3220.0	19.0	51.0
3221.0	23.3	72.2
3222.0	27.4	97.5
3223.0	32.9	127.7
3224.0	37.6	162.9
3225.0	42.8	203.1
3226.0	48.7	248.9
3227.0	54.8	300.6

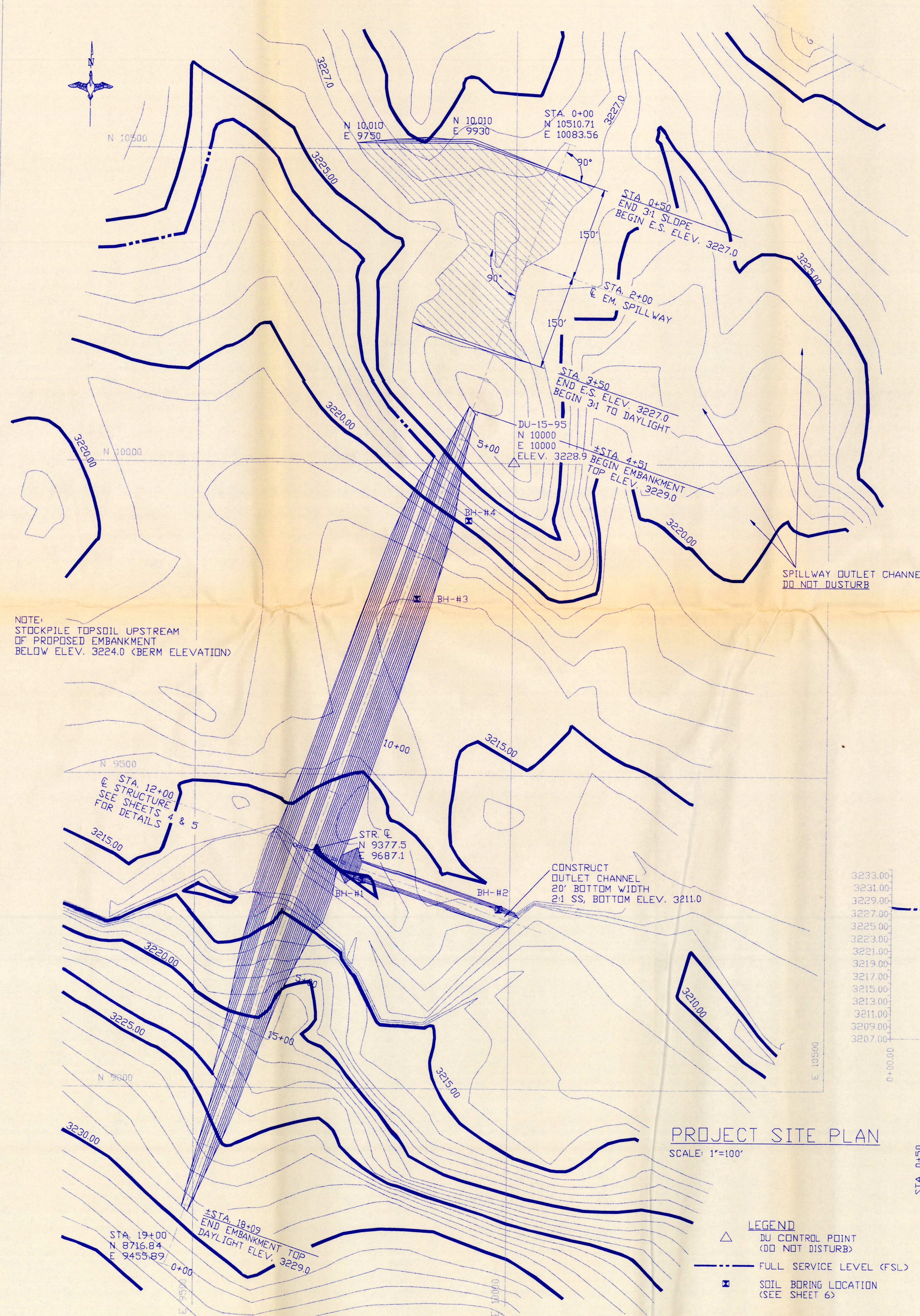
LEGEND

- DU CONTROL POINT
- #5 REBAR CAPPED & STAMPED (DO NOT DISTURB)
- EXISTING FENCELINE
- FULL SERVICE LEVEL (FSL)
- SOIL BORING LOCATION (SEE SHEET 6 FOR INFORMATION)

VERTICAL CONTROL:
ESTABLISHED FROM TRI-STATION "BATTLE 1952". THE DATA SHEET SCALED ELEVATION FOR THIS POINT IS 3251. THE USGS QUAD SHEET USED ELEVATION 3276. WE USED ELEVATION 3276.
HORIZONTAL CONTROL:
LOCAL DU COORDINATES WITH REFERENCE AZIMUTH TO TRUE NORTH WITH A BRUNTON COMPASS WITH 13' OF MAGNETIC DECLINATION ACCOUNTED FOR.

