Considered: _____

WATER PERMIT NO. 5066A-3

MAP No. same

Name of Applicant SD Department of Game, Fish and Parks

Post Office Address 445 E Capitol, Anderson Bldg, Pierre SD

Amount of Water Claimed 65.2 acre-feet Total Acres NA

Source of Water Supply 2 dams

Water to be used for wildlife & waterfowl production County Marshall

About 10 miles E of Britton.

PROOF OF PUBLICATION: Received ✓ Not Received _____

APPLICATION: Approved 5/6/87 Subject to _____

F.F.& C.L. Adopted _____ Not Approved _____ Deferred _____

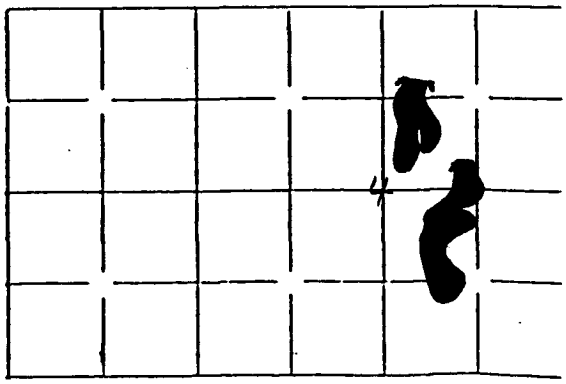
PRIORITY Date Received March 18, 1987 Fee none Remarks appl. is 3/18/87 to construct 2 add'l storage dams in Black Slough

Corrected Application Received _____ Period of Annual Use Jan 1 - Dec 31

WATER QUALITY APPROVAL RECEIVED NA APPROVED/CONDITIONAL (Circle one)

WI-1 Description same as Application YES ___ NO ___ REMARKS _____

Diversion Point Upper dam: SW¼NE¼; Lower dam: NW¼NE¼; both in section 4-T126N-R56W



Land to be Irrigated NA

Well Log: Driller NA Licensed YES ___ NO ___

Depth of Well _____ REMARKS _____

Type of Map Topo PREPARED BY Wesley W. Achon Reviewed and the Number assigned on March 18, 1987 By Ron Duvall

FORM 2: Application for uses other than irrigation (type or print)

Mail to: Water Rights Div.
DWNR, Foss Bldg.
Pierre, SD 57501
(605) 773-3352

No. 5066A-3 Hydrologic Unit 10160010
Map No. same Basin James River
Newspaper Britton Journal, Box 69 (Wed)

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

Check use of water: Industrial ☐ Commercial ☐ Municipal ☐ Other Common Distribution System ☐
Rural Water System ☐ Suburban Housing ☐ Geothermal Heat ☐ Institutional ☐ Recreational ☒
Domestic ☐ (above 18gpm) Other ☒ waterfowl & wildlife production

Type of Application: Check one or more of the following

New ☒ Vested Right ☐ Future Use ☐ Change Use ☐
☐ Amend Permit No._____ with old priority date retained
Change diversion point(s) ☐ Add diversion point(s) ☐ Other ☐ _____
☐ Application to: Change diversion point(s) ☐ Add diversion point(s) ☐ on Permit No. _____
☐ Construction to use water reserved by Future Use Permit No._____

MAR 1987 DIVISION OF WATER RIGHTS Pierre, SD

1. Name of Applicant S.D. Department of Game, Fish and Parks Phone No. 773-3387
   Post Office Address 445 E. Capitol, Pierre, South Dakota State 57501
   (Street, RR or Box) Zip Code
2. Amount of water claimed (c.f.s) See below description of project for water level elevations
   65.2 acre-feet
3. Source of water supply Crow Creek (upper)
4. Location of point of diversion Black Slough T126N, R56W, Sec 3 & 4, Marshall County, South Dakota (see map) Upper dam: SW¼NE¼; Lower dam; NW¼NE¼; both in Section 4-T126N-R56W County Marshall
5. Counties where water will be used Marshall
6. Annual period during which water is to be used 01-01 through 12-31 annually
7. Give a brief description of proposed 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)

   Two water control structures will be constructed in Black Slough to create two separate pools (see map) for additional enhancement of waterfowl production. "Upper" dam will be at elevation 1796.0 and "lower" dam will be at elevation 1785.0 msl. Full service levels will be at 1792.0 msl and 1781.0 msl respectively.

Attachments: Attach Form 2A if diversion from a well or dugout, or if storage of water, is proposed. Attach map (see instruction)

STATE OF SOUTH DAKOTA)
County of Hughes)ss

I, South Dakota Department of Game, Fish and Parks the applicant, certify that I have read the foregoing application, have examined the attached map and that the matters therein stated are true and that I intend, and am able to complete the necessary construction.

Signed Terrance M. Hertz, Wildlife Biologist

Subscribed and sworn to before me this 18th day of March 19 87

Charles E. Keeler
Notary Public (or other qualified officer)

WATER PERMIT

The Water Management Board hereby approves Water Permit Application No. 5066A-3

S.D. Department of Game, Fish & Parks (Applicant) 445 E Capitol, Pierre (Post Office Address)

SD (State) 57501 (Zip Code) With the following qualifications.

The top elevation of the primary spillway (outlet for dam No. 1)- upper dam)may not exceed 1792.0 ft msl.

The top elevation of the primary spillway (outlet for dam No. 2 - lower dam) may not exceed 1781.1 ft msl.

Date of first receipt of application March 18, 19 87.

Date of return to applicant for correction, amendments or changes required _____, 19____.

Date of receipt of corrected application _____, 19____. Approved May 6, 19 87.

The Water Management Board hereby approves this Water Permit No. 5066A-3 authorizing the construction of the water use system and the placing of water to beneficial use as stated in the Application and as qualified in the Water Permit approval, subject, however, to the following limitations and conditions:

1. The date from which applicant may claim right is March 18, 19 87.
2. The equivalent of at least one-fifth of the specified work is to be completed on or before October 6, 19 89.
3. The whole of said work is to be completed on or before May 6, 19 92.
4. The limit of time from proof of beneficial use of water appropriated in accordance herewith is May 6, 19 96.
5. The water appropriated shall be used for the purpose of providing habitat for waterfowl and wildlife production for recreational purposes
6. The prior right of all persons who, by compliance with the laws of the State of South Dakota, have acquired a right to the use of water must not be unlawfully impaired by this appropriation.
7. The amount of the appropriation herein granted shall not exceed 65.2 acre-feet annually ~~cubic feet per second;~~ neither shall it exceed the capacity of the above described water supply system nor shall it exceed the amount of water needed for beneficial uses served and to which water is actually and beneficially applied for recreational use on or before May 6, 19 96; said water to be used during the following described annual period: Jan 1 - Dec 31

WATER MANAGEMENT BOARD

By: John Cooper
Chief Engineer
Division of Water Rights
Dept. of Water and Natural Resources

JUL 17 1987, 19____

Form 2A

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 of Water (ground surface to water level) _____

g) Distance to nearest existing domestic well:

On applicants property _____ On property owned by others _____

2. Dugout Information Estimates

a) Surface Dimensions _____ Depth _____

b) Depth to water (ground surface to water level) _____

3. Water Storage Dams

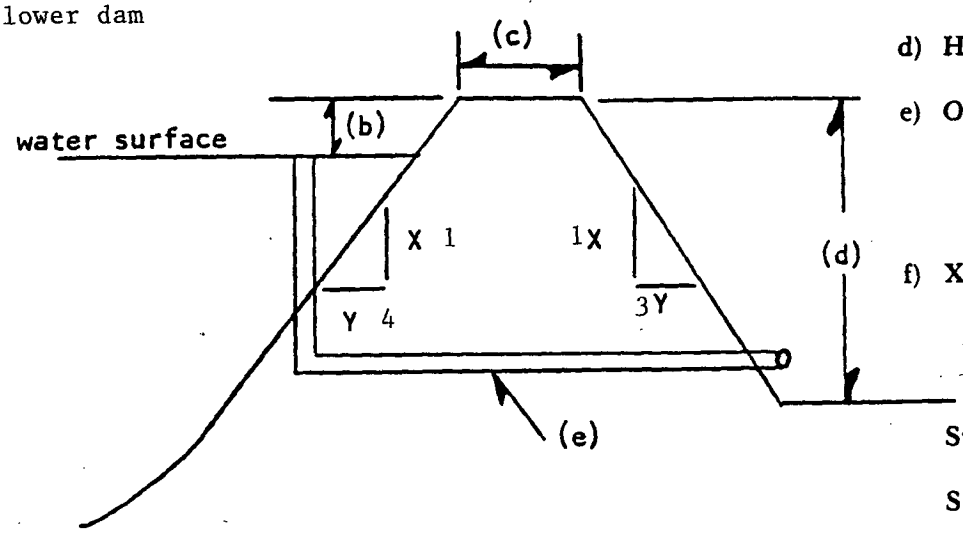
If the proposed water use system contains one or more storage dams, please furnish the information requested below. The locations of each dam should be shown on the map submitted with the application.

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

Ulteig Engineering

Bismarck, ND

lower dam



b) Freeboard 4'

c) Crest Width 12'

Crest Length 340'

d) Height 10' max

e) Outlet Dimensions:
Pipe diameter 12" 0

Spillway width 35'

f) X & Y Slope
Upstream 4:1

Downstream 3:1

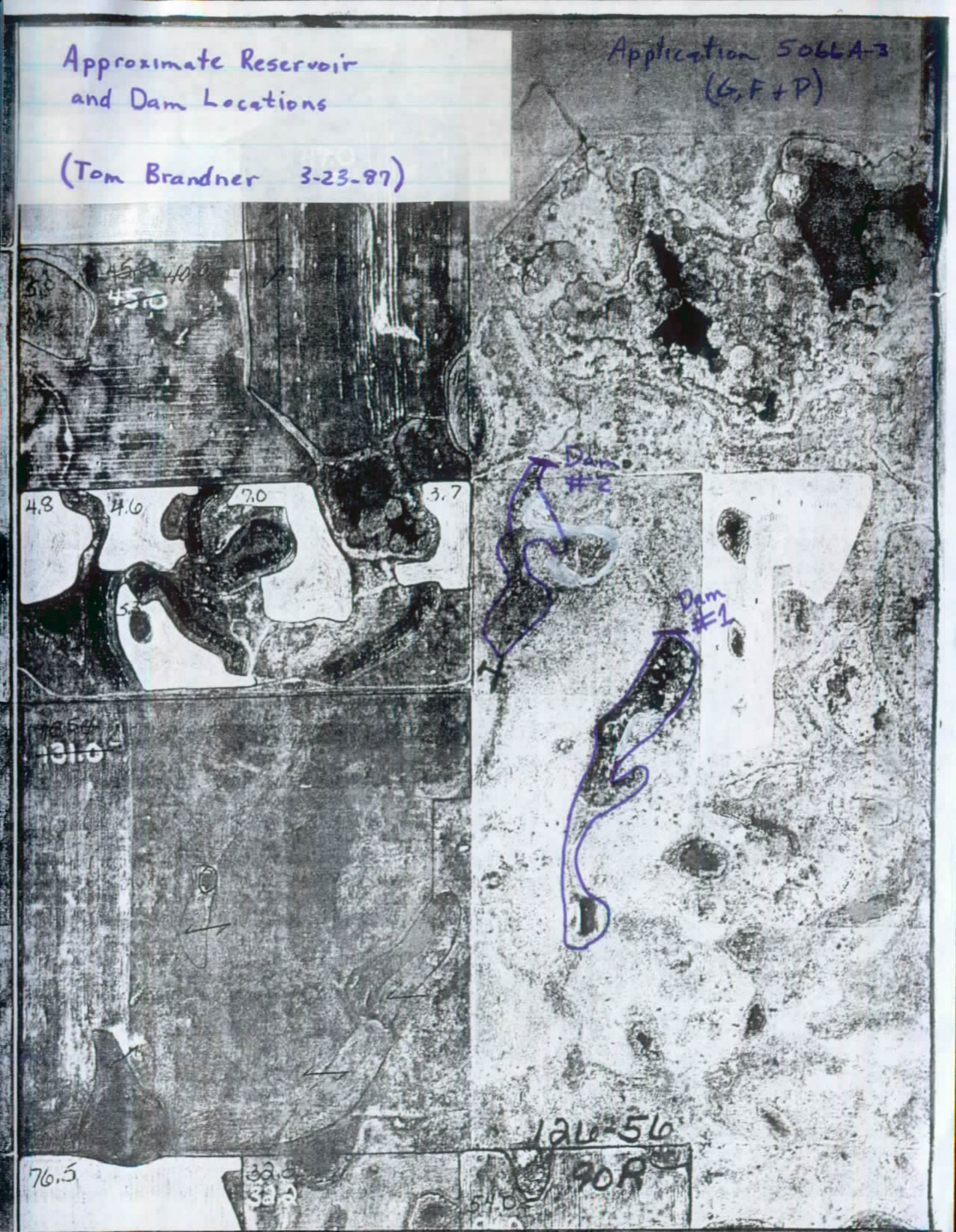
Surface Area of Impoundment 6 acres

Storage 17.2 acre feet

Drainage area above dam 321 acres

Donald W. Leith

Signature of Applicant


Approximate Reservoir and Dam Locations
(Tom Brandner 3-23-87)
Application 5066A-3 (G, F + P)
Dam #2
Dam #1
4.8
4.6
7.0
3.7
76.5
120-56
POR

Report on Application No. 5066A-3
S.D. Department of Game, Fish & Parks

March 23, 1987

Water Permit Application No. 5066A-3 was submitted for the S.D. Department of Game, Fish & Parks to create two small reservoirs capable of storing a total of 65.2 acre-feet of water annually. The water bodies will be located in Black Slough in Marshall County, approximately 10 miles east of Britton. The applicant proposes to construct two dams in the Black Slough which is located in the North 1/2 of Sections 3 and 4, T126N, R56W and in the South 1/2 of Sections 33 and 34, T127N, R56W. The upper dam with a capacity to store 48 acre-feet is to be located in the SW1/4 NE1/4 of Section 4, T126N, R56W and have a maximum pool elevation of 1792.0 feet mean sea level (msl). The dam is to be equipped with a stoplog water level control structure and an emergency spillway. A second lower dam with a storage capacity of 17.2 acre-feet is to be located in the NW1/4 NE1/4 of Section 4, T126N, R56W and have a maximum pool elevation of 1781.0 ft. msl. This dam will also be equipped with an emergency spillway. The water will be used for waterfowl habitat and wildlife production.

Background

Water for the proposed project will be captured from surface runoff on the upper Crow Creek drainage basin. The amount of water requested (65.2 acre-feet) is small and the drainage basin area of these new impoundments (less than one square mile) is also insignificant in comparison to the total Crow Creek drainage area. Therefore unappropriated water is available for this permit.

Approximately 20 acres of land will be inundated under maximum pool elevations. These lands are located within a State Game Production Area and are owned by the S.D. Game, Fish & Parks Department (GF&P), and no privately owned lands will be affected by this permit application.

Existing Permits

The only existing water rights in the Black Slough area are Vested Right Claim No. 5050-3 and Permit 5066-3. Both of these permits are also owned by the Department of Game, Fish & Parks and will not be adversely affected by Permit No. 5066A-3.

Conclusions

1. There is unappropriated water available for Water Permit No. 5066A-3.

2. The lands subject to flooding by construction of the dams are owned by Department of Game, Fish & Parks and no privately owned property will be affected.

3. Water Rights Division files indicate only the Department of Game, Fish & Parks has water rights in the Black Slough vicinity.

4. Approval of the application is recommended with the qualification that the outlet or maximum pool elevations not exceed the following levels:

a. Dam No. 1 (upper dam) - 1792.0 ft. msl
b. Dam No. 2 (lower dam) - 1781.0 ft. msl

Tom Brandner
Natural Resources Engineer

RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 5066A-3, Dept. of Game, Fish and Parks

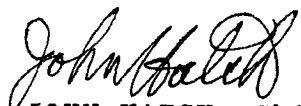
Pursuant to SDCL 46-2A-2, the following is the recommendation of the Chief Engineer, Water Rights Division, Department of Water and Natural Resources concerning Water Permit Application No. 5066A-3, Dept of Game, Fish and Parks, Anderson Building, Pierre SD 57501.

The Chief Engineer is recommending APPROVAL of Application No. 5066A-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) in the public interest with the following qualifications:

1. The top elevation of the primary spillway (outlet for dam No. 1-upper dam) may not exceed 1792.0 ft msl.

2. The top elevation of the primary spillway (outlet for dam No. 2-lower dam) may not exceed 1781.0 ft msl.

See the attached report for additional information.



JOHN HATCH, Chief Engineer
March 24, 1987

DWNR 806-11/85

No. 5066A-3

Instruction to Newspaper - Publish first publication of the following Notice on or before **April 1, 1987** with 2nd publication 1 week later. The applicant is responsible for payment.

NOTICE OF HEARING on Application No. **5066A-3** to Appropriate Water ~~and/or to Amend Water Permit or Water Right No.~~ _____

Notice is hereby given that **SD Dept. of Game, Fish & Parks** whose mailing address is **445 E. Capitol, Anderson Bldg., Pierre**, South Dakota has made an application for a permit **to construct two dams in the Black Slough located in the N½ sections 3 and 4-T126N-R56W; S½ Sections 33 and 34-T127N-R56W. The upper dam (48 acre-feet storage capacity) is to be located in the SW¼NE¼ Section 4-T126N-R56W and have an outlet elevation of 1792.0 feet mean sea level. The lower dam (17.2 acre-feet storage capacity) is to be located in the NW¼NE¼ Secton 4-T126N-R56W and have an outlet elevation of 1781.0 feet msl. The upper dam is to be equipped with a stoplog water control structure (48 inch riser with 18 inch tube) to allow the dam pool to be maintained at various levels or drained. Both dams are also to be equipped with emergency spillways. The water is to be used to provide habitat for waterfowl and wildlife production.**

Pursuant to SDCL 46-2A-2 the Chief Engineer of the Water Rights Division recommends **APPROVAL** of Application No. **5066A-3** because 1) unappropriated water is available, 2) will be no unlawful impairment of existing rights, 3) is beneficial use of water and 4) is in the public interest.

This application will be considered by the Water Management Board at **room 216, Joe Foss Building, 523 E. Capitol, Pierre, South Dakota, May 6** 19**87** at 10:00 am.

The recommendation of the Chief Engineer is not final or binding upon the Board and the Board is authorized to 1) approve, 2) approve with qualifications, 3) defer, or 4) deny this application after it reaches a conclusion based upon facts presented at the public hearing. Any interested person who may be affected by a Board decision and who intends to participate in the hearing before the Board and present evidence or cross-examine witnesses according to SDCL 1-26, must file a written petition with BOTH the applicant and the Chief Engineer by **April 24, 1987**. The petition may be informal, but it must include a statement describing the petitioners interest in the application, the reasons for the petitioner's opposition to or support of the application, and the signature and mailing address of the petitioner or his legal counsel if legal counsel is obtained. The applicant need not file a petition.

This application is made pursuant to the provisions of SDCL 46-1-1 thru 46-1-9, 46-1-12 thru 46-1-15; 46-2-3.1, 46-2-9, 46-2-11, 46-2-13, 46-2-17; 46-2A-1 thru 46-2A-10, 46-2A-12, 46-2A-14, 46-2A-15; 46-5-1 thru 46-5-11, 46-5-13 thru 46-5-15, 46-5-24, 46-5-25, 46-5-30.2 46-5-30.4, 46-5-31; ~~(ground) 46-6-3, 46-6-3.1, 46-6-6.1, 46-6-10, 46-6-13, 46-6-14, (future use) 46-5-38 thru 46-5-40; (transfer lands) 46-5-30.4, 46-5-33 thru 46-5-35; (10,000 AFA) 46-5-20.1, 46-5-8.1;~~ and Board Rules ARSD 74:02:01:01 thru 74:02:01:15; ~~(future use) 74:02:01:24 thru 74:02:01:25; (10,000 AFA) 74:02:01:15:02 thru 74:02.01.15.05.~~

This hearing is an adversary proceeding. The applicant or any person, after filing a petition, has the right to be present or to be represented by a lawyer. These and other due process rights will be forfeited if they are not exercised. Decisions of the Board may be appealed to the Circuit Court and the State Supreme Court as provided by law.

Any person wishing a copy of the Chief Engineer's recommendation, further information on this application or to assure access to the hearing by the handicapped can contact the Water Rights Division, DWNR, Joe Foss Bldg, Pierre SD (605 773-3352) for assistance prior to the hearing date. The time of the hearing will be automatically extended for at least twenty days upon written request of the applicant or any person who has filed a petition to oppose or support the application. The request for extension must be filed with the Chief Engineer by **April 24, 1987**.

Duplicate

AFFIDAVIT OF PUBLICATION

STATE OF SOUTH DAKOTA, County of Marshall.

C. L. Card of said county, being first duly sworn on oath says that he is publisher of the BRITTON JOURNAL, a weekly newspaper printed and published in the City of Britton, in the County of Marshall, and has full and personal knowledge of all the facts herein stated; that said newspaper is a legal newspaper and has a bona-fide circulation of at least two hundred copies weekly and has been published within said County for fifty-two successive weeks, next prior to the publication of the notice herein mentioned and is printed wholly or in part in an office at said place of publication;

that the Notice of Hearing (# 5066A-3)

a printed copy of which, taken from the paper in which the same was published, is attached to this sheet and is made a part of this affidavit, was published in said newspaper at least once each week for Two successive weeks, on the day of each week on which said newspaper was regularly published, to wit:

April 1, 1987

April 8, 1987

107 l x 2 wks @ .399258 per col inch for 2 publ. = 85.42

once @ .221810 = 47.46

second @ 8090 = 37.96

APR 1987 DIVISION OF WATER RIGHTS Pierre, SD

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

Forty two and 72/100 DOLLARS.

C. L. Card

Subscribed and sworn to before me this 8th day of April A. D., 19 87

Notary Public, Marshall County, S. D.

My Commission Expires

2T(Apr. 1-8)

NOTICE OF HEARING
on Application No. 5066A-3
to Appropriate Water

Notice is hereby given that SD Dept. of Game, Fish & Parks whose mailing address is 445 E. Capitol, Anderson Bldg., Pierre, South Dakota has made an application for a permit to construct two dams in the Black Slough located in the N½ sections 3 and 4-T126N-R56W; S½ Sections 33 and 34-T127N-R56W. The upper dam (48 acre-feet storage capacity) is to be located in the SW¼NE¼ Section 4-T126N-R56W and have an outlet elevation of 1792.0 feet mean sea level. The lower dam (17.2 acre-feet storage capacity) is to be located in the NW¼NE¼ Section 4-T126N-R56W and have an outlet elevation of 1781.0 feet msl. The upper dam is to be equipped with a stoplog water control structure (48 inch riser with 18 inch tube) to allow the dam pool to be maintained at various levels or drained. Both dams are also to be equipped with emergency spillways. The water is to be used to provide habitat for waterfowl and wildlife production.

Pursuant to SDCL 46-2A-2 the Chief Engineer of the Water Rights Division recommends APPROVAL of Application No. 5066A-3 because 1) unappropriated water is available, 2) will be no unlawful impairment of existing rights, 3) is beneficial use of water and 4) is in the public interest.

This application will be considered by the Water Management Board at room 216, Joe Foss Building, 523 E. Capitol, Pierre, South Dakota, May 6, 1987, at 10:00 a.m.

The recommendation of the Chief Engineer is not final or binding upon the Board and the Board is authorized to 1) approve, 2) approve with qualifications, 3) defer, or 4) deny this application after it reaches a conclusion based upon facts presented at the public hearing. Any interested person who may be affected by a Board decision and who intends to participate in the hearing before the Board and present evidence or cross-examine witnesses according to SDCL 1-26, must file a written petition with BOTH the applicant and the Chief Engineer by April 24, 1987. The petition may be informal, but it must include a statement describing the petitioners interest in the application, the reasons for the petitioner's opposition to or support of the application, and the signature and mailing address of the petitioner or his legal counsel if legal counsel is obtained. The applicant need not file a petition.

This application is made pursuant to the provisions of SDCL 46-1-1 thru 46-1-9, 46-1-12 thru 46-1-15; 46-2-3.1, 46-2-9, 46-2-11, 46-2-13, 46-2-17, 46-2A-1 thru 46-2A-10, 46-2A-12, 46-2A-14, 46-2A-15; 46-5-1 thru 46-5-11, 46-5-13 thru 46-5-15, 46-5-24, 46-5-25, 46-5-30.2, 46-5-30.4, 46-5-31; and Board Rules ARSD 74:02:01:01 thru 74:02:01:19.

This hearing is an adversary proceeding. The applicant or any person, after filing a petition, has the right to be present or to be represented by a lawyer. These and other due process rights will be forfeited if they are not exercised. Decisions of the Board may be appealed to the Circuit Court and the State Supreme Court as provided by law.

Any person wishing a copy of the Chief Engineer's recommendation, further information on this application or to assure access to the hearing by the handicapped can contact the Water Rights Division, DWNR, Joe Foss Bldg., Pierre, SD (605-773-3352) for assistance prior to the hearing date. The time of the hearing will be automatically extended for at least twenty days upon written request of the applicant or any person who has filed a petition to oppose or support the application. The request for extension must be filed with the Chief Engineer by April 24, 1987.

SOUTH Dakota Department of
Water & Natural Resources
Joe Foss Building
523 East Capitol
Pierre, South Dakota 57501

Water Rights Division
605 773-3352

5066A-3

JUL 17 1987

S.D. Department of Game, Fish & Parks
445 E. Capitol
Pierre, South Dakota 57501

Dear Sir:

Enclosed herewith is your Water Permit No. 5066A-3 as approved by the Water Management Board authorizing you to construct your water diversion system and the water to beneficial use, not exceeding the limits as specified in said Water Permit No. 5066A-3

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 your Water License may be issued to you, thus completing your acquistion of a Water Right.

Very truly yours,

JOHN HATCH, Chief Engineer
Water Rights Division

JH: ms

enclosure

PLEASE NOTE: Certain changes can be made in your permit within the five year construction period, usually without affecting the priority date provided an application to amend your permit is made within the five year period-i.e. changes in location or number of diversion points (wells) or location of land to be irrigated. Well locations for wells into the same aquifer can be moved up to 660 feet without application.