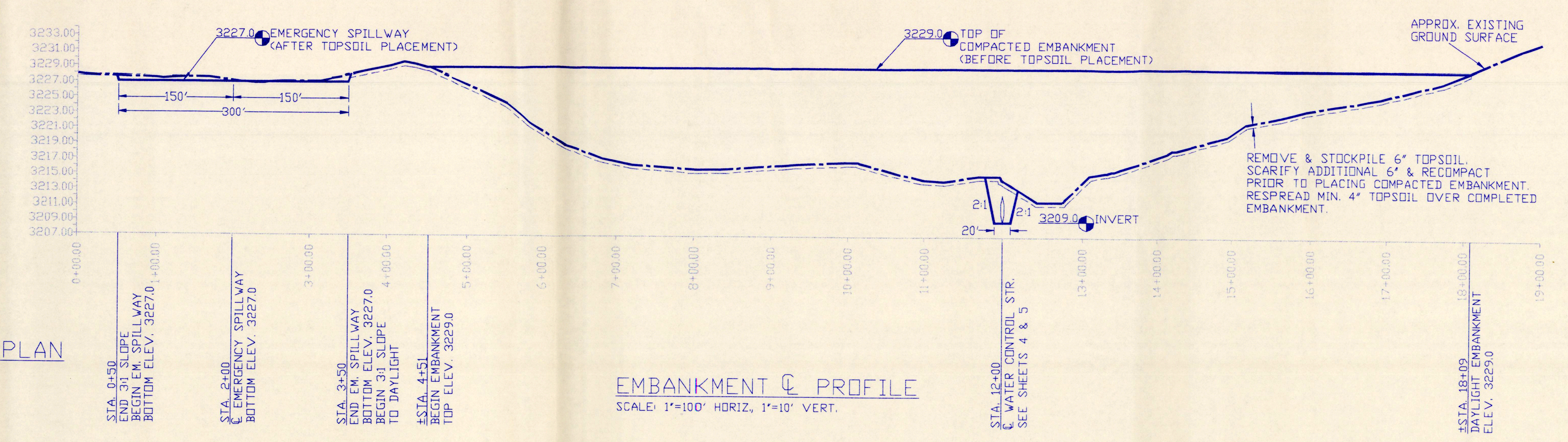
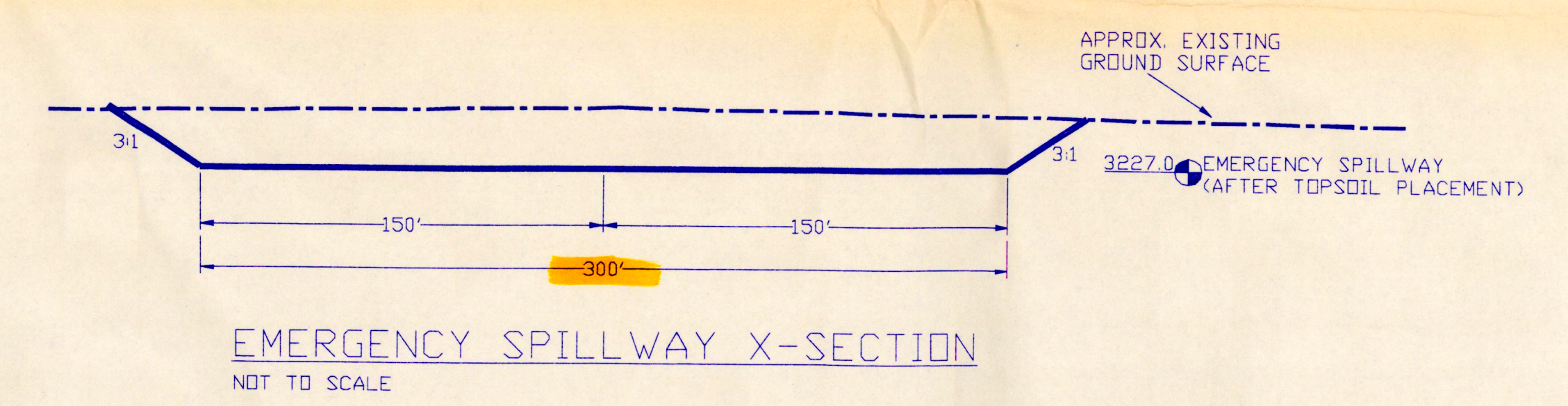
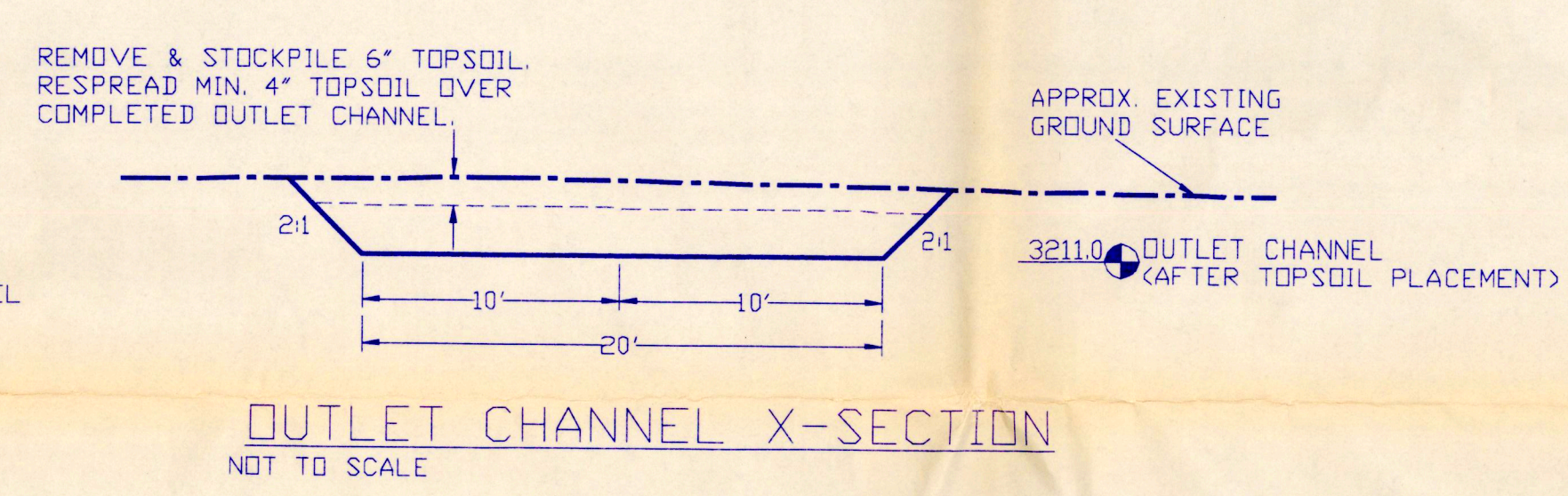
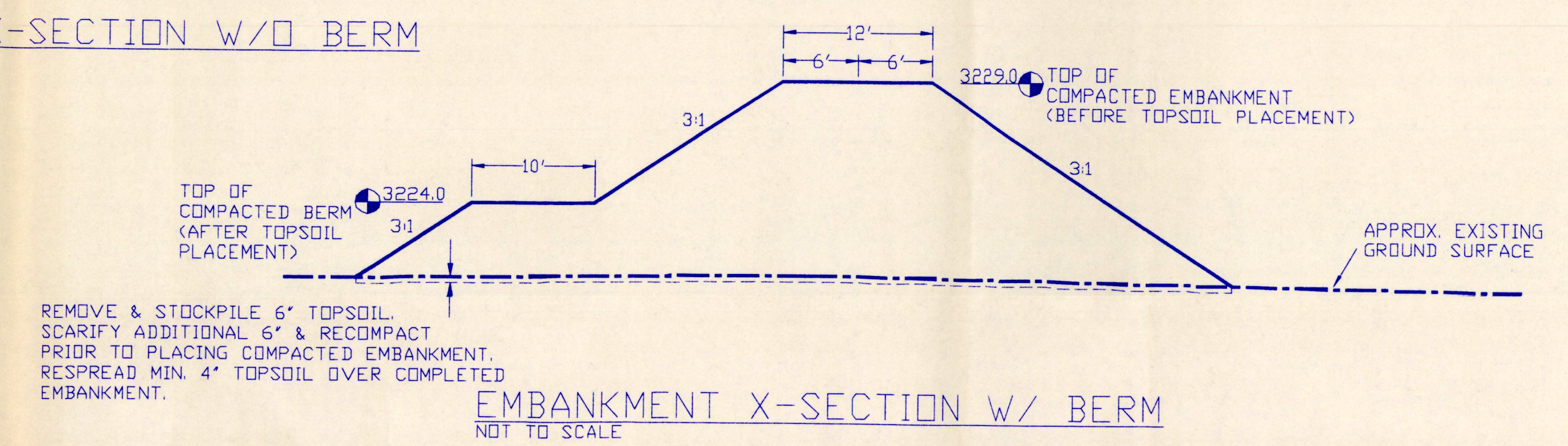