Applications to amend a permit after the five year construction period will be assigned a new priority date. Applications to change water sources, to add lands or increase original diversion rates, if approved will usually receive the date of the new application as a priority date regardless of the five year construction period.

Permit No. 5066A-3

James River - Water District

Other permit/license(s) associated with project: **5066-3**
Contact Person & Address: **Aaron Kahre, PO Box 1078, Britton SD 57430**

Report Of Examination Of Works

On, **October 7, 2002**, I made a thorough examination of the water use system constructed by **South Dakota Game, Fish, & Parks** of **523 E Capitol, Pierre SD 57501** holder of Permit No. **5066-3**, bearing the priority of **June 14, 1985,** authorizing the storage of **481.5** acre-feet of the waters of **Black Slough drainage** for **waterfowl production** purposes, and Permit No. **5066A-3**, bearing the priority of **March 18, 1987,** authorizing the storage of **65.2** acre-feet of the waters of **the upper Crow Creek drainage basin** for **waterfowl and wildlife production** purposes, in **Marshall** County.

The system is in the following condition **good**. The point of diversion is located **North Dam: it is 739 feet north and 3328 feet east from SW corner of Section 33 T127N-R56W** with a longitude of **-97.554094** and a latitude of **45.763520**. The point of diversion is located **Upper Dam: it is 966 feet south and 3043 feet east from NW corner of Section 4 T126N-R56W** with a longitude of **-97.554666** and a latitude of **45.758612**. The point of diversion is located **Lower Dam: it is 1962 feet south and 3668 feet east from NW corner of Section 4 T126N-R56W** with a longitude of **-97.552395** and a latitude of **45.755930**. The point of diversion is located **South Dam: it is 3412 feet north and 258 feet west from SE corner of Section 4 T126N-R56W** with a longitude of **-97.546817** and a latitude of **45.756093**. T The point of diversion is located **Middle Dam: it is 4010 feet north from SE corner of Section 4 T126N-R56W** with a longitude of **-97.545883** and a latitude of **45.757720**. The works are capable of diverting and conveying to the place of use storing **546.7** acre-feet of water that is to be used for **waterfowl and wildlife production purposes**. The license should be issued for **546.7** acre-feet of storage.

Review of Permit Qualifications And Regulations:

1) Special qualifications to permit being abided by **yes**
2) All structures, wells and lands on map **yes**
3) Irrigation Questionnaires checked to determine if permit owner started irrigation by the end of construction period **NA**
4) Exceptions to compliance are: **none**

Report On the Specifics of the System

Dam Information: North Dam

1) Height to crest **6.6** feet
2) Height to primary spillway or outlet **3.3** feet
3) Height to secondary spillway **NA** ft
4) Crest width **10** feet
5) Crest length **70** feet
6) Spillway length **NA** feet
7) Spillway width **NA** feet
8) Approx. storage **387** ac-ft

Dam Information: Middle Dam

1) Height to crest **10** feet
2) Height to primary spillway or outlet **7** feet
3) Height to secondary spillway **NA** ft
4) Crest width **10** feet
5) Crest length **280** feet
6) Spillway length **NA** feet
7) Spillway width **NA** feet
8) Approx. storage **32** ac-ft

Dam Information: South Dam

1) Height to crest **10** feet
2) Height to primary spillway or outlet **7** feet
3) Height to secondary spillway **NA** ft
4) Crest width **10** feet
5) Crest length **600** feet
6) Spillway length **NA** feet
7) Spillway width **NA** feet
8) Approx. storage **62.5** ac-ft

Dam Information: Upper Dam

1) Height to crest **8** feet
2) Height to primary spillway or outlet **4** feet
3) Height to secondary spillway **NA** ft
4) Crest width **10** feet
5) Crest length **300** feet
6) Spillway length **500** feet
7) Spillway width **40** feet
8) Approx. storage **48** ac-ft
9) Outlet tubes:
   a) height **48** inches
   b) type **CMP**
   c) valved **drop 18" diameter**
   d) valve type **none**

Dam Information: Lower Dam

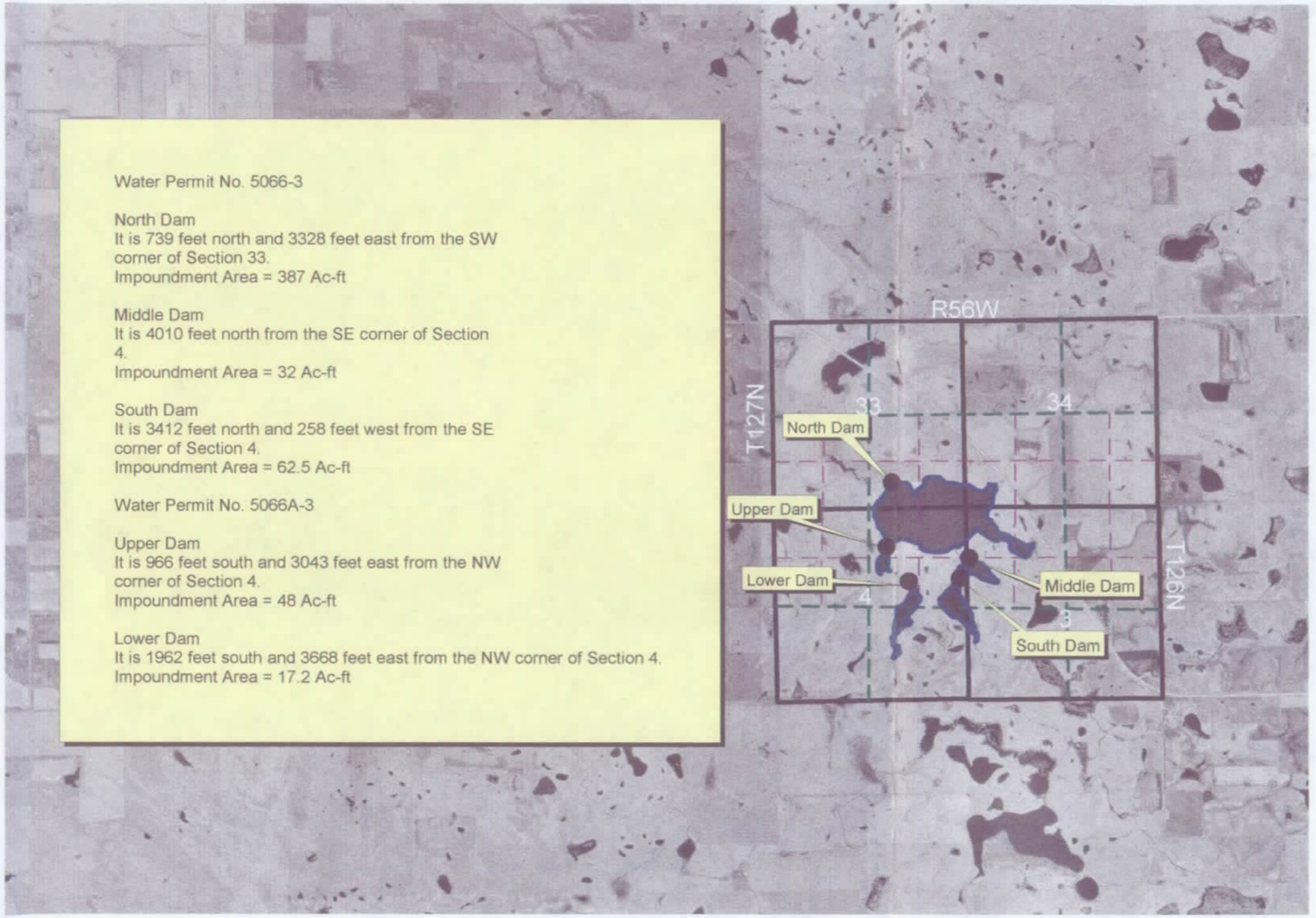
1) Height to crest **10** feet
2) Height to primary spillway or outlet **6** feet
3) Height to secondary spillway **NA** ft
4) Crest width **12** feet
5) Crest length **250** feet
6) Spillway length **500** feet
7) Spillway width **20** feet
8) Approx. storage **17.2** ac-ft
9) Outlet tubes:
   a) height **18** inches
   b) type **CMP**
   c) valved **drop 12" diameter**
   d) valve type **none**

COMMENTS: **Riprap at both Middle and South dams.**

Stacy J Johnson — 11-12-02

Stacy J. Johnson — Date
Natural Resources Project Engineer
DENR, Water Rights Program

Water Permit Nos. 5066-3 and 5066A-3



Water Permit No. 5066-3

North Dam
It is 739 feet north and 3328 feet east from the SW corner of Section 33.
Impoundment Area = 387 Ac-ft

Middle Dam
It is 4010 feet north from the SE corner of Section 4.
Impoundment Area = 32 Ac-ft

South Dam
It is 3412 feet north and 258 feet west from the SE corner of Section 4.
Impoundment Area = 62.5 Ac-ft

Water Permit No. 5066A-3

Upper Dam
It is 966 feet south and 3043 feet east from the NW corner of Section 4.
Impoundment Area = 48 Ac-ft

Lower Dam
It is 1962 feet south and 3668 feet east from the NW corner of Section 4.
Impoundment Area = 17.2 Ac-ft

2 0 2 4 Miles

N
W E
S

South Dakota GIS

South Dakota Department of Environment and Natural Resources
Protecting South Dakota's Tomorrow ... Today

Stacy J. Johnson 10-28-02
Stacy J. Johnson
Natural Resources Project Engineer
SD DENR Water Rights Program

STATE OF SOUTH DAKOTA

WATER LICENSE NO. 5066A-3

(1) The South Dakota Department of Game, Fish and Parks, 523 E Capitol, Pierre SD 57501 made Application No. 5066A-3, March 18, 1987 for a water permit to impound 65.2 acre feet of water (Upper and Lower Dams) from runoff, Marshall County, South Dakota for fish and wildlife propagation and recreational purposes. Permit No. 5066A-3, with a priority date of March 18, 1987 was approved May 6, 1987 and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before May 6, 1992 and for the application to beneficial use of water on or before May 6, 1996.

Water Permit No. 5066-3, with a priority date of June 14, 1985 authorized impoundment of 481.5 acre feet of water (North, Middle and South Dams). The applicable portions of No. 5066-3 are incorporated into 5066A-3.

(2) The water supply system has been completed and water applied to beneficial use in accordance with South Dakota State Law. Pursuant to South Dakota Codified Law 46-5-30.1, the holder and/or owner of Incorporated Water Right No. 5066A-3 is issued a license, bearing priority dates of March 18, 1987 (65.2 acre-feet in Upper and Lower Dams) and June 14, 1985 (481.5 acre-feet in North, Middle and South Dams) to impound 546.7 acre feet of water.

The location of the storage dams are as follows:

North Dam (387 acre-feet) – 739 feet north and 3,328 feet east from the southwest corner of Section 33-T127N-R56W
Middle Dam (32 acre-feet) – 4,010 feet north from the southeast corner of Section 4-T126N-R56W
South Dam (62.5 acre-feet) – 3,412 feet north and 258 feet west from the southeast corner of Section 4-T126N-R56W
Upper Dam (48 acre-feet)– 966 feet south and 3,043 feet east from the northwest corner of Section 4-T126N-R56W
Lower Dam (17.2 acre-feet) – 1,962 feet south and 3,668 feet east from the northwest corner of Section 4-T126N-R56W

(3) This license is subject to South Dakota Water Law, any limitations or conditions listed in Incorporated Water Permit No. 5066A-3, including the following now applicable qualifications:

- Water Right No. 5066A-3 authorizes storage of 546.7 acre feet of water annually.
- The top elevation of the primary spillway (outlet for upper dam) may not exceed 1792.0 ft msl.
- The top elevation of the primary spillway (outlet for lower dam) may not exceed 1781.1 ft msl.

Garland Erbele

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

MAR 19 2003
date



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
www.state.sd.us/denr

MAR 19 2003

5066A-3

South Dakota Department of Game Fish & Parks
% John Cooper
523 E Capitol
Pierre SD 57501

Dear Mr. Cooper:

Enclosed is Water License No. 5066A-3. This is the final water right document completing your process of obtaining a Water Right.

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

Sincerely,

Garland Erbele

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

NOTE: The applicable portions of No. 5066-3 are incorporated into Water License No.5066A-3.

c: Aaron Kahre, PO Box 1078, Britton SD 57430

enclosures

MAR 1987
DIVISION OF
WATER RIGHTS
Pierre, SD

PROJECT

BLACK SLOUGH - PART II
TOPOGRAPHICAL MAP & STRUCTURES FOR WATER CONTROL

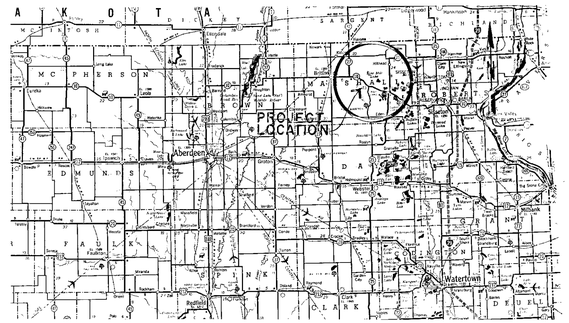
PREPARED FOR

DUCKS UNLIMITED, INC.