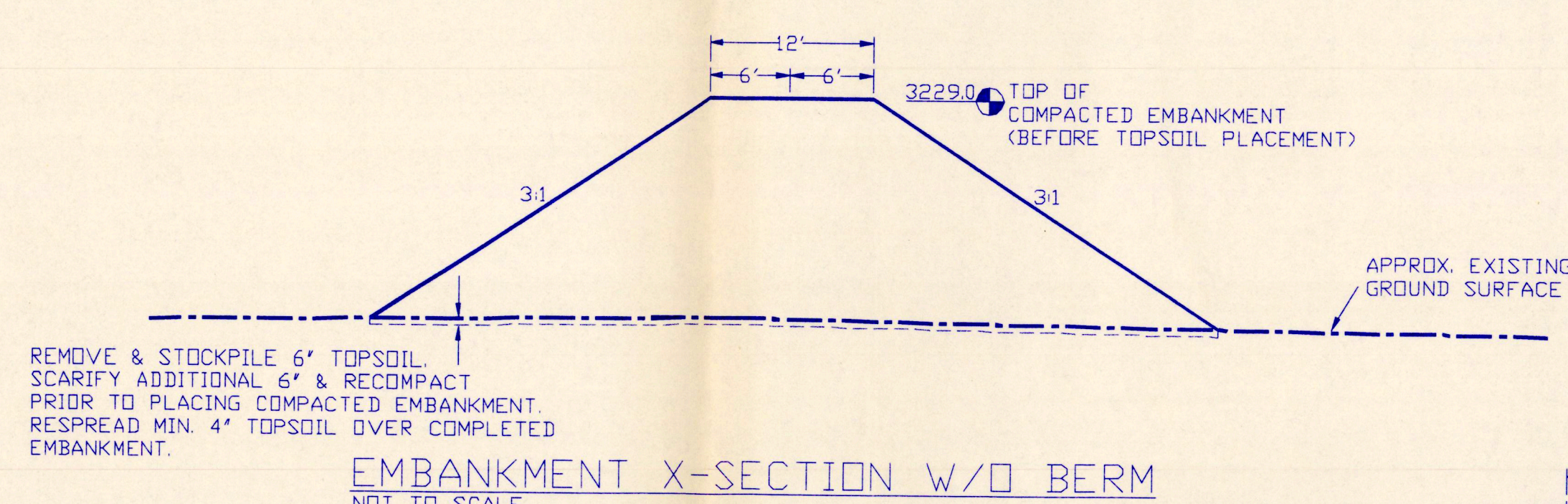
DUCKS UNLIMITED INC.	PROJECT NO. SD-0182-001	DESIGNED BY: R.C.S.
	BATTLE CREEK	DRAWN BY: K.B.
GREAT PLAINS REGIONAL OFFICE	PROJECT TOPOGRAPHY	SURVEYED BY:
DATE: 12-17-95	SHEET NO. 2 OF 6	CHECKED BY: B.R.K.
	APPROVED BY:	APPROVED BY:

1638-1

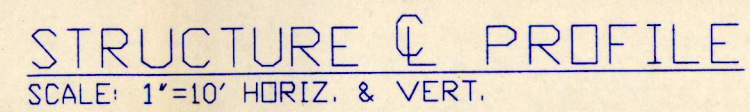
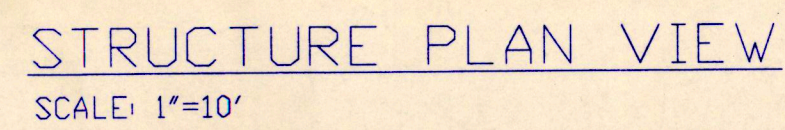


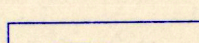
PROJECT SITE PLAN
SCALE: 1"=100'

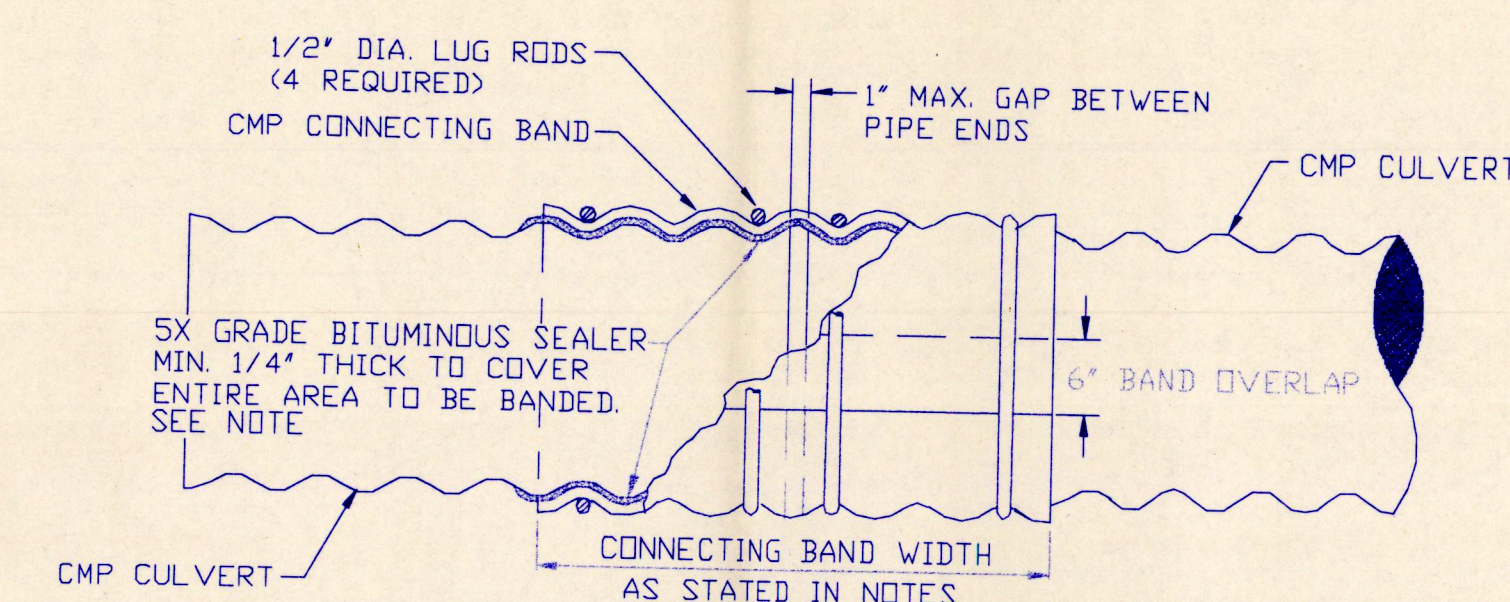
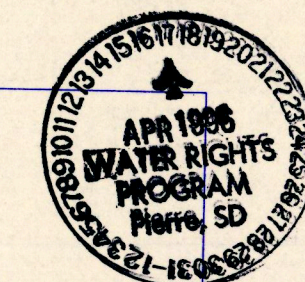
- LEGEND
- △ DU CONTROL POINT (DO NOT DISTURB)
 - FULL SERVICE LEVEL (FSL)
 - ⊗ SOIL BORING LOCATION (SEE SHEET 6)



DUCKS UNLIMITED INC.		PROJECT NO. SD-0182-001	DESIGNED BY: R.C.S.
GREAT PLAINS REGIONAL OFFICE		BATTLE CREEK	DRAWN BY: K.B.
DATE: 12-14-95	SHEET NO. 3 OF 6	PROJECT SITE PLAN	SURVEYED BY:
		APPROVED BY:	CHECKED BY: B.R.K.