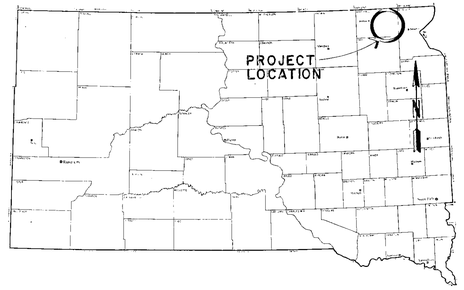


PREPARED BY

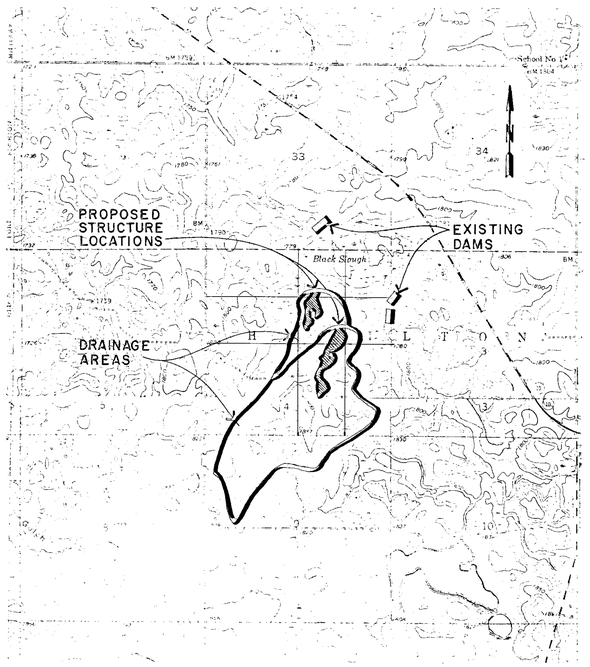
ULTEIG ENGINEERS, INC.
FARGO - MINNEAPOLIS - BISMARCK



LOCATION MAP



SOUTH DAKOTA



VICINITY MAP

INDEX TO DRAWINGS

COVER SHEET	
TOPOGRAPHICAL MAP	SHEET 1 OF 4
UPPER DAM - SPILLWAY AND SECTIONS	SHEET 2 OF 4
LOWER DAM - SPILLWAY AND SECTIONS	SHEET 3 OF 4
DETAIL SHEET	SHEET 4 OF 4

REGISTERED PROFESSIONAL ENGINEER
REG. NO.
4183
WESLEY W.
SCHON
SOUTH DAKOTA

PRELIMINARY

CERTIFICATION

I HEREBY CERTIFY THAT THE ATTACHED PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF SOUTH DAKOTA.

Wesley W. Schon

DATE Feb. 4, 1987 REG. NO. 4183

Appl. No. 5066A-3



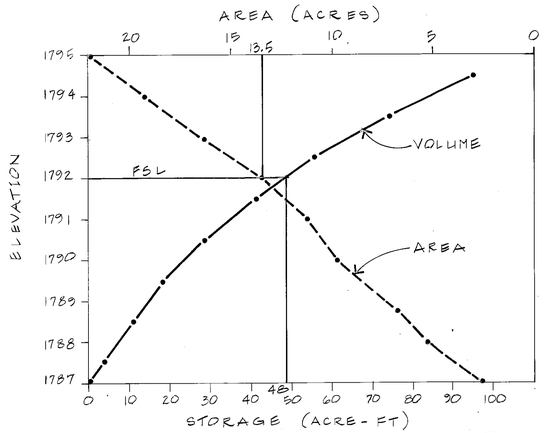
1 TOPOGRAPHICAL MAP

SCALE: 1" = 100'

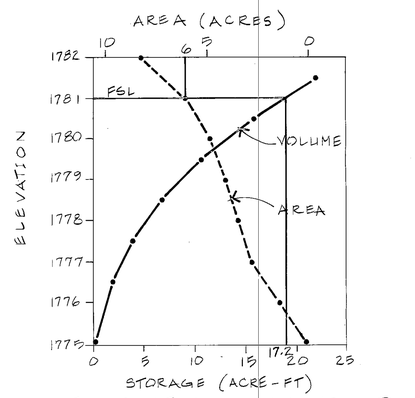
BENCH MARKS

UPPER DAM @ CONTROL POINT "K-1"
ELEVATION = 1798.80

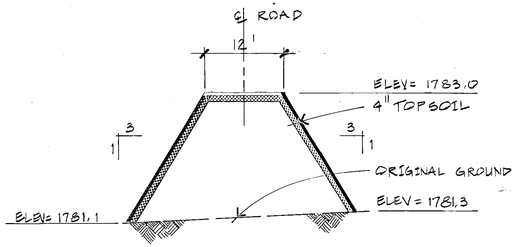
LOWER DAM @ CONTROL POINT "K"
ELEVATION = 1785.27



2 STAGE STORAGE CURVES @ UPPER DAM



3 STAGE STORAGE CURVES @ LOWER DAM



4 SECTION A-A @ 12' ROAD

NTS

0 50 100 200

SCALE : 1" = 100'

REGISTERED PROFESSIONAL ENGINEER
REG. NO.
4183
WESLEY W. SCHON
SOUTH DAKOTA

REV.	DATE	DESCRIPTION	BY
△			
△			
△			
△			

DUCKS UNLIMITED, INC.
BLACK SLOUGH - PART II

TOPOGRAPHICAL MAP

ULTEIG ENGINEERS, INC. CONSULTING ENGINEERS • ARCHITECT
FARGO • BISMARCK • MINNEAPOLIS

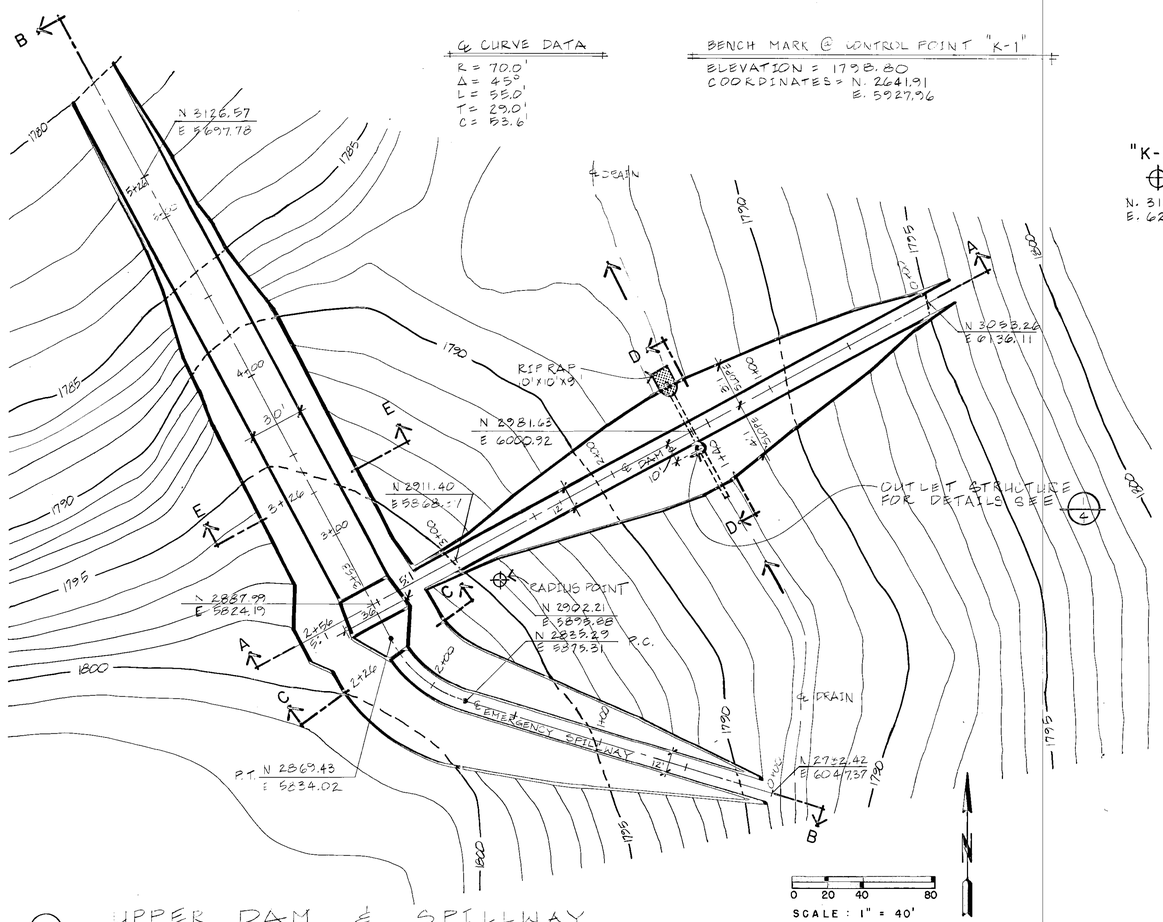
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CHECKED BY: WS	DATE: 2/4/87	SHEET 1 of 4
APPROVED BY: WS		

ULTEIG ENGINEERS

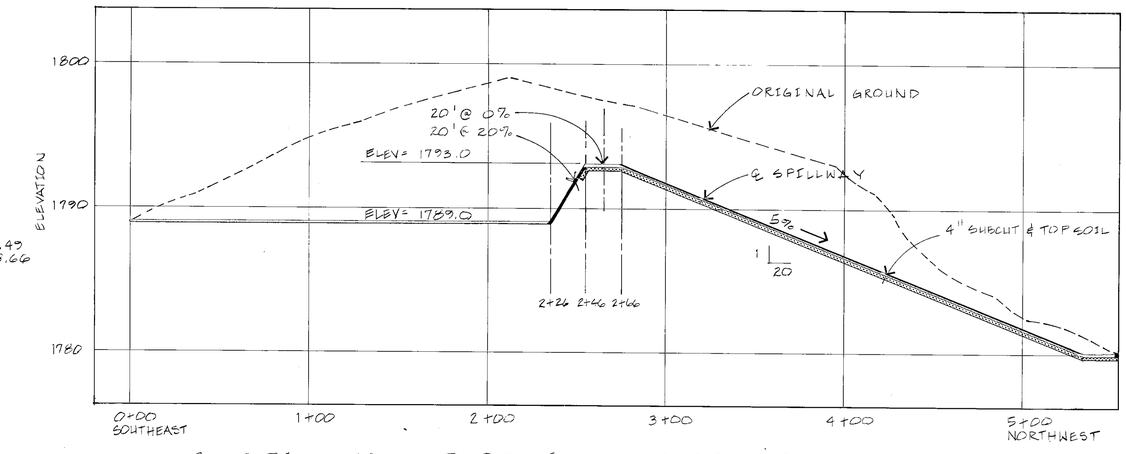
℄ CURVE DATA
R = 70.0'
Δ = 45°
L = 55.0'
T = 29.0'
C = 53.6'

BENCH MARK @ CONTROL POINT "K-1"
ELEVATION = 1798.80
COORDINATES = N. 2641.91
E. 5927.96

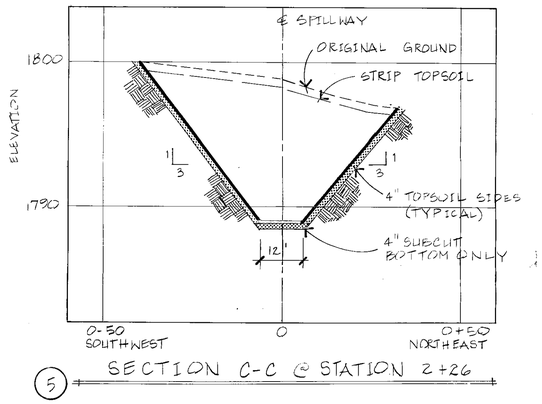
"K-3"
N. 3123.49
E. 6268.66



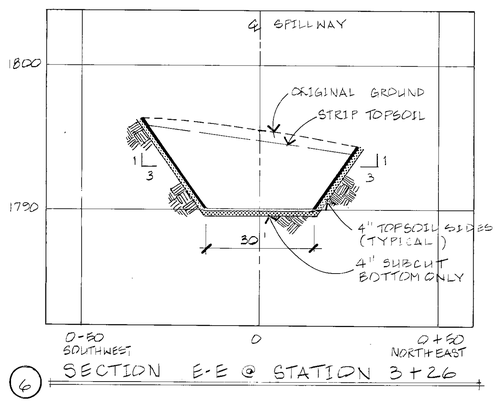
① UPPER DAM & SPILLWAY



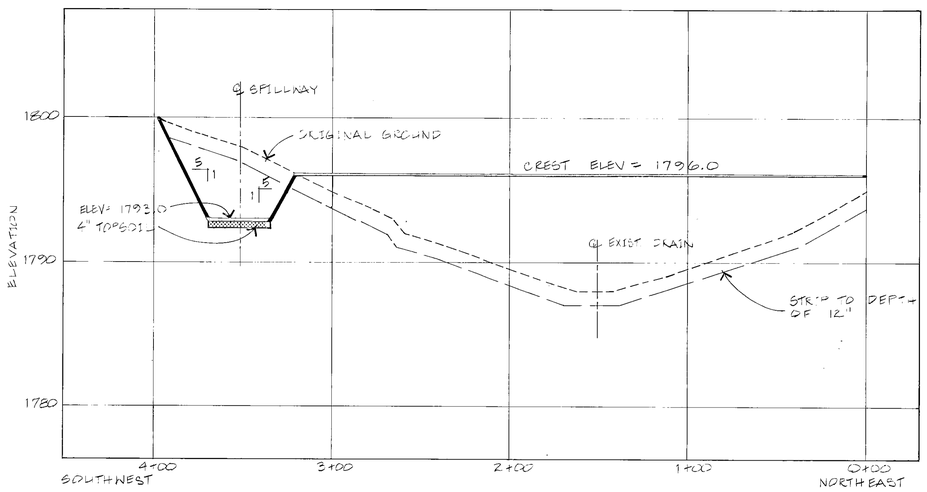
④ ℄ SPILLWAY PROFILE — SECTION B-B



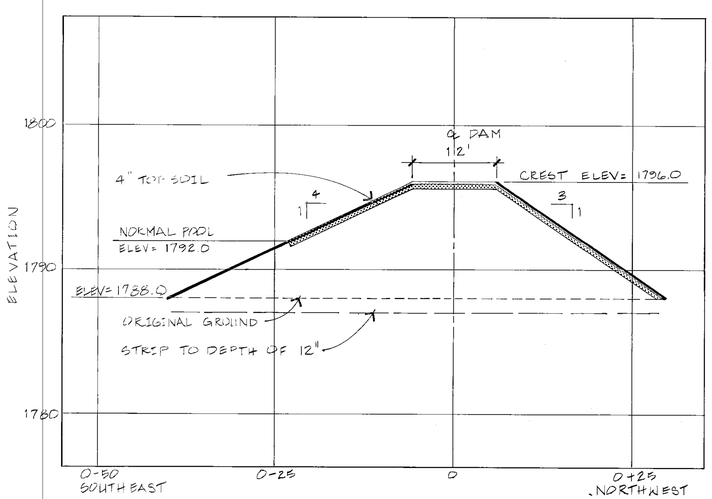
⑤ SECTION C-C @ STATION 2+26



⑥ SECTION E-E @ STATION 3+26



② ℄ DAM PROFILE — SECTION A-A



③ SECTION D-D (MAXIMUM) @ STATION 1+40

REGISTERED PROFESSIONAL ENGINEER
REG. NO. 4183
WESLEY W. SCHON
SOUTH DAKOTA

REV.	DATE	DESCRIPTION	BY
△			
△			
△			
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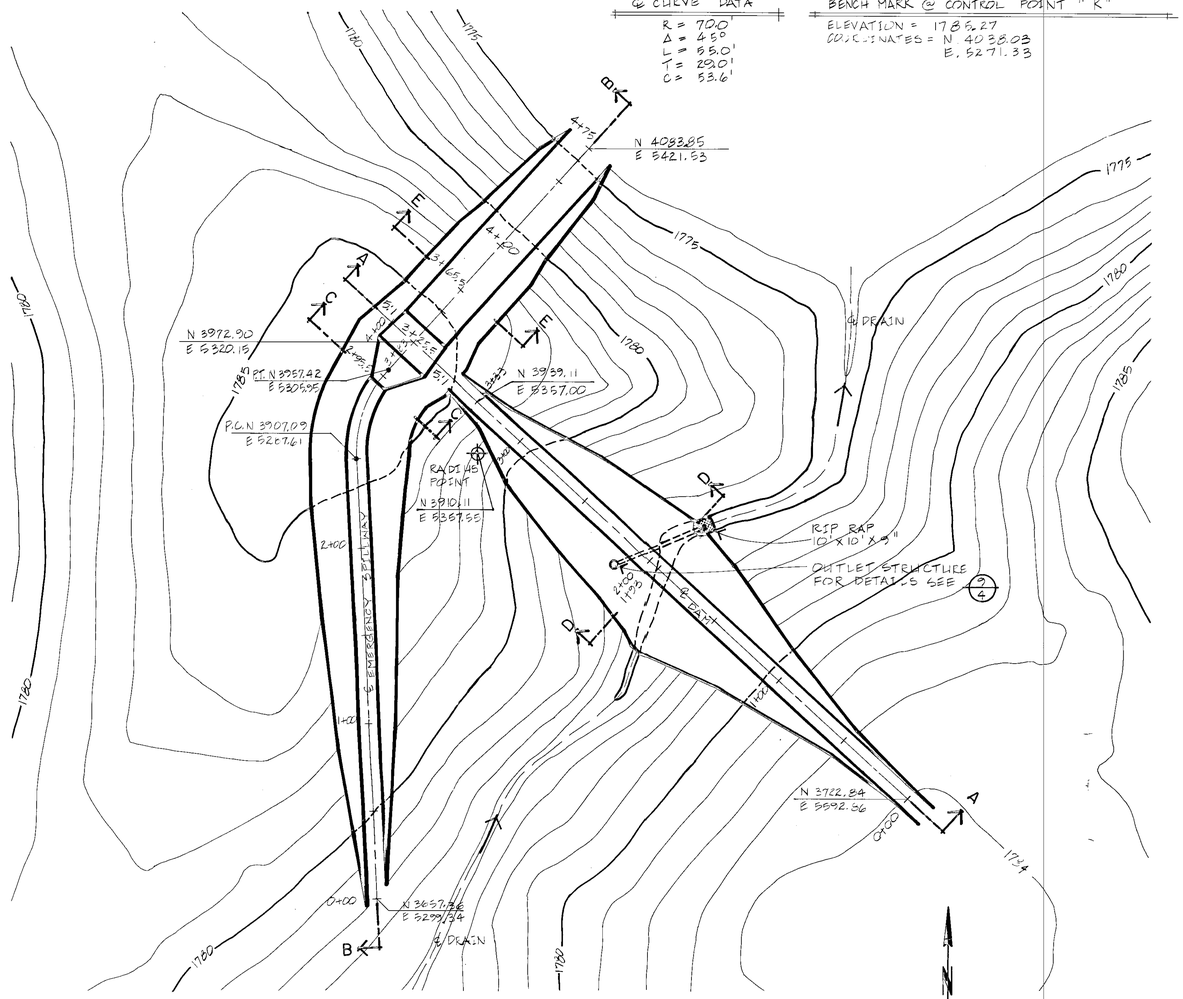
DUCKS UNLIMITED, INC.
BLACK SLOUGH – PART II

UPPER DAM - SPILLWAY & SECTIONS

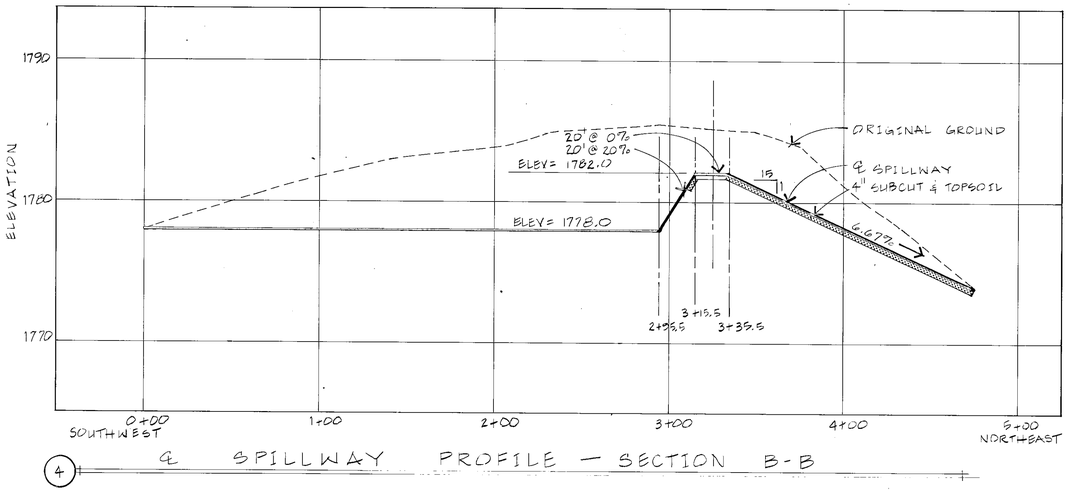
ULTEIG ENGINEERS, INC. CONSULTING ENGINEERS • ARCHITECT
FARGO • BISMARCK • MINNEAPOLIS

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CHECKED BY: WS	DATE: 2/4/87	SHEET 2 of 4
APPROVED BY: WS		

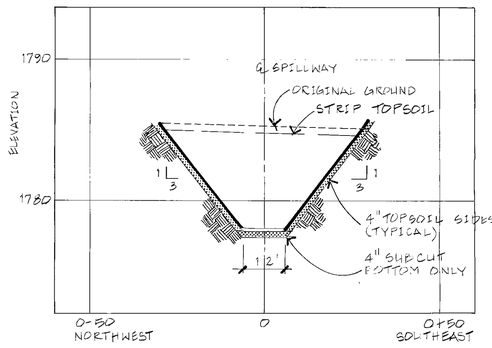
ULTEIG ENGINEERS



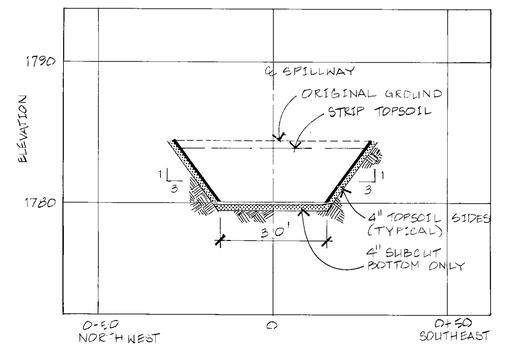
1 LOWER DAM & SPILLWAY



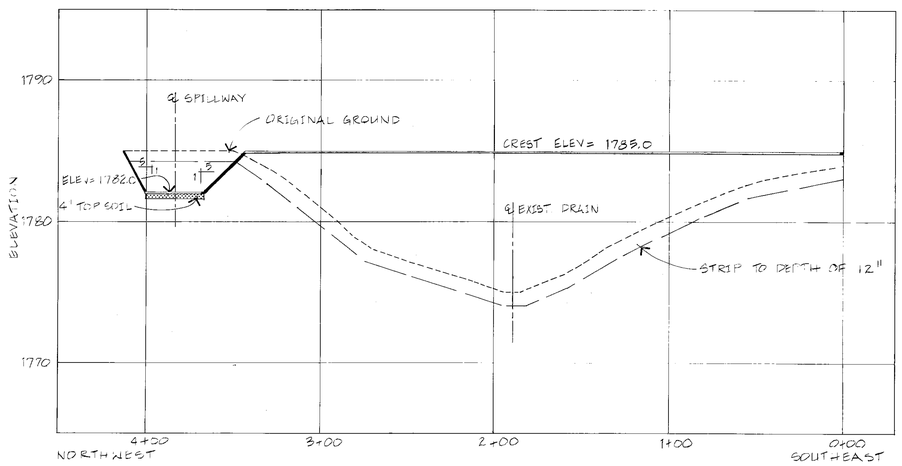
4 ℄ SPILLWAY PROFILE — SECTION B-B



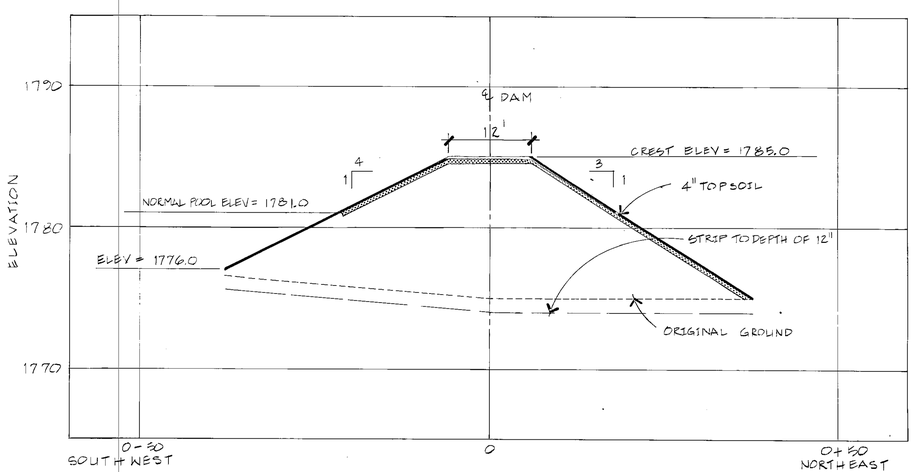
5 SECTION C-C @ STATION 2+95.5



6 SECTION E-E @ STATION 3+65.5



2 ℄ DAM PROFILE — SECTION A-A



3 SECTION D-D (MAXIMUM) @ STATION 1+93

REGISTERED PROFESSIONAL ENGINEER
REG. NO. 4183
WESLEY W. SCHON
SOUTH DAKOTA

REV.	DATE	DESCRIPTION	BY
△			
△			
△			
△			

DUCKS UNLIMITED, INC.
BLACK SLOUGH — PART II

LOWER DAM - SPILLWAY & SECTIONS

ULTEIG ENGINEERS, INC. CONSULTING ENGINEERS • ARCHITECT
FARGO • BISMARCK • MINNEAPOLIS

DRAWN BY: BN	SCALE: AS SHOWN	PROJECT NO. 1892.12
CHECKED BY: WS	DATE: 2/4/87	SHEET 3 of 4
APPROVED BY: WS		

ULTEIG ENGINEERS

5066A-3

MAR 1987
DIVISION OF
WATER RIGHTS
Pierre, SD

PROJECT

BLACK SLOUGH - PART II
TOPOGRAPHICAL MAP & STRUCTURES FOR WATER CONTROL

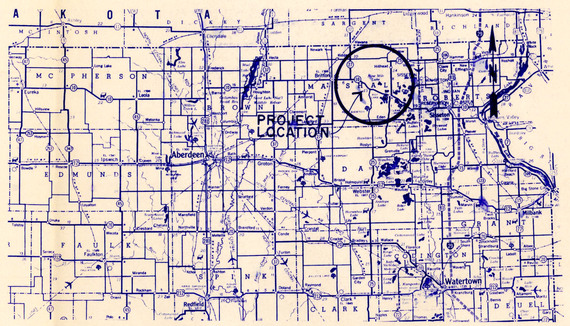
PREPARED FOR

DUCKS UNLIMITED, INC.