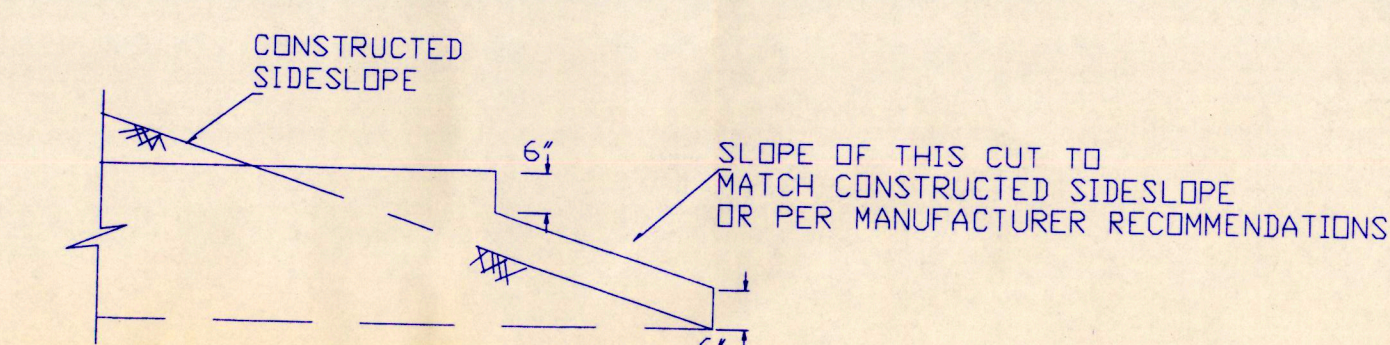
 DUCKS UNLIMITED INC.	PROJECT NO. SD-0182-001		DESIGNED BY: R.C.S.
	BATTLE CREEK IMPOUNDMENT		DRAWN BY: S
GREAT PLAINS REGIONAL OFFICE	STRUCTURE PLAN & PROFILE		SURVEYED BY:
	DATE: 12-18-95	SHEET NO. 4 OF 6	CHECKED BY: BRK.
		APPROVED BY:	APPROVED BY:



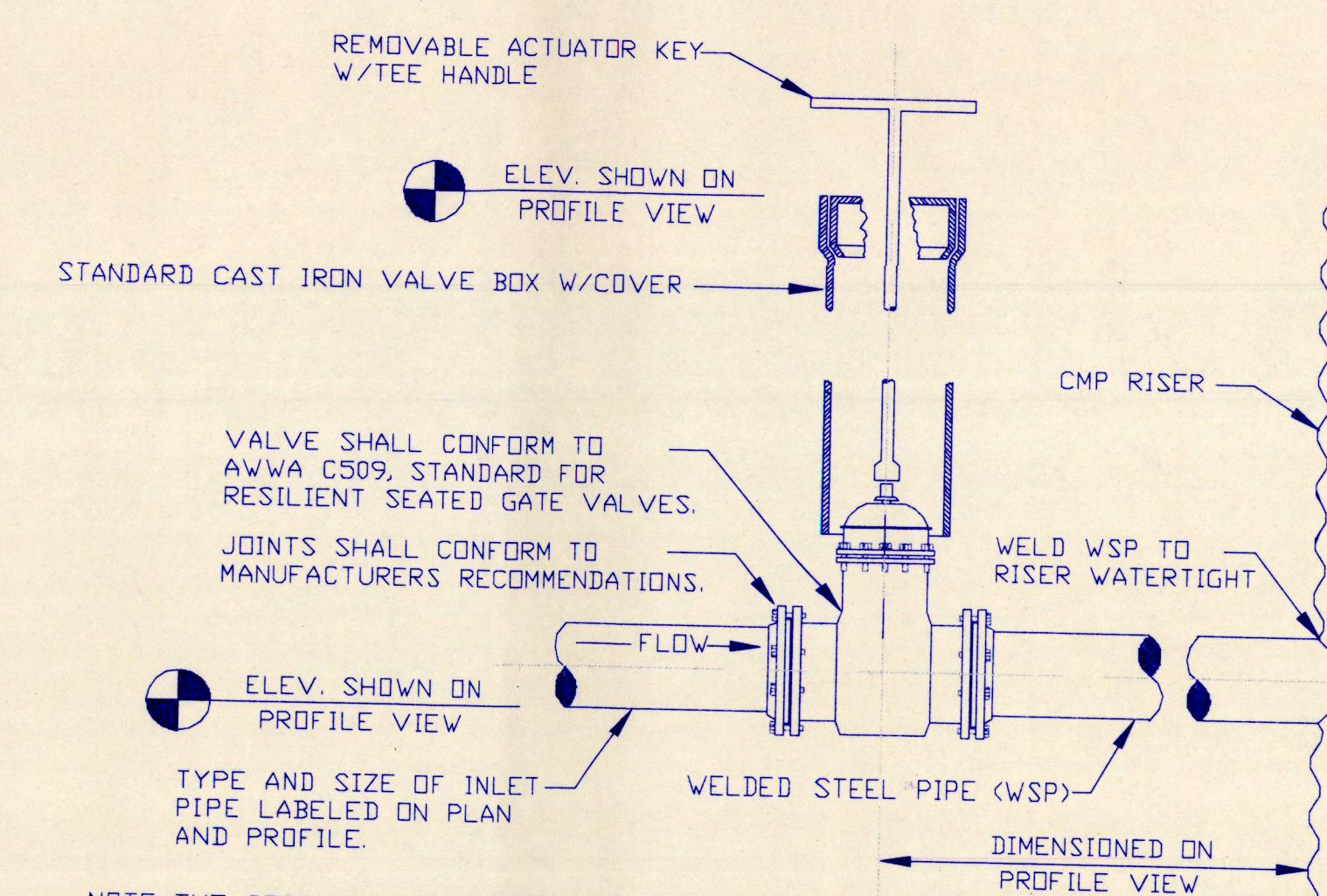
AFTER BANDS HAVE BEEN TIGHTENED, A COAT OF 5X SEALER SHALL BE APPLIED AROUND THE CULVERT AT THE ENDS OF THE CONNECTING BAND AND ALONG THE SEAM OF THE BAND OVERLAP.