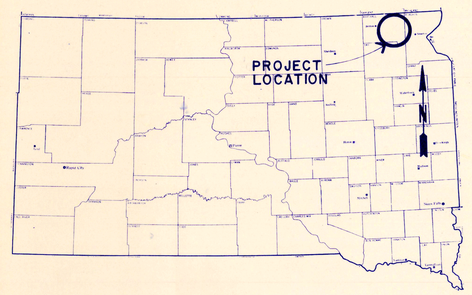


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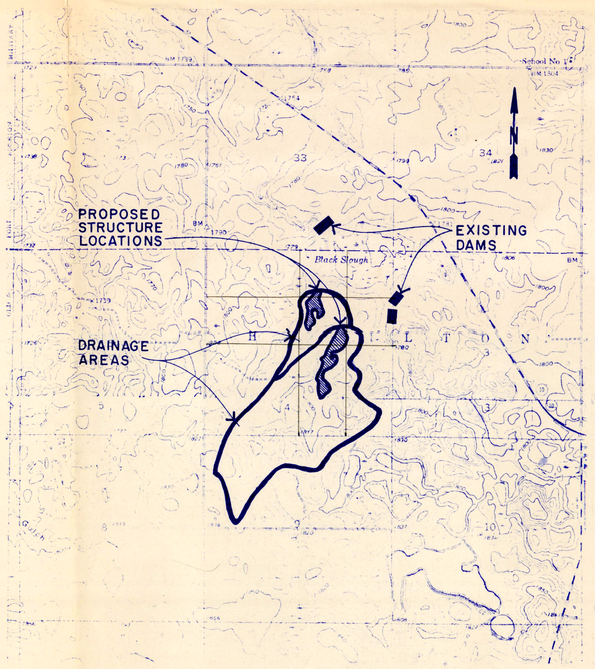
ULTEIG ENGINEERS, INC.
FARGO - MINNEAPOLIS - BISMARCK



LOCATION MAP



SOUTH DAKOTA



VICINITY MAP

INDEX TO DRAWINGS

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LOWER DAM - SPILLWAY AND SECTIONS	SHEET 3 OF 4
DETAIL SHEET	SHEET 4 OF 4

REGISTERED PROFESSIONAL ENGINEER
REG. NO.
4183
WESLEY W. SCHON
SOUTH DAKOTA

PRELIMINARY

CERTIFICATION

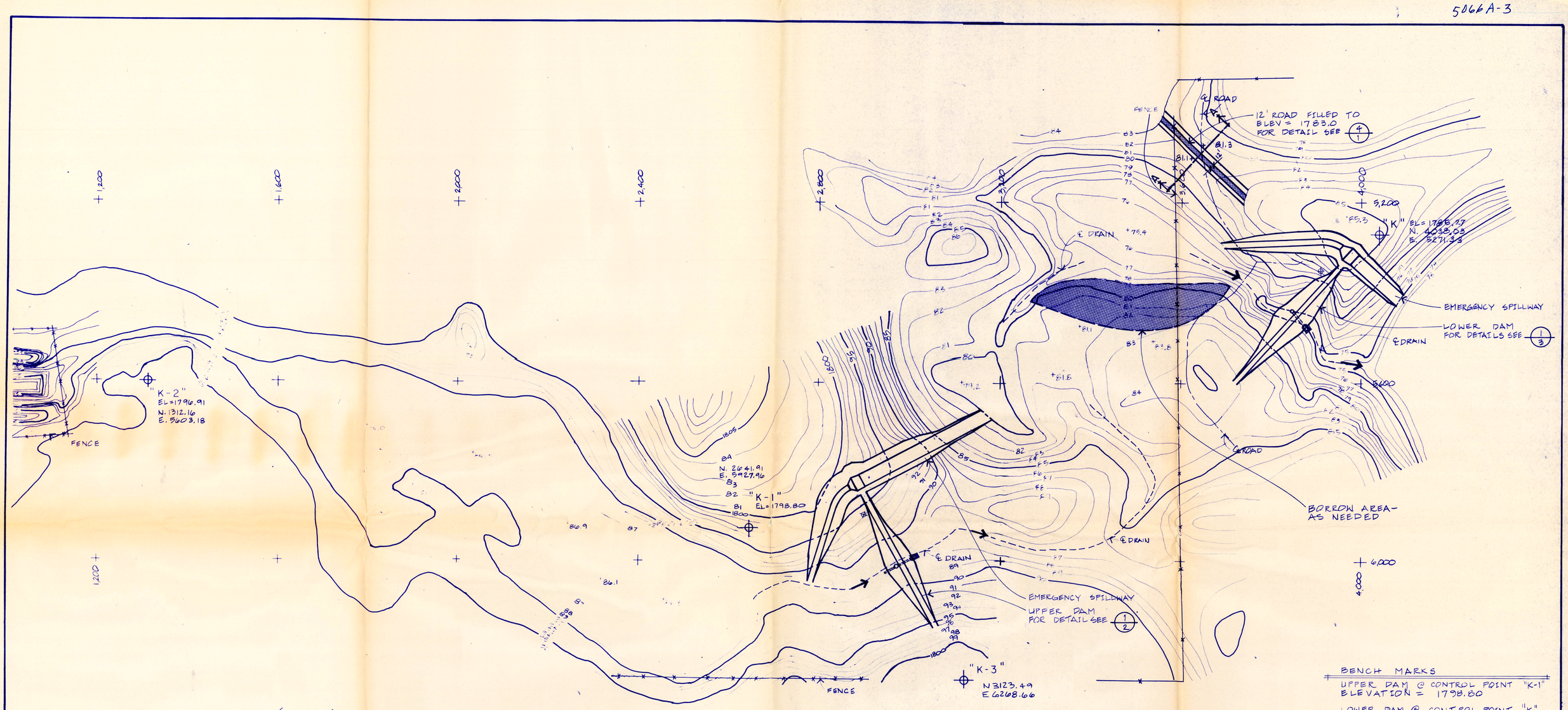
I HEREBY CERTIFY THAT THE ATTACHED PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF SOUTH DAKOTA.

Wesley W. Schon

DATE ~~FEB.~~ 4. 1987 REG. NO. 4183

Appl. No. 5066A-3

5066A-3

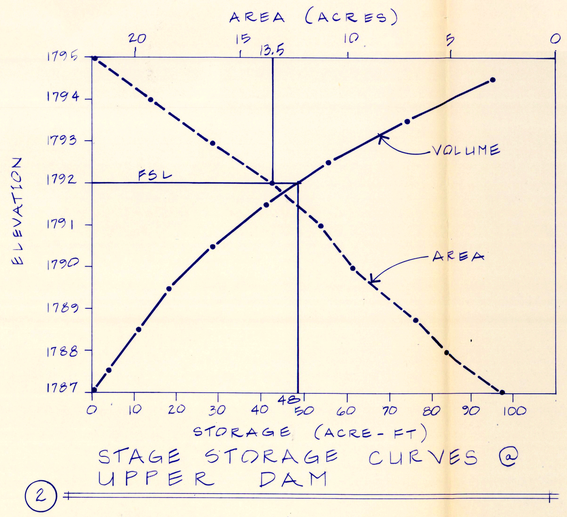


1 TOPOGRAPHICAL MAP.
SCALE: 1" = 100'

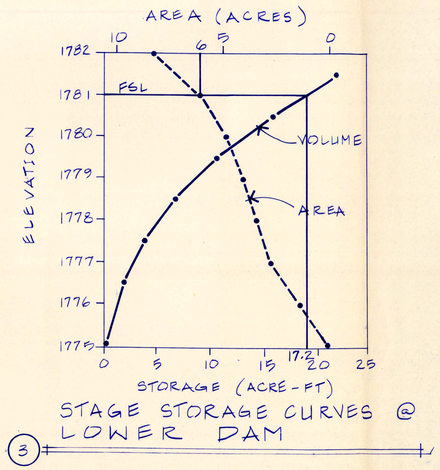
BENCH MARKS

UPPER DAM @ CONTROL POINT "K-1"
ELEVATION = 1798.80

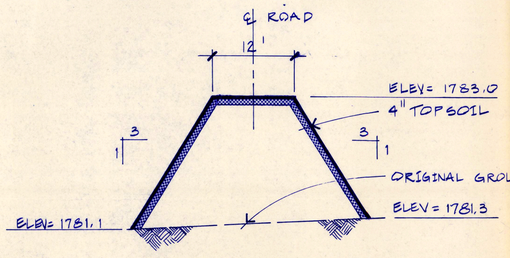
LOWER DAM @ CONTROL POINT "K"
ELEVATION = 1785.27



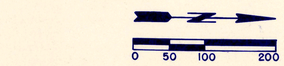
2 STAGE STORAGE CURVES @ UPPER DAM



3 STAGE STORAGE CURVES @ LOWER DAM



4 SECTION A-A @ 12' ROAD
NTS



REGISTERED PROFESSIONAL ENGINEER
REG. NO. 4183
WESLEY W. SCHON
SOUTH DAKOTA

REV.	DATE	DESCRIPTION	BY
△			
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△			
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DUCKS UNLIMITED, INC.
BLACK SLOUGH - PART II