NOTE TO SUPPLIERS:
IF ANNULAR PIPE IS USED, USE A 2 FT. WIDE
ANNULAR BAND. IF HELICAL PIPE WITH 4
CORRUGATIONS REROLLED TO ANNULAR IS USED,
USE A 21 INCH WIDE ANNULAR BAND. SEE
SPECIFICATION 207.2.

CONNECTING BAND DETAIL
NOT TO SCALE

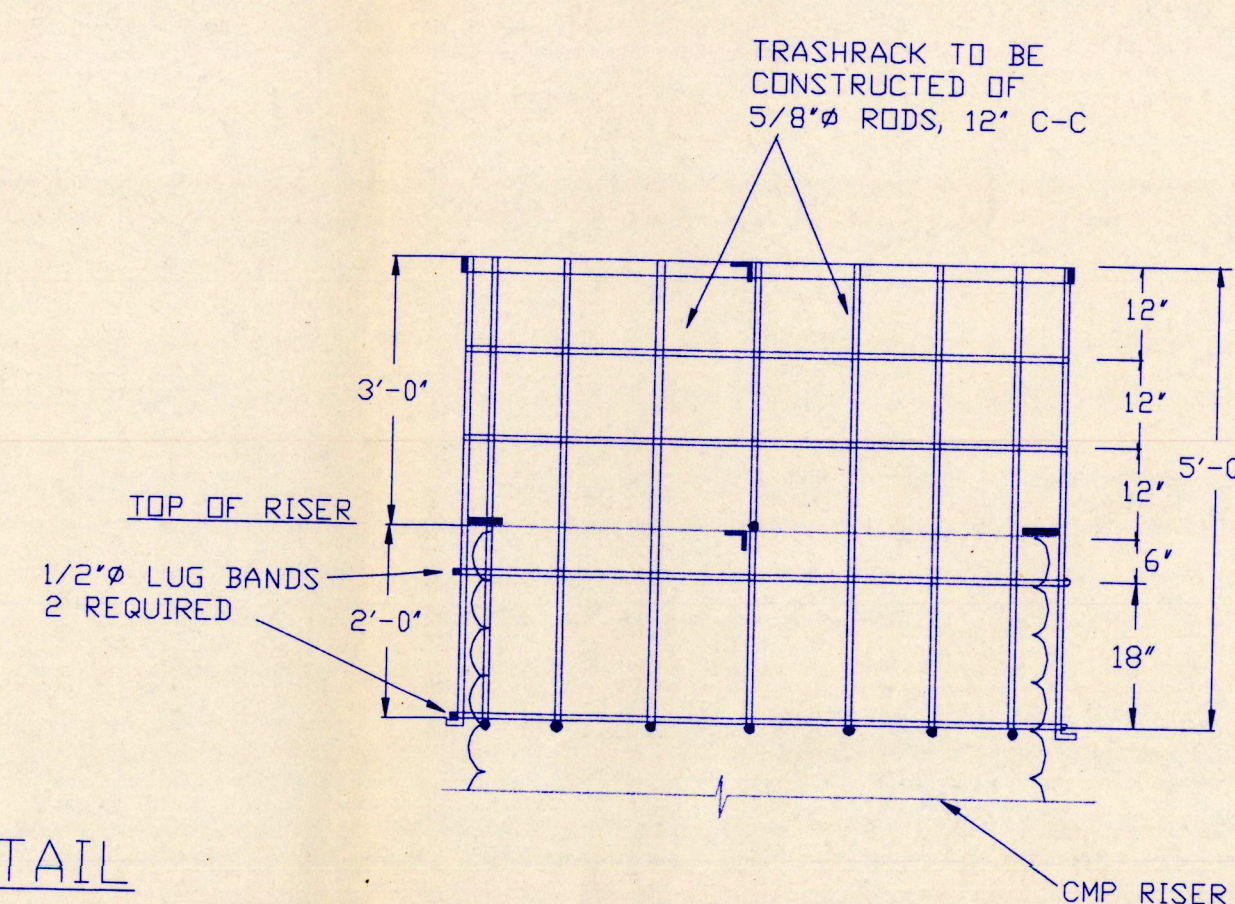