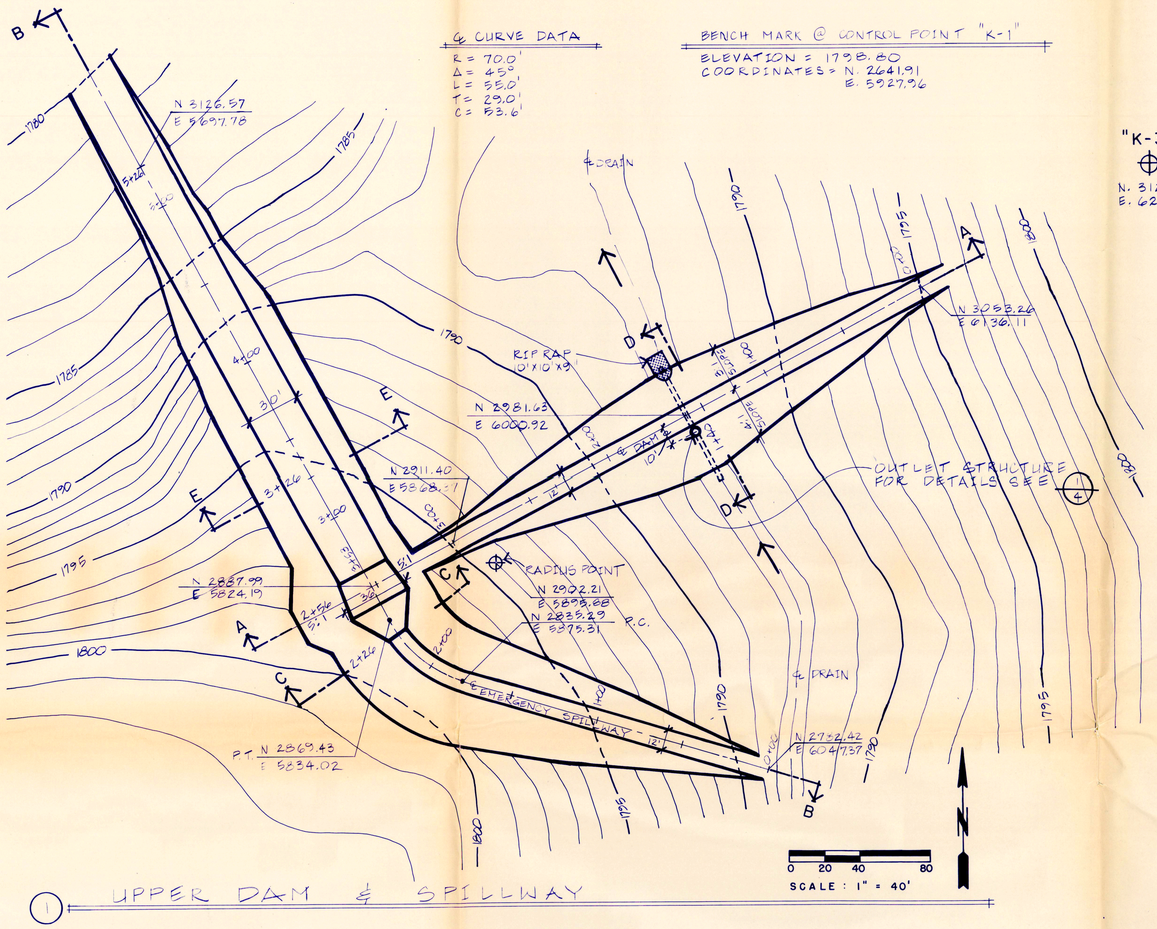
TOPOGRAPHICAL MAP

ULTEIG ENGINEERS, INC. CONSULTING ENGINEERS • ARCHITECT
FARGO • BISMARCK • MINNEAPOLIS

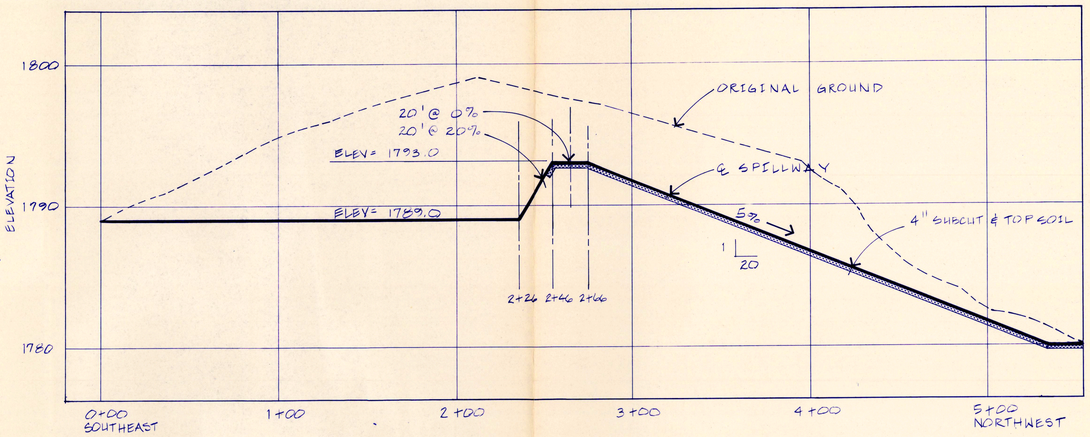
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CHECKED BY:	AS SHOWN	1892.12
APPROVED BY:	DATE: 2/4/87	SHEET 1 of 4

ULTEIG ENGINEERS

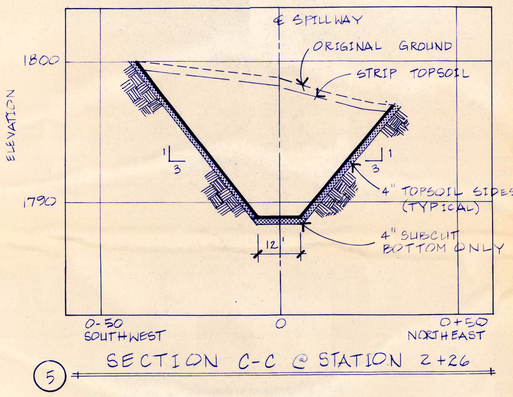
5066A-3



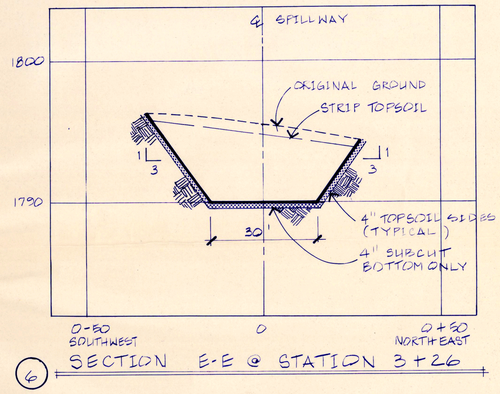
1 UPPER DAM ℄ SPILLWAY



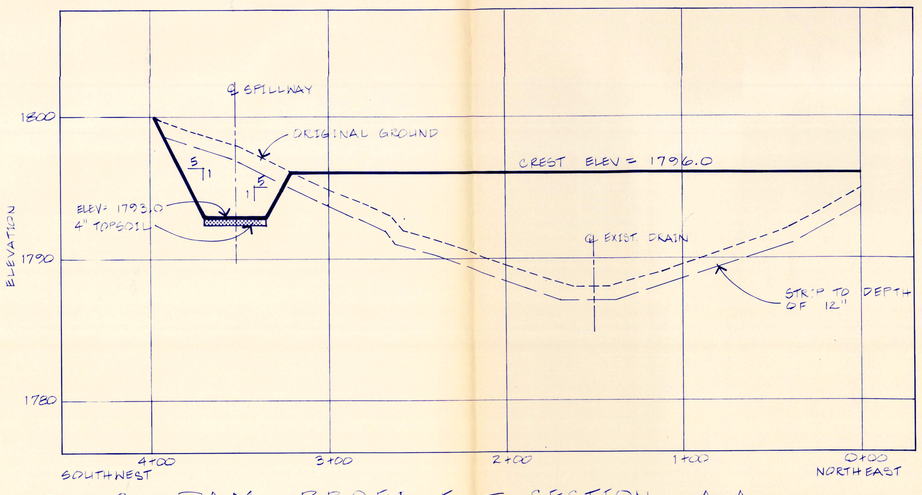
4 ℄ SPILLWAY PROFILE — SECTION B-B



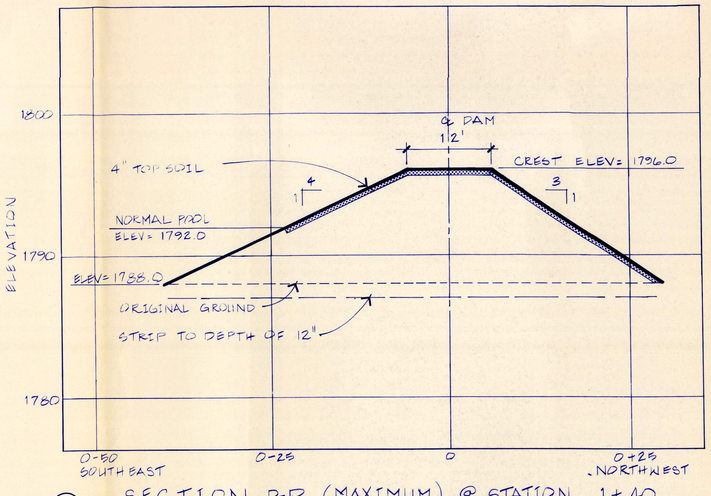
5 SECTION C-C @ STATION 2+26



6 SECTION E-E @ STATION 3+26



2 ℄ DAM PROFILE — SECTION A-A



3 SECTION D-D (MAXIMUM) @ STATION 1+40

REGISTERED PROFESSIONAL ENGINEER
REG. NO. 4183
WESLEY W. SCHON
SOUTH DAKOTA

REV.	DATE	DESCRIPTION	BY
△			
△			
△			
△			

DUCKS UNLIMITED, INC.
BLACK SLOUGH – PART II

UPPER DAM – SPILLWAY & SECTIONS

ULTEIG ENGINEERS, INC. CONSULTING ENGINEERS • ARCHITECT
FARGO • BISMARCK • MINNEAPOLIS

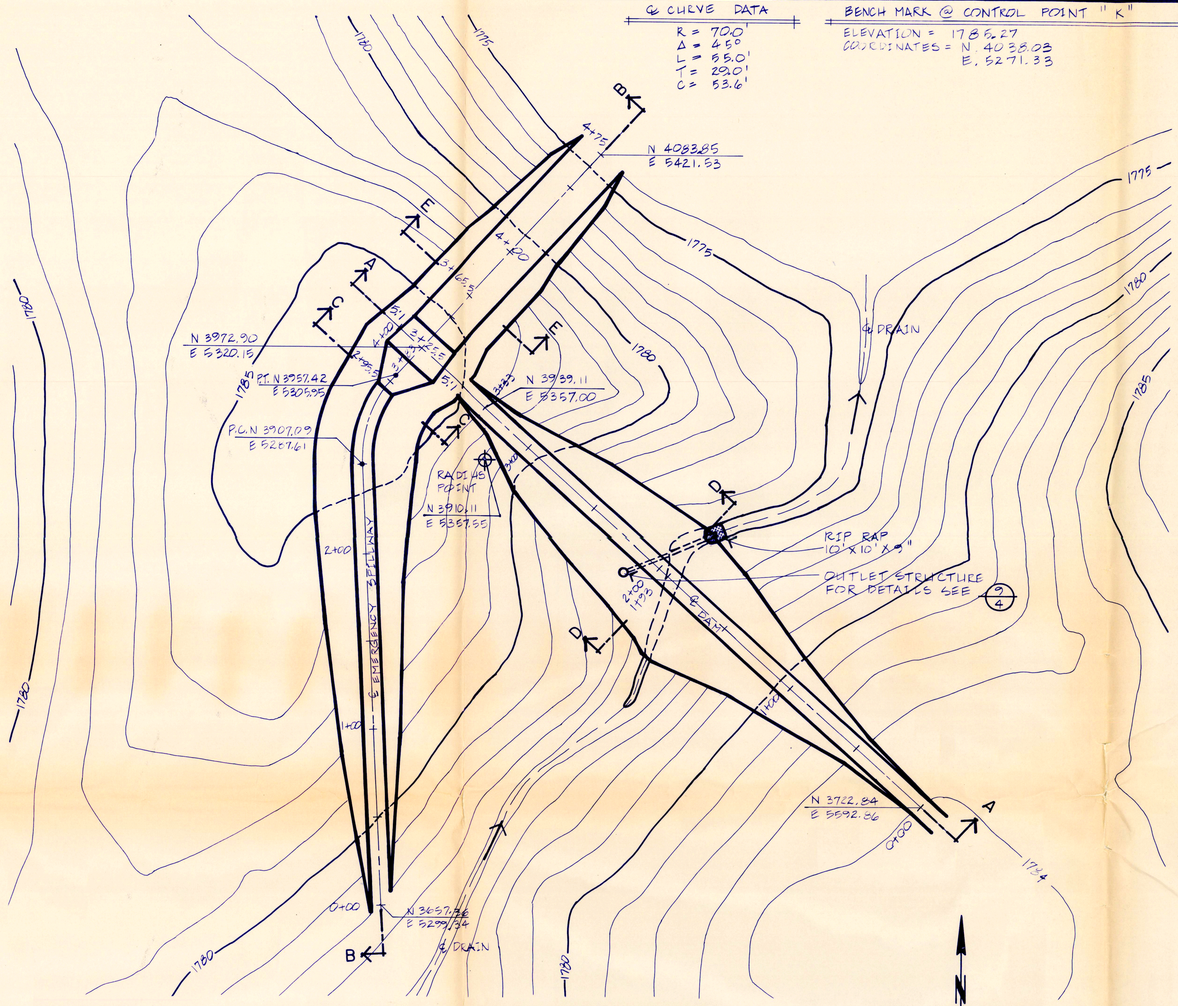
ULTEIG ENGINEERS

DRAWN BY:	SCALE: AS SHOWN	PROJECT NO. 1892.12
CHECKED BY:	DATE: 2/4/87	SHEET 2 of 4
APPROVED BY:		

5066 A-3

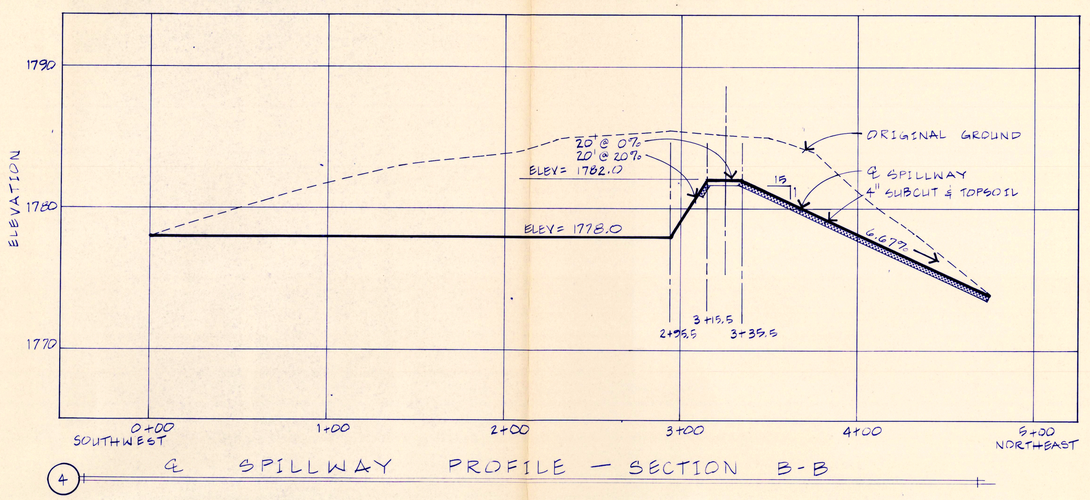
℄ CURVE DATA
R = 700'
Δ = 45°
L = 55.0'
T = 29.0'
C = 53.6'