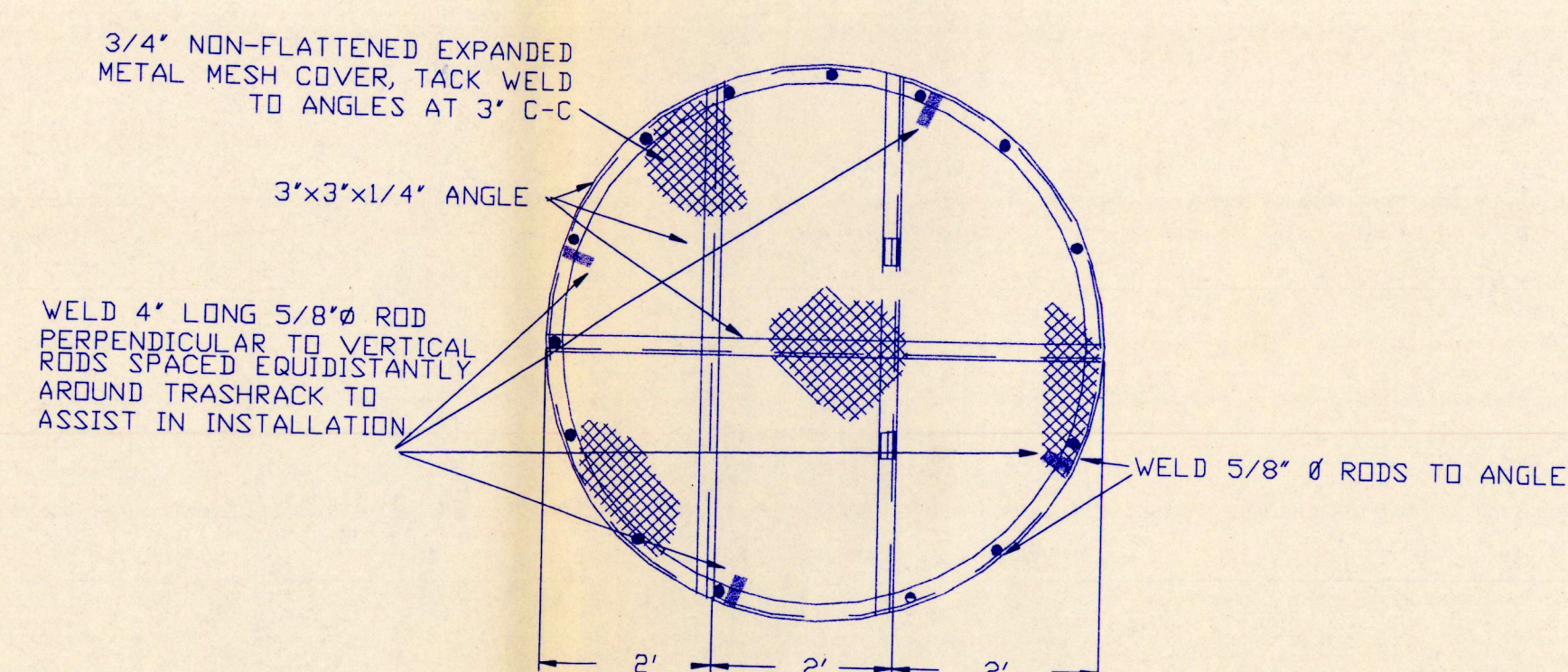


STEP BEVEL DETAIL
NOT TO SCALE



DRAWDOWN VALVE DETAIL

COST OF THE GATE VALVE AND ASSOCIATED ITEMS SHALL BE CONSIDERED INCIDENTAL TO "WATER CONTROL STRUCTURE."



TRASHRACK DETAIL
NOT TO SCALE