BENCH MARK @ CONTROL POINT "K"
ELEVATION = 1786.27
COORDINATES = N. 4038.08
E. 5271.33

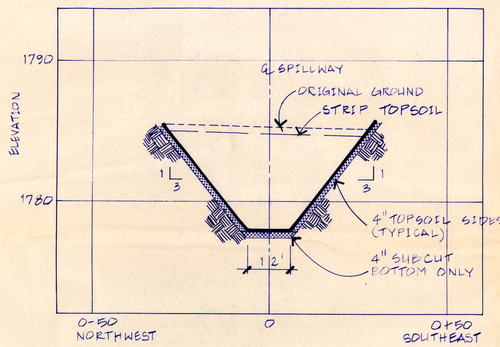


0 20 40 80
SCALE : 1" = 40'

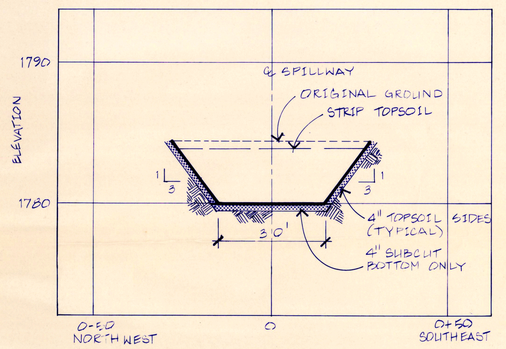
1 LOWER DAM & SPILLWAY



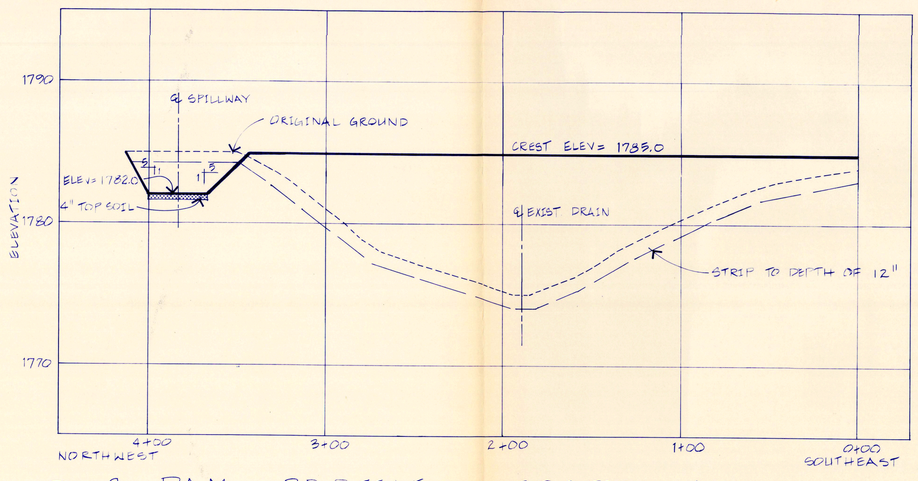
4 ℄ SPILLWAY PROFILE — SECTION B-B



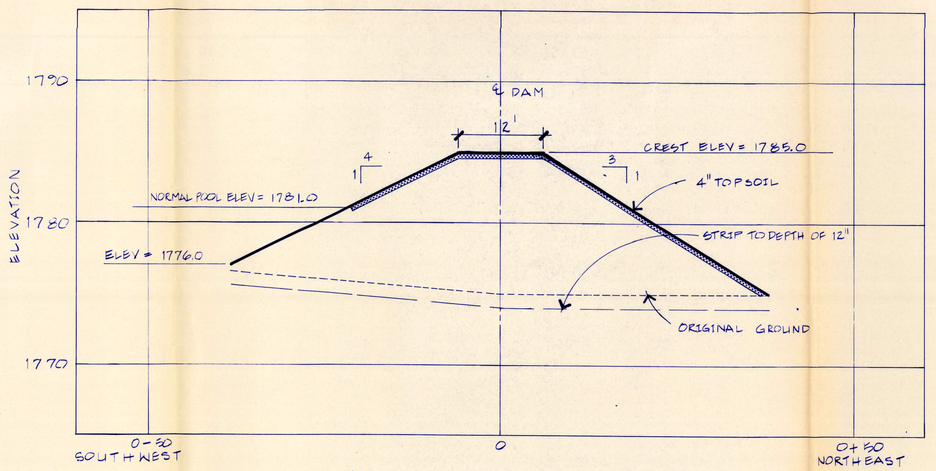
5 SECTION C-C @ STATION 2+95.5



6 SECTION E-E @ STATION 3+65.5



2 ℄ DAM PROFILE — SECTION A-A



3 SECTION D-D (MAXIMUM) @ STATION 1+93

REGISTERED PROFESSIONAL ENGINEER
REG. NO. 4183
WESLEY W. SCHON
SOUTH DAKOTA

REV.	DATE	DESCRIPTION	BY
△			
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△			
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DUCKS UNLIMITED, INC.
BLACK SLOUGH — PART II

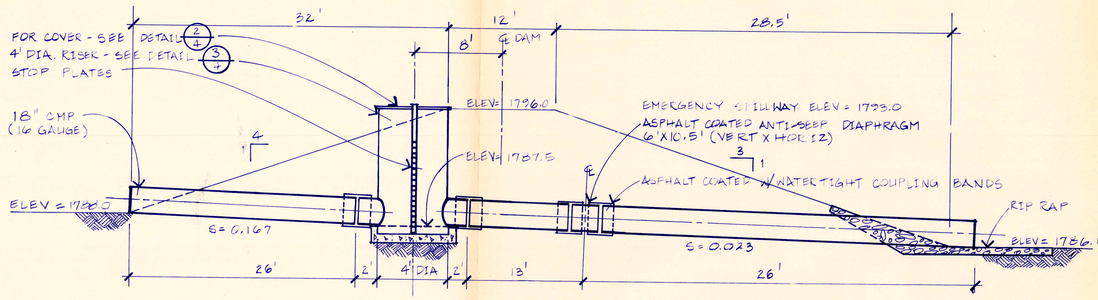
LOWER DAM - SPILLWAY & SECTIONS

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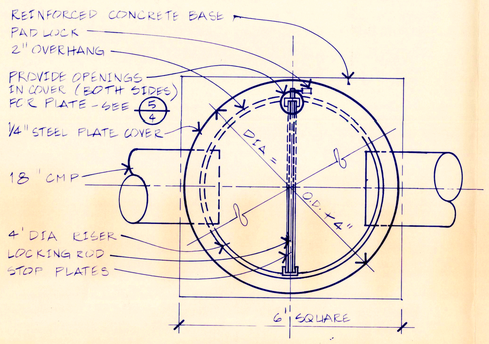
ULTEIG ENGINEERS

5066A-3



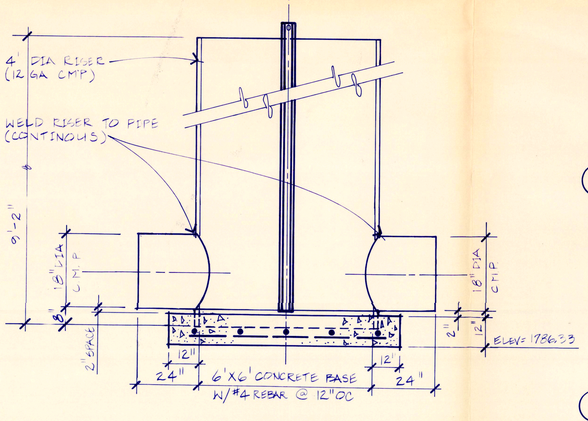
1 CONTROL STRUCTURE PROFILE — UPPER DAM

NTS



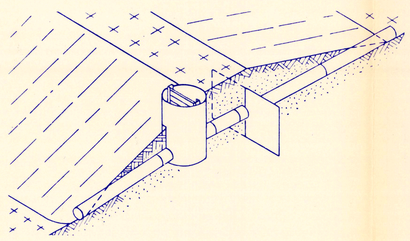
2 COVER DETAIL

NTS



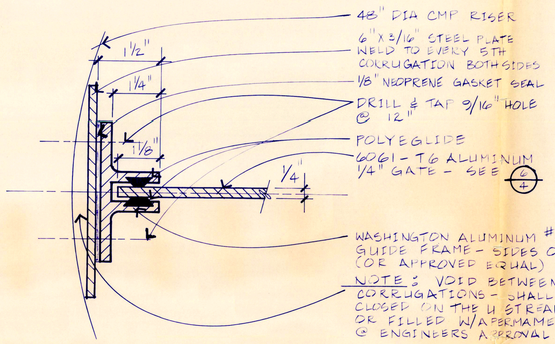
3 RISER SECTION

NTS



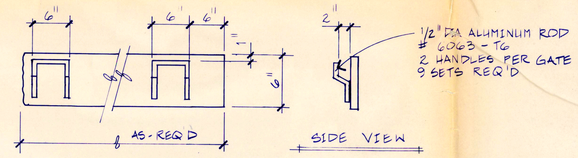
4 ISOMETRIC VIEW

NTS



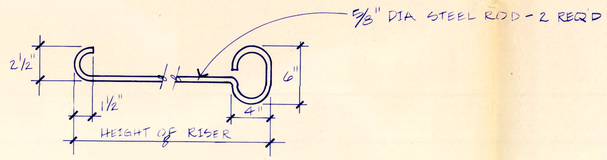
5 GUIDE FRAME - DETAIL

NTS



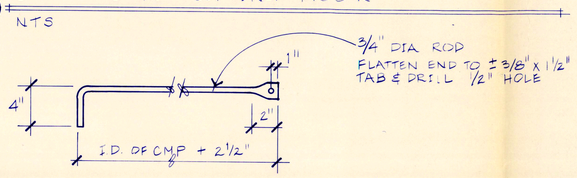
6 HANDLE DETAIL

NTS



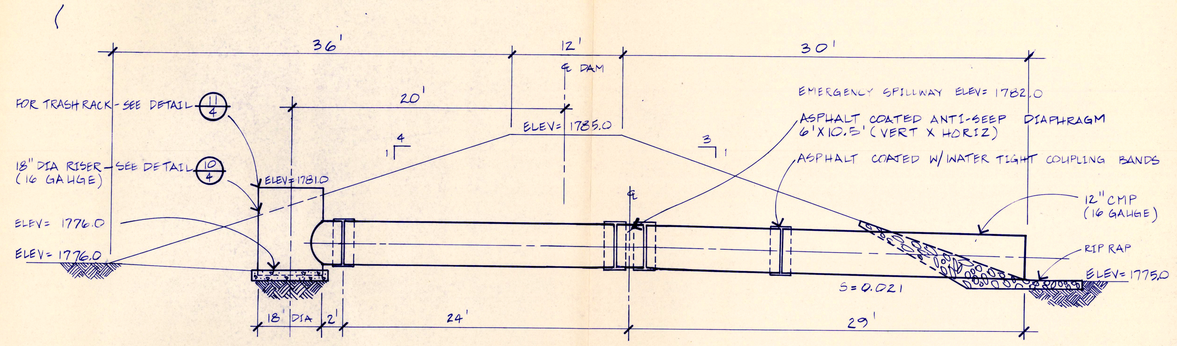
7 STOP PLATE - LIFTING HOOK

NTS



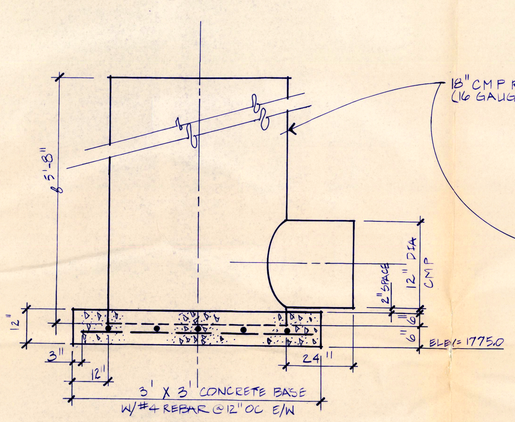
8 LOCKING ROD - DETAIL

NTS



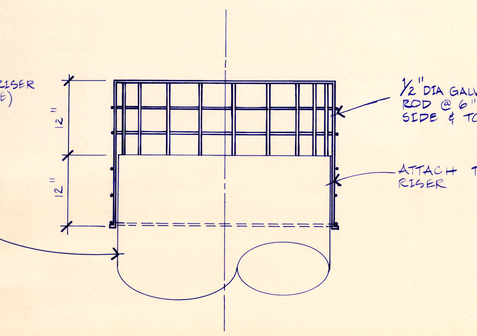
9 CONTROL STRUCTURE PROFILE — LOWER DAM

NTS



10 RISER SECTION

NTS



11 TRASH RACK DETAIL

NTS

NOTE:

UPPER DAM — DETAILS #1 THRU #8
LOWER DAM — DETAILS #9 THRU #11

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DETAILS

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